



**Regular Meeting Agenda
Planning Commission**

*JOSEPH MUELLER - CHAIR
WAYNE TANDA - VICE-CHAIR
LIAM DOWNEY - PLANNING COMMISSIONER
MOHAMMAD HABIB - PLANNING COMMISSIONER
PAUL LAKE - PLANNING COMMISSIONER
MALISHA KUMAR - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER*

Tuesday, October 11, 2022 7:00 PM

Virtual Meeting

VIRTUAL MEETING GUIDELINES AND PUBLIC COMMENT

In accordance with Executive Order N-25-20 and guidance from the California Department of Public Health on gatherings, remote public participation is allowed. Physical meetings will not be in the City Council Chamber until further notice.

Planning Commission meetings will be live streamed on Channel 17, on the City's website and on the City's Facebook page. Those members of the community that would like to participate in the meetings remotely may do so by join the virtual meeting at:

<https://bit.ly/PlanningCommissionMtg> or by calling in to: (669) 900-9128, then enter the webinar ID#: 862 0324 6251.

Public comment may be provided in the following ways:

- Join the virtual Planning Commission meeting via the link above, when public comment is opened, raise your virtual hand and be called upon to speak for up to 3 minutes
- Join the virtual meeting by calling in to the number above, dial *9 to raise your hand and *6 when called upon to speak for up to 3 minutes
- Send public comments in writing to the Minutes Clerk at pcpubliccomment@morganhill.ca.gov

* Please note that comments made on Facebook are not considered public comment.

CALL TO ORDER

ROLL CALL ATTENDANCE

DECLARATION OF POSTING

Pursuant to Government Code Section 54954.2

PLEDGE OF ALLEGIANCE

PUBLIC COMMENT

Members of the public are entitled to address the Planning Commission concerning any item within the Morgan Hill Planning Commission's subject matter jurisdiction. Public comments are limited to no more than three minutes. Except for certain specific exceptions, the Commission is prohibited from discussing or taking action on any item not appearing on the posted agenda. (See additional noticing at the end of this agenda)

ORDERS OF THE DAY

CONSENT AGENDA

1. August 23, 2022 Meeting Minutes

Recommendation:

1. Accept Meeting Minutes

2. September 13, 2022 Meeting Minutes

Recommendation:

1. Accept Meeting Minutes

PUBLIC HEARINGS

3. **ZA2019-0003/GPA2021-0004/EA2021-0010: COCHRANE – MORGAN HILL RETAIL VENTURE CENTER: REQUEST FOR A GENERAL PLAN AMENDMENT AND PLANNED DEVELOPMENT AMENDMENT FOR THE COCHRANE COMMONS RETAIL CENTER AND ASSOCIATED LAND. THE PROJECT IS ALSO REFERRED TO AS COCHRANE COMMONS PHASE 2. THE PROPERTIES, IDENTIFIED BY ASSESSOR PARCEL NUMBERS: 728-**

37-056, -069, AND -041, ARE LOCATED ON THE NORTHWEST CORNER OF HIGHWAY 101, COCHRANE ROAD, AND MISSION VIEW DRIVE, (MORGAN HILL RETAIL VENTURE LP, OWNER). CEQA: SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Recommendation:

1. Open/close public hearing; and
2. Adopt a Resolution recommending the City Council certify the SEIR, approve the Mitigation Monitoring and Reporting Program prepared for the project, and adopt Findings of Significance and Statement of Overriding Considerations (Attachment 1); and
3. Adopt a Resolution recommending the City Council approve an amendment to the General Plan land use designation and a Zoning Amendment for a Planned Development Combining District (Attachment 2).

4. **ZA2022-0004/AAE2022-0004/EA2022-0010: MONTEREY - GRANADA HOTEL: A REQUEST A ZONING AMENDMENT TO REZONE THE PROPERTY TO ADD THE PLANNED DEVELOPMENT COMBINING DISTRICT AND A DESIGN PERMIT AMENDMENT TO ALLOW FOR AN ADDITIONAL LEVEL (5TH FLOOR) FOR THE APPROVED GRANADA HOTEL. THE PROPERTY, LOCATED AT 17490 MONTEREY ROAD, IDENTIFIED BY ASSESSOR PARCEL NUMBER 726-14-074, IS LOCATED ON THE SOUTHEAST CORNER OF MONTEREY ROAD AND FIRST STREET (LEAL VINEYARDS INC., APPLICANT/OWNER).**

Recommendation:

1. Open / Close Public Hearing; and
2. Adopt a Resolution recommending City Council approval of a Zoning Amendment to add the Planned Development Combining District to the property; and
3. Adopt a Resolution recommending City Council approval of a Design Permit Amendment for minor facade modifications, including a partial fifth floor to the hotel.

DIRECTOR'S REPORT/ANNOUNCEMENTS

ADJOURNMENT

NOTICE

Any documents produced by the City and distributed to the majority of the Planning Commission less than 72 hours prior to an open meeting, will be made available for public inspection at the front counter at City Hall located at 17575 Peak Avenue, Morgan Hill, CA, 95037 and at the Morgan Hill Public Library located

October 11, 2022

at 660 West Main Avenue, Morgan Hill, California, 95037 during normal business hours. (Pursuant to Government Code 54957.5)

PUBLIC COMMENT

Members of the Public are entitled to directly address the Planning Commission concerning any item that is described in the notice of this meeting, before or during consideration of that item. If you wish to address the Planning Commission on any issue that is on this agenda, please complete a speaker request card located in the foyer of the Council Chambers and deliver it to the Minutes Clerk prior to discussion of the item. You are not required to give your name on the speaker card in order to speak to the Planning Commission, but it is very helpful. When you are called, proceed to the podium and the Chair will recognize you. If you wish to address the Planning Commission on any other item of interest to the public, you may do so during the public comment portion of the meeting following the same procedure described above. Please limit your comments to three (3) minutes or less.

Please submit written correspondence to the Minutes Clerk, who will distribute correspondence to the Planning Commission.

Persons interested in proposing an item for the Planning Commission agenda should contact a member of the Commission who may plan an item on the agenda for a future Commission meeting. Should your comments require Planning's action, your request may be placed on the next appropriate agenda. Planning Commission discussion or action may not be taken until your item appears on an agenda. This procedure is in compliance with the California Public Meeting Law (Brown Act) Government Code §54950.

City Council Policies and Procedures (CP 03-01) outlines the procedure for the conduct of public hearings. Notice is given, pursuant to Government Code Section 65009, that any challenge of Public Hearing Agenda items in court, may be limited to raising only those issues raised by you or on your behalf at the Public Hearing described in this notice, or in written correspondence delivered to the Commission at, or prior to the Public Hearing on these matters.

The time within which judicial review must be sought of the action by the Commission, which acted upon any matter appearing on this agenda is governed by the provisions of Section 1094.6 of the California Code of Civil Procedure.

For a copy of Commission Policies and Procedures CP 97-01, please contact the City Clerk's office (408) 779-7259, (408) 779-3117 (fax) or by email cityclerk@morganhill.ca.gov.

AMERICANS WITH DISABILITIES ACT (ADA)

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (408)779-7259, (408)779-3117 (fax) or by email cityclerk@morganhill.ca.gov. Requests must be made as early as possible and at least two-full business days before the start of the meeting.



**Meeting Minutes
Planning Commission**

JOSEPH MUELLER - CHAIR
WAYNE TANDA - VICE-CHAIR
LIAM DOWNEY - PLANNING COMMISSIONER
MOHAMMAD HABIB - PLANNING COMMISSIONER
PAUL LAKE - PLANNING COMMISSIONER
MALISHA KUMAR - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER

Tuesday, August 23, 2022 7:00 PM

Virtual Meeting

CALL TO ORDER

Chair Mueller called the meeting to order at 7:02 p.m.

ROLL CALL ATTENDANCE

Minutes Clerk Luna called the roll at 7:02 p.m.

PRESENT	Malisha Kumar, Joseph Mueller, Wayne Tanda, Mohammad Habib, Liam Downey, Paul Lake, James Wilson
ABSENT	None
EXCUSED	None

DECLARATION OF POSTING

Minutes Clerk Luna declared the posting of the agenda at 7:03 p.m.

PLEDGE OF ALLEGIANCE

Planning Commissioner Habib led the Pledge of Allegiance at 7:03 p.m.

PUBLIC COMMENT

Chair Mueller opened the Public Comment period at 7:04 p.m.

Chair Mueller gave the floor to the Community Development Director Jennifer Carman to introduce our newest Planning Commissioner, James Wilson, at 7:04 p.m.

Chair Mueller proceeded with the Public Comment Period at 7:05 p.m. Hearing no requests to speak, the Public Comment Period was closed.

ORDERS OF THE DAY

No changes were made.

MINUTES APPROVAL

1. July 26, 2022 Meeting Minutes

Recommendation:

1. Accept Minutes

MOTION:

Accept the July 26, 2022, Meeting Minutes.

RESULT:	Passed
MOVER:	Planning Commissioner Lake
SECONDER:	Planning Commissioner Downey
AYES:	Mueller, Tanda, Habib, Downey, Lake, Kumar, Wilson
NAYS:	None
ABSTAIN:	None
ABSENT:	None

PUBLIC HEARINGS

2. AN ORDINANCE OF THE CITY OF MORGAN HILL AMENDING SECTION 14.04.040 (GENERAL REQUIREMENTS) AND SECTION 14.040.060

(CONTINUED AFFORDABILITY AND CITY REVIEW OF OCCUPANCY) OF CHAPTER 14.04 (INCLUSIONARY HOUSING) OF TITLE 14 (HOUSING) TO CLARIFY INCLUSIONARY HOUSING REGULATIONS AND ENACTING CHAPTER 18.48 (DENSITY BONUS) OF TITLE 18 (ZONING) OF THE MUNICIPAL CODE OF THE CITY OF MORGAN HILL REGARDING GRANTING OF DENSITY BONUS, INCENTIVES/CONCESSIONS AND WAIVERS OR REDUCTION OF DEVELOPMENT STANDARDS FOR HOUSING PROJECTS THAT INCLUDE AFFORDABLE UNITS, AS REQUIRED BY STATE LAW (AB 1763)

Recommendation:

1. Open/close public hearing; and
2. Adopt a resolution recommending City Council approval of the Municipal Code Amendments.

Assistant City Attorney for Community Development Cynthia Hasson presented the Staff Report at 7:08 p.m.

Chair Mueller opened the Public Hearing at 7:40 p.m. Hearing no further requests to speak, the Public Hearing was closed.

MOTION:

Adopt the Resolution recommending City Council approve the Municipal Code Amendments.

RESULT:	Passed
MOVER:	Planning Commissioner Downey
SECONDER:	Planning Commissioner Lake
AYES:	Mueller, Tanda, Habib, Downey, Lake, Kumar, Wilson
NAYS:	None
ABSTAIN:	None
ABSENT:	None

DIRECTOR'S REPORT/ANNOUNCEMENTS

Community Development Director Jennifer Carman made an announcement at 7:46 p.m. Housing Director Rebecca Garcia made an announcement at 7:49 p.m. Assistant City Manager to Community Development Director Edith Ramirez addressed Chair Mueller's question at 7:50p.m.

ADJOURNMENT

There being no further business to discuss, Chair Mueller adjourned the meeting at 7:51 p.m.

MINUTES PREPARED BY:

Jenna Luna, Minutes Clerk



**Meeting Minutes
Planning Commission**

JOSEPH MUELLER - CHAIR
WAYNE TANDA - VICE-CHAIR
LIAM DOWNEY - PLANNING COMMISSIONER
MOHAMMAD HABIB - PLANNING COMMISSIONER
PAUL LAKE - PLANNING COMMISSIONER
MALISHA KUMAR - PLANNING COMMISSIONER
JAMES WILSON - PLANNING COMMISSIONER

Tuesday, September 13, 2022 7:00 PM

Virtual Meeting

CALL TO ORDER

Chair Mueller called the meeting to order at 7:00 p.m.

ROLL CALL ATTENDANCE

Minutes Clerk Luna called the roll at 7:00 p.m.

PRESENT	Joseph Mueller, Wayne Tanda, Mohammad Habib, Liam Downey, Paul Lake, James Wilson
ABSTAIN	None
ABSENT	None
EXCUSED	Malisha Kumar

DECLARATION OF POSTING

Minutes Clerk Luna declared the posting of the Agenda at 7:00 p.m.

PLEDGE OF ALLEGIANCE

Planning Commissioner Downey led the Pledge of Allegiance at 7:01 p.m.

PUBLIC COMMENT

Chair Mueller opened the Public Comment Period at 7:02 p.m. Hearing no requests to speak on non-agendized items the Public Comment period was closed.

ORDERS OF THE DAY

No changes were made.

PUBLIC HEARINGS

1. **PRELIMINARY REVIEW (SR2022-0012): JARVIS/EVERGREEN VILLAGE – LENNAR HOMES: PRELIMINARY PLAN REVIEW FOR GENERAL PLAN AND ZONING AMENDMENTS. THE GENERAL PLAN LAND USE WOULD BE CHANGED FROM COMMERCIAL TO MIXED USE FLEX, AND ZONING FROM GENERAL COMMERCIAL (CG) TO MIXED USE FLEX (MU-F), WITH REMOVAL OF THE PLANNED DEVELOPMENT COMBINING DISTRICT. THE AMENDMENTS ARE NECESSARY TO ALLOW FOR THE DEVELOPMENT OF A 125-UNIT TOWNHOME STYLE CONDOMINIUM DEVELOPMENT. THIS ITEM IS A PRELIMINARY REVIEW FOR INPUT ONLY. NO ACTION WILL BE TAKEN ON THIS ITEM.**

Recommendation:

1. Open and close public hearing; and
2. Planning Commission to provide preliminary input on the proposed General Plan Amendment and Zoning Amendment. This is a Preliminary Plan Review application. No action will be taken on the project as this is advisory only.

Senior Planner Tiffany Brown presented the Staff Report at 7:04 p.m.

Chair Mueller opened the Public Hearing at 7:17 p.m. The following individuals addressed the Planning Commission:

- Laura Ortiz
- Chad Kiltz
- Joe Baranowski

Hearing no further requests to speak, the Public Hearing was closed at 7:49 p.m.

Economic Development Director Matthew Mahood addressed the Planning Commissioners' questions.

MOTION:

The No Action Taken. The Planning Commission reviewed, discussed, and provided feedback on the project.

The Planning Commission meeting recessed at 8:28 p.m.

The Planning Commission meeting reconvened at 8:35 p.m.

2. **SD2021-0004/SR2021-0014/EA2021-0012: MONTEREY – KERLEY (DENOVA HOMES): SINGLE-LOT VESTING TENTATIVE MAP FOR CONDOMINIUM PURPOSES AND DESIGN PERMIT FOR A RESIDENTIAL CONDOMINIUM DEVELOPMENT, COMPRISED OF 93 UNITS. THE PROPERTY, IDENTIFIED BY ASSESSOR PARCEL NUMBER 726-42-001 AND -002 IS LOCATED WEST OF THE MONTEREY ROAD/BURNETT AVENUE INTERSECTION, THE FAMILY RV SITE (FARV MONTEREY, LLC, OWNER). CEQA: EXEMPT PURSUANT TO CEQA GUIDELINES SECTION 15332 (IN-FILL).**

Recommendation:

1. Open/close the public hearing; and,
2. Adopt a Resolution approving a single-lot Vesting Tentative Map and Design Permit.

Principal Planner Gina Paolini presented the staff report at 8:37 p.m.

Chair Mueller opened the Public Hearing at 8:59 p.m. The following individuals addressed the Planning Commission:

- DeNova Homes
- Robert Del Rio
- Alicia Chandler
- William Link
- Joe Baranowski
- Robert Del Rio
- Rich Pignone
- Bob Long
- Dan Martinelli
- DeNova Homes
- Alicia Chandler
- DeNova Homes
- Bob Long

Hearing no further request to speak, the Public Hearing was closed at 10:08 p.m.

MOTION:

Adopt as Amended with the following added conditions: 1. Subject to the approval of the Development Director or designee, the landscape plans shall be modified to include additional trees and larger trees (maximum 24-inch box) along the southern property line shared with the Angelica Court properties. The applicant and the City shall select an Evergreen tree species for quick growth, large canopies, and minimal "shedding", that comply with the Water Efficient Landscape Ordinance and other City standards; 2. On Page 22 of the conditions, Section F: Masonry Wall: Change all references of a 6-ft masonry wall to a 7-ft masonry wall; 3. Fence: The applicant shall install a 7-foot tall (6' solid, 1-foot lattice) wood fence along the property line shared with Angelica Court properties, provided that the fence is taller and provides better "screening value" than the existing fence, subject to the approval of the Development Services Director or designee; 4. Add a disclosure statement to the CC&Rs that a statement shall be inserted into the homeowner disclosures identifying the potential for noise, dust, and other business-related operations created by the adjacent business (Irish Construction Co.) to the north.

RESULT:	Passed
MOVER:	Planning Commissioner Downey
SECONDER:	Planning Commissioner Habib
AYES:	Mueller, Tanda, Habib, Downey
NAYS:	Lake, Wilson
ABSTAIN:	None
ABSENT:	Kumar

DIRECTOR'S REPORT/ANNOUNCEMENTS

Community Development Director Jennifer Carmen made an announcement at 10:25 p.m.

ADJOURNMENT

There being no further business to discuss, Chair Mueller adjourned the meeting at 10:38 p.m.

MINUTES PREPARED BY:

Jenna Luna, Minutes Clerk

PLANNING COMMISSION STAFF REPORT

MEETING DATE: October 11, 2022

PREPARED BY:

Jennifer Carman, Development Services Director

APPROVED BY: Jennifer Carmen

ZA2019-0003/GPA2021-0004/EA2021-0010: COCHRANE – MORGAN HILL RETAIL VENTURE CENTER: REQUEST FOR A GENERAL PLAN AMENDMENT AND PLANNED DEVELOPMENT AMENDMENT FOR THE COCHRANE COMMONS RETAIL CENTER AND ASSOCIATED LAND. THE PROJECT IS ALSO REFERRED TO AS COCHRANE COMMONS PHASE 2. THE PROPERTIES, IDENTIFIED BY ASSESSOR PARCEL NUMBERS: 728-37-056, -069, AND -041, ARE LOCATED ON THE NORTHWEST CORNER OF HIGHWAY 101, COCHRANE ROAD, AND MISSION VIEW DRIVE, (MORGAN HILL RETAIL VENTURE LP, OWNER). CEQA: SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

RECOMMENDATION(S)

1. Open/close public hearing; and
2. Adopt a Resolution recommending the City Council certify the SEIR, approve the Mitigation Monitoring and Reporting Program prepared for the project, and adopt Findings of Significance and Statement of Overriding Considerations (Attachment 1); and
3. Adopt a Resolution recommending the City Council approve an amendment to the General Plan land use designation and a Zoning Amendment for a Planned Development Combining District (Attachment 2).

LOCATION MAP/PROJECT INFORMATION:



- | | | |
|----|---------------|---|
| 1. | Location: | Northeast corner of Highway 101 and Cochrane Road identified by Assessor Parcel Numbers: 728-37-056, -069, and -041 |
| 2. | Site Area: | 66.49 Acres |
| 3. | General Plan: | Commercial and Mixed Use Flex |
| 4. | Zoning: | Highway Commercial - PD (Planned Development Combining |

- District)
5. Request: Request for a modification to an existing Planned Development Combining District and Master Plan to incorporate housing and expand range of uses allowed within the Cochrane Commons shopping center.

BACKGROUND:

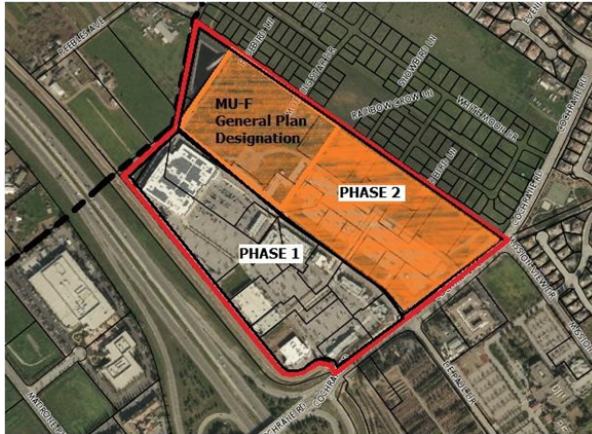
The Planned Development Combining District (PD) and associated Master Plan Overlay for the project site was established by City Council Ordinance No. 1746, New Series on November 5, 2005 (Attachment 3). Phase 1 is built on the west side of the property, with several sites remaining before final buildout. Phase 2, occupying the eastern half of the property, has yet to develop, although the parking lot area and trash dumpsters were constructed along with Phase 1 many years ago and a gas station was constructed at the Cochrane entrance.

The General Plan land use designation for Phase 1 of the shopping center is Commercial. The General Plan land use designation for the northeastern portion of Phase 2 next to Target was changed to Mixed Use Flex (MU-F) at the request of the property owner as part of the 2016 update of the Morgan Hill 2035 General Plan. Base zoning for the entire site is Highway Commercial (HC). A Planned Development Combining District has been applied to the entire site that serves as the zoning district that governs uses and development standards on the overall site.

As required by Section 18.30.050 (Planned Development Combining District) of the Morgan Hill Municipal Code, the applicant submitted an application for preliminary review on the proposed planned development project. The Planning Commission considered the initial preliminary application at their February 11, 2020 meeting. The applicant continued to refine the application and appeared before the Planning Commission again on March 23, 2021.

PROJECT DESCRIPTION:

The applicant seeks to modify the approved Planned Development Combining District and the associated Master Plan (Attachment 3) to modernize the mix of land uses in the Cochrane Commons Shopping Center. The approved center originally included over 650,000 square feet of commercial (12 major retail tenants and 50 smaller restaurants and shops). The applicant requests to amend the approved Planned Development Combining District language to conform with the existing Mixed-Use Flex General Plan land use designation on a portion of the site to allow for more flexibility in land use types permitted in the commercial designated portion of the site (Attachments 4 and 5). The applicant also proposes a General Plan Amendment (Attachment 6) to expand the Mixed-Use Flex General Plan land use designation to the entire Phase 2 portion of the site as shown in the graphic below. An updated overall site plan and a Phase 2 site plan have been provided (Attachments 7 and 8). A matrix comparison of approved versus proposed uses and the uses allowed in the base zoning districts has been provided (Attachment 9). The applicant is also seeking to allow a third pylon sign within the Shopping Center near U.S. Highway 101 as part of the Planned Development (PD). A further explanation of the applicant's request is provided in the attached Statement of Planning Objectives (Attachment 10).



PROJECT ANALYSIS AND FINDINGS:

The proposed project was analyzed with respect to conformance with 1) Morgan Hill 2035 General Plan; 2) Zoning Ordinance; and 3) Findings.

1. General Plan Land Use Consistency

The project includes expanding the existing Mixed-Use Flex land use designation at the northeast corner of the site south to Cochrane Road as shown in Attachment 6. While the proposal is to expand the designation, the proposed Master Plan does not include residential uses extending to Cochrane Road. The proposed General Plan Amendment can be found consistent with the policies and provisions of the Morgan Hill 2035 General Plan as described below. Should the Planning Commission recommend limiting the expansion of the Mixed Use Flex designation to the area proposed for residential use, that recommendation would also be consistent with the following policies:

City and Neighborhood Form Element

Policy CNF-10.3 - Adequate Supply of Multi-Family Housing. Provide for an adequate supply of multi-family housing, located convenient to shopping, services, and transportation routes.

Consistent: The Mixed-Use Flex land use will allow for residential uses to be developed on the site which will assist the City in achieving an adequate housing supply as the proposal includes 489 residential units. The conceptual Site Plan provides for a mix of residential and commercial uses that will allow for the placement of housing convenient to shops and services.

Policy CNF-10.6 - Density Near Infrastructure. Encourage higher residential densities at locations where convenient access and adequate infrastructure is readily available.

Consistent: The property is adjacent to Cochrane Road and U.S. Highway 101. Adequate infrastructure is available around the project site to support the uses identified.

Policy CNF-13.1 - Mixed Use Flex Development. Encourage a mix of uses, either vertically or horizontally, to allow residents and employees to meet daily needs without the use of the private automobile.

Consistent: The Mixed-Use Flex land use designation would allow for a variety of uses including retail, residential, and commercial uses. The combination of uses within the property provides for walkability to services for residents and employees.

Housing Element

Policy HE-4u: - Mix of Housing Near Services. Encourage a mix of housing types in each neighborhood located convenient to shopping, services, recreation, and transit routes.

Consistent: The Mixed-Use Flex land use designation would allow for residential use at the project site. The project proposes a wide variety of housing types including one- and two-bedroom units, affordable units in both rental and ownership housing types. The housing would be conveniently co-located adjacent to existing services.

Economic Development Element

Policy ED-7.4 - Compatible Uses in Retail Centers. Encourage the evolution of retail centers into mixed-use activity nodes by supporting integration of uses that provide necessary or useful services or amenities that will benefit nearby residential areas and commercial establishments. Such uses may include but shall not be limited to:

1. Health services and fitness facilities.
2. Childcare.
3. Housing, including affordable and senior housing.
4. Religious facilities.
5. Education/training facilities.
6. Parks/community facilities/public gathering places.

Consistent: The Mixed-Use Flex land use designation will allow for a mix of retail and residential uses convenient to the proposed and existing adjacent neighborhood.

Two separate traffic analysis documents were generated for the proposed project - one using the VMT metric required by CEQA (discussed further in the CEQA section of this report) and one using LOS to determine General Plan consistency. The traffic analysis found the proposed mixed-use development would result in 2,191 fewer daily trips with 285 additional trips during the AM peak hour and 180 fewer trips occurring during the PM peak hour when compared to the previously approved commercial/retail development on the project site. The proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development. Furthermore, two intersections (Monterey Road/Dunne Avenue and Cochrane Road/Mission View Road) were shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation measures of the 2005 EIR have since been completed.

2. Zoning Ordinance Consistency - Planned Development (PD) Combining District

Pursuant to Section 18.30.050.A of the Morgan Hill Municipal Code, “the purpose of the Planned Development (PD) combining district is to allow for high quality development that deviates from standards and regulations applicable to base zoning districts in Morgan Hill. The PD combining district is intended to promote creativity in building design, flexibility in permitted uses, and innovation in development concepts. The PD combining district provides landowners with enhanced flexibility to take advantage of unique site characteristics and develop projects that will provide public benefits for residents, employees, and visitors.” A PD allows a project to deviate from development standards in the base zoning district (except the maximum floor area ratio and residential density may not exceed maximums established in the General Plan). The exception to this would be application of State mandated density bonus for affordable housing. As stated previously, the original PD and associated Master Plan for the project site was established by City Council Ordinance No. 1746 on November 5, 2005.

The applicant has provided a set of amended PUD Guidelines that contains a broad list of land uses (Attachment 4). This list includes refined uses that are generally consistent with both the Highway Commercial and Mixed-Use Flex General Plan land use designation. A matrix comparison of

currently approved versus proposed uses and the uses allowed in the base zoning districts has also been provided (Attachment 9).

As part of the PD, the applicant also requests modification of a number of approved development standards and new development standards related to the proposed Phase 2 development (Attachment 10) and the addition of an additional pylon sign along the western elevation parallel to U.S. Highway 101. The proposed changes to development standards include reduced building setbacks along Mission View Drive, added setbacks from public right-of-ways and a 28 foot increase in base height across the PD from 40 to 68 feet.

The originally submitted PD amendment requested "any material future revisions to the project site plan and/or project design elevations included as a part of this application shall be reviewed and approved by City Staff at Staff level if it is determined by Staff that the project revisions are consistent with or in substantial conformance with the content or intent of this PD and or the project site plan and design elevations". Based on the limited detail included in the site plan and sample elevations, staff had concerns with this request. Staff believed the proposed change in development standards noted in the above paragraph necessitates a formal review process to ensure appropriate transitions to adjacent areas. Site plans submitted to date are master plans, not detailed design plans where staff can determine whether City standards are met. The Design Review process requires submittal of these plans. The applicant responded to staff concerns and edited the PD Amendment to request Administrative Design Review for specific developments within Phase 2 (Section 2. #4 in the PD Guidelines). A condition requiring an administrative Design Permit for individual projects within Phase 2 is included in the draft resolution.

3. Findings

General Plan

Section 18.115.060 of the Zoning Code requires a determination that the proposed amendment meets the letter and intent of the General Plan goals and policies.

The proposed General Plan land use designation amendment generally meets the letter and intent of the General Plan goals and policies. The incorporation of housing into the project creates a "lifestyle" center where a mix of uses allows residents inside and outside the center as well as employees to meet daily needs without the use of a private automobile. However, limiting the expansion of the Mixed Use Flex designation to the area proposed for residential use would more closely meet the intent of the General Plan policies and retain a Highway Commercial base designation for remaining commercial acreage.

The traffic analysis conducted for the General Plan consistency review showed that the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development.

Zoning Amendment/Planned Development Combining District and Master Plan

To approve a PD, the following findings of Section 18.30.050.H.7 of the Zoning Code are required.

a. The proposed development is consistent with the General Plan, Zoning Code and any applicable specific plan or area plan adopted by the City Council;
The Planned Development amendment will yield a mixed-use project that is consistent with General Plan City and Neighborhood Form Policies CNF-10.3, CNF-10.6, CNF-13.1, Housing Element Policy HE-4u, Economic Development Element Policy ED7.4. There is no specific plan or area plan relating to this site.

b. The proposed development is superior to the development that could occur under the standards applicable in the existing zoning districts;

The existing PD provides for a regional shopping center and the first phase has been completed. Stand-alone, big box shopping centers are no longer a successful development model and, as such, the applicant desires to incorporate housing into the project to create a mixed-use neighborhood more consistent with the Morgan 2035 General Plan and superior to the originally approved PD.

- c. The proposed project will provide a substantial public benefit(s) as defined in Paragraph 8 (Substantial Public Benefit Defined). The public benefit provided shall be of sufficient value as determined by the Planning Commission to justify deviation from the standards of the zoning district that currently applies to the property;

There is an existing Planned Development on this property. Substantial public benefits were not required with the approval of the original PD. The incremental changes proposed by the Amendment allow housing on the site. The project will pay special attention to the connections between Phase I and II to ensure uses complement each other and there is adequate interface between uses. The project will give to the pedestrian scale of common areas and activation of the pedestrian realm. The additional activation of public spaces and connections across the property will provide benefits not only to residents of the center, but to the public as well.

- d. The site for the proposed development is adequate in size and shape to accommodate proposed land uses;

At almost 70 acres, the site is more than adequate in size to accommodate the original regional shopping center PD as well as the proposed mixed use development that would be achievable by adding housing to the site.

- e. Adequate transportation facilities, infrastructure, and public services exist or will be provided to serve the proposed development;

The site is located adjacent to U.S. Highway 101 bounded by Cochrane Road and Mission View Drive. There are wet and dry utilities and infrastructure in the surrounding area that support the development of this site.

- f. The proposed development will not have a substantial adverse effect on surrounding property and will be compatible with the existing and planned land use character of the surrounding area; and,

The proposed changes to the existing PD will create a mixed-use neighborhood that will be compatible with the existing and planned land use character in the area surrounding the existing center. There continues to be a significant impact under CEQA related to transportation, similar to what was approved as part of the 2005 PD and associated EIR. However, this significant impact is based on VMT. This is discussed further in the CEQA section of the report. The traffic study conducted for the General Plan based on Level of Service (LOS) demonstrated that the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development.

- g. Findings required for the concurrent approval of a Zoning Map Amendment can be made. As demonstrated in previous findings, the required findings in Section 18.114.060 can be made. The Planned Development amendment will yield a mixed-use project that is consistent with General Plan City and Neighborhood Form Policies CNF-10.3, CNF-10.6, Housing Element Policy HE-4u, Economic Development Element Policy ED7.4. There is no specific plan or area plan relating to this site. The inclusion of housing and the creation of a mixed-use neighborhood will not be detrimental to the public interest, health, safety, convenience, or welfare of the city. The project site is physically suitable for the proposed changes to the existing PD and the creation of a mixed-use neighborhood will create a more integrated community with easy access to goods and services.

CONCLUSION:

General Plan Amendments and Zone Changes, as proposed by the project applicant, are both legislative acts. The City is granted broad discretion to make decisions on legislative acts by State statute. Applications for such changes are not subject to the Permit Streamlining Act, and the City maintains significant discretion on all such requests, providing no obligation to recommend project approval or make findings for denial. The City is granted such discretion for legislative acts because changes to the General Plan and Zoning affect development policies for the entire City. Proposed amendments to the City's General Plan and zoning ordinance require careful consideration for internal consistency and long-term implications for effective land use planning. As such, the staff report documents the City's policies, provides analysis of the proposed project, identifies required findings, and specific recommendations to the Planning Commission.

The proposed project will create a mixed-use neighborhood on the Cochrane Commons campus. The approved PD has been in place since 2005 and the originally envisioned big box retail/cineplex development has not been able to come to fruition. The developer has been working to attract retail tenants to the shopping center for over 15 years. The City's 2017 Economic Blueprint action 13 calls for a Retail Concentration Strategy to support existing retail as Morgan Hill is considered over-retailed. The proposed project is generally consistent with the General Plan and the changes proposed in the PD, while broad, create the most flexibility for future development within the center.

Staff has one remaining concern with the proposed General Plan request. The project currently recommends extending the Mixed-Use Flex designation all the way to Cochrane Road. This could open up the remainder of Phase 2 to housing only, though a master plan amendment would be required. Staff recommends aligning the General Plan amendment with the proposed master plan.

CEQA (California Environmental Quality Act):

An Environmental Impact Report (EIR) was prepared as a Subsequent EIR (SEIR) to the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). The 2005 EIR approval resolution is included as Attachment 11. On December 3, 2021, the City of Morgan Hill circulated a Notice of Preparation (NOP) for a 30-day comment period to request input on the types of impacts that could result from the proposed project. The Draft SEIR, along with appendices (Attachments 12 through 16) was made available for public review for a 45-day comment period that began on June 10, 2022 and ended on July 25, 2022. The Notice of Availability of a Draft SEIR was posted with the County Clerk, sent to the State Clearinghouse, published on the City's website, and mailed to responsible agencies. The City also held a virtual community open house as an opportunity for the public to submit verbal comments on July 13, 2022.

Responses to the Notice of Preparation of a Draft SEIR and input received at the SEIR scoping meeting held by the City are summarized in Section 1 of the Draft SEIR. Comment letters received during circulation of the Draft SEIR and responses to those letters are included in the FEIR. (Attachment 17). A Mitigation and Monitoring Report is also attached (Attachment 18).

SEIR SUMMARY

As indicated in the Initial Study, there is no substantial evidence that significant and unmitigable impacts would occur to the following issue areas: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Impacts to Tribal Cultural Resources and Transportation were found to be potentially significant and were addressed in the SEIR.

Table ES-4 in the FEIR summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required) identified in the SEIR. Table ES-5 in the FEIR summarizes mitigation measures included in the 2005 EIR that would continue to be implemented under the proposed project. Because some mitigation measures have been previously complied with during development of Phase I, the already developed area adjacent to the project site, not every mitigation measure from the 2005 EIR would be included in the proposed project.

Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

The Draft SEIR identifies significant impacts to the following California Environmental Quality Act (CEQA) environmental issue area: transportation. As described in the Draft SEIR, Vehicle Miles Traveled (VMT) impacts can be mitigated, but the project would not fall below the applicable residential VMT per capita threshold and would be considered significant and unavoidable. All other subject area impacts were determined to have no impact or less than significant with the implementation of mitigation measures.

VMT measures the amount and distance of vehicle travel attributed to a project or use. Specifically, VMT focuses on determining the origin and destination of travel patterns. Unlike LOS, VMT does not assess the local vehicle trips from a project or the project's traffic impacts on a local intersection or road/highway segment. Rather, VMT assesses the effects of the project on regional traffic and use of transit and non-motorized travel. VMT is not a new methodology; it has been used for many years in CEQA documents in estimating pollution (air quality impacts), GHG emissions, and energy consumption. VMT is typically calculated using a travel demand model, which estimates the total number and length of vehicle trips to and from a given geographic area, such as transportation analysis zones (TAZs). The Valley Transportation Authority (VTA) developed the countywide VMT evaluation tool that is used to generate VMT calculations. Unfortunately, because it is a countywide model, the calculations levy 13 extra miles attached to Morgan Hill due to the City's distance from regional job centers in San Jose.

In June 2021, City Council directed City Staff to pursue a VMT model in order to deviate from the Valley Transportation Authority (VTA) Santa Clara Countywide VMT Evaluation Tool and/or to provide substantial evidence to deviate from the Governor's Office of Planning and Research (OPR) Technical Advisory which recommends a 15% threshold of significance reduction from existing VMT. This effort is currently underway.

The project would involve construction of Phase II of the Cochrane Commons development, which was previously analyzed in the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060) on the undeveloped site adjacent to the completed

Phase I. The 2005 EIR identified that significant and unavoidable impacts to agriculture, air quality, noise, and transportation would result from the previously approved project. The previously approved project and the current version of the project would both convert prime farmland out of agricultural use, and this impact would remain significant under the current project. The 2005 EIR found that the previously approved project would result in significant operational emissions from mobile air pollutant sources, even with the implementation of mitigation to implement a trip reduction plan. However, updated modeling with more accurate tools taking into account improved vehicle standards show that air quality emissions from the proposed current project would be less than significant. The 2005 EIR identified a short-term significant and unavoidable noise impact to two single-family residential units on the southeast corner of the project site due to the increased number of vehicle trips. As these units have since been demolished, this impact would no longer apply to the current project. The 2005 EIR also found that the previously approved project would generate new trips on the segment of US 101 between Tennant Avenue and Dunne Avenue that would exacerbate existing unacceptable level of service (LOS) conditions. Since the 2005 EIR's publication, SB 743 was passed, which prohibits the use of LOS as a metric to analyze transportation impacts under CEQA, so this impact is no longer relevant to the proposed project.

As stated previously, the project would exceed the applicable significance threshold for VMT. Even with Mitigation Measure TRA-1, that focuses on VMT Reductions, the project would not fall below the applicable residential VMT per capita threshold. A Findings of Fact and Statement of Overriding Considerations is included in the Draft Resolution for the SEIR (Attachment 1). The previous 2005 EIR also included significant impacts to traffic and circulation and a Findings of Fact and Statement of Overriding Considerations was adopted for the original project (Attachment 11).

There is no mitigation that could reduce VMT by 15% as required because of the extra 13 miles the City has to account for in the VTA traffic model - the methodology the City uses to determine VMT impacts. Significant VMT impacts will be commonplace across all projects until the model or measurements are able to be adjusted.

As required by the California Environmental Quality Act (CEQA), the SEIR also examined alternatives to the proposed project. Studied alternatives include the following three alternatives: 1) No build, no project, 2) Build out based on current General Plan Designation, 3) Expansion of General Plan Mixed-Use Flex Designation on the north half of the site. Based on the alternatives analysis, the proposed project was determined to be the environmentally superior alternative.

COMMUNITY ENGAGEMENT:

The proposed project was publicly noticed with expanded noticing (mailed to property owners within an expanded notice area – beyond 600 feet - of the project site and display notice placed in the local newspaper) for the minimum 10-day period. Information regarding the meeting was also placed on social media and the City's 411 information email.

ATTACHMENTS:

1. Draft Reso - SEIR
2. Draft Resolution - PD
3. 2005 PD Ordinance
4. PD Amendment Guidelines
5. Design Standard Matrix
6. General Plan Amendment Designation Plan
7. Updated Project Site Plan 052322
8. Phase 2 Site Plan - Color
9. Use Comparison Matrix
10. Statement of Objectives

11. 2005 EIR Certification reso
12. Cochrane Commons Draft SEIR
13. Cochrane Commons Draft SEIR Appendix A
14. Cochrane Commons Draft SEIR Appendix B
15. Cochrane Commons Draft SEIR Appendix C
16. Cochrane Commons Draft SEIR Appendix D
17. Final SEIR
18. Cochrane Commons MMRP
19. Cochrane Commons Mixed-Use Development Transportation Operations Analysis (01-03-22)

RESOLUTION NO.

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL RECOMMENDING THAT THE CITY COUNCIL CERTIFY THE FINAL SUSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE COCHRANE COMMONS PHASE 2 PROJECT AS CONSISTENT WITH THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND ADOPT A STATEMENT OF OVERRIDING CONSIDERATIONS REGARDING ENVIRONMENTAL IMPACTS AND A RELATED MITIGATION MONITORING AND REPORTING PROGRAM

WHEREAS, an Environmental Impact Report (EIR) (SCH Number 2022060200) was prepared for the Cochrane Commons Phase 2 Project in accordance with the California Environmental Quality Act (CEQA). A Notice of Preparation (NOP) was circulated between December 3, 2021 and January 3, 2022 to receive comments regarding the scope and content of the SEIR. A public scoping meeting was held on December 16, 2021 to receive oral comments on the NOP. The Draft SEIR was circulated between June 10, 2022 and July 25, 2022; and

WHEREAS, the City of Morgan Hill received comments on the Draft SEIR by seven individuals / organizations. Responses to those comments and minor changes to the Draft SEIR were included in a Final SEIR document in accordance with the requirements of CEQA; and

WHEREAS, the information contained in the Final SEIR, consisting of the Draft SEIR document in combination with the Final SEIR document, was reviewed and considered by the Planning Commission at a duly-noticed Planning Commission public hearing held on October 11, 2022; and the Planning Commission took action to recommend to the City Council that the Final SEIR be certified as being found complete, correct and in substantial compliance with the requirements of California Environmental Quality Act; and

WHEREAS, the Environmental Impact Report concluded that implementation of the Project could result in one significant effect on the environment and identified mitigation measures that would reduce some but not all of those significant effects to a less-than significant level; and

WHEREAS, in connection with the approval of a project involving the preparation of an Environmental Impact Report that identifies one or more significant environmental effects, CEQA requires the decision-making body of the lead agency to incorporate feasible mitigation measures that would reduce those significant environmental effects to a less-than-significant level and/or adopt a Findings of Fact and Statement of Overriding Considerations; and

WHEREAS, whenever a lead agency approves a project requiring the implementation of measures to mitigate or avoid significant effects on the environment,

CEQA also requires a lead agency to adopt a mitigation monitoring and reporting program to ensure compliance with the mitigation measures during project implementation, and such a mitigation monitoring and reporting program has been prepared for the Project for consideration by the decision-maker of the City of Morgan Hill as lead agency for the Project (the "Mitigation Monitoring and Reporting Program"); and

WHEREAS, the City of Morgan Hill is the lead agency on the Project, and the City Council is the decision-making body for the proposed approval to construct and otherwise undertake the Project; and

WHEREAS, the Subsequent Environmental Impact Report and the related Findings of Fact and Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program for the Project are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, the Subsequent Environmental Impact Report, incorporating any Addenda, and related Findings of Fact and Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program for the Project are on file in the Development Services Department located at 17575 Peak Avenue, Morgan Hill, California, 95037, and are available for inspection by any interested person at that location.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1 : FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS BY THE CITY COUNCIL OF THE CITY OF MORGAN HILL REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE COCHRANE COMMONS PHASE 2 PROJECT: The Planning Commission hereby recommends that the City Council find, determine and declare the findings and facts and statement of overriding considerations as set forth in the attached Exhibit "A" by this reference incorporated herein.

SECTION 2: CERTIFICATION OF FINAL EIR: The Planning Commission recommends that the City Council hereby certify that the Final SEIR has been completed in compliance with CEQA

PASSED AND ADOPTED THIS 11th DAY OF OCTOBER 2022, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

Resolution No.

Page 3

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

JOSEPH MUELLER, Chair

EXHIBIT "A"

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS BY THE CITY COUNCIL OF THE CITY OF MORGAN HILL REGARDING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE COCHRANE COMMONS PHASE 2 PROJECT (State Clearinghouse No. 2004112060)

The following Findings, the mitigation measures specified herein, and the Mitigation Monitoring and Reporting Program attached hereto are hereby adopted by the Morgan Hill City Council in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 21081, 21081.5 and 21081.6, and the CEQA Guidelines, Title 14, California Code of Regulations, Sections 15091 and 15092 for the Cochrane Commons Phase II Project (project).

Section 15091 of the CEQA Guidelines states that:

- a. No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:*
 - (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.*
 - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
 - (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.*

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental impacts that will otherwise occur with implementation of the project. Project mitigation or alternatives are not required, however, where they are infeasible or where the responsibility for modifying the project lies with another agency.

For those significant effects that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the

environment. The CEQA Guidelines state in section 15093 that:

“If the specific economic, legal, social, technological, or other benefits of a propos[ed] project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’”

A. ENVIRONMENTAL REVIEW PROCESS

The Subsequent Environmental Impact Report (SEIR) prepared by the City of Morgan Hill (City) for the Cochrane Commons Phase II Project (project) consists of the Draft Subsequent EIR (Draft SEIR) and the Final SEIR / Response to Comments on the Draft SEIR. It was prepared as a SEIR to the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). The project analyzed under the 2005 EIR included 590,100 square feet of retail space, a 12-pump gas station, and a 63,200-square-foot movie theatre in the same location as the project, which would have been built out in two phases. The 2005 EIR covered both Phase I and Phase II of project construction. Construction of Phase I of the project was completed in 2007.

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The Phase II project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, and a 140-room hotel. Residential and hotel uses were not considered under the 2005 EIR. The General Plan land use designation would be amended from Commercial to Mixed Use Flex and the zoning from Highway Commercial/Planned Unit Development to Mixed Use Flex/Planned Development for the Phase II development area.

On December 3, 2021, the City of Morgan Hill circulated a Notice of Preparation (NOP) for a 30-day comment period to request input on the types of impacts that could result from the proposed project. The Draft SEIR was made available for public review for a 45-day comment period that began on June 10, 2022 and ended on July 25, 2022. The Notice of Availability of a Draft SEIR was posted with the Santa Clara County Clerk, sent to the State Clearinghouse, published on the City’s website, and mailed to responsible agencies. The City also held a virtual community open house as an opportunity for the public to submit verbal comments on the SEIR at 7:00 p.m. on July 13, 2022. The City of Morgan Hill received a total of seven written comment letters during the public comment period.

The City released the Final SEIR for public review on September 30, 2022. The Final SEIR consists of copies of all comments received on the Draft SEIR, a list of commenters, all responses to comments, and proposed amendments to the SEIR. The Final SEIR, Draft SEIR, and Mitigation Monitoring and Reporting Program (MMRP) together comprise the SEIR for the project. The analysis and conclusions contained in the SEIR

reflect the independent judgment of the City.

B. PROJECT DESCRIPTION

Section 2 of the Draft SEIR includes a detailed description of the project. Other than minor clarifications, no revisions to the project description were required.

The 33.5-acre project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to MUF for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, swimming pool would also be provided for on-site residents.

There would be a total of 1,367 parking spaces. During Phase I, the project would include 276 parking stalls. During Phase 2, 658 stalls would be added and during Phase 3, 433 stalls would be added. Vehicles would access the project site primarily from De Paul Drive, which would have two driveways leading to two central roadways which would connect to two driveways off Mission View Drive. An additional driveway would be located off of Cochrane Road which would allow right-in and right-out vehicle movements. The project site has been previously graded and would be further modified by additional grading. The storm drain system design would incorporate City standards for pipe sizes, maximum slopes, minimum flow velocities, and pipe material, and drainage would be to the planned detention pond and pumped to the adjacent Cochrane Channel at discharge rates at or below pre-development levels.

The project objectives are to:

- Increase the viability of the existing Cochrane Commons anchors and tenants
- Create a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place
- Assist in protecting the tax revenue generated by the current and future tenants and the long-term viability of the City of Morgan Hill's retailers
- Provide much needed variety to the City's housing stock in the form of market rate and below market rate affordable housing
- Encourage the development of the remainder of the shopping center

The proposed project would require the following approvals:

- **Certification of a Subsequent EIR.** Certify the Cochrane Commons Phase II SEIR and make environmental findings pursuant to CEQA.

- **Amendment to Zoning and General Plan Designation.** Adopt an amendment to the zoning map and General Plan land use map to convert the Phase II development area to MUF.

C. SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS AND DISPOSITION OF RELATED MITIGATION MEASURES

The following findings are hereby made by the City of Morgan Hill City Council for the significant environmental effects identified in the SEIR and Initial Study related to transportation (impacts related to VMT) and agriculture and forestry resources (impacts related to conversion of Important Farmland). The Final SEIR identified the following impact associated with the project that would be significant and unavoidable:

SEIR

1. **Transportation Impact TRA-2:** The project would exceed the applicable significance threshold for VMT. Mitigation Measure TRA-1 would reduce residential VMT per capita, but not below the per capita threshold of significance. Impacts would be significant and unavoidable.

Mitigation Measure TRA-1: VMT Reductions. The applicant shall develop and implement Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below:

- **School Pool Programs:** Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT.
- **Voluntary Travel Behavior Change Programs.** Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT.

Finding: Even with incorporation of Mitigation Measure TRA-1, VMT per capita would not be reduced by 27 percent, which is the percent needed to reduce the VMT per capita below the threshold. There are no feasible mitigation measures or combination of measures that would reduce the overall project VMT per capita by 27 percent. Therefore, the impact would remain significant and unavoidable.

Impacts related to transportation have been mitigated to the extent feasible. The City of Morgan Hill finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in Section K, *Statement of Overriding Considerations*.

INITIAL STUDY

1. Agriculture and Forestry Impact A: Impacts to Agricultural Resources were analyzed in Section 3.2 of the 2005 EIR. The 2005 EIR concluded that the project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, which would result in significant and unavoidable impacts. The impacts of the proposed project would be the same as those analyzed in the 2005 EIR.
2. Agriculture and Forestry Impact E: Impacts to Agricultural Resources were analyzed in Section 3.2 of the 2005 EIR. The 2005 EIR concluded that the project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, which would result in significant and unavoidable impacts. The impacts of the proposed project would be the same as those analyzed in the 2005 EIR.

Finding: The project would result in the conversion of Farmland to non-agricultural use, which would result in significant and unavoidable impacts. The 2005 EIR found that there are no feasible mitigation measures available to reduce the impact of agricultural land conversion to a less than significant impact. The City of Morgan Hill finds that although this impact would be significant and unavoidable, the impact is acceptable when weighed against the overriding social, economic, and other considerations set forth in Section K, *Statement of Overriding Considerations*.

For a detailed description of impacts and mitigation measures, see the appropriate text in the Final SEIR.

D. SIGNIFICANT IMPACTS IDENTIFIED IN THE INITIAL STUDY OR SEIR THAT ARE REDUCED TO A LEVEL OF "LESS THAN SIGNIFICANT" BY THE MITIGATION MEASURES INCORPORATED INTO THE PROJECT

The following findings are hereby made by the City of Morgan Hill City Council for the significant environmental effects identified in the SEIR and Initial Study that would be reduced to a less than significant level through incorporation of mitigation measures. The City finds for each of the significant or potentially significant impacts identified in this section that based upon substantial evidence in the record, changes or alterations have been required or incorporated into the project which avoid or substantially lessen the significant effects as identified in the SEIR and Initial Study and, thus, that adoption of the mitigation measures set forth below will reduce these significant or potentially significant effects to less-than-significant levels. Adoption of the mitigation measures

will effectively make the mitigation measures part of the project. In addition, compliance with City and other applicable regulations will further reduce project impacts. Therefore, the City finds that based upon substantial evidence in the record, changes or alterations have been required or incorporated into the project which avoid or substantially lessen the significant effects as identified in the SEIR and Initial Study.

SEIR

The Final SEIR identified several impacts associated with the project that would be reduced to a level of less than significant with the implementation of mitigation measures identified in the Final SEIR:

1. Transportation Impact TRA-4: The project could result in inadequate emergency access to the project site. This impact would be less than significant with adherence to Mitigation Measure TRA-2.
2. Tribal Cultural Resources Impact TCR-1: The project has the potential to uncover buried tribal cultural resources during ground disturbing activities. Should project construction activities encounter a tribal cultural resource, Mitigation Measure TCR-1 would ensure that potential impacts to tribal cultural resources would be less than significant.

INITIAL STUDY

3. Aesthetics Impact D: Lighting impacts from the proposed project as potentially significant because of its potential adverse effects to night sky visibility and the Lick Observatory on Mount Hamilton. Potentially significant impacts would be reduced to a less than significant level with the implementation of Mitigation Measure 3.1-1 from the 2005 EIR.
4. Air Quality Impact B: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. BAAQMD recommends the implementation of best management practices (BMP) to reduce fugitive dust emissions. Adherence to the dust control measures listed in Mitigation Measure 3.3-2 of the 2005 EIR would reduce impacts to less-than-significant levels.
5. Biological Resources Impact A: The project would impact potentially candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Potentially significant impacts would be reduced to a less than significant level with implementation of Mitigation Measures Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3 from the 2005 EIR.
6. Biological Resources Impact D: The project site is located in an urbanized area of Morgan Hill and lacks natural habitats or riparian corridors and does not connect habitat or open space areas. With Mitigation Measures 3.3-1 through 3.3-3 and 3.4-

1a through 3.4-3 incorporated, the project would not interfere substantially with wildlife movement, and this impact would be less than significant.

7. Biological Resources Impact E: The project site currently does not have any existing trees that would be removed by the proposed project. The project would comply with existing regulations, avoidance measures, and mitigation fees in the HCP and Burrowing Owl Mitigation Plan. The project would not conflict with any local policies or ordinances, and impacts would be less than significant with implementation of mitigation measures.
8. Biological Resources Impact F: The project site is located in an urbanized area of Morgan Hill and would be required to comply with Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3, and applicable mitigation fees and mitigation measures that are identified in Chapter 6 of the HCP.
9. Cultural Resources Impact A-C: The project site does not contain known historic resources, archaeological resources, or human remains. Nonetheless, project ground-disturbing activities have the potential to impact unrecorded cultural resources. Potentially significant impacts would be reduced to a less than significant level with implementation of Mitigation Measures 3.5-1a and 3.5-1b from the 2005 EIR.
10. Geology and Soils Impact A1-A4: With implementation of the mitigation measures described below, the project site would be considered suitable for development provided that the recommendations contained in a geotechnical investigation conducted by Twining Laboratories in 2004 are implemented. Furthermore, the project would be required to comply with California Building Code requirements and 2005 EIR Mitigation Measure 3.6-1 which would reduce impacts to less than significant. Subsurface conditions on the project site and depth to groundwater across the site would indicate that there is some potential for liquefaction at the site. Therefore, the 2005 EIR requires implementation of Mitigation Measure 3.6-2 to reduce impacts to a less-than-significant level. Settlements would exceed the tolerances for conventional shallow spread foundations and slabs on grade planned for the project. The 2005 EIR required implementation of Mitigation Measure 3.6-3 to reduce this impact to less than significant.
11. Geology and Soils Impacts C-D: Settlements would exceed the tolerances for conventional shallow spread foundations and slabs on grade planned for the project. The 2005 EIR required implementation of Mitigation Measure 3.6-3 to reduce this impact to less than significant. Due to the compressible nature of the near surface soils, they would not provide adequate support for the proposed improvements in their existing condition. The 2005 EIR further required implementation of Mitigation Measure 3.6-4 to reduce this impact to a less-than-significant level. The 2005 EIR found that there is a less-than-significant impact from unstable soils or geologic units and expansive soils, as development standards and compliance with Mitigation Measures 3.6-5 through 3.6-7, the Morgan Hill Building Code, and California Building

Code would ensure structures are constructed to accommodate unstable or expansive soil units.

12. Geology and Soils Impact F: No paleontological resources have been explicitly found in the City, but project construction has the potential to result in inadvertently uncovering unique resources during ground-disturbing activities. Implementation of Mitigation Measure 3.5-1a would reduce impacts to unique paleontological resources to less than significant.
13. Hydrology and Water Quality Impact D: The Anderson Dam has been identified to have seismic safety concerns and is currently undergoing a capital earthquake retrofit to improve dam safety and to return the Anderson Reservoir to its original storage capacity. Flood hazard risk at the project is therefore slightly higher than the risk originally identified in the 2005 EIR. Tsunami, and seiche risk remain the same as when analyzed in the 2005 EIR. The impact would therefore be the same as for the previous project, mitigation measures 3.8-1 through 3.8-3 would apply, and the issue was addressed adequately in the 2005 EIR. Mitigation measures included in the 2005 EIR require an emergency evacuation plan, which would apply to the proposed project.
14. Public Services Impact A1-A2: The proposed project is located in an urbanized area already served by the MHPD and is generally similar to the surrounding uses and would not substantially increase demand on local police services. The proposed project would be required to implement Mitigation Measure 3.11-1 from the 2005 EIR to reduce impacts to less-than-significant levels.
15. Utilities and Service Systems Impacts D-E: There is adequate capacity available to serve the project. Mitigation Measure 3.13-1 from the 2005 EIR would increase the solid waste diversion of project-generated waste.

E. LESS THAN SIGNIFICANT IMPACTS IDENTIFIED IN THE SEIR OR INITIAL STUDY

The following findings are hereby made by the City of Morgan Hill City Council regarding issue areas with no impact on the environment. The City finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the project are not significant or are less than significant. The SEIR and Initial Study provide a detailed analysis of the less-than-significant impacts of the proposed project for all issue areas below.

SEIR

1. Greenhouse Gas Emissions Impact GHG-1: The project would generate temporary and long-term increases in GHG emissions, but such emissions would remain below the adjusted efficiency threshold intended to demonstrate consistency with the 2030 statewide GHG reduction target.
2. Transportation Impact TRA-1: The project would not conflict with applicable policies

addressing transit, bicycle, and pedestrian facilities.

3. Transportation Impact TRA-3: The project would not introduce design features or incompatible uses that could increase traffic hazards.

INITIAL STUDY

1. Aesthetics Impact A: The proposed project site is not on a hillside, the project would not conflict with City goals and policies regarding hillside preservation in the City's 2035 General Plan. Furthermore, the project would comply with height regulations established in the Zoning Code. The proposed project would not have a significant impact on scenic vistas.
2. Aesthetics Impact C: The project would not substantially degrade the existing visual character or quality of the site and its surroundings.
3. Air Quality Impact A: The project would not conflict with or obstruct implementation of the applicable air quality plan.
4. Air Quality Impact C: The project would not expose sensitive receptors to substantial pollutant concentration.
5. Air Quality Impact D: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
6. Energy Impact A: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.
7. Energy Impact B: The project would result in no impact to state and local plans for renewable energy or energy efficiency.
8. Geology and Soils Impact B: With compliance with existing regulations, substantial erosion during construction would not occur.
9. Geology and Soils Impact E: The project would be serviced by wastewater collection and treatment systems, and no septic tanks or alternative wastewater disposal systems would be installed, which would be the same for the modified project.
10. Hazards and Hazardous Materials Impact A: The proposed project would include residential and commercial retail land uses, which typically do not use or store large quantities of hazardous materials.
11. Hazards and Hazardous Materials Impact B: No known changes in the conditions of the soils or groundwater at the site have occurred since 2005, and the proposed development would not include activities that use or store more hazardous materials than the Phase II project analyzed in the 2005 EIR.

12. Hazards and Hazardous Materials Impact D: The project site is not located on a hazardous materials site. A search of the Department of Toxic Substances Control (DTSC) EnviroStor database and the State Water Resources Control Board (SWRCB) GeoTracker database conducted on September 9, 2021, confirmed the project site is not located on a hazardous materials site on either database.
13. Hazards and Hazardous Materials Impact F: The proposed project would not result in adverse effects on emergency response or evacuation plans. The project would be required to comply with federal, state, and local regulations, including the Morgan Hill Emergency Operations Plan.
14. Hazards and Hazardous Materials Impact G: The project would not expose people or structures to significant risks involving wildland fires.
15. Hydrology and Water Quality Impact A: The project would be required to comply with regulations under the NPDES permit, Regional Water Quality Control Board, and adopted City regulations, which would address impacts to water quality.
16. Hydrology and Water Quality Impact B and E: The project would not extract groundwater or directly interfere with the groundwater table through construction activities on the site, as ground disturbance would not occur below the water table. The WSA provided as Appendix WSA determines that there is sufficient water supply available to meet the project's projected demands reliably over a 20-year projection and with consideration to varying climatic (drought) conditions.
17. Hydrology and Water Quality C1-C4: The 2005 EIR found that the proposed project would result in a substantial increase in stormwater runoff generated at the project site compared to existing conditions, but the project includes detention ponds, which have been designed to provide temporary storage of increased runoff in order to prevent increased flooding downstream. Detention basins on the project site would be fixed to accommodate Santa Clara Valley Water District (Valley Water) requirements and the City's detention design criteria. The stormwater to be temporarily stored in the planned detention ponds will be pumped to the adjacent Cochrane Channel at discharge rates, which are at or below pre-development levels, as required by Valley Water.
18. Land Use and Planning Impact A-B: The project would not divide an established community. The proposed project would not result in conflicts with Morgan Hill Municipal Code regulations adopted to avoid or mitigate environmental effects.
19. Mineral Resources Impacts A-B: The proposed project would not result in significant impacts to mineral resources, as the City of Morgan Hill General Plan and the General Plan EIR do not identify any mineral resource areas in the vicinity of the project site.
20. Noise Impact A: The project would not make substantial alterations to roadway

alignments¹ or substantially change the vehicle classifications mix on local roadways. The project would therefore not result in significant impacts to these receivers or any receivers from an increase in traffic noise. Offsite traffic would not create a new or substantially increased noise impact.

21. Noise Impact B: Construction vibration would be lower than what is considered a distinctly perceptible impact for humans. The project does not include substantial vibration sources associated with operation.
22. Population and Housing Impact A: Implementation of the proposed project and the additional population would be in population projections for the City and would not result in substantial cumulative impacts due to population growth. The proposed project would not induce substantial unplanned growth directly or indirectly.
23. Public Services Impact A3: Payment of the development fees is considered full mitigation for the proposed project's impacts related to schools under CEQA and impacts would be less than significant.
24. Public Services Impact A4: The proposed project would not have substantially adverse impacts associated with the provision of new or physically altered recreational services, or the need for new or physically altered recreational services.
25. Public Services Impact A5: The project's new residents would generate additional demand for library services, but the project's growth is in the population forecasts in ABAG projections. The proposed project does not include and would not require new or physically altered governmental facilities.
26. Recreation Impact A-B: The increase in population would result in a proportionate increase in demand for recreational facilities. The project's residential and commercial development would impact the parkland ratio in the City. The amenities provided by the proposed project would reduce the demand for offsite recreational facilities generated by new residents.
27. Utilities and Service Systems Impacts A-C: Services are readily available near the project site. The City of Morgan Hill has prohibited the use of natural gas in new development, the project would not involve the use of natural gas. As circumstances have not changed with respect to electricity and telecommunications infrastructure, the project would continue to be adequately served. There is adequate wastewater service available to serve the project. There is adequate water supply available to serve the project.
28. Wildfire Impacts A-D: The proposed project is not located in a State Responsibility

¹ The project would include the addition of a dedicated left turn lane and right turn lane on Tokay Avenue for movements in and out of the community; other than restriping lanes for the dedicated turn lanes, the project would not alter Tokay Avenue (e.g., no roadway widening required).

Area (SRA) or located near a VHFHSZ.

F. AREAS OF NO IMPACT IDENTIFIED IN THE SEIR OR INITIAL STUDY

The Final SEIR and Initial Study prepared for the project identified impacts that would have no impact:

The following findings are hereby made by the City of Morgan Hill City Council for the environmental effects found to have no impact:

SEIR

1. Greenhouse Gas Emissions Impact GHG-2: The project would be consistent with the 2017 Scoping Plan and Plan Bay Area 2050. This project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

INITIAL STUDY

1. Aesthetics Impact B: There are no designated State Scenic Highways in Morgan Hill. Thus, there would be no impact to scenic resources in a State Scenic Highway.
2. Agricultural Resources Impact B: Neither the project site nor the directly adjacent parcels are under Williamson Act contracts.
3. Agricultural Resources Impact C-D: The General Plan and U.S. Department of Agriculture does not identify any land in the City as zoned for forest land or timberland. The project site does not contain forest land or forestry resources.
4. Biological Resources Impact B: The project site lacks sensitive natural communities and protected wetlands, the project would not have a direct adverse impact on biological resources
5. Biological Resources Impact C: There are no riparian areas or other sensitive natural communities on or directly adjacent to the project site.
6. Hazards and Hazardous Materials Impact C: The project would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school.
7. Hazards and Hazardous Materials Impact E: The project would not be within two miles of a public airport or airstrip and would not result in a safety hazard or excessive noise hazards.
8. Noise Impact C: The project site is outside of the area of the land use plan for the airport. There are no private airstrips near the project site. Because there are no airports or airstrips near the project site, the project would not result in the exposure of people to excessive noise levels from aircraft.

9. Population and Housing Impact B: There are currently no residences on the project site. Therefore, the project would not displace existing people or housing.

G. MITIGATION MONITORING AND REPORTING PROGRAM

When making findings, the lead agency must adopt a reporting or monitoring program for the mitigation measures it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment. The City hereby adopts the MMRP for the project, included as Attachment A to these findings. The mitigation measures identified in the Final SEIR and adopted and incorporated into the project will be monitored pursuant to this program.

H. ALTERNATIVES

Pursuant to CEQA Guidelines Section 15126.6, the SEIR examined a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives but would avoid or substantially lessen the significant adverse impacts. The City has reviewed the impacts associated with each alternative as compared with the proposed project, and has also considered each alternative's feasibility, considering a range of economic, environmental, social, and legal factors. Overall, the City concludes that Alternative 1 (No Project Alternative) would be the environmentally superior alternative. However, pursuant to CEQA Guidelines Section 15126.6(e)(2), if the No Project Alternative is determined to be environmentally superior, the EIR shall also identify an environmentally superior alternative among the other alternatives. . As discussed above, both Alternative 2 and Alternative 3 would result in reduced transportation impacts compared to the proposed project; however, transportation impacts under Alternative 2 and Alternative 3 would remain significant and unavoidable. Furthermore, the additional commercial buildout under Alternative 2 and Alternative 3 would result in an increased amount of annual operational GHG emissions. While these emissions do not exceed the adjusted BAAQMD emissions per service person threshold, both alternatives would result in more annual operational GHG emissions, which would result in further impacts to the environment. The alternatives considered by the City are summarized below.

Alternative 1 (No Project Alternative) Under the No Project Alternative, the proposed residential, retail, and commercial buildings associated with the proposed project would not be constructed. Alternative 1 would involve no modification of the existing parcel. The site would remain vacant, and no land use designation or zoning changes would occur. Alternative 1 would not fulfill the project's objectives to develop the remainder of the shopping center, nor would it provide additional housing.

Alternative 2 (No Project – Allowable Buildout under Existing General Plan Designation Alternative) The No Project – Allowable Buildout alternative assumes that the proposed residential, retail, and commercial buildings associated with the proposed project are not constructed. However, this alternative also assumes that buildout currently allowed by the existing Morgan Hill 2035 General Plan land use designations

would occur. As described in Section 2, *Project Description*, the project site is currently split between two land use designations. Approximately 13 acres of the northwest corner of the site is designated Mixed Use Flex (MUF) (7-24 dwelling units/acre) with the remaining 20.5 acres designated Commercial. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers, with a maximum FAR of 0.6. With 20.5 acres of the project site designated as commercial and a FAR of 0.6, Alternative 2 would allow a maximum of approximately 536,000 square feet of commercial development.² The MUF designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre and a maximum FAR of 0.5. With 13 acres of the project site designated as MUF, a maximum of 312 dwelling units could be developed in the project site. Because lands designated as MUF have a maximum FAR of 0.5, the maximum residential building footprint within the site would be approximately 283,000 square feet.³ Altogether, Alternative 2 would result in the development of fewer residential units and more commercial area. This alternative would meet most of the project objectives, but it would contribute less housing stock than the proposed project.

Alternative 3 (Mixed-Use Flex Designation on North Half of the Site Alternative)

The Extension of Mixed-Use Flex Designation to Cover Half the Site alternative assumes that the 2035 General Plan land use designation of MUF would be extended beyond the northwestern portion of the project site to the east to encompass the northern half of the project site. Residential, retail, and commercial buildings would be constructed consistent with the adjusted land use designation. Approximately 16.75 acres on the northern side of the project site would be designated MUF, and 16.75 acres on the southern side of the project site would remain designated as commercial. 16.75 acres of land designated as MUF would allow for up to 402 dwelling units to be built under Alternative 3,⁴ and 16.75 acres of land designated as commercial would allow for up to approximately 435,600 square feet of commercial use.⁵ Alternative 3 would result in half as much area designated as MUF compared to the proposed project; thus, the extended MUF area under this alternative would allow the development of fewer dwelling units compared to the proposed project. Alternative 3 would also involve an increase in areas designated as commercial compared to the proposed project. Similar to the proposed project, this alternative would meet the project objectives by increasing the viability of the existing Cochrane Commons anchors and tenants, developing the remainder of the shopping center, and adding variety to the city's housing stock.

I. RECIRCULATION NOT REQUIRED

² 20.5 acres multiplied by a FAR of 0.6, converted to square feet, equals approximately 536,000 square feet of allowable commercial development.

³ 13 acres multiplied by up to 24 dwelling units per acre equals 312 dwelling units. 13 acres multiplied by a FAR of 0.5 converted to square feet, is approximately 283,000 square feet of residential development.

⁴ 16.75 acres multiplied by up to 24 dwelling units per acre equals 402 dwelling units.

⁵ 16.75 acres Multiplied by a FAR of 0.6, converted to square feet, equals approximately 435,600 square feet of allowable commercial development.

No new or substantial changes to the SEIR were proposed as a result of the public comment process. The Final SEIR responds to comments and makes only minor technical changes, clarifications or additions to the EIR. The minor changes, clarifications, and additions to the SEIR do not identify any new significant impacts or substantial increase in the severity of any environmental impacts. Therefore, recirculation of the SEIR is not required.

J. RECORD OF PROCEEDINGS

Various documents and other materials constitute the record of proceedings upon which the City base their findings and decisions contained herein. Documents related to this proposed project are located in the City of Morgan Hill Development Services, 17575 Peak Avenue, Morgan Hill, California 95037.

K. STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the decision-making agency to balance the benefits of a project against its significant and unavoidable impacts when determining whether to approve a project. If the benefits of the project outweigh its unavoidable adverse environmental effects, those effects may be considered acceptable (CEQA Guidelines Section 15093(a)). CEQA requires the agency to state in writing the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the Final SEIR or elsewhere in the administrative record (CEQA Guidelines Section 15093(b)). The proposed project would result in significant and unavoidable impacts related to vehicle miles traveled and transportation, even after incorporation of Mitigation Measure TRA-1, VMT Reductions.

The City adopts and makes this Statement of Overriding Considerations regarding the significant unavoidable impacts of the project and the anticipated benefits of the project. The City finds that the project's benefits of providing affordable multi-family housing, increasing the viability of the Cochrane Commons, and developing the remainder of the shopping center outweighs the project's significant unavoidable environmental effects.

On balance, the City finds that there are specific considerations associated with the project that serve to override and outweigh the project's significant unavoidable effects. Therefore, pursuant to CEQA Guidelines Section 15093(b), these adverse effects are considered acceptable.

L. SUBSTANTIAL EVIDENCE SUPPORTING FINDINGS

Substantial evidence supporting each and every finding made herein is contained in the Final SEIR and record of proceedings. Omission of reference in these findings to any evidence in the SEIR and/or record of proceedings is not intended to exclude that evidence as supporting these findings.

In making these findings, the City Council has relied upon the expertise of a variety of independent technical and professional consultants to the City, and the expertise of the City's Staff. The City Council has also carefully considered the evidence submitted by

property owners and other interested agencies and individuals. To the extent that evidence consists of expert opinions that differ from the opinions of the City's outside consultants and Staff, at most it represents a disagreement of experts, which is adequately reviewed in the EIR. Based on its review, the City Council has determined that the opinions of its outside consultants and Staff are valid and are hereby accepted. In some instances, the City Council has also relied on the expertise of other agencies who have provided comments on the Draft SEIR and other actions related to the Project. To the extent that alternatives or mitigation measures were proposed by other agencies or interested persons that differ from the mitigation adopted herein, the City Council specifically rejects these proposals based on the substantial evidence in the record supporting the mitigation adopted as sufficient and necessary to mitigate impacts to a less than significant level or to the level that the impacts can feasibly be mitigated.

RESOLUTION NO. XX-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL RECOMMENDING APPROVAL TO ADOPT A GENERAL PLAN AMENDMENT AND AMENDMENTS TO THE COCHRANE COMMONS PLANNED UNIT DEVELOPMENT FOR A 66.49-ACRE AREA LOCATED AT THE NORTHEAST QUADRANT OF COCHRANE ROAD AND HIGHWAY 101 (APNs 728-37-001, -002, -004, -005 & -007)

WHEREAS, the applicant is requesting a General Plan Amendment and an amendment to the master development plan and Planned Unit Development (PUD) Guidelines for a shopping center on a 66.49-acre site originally approved in 2005 to incorporate housing units into the project; and

WHEREAS, such request was considered by the Planning Commission at their regular meeting of October 11, 2022, at which time the Planning Commission recommended approval of applications ZA2019-0003 and GPA2021-0004 (Morgan Hill Retail Venture LP, Owner; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The proposed General Plan land use designation amendment generally meets the letter and intent of the General Plan goals and policies. The incorporation of housing into the project creates a "lifestyle" center where a mix of uses allows residents inside and outside the center as well as employees to meet daily needs without the use of a private automobile. The traffic analysis conducted for the General Plan consistency review showed that the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development.

SECTION 2. The Planned Development amendment will yield a mixed-use project that is consistent with General Plan City and Neighborhood Form Policies CNF-10.3, CNF-10.6, CNF-13.1 Housing Element Policy HE-4u, Economic Development Element Policy ED7.4. There is no specific plan or area plan relating to this site.

SECTION 3. The existing PD provides for a regional shopping center and the first phase has been completed. Stand-alone, big box shopping centers are

no longer a successful development model and, as such, the applicant desires to incorporate housing into the project to create a mixed-use neighborhood more consistent with the Morgan Hill 2035 General Plan and superior to the originally approved PD.

SECTION 4. There is an existing Planned Development on this property. Substantial public benefits were not required with the approval of the original PD. The incremental changes proposed by the Amendment allow housing on the site. The project will pay special attention to the connections between Phase I and II to ensure uses complement each other and there is adequate interface between uses. The project will give to the pedestrian scale of common areas and activation of the pedestrian realm. The additional activation of public spaces and connections across the property will provide benefits not only to residents of the center, but to the public as well.

SECTION 5. The site is more than adequate in size to accommodate the original regional shopping center Planned Development as well as the proposed mixed-use development that would be achievable by adding housing to the site.

SECTION 6. The site is located adjacent to Highway 101 bounded by Cochrane Road and Mission View Drive. There are wet and dry utilities and infrastructure in the surrounding area that support the development of this site.

SECTION 7. The proposed changes to the existing PD will create a mixed-use neighborhood that will be compatible with the existing and planned land use character in the area surrounding the existing center. There continues to be a significant impact under CEQA related to transportation, similar to what was approved as part of the 2005 PD and associated EIR. However, this significant impact is based on Vehicle Miles Traveled (VMT). The traffic study conducted for the General Plan based on Level of Service (LOS) demonstrated that the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development.

SECTION 8. A Subsequent Environmental Impact Report has been prepared for this project as part of the General Plan Amendment and Zoning Amendment applications. Mitigation measures and a monitoring program will be adopted for those environmental impacts identified in the report.

SECTION 9. The required findings for a Zoning Amendment in Section 18.114.060 can be made. The Planned Development amendment will yield a mixed-use project that is consistent with General Plan City and Neighborhood Form Policies CNF-10.3, CNF-10.6, CNF-13.1 Housing Element Policy HE-4u, Economic Development Element Policy ED7.4. There is no specific plan or area plan relating to this site. The inclusion of housing and the creation of a mixed-use neighborhood will not be detrimental to the public interest,

health, safety, convenience, or welfare of the city. The project site is physically suitable for the proposed changes to the existing PD and the creation of a mixed-use neighborhood will create a more integrated community with easy access to goods and services.

SECTION 10 The required findings for a General Plan Amendment in Section 18.115.060 and for a Planned Development amendment in Section 18.30.050 H.7 can be made.

SECTION 11. Therefore, based upon the above reasons, and the record in this matter, the Planning Commission hereby recommends approval of the proposed General Plan Amendment and Planned Development Amendment as shown in Exhibit A.

SECTION 12. The approved project shall be subject to the following conditions:

- a. The applicant shall comply with the mitigation measures of the certified Subsequent Environmental Impact Report, remaining mitigation measures in the 2005 Environmental Impact Report and adhere to the adopted Mitigation Monitoring and Reporting Program.
- b. The project shall be subject to compliance with the PD Guidelines as attached in Exhibit A of this Resolution.
- c. Individual developments within Phase 2 shall be subject to Administrative Design Review.
- d. Any additional signage beyond the additional pylon side discussed within the PD Guidelines shall be added to the uniform sign program and reviewed and approved by the Development Services Director.

PASSED AND ADOPTED THIS 11th DAY OF OCTOBER, 2022, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:NONE

ABSTAIN: COMMISSIONERS:NONE

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

JOSEPH MUELLER, Chair

EXHIBIT A – PD Guidelines and General Plan Amendment

MIXED USE PROJECT
COCHRANE ROAD AND HIGHWAY 101
A DINAPOLI, BROWMAN, GUGLIELMO DEVELOPMENT

PD GUIDELINES
MORGAN HILL, CA
October 2022

Location

Cochrane Commons is located at the northeast quadrant of the Cochrane Road overpass at Highway 101.

Introduction and Intent

The intent of this narrative is to describe the architectural theme and site development plans which will guide the future development of this site relative to architectural compatibility, site design, landscape features, and signage concepts. These development standards are designed to provide flexibility to allow creative freedom and diversity, which is necessary for maintaining and attracting national retail tenants and future residents to the Cochrane Commons mixed use project. This document outlines the guidelines under which all businesses and residents can synergistically coexist in a competitive market and in close proximity to Cochrane Commons Shopping Center. Except as otherwise modified and amended herein the existing and approved PUD shall remain in full force and effect, including without limitation the permitted and conditionally permitted uses as well as the original site plan.

Development Guideline Format

These PD guidelines are organized as follows:

- Section 1: Allowable Uses
- Section 2: Site Development Concept
- Section 3: Landscape and Lighting Concepts and Guidelines
- Section 4: Parking and Loading/Circulation
- Section 5: Architectural Concepts and Guidelines
- Section 6: Site Design Guidelines
- Section 7: Utilities and Appurtenant Uses / Devices

SECTION 1: ALLOWABLE USES

All capitalized terms herein shall have the meaning set forth in the Morgan Hill Zoning Code, as adopted on June 6, 2018.

Permitted Uses:

- Small, medium and big box Retail, (including, but not limited to General Retail, Convenience Markets, Home Improvement Centers, Grocery stores, Liquor Stores, Drug Stores, and/or Large Commodity Retail)
- Residential Land Uses (approximately 8-24 dwelling units per acre), rentals or for sale (including, but not limited to, Duplexes, Triplexes, Group Housing, Live/Work Units, Mixed Use Residential, Multi-Family Dwellings, Single-Family Dwellings, Single-Family Attached Dwellings, and/or Single Family Detached Dwellings)
- Lodging Facilities
- Nursing Homes, Long-Term Care, Residential Care Facilities, and/or Residential Care Facilities, Small
- Day Care Centers and/or Home Day Care
- Colleges and Trade Schools, Community Assembly, Cultural Institutions, Instructional Services, Schools
- Eating and Drinking Uses (including, but not limited to, Restaurants, Fast Food Restaurants, Sit-Down, quick service, fast casual, café, market hall, cafeteria style, drive in and full service)
- Up to five (5) Drive-Through Facilities. Drive-Through Facilities in addition to those permitted above, shall be permitted within the shopping center with the approval of a conditional use permit.
- Commercial Recreation (including indoor health clubs and group fitness facilities), Cinemas and Theaters, Parks and Recreational Facilities, Bars and Nightclubs, Tasting Rooms, Plant Nurseries, Breweries, Beer Gardens
- Pop-up shops, food trucks and/or temporary food kiosks (day or night)
- Farmers Market
- Animal Boarding
- Professional Offices, Medical Offices and Clinics, Banks and Financial Institutions, Veterinarian Clinics and Hospitals, Government Offices, Service Commercial Uses, Business Support Services, and/or co-working spaces
- Personal Services, Social Services, and/or Public Safety Facilities
- Fuel and Service Stations, Vehicle Rentals, Vehicle Sales and Leasing, Vehicle Washing
- Parking Lots and Structures
- Recycling Facilities
- Light Fleet-Based Services
- Vehicle Repair and Maintenance, Minor (such as a tire shop, oil changer, car audio shop, or other similar auto oriented uses)
- Wireless Communication Facilities
- Urban Agriculture
- Wholesaling
- Warehousing, storage, and distribution, curbside and in store pick-up services, return and delivery services,
- Ecommerce Fulfillment Services business as part of a retail or other allowable use;

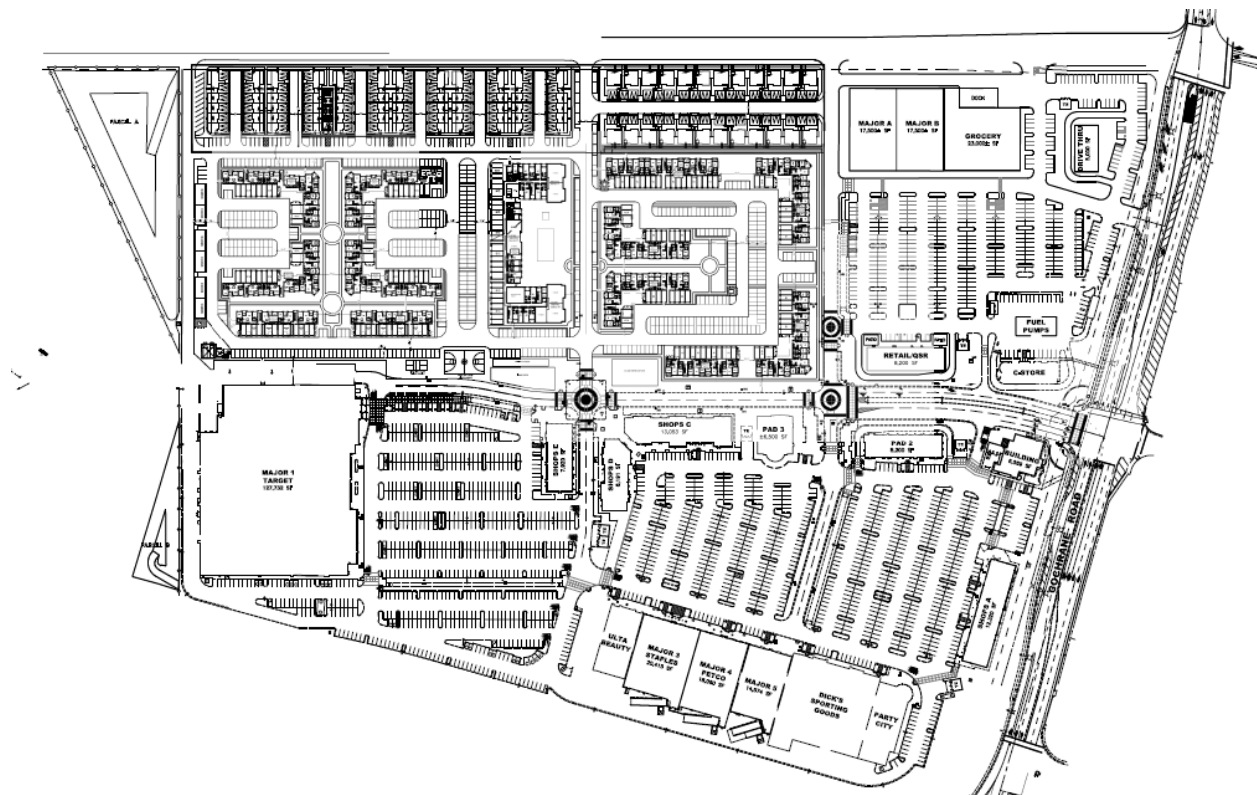
-
- Any other use that is supportive of Retail
- Any other use listed as a permitted use in the original Project PUD approvals, in the GC, General Commercial District in the Morgan Hill Municipal Code, or Mixed Use Flex designation in the General Plan

Conditional:

- Any Drive-Through and Drive-In Facilities that is proposed beyond the five (5) that are permitted above shall require a conditional use permit.
- A maximum of one (1) of each: Fuel and Service Stations, Vehicle Washing, and Convenience Markets, unless such use is a part of a Retail tenant located or to be located in the Shopping Center in which case more than one of each of the foregoing shall be permitted.
- Mini-Storage
- Vehicle Repair and Maintenance, Major
- Except as permitted above, Warehousing and Distribution

SECTION 2: SITE DEVELOPMENT CONCEPT: Notwithstanding anything contained herein to the contrary, the original Site Development Concept in Section 2 of Ordinance No. 1746 dated December 8, 2005 ("First PD") shall continue in full force and effect, except as added or modified herein.

1. The mixed use site development plan consists of multiple retail areas and residential areas, with vehicular roadways bisecting the site N/S from Cochrane Road at De Paul Drive and E/W from Mission View Drive.
2. Building setbacks along Cochrane Road shall be an average of 25 ft; along Mission View an average of 10 feet,(with all setback distances measured from the property line); however, encroachments into the setback area are permissible to accommodate the architectural and functional needs of the development as long as the overall average is maintained. Building setbacks along rear or side yard property lines adjacent to property not a part of the PD shall be an average of 10'. For all property within the Project that is subject to the PD there shall be no minimum building setback requirements required between buildings or other improvements, uses, or properties within the Project boundaries.
3. The First PD site plan, and the Site Plan and elevations submitted with the PD Application adopted in Ordinance No. 1746 dated December 8, 2005 shall not require further review or approval.
4. The project site plan and project design elevations shall be subject to Staff Level Design Review and reviewed and approved by City Staff to determined that the project is consistent with or in substantial conformance with the content or intent of this PD.



Project Site Plan

SECTION 3: LANDSCAPE AND LIGHTING CONCEPTS AND GUIDELINES

Landscape

5. Project landscaping shall be substantially consistent with the Project Site Plan and attached general landscape plan submitted as part of the Amended PD, but will require further Staff Review review at building permit plan review for consistency with local and state watering and irrigation standards. All street trees and trees planted within the front setback areas shall be a minimum 15 gallon size. Except as permitted under the approved PD Amendment or otherwise shown on approved Project landscape drawings, and except for landscaping adjacent to buildings, all landscape areas shall comply with city code.
6. The general characteristics of the plant palette for the Project shall be a combination of year-round color and textural interest. Plants shall be selected on the basis of color combinations complementary to the existing architectural theme, growing patterns, low maintenance and water conservation characteristics.
7. An average 20 foot wide landscape strip (excluding sections of hardscape elements such as driveways or sidewalks) shall be provided along Cochrane road, and an average 10 foot wide landscape strip (excluding sections of hardscape elements such as driveways or sidewalks) shall be provided along Mission View Drive. Encroachments into all landscape setbacks shall be permissible to accommodate the architectural and functional needs of the development as long as the remaining landscaped areas maintains the overall average or a substantial portion of the landscape strip equals or exceeds 10 foot requirement. Acceptable mitigation for such encroachments shall include, without limitation: additional landscape planting, an earthen

berm, or screen walls. Berms shall be an average height of 3 feet with a minimum height of 1.5 feet, and shall undulate where possible to be aesthetically pleasing. Except as provided herein, the design of the landscaping strip referred to above shall substantially conform to the Landscape Plan submitted as part of the PD Master Plan.

8. Canopy-providing trees shall be planted in the parking lot planter islands to produce shade.
9. The main project entrance at DePaul Drive shall be well landscaped and serve as a focal point, and may include attractive landscape walls, project signage, and other features.
10. Shrubs or vine planting shall be provided to screen utilities and trash enclosures.
11. The main parking field and/or any parking structure shall be screened from view of public streets by use of berming and/or bushes of a minimum of 3 feet effective height (18 months after planting), as measured from the top of the nearest street curb.
12. Where possible, landscaping shall be used to soften the appearance of fences and walls and front elevations of large scale retail buildings which lack fenestration or other architectural detailing.
13. All service areas fronting on public streets shall be screened by landscaping, berms, screens, and/or walls, substantially consistent with the colors and materials shown in the 'colors and materials pallet' packet on file in the Development Services Center.
14. Special paving or materials such as integral color concrete or asphalt, pavers, and/or scored concrete paving shall be provided at key on-site intersections. Pedestrian walkways shall be provided connecting groupings of retail structures to other retail areas, mixed use areas, and/or residential areas, and to parking areas. Walkways which cross traffic lanes shall have special markings such as integral colored concrete, scored or raised concrete, colored paving, special striping, and/or paving stones.



Landscape Site Plan

Lighting

15. Any decorative lighting on the pedestrian pathways parallel to the main driveway from Cochrane Road shall be reduced in height and scale, to create a more human-scale feeling and atmosphere.
16. The design of the exterior retail building lighting shall be compatible with the existing architectural style of the project. The design of the exterior residential and/or mixed use building lighting shall be complementary with the existing architectural style of the project, and/or provide an architectural transition to the adjacent residential projects.
17. The main parking lot lighting fixtures shall be consistent throughout the project, provided, however the mixed use and/or residential portions of the project shall complement the other portions of the project and will help identify neighborhoods within the project. The maximum pole height (including the base) shall be 33 feet except that lighting poles along Mission View project edge and the Cochrane Road project edge shall be limited to a maximum height (excluding the base) of 15 feet. Further conditions regarding residentially zoned properties are imposed under guideline #18 below.
18. All lighting shall be shielded and directed in such a manner so as not to directly cast light on neighboring residentially zoned properties outside the Project. The Applicant shall pay special attention to ensure that there is no unacceptable spillage of light outside the applicable boundaries of the project. Prior to issuance of site construction permits, Applicant shall provide a photometric plan evidencing conformance of the lighting plan to these guidelines.

SECTION 4: PARKING AND LOADING/CIRCULATION

19. The main parking field shall be screened from public view on Cochrane Road primarily through constructed buildings, the use of berming and/or hedge row plantings, shrubs, trees or any combination thereof, in a manner substantially consistent with the project Landscape Plan.
20. 90 degree parking, angled parking, compact parking, RV parking, parallel parking, one-way drive aisles, and roundabouts shall be permitted.
21. Parking areas shall be designed to include provision for pedestrian walkways for access to building entrances. Walkways which cross traffic lanes shall have special markings such as integral color concrete, scored or raised concrete, colored paving, special striping and/or paving stones. Walkway strips shall be intermittently provided through landscaped areas to protect landscaping from foot traffic damage.
22. In order to facilitate on-site traffic flow and vehicle and pedestrian safety, parking stalls shall not be located directly adjacent to the front of a retail anchor tenant occupying a ground floor area that is 100,000 square feet or larger (i.e. Major 1 (Target) as shown on the PD Master Plan).
23. Reciprocal access and shared parking between properties shall be permitted and used, whenever possible, and for purposes of calculating parking ratios residential portions of the project shall be allowed to share parking stalls from the retail portion of the project in meeting the guest stall parking requirements. Given the benefits of the walkable and mixed-use nature of the project the Residential portion of the Project shall be permitted to receive an overall reduction in its parking requirements by up to 15% off the total parking required for the residential portion of the Project.
24. Cross access easements shall be provided throughout the project.
25. Shared access easements and driveways shall be provided.

26. Drive aisles shall allow for circulation within the project, with sufficient width for emergency vehicles.
27. Provisions for connecting driveways and walkways between adjacent properties within the project are encouraged.
28. Emergency vehicle access shall be provided throughout the project.
29. Loading areas and docks shall be screened from view along Mission View Drive by landscaping or a screening structure. Screen walls or other screening structures shall be architecturally treated, and may be constructed with metal, concrete, concrete block, wood or a combination thereof (see attached exhibit for an example of acceptable screening). Alternatively, screening along the northern property may be comprised of dense evergreen plantings, or other similar screenings.
30. All truck deliveries between the hours of 10pm to 6am shall enter and exit through the DePaul Drive project driveway (main vehicular entry from Cochrane Road).
31. Parking required for the development shall meet the requirements set forth in this PD Amendment. The project shall benefit from and receive credit for shared parking throughout the project and among a mix of uses.

SECTION 5: ARCHITECTURAL CONCEPTS AND GUIDELINES

32. The architectural concept shall create a campus of mixed use residential and commercial structures which vary in character, massing, materials, and colors but remaining complementary to the existing theme of the PD Master Plan. Each structure shall be complementary to the existing architectural theme or most directly adjacent structure, but may maintain its own uniqueness prioritizing thoughtful transitions from differing styles within the project and the context of the neighborhood. Building facades may contain design features and variances in scale to create interest in character. The design of entertainment uses may be enhanced by featured elements which may include some or all of the following: neon, tower, marquee, theater lights and statement lobby glazing. The development shall include tower and/or entry features, bold cornices, and varying facades, and a variety of materials, colors and storefronts. Awnings, light sconces, site lighting, and/or street furniture shall be situated at appropriate locations as determined by Applicant to enhance the pedestrian and/or human scale feel of the project.
33. No building shall exceed 68 feet in height to the top of the parapet except that tower and accent features of buildings may exceed such height limitations as long as (i) the scale and design of such features are complementary to the existing architectural design of the project; (ii) such exceptions affects no more than 25% of the applicable building; (iii) such features shall not exceed 75 feet at the highest point. Notwithstanding the above, no building sharing a frontage with Mission View shall exceed 3 stories in height, excluding roof decks or other outdoor space which in this case shall not be included in the total number of building stories.
34. Rooflines may be flat and/or provide variation in height, cascading rooflines, or a combination of the above, which shall be complementary to the existing architectural theme established for the development.
35. Large, continuous structures shall incorporate breaks in horizontal planes by varying architectural features and designs and recessing windows and entrances, to provide substance and scale.

36. Windows shall be enhanced by use of various sizes and shapes, and highlighted by the use of accent trim (e.g. molding, pop-out or wood trim). The design shall be complementary to the architectural style of the project.
37. Architectural treatment shall be applied to the front façade of all building elevations consistent with the below design elevation concepts and complementary to the existing retail development and surrounding residential neighborhoods; complementary architectural treatment shall also be applied to other areas of any building clearly visible from any public street. Final building designs shall be a staff level design review approval.
38. Building design shall be compatible with the immediate adjacent building and provide harmonious transition between various uses.
39. Gutters and downspouts shall be made of quality materials and treated to blend into the façade to which it is attached, unless as a design element, in which case the color shall be consistent with the color schemes of the building.
40. No mechanical equipment shall be exposed on the wall surface of any building.
41. All roof-mounted mechanical equipment or ductwork which project vertically above the roof or parapet shall be screened consistently with the building design.
42. Any outdoor storage of goods, materials or equipment (e.g. garden center, lumber yard) shall be located within an enclosed area. The fencing and/or screening enclosing such area shall be complementary to the existing architectural theme of the PD Master Plan and designed in a manner complementary to the building design and site layout. Chain link fencing with wood inserts is not an acceptable manner of screening.
43. Fences and walls shall be designed to be compatible with the surrounding landscape and architectural style of the PD.
44. Trash enclosures shall be constructed of solid material, and shall be a minimum of six feet in height, with solid view obstructing gates. Reasonable efforts shall be made to screen trash enclosures or locate them in inconspicuous locations.



3 Story Multi-Family



4 Story Multi-Family



Retail



Bungalows



Townhomes



Townhomes

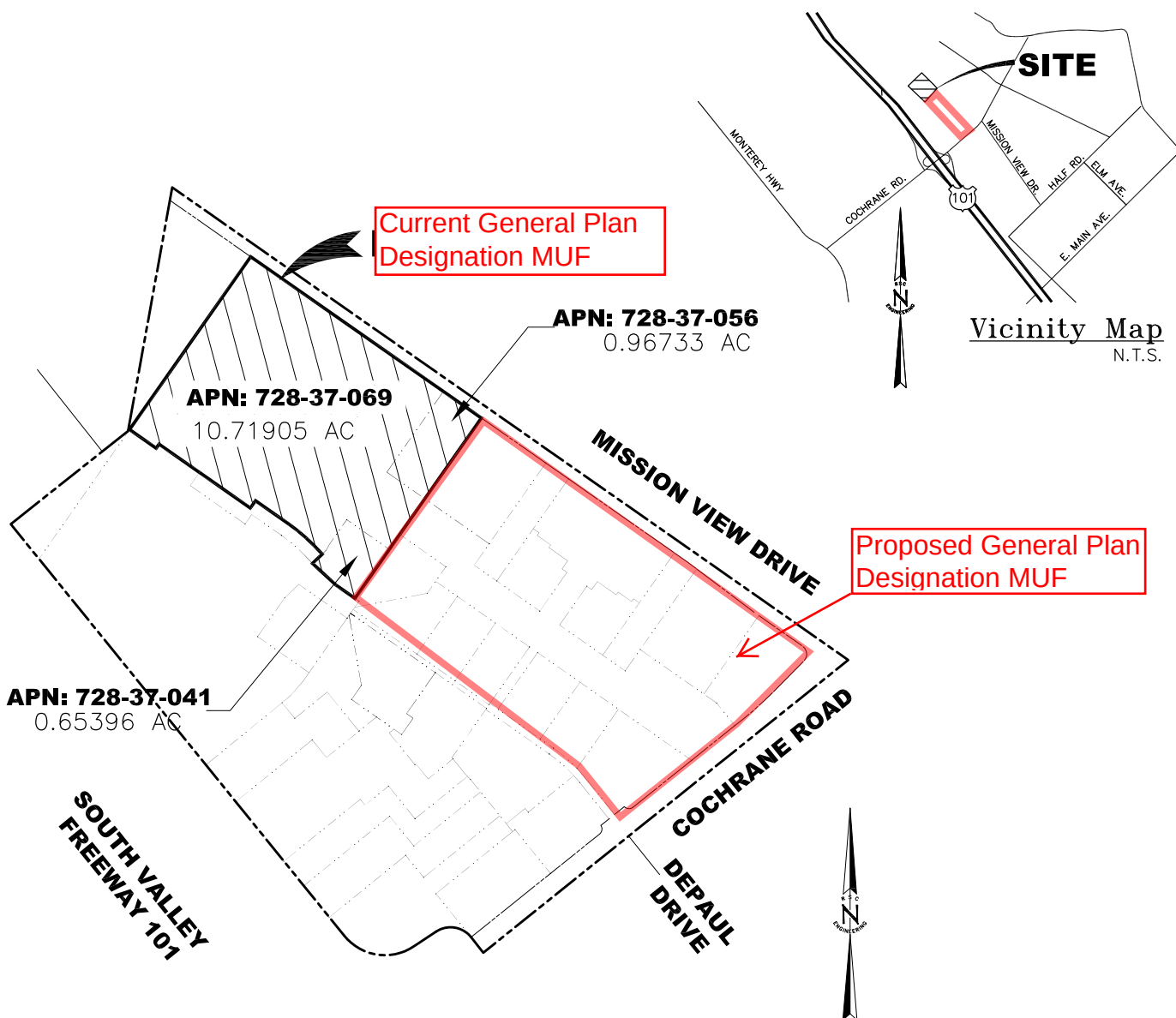
SECTION 6: SIGN DESIGN GUIDELINES

45. This PD shall permit two (2) pylon sign structures along Highway 101 near the north end of the site and one pylon structure along Highway 101 near Cochrane Road consistent with the original PD application (8/22/05), subject, if necessary, to approval by the SCVWD. The two pylon signs near the north end of the site shall be a maximum height of 68 ft, as measured to the top of the horizontal cornice. The pylon sign near Cochrane Road shall be a maximum height of 50 ft, as measured at the top of the horizontal cornice. Decorative architectural features may extend above the 68 ft and 50 ft height limits as depicted on the sign elevations date stamped October 27, 2005, on file at the Community Development Department. This PD shall also permit one monument sign structure consistent with the original PD application (8/22/05) at the intersection of Cochrane Road and Mission View Drive. This monument sign shall be a maximum overall height of 20 feet, and shall not be illuminated in the evenings after 10pm. In addition, this PD shall permit directional signage, other residential project signage, landscape wall signs including but not limited to landscape wall signs along Cochrane and Mission View, and other signage consistent with a leasing office.
46. Except as permitted above, the uniform sign program for the Project shall control the signage requirements and placement of signs within the project. The uniform sign program shall be applicable to all buildings and uses within the PD. Tenant identification signs and “now leasing” signs will be allowed on the sides of the buildings that are visible to Highway 101. Signs, Banners and posters shall be permitted and must be of a high quality with character, and ambiance complementary to the existing architectural theme and the standards of the PD Master Plan. Address numbers shall contrast with their background and shall be a minimum of six inches in height.

47. Poster boards containing retail displays (including advertising), for sale/for rent signs incorporating an artistic component or displaying information of community interest shall be permitted.

SECTION 7: UTILITIES AND APPURTENANT USES / DEVICES

48. Easements for the installation and maintenance of utilities, walkways, roads, shared driveways, parking and drainage facilities shall be recorded as part of any subdivision map or lot line adjustment.
49. Detention ponds and/or bioswales may be located within any setback area or outside a setback area.
50. Utility equipment may be located with landscaped or setback areas provided they are located as far from the street frontage as feasibly possible, and adequately screened and/or landscaped to limit the visibility of such equipment.
51. Uses within the PD that utilize shopping carts shall provide indoor or outdoor screened storage of the carts and shall provide for architecturally treated collection areas throughout the parking lots.
52. Vending machines, bike and/or scooter racks, rideshare pick up areas, solar panel installations, newspaper racks, coin operated devices, electric vehicle parking and/or charging stations or other similar devices may be placed on the exterior and/or walkway and/or parking lot or garage adjacent to proposed buildings, provided the area in which the device is located is neat, attractive, attractive or otherwise architecturally treated or landscaped. Once installed, such devices and locations shall be maintained in a high quality manner.

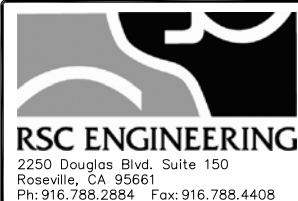


<u>APN</u>	<u>EXISTING GP LAND USE DESIGNATION</u>	<u>PROPOSED GP LAND USE DESIGNATION</u>
728-37-069	COMMERCIAL	MULTI-FAMILY (MED/HIGH) RESIDENTIAL
728-37-056	COMMERCIAL	MULTI-FAMILY (MED/HIGH) RESIDENTIAL
728-37-041	COMMERCIAL	MULTI-FAMILY (MED/HIGH) RESIDENTIAL

LEGEND:

 AREA TO BE DESIGNATED
MULTI-FAMILY (MED/HIGH)

EXHIBIT "A"
PROPOSED GENERAL PLAN AMENDMENT
 FOR
APN 728-37-069, 728-37-056
AND 728-37-041
COCHRANE COMMONS SHOPPING CENTER
MORGAN HILL, CA



PROJECT NO.: 019-025

SCALE: 1"=500'

DATE: 06/17/14

ORDINANCE NO. 1746, NEW SERIES

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL APPROVING A ZONING AMENDMENT TO ESTABLISH A PLANNED UNIT DEVELOPMENT FOR A 66.49-ACRE AREA LOCATED AT THE NORTHEAST QUADRANT OF COCHRANE ROAD AND HIGHWAY 101 (APNs 728-37-001, -002, -004, -005 & -007) (ZA-04-12: COCHRANE – DINAPOLI/BROWMAN)

THE CITY COUNCIL OF THE CITY OF MORGAN HILL DOES HEREBY ORDAINS AS FOLLOWS:

- SECTION 1.** The subject site is designated a 'Sub-regional Commercial Site' on the General Plan Map. The project proposes a sub-regional commercial shopping center, and is therefore, consistent with the Zoning Ordinance and the General Plan.
- SECTION 2.** The zone change is required in order to serve the public convenience, necessity and general welfare as provided in Section 18.62.050 of the Municipal Code.
- SECTION 3.** An Environmental Impact Report has been prepared for this project as part of the following applications: General Plan Amendment, Zoning Amendment, Subdivision, Development Agreement, Use Permit and Architectural and Site Plan Review. Mitigation measures and a monitoring program will be adopted for those environmental impacts identified in the report.
- SECTION 4.** The project site is currently zoned PUD with a HC, Highway Commercial underlying zone.
- SECTION 5.** Section 18.30.090 of the Morgan Hill Municipal Code establishes minimum development standards for commercial PUDs.
- SECTION 6.** In accordance with Section 18.30.110 of the Morgan Hill Municipal Code, the City Council may grant exceptions to the minimum PUD development standards upon recommendation of the Planning Commission with the following affirmative findings:
- a. Approval of the exception is necessary for the preservation and enjoyment of substantial property rights of the applicant; and
 - b. The exception will only be approved to the extent necessary for the preservation and enjoyment of the substantial property rights of the applicant; and
 - c. The effect of the reduction or elimination of the development standard will be substantially mitigated by the provision of other design features or enhancements to the project; and
 - d. Approval of the exception will not be outweighed by the adverse effects to the public health, safety and welfare of persons working or residing in the area.

SECTION 7. On November 8, 2005, the Planning Commission reviewed and recommended approval of the zoning amendment request, including the exceptions to the minimum PUD development standards. In their recommendation of approval, based on evidence and the facts in the record, the Planning Commission made the following affirmative findings:

- a. Approval of the exception is necessary for the preservation and enjoyment of substantial property rights of the applicant; and
- b. The exception will only be approved to the extent necessary for the preservation and enjoyment of the substantial property rights of the applicant; and
- c. The effect of the reduction or elimination of the development standard will be substantially mitigated by the provision of other design features or enhancements to the project; and
- d. Approval of the exception will not be outweighed by the adverse effects to the public health, safety and welfare of persons working or residing in the area.

SECTION 8. The project site is one of only two locations in the City designated 'Sub-regional Commercial Site' on the General Plan Map and zoned PUD (Highway Commercial).

SECTION 9. Strict adherence to the city-wide PUD standards would hinder the establishment of an economically and functionally successful sub-regional commercial shopping center at the proposed site, as the city-wide PUD standards did not anticipate a large scale, sub-regional commercial shopping center.

SECTION 10. Therefore, based upon the above reasons, and the evidence and facts in the record in this matter, the City Council hereby approves exceptions to the City-wide PUD development standards for the proposed sub-regional commercial shopping center. The Council hereby finds that:

- a. Approval of the exceptions is necessary for the preservation and enjoyment of substantial property rights of the applicant; and
- b. The exceptions will only be approved to the extent necessary for the preservation and enjoyment of the substantial property rights of the applicant; and
- c. The effect of the reduction or elimination of the development standards will be substantially mitigated by the provision of other design features or enhancements to the project; and
- d. Approval of the exceptions will not be outweighed by the adverse effects to the public health, safety and welfare of persons working or residing in the area.

SECTION 11. Based on the foregoing, the City Council hereby approves a precise development plan as contained in that certain series of documents dated August 22, 2005 (date stamped October 21, 2005), on file in the Community Development Department, entitled "A Retail Project – A DiNapoli Browman Guglielmo Development" prepared by Craig+Grant Architects. These

documents, as amended by site and architectural review, show the location and sizes of all lots in this development and the location and dimensions of all proposed buildings, basic design, uses, vehicle and pedestrian circulation ways, recreational amenities, parking areas, landscape areas and any other purposeful uses on the project.

SECTION 12. The approved project shall be subject to the following conditions:

- a. The applicant shall comply with the mitigation measures of the certified Environmental Impact Report and adhere to the adopted Mitigation Monitoring and Reporting Program.
- b. The project shall be subject to compliance with the Cochrane Road PUD Guidelines as attached in Exhibit A of this Resolution. The project shall also be subject to compliance with the city-wide PUD standards as contained in Chapter 18.30 of the Morgan Hill Municipal Code, excluding any exceptions approved by the City Council.
- c. The signs identified on the project plans are not approved as part of the zoning amendment application, except that two freeway signs and one monument sign at the corner of Mission View and Cochrane Road are approved as described under Item 46 in the attached Cochrane Road PUD Guidelines. A uniform sign program shall be established for the overall PUD and submitted for review and approval by the Architectural Review Board (ARB).
- d. Defense and indemnity. Applicant agrees to defend and indemnify and hold City, its officers, agents, employees, officials and representatives free and harmless from and against any and all claims, losses, damages, injuries, costs and liabilities arising from any suit for damages or for equitable or injunctive relief which is filed against City by reason of its approval of applicant's project. In addition, developer shall pay all pre-tender litigation costs incurred on behalf of the City including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals, but shall not be required to pay any litigation from the City. However, developer shall continue to pay reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted.

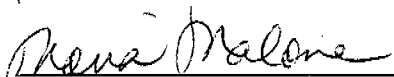
SECTION 13. Severability. If any part of this Ordinance is held to be invalid or inapplicable to any situation by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance or the applicability of this Ordinance to other situations.

SECTION 14. Effective Date; Publication. This Ordinance shall take effect thirty (30) days after the date of its adoption. The City Clerk is hereby directed to publish this ordinance pursuant to §36933 of the Government Code.

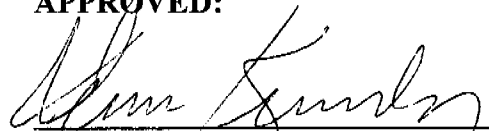
The foregoing ordinance was introduced at the regular meeting of the City Council of the City of Morgan Hill held on the 16th Day of November 2005, and was finally adopted at a regular meeting of said Council on the 7th Day of December 2005, and said ordinance was duly passed and adopted in accordance with law by the following vote:

AYES:	COUNCIL MEMBERS:	Larry Carr, Mark Grzan, Dennis Kennedy, Greg Sellers, Steve Tate
NOES:	COUNCIL MEMBERS:	None
ABSTAIN:	COUNCIL MEMBERS:	None
ABSENT:	COUNCIL MEMBERS:	None

ATTEST:


Moira Malone, Deputy City Clerk

APPROVED:


Dennis Kennedy, Mayor

∞ **CERTIFICATE OF THE CITY CLERK** ∞

I, **MOIRA MALONE, DEPUTY CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA**, do hereby certify that the foregoing is a true and correct copy of Ordinance No. 1746, New Series, adopted by the City Council of the City of Morgan Hill, California at their regular meeting held on the 7th Day of December 2005.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: 12-08-2005

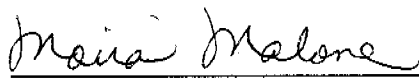

MOIRA MALONE, Deputy City Clerk

EXHIBIT A

A Retail Project Cochrane Road and Highway 101 A Dinapoli Browman Guglielmo Development

**PUD Guidelines
Morgan Hill, CA
November 10, 2005**

Location

This retail development is located at the northeast quadrant of the Cochrane Road overpass at Highway 101. The Assessor's Parcel Numbers (APN) for the land area within the project are: 728-37-001, 728-37-002, 728-37-004, 728-37-005, 728-37-007.

Introduction and Intent

The intent of this narrative is to describe the architectural theme and site development plans which will guide the future development of this site relative to architectural compatibility, site design, landscape features, and signage concepts. These development standards are designed to be flexible whenever possible to allow creative freedom and diversity, which is necessary for national tenants to be attracted to this regional shopping center and the development of the best possible project. This document outlines the guidelines under which all business can coexist in a competitive market.

Development Guideline Format

These PUD guidelines are organized as follows:

- | | |
|------------|--|
| Section 1: | Allowable Uses |
| Section 2: | Site Development Concept |
| Section 3: | Landscape and Lighting Concepts and Guidelines |
| Section 4: | Parking and Loading/Circulation |
| Section 5: | Architectural Concepts and Guidelines |
| Section 6: | Sign Design Guidelines |
| Section 7: | Utilities and Appurtenant Uses / Devices |

Section 1: Allowable Uses

Permitted:

- Mix of commercial and/or retail big box anchors
- Medium size anchors
- Shop space
- Eating Establishments (See Note 1 below)
- Up to five (5) drive-thru facilities as identified on the precise development plan, of which only two can be fast food drive-thru uses, as defined in Note 2 below; any additional drive-thru use proposed within the shopping center shall require a conditional use permit
- Commercial recreation and entertainment uses (including cinema and health club)
- Grocery store
- Offices
- Service Offices (including real estate offices, banks or other financial institutions, title companies, credit unions)
- Personal Services
- Liquor store
- Wine shop
- Any other use listed as a permitted use in the CG, General Commercial District in the Morgan Hill Municipal Code, with the exception of day care centers and nursery schools which shall be conditional uses

Note 1: Eating establishments shall include both sit down and fast food restaurants.

Note 2: For the purpose of this PUD only, 'drive-thru fast food' shall be defined as follows:

A "Drive-Thru Fast Food" restaurant is any establishment whose principal business is the sale of prepared foods to customers and whose service includes all of the following characteristics:

- A. The restaurant has a drive-through aisle and window.
- B. Meals are usually provided in disposable plastic or paper containers.
- C. There is no substantial differentiation in the meals or the service provided for consumption on the premises and meals that are taken out of the premises for consumption.

Businesses that primarily sell coffee, juices and other beverages shall not be considered 'drive-thru fast food' for the purpose of this definition.

Conditional:

- Any drive-thru use that is proposed beyond the five (5) that are permitted in the shopping center shall require a conditional use permit
- A maximum of one fuel station, car wash and convenience market
- All other uses which are supportive of retail (i.e., daycare)

Section 2: Site Development Concept

1. The site development plan consists of three retail areas, created by the pattern of vehicular roadways which bisect the site N/S from Cochrane Road at De Paul Drive and E/W from Mission View Drive.
2. Building setbacks along Cochrane Road shall be an average of 30-ft; however, encroachments into the setback area are permissible to accommodate the architectural and functional needs of the development as long as the overall average is maintained and a substantial portion of the setback shall be no less than 30 feet.
3. Buildings situated at or near the front setback shall provide a public access route to the buildings from the front setback, except as shown on the Site Plan.
4. Elevations submitted with the PUD application (8/22/05) shall not require further review or approval except that the supporting architectural and design details for such elevations shall require final review and approval by an ARB Subcommittee. Any minor modifications to the submittals under the Precise Development Plan shall be subject to approval by Staff on the basis of substantial conformance with the Precise Development Plan, or if Staff is unable to make such a determination, then by a sub-committee of the Architectural Review Board. Subsequent submittals for elevations not submitted as a part of the original PUD application shall be substantially consistent with the Precise Development Plan and shall be subject to the approval of the Architectural Review Board. Individual buildings within the development may be larger or smaller than shown on the Precise Development Plan as long as the approximate location and overall total square footage is substantially consistent with and in aggregate, does not exceed the Precise Development Plan.

Section 3: Landscape and Lighting Concepts and Guidelines

Landscape

5. Project landscaping shall be substantially consistent with the Project Landscape Plan submitted as a part of the Precise Development Plan. All street trees, trees planted within the front setback areas, and trees planted at the entrance of buildings shall, at a minimum, conform to "15 gallon" sizing standards provided by the California Association of Nurserymen. Except as permitted under guideline #7 below, and except for landscaping adjacent to buildings, all landscape areas shall comply with city code.
6. The general characteristics of the plant palette for the PUD shall be a combination of year-round color and textural interest. Plants shall be selected on the basis of color combinations (consistent with the Art Deco theme), growth patterns, low maintenance and water conservation characteristics. At time of installation, all trees shall, at a minimum, conform to "15 gallon" sizing standards provided by the California Association of Nurserymen.

7. An average 30-foot wide landscape strip (excluding any landscaping within the right-of-way) shall be provided along Cochrane Road. An average 20-ft wide landscape strip shall be provided along Mission View Drive up to the first driveway. Thereafter, an average 15-foot wide landscape strip shall be provided along the northerly extension of Mission View Drive. Encroachments into such landscape strips shall be permissible to accommodate the architectural and functional needs of the development as long as the overall average is maintained and a substantial portion of each landscape strip equals or exceeds the respective 30-foot and 15-foot requirements. Acceptable mitigation for such encroachments shall include, without limitation, additional landscape planting or a combination of an earthen berm or screen wall. Berms shall be an average height of three feet with a minimum height of one and one-half feet, and shall undulate where possible and aesthetically pleasing. Except as provided herein, the design of the landscaping strips referred to above shall substantially conform to the Landscape Plan submitted as a part of the Precise Development Plan.
8. The driveway comprising the main vehicular entry from Cochrane Rd. shall be provided with landscaped medians in substantial conformance with the precise development plan dated 8/22/05 on file at the Community Development Department.
9. Canopy-providing trees shall be planted in the parking lot planter islands to produce shade.
10. The main project entrance at Cochrane Rd. and DePaul Drive shall be well landscaped and serve as a focal point.
11. Shrubs or vine planting shall be provided to screen utilities and trash enclosures.
12. The main parking field shall be screened from view of public streets by use of berming and/or bushes of a minimum of three feet effective height (18 months after planting), as measured from the top of the nearest street curb.
13. Where possible, landscaping shall be used to soften the appearance of fences and walls and front elevations of large scale retail buildings which lack fenestration or other architectural detailing.
14. All service areas fronting on public streets shall be screened by landscaping, berms, screens and/or walls, substantially consistent with the colors and materials shown in the 'colors and materials pallet' packet, date stamped August 24, 2005 on file at the Community Development Department.
15. Special paving or materials such as integral color concrete or asphalt, pavers and/or scored concrete paving shall be provided at key on-site intersections. Pedestrian walkways shall be provided connecting groupings of retail structures to other such retail areas and to parking areas. Walkways which cross traffic lanes shall have special markings such as integral color concrete, scored or raised concrete, colored paving, special striping and/or paving stones.

Lighting

16. Any decorative lighting on the pedestrian pathways parallel to the main driveway from Cochrane Road shall be reduced in height and scale, to create a more human-scale feeling and atmosphere.
17. The design of the exterior building lighting shall be compatible with the Art Deco architectural style of the PUD.
18. The main parking lot lighting fixtures shall be consistent throughout the PUD. The maximum pole height (including the base) shall be 33 feet except that lighting poles along the Mission View project edge and the Cochrane Road project edge across the approved congregate care and assisted living facilities to the south shall be limited to a maximum height (including the base) of 15 feet. Further conditions regarding residentially zoned properties are imposed under guideline #19 below.
19. All lighting shall be shielded and directed in such a manner so as not to directly cast light on neighboring residentially zoned properties or the approved congregate care and assisted living facilities to the south. The Applicant shall pay special attention to insure that there is no unacceptable spillage of light outside the applicable boundaries of the shopping center. Prior to issuance of site construction permits, Applicant shall provide a photometric plan evidencing the conformance of the lighting plan to these guidelines. Adjustments to the lighting intensity and direction may be required after commencement of the use to the extent that neighboring residential properties are adversely affected.

Section 4: Parking and Loading/Circulation

20. The main parking field shall be screened from public view on Cochrane Rd primarily through the use of berming and/or hedge row plantings, shrubs, trees or any combination thereof, in a manner substantially consistent with the project Landscape Plan. At the time of installation, shrub plantings shall conform to "5 gallon" sizing standards provided by the California Association of Nurserymen, trees shall conform to "15 gallon" sizing standards provided by the California Association of Nurserymen, accents and groundcover shall conform to "1 gallon" sizing standards provided by the California Association of Nurserymen and berming may undulate to create interest and contrast as long as (i) the average height shall be three feet, and (ii) not less than 50% of the length of such berming is actually 3 feet or more in height as measured from the top of the nearest street curb.
21. 90 degree parking shall be permitted. Alternatively, the PUD shall permit angled parking and one-way drive aisles subject to review and approval of the Architectural Review Board.
22. Parking areas shall be designed to include provision for pedestrian walkways for access to building entrances. Walkways which cross traffic lanes shall have special markings such as integral color concrete, scored or raised concrete, colored paving, special striping and/or

paving stones. Walkway strips shall be intermittently provided through landscaped areas to protect landscaping from foot traffic damage.

23. In order to facilitate on-site traffic flow and vehicle and pedestrian safety, parking stalls shall not be located directly adjacent to the front of a major use occupying a ground floor area that is 100,000 square feet or larger (i.e. Major 1 (Target) and Major 8 as shown on the precise development plan).
24. Reciprocal access and shared parking between properties shall be used, whenever possible.
25. Cross access easements shall be provided throughout the PUD.
26. Shared access easements and driveways shall be provided.
27. Drive aisles shall allow for circulation within the PUD, with sufficient width for emergency vehicles. Dead end drive aisles are discouraged but shall be allowed subject to review and approval of the Architectural Review Board.
28. Provisions for connecting driveways and walkways between adjacent properties within the PUD are to be provided.
29. Emergency vehicle access shall be provided throughout the PUD.
30. Loading areas and docks shall be screened from view along the new road (proposed northerly extension of Mission View Drive) by landscaping or a screening structure. Screen walls or other screening structures shall be architecturally treated, and may be constructed with metal, concrete, concrete block, wood or a combination thereof (see attached exhibit for an example of acceptable screening). Alternatively, screening along the northern property line may be comprised of dense evergreen plantings.
31. All truck deliveries between the hours of 10pm to 6am shall enter and exit through the DePaul Drive project driveway (main vehicular entry from Cochrane Road).
32. Overnight parking of delivery trucks shall be prohibited on-site, except that delivery trucks may be parked within loading docks provided no equipment is kept running, including but not limited to generators, refrigeration units and compressors.

Section 5: Architectural Concepts and Guidelines

33. The architectural concept shall create a campus of retail structures which vary in character, massing, materials, and colors but remaining consistent with the Art Deco theme of the Precise Development Plan. Each structure shall be complementary to the Art Deco theme but may maintain its own uniqueness. Building facades may contain design features and variances in scale to create interest and character. The design of entertainment uses may be enhanced by featured elements which may include some or all of the following: neon tower, marquee, theater lights and statement lobby glazing. Art Deco forms and treatments

shall be utilized as part of the overall architectural presentation. If neon is utilized, it shall not be established in areas facing residentially zoned properties adjacent to the site. The development shall include tower and/or entry features, bold cornices, and varying facades, and a variety of materials, colors and storefronts. Awnings, light sconces, site lighting, and/or street furniture shall be situated at appropriate locations as determined by Applicant to enhance the pedestrian and/or human scale feel of the project.

34. No building shall exceed 40 feet in height to the top of the parapet except that tower and accent features of buildings may exceed such height limitation as long as (i) the scale and design of such features are consistent and appropriate for the Art Deco design of the shopping center; (ii) such exception affects no more than 25% of the theater and no more than 15% of any other building; and (iii) such features shall not exceed 60 feet at the highest point. Overall, building heights and tower and accent features shall be substantially consistent in scale and proportion with the building elevations dated 8/22/05 on file at the Community Development Department.
35. Rooflines shall vary in height and flat rooflines shall be permitted in a manner substantially consistent with the building elevations dated 8/22/05 on file at the Community Development Department and the Art Deco architectural theme established for the development.
36. Large, continuous structures shall incorporate breaks in horizontal planes by varying architectural features and designs and recessing windows and entrances, to provide substance and scale.
37. Windows shall be enhanced by use of various sizes and shapes, and highlighted by the use of accent trim (e.g. molding, pop-out or wood trim). The design shall be complementary to the architectural style of the PUD.
38. Architectural treatment shall be applied to the front façade of all building elevations consistent with the building elevations dated 8/22/05 on file at the Community Development Department; complementary architectural treatment shall also be applied to other areas of any building clearly visible from any public street.
39. Building design shall be compatible with the immediate adjacent building and provide harmonious transition between various uses.
40. Gutters and downspouts shall be made of quality materials and treated to blend into the facade to which it is attached, unless used as a design element, in which case the color shall be consistent with the color schemes of the building.
41. No mechanical equipment shall be exposed on the wall surface of any building.
42. Mechanical and utility equipment shall be located below the roof line or parapet wall and out of public view. All roof-mounted mechanical equipment or ductwork which project vertically above the roof or parapet shall be screened by an enclosure which is detailed consistently with the building design.

43. Any outdoor storage of goods, materials or equipment (e.g. garden center, lumber yard) shall be located within an enclosed area. The fencing and/or screening enclosing such area shall be consistent with the Art Deco architectural theme of the Precise Development Plan and designed in a manner complementary to the building design and site layout. Chain link fencing with wood inserts is not an acceptable manner of screening.
44. Fences and walls shall be designed to be compatible with the surrounding landscape and architectural style of the PUD.
45. Trash enclosures shall be constructed of solid material, and shall be a minimum of six feet in height, with solid view obstructing gates. Trash enclosures shall be located in inconspicuous locations.

Section 6: Sign Design Guidelines

46. This PUD shall permit one pylon sign structure along Highway 101 near the north end of the site and one pylon sign structure along Highway 101 near Cochrane Road consistent with the original PUD application (8/22/05), subject to approval by the SCVWD if necessary. The pylon sign near the north end of the site shall be a maximum height of 68 ft, as measured to the top of the horizontal cornice. The pylon sign near Cochrane Road shall be a maximum height of 50 ft, as measured to the top of the horizontal cornice. Decorative architectural features may extend above the 68-ft and 50-ft height limits as depicted on the sign elevations date stamped October 27, 2005, on file at the Community Development Department. This PUD shall also permit one monument sign structure consistent with the original PUD application (8/22/05) at the intersection of Cochrane Road and Mission View Drive. This monument sign shall be a maximum overall height of 20 feet, and shall not be illuminated in the evenings after 10 pm.
47. The uniform sign program for the Project shall control the signage requirements and placement of signs within the project. The uniform sign program shall be applicable to all buildings and uses within the PUD. Tenant identification signs will be allowed on the sides of buildings that are visible to Highway 101. Signs fronting Highway 101 and Mission View Drive shall be limited to business identification signs only. Signs, banners and posters shall be permitted and must be of a high quality with character, and ambiance consistent with the Art Deco theme and the standards of the Precise Development Plan. Address numbers shall contrast with their background and shall be a minimum of six inches in height.
48. Poster boards containing retail displays (including advertising) incorporating an artistic component or displaying information of community interest shall be permitted. Such displays shall comply with guidelines issued by a sub-committee of the Architectural Review Board.

Section 7: Utilities and Appurtenant Uses / Devices

49. Easements for the installation and maintenance of utilities, walkways, roads, shared driveways, parking and drainage facilities shall be recorded as part of any subdivision map or lot line adjustment.
50. A detention pond or an interlinked detention pond system with outfalls shall be used to serve the PUD. The detention ponds and/or bioswales may be located within any setback area or outside a setback area.
51. Utility equipment may be located within landscaped or setback areas provided they are located as far from the street frontage as feasibly possible, and adequately screened and/or landscaped to limit the visibility of such equipment.
52. Uses within the PUD that utilize shopping carts shall provide indoor or outdoor screened storage of the carts and shall provide for architecturally treated collection areas throughout the parking lots.
53. Vending machines, rides, newspaper racks, coin operated devices or other similar devices may be placed on the exterior of and/or walkway adjacent to proposed buildings, provided the area in which the devices are located is partially enclosed or architecturally treated. Prior to installing such equipment or devices, Applicant shall provide Staff with a proposed plan indicating the nature and proposed location of such devices for Staff review and approval. Once installed, such devices and locations shall be maintained in a high quality manner.

Section 8: Disclosures

54. A disclosure statement shall be included in all sale or lease agreements informing prospective buyers and tenants of the adjacent agricultural uses.

(end)

MIXED USE PROJECT
COCHRANE ROAD AND HIGHWAY 101
A DINAPOLI, BROWMAN, GUGLIELMO DEVELOPMENT

PD GUIDELINES
MORGAN HILL, CA
October 2022

Location

Cochrane Commons is located at the northeast quadrant of the Cochrane Road overpass at Highway 101.

Introduction and Intent

The intent of this narrative is to describe the architectural theme and site development plans which will guide the future development of this site relative to architectural compatibility, site design, landscape features, and signage concepts. These development standards are designed to provide flexibility to allow creative freedom and diversity, which is necessary for maintaining and attracting national retail tenants and future residents to the Cochrane Commons mixed use project. This document outlines the guidelines under which all businesses and residents can synergistically coexist in a competitive market and in close proximity to Cochrane Commons Shopping Center. Except as otherwise modified and amended herein the existing and approved PUD shall remain in full force and effect, including without limitation the permitted and conditionally permitted uses as well as the original site plan.

Development Guideline Format

These PD guidelines are organized as follows:

- Section 1: Allowable Uses
- Section 2: Site Development Concept
- Section 3: Landscape and Lighting Concepts and Guidelines
- Section 4: Parking and Loading/Circulation
- Section 5: Architectural Concepts and Guidelines
- Section 6: Site Design Guidelines
- Section 7: Utilities and Appurtenant Uses / Devices

SECTION 1: ALLOWABLE USES

All capitalized terms herein shall have the meaning set forth in the Morgan Hill Zoning Code, as adopted on June 6, 2018.

Permitted Uses:

- Small, medium and big box Retail, (including, but not limited to General Retail, Convenience Markets, Home Improvement Centers, Grocery stores, Liquor Stores, Drug Stores, and/or Large Commodity Retail)
- Residential Land Uses (approximately 8-24 dwelling units per acre), rentals or for sale (including, but not limited to, Duplexes, Triplexes, Group Housing, Live/Work Units, Mixed Use Residential, Multi-Family Dwellings, Single-Family Dwellings, Single-Family Attached Dwellings, and/or Single Family Detached Dwellings)
- Lodging Facilities
- Nursing Homes, Long-Term Care, Residential Care Facilities, and/or Residential Care Facilities, Small
- Day Care Centers and/or Home Day Care
- Colleges and Trade Schools, Community Assembly, Cultural Institutions, Instructional Services, Schools
- Eating and Drinking Uses (including, but not limited to, Restaurants, Fast Food Restaurants, Sit-Down, quick service, fast casual, café, market hall, cafeteria style, drive in and full service)
- Up to five (5) Drive-Through Facilities. Drive-Through Facilities in addition to those permitted above, shall be permitted within the shopping center with the approval of a conditional use permit.
- Commercial Recreation (including indoor health clubs and group fitness facilities), Cinemas and Theaters, Parks and Recreational Facilities, Bars and Nightclubs, Tasting Rooms, Plant Nurseries, Breweries, Beer Gardens
- Pop-up shops, food trucks and/or temporary food kiosks (day or night)
- Farmers Market
- Animal Boarding
- Professional Offices, Medical Offices and Clinics, Banks and Financial Institutions, Veterinarian Clinics and Hospitals, Government Offices, Service Commercial Uses, Business Support Services, and/or co-working spaces
- Personal Services, Social Services, and/or Public Safety Facilities
- Fuel and Service Stations, Vehicle Rentals, Vehicle Sales and Leasing, Vehicle Washing
- Parking Lots and Structures
- Recycling Facilities
- Light Fleet-Based Services
- Vehicle Repair and Maintenance, Minor (such as a tire shop, oil changer, car audio shop, or other similar auto oriented uses)
- Wireless Communication Facilities
- Urban Agriculture
- Wholesaling
- Warehousing, storage, and distribution, curbside and in store pick-up services, return and delivery services,
- Ecommerce Fulfillment Services business as part of a retail or other allowable use;

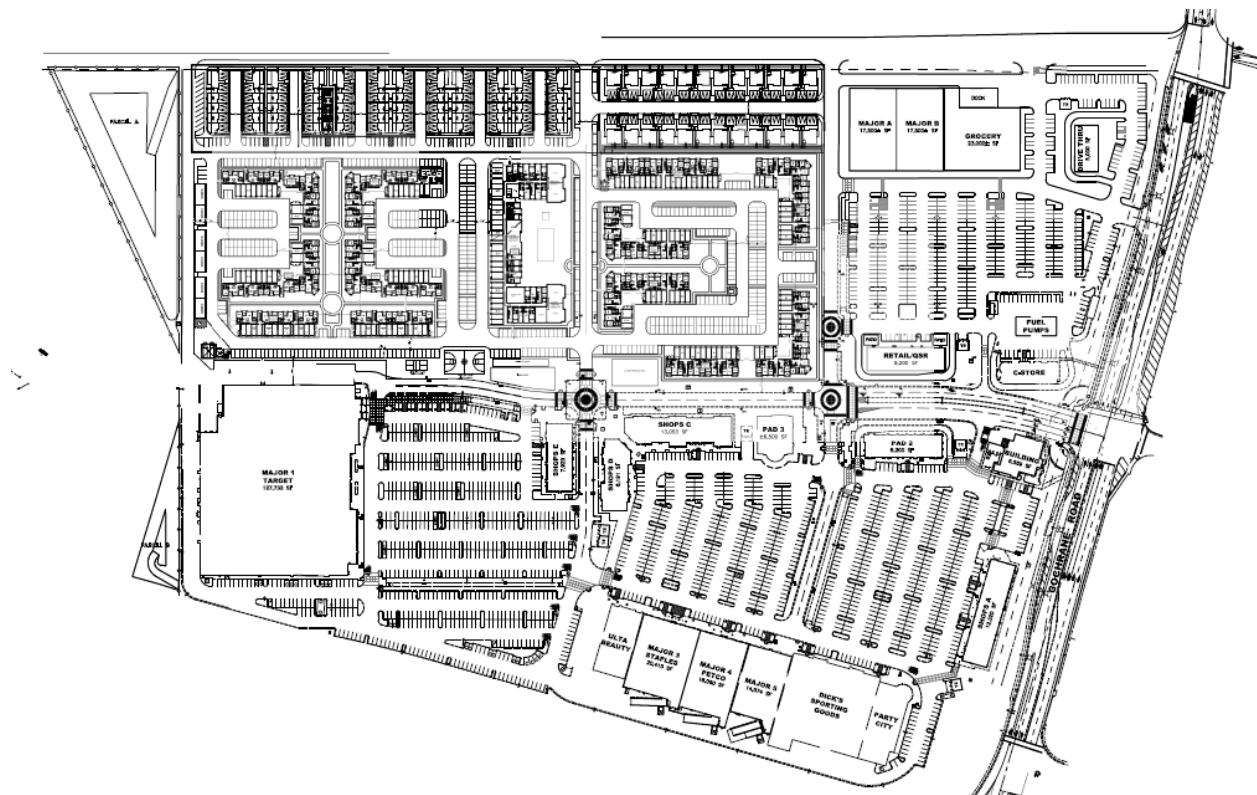
-
- Any other use that is supportive of Retail
- Any other use listed as a permitted use in the original Project PUD approvals, in the GC, General Commercial District in the Morgan Hill Municipal Code, or Mixed Use Flex designation in the General Plan

Conditional:

- Any Drive-Through and Drive-In Facilities that is proposed beyond the five (5) that are permitted above shall require a conditional use permit.
- A maximum of one (1) of each: Fuel and Service Stations, Vehicle Washing, and Convenience Markets, unless such use is a part of a Retail tenant located or to be located in the Shopping Center in which case more than one of each of the foregoing shall be permitted.
- Mini-Storage
- Vehicle Repair and Maintenance, Major
- Except as permitted above, Warehousing and Distribution

SECTION 2: SITE DEVELOPMENT CONCEPT: Notwithstanding anything contained herein to the contrary, the original Site Development Concept in Section 2 of Ordinance No. 1746 dated December 8, 2005 ("First PD") shall continue in full force and effect, except as added or modified herein.

1. The mixed use site development plan consists of multiple retail areas and residential areas, with vehicular roadways bisecting the site N/S from Cochrane Road at De Paul Drive and E/W from Mission View Drive.
2. Building setbacks along Cochrane Road shall be an average of 25 ft; along Mission View an average of 10 feet,(with all setback distances measured from the property line); however, encroachments into the setback area are permissible to accommodate the architectural and functional needs of the development as long as the overall average is maintained. Building setbacks along rear or side yard property lines adjacent to property not a part of the PD shall be an average of 10'. For all property within the Project that is subject to the PD there shall be no minimum building setback requirements required between buildings or other improvements, uses, or properties within the Project boundaries.
3. The First PD site plan, and the Site Plan and elevations submitted with the PD Application adopted in Ordinance No. 1746 dated December 8, 2005 shall not require further review or approval.
4. The project site plan and project design elevations shall be subject to Staff Level Design Review and reviewed and approved by City Staff to determined that the project is consistent with or in substantial conformance with the content or intent of this PD.



Project Site Plan

SECTION 3: LANDSCAPE AND LIGHTING CONCEPTS AND GUIDELINES

Landscape

5. Project landscaping shall be substantially consistent with the Project Site Plan and attached general landscape plan submitted as part of the Amended PD, but will require further Staff Review review at building permit plan review for consistency with local and state watering and irrigation standards. All street trees and trees planted within the front setback areas shall be a minimum 15 gallon size. Except as permitted under the approved PD Amendment or otherwise shown on approved Project landscape drawings, and except for landscaping adjacent to buildings, all landscape areas shall comply with city code.
6. The general characteristics of the plant palette for the Project shall be a combination of year-round color and textural interest. Plants shall be selected on the basis of color combinations complementary to the existing architectural theme, growing patterns, low maintenance and water conservation characteristics.
7. An average 20 foot wide landscape strip (excluding sections of hardscape elements such as driveways or sidewalks) shall be provided along Cochrane road, and an average 10 foot wide landscape strip (excluding sections of hardscape elements such as driveways or sidewalks) shall be provided along Mission View Drive. Encroachments into all landscape setbacks shall be permissible to accommodate the architectural and functional needs of the development as long as the remaining landscaped areas maintains the overall average or a substantial portion of the landscape strip equals or exceeds 10 foot requirement. Acceptable mitigation for such encroachments shall include, without limitation: additional landscape planting, an earthen

berm, or screen walls. Berms shall be an average height of 3 feet with a minimum height of 1.5 feet, and shall undulate where possible to be aesthetically pleasing. Except as provided herein, the design of the landscaping strip referred to above shall substantially conform to the Landscape Plan submitted as part of the PD Master Plan.

8. Canopy-providing trees shall be planted in the parking lot planter islands to produce shade.
9. The main project entrance at DePaul Drive shall be well landscaped and serve as a focal point, and may include attractive landscape walls, project signage, and other features.
10. Shrubs or vine planting shall be provided to screen utilities and trash enclosures.
11. The main parking field and/or any parking structure shall be screened from view of public streets by use of berming and/or bushes of a minimum of 3 feet effective height (18 months after planting), as measured from the top of the nearest street curb.
12. Where possible, landscaping shall be used to soften the appearance of fences and walls and front elevations of large scale retail buildings which lack fenestration or other architectural detailing.
13. All service areas fronting on public streets shall be screened by landscaping, berms, screens, and/or walls, substantially consistent with the colors and materials shown in the 'colors and materials pallet' packet on file in the Development Services Center.
14. Special paving or materials such as integral color concrete or asphalt, pavers, and/or scored concrete paving shall be provided at key on-site intersections. Pedestrian walkways shall be provided connecting groupings of retail structures to other retail areas, mixed use areas, and/or residential areas, and to parking areas. Walkways which cross traffic lanes shall have special markings such as integral colored concrete, scored or raised concrete, colored paving, special striping, and/or paving stones.



Landscape Site Plan

Lighting

15. Any decorative lighting on the pedestrian pathways parallel to the main driveway from Cochrane Road shall be reduced in height and scale, to create a more human-scale feeling and atmosphere.
16. The design of the exterior retail building lighting shall be compatible with the existing architectural style of the project. The design of the exterior residential and/or mixed use building lighting shall be complementary with the existing architectural style of the project, and/or provide an architectural transition to the adjacent residential projects.
17. The main parking lot lighting fixtures shall be consistent throughout the project, provided, however the mixed use and/or residential portions of the project shall complement the other portions of the project and will help identify neighborhoods within the project. The maximum pole height (including the base) shall be 33 feet except that lighting poles along Mission View project edge and the Cochrane Road project edge shall be limited to a maximum height (excluding the base) of 15 feet. Further conditions regarding residentially zoned properties are imposed under guideline #18 below.
18. All lighting shall be shielded and directed in such a manner so as not to directly cast light on neighboring residentially zoned properties outside the Project. The Applicant shall pay special attention to ensure that there is no unacceptable spillage of light outside the applicable boundaries of the project. Prior to issuance of site construction permits, Applicant shall provide a photometric plan evidencing conformance of the lighting plan to these guidelines.

SECTION 4: PARKING AND LOADING/CIRCULATION

19. The main parking field shall be screened from public view on Cochrane Road primarily through constructed buildings, the use of berming and/or hedge row plantings, shrubs, trees or any combination thereof, in a manner substantially consistent with the project Landscape Plan.
20. 90 degree parking, angled parking, compact parking, RV parking, parallel parking, one-way drive aisles, and roundabouts shall be permitted.
21. Parking areas shall be designed to include provision for pedestrian walkways for access to building entrances. Walkways which cross traffic lanes shall have special markings such as integral color concrete, scored or raised concrete, colored paving, special striping and/or paving stones. Walkway strips shall be intermittently provided through landscaped areas to protect landscaping from foot traffic damage.
22. In order to facilitate on-site traffic flow and vehicle and pedestrian safety, parking stalls shall not be located directly adjacent to the front of a retail anchor tenant occupying a ground floor area that is 100,000 square feet or larger (i.e. Major 1 (Target) as shown on the PD Master Plan).
23. Reciprocal access and shared parking between properties shall be permitted and used, whenever possible, and for purposes of calculating parking ratios residential portions of the project shall be allowed to share parking stalls from the retail portion of the project in meeting the guest stall parking requirements. Given the benefits of the walkable and mixed-use nature of the project the Residential portion of the Project shall be permitted to receive an overall reduction in its parking requirements by up to 15% off the total parking required for the residential portion of the Project.
24. Cross access easements shall be provided throughout the project.
25. Shared access easements and driveways shall be provided.

26. Drive aisles shall allow for circulation within the project, with sufficient width for emergency vehicles.
27. Provisions for connecting driveways and walkways between adjacent properties within the project are encouraged.
28. Emergency vehicle access shall be provided throughout the project.
29. Loading areas and docks shall be screened from view along Mission View Drive by landscaping or a screening structure. Screen walls or other screening structures shall be architecturally treated, and may be constructed with metal, concrete, concrete block, wood or a combination thereof (see attached exhibit for an example of acceptable screening). Alternatively, screening along the northern property may be comprised of dense evergreen plantings, or other similar screenings.
30. All truck deliveries between the hours of 10pm to 6am shall enter and exit through the DePaul Drive project driveway (main vehicular entry from Cochrane Road).
31. Parking required for the development shall meet the requirements set forth in this PD Amendment. The project shall benefit from and receive credit for shared parking throughout the project and among a mix of uses.

SECTION 5: ARCHITECTURAL CONCEPTS AND GUIDELINES

32. The architectural concept shall create a campus of mixed use residential and commercial structures which vary in character, massing, materials, and colors but remaining complementary to the existing theme of the PD Master Plan. Each structure shall be complementary to the existing architectural theme or most directly adjacent structure, but may maintain its own uniqueness prioritizing thoughtful transitions from differing styles within the project and the context of the neighborhood. Building facades may contain design features and variances in scale to create interest in character. The design of entertainment uses may be enhanced by featured elements which may include some or all of the following: neon, tower, marquee, theater lights and statement lobby glazing. The development shall include tower and/or entry features, bold cornices, and varying facades, and a variety of materials, colors and storefronts. Awnings, light sconces, site lighting, and/or street furniture shall be situated at appropriate locations as determined by Applicant to enhance the pedestrian and/or human scale feel of the project.
33. No building shall exceed 68 feet in height to the top of the parapet except that tower and accent features of buildings may exceed such height limitations as long as (i) the scale and design of such features are complementary to the existing architectural design of the project; (ii) such exceptions affects no more than 25% of the applicable building; (iii) such features shall not exceed 75 feet at the highest point. Notwithstanding the above, no building sharing a frontage with Mission View shall exceed 3 stories in height, excluding roof decks or other outdoor space which in this case shall not be included in the total number of building stories.
34. Rooflines may be flat and/or provide variation in height, cascading rooflines, or a combination of the above, which shall be complementary to the existing architectural theme established for the development.
35. Large, continuous structures shall incorporate breaks in horizontal planes by varying architectural features and designs and recessing windows and entrances, to provide substance and scale.

36. Windows shall be enhanced by use of various sizes and shapes, and highlighted by the use of accent trim (e.g. molding, pop-out or wood trim). The design shall be complementary to the architectural style of the project.
37. Architectural treatment shall be applied to the front façade of all building elevations consistent with the below design elevation concepts and complementary to the existing retail development and surrounding residential neighborhoods; complementary architectural treatment shall also be applied to other areas of any building clearly visible from any public street. Final building designs shall be a staff level design review approval.
38. Building design shall be compatible with the immediate adjacent building and provide harmonious transition between various uses.
39. Gutters and downspouts shall be made of quality materials and treated to blend into the façade to which it is attached, unless as a design element, in which case the color shall be consistent with the color schemes of the building.
40. No mechanical equipment shall be exposed on the wall surface of any building.
41. All roof-mounted mechanical equipment or ductwork which project vertically above the roof or parapet shall be screened consistently with the building design.
42. Any outdoor storage of goods, materials or equipment (e.g. garden center, lumber yard) shall be located within an enclosed area. The fencing and/or screening enclosing such area shall be complementary to the existing architectural theme of the PD Master Plan and designed in a manner complementary to the building design and site layout. Chain link fencing with wood inserts is not an acceptable manner of screening.
43. Fences and walls shall be designed to be compatible with the surrounding landscape and architectural style of the PD.
44. Trash enclosures shall be constructed of solid material, and shall be a minimum of six feet in height, with solid view obstructing gates. Reasonable efforts shall be made to screen trash enclosures or locate them in inconspicuous locations.



3 Story Multi-Family



4 Story Multi-Family



Retail



Bungalows



Townhomes



Townhomes

SECTION 6: SIGN DESIGN GUIDELINES

45. This PD shall permit two (2) pylon sign structures along Highway 101 near the north end of the site and one pylon structure along Highway 101 near Cochrane Road consistent with the original PD application (8/22/05), subject, if necessary, to approval by the SCVWD. The two pylon signs near the north end of the site shall be a maximum height of 68 ft, as measured to the top of the horizontal cornice. The pylon sign near Cochrane Road shall be a maximum height of 50 ft, as measured at the top of the horizontal cornice. Decorative architectural features may extend above the 68 ft and 50 ft height limits as depicted on the sign elevations date stamped October 27, 2005, on file at the Community Development Department. This PD shall also permit one monument sign structure consistent with the original PD application (8/22/05) at the intersection of Cochrane Road and Mission View Drive. This monument sign shall be a maximum overall height of 20 feet, and shall not be illuminated in the evenings after 10pm. In addition, this PD shall permit directional signage, other residential project signage, landscape wall signs including but not limited to landscape wall signs along Cochrane and Mission View, and other signage consistent with a leasing office.
46. Except as permitted above, the uniform sign program for the Project shall control the signage requirements and placement of signs within the project. The uniform sign program shall be applicable to all buildings and uses within the PD. Tenant identification signs and “now leasing” signs will be allowed on the sides of the buildings that are visible to Highway 101. Signs, Banners and posters shall be permitted and must be of a high quality with character, and ambiance complementary to the existing architectural theme and the standards of the PD Master Plan. Address numbers shall contrast with their background and shall be a minimum of six inches in height.

47. Poster boards containing retail displays (including advertising), for sale/for rent signs incorporating an artistic component or displaying information of community interest shall be permitted.

SECTION 7: UTILITIES AND APPURTENANT USES / DEVICES

48. Easements for the installation and maintenance of utilities, walkways, roads, shared driveways, parking and drainage facilities shall be recorded as part of any subdivision map or lot line adjustment.
49. Detention ponds and/or bioswales may be located within any setback area or outside a setback area.
50. Utility equipment may be located with landscaped or setback areas provided they are located as far from the street frontage as feasibly possible, and adequately screened and/or landscaped to limit the visibility of such equipment.
51. Uses within the PD that utilize shopping carts shall provide indoor or outdoor screened storage of the carts and shall provide for architecturally treated collection areas throughout the parking lots.
52. Vending machines, bike and/or scooter racks, rideshare pick up areas, solar panel installations, newspaper racks, coin operated devices, electric vehicle parking and/or charging stations or other similar devices may be placed on the exterior and/or walkway and/or parking lot or garage adjacent to proposed buildings, provided the area in which the device is located is neat, attractive, attractive or otherwise architecturally treated or landscaped. Once installed, such devices and locations shall be maintained in a high quality manner.

PD Design Standards Summary

	Approved	Proposed	Zoning Code
Building setbacks			
Cochrane	30	25	
Mission View	30	10	
Side (adjacent to public ROW)	-	10	
Rear (adjacent to public ROW)	-	10	
Interior parcels	-	0	
Minimum Lot Sizes	-	0	
Landscape Strip			
Cochrane	30	20	
Mission View (up to 1st driveway)	20	10	
Mission View (after 1st driveway)	15	10	
Lighting - Parking Lot Lights			
Maximum Pole Height	33	33	
Max Pole Height: Mission View, Cochrane	15	15	
Building Height	40	68	
Max height for architectural features	60	75	
Allowable amount of exceptions (of frontage) for architectural features	25%	25%	
Maximum Stories for buildings fronting Mission View	-	3	
Parking			
Retail	Per REA	Per REA	1 / 250 SF
Residential			
Studio & One-Bedroom	-	Per Zoning except as allowed in PD	1 covered / 0.5
Two Bedroom	-		1 covered / 1
Three Bedroom	-		1 covered / 1.5
Single Family Dwellings Attached & Detached	-		2 covered
Guest Stalls	-		1 per 3 units

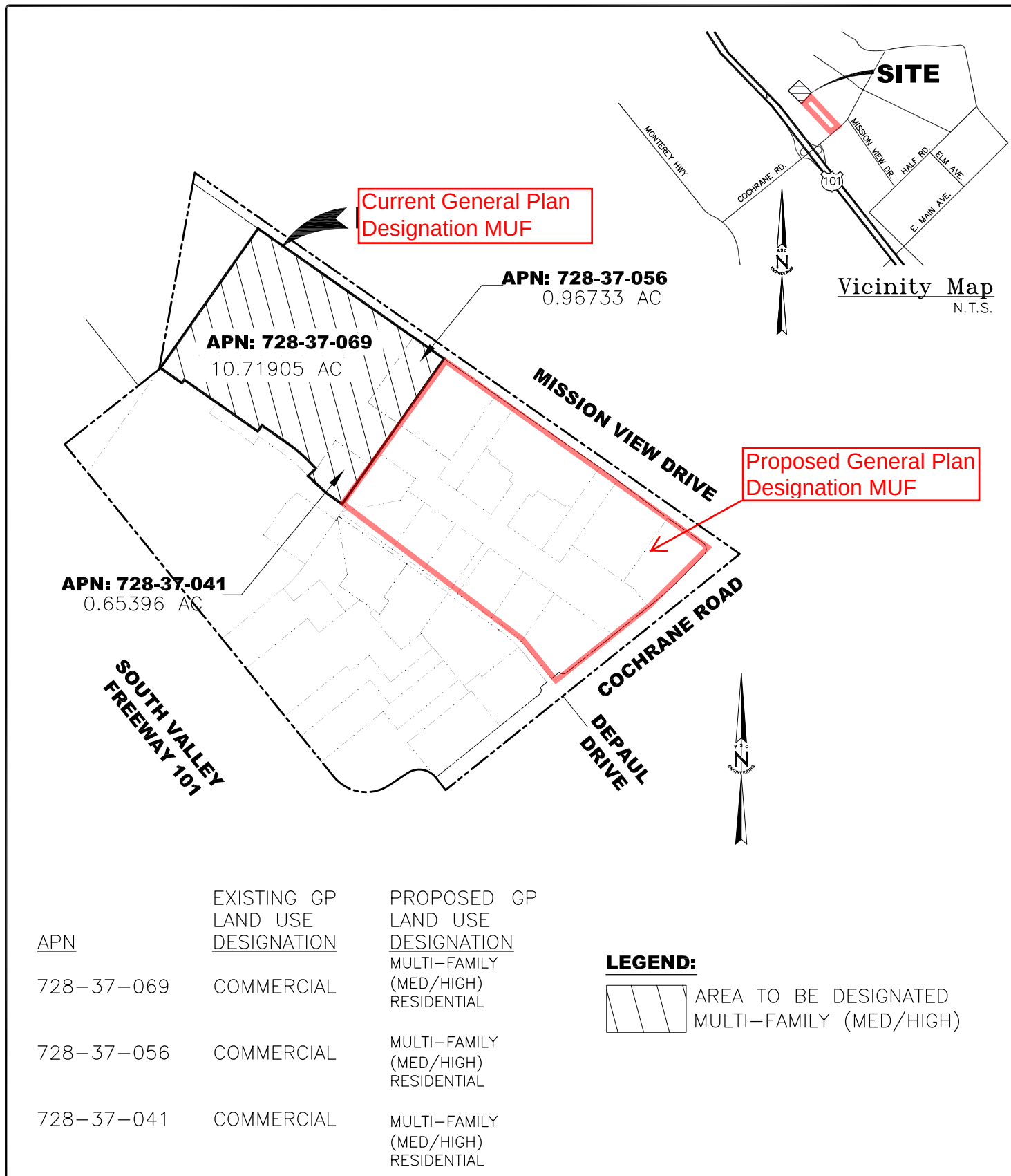
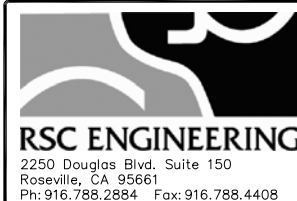


EXHIBIT "A"
PROPOSED GENERAL PLAN AMENDMENT
FOR
APN 728-37-069, 728-37-056
AND 728-37-041
COCHRANE COMMONS SHOPPING CENTER
MORGAN HILL, CA



PROJECT NO.: 019-025
SCALE: 1"=500'
DATE: 06/17/14

SITE PLAN NOTES

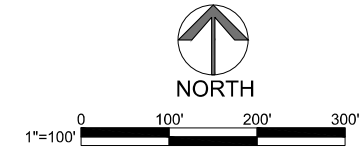
1. THIS ARCHITECTURAL SITE PLAN IS PROVIDED FOR OVERALL SITE REFERENCE. THE LOCATION OF ITEMS INCLUDED IN THIS SET OF PLANS IS FOR AGENCY DEPARTMENT USE ONLY.
2. THIS SITE PLAN IS FOR REFERENCE ONLY. AS AN ARCHITECTURAL PLAN FOR GENERAL LAYOUT AND IDENTIFICATION PURPOSES ONLY.
3. FOR LOT LINE DIMENSIONS & HORIZONTAL CONTROL, SEE CIVIL DRAWINGS
4. FOR HARDSCAPE AND ALL SITE IMPROVEMENTS, SEE LANDSCAPE DRAWINGS
5. FOR PARKING GARAGE, SEE SEPARATE SUBMITTAL PACKAGE
6. FOR "FIRE LANE" DESIGN, SEE CIVIL AND LANDSCAPE DRAWINGS
7. FOR PERIMETER FENCING, SEE LANDSCAPE DRAWINGS
8. REFER TO CIVIL AND LANDSCAPE DRAWINGS FOR SPECIFIC SITE REQUIREMENTS
9. ALL PROPERTY LINES, EASEMENTS, AND BUILDINGS, EXISTING AND PROPOSED ARE SHOWN ON THIS PLAN BUT MUST BE VERIFIED WITH THE CIVIL PLANS
10. BUILDING SIGNAGE IS DESIGNED BY OTHERS AND INSTALLED BY THE GENERAL CONTRACTOR.
11. SITE SIGNAGE IS DESIGNED BY OTHERS AND INSTALLED BY THE CONTRACTOR.
12. SITE WALLS ARE DESIGNED BY OTHERS
13. DECORATIVE SITE LIGHTING IS DESIGNED BY OTHERS.
14. SURFACE WATER MUST DRAIN AWAY FROM BUILDING SEE CIVIL AND LANDSCAPE PLANS FOR DRAINAGE DESIGN.

GENERAL NOTES

1. SEE LANDSCAPE SHEETS FOR LANDSCAPE DETAILS
2. SEE CIVIL SHEETS FOR CIVIL DETAILS

PROJECT SUMMARY

LEGEND



CONCEPTUAL SITE PLAN - OVERALL

A1.1

COCHRANE & MISSION VIEW

MORGAN HILL, CA

BROWMAN DEVELOPMENT COMPANY
1556 PARKSIDE DR, WALNUT CREEK, CA 94596
925.588.2219

DATE: 03-31-22
JOB NO.: 2021-445

ARCHITECTS ORANGE
144 NORTH ORANGE ST., ORANGE, CA 92866
(714) 639-9860





COCHRANE & MISSION VIEW
BROWMAN DEVELOPMENT COMPANY
1556 PARKSIDE DR, WALNUT CREEK, CA 94596
925.588.2219

MORGAN HILL, CA

Approved PD	Proposed Additional Uses	General Commercial Zone	Highway Commercial Zone	Mixed Use Flex
PERMITTED USES	PERMITTED USES	PERMITTED USES	PERMITTED USES	PERMITTED USES
Mix of commercial and/or retail big box anchors	Small and medium size Retail Big Box Retail General Retail	General Retail	General Retail	General Retail
Medium size anchors	Home Improvement Center Large Commodity Retail Grocery Stores, Drug Stores	Home Improvement Centers	Home Improvement Centers	
Shop space	Convenience Markets			
Eating Establishments	Eating and Drinking Uses including but not limited to: Restaurants: (Fast food*, sit down, quick service, fast casual, café, market hall, cafeteria style and full service) *Fast Food that primarily sell coffee, juices and other beverages shall not be considered as a restaurant for the purposes of this definition.	Restaurants, Fast Food Restaurants, Sit-Down	Restaurants, Fast Food Restaurants, Sit-Down	Restaurants, Fast Food Restaurants, Sit-Down
Up to five (5) drive-thru facilities	Up to five (5) drive-through and Drive-In Facilities			
Commercial recreation and entertainment uses (including cinema and health club)	Commercial Recreation Cinemas and Theaters	Commercial Recreation, Indoor ≤15,000 sq. ft.	Commercial Recreation, Indoor ≤15,000 sq. ft.	
	Parks and Recreation			Parks and Recreation facilities

Approved PD	Facilities	General Commercial Zone	Highway Commercial Zone	Mixed Use Flex
	Proposed			
Grocery store	Pop-up shops Food trucks and/or Temporary food kiosks (day or night)			
Offices	Professional Offices Medical Offices and Clinics, Banks and Financial Institutions (including ATMS's), co-working spaces, Service Commercial Uses,	Banks and Financial Institutions Government Offices Medical Offices and Clinics Professional Offices	Banks and Financial Institutions Professional Offices	Banks and Financial Institutions Medical Offices and Clinics Professional Offices
Service Offices (including real estate offices, banks or other financial institutions, title companies, credit unions)				
Personal Services	Personal Services, Social Services and/or Public Safety Facilities	Personal Services		Personal Services
Liquor store	Bars and nightclubs			
Wine shop	Tasting Rooms, Breweries, Beer Gardens		Tasting Rooms	Tasting Rooms
Any other use listed as a permitted use in the CG, General Commercial District in the Morgan Hill Municipal Code, with the exception of day care centers and nursery schools which shall be conditional uses	Daycare Centers Home Daycare			Home Day Care (small)
	Animal Boarding; Veterinarian Clinics and Hospitals			

	Plant Nurseries			
	Farmers Market			
	Lodging Facilities		Hotels and Motels	
Approved PD	Proposed	General Commercial Zone	Highway Commercial Zone	Mixed Use Flex
	Government Offices and/or Business Support Services	Business Support Services	Business Support Services	Business Support Services
	Colleges and Trade Schools Community Assembly Cultural Institutions Instructional Services Schools (including but not limited to education/learning facilities)			College and Trade Schools Instructional Services
	Fuel and Service Station, Vehicle Rentals, Vehicle Sales and Leasing, Vehicle washing		Vehicle Rentals Vehicle Sales and Leasing	
	Light Fleet Based Services			
	Parking Lots and Structures			
	Recycling Facilities			
	Wireless Communication Facilities			
	Urban Agriculture			
	Nursing Homes Long Term Care Residential Care Facilities Residential Care Facilities-Small; senior care facilities			Residential Care Facilities (small)
	<u>Residential land uses:</u> (approximately 8-24 dwelling units per acre), rentals or for sale including but not limited to:			Mixed Use Residential Accessory Dwelling Units

Approved PD	Proposed	General Commercial Zone	Highway Commercial Zone	Mixed Use Flex
	Duplexes, Triplexes Group Housing Live/work Units Mixed Use Residential Multifamily Dwellings Single-Family Dwellings Single-Family Attached Dwellings			
	Any other use listed as a permitted use in the original Project PUD approvals, in the GC, General Commercial District in the Morgan Hill Municipal Code, or Mixed Use Flex designation in the General Plan			Food and Beverage Production <5,000 sq. ft (*On site wholesale or retail sales required)
	Vehicle Repair and Maintenance, Minor			
	Wholesaling			
	Warehousing , storage, and distribution; curbside and in store pick-up services, and return and delivery services; Ecommerce Fulfillment Services			
	Any other use that is supportive of Retail			

Approved PD	Proposed	General Commercial Zone	Highway Commercial Zone	Mixed Use Flex
CONDITIONAL USES	CONDITIONAL USES	CONDITIONAL USES	CONDITIONAL USES	CONDITIONAL USES
Any drive-thru use that is proposed beyond the five (5) that are permitted in the shopping center shall require a conditional use permit	Any Drive-Through and Drive-In Facilities that is proposed beyond the five (5) that are permitted above shall require a conditional use permit.	Drive-Through and Drive-In Facilities	Drive-Through and Drive-In Facilities	Drive Through Facilities
A maximum of one fuel station, car wash and convenience market	A maximum of one (1) or each: Fuel and Service Stations, Vehicle Washing, and Convenience Markets, unless as part of a Retail tenant located or to be located in the Shopping Center unless as a part of General Retail in which case more than one of each of the foregoing shall be permitted .	Convenience Market Fuel and Service Stations Vehicle Washing	Convenience Market Fuel and Service Stations Vehicle Washing	Convenience Market-A Fuel and Service Stations Vehicle Washing
All other uses which are supportive of retail (i.e., daycare)		Animal Boarding Bars and Nightclubs Cinemas and Theaters-A College & Trade Schools Commercial Recreation, Indoor >15,000 sq. ft. Community Assembly Cultural Institutions Day Care Centers-A Funeral Parlors and Mortuaries Hotels and Motels-A Instructional Services-A Large Commodity Retail Parking Lots and Structures Plant Nurseries Reverse Vending Machine Schools, Public and Private Social Services Tasting Rooms-A Vehicle Rentals Vehicle Sales and Leasing	Cinemas and Theatres-A Commercial Recreation, Indoor > 15,000 sq. ft. Instructional Services-A Medical Offices-A Reverse Vending Machine Veterinarian Clinics/Hospitals-A	Bars and Nightclubs Bed and Breakfast-A Cinemas and Theaters-A Commercial Recreation, Indoor >15,000 sq. ft. Community Assembly Cultural Institutions-A Day Care Centers Emergency Shelters Farmers Market-A Government Offices-A Hospitals Hotels and Motels Parking Lot and Structures Public Safety Facilities Reverse Vending Machine Vehicle Rentals Schools, Public and Private Social Services

Approved PD	Proposed	General Commercial Zone	Highway Commercial Zone	Veterinary Clinics & Hospitals Mixed Use Flex
		Veterinary Clinics & Hospitals-A		
	Mini-Storage	Mini-Storage		
	Vehicle Repair and Maintenance, Major	Light Fleet-Based Services Vehicle Repair and Maintenance, Minor		
		Wholesaling		
	Except as otherwise permitted above, Warehousing and Distribution	Food and Beverage Production <5,000 sq. ft. (*On site wholesale or retail sales required.)-A Food and Beverage Production-A 5,000 sq. ft. to 10,000 sq. ft. (*On site wholesale or retail sales required.) Utilities, Major	Food and Beverage Production <5,000 sq. ft. (*On site wholesale or retail sales required.)-A Food and Beverage Production 5,000 sq. ft. to 10,000 sq. ft. (*On site wholesale or retail sales required.) Freight Terminals and Transfer	Food and Beverage Production 5,000 sq. ft. to 10,000 sq. ft. (*On site wholesale or retail sales required.)
		Residential Uses: Caretaker Quarters Nursing Homes and Long-Term care		Residential Uses: Duets and Duplexes Group Housing Home Day Care, Large Live/Work Unit-A Multi Family Dwellings Nursing Homes and Long-Term Care Residential Care Facilities Senior Housing, Independent Living Single Family Attached Dwelling Single Family Detached Dwelling

Cochrane Commons, Morgan Hill – Planned Unit Development Amendment

Realizing the vision of a vibrant village center for Northeast Morgan Hill, a decade in the making

Statement of Planning Objectives

The purpose of this Zoning Amendment, Amending a Planned Development (the “PUD Amendment”), and the approval of a tentative Parcel Map is to address the policy considerations for approval of an amendment to the existing Planned Development dated November 10, 2005 (“Existing PD”) to allow for additional land uses in the 66.26 acre Cochrane Commons Shopping Center (the “Shopping Center”). The proposed project is an approximately 31 acre site (the “Project”) located within the Shopping Center. The Project has a land use designation of Mixed Use Flex for a 14.89 acre portion of the site and a commercial designation for the remainder. The entire site is zoned PUD (underlying zoning Highway Commercial) in accordance with City Council Ordinance No. 1746.

Morgan Hill Retail Ventures L.P. (“Operating Partners”) is now seeking to obtain a PD approval that would modernize the allowable uses in the commercial components of the Shopping Center, and make the make the zoning for the above mentioned 14.89 acre portion consistent with the City Council approved MUF zoning which allows for among other uses medium density residential, and is proposing a conceptual block level master plan to identify how commercial and residential uses will be incorporated within the Project. Currently, commercial uses within the Project are permitted with the Existing PD. The additional residential uses within the Project are consistent with the new General Plan designation.

Pursuant to the Initial Study, the Operating Partners’ have found that the proposed Project (i) would not cause any additional significant effect on the environment which was not previously examined in the EIR originally created for the Shopping Center (ii) no additional mitigation measures or alternatives will be required as a result of the Project, and (iii) the Project is within the scope of the original EIR. Therefore, based on the foregoing reasons and the evidence and facts set forth in the Initial Study, subject to compliance with the mitigation measures of the existing EIR and the Cochrane Road PUD Guidelines as amended hereby, the Operating Partners recommend approval of this PUD Amendment, the precise development plan, tentative parcel map, location and sizes of lots, additional pylon sign, basic design, uses, vehicle and pedestrian circulation, related amenities, parking areas, landscaping areas, and any other purposeful uses on the Project.

Project Background

The Operating Partners entitled the Shopping Center during 2005 and 2006 as a 657,250 SF retail development at the height of the then booming economy, with expectation of demand from at least 12 major retail anchor tenants and over 50 smaller restaurant and shop tenants. In 2007 roughly 262,560 SF of the Shopping Center was built to meet the existing market demands from corporate, franchise, and/or independent retailers, including the 127,732 SF Target anchor. A study referenced in Resolution No. 17-052 notes that “while the Bay Area has seen one of the single largest economic expansions in the last 50 years, the City of Morgan Hill has not experienced as much new commercial and industrial

development as other Bay Area jurisdictions.” Following the Great Recession in 2008, the retail industry went into retraction and saw major retailers file for bankruptcy, including American institutions and/or big box retailers like Mervyn’s, Borders, Linens n Things, Shoe Pavilion, Good Guys, and Circuit City, an anchor at the Shopping Center which permanently closed its doors in 2009.

Over the last 10 years the Operating Partners of the Shopping Center have continued to own and operate the property in a first class manner despite the financial hardships of vacancy and the burden of carrying the excess land. This has included actively marketing the Shopping Center to additional anchors to build out the remaining entitled buildings in the Shopping Center, as well as shop and junior retailers to fill the existing vacancies. These efforts have led to the near completion of the original Phase I of the project, bringing additional high quality retail offerings and tax revenue to the community including Dick’s Sporting Goods and ULTA Beauty, among many other shop and restaurant tenants. Despite those additions space in the existing and future project areas have remained vacant, and at this time these outreach efforts have led to the belief that there will not be the originally expected demand for the amount of allowable retail development approved in the Shopping Center.

In July of 2016, the City Council of Morgan Hill approved the General Plan Update 2035. This update included a change in the General Plan designation for a 14.89 acre portion of the planned Phase II of the Shopping Center from Highway Commercial to Mixed Use Flex (“MUF”). The portion now designated as Mixed Use/Flex was previously approved for a second full size anchor of 150,400 SF, but there has been no demand due to (i) the shrinking pool of viable retailers in this size range and (ii) the self-imposed limit on housing growth within the City of Morgan Hill which prevents such anchor retailers to anticipate typical sales growth from housing expansion in the trade areas. The area also includes two proposed ancillary retail pad buildings totaling 11,000 SF. The new Mixed Use Flex designation maintains the ability to accommodate such an anchor should one have interest, while also allowing the flexibility for the construction of residential housing at the densities consistent with the new MUF Zoning.

Between the post-recession reality of consumer spending, and the competition with online retail sales, retailers and shopping centers throughout the country are still struggling to make sense of their own future. Many of these shopping centers have begun to take creative approaches in bringing additional foot traffic to their properties, including the introduction of new types of tenants like educational uses, health care uses, medical and hospitality uses, recreational and entertainment uses, as well as the inclusion of denser office uses and most notably residential uses.

Mixing residential uses with commercial shopping districts has an especially synergistic effect in bringing additional shoppers to the center, and there are many case studies where shopping centers have benefited greatly from this type of mixed use residential component. Additional environmental benefits exist from mixing residential and commercial uses. Creating an environment in which customers are able to walk to shops for their daily needs and basic services lowers green-house gas emissions from fewer car trips, as well as promotes health and quality of life benefits from living in a walkable community.

The Operating Partners are now seeking to amend the Existing PD as follows:

1. Zoning: Reflect the change in the new overlaying General Plan designation and underlying Zoning of Mixed-Use Flex, including, without limitation, the lot sizes, densities, setbacks, and heights;
2. Uses: Permit, as a matter of right, the uses permitted in the Mixed-Use Flex zoning including residential, as well as other uses that are supportive of retail and typical in the shopping centers of today's post-recession economy; such uses are included in the attached "Revised Planned Unit Development". Please note that the current PUD already permits other uses that are "supportive of retail," but the Operating Partners would like to clarify such right;
3. Pylon Sign: Permit, as a matter of right, a third pylon sign within the Shopping Center and near Highway 101 to attract additional tenant interest in the planned buildings, which plan is attached hereto and labeled "Pylon Sign Plan";
4. Site Plan: Replace the current site plan with the site plan attached hereto labeled "Alternate Site Plan" in order to reflect the potential residential component of the Shopping Center and, in addition, allow the Operating Partner future flexibility in modifying the Alternate Site Plan to adapt to market trends; and
5. Elevations: Approve the "Conceptual Elevation Plans" which illustrate the architectural theme from the existing project being carried over into the new uses in Phase II. The same commitment to quality in design and material choice will be maintained throughout the project, and a thoughtful approach will be taken to integrating and improving on the existing architectural themes.

The Operating Partners will seek the approval of a lot line adjustment and/ or Tentative Parcel Map consistent with the final revised site plan at a later date.

The above changes will help, among many other things, (i) increase the viability of the existing Shopping Center's anchors and tenants, (ii) create a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place, (iii) assist in protecting the tax revenue generated by the current and future tenants and the long term viability of the City of Morgan Hill's retailers, and (iv) encourage the development of the remainder of the Shopping Center.

Attached to this letter the Operating Partner has included, among other things, the redline Revised Planned Unit Development reflecting the revised "Allowable Uses", the "Alternate Site Plan", conceptual "Phase II Elevations, the "Pylon Sign Plan", and a traffic study documenting the decreased impact on traffic of the Alternate Site Plan to the surrounding area based on the maximum allowable density, of which the current Alternate Site Plan does not reach. There are CC&R's in place that provide for the maintenance of the entire property, which have also been attached to this application.

Statement of Intent to Sell/Lease

The intent of ownership is to continue to own and operate the property including the shopping center and proposed multifamily housing, and to sell the proposed townhome portion either at allocation or at occupancy permit. Other portions of the vacant land may be considered for sale to attract the appropriate operator to enhance the overall planned development, though it is the preference of ownership to retain as much of the land as possible to lease and own in the long term.

Development Scheme /Phasing

It is the goal of ownership to begin construction of Phase II upon receipt of planning and building permit approvals. Build out of the various uses within Phase II will depend on leasing and economic conditions, but it is our intent to build out as much of the vacant land as possible concurrently.

Operating Partner Statement

In summary we, the Operating Partners, are excited for the opportunity to continue to work with the City of Morgan Hill to complete the Project in a manner that best serves the surrounding neighborhood and city-wide community, and assists in the long term viability of this major retail node.

We believe the Alternate Site Plan and project as conceptually proposed is a dramatic improvement from the currently approved project, that it more adequately reflects the reality of today's shopping environment, and offers a drastically improved quality of life for nearby residents and the surrounding community compared to the previous plan and currently existing conditions. Special attention will be paid to the connections between Phase I and II to ensure uses complement each other, and that priority is given to the pedestrian scale of common areas and activation of the pedestrian realm.

Morgan Hill has worked hard to position itself among competing cities in Silicon Valley by offering quality housing opportunities, additional neighborhood amenities, a strong public school system, a growing local employment base, and an increasingly vibrant downtown. We appreciate your consideration in our being a part of these positive trends and look forward to staff feedback.

RESOLUTION NO. 5957

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORGAN HILL CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT AND ADOPTING FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATIONS, AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE COCHRANE ROAD PLANNED UNIT DEVELOPMENT PROJECT

WHEREAS, for purposes of compliance with the provisions of the California Environmental Quality Act ("CEQA"), a Draft Environmental Impact Report ("DEIR") for the Cochrane Road Planned Unit Development Project ("Project") was prepared and circulated for review and comment; and

WHEREAS, the environmental consultant which prepared the DEIR responded to comments received during the review and comment period and prepared a Final Environmental Impact Report ("FEIR"); and

WHEREAS, an Addendum to the FEIR was prepared to address a DEIR comment that the cumulative traffic analysis did not take into account residential units that would be constructed by the time the project is built out; the concern is that these units could accelerate the need to build Cochrane Road to its ultimate six-lane configuration; and

WHEREAS, the Project will include approval by the City Council of the following elements: demolition of all existing structures, removal of existing trees, and construction of a 657,250-sf sub-regional commercial shopping center that will include a mix of commercial, retail, and restaurant uses; and

WHEREAS, CEQA requires that, in connection with the approval of a project for which an EIR has been prepared which identifies one or more significant environmental effects, the decision-making agency make certain findings regarding those effects; and

WHEREAS, the City Council has reviewed the DEIR and the FEIR (and the Addendum thereto), all staff reports and all other information in the record and has considered the information contained therein, including the written and oral comments received at the Council meeting on the Project and makes the findings contained in this Resolution.

NOW, THEREFORE, THE MORGAN HILL CITY COUNCIL DOES RESOLVE AS FOLLOWS

SECTION 1. FEIR Certification. The City Council hereby finds and affirms that the FEIR and the Addendum thereto (collectively "FEIR" hereafter) has been completed in compliance with CEQA; that the City Council has reviewed and analyzed the FEIR and other information in the record and has considered the information contained therein, including the written and oral comments received at the public meeting on the FEIR and the Project, prior to acting upon or approving the Project; and that the FEIR represents the independent judgment of the City of Morgan Hill; and

SECTION 2. Findings. The findings and recommendations set forth in Exhibit A, and incorporated herein by reference, are made by the City Council as the City's Findings under CEQA (Pub. Resources Code §21000 et seq.) and CEQA Guidelines (Cal. Code Regs., Title 14; § 15000 et seq.) relating to the Project. The Findings provide the written analysis and conclusions of the City Council regarding the Project's environmental impacts, mitigation measures and alternatives to the Project.

SECTION 3. Statement of Overriding Considerations. Specifically, pursuant to Pub. Resources Code §21081 and CEQA Guidelines §§15091 et seq., the City Council adopts and makes the Statement of Overriding Considerations set forth in Section IV of Exhibit A, regarding the remaining unavoidable impacts of the Project and the anticipated economic, social and other benefits of the Project.

SECTION 4. Project Approval. The City Council hereby approves the Project as shown on the site plan dated August 22, 2005.

SECTION 5. MMRP. The City Council hereby approves the Mitigation Monitoring and Reporting Program (MMRP), attached hereto as Exhibit B. The MMRP identifies potential impacts of the Project, corresponding mitigations, designation of responsibility for mitigation implementation and the entity responsible for the monitoring action.

PASSED AND ADOPTED by the City Council of Morgan Hill at a Regular Meeting held on the 16th Day of November, 2005 by the following vote.

AYES:	COUNCIL MEMBERS:	Larry Carr, Mark Grzan, Dennis Kennedy, Greg Sellers, Steve Tate
NOES:	COUNCIL MEMBERS:	None
ABSTAIN:	COUNCIL MEMBERS:	None
ABSENT:	COUNCIL MEMBERS:	None

☞ CERTIFICATION ☞

I, IRMA TORREZ, CITY CLERK OF THE CITY OF MORGAN HILL, CALIFORNIA, do hereby certify that the foregoing is a true and correct copy of Resolution No. 5957, adopted by the City Council at a Regular Meeting held on November 16, 2005.

WITNESS MY HAND AND THE SEAL OF THE CITY OF MORGAN HILL.

DATE: November 28, 2005



IRMA TORREZ, City Clerk

Exhibit A

ENVIRONMENTAL IMPACT REPORT FINDINGS, MITIGATIONS, AND STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE COCHRANE ROAD PLANNED UNIT DEVELOPMENT PROJECT

I. INTRODUCTION

CEQA requires that, before the approval of a project for which an EIR has been prepared, the decision-making body shall review and consider the Final EIR ("FEIR") and make certain findings regarding the significant effects on the environment identified in the FEIR; and

CEQA requires that for each significant environmental effect identified in an EIR, the decision-making body of the lead agency for the project must make at least one or more written findings accompanied by a brief explanation of the rationale for the finding. The possible findings are: (1) that changes or alterations have been required in or incorporated into the project which avoid or substantially lessen any significant environmental effect; (2) that changes or alterations to the project are the responsibility and within the jurisdiction of another agency and have been or can and should be adopted by such agency; (3) that specific economic, legal, social, technological or other considerations make infeasible the mitigation measures or project alternatives identified in the FEIR.

When the lead agency for a project which will result in the occurrences of significant effects which are identified in the FEIR but are not avoided or lessened, the agency shall state that overriding considerations that support its action based on the FEIR and/or other information in the record.

II. SIGNIFICANT ENVIRONMENTAL EFFECTS OF PROJECT

A. AESTHETICS

Impact: The proposed project would introduce new sources of lighting that could adversely affect the existing and proposed development in the vicinity of the project site.

Mitigation: The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.

Finding: The increased residual glare and light is considered a potentially significant impact. Preparation and implementation of a detailed exterior lighting plan for the proposed project would reduce this impact to a less than significant level.

B. AGRICULTURAL RESOURCES

Impact: The proposed project would result in the conversion of approximately 66.49 acres of 'Prime Farmland' as designated on California Department of Conservation, Division of Land Resources Protection *Santa Clara County Important Farmland Map*.

Finding/Overriding Consideration: This is a significant and unavoidable impact. There are no feasible mitigation measures available to reduce the impact of agricultural land conversion to a less than significant level. The economic, social, and other benefits of the Project override the unmitigated significant impact described above, as more fully stated in the Statement of Overriding Considerations in Section 2 of the Resolution.

C. AIR QUALITY

Impact 1: The proposed project would require the demolition of three residences and associated outbuildings (e.g. barns, sheds, and a water tower). Based on a site reconnaissance performed by Bovee Environmental Management Inc., asbestos is detectable in hazardous concentrations in the structures at the project site. Therefore, demolition of these buildings has the potential to result in short-term air quality emissions, including the release of asbestos.

Mitigation 1: Prior to demolition of any on-site structures, the project applicant shall conduct a full site assessment for asbestos-containing materials (ACM) by a California Certified Asbestos Consultant for all structures proposed for demolition. Prior to demolition and site clearing activity, all identified ACM shall be removed by a licensed asbestos abatement contractor and clearance shall be obtained from the BAAQMD before proceeding with the demolition. All ACM shall be transported to a disposal site approved to accept non-friable asbestos-containing waste.

Finding 1: The above listed mitigation measure would require the project applicant to conduct a full site assessment and removal of asbestos-containing material prior to demolition, which would reduce this impact to a less than significant level.

Impact 2: Construction activity during build-out of the proposed project would generate air pollutant emissions that could expose sensitive receptors to substantial pollutant concentrations.

Mitigation 2a: The project applicant shall implement the following recommended BAAQMD dust control measures for construction emissions of PM₁₀. These dust control measures shall be implemented during construction for all phases of the proposed project:

- Sprinkle water to all active construction areas at least twice daily and more often when conditions warrant;
- Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least two feet of freeboard;

- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
- Sweep daily all paved access roads, parking areas, and staging areas at construction sites;
- Sweep streets daily if visible soil material is carried onto adjacent public streets;
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas;
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 miles per hour;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation in disturbed areas as quickly as possible;
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site;
- Suspend grading activities when winds exceed 25 miles per hour (mph) and visible dust clouds cannot be prevented from extending beyond active construction areas; and
- Limit the area subject to excavation, grading and other construction activity at any one time.

The project applicant shall incorporate as many BAAQMD recommended reduction measures, as reasonably possible, into the trip reduction plan including the following: providing public service announcements including the 'Spare the Air' advertisement at the project's cinema and provide employees with parking cash-out incentive to reduce the likelihood of driving alone.

Mitigation 2b: Subject to approval by the City of Morgan Hill, the project applicant shall limit the pieces of diesel-powered construction equipment used at any one time, and limit the idling and hours of operation for heavy-duty equipment as feasible during construction of the proposed project to limit the emission of diesel exhaust. Gasoline-powered equipment shall be used as an alternative to diesel to the extent feasible and when comparable equipment and technology is available.

Finding 2: Implementation of the mitigation measures described above would reduce the potential release of particulate matter and pollutant concentrations into the environment. Potentially significant air quality impacts of the Project therefore would be reduced to a less than significant level.

Impact 3: The proposed project would generate operational emissions that would affect long-term air quality.

Mitigation 3a: A facilities 'trip reduction plan' shall be implemented by the project applicant to reduce single occupant vehicle commute trips by employees and promote non-auto travel by both employees and patrons. The facilities trip reduction plan may include, but not be limited to elements that would reduce traffic, and thus air pollutant emissions as described below:

- Provide one bus stop/shelter with pedestrian access to the project site. Implementation of this measure could reduce project emissions by approximately two percent.
- Bicycle amenities should be provided at the project site once the proposed project is in operation. Bicycle amenities could include secure bicycle parking for employees, bicycle racks for customers, and bike lane connections. This vehicle trip reduction measure may reduce emissions associated with the proposed project by approximately two percent.
- Pedestrian facilities should link the future transit stop and access roadways to the major sites uses. This trip reduction measure may reduce emissions by approximately one percent.
- Designate a portion of the parking lot for weekday 'park-and-ride' parking spaces (the excess between weekday peak and weekend peak) which would reduce emissions from traffic to the project site by allowing commuters to park their car and carpool or take transit.
- Require employers at the project site to post transit rates and scheduling information on bulletin boards. This vehicle trip reduction measure may reduce emissions by one percent.

The project applicant shall incorporate as many BAAQMD recommended reduction measures, as reasonably possible, into the trip reduction plan including the following: providing public service announcements including the 'Spare the Air' advertisement at the project's cinema and provisions to provide employees with a parking cash-out incentive to reduce the likelihood of driving alone.

Mitigation 3b: Subject to review and approval by the City of Morgan Hill, the proposed project shall integrate the following design features into the proposed project to reduce area source air quality emissions:

- Carefully select and locate trees to provide shade for structures and pathways within the project site during the summer months. Deciduous trees should be favored since they provide shade in the summer and allow sun to reach residences during cold and winter months. This measure should be focused on southern and western exposures of buildings;

- Incorporate as many energy conserving features as financially feasible into the design and construction of new buildings at the project site. Examples include, but are not limited to, increased wall and ceiling insulation (beyond code requirements), super insulated windows (triple pane) and maximum use of energy efficient lighting;
- Install super-efficient heating, ventilation, and air conditioning (HVAC) systems; and
- Incorporate light colored and reflective roofing materials into the project design.

Finding 3/Overriding Considerations 3: Preparation and implementation of a trip reduction plan designed to reduce traffic congestion in the Project area, as well as incorporation of design features to reduce area source emissions, could result in lower emissions from vehicle travel and operation of the proposed Project. The amount of congestion relief and related total emission reduction is unknown. Therefore, long-term operational emissions associated with the proposed Project would remain significant and unavoidable, even with full effectiveness of the mitigation measure. See Statement of Overriding Considerations.

Impact 4: Project development, combined with other reasonably foreseeable projects in the project vicinity, would contribute to increased air quality emissions in the air basin.

Finding 4/Overriding Consideration 4: Because the proposed project results in significant emissions of air pollutants that affect regional air quality, it is considered to result in a significant cumulative unavoidable impact that cannot be mitigated to a less than significant level. There are no feasible mitigation measures available to reduce the impact to a less than significant level. See Statement of Overriding Considerations.

D. BIOLOGICAL RESOURCES

Impact 1: Implementation of the proposed project would result in temporary and direct alteration of site conditions that could support burrowing owl, a special status wildlife species.

Mitigation 1a: The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1st through August 30th), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity within the vicinity of the burrow

(distance to be determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented and the biologist deems disturbance potential to be minimal.

Mitigation 1b: The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003).

Finding 1: Implementation of the above mitigation measures would reduce impacts to burrowing owl to a less than significant level.

Impact 2: Implementation of the proposed project would result in temporary and direct disturbance to nesting raptors and migratory birds (excluding burrowing owl).

Mitigation 2: If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1st through August 31st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet or as determined by a qualified biologist around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the non-breeding season (generally September 1st through January 31st).

Finding 2: Implementation of the above mitigation measure would reduce impacts to raptors and migratory birds to a less than significant level.

Impact 3: Implementation of the proposed project would result in temporary and direct alteration of site conditions that could support special status bat species and/or their roosting habitat.

Mitigation 3: The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special status bat species within the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified within the project area during preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum):

- a) Identify species present within the roost (this may require the assistance of a biologist who specializes in bat ecology);

- b) Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present); and
- c) Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available.

Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.

Finding 3: Implementation of the above mitigation measure would reduce impacts to special status bat species to a less than significant level.

Impact 4: Implementation of the proposed project would result in potential removal of 118 various tree species, five of which fall within the criteria of the City of Morgan Hill Ordinance Section 12.32.070 due to their size and species.

Mitigation 4: Removal and/or relocation of trees at the project site shall be in compliance with Sections 12.32.030 through 12.32.080 of the City of Morgan Hill Municipal Code, Restrictions on Removal of Significant Trees. Should the City of Morgan Hill require the project applicant to preserve any existing trees in place and/or transplant any trees at the project site, the following tree protection standards shall be implemented during construction and demolition activities at the project site:

Prior to commencement of construction activities, to the greatest extent feasible, the critical root zone (measurement of the dripline radius taken from the tree trunk to the tip of the farthest reaching branch as determined by a Certified Arborist or Registered Professional Forrester) of any tree to be retained shall be fenced with a four-foot high brightly colored synthetic fence at the outermost edge of the critical root zone to prevent injury to the trees prior to grading and during construction activities within the project area. The fencing shall remain in place until all construction activities are complete. Trenching, grading, soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed within the critical root zone.

Finding 4: Loss of protected trees at the project site is considered a potentially significant impact. Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 5: The proposed project would potentially result in increased runoff entering the SCVWD Cochrane Channel, which is a tributary of Coyote Creek.

Mitigation 5: Mitigation Measure 3.8-3 in Section 3.8, Surface Water Hydrology and Water Quality, would require implementation of structural and non-structural stormwater controls as follows. The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads.

Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion).

Additional post-construction Best Management Practices (BMPs) to be implemented will include, but not be limited to the following:

- Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants;
- Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system;
- Engineered products, such as storm drain inlet filters, oil/water separators, vortex separators etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system;
- The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials;
- Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance including minimizing use of fertilizer, herbicides and pesticides;
- The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on storm water quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations;
- Storm drain inlets shall be labeled with the phrase “No dumping – flows to Bay,” or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system;

- Restaurants within the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.

The portion of the project SWPPP that addresses post-construction practices shall itemize these and any additional pollution control measures required for the proposed project.

Finding 5: Implementation of this mitigation measure would reduce the long-term potential of increased non-point source pollution in Coyote Creek to a less than significant level.

Impact 6: The proposed project, in addition to anticipated cumulative development in the project vicinity, may disturb special status species, critical habitats, and wildlife movement throughout the region.

Mitigation 6: Mitigation measures required elsewhere in the FEIR would reduce the overall contribution to cumulative biological resource impacts.

Finding 6: Implementation of mitigation measures incorporated in the FEIR would reduce the overall contribution to cumulative biological resource impacts resulting from completion of the proposed Project. Therefore, the project contributions to the potential loss and/or restriction of biological resources in the region are considered less than significant.

E. CULTURAL RESOURCES

Impact 1: The project site does not contain any recorded or anticipated resources of archaeological, cultural, or pre-historic significance. However, site preparation and grading could disrupt undiscovered archaeological and cultural resources of importance under CEQA and/or eligible for listing on the California Register.

Mitigation 1a: Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 50 feet of the discovery shall be halted until such time as a can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant.

Mitigation 1b: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Santa Clara County has determined whether the remains are subject to the coroner's authority. This is in accordance with Section 7050.5 of the California Health and Safety Code. If the human remains are of Native American origin, the coroner must notify the Native American Heritage

Commission within 24 hours of identification. Pursuant to Section 5097.98 of the Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

Finding 1: Any destruction or disturbance of undiscovered archaeological resources, whether planned or inadvertent, is considered a potentially significant impact. Implementation of the above listed mitigation measures would reduce this impact to a less than significant level.

Impact 2: Implementation of the proposed project, in combination with cumulative development activity in the region, would increase the potential to disturb or contribute to the loss of known and undiscovered cultural resources.

Mitigation 2: Mitigation Measures 3.5-1a and 3.5-1b of the FEIR would address impacts on a case by case basis, thus avoiding compounding of cumulative development.

Finding 2: Implementation of mitigation measures incorporated in the FEIR would ensure that the Project's contribution to this cumulative impact will be reduced to a less than significant level.

F. GEOLOGY AND SOILS

Impact 1: Strong ground shaking occurring on the site during a major earthquake event could cause severe damage to project buildings and structures.

Mitigation 1: Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code, and implementing the recommendations of the project geotechnical engineer.

Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures within areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals.

Finding 1: Implementation of the above mitigation measure would ensure that potential impacts to residents and structures from seismic ground shaking would be reduced to a less than significant level.

Impact 2: There is a low, but not necessarily insignificant, potential for liquefaction at the project site, which could result in differential settlements and damage to project structures and improvements.

Mitigation 2: All proposed structures at the project site shall be evaluated for liquefaction potential on a case-by-case basis as part of subsequent design-level geotechnical engineering investigations. If there is determined to be a potential for liquefaction, mitigation will be accomplished through compliance with the recommendations contained in the design-level geotechnical engineering reports with recommendations included as specifications in the construction contract documents.

Finding 2: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 3: There is a potential for seismically-induced ground settlements at the site, which could result in damage to project foundations and structures.

Mitigation 3: Near-surface soils beneath buildings, exterior slabs, and pavements shall be overexcavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer.

The depth of required overexcavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.

Finding 3: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 4: Soils present on the site exhibit high compressibility and high collapse potential, which could result in damage to structures.

Mitigation 4: The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer.

The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.

Finding 4: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 5: There is a low, but not necessarily insignificant, potential for soils expansion at the site, which could result in differential subgrade movements and cracking of foundations.

Mitigation 5: All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report.

Finding 5: Implementation of the above mitigation measure would reduce the effects of expansive soils at the project site to a less than significant level.

Impact 6: The project soils are mildly corrosive to buried metal objects, and could result in damage to buried utilities.

Mitigation 6: The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers' specifications.

Finding 6: Implementation of the above mitigation measure would reduce this potentially significant impact to a less than significant level.

Impact 7: There is a potential for bank instability along the banks of the proposed detention basins for the project.

Mitigation 7: Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.

Finding 7: Implementation of the above mitigation measure would reduce this potentially significant impact to a less than significant level.

G. HAZARDS AND HAZARDOUS MATERIALS

Impact 1: The project site includes three residences and associated outbuildings that are proposed for demolition with implementation of the proposed project. According to an asbestos and lead-based paint reconnaissance performed by Bovee Environmental Management, Inc., these existing structures contain asbestos and lead-based paint in hazardous concentrations.

Mitigation 1: Prior to demolition of any on-site structures, a full site assessment for lead-based paint shall be conducted by a California Department of Health Services approved Lead Inspector/Assessor. Prior to general demolition and site clearing activity, all identified deteriorating lead-based paint shall be removed by a licensed lead paint abatement contractor and properly disposed of in accordance with Title 22 of the California Code of Regulations.

Finding 1: Implementation of the above mitigation measure would reduce the effects of lead-based paint to a less than significant level.

Impact 2: There are four septic tanks reportedly present on the project site, although their locations were not identified during the Phase I site reconnaissance.

Mitigation 2: Septic systems at the project site shall be properly removed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department.

Finding 2: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 3: Unless the four existing wells on the site are properly destroyed, they could act as conduits for groundwater contamination.

Mitigation 3: Prior to commencement of site clearing and general demolition activities, the existing wells on the site shall be destroyed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department and the Santa Clara Valley Water District (Ordinance 90-1), unless the existing well(s) will be used for landscape irrigation purposes. Use of the existing well(s) on-site for landscape irrigation may be allowed provided there is no connection to the City municipal water supply system, and subject to the review and approval of the Santa Clara Valley Water District.

Finding 3: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 4: The proposed project includes a possible fuel station, which would involve potentially hazardous storage and handling of gasoline.

Mitigation 4: The gasoline station operator shall obtain a Hazardous Materials Storage Permit from the Santa Clara County Fire Department for the proper handling and storage of gasoline and any other hazardous materials. In addition, air quality permits shall be required for the fuel station from the BAAQMD.

Finding 4: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

H. SURFACE WATER HYDROLOGY AND WATER QUALITY

Impact 1: Since the project site is located within the dam failure inundation area for Anderson Reservoir, development of the proposed project would increase the number of people and structures exposed to dam failure risk and the potential for associated loss of life and property.

Mitigation 1: Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures

shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers.

Finding 1: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 2: During grading and construction, erosion of exposed soils and pollutants generated by site development activities may result in water quality impacts to downstream water bodies.

Mitigation 2: The project applicant shall prepare a comprehensive erosion control and water pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site.

Finding 2: Implementation of the above mitigation measure would reduce potential water quality impacts during grading and construction activities to a less than significant level.

Impact 3: The proposed project would generate urban non-point contaminants, which may be carried in stormwater runoff from paved surfaces to downstream water bodies.

Mitigation 3: The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads.

Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion).

Additional post-construction Best Management Practices (BMPs) to be implemented will include, but not be limited to the following:

- Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants;
- Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system;

- Engineered products, such as storm drain inlet filters, oil/water separators, vortex separators etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system;
- The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials;
- Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance including minimizing use of fertilizer, herbicides and pesticides;
- The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on storm water quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations;
- Storm drain inlets shall be labeled with the phrase “No dumping – flows to Bay,” or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system;
- Restaurants within the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.

The portion of the project SWPPP that addresses post-construction practices shall itemize these and any additional pollution control measures required for the proposed project.

Finding 3: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 4: The proposed project would result in a substantial increase in stormwater runoff generated at the project site compared to existing conditions; however, the project includes detention ponds which have been designed to provide temporary storage of increased runoff in order to prevent increased flooding downstream.

Mitigation 4: Subject to approval by the SCVWD, the project applicant shall install a telemetry system or other measure agreed upon by the SCVWD to minimize flooding downstream. A telemetry system senses the flow in Coyote Creek at a SCVWD stream gage system, and shuts down the pumping system at the detention ponds when creek discharges reach or exceed levels believed to cause flooding in the William Street area in the City of San Jose.

Finding 4: Implementation of the above mitigation measure would reduce this potentially significant impact to a less than significant level.

I. LAND USE

Impact 1: The proposed project would construct a 657,250 square-foot retail center that would consist of the relocation and expansion of the 'Target' store (currently located at the Cochrane Plaza shopping center) and construction of over 530,000 square feet of additional retail, which could include a home improvement store, wholesale store or department store; retail shops; restaurants (sit-down and fast food); and a 63,200 square foot multi-plex cinema with up to 14 screens. These retail uses would compete with existing businesses in the City of Morgan Hill. This increased competition could potentially result in or contribute to closure of existing businesses in the City of Morgan Hill and there is a high likelihood that the Cochrane Plaza would be subject to a causal chain ultimately resulting in urban decay.

Mitigation 1a: As a condition of approval for the proposed project, the Target Corporation will make a written commitment, using a mechanism such as a restriction or notice on their deed to the existing store property, to maintain their vacated existing store per the guidelines set out in the BAE report regarding abatement of physical decay and deterioration of buildings per the City of Morgan Hill Municipal Code. This maintenance will include but not be limited to prompt removal of trash and graffiti and upkeep of the vacant building to leasable standards for a modern community shopping center. This commitment will extend to successors in ownership if the Target Corporation sells the property prior to re-tenanting. This commitment will extend until a majority of the space in the vacant store is re-occupied for a period of at least 12 consecutive months.

Mitigation 1b: As an additional measure to assure proper maintenance of the vacated store, the Target Corporation will provide the City of Morgan Hill with a façade easement on the existing Target space. The facade easement will make it easier for the City and its Redevelopment Agency to step in and clean up the site and lien the property for reimbursement, if needed. The easement language can establish the maintenance standards to be followed. For this property, the easement language should give the City of Morgan Hill the right to enter onto the property and perform any deferred maintenance thereon as may be necessary to keep the property in good condition and repair, if the Target Corporation or successor in ownership (the "owner") does not perform such maintenance itself within a set period of time after receiving notice of the need for maintenance. Such notice shall identify each item of maintenance and repair required to restore the landscaping and exterior facade on the property to good condition and repair. All costs of maintenance performed by the City of Morgan Hill shall be paid directly by the owner or be reimbursed to the City by the owner. The owner's obligation to reimburse the City shall be secured by a lien encumbering the property, which lien shall be enforceable in accordance with the provisions of California Civil Code Section 2924 et seq., as amended. This façade easement will be granted for a period not to exceed five years, or until a majority of the space is re-occupied for a period of at least 12 consecutive months.

Mitigation 1c: The Target Corporation shall provide the City of Morgan Hill with a written re-tenanting plan for the vacant store. Every six months until the majority of the space is leased to a tenant(s) with a lease commitment of at least 12 months, or sold to another independent party, the Target Corporation shall provide to the City of Morgan Hill a progress report on efforts to re-lease the vacant space. The Target Corporation shall not put restrictions on the types of retailers permitted, e.g., they will not refuse to lease to a Target competitor. Permitted activities and land uses shall be solely governed by the City of Morgan Hill General Plan and the *City of Morgan Hill Planning and Zoning Codes*.

Finding 1/Overriding Consideration 1: Based on the analysis conducted by BAE, it cannot be stated with any degree of certainty that the mitigation measures would prevent urban decay in the Cochrane Plaza shopping center. Therefore, the proposed project would likely lead to a significant and unavoidable impact with respect to urban decay and physical deterioration at the Cochrane Plaza shopping center. The economic, social, and other benefits of the Project override the unmitigated significant impact described above, as more fully stated in the Statement of Overriding Considerations in Section 2 of the Resolution.

Impact 2: The proposed project would increase competition that could result in closure for major tenants in the Lawrence Oaks and Tennant Station shopping centers.

Mitigation 2a: There is a likelihood of closure for major tenants in the Lawrence Oaks (Home Depot), Tennant Station (Cinelux Theatres), and Cochrane Plaza (Target with the likelihood of other tenants following) If these centers (or others) face vacancies following the opening of the proposed project, the City of Morgan Hill will monitor maintenance of the vacated spaces and their centers for the first signs of disinvestment or deterioration, and require that these properties continue to be maintained to standards as stated in Section 15.56.020 of the Morgan Hill Municipal Code, such that the building will not endanger life, limb, health, property, safety, or welfare of the general public or its occupants. These standards are based on the International Conference of Building Officials "Uniform Code of the Abatement of Dangerous Buildings, 1997 Edition," except where otherwise noted in the Section 15.56.020 of the Morgan Hill Municipal Code. The property shall be maintained in accordance with Morgan Hill Municipal Code Section 8 regarding Health and Safety, including but not limited to keeping premises free of litter, weeds, graffiti, and abandoned vehicles.

Mitigation 2b: To help small local businesses compete with likely national chain retailers in the proposed project, the City of Morgan Hill will fund programs aimed at assisting locally-owned small retailers. This could take the form of a business seminar sponsored by Target and the project developers to educate local retailers, or other programs geared toward small retail business assistance, such as a kiosk at the Proposed Project providing information on shopping opportunities in Downtown Morgan Hill or other centers. Such a program could be funded by the City of Morgan Hill committing a percentage of the sales tax revenue generated by the Proposed Project.

Mitigation 2c: City of Morgan Hill will ensure the Target Corporation, the other owners of Cochrane Plaza, and the owners of Tennant Station, Vineyard Town Center, and the Lawrence

Oaks Shopping Center are aware that their centers are in the City's Redevelopment Area, and as a result they are eligible to apply for programs administered by the City's Business Assistance Division, including the Facade Improvement Program, Impact Fee Financing Programs, and Business Assistance Guidelines.

Finding 2: Implementation of the above mitigation measures would ensure the proposed Project would have a less than significant impact on potential store closures at the Lawrence Oaks and Tennant Station shopping centers.

J. NOISE

Impact 1: The proposed project will result in an increase of approximately 22,009 daily weekday automobile trips on the existing roadway network, which will result in traffic noise level increases greater than 5 dBA L_{dn} over background conditions.

Mitigation 1: There are no feasible mitigation measures available to reduce the operational noise impacts to a less than significant level.

Finding 1/Overriding Consideration 1: According to the *City of Morgan Hill General Plan*, the property where these two single-family residences are located is designated for commercial uses and one of the single-family homes has been vacated. Due to the urbanization in the project vicinity, it is likely that these homes may be developed for commercial uses in the future. Therefore, this impact would be considered a short-term significant and unavoidable impact in the interim until these properties are developed for commercial uses. Future development on these properties would likely occur after buildout of the proposed Project. There are no feasible mitigation measures available to reduce the operational noise impacts to a less than significant level. See Statement of Overriding Considerations.

Impact 2: The proposed project would contribute to cumulative traffic on the roadway network over existing conditions, which would contribute to cumulative traffic noise at sensitive receptors along Cochrane Road.

Mitigation 2: There are no feasible mitigation measures available to reduce the cumulative traffic noise impacts to a less than significant level.

Finding 2/Overriding Consideration 2: According to the *City of Morgan Hill General Plan*, the property where these two single-family residences are located is designated for commercial uses and one of the single-family homes has been vacated. Due to the urbanization in the project vicinity, it is likely that these homes may be developed for commercial uses in the future. Therefore, this impact would be considered a short-term significant and unavoidable cumulative impact in the interim until these properties are developed for commercial uses. Future development on these properties would likely occur after buildout of the proposed Project. There are no feasible mitigation measures available to reduce the cumulative traffic noise impacts to a less than significant level. See Statement of Overriding Considerations.

K. PUBLIC SERVICES

Impact: The proposed project will not result in the need for new or physically altered governmental facilities, but will increase service demands for police patrol and incident response.

Mitigation: Subject to review and approval by the City of Morgan Hill Police Department, the project applicant shall install and maintain a video surveillance system throughout the proposed project and maintain on-site security personnel during all hours of operation, or provide other security measures acceptable to the Morgan Hill Police Department.

Finding: The above mitigation measure would limit police response to major crimes against persons or property and reduce service demands to a less than significant level.

L. TRANSPORTATION AND CIRCULATION

Impact 1: With the addition of project-generated traffic, significant level of service impacts would occur at two intersections, as follows:

- a. The Dunne Avenue/Monterey Road signalized intersection is projected to operate unacceptably during the PM peak hour under both Background and Project Conditions. Although the addition of project traffic causes a decrease (i.e., improvement) in the average critical delay, the critical volume-to-capacity ratio increases by more than 0.01.
- b. At the Cochrane Road/Mission View Drive unsignalized intersection, the addition of project traffic is expected to reduce acceptable levels of service under Background Conditions to an unacceptable level of service (LOS F) during the AM, PM, and Saturday midday peak hours.

Mitigation 1a: At the Dunne Avenue/Monterey Road intersection, the westbound right-turn lane shall be restriped as a shared through/right-turn lane, and a northbound right-turn overlap phase shall be installed. This improvement would be required when 35 percent of the project has been constructed based on total PM peak hour trip generation.

Mitigation 1b: At the Cochrane Road/Mission View Drive intersection, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry:

- The northbound approach should include one left-turn lane and one shared through/right-turn lane.

- The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane.
- The southbound approach should include one left-turn lane, one shared through/right-turn lane, and one right-turn lane.
- The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.

Finding 1: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 2: The addition of project-generated traffic would have a significant impact on the level of service at the segment of U.S. Highway 101 between Tennant Avenue and Dunne Avenue.

Mitigation 2: The project shall implement the applicable actions listed in the *Immediate Implementation Action List* contained in the *Deficiency Plan Guidelines* of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system.

Finding 2/Overriding Consideration 2: The proposed Project will have a significant impact at the segment of U.S. Highway 101 between Tennant Avenue and Dunne Avenue. Implementation of the above measures would not reduce the Project traffic contribution to this freeway segment to less than one percent of current volumes. Therefore, the impact would not be reduced to less-than-significant levels and the Project traffic would result in a significant and unavoidable impact to this freeway segment. See Statement of Overriding Considerations.

Impact 3: The six entry driveways on Mission View Drive are more than are needed to provide adequate access to the proposed project. This condition unnecessarily increases the potential for vehicle conflicts with pedestrians.

Mitigation 3: The two driveways shown directly behind the movie theater complex on Mission View Drive (i.e., the second and third driveways north of the Cochrane Road intersection) should be eliminated from the proposed project, and a circulation aisle should be provided behind the movie theater complex. As an alternative, the project applicant shall work with the City to incorporate traffic calming improvements at the driveways located along Mission View Drive to minimize pedestrian and vehicle conflicts at the project site.

Finding 3: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 4: At the southernmost project driveway on Mission View Drive (i.e., the first driveway north of the Cochrane Road intersection), the preliminary site plan shows no left-turn restrictions. Given the close proximity of this driveway to Cochrane Road, if left turns into the project site are allowed at this driveway, this could result in potential conflicts with vehicles queuing on the north leg of the Mission View/Cochrane intersection.

Mitigation 4: The southernmost project driveway should be designated as a right-turn in and out only driveway (i.e., signs should be posted prohibiting left turn movements into or out of the project site at this driveway).

Finding 4: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 5: The main north-south circulation aisle that extends north into the project from DePaul Drive is a long straight section that may encourage speeding without traffic control devices.

Mitigation 5: The following modifications are identified on the main north-south circulation aisle to discourage speeding and provide more visible crosswalks for pedestrians:

- a) At the first intersection north of Cochrane (i.e., between Shops K and Pad 7, and between Shops B and Pad 2), stop signs should be installed on the side street approaches;
- b) At the second intersection north of Cochrane, provide one of the following alternative configurations:
 - i) Provide raised intersection to provide vertical displacement, and provide stop signs on the side street approaches; or
 - ii) Provide stop signs on all four approaches;
- c) At the third intersection north of Cochrane, provide stop signs on all four approaches.

Finding 5: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 6: At the southwest corner of the building "Major 8" (on March 10, 2005 site plan), the proximity of the designated loading zone to the nearby intersection of two major internal drive aisles could create a driving hazard due to driver confusion.

Mitigation 6: The designated loading zone shall be relocated far enough to the east to allow the intersection approach lane to be reduced to one lane.

Finding 6: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 7: Due to demand for transit service generated by the project, existing transit facilities may not be adequate to serve the project.

Mitigation 7: The project applicant shall construct a new covered bus stop along the project frontage, including transit amenities such as a bus turnout, a shelter, and benches. All improvements shall be in accordance with the Santa Clara Valley Transportation Authority (VTA) standards, with the exception of planting trees at the bus stop in order to provide a more comfortable and aesthetically pleasing environment. The City of Morgan Hill shall work with the project applicant, Caltrain, and the VTA on ways to increase the frequency and coverage of transit service serving the project area and the nearest Caltrain station. The City shall also aggressively pursue and work with VTA to provide the 'Community Bus Service' program in Morgan Hill.

Finding 7: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 8: The preliminary project site plan does not indicate pedestrian crossing facilities at the major intersections adjacent to the project; unless these are provided, a hazard to pedestrian circulation could result.

Mitigation 8: Pedestrian crosswalks shall be provided on all four legs of the Cochrane Road/Mission View Drive intersection, and at all but the west leg of the Cochrane Road/De Paul Drive intersection.

Finding 8: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 9: The proposed project would create a demand for bicycle facilities, including: a) bicycle racks or lockers within the project site; and b) bicycle lanes along the project frontages.

Mitigation 9: The following bicycle facilities shall be incorporated into the project:

- a) Bicycle racks and/or lockers to accommodate bicycle travel by customers and employees. Bicycle parking facilities should be located in high visibility areas in order to encourage bicycle travel and discourage theft and vandalism.
- b) Class II bicycle lanes along the project street frontages.

The *Santa Clara Valley Transportation Authority (VTA) Bicycle Technical Guidelines*, *VTA Community Design and Transportation Guidelines* and the *VTA Pedestrian Technical Guidelines* shall be used in design of the proposed bicycle facilities associated with the proposed project.

Finding 9: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 10: The proposed project may not provide sufficient parking supply to meet the demand generated by the planned project land uses.

Mitigation 10: The overall number of parking spaces included in the project shall be required to meet the City code parking requirement as follows: the cinema shall be parked at 1 space for every 3.5 seats, and the remainder of the shopping center shall be parked at one space for every 283 square feet.

Finding 10: Based on research conducted by City Staff, the City parking requirements are consistent with the parking requirements of other jurisdictions. This supports City Staff's earlier assertions that the proportion of restaurants contemplated in the ITE rates in general is not 'minor'. Furthermore, the City's parking requirement is actually more conservative than the shared parking analysis prepared for the proposed Project. Implementation of the above mitigation measure would ensure that adequate parking is available on-site and would ensure that the proposed Project does not result in a potentially significant impact to parking at the Project site.

Impact 11: The addition of project-generated traffic would result in cumulative level of service impacts at the Cochrane Road/Mission View Drive intersection.

Mitigation 11: At the Cochrane Road/Mission View Drive intersection, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry:

- The northbound approach should include one left-turn lane and one shared through/right-turn lane.
- The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane.
- The southbound approach should include one left-turn lane, one shared through/right-turn lane, and one right-turn lane.
- The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.

Finding 11: Implementation of this mitigation measure would improve the level of service at the Cochrane Road/Mission View Drive intersection to acceptable levels (LOS D+ or better) under Cumulative Conditions. Therefore, the proposed project would result in a less than significant cumulative impact.

Impact 12: The addition of project-generated traffic would have a significant cumulative impact on the level of service at the segment of U.S. Highway 101 between Tennant Avenue and Dunne Avenue.

Mitigation 12: The project shall implement the applicable actions listed in the *Immediate Implementation Action List* contained in the *Deficiency Plan Guidelines* of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system.

Finding 12/Overriding Consideration 12: The traffic volume generated under this scenario would add volume greater than one percent to this freeway segment. Implementation of the above measure would not reduce the cumulative plus project traffic contribution to this freeway segment to less than one percent of current volumes. Therefore, the impact would not be reduced to less-than-significant levels and the cumulative plus project traffic would result in a significant and unavoidable cumulative impact to this freeway segment. See Statement of Overriding Considerations.

Impact 13: With the addition of project-generated traffic, significant impacts would occur at two intersections under General Plan Buildout Conditions, as follows:

- a) The Cochrane Road/Butterfield Boulevard signalized intersection is projected to operate at unacceptable LOS E- during the AM peak hour, and at unacceptable LOS F during the PM peak hour under General Plan Buildout Conditions.
- b) The Cochrane Road/Cochrane Plaza signalized intersection is expected to operate at unacceptable LOS D during the PM peak hour under General Plan Buildout Conditions.

Mitigation 13: The following intersection modifications are identified to provide acceptable operations under General Plan Buildout Conditions:

- a) Cochrane Road/Butterfield Boulevard. For the intersection to operate at LOS D+ or better during the AM and PM peak hours, the General Plan configuration for the intersection would require the following modifications:
 - Northbound approach: increase number of left-turn lanes from one to two; increase the number of through lanes from one to two; reduce the number of right-turn lanes from two to one.
 - Eastbound approach: add a free right-turn lane.

b) Cochrane Road/Cochrane Plaza. For the intersection to operate at LOS D+ or better during the PM peak hour, the General Plan configuration for the intersection would require the following modifications:

- Southbound approach: increase number of left-turn lanes from one to two; change the shared left/through lane to a through lanes; keep the number of right-turn lanes at one.

To implement the above mitigation measures, the applicant will be required to pay impact fees which reflect the Project's fair share of improvement costs.

Finding 13: Implementation of the above mitigation measure would reduce this impact to a less than significant level.

Impact 14: The 'Supermarket Alternative' (Project-Alternative 2) would result in a significant impact to three intersections operating at unacceptable levels: Cochrane Road/U.S. Highway 101 northbound ramps, Cochrane Road/Mission View Drive, and Dunne Road/Monterey Road.

Mitigation 14: Mitigation Measures 3.12-1a and 3.12-1b in the FEIR would reduce the potentially significant impacts to the Cochrane Road/Mission View Drive and Dunne Road/Monterey Road intersections to a less than significant level. In addition, the Project-Alternative 2 shall convert the westbound approach of the U.S. Highway 101/Cochrane Road intersection to provide one separate through lane and one shared through right-turn lane, subject to review and approval by Caltrans and the City of Morgan Hill., to improve the level of service at this intersection to LOS D during the Saturday peak hour.

Finding 14: Implementation of the above mitigation measures would reduce this impact to a less than significant level.

M. UTILITIES

Impact: The proposed project would generate between 0.8 and 8.3 tons of solid waste per day. The waste management provider responsible for the project has sufficient capacity to accommodate the waste within the Pacheco Pass Landfill in Morgan Hill, Kirby Creek Landfill in Milpitas, or FFI landfill in San Jose. Without sufficient waste diversion practices, however, the project may result in noncompliance with the California Integrated Waste Management Act of 1989.

Mitigation: Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses personnel generating such waste. Contracts for or maintenance the collection of these recyclables shall also be maintained as available.

Finding: Implementation of this mitigation measure would reduce long-term impacts to waste diversion goals to a less than significant level by ensuring compliance with state mandated source reduction and recycling goals.

III. ALTERNATIVES TO PROPOSED PROJECT

Because all significant effects as discussed above cannot be eliminated or substantially lessened by mitigations in the Project, several alternatives were evaluated. Alternatives evaluated included the following:

A. NO PROJECT/NO DEVELOPMENT: CEQA Guidelines Section 15126.6(e)(3) requires that a 'No Project/No Development Alternative' be evaluated as part of an EIR, proceeding along one of two lines: the project site remaining in its existing undeveloped state, or development of the project site under existing underlying land use designations. The 'No Project/No Development Alternative' considers the comparative environmental effects of not approving the proposed project, with the site remaining in its current rural residential and agricultural state, since the underlying General Plan land use designation of 'Commercial' would result in a similar project as is currently proposed. The 'No Project/No Development' alternative was found to be the environmentally superior alternative, as most impacts would be reduced relative to the proposed project. However, the 'No Project/No Development' meets none of the project objectives and is inconsistent with the General Plan and zoning designations of the site.

B. SUPERMARKET ALTERNATIVE: The 'Supermarket Alternative' assumes replacement of approximately 50,000 square feet of commercial uses and construction of a 50,000 square foot supermarket at the project site. The intent of the 'Supermarket Alternative' is to meet Policy 9g in the *City of Morgan Hill General Plan*, which plans for a future grocery store east of U.S. Highway 101 along Cochrane Road. All other components of the 'Supermarket Alternative' would be similar to the proposed project. If this alternative were selected all mitigation measures incorporated herein would be applicable and one additional traffic mitigation measure would be required for transportation and circulation.

C. REDUCED DENSITY ALTERNATIVE: This alternative assumes a 40 percent reduction in the square footage to a 394,350 square foot commercial shopping center on a reduced footprint of approximately 40 acres, which would provide a buffer around the project site. A reduced commercial would generate less traffic, and subsequently result in a decrease in noise emissions in comparison to the proposed project. After the 'No Project/No Development' alternative, the 'Reduced Density Alternative' would be the environmentally superior alternative and would result in a lesser degree of environmental impact as compared to the proposed project. This is due primarily to the reduced impacts that would result from the reduced square footage. However, this scenario would not be financially feasible to the project applicant and would not meet the applicant's project objectives or the City's objectives to provide commercial retail shopping center that serves the local and regional market, results in a net fiscal benefit to the City, reduces sales dollar leakage, and creates

new jobs for the City of Morgan Hill.

D. ALTERNATE LOCATION ALTERNATIVE: The 'Alternate Location Alternative' is located at the southeast corner of the Cochrane Road and U.S. Highway 101 intersection, immediately south of the project site and is comprised of six parcels (APN: 728-30-006, 008, and 009 and 728-31-009, 010, 011). This site is approximately 58.75 acres (approximately 7.74 acres less than the project site). Access to this site is provided by Cochrane Road and De Paul Drive. This alternative would include the same range of land uses as the proposed Project, however, would result in greater impacts. The alternate location is at a lower elevation than the proposed Project, and therefore, would result in a slightly greater visual impact based on visibility from northbound U.S. Highway 101. Greater impacts are anticipated under Land Use and Planning with this alternative, as the zoning would be inconsistent for approximately two thirds of the site. In addition, this location is not identified in the *City of Morgan Hill General Plan* as the location of 'Sub-Regional Commercial Site', and a General Plan Amendment would be required to amend the southern portion of the site that is designated for industrial uses in the *City of Morgan Hill General Plan*. Finally, the 'Alternate Location Alternative' would result in the same number of vehicle trips as the proposed project, which would result in similar traffic distribution and impacts as the proposed project. As the 'Alternate Location Alternative' is approximately 7.74 acres less than the Project site, the parking impacts associated with this alternate site location would likely be greater than the proposed Project.

IV. STATEMENT OF OVERRIDING CONSIDERATIONS

After very extensive review of the entire administrative record, including the Draft and Final EIR, the staff reports, and the oral and written testimony, it is concluded that specific economic, social and employment opportunities justify the approval of the Project-Alternative 2 ('Supermarket Alternative'), in spite of the existence of significant environmental effects which cannot be fully mitigated and in spite of other alternatives which might be environmentally superior.

The specific overriding considerations include the following:

- A. The Project site clearly is suited for intense development, given its excellent freeway visibility, proximity and accessibility.
- B. The Morgan Hill General Plan designates only two locations in the City for a 'Sub-Regional Commercial Site' of which the Project is one.
- C. Project-Alternative 2 is consistent with the City's General Plan Policy to plan for a future grocery store east of U.S. Highway 101 along Cochrane Road.
- D. The economic impact study prepared for the DEIR estimates that Morgan Hill experiences approximately \$100M in annual sales tax leakage. The Project would capture a large portion of the sales tax dollars currently being spent outside of the community.

- E. Development of this Project is estimated to generate an approximate average of \$2.25M annually to the City in property and sales tax revenue over a 15 year period. Based on the DEIR's recapture rate, over 70% or \$1.6M of the \$2.25M is considered to be "net" new revenue to the City. The City would receive approximately \$1.6M more annually in revenue than it would if this Project was not developed.
- F. Development of this Project will provide a commercial retail shopping center that serves both the local and regional market to attract new customers and retailers into the City, and create new jobs for Morgan Hill residents.
- G. Development of this Project will meet a current unmet demand for a large scale development that provides a mix of commercial, retail, restaurants and entertainment uses.

V. CUSTODIANSHIP OF THE PUBLIC RECORD

The custodian of documents and other materials which constitute the record of proceedings, upon which this decision is based is the following:

City Clerk
City of Morgan Hill City Clerk's Office
17555 Peak Avenue
Morgan Hill, CA 95037

Copies of these documents are available for public review during normal business hours.

Exhibit B

**MITIGATION MONITORING AND
REPORTING PROGRAM
FOR THE
COCHRANE ROAD PLANNED UNIT
DEVELOPMENT (PUD)**

SCH #2004112060

CITY OF MORGAN HILL
Community Development Department
17555 Peak Avenue
Morgan Hill, CA 95037-4128

Prepared by:



NOVEMBER 2005

MITIGATION MONITORING AND REPORTING PROGRAM

PROGRAM CONTENTS

This mitigation monitoring and reporting program includes a brief discussion of the legal basis and purpose of the mitigation monitoring and reporting program, a key to understanding the monitoring matrix, and the mitigation monitoring and reporting matrix itself.

LEGAL BASIS AND PURPOSE OF THE MITIGATION MONITORING PROGRAM

Public Resource Code (PRC) 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report or mitigated negative declaration. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The Governor's Office of Planning and Research advisory publication, *Tracking CEQA Mitigation Measures*, provides local governments basic information and practical advice concerning compliance with mitigation monitoring and reporting programs. Correspondingly, this document incorporates the suggestions contained within the advisory publication and from research on similar monitoring programs.

MONITORING MATRIX

The following pages provide a series of tables identifying the mitigation measures proposed specifically for the proposed project. These mitigation measures are derived from the *Cochrane Road Planned Unit Development Draft Environmental Impact Report* (July 2005). The columns within the tables have the following meanings:

Mitigation Measure:	Provides the text of the Mitigation Measure identified in the Environmental Impact Report.
Responsible Agency:	References the public agency or department (City of Morgan Hill) and/or any other agency responsible for monitoring and verification of compliance of the identified mitigation measure. The agencies listed are responsible for clearing the mitigation measure.
Monitoring/Reporting Done By:	Identifies by whom the monitoring or reporting will be done, which may include the applicant, applicant's consultant or contractor.

*Cochrane Road Planned Unit Development (PUD)
Mitigation Monitoring and Reporting Program*

MITIGATION MONITORING AND REPORTING PROGRAM

Timing/Frequency:	Identifies at what point in time, review process or phase of the project the measure will be completed.
Final Clearance Date:	These columns will be initialed and dated by the individual designated to verify adherence to project specific mitigation.
Comments:	This column is reserved for any additional explanation or notes made during compliance monitoring, if necessary.

The Mitigation Measures in the matrix represent the final version of the measures to be considered by the City Council.

NONCOMPLIANCE

Any person or agency may file a complaint asserting noncompliance with the mitigation measures associated with the project. The complaint shall be directed to the City of Morgan Hill in written form providing specific information on the asserted violation. The City of Morgan Hill shall initiate an investigation and determine the validity of the complaint; if noncompliance with a mitigation measure has occurred, the City shall initiate appropriate actions to remedy any violation. The complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
AESTHETICS						
MM 3.1-1	The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant	Prior to approval of final improvement plans		
AIR QUALITY						
MM 3.3-1	Prior to demolition of any on-site structures, the project applicant shall conduct a full site assessment for asbestos-containing materials (ACM) by a California Certified Asbestos Consultant for all structures proposed for demolition. Prior to demolition and site clearing activity, all identified ACM shall be removed by a licensed asbestos abatement contractor and clearance shall be obtained from the BAAQMD before proceeding with the demolition. All ACM shall be transported to a disposal site approved to accept non-friable asbestos-containing waste.	City of Morgan Hill Community Development and BAAQMD	City of Morgan Hill Community Development/Project Applicant	Prior to demolition activities		
MM 3.3-2a	The project applicant shall implement the following recommended BAAQMD dust control measures for construction emissions of PM ₁₀ . These dust control measures shall be implemented during construction for all phases of the proposed project: • Sprinkle water to all active construction areas at least twice daily and more often when conditions warrant; • Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least two feet of freeboard; • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant	During construction activities		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
	- parking areas and staging areas at construction sites; - Sweep daily all paved access roads, parking areas, and staging areas at construction sites; - Sweep streets daily if visible soil material is carried onto adjacent public streets; - Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas; - Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.); - Limit traffic speeds on unpaved roads to 15 miles per hour; - Install sandbags or other erosion control measures to prevent silt runoff to public roadways; - Replant vegetation in disturbed areas as quickly as possible; - Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site; - Suspend grading activities when winds exceed 25 miles per hour (mph) and visible dust clouds cannot be prevented from extending beyond active construction areas; and - Limit the area subject to excavation, grading and other construction activity at any one time. The project applicant shall incorporate as many BAAQMD recommended reduction measures, as reasonably possible, into the trip reduction plan including the following: providing public service announcements including the 'Share the Air' advertisement at the project's cinema and provide employees with parking cash-out incentive to reduce the likelihood of driving alone.					

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM-3.3-2b	Subject to approval by the City of Morgan Hill, the project applicant shall limit the pieces of diesel-powered construction equipment used at any one time, and limit the idling and hours of operation for heavy-duty equipment as feasible during construction of the proposed project to limit the emission of diesel exhaust. Gasoline-powered equipment shall be used as an alternative to diesel to the extent feasible and when comparable equipment and technology is available.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	During construction activities		
MM-3.3-3a	A facilities 'trip reduction plan' shall be implemented by the project applicant to reduce single occupant vehicle commute trips by employees and promote non-auto travel by both employees and patrons. The facilities trip reduction plan may include, but not be limited to elements that would reduce traffic, and thus air pollutant emissions as described below: • Provide one bus stop/shelter with pedestrian access to the project site. Implementation of this measure could reduce project emissions by approximately two percent. • Bicycle amenities should be provided at the project site once the proposed project is in operation. Bicycle amenities could include secure bicycle parking for employees, bicycle racks for customers, and bike lane connections. This vehicle trip reduction measure may reduce emissions associated with the proposed project by approximately two percent. • Pedestrian facilities should link the future transit stop and access roadways to the major sites uses. This trip reduction measure may reduce emissions by approximately one percent. • Designate a portion of the parking lot for weekday 'park-and-ride' parking spaces (the excess between	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Due By	Timing/Frequency	Final Clearance Date	Comments
	weekday peak and weekend peak) which would reduce emissions from traffic to the project site by allowing commuters to park their car and carpool or take transit. Require employers at the project site to post transit rates and scheduling information on bulletin boards. This vehicle trip reduction measure may reduce emissions by one percent. The project applicant shall incorporate as many BAAQMD recommended reduction measures, as reasonably possible, into the trip reduction plan including the following: providing public service announcements including the 'Spare the Air' advertisement at the project's cinema and provisions to provide employees with a parking cash-out incentive to reduce the likelihood of driving alone.					
MM 3.3-3b	Subject to review and approval by the City of Morgan Hill, the proposed project shall integrate the following design features into the proposed project to reduce area source air quality emissions: - Carefully select and locate trees to provide shade for structures and pathways within the project site during the summer months. Deciduous trees should be favored since they provide shade in the summer and allow sun to reach residences during cold and winter months. This measure should be focused on southern and western exposures of buildings; - Incorporate as many energy conserving features as financially feasible into the design and construction of new buildings at the project site. Examples include, but are not limited to, increased wall and ceiling insulation (beyond code requirements), super insulated windows (triple pane) and maximum use of energy efficient lighting;	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	In conjunction with final map submittals		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.3-3b (cont.)	- Install super-efficient heating, ventilation, and air conditioning (HVAC) systems; and - Incorporate light colored and reflective roofing materials into the project design.					
BIOLOGICAL RESOURCES						
MM 3.4-1a	The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1* through August 30*), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity within the vicinity of the burrow (distance to be determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented and the biologist deems disturbance potential to be minimal.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant and Qualified Biologist	Prior to commencement of construction activities		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.4-1b	The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003).	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant	Prior to operation of the proposed project		
MM 3.4-2	If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1 st through August 31 st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds within and in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 100-feet or as determined by a qualified biologist around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1 st through January 31 st).	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant and Qualified Biologist	Prior to commencement of construction activities		
MM 3.4-3	The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special status bat species within the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified within the project area during	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant and Qualified Biologist	Prior to commencement of construction activities		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.4-3 (cont.)	preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum): a) Identify species present within the roost (this may require the assistance of a biologist who specializes in bat ecology); b) Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present); and c) Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available. Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.					
MM 3.4-4	Removal and/or relocation of trees at the project site shall be in compliance with Sections 12.32.030 through 12.32.080 of the City of Morgan Hill Municipal Code. Restrictions on Removal of Significant Trees: Should the City of Morgan Hill require the project applicant to preserve any existing trees in place and/or transplant any trees at the project site, the following tree protection standards shall be implemented during construction and demolition activities at the project site.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant and Certified Arborist or Registered Professional Forester	Prior to commencement of construction activities		

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MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.4-4 (cont.)	Prior to commencement of construction activities, to the greatest extent feasible, the critical root zone (measurement of the dripline radius taken from the tree trunk to the tip of the farthest reaching branch as determined by a Certified Arborist or Registered Professional Forester) of any tree to be retained shall be fenced with a four-foot high brightly colored synthetic fence at the outermost edge of the critical root zone to prevent injury to the trees prior to grading and during construction activities within the project area. The fencing shall remain in place until all construction activities are complete. Trenching, grading, soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed within the critical root zone.					
CULTURAL RESOURCES						
MM 3.5-1a	Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 50 feet of the discovery shall be halted until such time as a can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	During grading and excavation activities		
MM 3.5-1b	In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of Santa Clara County has determined whether the remains are subject to the coroner's authority. This is in accordance with Section 7050.5 of the	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	During grading and excavation activities		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.5-1b (cont.)	California Health and Safety Code. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.98 of the Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendant" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.					
GEOLOGY AND SOILS						
MM 3.6-1	Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code, and implementing the recommendations of the project geotechnical engineer.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department Applicant	In conjunction with final map submittals		
MM 3.6-2	Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures within areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department Applicant	In conjunction with final map submittals		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.6-3	Near-surface soils beneath buildings, exterior slabs, and pavements shall be overexcavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required overexcavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	In conjunction with final map submittals		
MM 3.6-4	The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	In conjunction with final map submittals		
MM 3.6-5	All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant and Geotechnical Engineer	In conjunction with final map submittals		
MM 3.6-6	The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers' specifications.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant and Geotechnical Engineer	Include as specifications in the construction contract documents		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.6-7	Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant and Geotechnical Engineer	Include as specifications in the construction contract documents		
HAZARDOUS AND HAZARDOUS MATERIALS						
MM 3.7-1	Prior to demolition of any on-site structures, a full site assessment for lead-based paint shall be conducted by a California Department of Health Services approved Lead Inspector/Assessor. Prior to general demolition and site clearing activity, all identified deteriorating lead-based paint shall be removed by a licensed lead paint abatement contractor and properly disposed of in accordance with Title 22 of the California Code of Regulations.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant	Prior to demolition and site clearing		
MM 3.7-2	Septic systems at the project site shall be properly removed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant	Prior to demolition and site clearing		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.7-3	Prior to commencement of site clearing and general demolition activities, the existing wells on the site shall be destroyed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department and the Santa Clara Valley Water District (Ordinance 90-1), unless the existing well(s) will be used for landscape irrigation purposes. Use of the existing well(s) on-site for landscape irrigation may be allowed provided there is no connection to the City municipal water supply system, and subject to the review and approval of the Santa Clara Valley Water District.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development/Project Applicant	Prior to demolition and site clearing		
MM 3.7-4	The gasoline station operator shall obtain a Hazardous Materials Storage Permit from the Santa Clara County Fire Department for the proper handling and storage of gasoline and any other hazardous materials. In addition, air quality permits shall be required for the fuel station from the.	Santa Clara County Fire Department/BAAQMD	City of Morgan Hill Community Development/Project Applicant	Prior to operation of the gasoline station		
SURFACE WATER HYDROLOGY AND WATER QUALITY						
MM 3.8-1	Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers.	City of Morgan Hill Community Development and Police Department	City of Morgan Hill Community Development/Project Applicant	Prior to occupancy of the structures		
MM 3.8-2	The project applicant shall prepare a comprehensive erosion control and water pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site.	City of Morgan Hill Public Works Department	City of Morgan Hill Community Development/Project Applicant	Prior to and during grading and construction activities		

Cochrane Road Planned Unit Development (PUD)
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MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.8-3	The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads. Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochran Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion). • Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the "wet" and "dry" seasons to limit the accumulation of "first flush" contaminants; • Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant	In conjunction with final map submittals and during operation of the proposed project		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.8-3 (cont.)	- Engineered products, such as storm drain inlet filters, oil/water separators, vortex separators etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system; - The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials; - Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance including minimizing use of fertilizer, herbicides and pesticides; - The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on storm water quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations; - Storm drain inlets shall be labeled with the phrase "No dumping - flows to Bay," or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system; - Restaurants within the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.					

Cochrane Road Planned Unit Development (PUD)
Mitigation Monitoring and Reporting Program

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Date By	Timing/Frequency	Final Clearance Date	Comments
MM 3.8-3 (cont.)	The portion of the project SWPPP that addresses post-construction practices shall itemize these and any additional pollution control measures required for the proposed project.					
MM 3.8-4	Subject to approval by the SCWWD, the project applicant shall install a telemetry system or other measure agreed upon by the SCWWD to minimize flooding downstream. A telemetry system senses the flow in Coyote Creek at a SCWWD stream gage system, and shuts down the pumping system at the detention ponds when creek discharges reach or exceed levels believed to cause flooding in the William Street area in the City of San Jose.	City of Morgan Hill Community Development Department and SCWWD	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		
LAND USE						
MM 3.9-1	As a condition of approval for the proposed project, the Target Corporation will make a written commitment, using a mechanism such as a restriction or notice on their deed to the existing store property, to maintain their vacated existing store per the guidelines set out in the BAE report regarding abatement of physical decay and deterioration of buildings per the City of Morgan Hill Municipal Code. This maintenance will include but not be limited to prompt removal of trash and graffiti and upkeep of the vacant building to leaseable standards for a modern community shopping center. This commitment will extend to successors in ownership if the Target Corporation sells the property prior to re-tenancing. This commitment will extend until a majority of the space in the vacant store is re-occupied for a period of at least 12 consecutive months.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department and Business Assistance and Housing Services /Project Applicant	The written commitment will extend until a majority of the space in the vacant store is re-occupied for a period of at least 12 consecutive months		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.9-2	As an additional measure to assure proper maintenance of the vacated store, the Target Corporation will provide the City of Morgan Hill with a facade easement on the existing Target space. The facade easement will make it easier for the City and its Redevelopment Agency to step in and clean up the site and lien the property for reimbursement, if needed. The easement language can establish the maintenance standards to be followed. For this property, the easement language should give the City of Morgan Hill the right to enter onto the property and perform any deferred maintenance thereon as may be necessary to keep the property in good condition and repair, if the Target Corporation or successor in ownership (the "owner") does not perform such maintenance itself within a set period of time after receiving notice of the need for maintenance. Such notice shall identify each item of maintenance and repair required to restore the landscaping and exterior facade on the property to good condition and repair. All costs of maintenance performed by the City of Morgan Hill shall be paid directly by the owner or be reimbursed to the City by the owner. The owner's obligation to reimburse the City shall be secured by a lien encumbering the property, which lien shall be enforceable in accordance with the provisions of California Civil Code Section 2924 et seq., as amended. This facade easement will be granted for a period not to exceed five years, or until a majority of the space is re-occupied for a period of at least 12 consecutive months.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development and Business Assistance and Housing Services / Target Corporation or successor in ownership	The facade easement will be granted for a period not to exceed five years, or until a majority of the space is re-occupied for a period of at least 12 consecutive months		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.9-3	The Target Corporation shall provide the City of Morgan Hill with a written re-tenanting plan for the vacant store. Every six months until the majority of the space is leased to a tenant(s) with a lease commitment of at least 12 months, or sold to another independent party, the Target Corporation shall provide to the City of Morgan Hill a progress report on efforts to re-lease the vacant space. The Target Corporation shall not put restrictions on the types of retailers permitted, e.g., they will not refuse to lease to a Target competitor. Permitted activities and land uses shall be solely governed by the City of Morgan Hill General Plan and the City of Morgan Hill Planning and Zoning Codes	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department and Business Assistance and Housing Services /The Target Corporation	Every six months until the majority of the space is leased to a tenant(s) with a lease commitment of at least 12 months, or sold to another independent party, the Target Corporation shall provide to the City of Morgan Hill a progress report on efforts to re-lease the vacant space.		
MM 3.9-4	There is a likelihood of closure for major tenants in the Lawrence Oaks (Home Depot), Tennant Station (CineLux Theatres), and Cochran Plaza (Target with the likelihood of other tenants following) If these centers (or others) face vacancies following the opening of the proposed project, the City of Morgan Hill will monitor maintenance of the vacated spaces and their centers for the first signs of disinvestment or deterioration, and require that these properties continue to be maintained to standards as stated in Section 15.56.020 of the Morgan Hill Municipal Code, such that the building will not endanger life, limb, health, property, safety, or welfare of the general public or its occupants. These standards are based on the International Conference of Building Officials' Uniform Code of the Abatement of Dangerous Buildings.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department and Business Assistance and Housing Services	Prior to and during operation of the proposed project		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.9-4 (cont.)	1997 Edition," except where otherwise noted in the Section 15.56.020 of the Morgan Hill Municipal Code. The property shall be maintained in accordance with Morgan Hill Municipal Code Section 8 regarding Health and Safety, including but not limited to keeping premises free of litter, weeds, graffiti, and abandoned vehicles.					
MM 3.9-5	To help small local businesses compete with likely national chain retailers in the proposed project, the City of Morgan Hill will fund programs aimed at assisting locally-owned small retailers. This could take the form of a business seminar sponsored by Target and the project developers to educate local retailers, or other programs geared toward small retail business assistance, such as a kiosk at the Proposed Project providing information on shopping opportunities in Downtown Morgan Hill or other centers. Such a program could be funded by the City of Morgan Hill committing a percentage of the sales tax revenue generated by the Proposed Project.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development and Business Assistance and Housing Services/Project Applicant and the Target Corporation	Prior to and during operation of the proposed project		
MM 3.9-6	City of Morgan Hill will ensure the Target Corporation, the other owners of Cochrane Plaza, and the owners of Tennant Station, Vineyard Town Center, and the Lawrence Oaks Shopping Center are aware that their centers are in the City's Redevelopment Area, and as a result they are eligible to apply for programs administered by the City's Business Assistance Division, including the Facade Improvement Program, Impact Fee Financing Programs, and Business Assistance Guidelines.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development and Business Assistance and Housing Services	Prior to and during operation of the proposed project		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
PUBLIC SERVICES						
MM 3.11-1	Subject to review and approval by the City of Morgan Hill Police Department, the project applicant shall install and maintain a video surveillance system throughout the proposed project and maintain on-site security personnel during all hours of operation, or provide other security measures acceptable to the Morgan Hill Police Department.	City of Morgan Hill Police Department	City of Morgan Hill Police Department/Project Applicant	During all hours of project operations		
TRAFFIC AND CIRCULATION						
MM 3.12-1a	At the Dunne Avenue/Monterey Road intersection, the westbound right-turn lane shall be restriped as a shared through/right-turn lane, and a northbound right-turn overlap phase shall be installed. This improvement would be required when 35 percent of the project has been constructed based on total PM peak hour trip generation.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	When 35 percent of the project percent has been constructed		
MM 3.12-1b	At the Cochran Road/Mission View Drive intersection, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry: - The northbound approach should include one left-turn lane and one shared through/right-turn lane. - The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane. - The southbound approach should include one left-turn lane, one shared through/right-turn lane, and one right-turn lane. - The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochran Road		

Cochran Road Planned Unit Development (PUD)
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MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.12-2	The project shall implement the applicable actions listed in the <i>Immediate Implementation Action List</i> contained in the <i>Deficiency Plan Guidelines</i> of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochran Road		
MM 3.12-3	The two driveways shown directly behind the movie theater complex on Mission View Drive (i.e., the second and third driveways north of the Cochran Road Intersection) should be eliminated from the proposed project, and a circulation aisle should be provided behind the movie theater complex. As an alternative, the project applicant shall work with the City to incorporate traffic calming improvements at the driveways located along Mission View Drive to minimize pedestrian and vehicle conflicts at the project site.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochran Road		
MM 3.12-4	The southernmost project driveway should be designated as a right-turn in and out only driveway (i.e., signs should be posted prohibiting left turn movements into or out of the project site at this driveway).	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochran Road		
MM 3.12-5	The following modifications are identified on the main north-south circulation aisle to discourage speeding and provide more visible crosswalks for pedestrians: a) At the first intersection north of Cochran (i.e., between Shops K and Pad 7, and between Shops B and Pad 2), stop signs should be installed on the side street approaches; b) At the second intersection north of Cochran, provide one of the following alternative configurations:	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		

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MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.12-5 (cont.)	i) Provide raised intersection to provide vertical displacement, and provide stop signs on the side street approaches; or ii) Provide stop signs on all four approaches; c) At the third intersection north of Cochran, provide stop signs on all four approaches.					
MM 3.12-6	The designated loading zone shall be relocated far enough to the east to allow the intersection approach lane to be reduced to one lane.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochran Road		
MM 3.12-7	The project applicant shall construct a new covered bus stop along the project frontage, including transit amenities such as a bus turnout, a shelter, and benches. All improvements shall be in accordance with the Santa Clara Valley Transportation Authority (VTA) standards, with the exception of planting trees at the bus stop in order to provide a more comfortable and aesthetically pleasing environment. The City of Morgan Hill shall work with the project applicant, Caltrain, and the VTA on ways to increase the frequency and coverage of transit service serving the project area and the nearest Caltrain station. The City shall also aggressively pursue and work with VTA to provide the 'Community Bus Service' program in Morgan Hill.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		
MM 3.12-8	Pedestrian crosswalks shall be provided on all four legs of the Cochran Road/Mission View Drive Intersection, and at all but the west leg of the Cochran Road/De Paul Drive Intersection.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		

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Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.12-9	The following bicycle facilities shall be incorporated into the project: a) Bicycle racks and/or lockers to accommodate bicycle travel by customers and employees. Bicycle parking facilities should be located in high visibility areas in order to encourage bicycle travel and discourage theft and vandalism. b) Class II bicycle lanes along the project street frontages. The Santa Clara Valley Transportation Authority (VTA) Bicycle Technical Guidelines, VTA Community Design and Transportation Guidelines and the VTA Pedestrian Technical Guidelines shall be used in design of the proposed bicycle facilities associated with the proposed project.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of each phase of the proposed project		
MM 3.12-10	The overall number of parking spaces included in the project shall be required to meet the City code parking requirement as follows: the cinema shall be parked at 1 space for every 3.5 seats, and the remainder of the shopping center shall be parked at one space for every 283 square feet.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of each phase of the proposed project		
MM 3.12-11	At the Cochrane Road/Mission View Drive Intersection, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry: • The northbound approach should include one left-turn lane and one shared through/right-turn lane. • The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Concurrent with or prior to the extension of Mission View Drive north of Cochrane Road		

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM 3.12-11 (cont.)	- The southbound approach should include one left-turn lane, one shared through/right-turn lane, and one right-turn lane. - The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.					
MM 3.12-12	The project shall implement the applicable actions listed in the <i>Immediate Implementation Action List</i> contained in the <i>Deficiency Plan Guidelines</i> of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant	Prior to operation of the proposed project		
MM 3.12-13	The following intersection modifications are identified to provide acceptable operations under General Plan Buildout Conditions: a) <u>Cochrane Road/Butterfield Boulevard</u>. For the intersection to operate at LOS D+ or better during the AM and PM peak hours, the General Plan configuration for the intersection would require the following modifications: - Northbound approach: increase number of left-turn lanes from one to two; increase the number of through lanes from one to two; reduce the number of right-turn lanes from two to one. - Eastbound approach: add a free right-turn lane. b) <u>Cochrane Road/Cochrane Plaza</u>. For the intersection to operate at LOS D+ or better during the PM peak hour, the General Plan configuration for the intersection would require the following modifications: - Southbound approach: increase number of left-turn	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/ Project Applicant	Payment of development impact fees prior to operation of the proposed project		

*Cochrane Road Planned Unit Development (PUD)
Mitigation Monitoring and Reporting Program*

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Number	Mitigation Measure	Responsible Agency/Department	Monitoring/Reporting Done By	Timing/Frequency	Final Clearance Date	Comments
MM3.12-13 (cont.)	lanes from one to two; change the shared left/through lane to a through lane; keep the number of right-turn lanes at one.					
MM3.12-14	The westbound approach of the U.S. Highway 101/Cochrane Road intersection shall be converted to provide one separate through lane and one shared through right-turn lane, subject to review and approval by Caltrans and the City of Morgan Hill, to improve the level of service at this intersection to LOS D during the Saturday peak hour.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of each phase of the proposed project		
UTILITIES AND SERVICE SYSTEMS						
MM3.13-1	Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses personnel generating such waste. Contracts for or maintenance the collection of these recyclables shall also be maintained as available.	City of Morgan Hill Community Development Department	City of Morgan Hill Community Development Department/Project Applicant	Prior to operation of the proposed project		



Cochrane Commons Phase II Project

Subsequent Environmental Impact Report

prepared by

City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037
Contact: Jennifer Carman, Development Services Director

prepared with the assistance of

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January 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers
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Cochrane Commons Phase II Project

Supplemental Environmental Impact Report

prepared by

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Executive Summary

This document is an Environmental Impact Report (EIR) that has been prepared as a Subsequent EIR (SEIR) to the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). The proposed Cochrane Commons Phase II Project is hereafter referred to as the “proposed project” or “project.”¹ The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The Phase II project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, a 140-room hotel. The General Plan land use designation would be amended from Commercial to Mixed Use Flex and the zoning from Highway Commercial/Planned Unit Development to Mixed Use Flex/Planned Development for the Phase II development area.

This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Project Applicant

Browman Development
1556 Parkside Drive
Walnut Creek, California 94596

Lead Agency Contact Person

Jennifer Carman, Development Services Director
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037
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Project Description

The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Shopping Center (Shopping Center). It is bounded by De Paul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101 (U.S. 101).

¹ In the Initial Study prepared for the project (Appendix A), the Cochrane Commons Phase II Project is also referred to as the “modified project.”

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to MUF for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, swimming pool would also be provided for on-site residents. Table ES-1 details the breakdown of proposed uses and square footage.

Table ES-1 Project Characteristics

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet
Mixed Use Flex Zoning Information	
Maximum Floor Area Ratio (FAR)	0.5
Maximum Height	35 feet
Residential Densities	7-24 units per acre
Maximum Building Coverage	50%

Project Characteristics

SITE ACCESS, CIRCULATION, AND PARKING

Vehicles would access the project site primarily from De Paul Drive, which bisects the site horizontally from Cochrane Road, which would have two driveways leading to two central roadways which would connect to two driveways off Mission View Drive. An additional driveway would be located off Cochrane Road which would allow right-in and right-out vehicle movements. There would be a total of 1,367 parking spaces. Parking would be constructed in phases. During Phase I, the project would include 276 parking stalls. During Phase 2, 658 stalls would be added and during Phase 3, 433 stalls would be added.

GRADING AND DRAINAGE

The project area has been previously graded and would further be modified by additional grading, which would be balanced on site. Stormwater drainage would be directed to catch basins located throughout the project site and then conveyed via underground storm drainpipes to a stormwater detention pond along the northern project boundary. The storm drain system design would incorporate City standards for pipe sizes, maximum slopes, minimum flow velocities, and pipe material. The detention basin would be sized in accordance with the City's detention design criteria. Stormwater would be temporarily stored in the planned detention pond and pumped to the

adjacent Cochrane Channel at discharge rates at or below pre-development levels, as required by the Santa Clara Valley Water District.

LANDSCAPING AND TREES

The project would involve new landscaping elements, including trees and vegetation along Mission View Drive and Cochrane Road, shrubs along the building perimeters and trees within parking areas. Additional trees and landscaping would be located within building courtyards. The landscaping plan would be subject to review and approval by the City's Architectural Review Board.

OFF-SITE IMPROVEMENTS

The project includes sidewalk and pavement improvements along road frontages that border the project site.

CONSTRUCTION

Construction would occur over three phases. Construction Phase 1 would consist of 104 units (175,000 square feet) of for-sale townhomes. Construction Phase 2 would consist of 394 units (410,000 square feet) of rental apartments. Construction Phase 3 would consist of the retail space and hotel. Construction would occur from May 2022 to December 2024 between the hours of 7 a.m. and 5 p.m. from Monday to Saturday. Construction would include 37,510 cubic yards of excavation, with balanced cut and fill anticipated.

Project Objectives

The applicant's objectives for the project are to:

- Increase the viability of the existing Cochrane Commons anchors and tenants
- Create a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place
- Assist in protecting the tax revenue generated by the current and future tenants and the long-term viability of the City of Morgan Hill's retailers
- Provide much needed variety to the City's housing stock in the form of market rate and below market rate affordable housing
- Encourage the development of the remainder of the shopping center

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, the proposed project was determined to be the environmentally superior alternative.

- Alternative 1: No Project, No Build
- Alternative 2: No Project – Allowable Buildout Under Existing General Plan Designation
- Alternative 3: Mixed Use Flex Designation on North Half of the Site

Refer to Section 5, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify any areas of known controversy for the proposed project. Responses to the Notice of Preparation of a Draft EIR and input received at the EIR scoping meeting held by the City are summarized in Section 1, *Introduction*.

Issues to be Resolved

The proposed project would require an amendment to the City's zoning map and General Plan land use map to convert the Phase II development area to Mixed Use Flex. The project would also require a revised Planned Development Combining District and associated Master Plan to allow the proposed commercial and residential uses, and issuance of a Design Permit consistent with the Master Plan.

Issues Not Studied in Detail in the EIR

As indicated in the Initial Study (Appendix A), there is no substantial evidence that significant and unmitigable impacts would occur to the following issue areas: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Impacts to Greenhouse Gas Emissions and Transportation were found to be potentially significant and are addressed in this EIR.

Summary of Impacts and Mitigation Measures

Table ES-2 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required) identified in the SEIR. Table ES-3 summarizes mitigation measures included in the 2005 EIR that would continue to be implemented under the proposed project. Because some mitigation measures have been previously complied with during development of Phase I, the already developed area adjacent to the project site, not every mitigation measure from the 2005 EIR would be included in the proposed project. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-2 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts of the SEIR

Impact	Mitigation Measure(s)	Residual Impact
Greenhouse Gas Emissions		
Impact GHG-1. The project would generate temporary and long-term increases in GHG emissions, but such emissions would remain below the adjusted efficiency threshold intended to demonstrate consistency with the 2030 statewide GHG reduction target. Impacts would be less than significant.	None required.	Less than Significant
Impact GHG-2. The project would be consistent with the 2017 Scoping Plan and Plan Bay Area 2050. This Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur.	None required.	No Impact
Transportation		
Impact TRA-1. The project would not conflict with applicable policies addressing transit, bicycle, and pedestrian facilities. Impacts related to transit, bicycle and pedestrian facilities would be less than significant.	None required.	Less than Significant
Impact TRA-2. The project would exceed the applicable significance threshold for VMT. Even with Mitigation Measure TRA-1, the project would not fall below the applicable residential VMT per capita threshold. Impacts would be significant and unavoidable.	TRA-1 VMT Reductions The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below: ▪ School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT	Significant and Unavoidable

Impact	Mitigation Measure(s)	Residual Impact
	- Transit Service Expansion. The project shall subsidize transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT - Voluntary Travel Behavior Change Programs. Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT	
Impact TRA-3. The project would not introduce design features or incompatible uses that could increase traffic hazards. This impact would be less than significant.	None required.	Less than Significant
Impact TRA-4. The project could result in inadequate emergency access to the project site. This impact would be less than significant with adherence to Mitigation Measure TRA-2.	TRA-2 Emergency Vehicle Site Access The project site shall be designed following City of Morgan Hill design standards and provide adequate width and turn-radii at and along all drive/parking aisles to allow for two-way circulation and adequate circulation of larger vehicles (such as emergency trucks, garbage trucks, and delivery trucks) throughout the project site. The project applicant shall provide detailed site development plans to the City of Morgan Hill Planning Division that demonstrate compliance with the City design standards prior to issuance of a building permit.	Less than Significant
Tribal Cultural Resources¹		
Impact TCR. There is always potential to uncover buried tribal cultural resources during ground disturbing activities. Should project construction activities encounter and damage or destroy a tribal cultural resource or resource, Mitigation measure CR-1 would ensure that potential impacts to tribal cultural resources would be less than significant.	TCR-1 Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply: - Prior to start of grading or earthmoving activity on the “first day of construction”, the archeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of “cultural sensitivity training” with the general contractor and subcontractors. - A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: - Work at the location of the find shall halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;	

Impact	Mitigation Measure(s)	Residual Impact
	▫ If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist shall prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find; ▫ If the find appears significant and to qualify as a unique archaeological resource, the archaeologist shall determine if the resource can be avoided and shall detail avoidance procedures in a formal memo/letter; and ▫ If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2. An archaeologist shall be on-call during ground disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: ▪ The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans. ▫ If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld. ▫ Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled. ▫ Surgical masks should also be worn to prevent exposure to pathogens that may be associated with the remains. ▪ In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below. ▪ An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or	

Impact	Mitigation Measure(s)	Residual Impact
	discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find). ▪ The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances. ▪ The contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition: ▫ The City of Morgan Hill Development Services Director (408) 779-7247 ▫ The Contractor's Point(s) of Contact ▫ The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900 ▫ The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082 ▫ The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C) ▫ The Tamien Nation (707)295-4011 (office) and (925) 336-5359 (THPO) ▪ The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC. ▪ The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.) ▪ Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose. ▪ Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out. ▪ If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.	

¹ The analysis for Tribal Cultural Resources and this mitigation measure are included in the Initial Study prepared for this project (Appendix A).

Table ES-3 Summary of Mitigation Measures Included from the 2005 EIR

Topic	Mitigation Measure(s)
Aesthetics	Mitigation 3.1-1. The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the [2005] City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.
Biological Resources	Mitigation 3.4-1a. The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1st through August 30th), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity in the vicinity of the burrow (distance to be determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented, and the biologist deems disturbance potential to be minimal. Mitigation 3.4-1b. The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003). Mitigation 3.4-2. If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1st through August 31st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned, or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 250 feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through January 31st) Mitigation 3.4-3. The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special-status bat species in the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified in the project area during preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum): - Identify species present in the roost (this may require the assistance of a biologist who specializes in bat ecology) - Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present) - Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available. Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.

Topic	Mitigation Measure(s)
Cultural Resources	Mitigation 3.5-1a. Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 150 feet of the discovery shall be halted until such time as a qualified professional archaeologist can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant. Mitigation 3.5-1b. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of Santa Clara County has determined whether the remains are subject to the Coroner's authority. This is in accordance with Section 7050.5 of the [2005] California Health and Safety Code. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.98 of the [2005] Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.
Geology and Soils	Mitigation 3.6-1. Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code and implementing the recommendations of the project geotechnical engineer. Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures in areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals. Mitigation 3.6-2. All proposed structures at the project site shall be evaluated for liquefaction potential on a case-by-case basis as part of subsequent design-level geotechnical engineering investigations. If there is determined to be a potential for liquefaction, mitigation will be accomplished through compliance with the recommendations contained in the design-level geotechnical engineering reports with recommendations included as specifications in the construction contract documents. Mitigation 3.6-3. Near-surface soils beneath buildings, exterior slabs, and pavements shall be over-excavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas. Mitigation 3.6-4. The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas. Mitigation 3.6-5. All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report. Mitigation 3.6-6. The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers' specifications. Mitigation 3.6-7. Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.

Topic	Mitigation Measure(s)
Hydrology and Water Quality	Mitigation 3.8-1. Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers. Mitigation 3.8-2. The project applicant shall prepare a comprehensive erosion control and water pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site. Mitigation 3.8-3. The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads. Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion). Additional post-construction BMPs to be implemented will include, but not be limited to, the following: ▪ Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants. ▪ Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ Engineered products, such as storm drain inlet filters, oil/water separators, etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials. ▪ Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance, including minimizing use of fertilizer, herbicides and pesticides. ▪ The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on stormwater quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations. ▪ Storm drain inlets shall be labeled with the phrase “No dumping – flows to Bay,” or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system. Restaurants in the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.
Utilities and Service Systems	Mitigation 3.13-1. Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses or maintenance personnel generating such waste. Contracts for the collection of these recyclables shall also be maintained as available.

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1 Introduction

This document is an Environmental Impact Report (EIR) that has been prepared as a Subsequent EIR (SEIR) to the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). The proposed Cochrane Commons Phase II Project is hereafter referred to as the “proposed project” or “project.”¹ The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The Phase II project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, a 140-room hotel. The General Plan land use designation would be amended from Commercial to Mixed Use Flex and the zoning from Highway Commercial/Planned Unit Development to Mixed Use Flex/Planned Development for the Phase II development area.

This section discusses (1) the basis for the preparation of a SEIR, (2) the legal basis for preparing a SEIR, (3) the environmental review background of the SEIR, (4) the scope and content of the SEIR, (5) the issue areas found not to be significant by the Initial Study, (6) the lead, responsible, and trustee agencies, and (7) the environmental review process required under the California Environmental Quality Act (CEQA). The proposed project is described in detail in Section 2, *Project Description*.

1.1 Basis for a SEIR

When an EIR has been adopted and a project is modified or expanded upon, additional CEQA review may be necessary. The key considerations in determining the need for the appropriate type of additional CEQA review are outlined in *CEQA Guidelines* Section 15162:

- (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
 - (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
 - (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

¹ In the Initial Study prepared for the project (Appendix A), the Cochrane Commons Phase II Project is also referred to as the “modified project.”

- (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
- (b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise, the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.
- (c) Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.
- (d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

As discussed in Section 2, *Project Description*, the proposed project would involve substantial changes to the project analyzed in the 2005 EIR, including adding new residential uses and a hotel. Therefore, the City has determined that the preparation of a SEIR is the appropriate approach to CEQA compliance. Consistent with *CEQA Guidelines* Section 15150, the 2005 EIR is incorporated into this document by reference.

1.2 Purpose and Legal Authority

The proposed project requires the discretionary approval of the City of Morgan Hill Planning Commission; therefore, the project is subject to the environmental review requirements of CEQA. Pursuant to Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this EIR is to serve as an informational document that:

“will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

As discussed above, this document is a SEIR to the 2005 EIR pursuant to Sections 15162 and 15163 of the *CEQA Guidelines*. A SEIR is appropriate when, “Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.”

This SEIR is intended to serve as an informational document for the public and City of Morgan Hill decision-makers. The process will include public hearings before the Planning Commission and the City Council to consider certification of a Final SEIR and approval of the proposed project.

1.3 Environmental Impact Report Background

In 2005, the City of Morgan Hill certified the Final EIR for the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). This project included development of 590,100 square feet of retail space, a 12-pump gas station, and a 63,200-square-foot movie theatre. The project was proposed to be built out in two phases, with the first phase covering the southwest portion of the site and the second phase (the project that is the subject of this SEIR) covering the northeast portion of the site. Construction of Phase I of the project was completed in 2007, consisting of 262,560 square feet of commercial retail, including a 127,732-square-foot Target store. Two commercial structures were also constructed on the eastern portion of the project site in the Phase II area and are currently occupied by a gas station and fast-food restaurant. In total, 303,429 square feet of retail space has been constructed, along with the gas station.

The City of Morgan Hill distributed a Notice of Preparation (NOP) of the EIR for a 30-day agency and public-review period (December 3, 2021 to January 3, 2022). In addition, the City held an EIR Scoping Meeting on December 16, 2021. The meeting, held from 6:00 p.m. to 6:30 p.m., was aimed at providing information about the proposed project to members of public agencies, interested stakeholders and residents/community members. The meeting was held via a Zoom video conference. The City received three letters from agencies and three from the public in response to the NOP during the public-review period, as well as various verbal comments during the EIR Scoping Meeting. The NOP is provided in Appendix B of this EIR, along with the Initial Study that was prepared for the project and the NOP responses received. Table 1-1 on the following page summarizes the content of the letters and verbal comments and where the issues raised are addressed in the EIR.

Table 1-1 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where It Was Addressed
Agency Comments		
Santa Clara Valley Water District	Requests review of the runoff analysis from the 2005 EIR to consider proposed changes to Phase 2 of the Cochrane Commons development.	This topic is addressed in Section 15, <i>Hydrology and Water Quality</i> , in the Initial Study included as Appendix A.
	Requests that a Water Supply Assessment (WSA) be incorporated into the EIR and requests review of the WSA to comment on consistency with countywide water supply planning efforts.	Water supply is addressed in Section 15, <i>Hydrology and Water Quality</i> , in the Initial Study included as Appendix A.

Commenter	Comment/Request	How and Where It Was Addressed
	Requests that consideration of implementation measures from the Model Water Efficient New Development Ordinance be given to minimize water and energy use associated with new construction.	Energy use and water supply are addressed in Section 6, <i>Energy</i> and Section 15, <i>Hydrology and Water Quality</i> , respectively in the Initial Study included as Appendix A.
	Concerns that development of the project site will reduce natural groundwater recharge and suggests incorporating Low Impact Development/Green Infrastructure best practices to improve draining while maintaining ground and surface water quality.	Impacts related to groundwater are addressed in Section 15, <i>Hydrology and Water Quality</i> , in the Initial Study included as Appendix A.
California Department of Transportation (Caltrans)	Primary and secondary effects on pedestrian, bicycle, travelers with disabilities, and transit performance should be evaluated.	Transportation impacts are addressed in Section 4.2, <i>Transportation and Circulation</i> , of the SEIR and a Transportation Analysis is provided as Appendix D.
	Requests that the vehicle miles traveled (VMT) analysis should be conducted pursuant to the City's guidelines. Mitigation measures for potential increases in VMT should encourage the use of transit and active transportation modes.	
	Classification of the intensity of events/reception to be held at the location and the associated travel demand and VMT mitigations should be included.	
	Requests project-generated travel demand and estimated costs of transit and active transportation improvements necessitated by the project be evaluated. Encourages contributions to be made toward multimodal and regional transit improvements will aide with mitigation.	
	Requests that state right-of-way project-related temporary access points be analyzed.	
	Requests discussion of utilities that are proposed, moved or modified in Caltrans' right-of-way.	
	Requests that the project's contribution, financing, scheduling, implementation responsibilities, and lead agency monitoring be fully discussed for all mitigation measures.	
	Requests that of any Caltrans facilities are impacted by the project, those facilities meet American Disabilities Act Standards after project completion.	

Commenter	Comment/Request	How and Where It Was Addressed
	Advises that any permanent work or temporary traffic control that encroaches onto the state right-of-way receive the required Caltrans-issued encroachment permit.	
County of Santa Clara, Roads and Airports Department	Requests that mitigation measures for impacted County facilities as a result of the project be provided in the EIR.	Impacts related to transportation are addressed in Section 4.2, <i>Transportation and Circulation</i> , of the SEIR, and a Transportation Analysis is provided as Appendix D.
	Asks if the City of Morgan Hill has adopted a mitigation monitoring and reporting program (MMRP) as identified in the Mitigation Monitoring Section of the 2005 EIR.	A MMRP will be adopted by the City of Morgan Hill at the time of certification of the SEIR.
Tamien Nation	Request for tribal consultation from the Tamien Nation to discuss alternatives, mitigation measures, significant effects, significance of tribal cultural resources and project impacts on these resources, and the environmental review.	Consultation required by Assembly Bill 52 and State Bill 18 was carried out by the City of Morgan Hill. This topic is discussed in Section 5, <i>Cultural Resources</i> and Section 18, <i>Tribal Cultural Resources</i> , of in the Initial Study and a Cultural Resources Report is provided as Appendix CUL.
Public Comments		
Traffic	Concerns that the project will increase traffic on and off the Cochrane Road exit off U.S. 101.	Air quality impacts are addressed in Section 3, <i>Air Quality</i> , in the Initial Study included in Appendix A, and traffic conditions are addressed in Section 4.2, <i>Transportation and Circulation</i> , of the SEIR. A traffic analysis is also included as Appendix D
	Requests that electric vehicle charging stations are included in the plan.	Project details are included in Section 2, <i>Project Description</i> , of this SEIR.
Air Resources	Concerns that additional traffic will cause air pollution.	Air quality impacts are addressed in Section 3, <i>Air Quality</i> , in the Initial Study included in Appendix A.
Land Use and Planning	Concerns regarding the proposed rezoning and land uses.	Land use and planning impacts are addressed in Section 11 of the Initial Study included in Appendix A.
EIR = Environmental Impact Report; WSA = Water Supply Assessment; VMT = vehicle miles travelled; ROW = right-of-way; MMRP = Mitigation Monitoring and Reporting Program; SEIR = Subsequent Environmental Impact Report		

1.4 Scope and Content

This SEIR addresses the following environmental issue areas, as well as other CEQA-mandated issues (i.e., cumulative impacts, growth-inducing impacts, significant unavoidable impacts, alternatives):

- Greenhouse Gas Emissions
- Transportation

The Initial Study (Appendix A to this SEIR) addresses other issue areas listed in Appendix G of the *CEQA Guidelines*. The alternatives section of the SEIR (Section 6) was prepared pursuant to *CEQA Guidelines* Section 15126.6 and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In addition, the alternatives section identifies the “environmentally superior”

alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required “No Project” alternative (analyzing both continuation of existing conditions and buildout as allowed under the General Plan) and one alternative development scenario for the project area.

The level of detail contained throughout this SEIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *CEQA Guidelines* state:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

In preparing the SEIR, use was made of pertinent policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents, including the 2005 EIR available on the City’s website located at: <http://www.morgan-hill.ca.gov/2259/Cochrane-Commons-Phase-2>. A full reference list is contained in Section 7, *References*.

CEQA Baseline

For issues analyzed in the Initial Study, the analysis compared impacts of the proposed project to the approved project analyzed in the 2005 EIR. For the issues of greenhouse gas (GHG) emissions and vehicle miles traveled (VMT) which have been recently added as environmental topics for analysis pursuant to CEQA and therefore were not analyzed in the 2005 EIR, this SEIR compares impacts of the project to existing conditions. The CEQA baseline for Section 4.2, *Transportation*, is also existing conditions, because the proposed project would include new land uses that were not analyzed in the 2005 EIR. In addition, onsite circulation and site access would differ.

1.5 Issues Not Studied in Detail in the EIR

An environmental checklist (Initial Study) was prepared for the project to determine issue areas to be discussed in this SEIR. The Initial Study is included as Appendix A of this EIR. As indicated in the Initial Study, there is no substantial evidence that significant impacts would occur in any of the following issue areas: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, and Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. The Initial Study is included in Appendix A.

1.6 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible, and trustee agencies. The City of Morgan Hill is the lead agency for the project, because it holds principal responsibility for approving the project.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. There are no responsible agencies for the proposed project. However, state, regional and/or local government permits may be required for development of the project,

whether or not they are explicitly listed below. State and regional agencies that may have jurisdiction over some aspects of the project include (but are not limited to):

- Bay Area Air Quality Management District (BAAQMD)

The SEIR will also be submitted to this agency for review and comment.

A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. *CEQA Guidelines* Section 15386 designates four agencies as trustee agencies: California Department of Fish and Wildlife (CDFW) with regards to fish and wildlife, native plants designated as rare or endangered, game refuges, and ecological reserves; the State Lands Commission with regard to state-owned “sovereign” lands, such as the beds of navigable waters and state school lands; the California Department of Parks and Recreation with regard to units of the state park system; and, the University of California with regard to sites in the Natural Land and Water Reserves System. There are no trustee agencies for the proposed project.

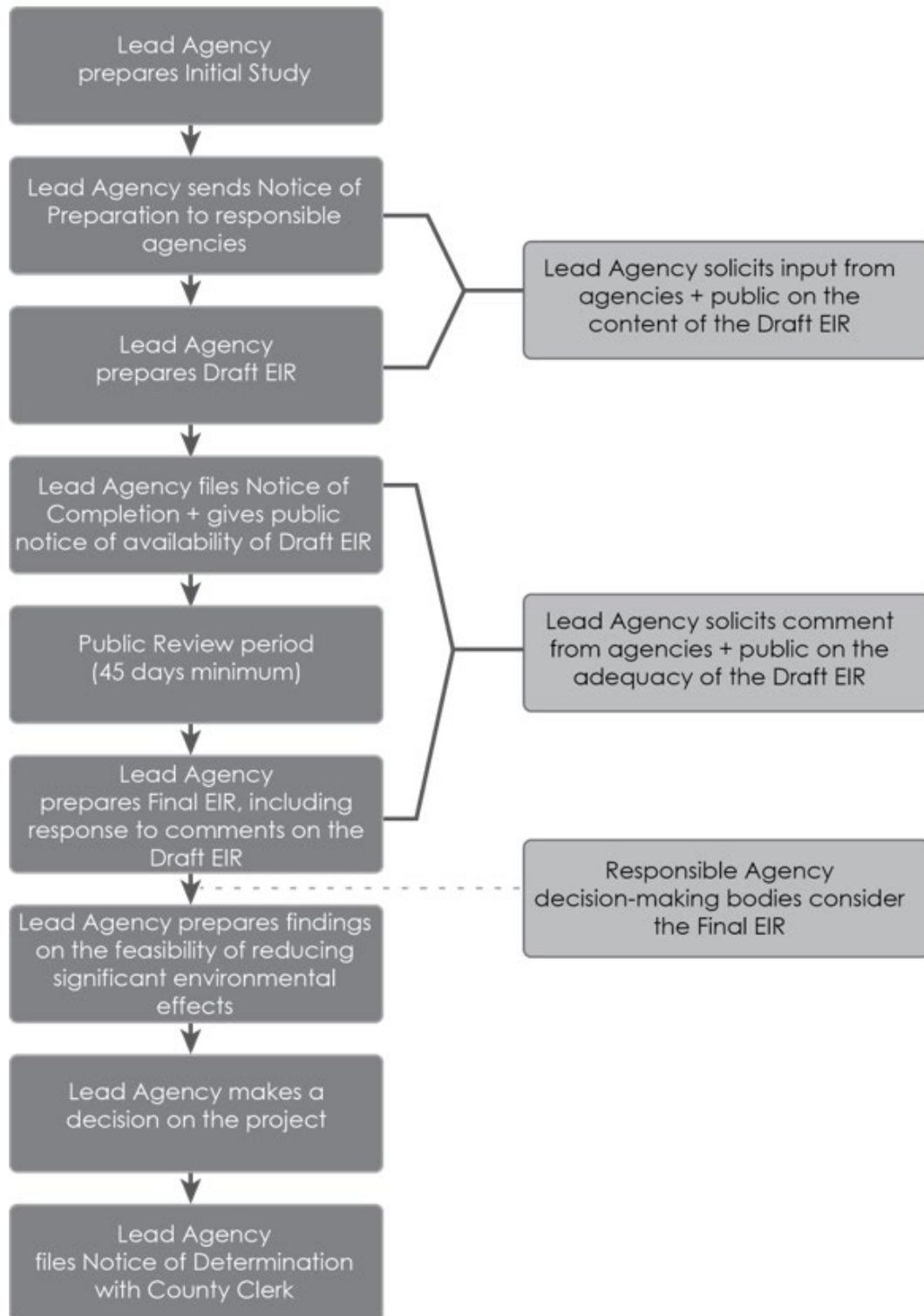
1.7 Environmental Review Process

The environmental impact review process, as required pursuant to CEQA, is summarized below and illustrated in Figure 1-1. The steps are presented in sequential order.

1. **Determination that SEIR is warranted.** When an EIR has been certified for a project, a lead agency must determine if a SEIR should be prepared due to substantial changes to the project, circumstances under which the project was approved, or new information. As described in Section 1.1, Basis for a SEIR, the proposed project would involve substantial changes that will require major revisions to what was analyzed on the project site in the 2005 EIR. Therefore, the City has determined that the preparation of a SEIR is the appropriate approach to CEQA compliance.
2. **NOP and Initial Study.** After deciding that an EIR is required, the lead agency (City of Morgan Hill) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082, Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk’s office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts.
3. **Draft SEIR.** The Draft SEIR must contain a) table of contents or index, b) summary, c) project description, d) environmental setting, e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts), f) a discussion of alternatives, g) mitigation measures, and h) discussion of irreversible changes.
4. **Notice of Completion (NOC).** The provisions of Sections 15085(a) and 15087(a)(1) of the *CEQA Guidelines* require that as soon as the Draft SEIR is completed, the lead agency must file a NOC with the Office of Planning and Research (OPR) and that a public Notice of Availability (NOA) be provided to all organizations and individuals who have previously requested notification. The City, serving as the lead agency, provided the NOC to OPR and circulated an NOA of the Draft SEIR to public agencies, special districts, tribal representatives, organizations, and individuals that commented on the NOP and/or requested to be kept informed of the proposed project.
5. **Final SEIR.** A Final SEIR consists of the Draft SEIR; revisions to the Draft SEIR; responses to comments addressing concerns raised by individuals, organizations, and public agencies or other reviewing parties; and a Mitigation Monitoring and Reporting Program (MMRP). According to

the Public Resources Code Section 21081.6, for projects in which significant impacts would be minimized by mitigation measures, the lead agency must include a Mitigation, Monitoring, and Reporting Program (MMRP). The purpose of an MMRP is to ensure compliance with required mitigation measures during implementation of the project. After the Final SEIR is completed, and at least 10 days prior to its certification, a copy of the response to comments on the Draft SEIR must be provided or made available to all commenting public agencies.

6. **Certification of Final SEIR.** Prior to making a decision on the proposed project, the lead agency must certify that (a) the Final SEIR has been completed in compliance with CEQA, (b) the Final SEIR was presented to the decision-making body of the lead agency, and (c) the decision-making body reviewed and considered the information in the Final SEIR prior to approval (*CEQA Guidelines* Section 15090).
7. **Lead Agency Project Decision.** The lead agency may (a) disapprove the project because of its significant environmental effects, (b) require changes to the project to reduce or avoid significant environmental effects, or (c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Section 15042 and Section 15043).
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the proposed project identified in the SEIR, the lead agency must find, based on substantial evidence, that either (a) the 2005 EIR has been changed to avoid or substantially reduce the magnitude of the impact, (b) changes are in another agency's jurisdiction and such changes have or should be adopted, or (c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
9. **MMRP.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination (NOD).** The lead agency must file a NOD after deciding to approve a project for which a SEIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the NOD with the County Clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

Figure 1-1 Environmental Review Process

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2 Project Description

This section describes the proposed project, including the project applicant, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

2.1 Project Sponsor

Browman Development
1556 Parkside Drive
Walnut Creek, California 94596

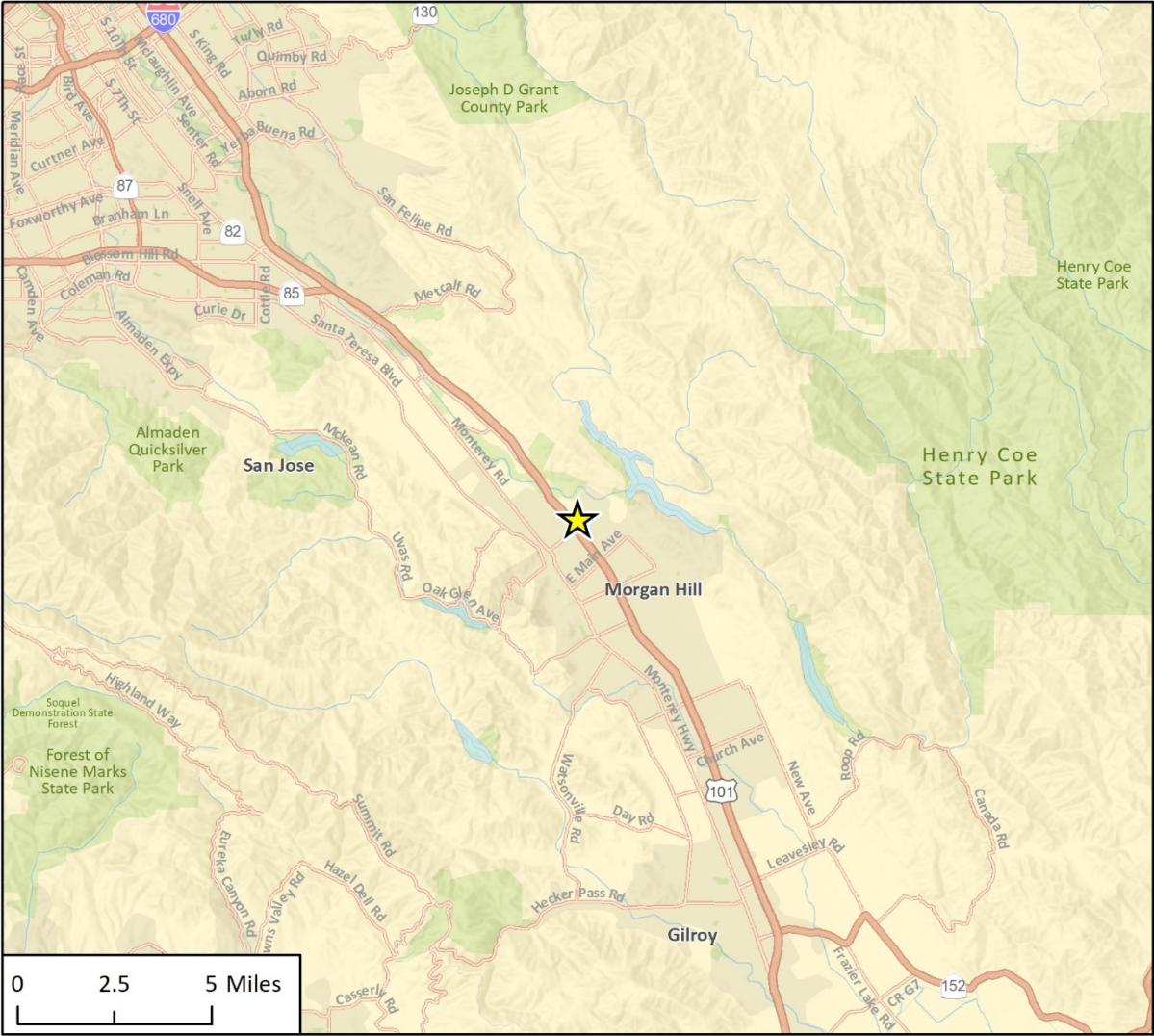
2.2 Lead Agency Contact Person

Jennifer Carman, Development Services Director
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037
(408) 778-6480

2.3 Project Location

The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Shopping Center (Shopping Center). It is bound by De Paul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101 (U.S. 101). Figure 2-1 shows the regional location of the project site, and Figure 2-2 shows the location of the site in its neighborhood context.

Figure 2-1 Regional Location



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★ Project Location

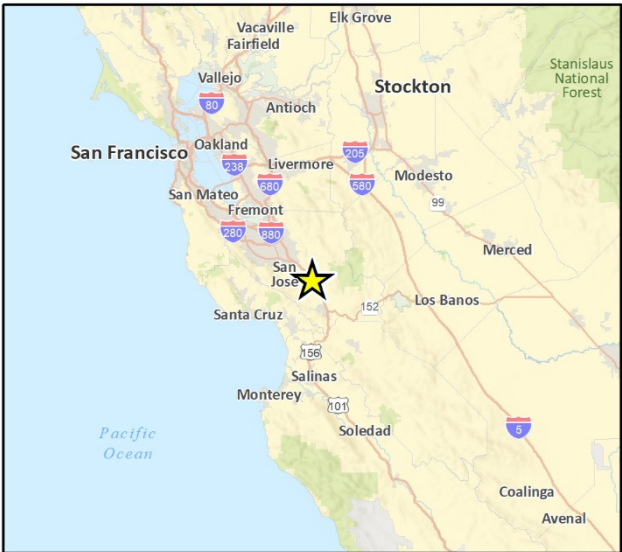
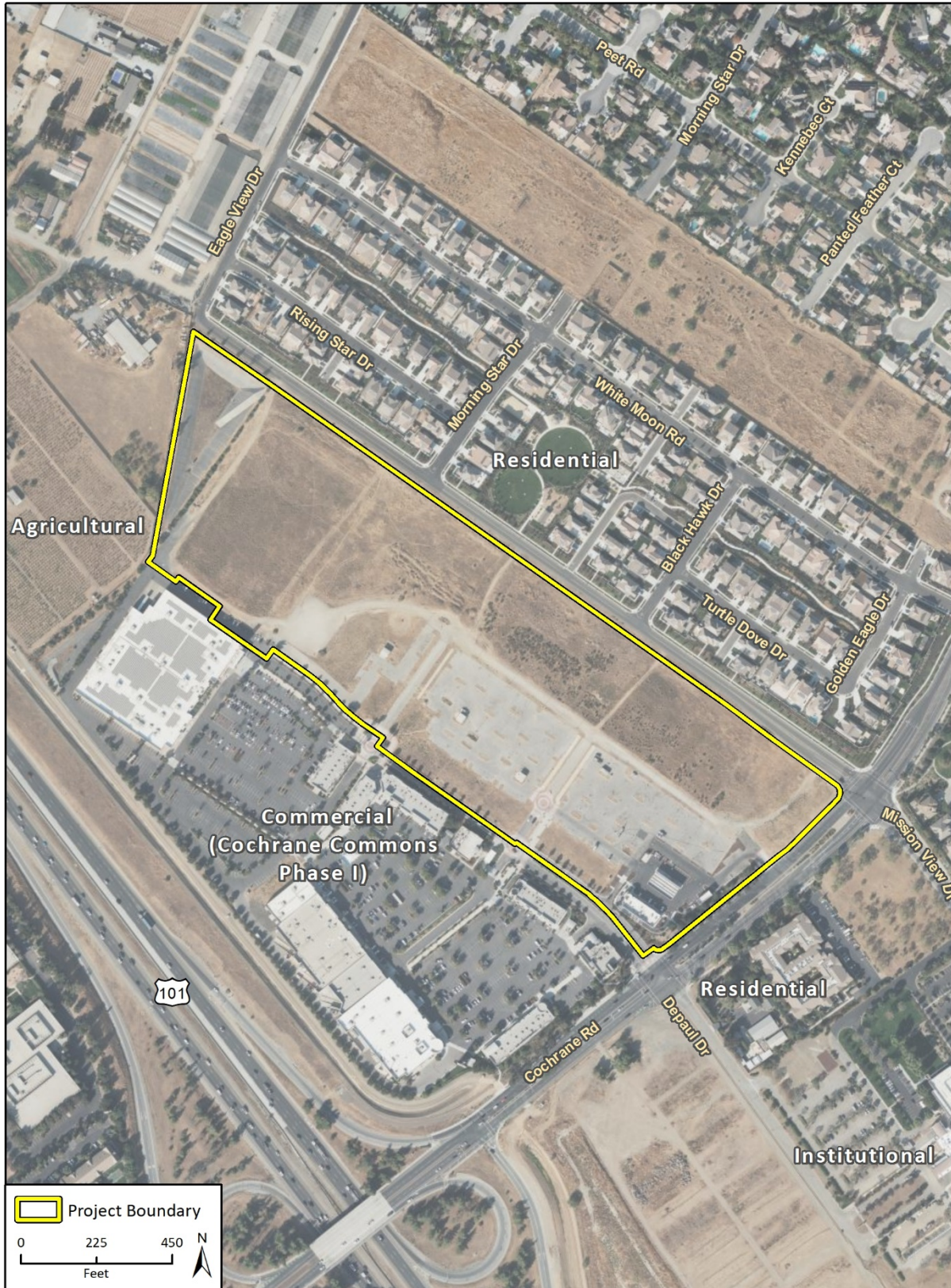


Fig X Regional Location

Figure 2-2 Project Site Location



2.4 Existing Site Characteristics

2.4.1 Site Conditions

The project site is located in an urbanized area and is generally flat, with an average elevation of 388 feet above mean sea level. There are two existing commercial structures in the southern portion of the site, which are occupied by a gas station and a Burger King restaurant. The central and southern areas of the site are partially developed with parking lots, roadways, and paved areas, as shown in Figure 2-2. Street trees are planted along Cochrane Road fronting Burger King, the gas station, and De Paul Drive along the southern portion of the site. The southeast corner of the site near the two existing commercial tenants is landscaped with ornamental trees and shrubs. The remainder of the site is undeveloped and contains ruderal vegetation, primarily mowed grasses and shrubs.

2.4.2 Current Land Use and Zoning Designations

The project site is split between two City of Morgan Hill 2035 General Plan land use designations. The northwest corner of the site is designated Mixed Use Flex (7 to 24 dwelling units/acre) with the remainder designated Commercial. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in standalone buildings or as part of shopping centers. It allows a maximum floor area ratio of 0.6. The Mixed Use Flex land use designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre and a maximum floor area ratio of 0.5. (Morgan Hill 2016).

The project site is zoned as Highway Commercial (CH), which seeks to provide areas adjacent to the freeway that can accommodate highway and tourist-oriented uses, and allows business services, restaurants and cafes, hotels, offices, retail services, and other related facilities (Morgan Hill 2018). Additionally, the project site has a Planned Unit Development (PUD) Legacy Zone, which is a zoning district applied to the property prior to July 7, 2018 and remains the zoning in effect for the property (Morgan Hill 2018).

2.4.3 Surrounding Land Uses

Parcels to the east of the project site have a land use designation of Commercial and Commercial/Industrial and are zoned as General Commercial and Public Facilities with a PUD overlay. Parcels south of the project site include Phase I of the Shopping Center, which has a Commercial land use designation and is zoned CH with the PUD overlay. Parcels west of the site are located in Santa Clara County and the City of Morgan Hill's sphere of influence. These parcels have a land use designation of Rural County. Parcels to the north of the site have a land use designation of Residential Detached Medium (up to 7 dwelling units/acre) and are zoned Residential Detached Medium Density (RDM 9,000 or 7,000) with a Planned Development (PD) overlay.

Surrounding development includes detached single-family houses to the north, senior living apartments to the east, commercial retail in Phase I of the Shopping Center to the south, and single-family and industrial structures within agricultural operations to the west. Buildings range in height from one to two stories.

2.5 Project Characteristics

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is

different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, and a 140-room hotel. To facilitate the Phase II project changes, amendments to the General Plan land use designation and zoning is required. The General Plan land use designation would be changed from Commercial to Mixed Use Flex and the zoning would be changed from CH/PUD to MU-F/PD. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also include various onsite amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, and swimming pool would also be provided for onsite residents. Table 2-1 details the breakdown of proposed uses and square footage.

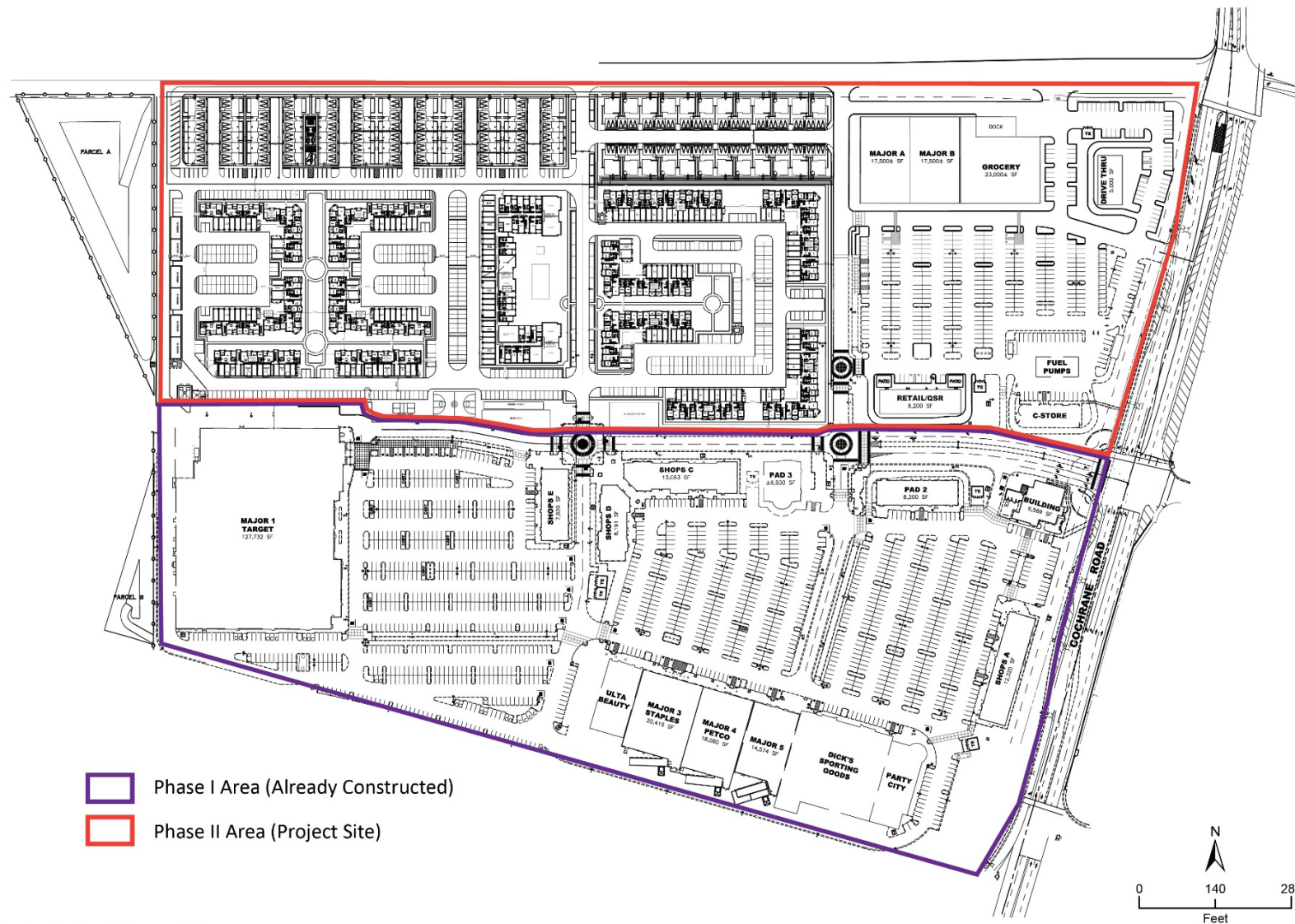
Table 2-1 Project Summary

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet
Mixed Use Flex Zoning Information	
Maximum Floor Area Ratio	0.5
Maximum Height	35 feet
Residential Densities	7 to 24 units per acre
Maximum Building Coverage	50%

Site Access, Circulation, and Parking

Vehicles would access the project site primarily from **De Paul** Drive, which bisects the site horizontally from Cochrane Road. Access would be taken from two driveways off De Paul Drive leading to two central roadways which would connect to two driveways off Mission View Drive, as shown in Figure 2-3. An additional driveway would be located off Cochrane Road that would allow right-in and right-out vehicle movements. There would be a total of 1,367 parking spaces. Parking would be constructed in phases. During Construction Phase 1, the project would include 276 parking stalls for the proposed townhomes. During Construction Phase 2, 658 stalls would be added for the rental apartment units, and during Construction Phase 3, 433 stalls would be added for the proposed retail uses and hotel.

Figure 2-3 Proposed Conceptual Site Plan



Source: Architects Orange, 2022.

Grading and Drainage

The project area has been previously graded and would further be modified by additional grading with excavation estimated at 37,510 square feet and balanced onsite fill. Stormwater drainage would be directed to catch basins located throughout the project site and then conveyed via underground storm drainpipes to a stormwater detention pond along the northern project boundary. The storm drain system design would incorporate City standards for pipe sizes, maximum slopes, minimum flow velocities, and pipe material. The detention basin would be sized in accordance with the City's detention design criteria. Stormwater would be temporarily stored in the planned detention pond and pumped to the adjacent Cochrane Channel at discharge rates at or below pre-development levels, as required by the Santa Clara Valley Water District.

Landscaping and Trees

The project would involve new landscaping elements, including trees and vegetation along Mission View Drive and Cochrane Road, shrubs along the building perimeters and trees in parking areas. Additional trees and landscaping would be located in building courtyards. The landscaping plan would be subject to review and approval during the Design Permit process.

Electricity

Pursuant to Chapter 15.63 of Morgan Hill Municipal Code, new residences and structures developed under the proposed project would not utilize natural gas and would be designed to be all-electric. The project would also be designed to exceed state standards, but the percentage that would be exceeded is still to be determined.

Offsite Improvements

The project would include sidewalk and pavement improvements along road frontages that border the project site.

Construction

Construction would occur over three phases. Construction Phase 1 would consist of 104 units (175,000 square feet) of for-sale townhomes. Construction Phase 2 would consist of 394 units (410,000 square feet) of rental apartments. Construction Phase 3 would consist of the retail space and hotel. Construction would occur from March 2023 to September 2025 between the hours of 7 a.m. and 5 p.m. from Monday to Saturday. The construction schedule is detailed in Table 2-2. Construction would include 37,510 cubic yards of excavation, with balanced cut and fill.

Table 2-2 Construction Schedule

Phase of Construction	Dates	Phase 1	Phase 2	Phase 3
Site Preparation	Start Date: End Date:	3/2023 – 4/2023	3/2024 – 4/2024	3/2025 – 4/2025
Grading	Start Date: End Date:	5/2023 – 6/2023	5/2024 – 6/2024	5/2025 – 6/2025
Building Construction	Start Date: End Date:	7/2023 – 3/2025	7/2024 – 11/2024	4/2025 – 8/2025
Paving	Start Date: End Date:	6/2023 – 7/2023	6/2024 – 7/2024	6/2025 – 7/2025
Completion date for all construction	9/2025			

2.6 Project Objectives

The objectives of the project as proposed by the applicant include:

- Increasing the viability of the existing Cochrane Commons anchors and tenants
- Creating a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place
- Assisting in protecting the tax revenue generated by the current and future tenants and the long-term viability of Morgan Hill's retailers
- Providing much needed variety to the city's housing stock in the form of market rate and below market rate affordable housing
- Encouraging the development of the remainder of the shopping center

2.7 Required Approvals

The City of Morgan Hill is the lead agency with responsibility for approving the project. Approval from other public agencies is not required. This SEIR is intended to provide the information and environmental analysis necessary to assist the City in considering the approvals and actions necessary to adopt and implement the project. Such actions include:

- **Certification of a SEIR.** Certify the Cochrane Commons Phase II SEIR and make environmental findings pursuant to CEQA
- **Amendment to Zoning and General Plan Designation.** Adopt an amendment to the zoning map and General Plan land use map to convert the Phase II development area to Mixed Use Flex
- **Adopt a revised Planned Development Combining District and associated Master Plan.** Adopt a revised PD and Master Plan for Phase II to allow the proposed uses.
- **Design Permit.** Review and Approve a Design Permit consistent with Master Plan.

2.8 Relationship of Proposed Project to Previous EIR Analysis

In 2005, an EIR was certified for the Cochrane Commons Shopping Center, a project that included development of 590,100 square feet of retail space, a 12-pump gas station, and a 63,200-square-

foot movie theatre. The project was proposed to be built out in two phases, with the first phase covering the southwest portion of the site and the second phase covering the northeast portion of the site. The 2005 EIR covered both Phase I and Phase II of project construction. Construction of Phase I of the project was completed in 2007, consisting of 262,560 square feet of commercial retail, including a 127,732-square-foot Target store. Two commercial structures were also constructed on the eastern portion of the project site in the Phase II area and are currently occupied by a gas station and fast-food restaurant. In total, 303,429 square feet of retail space has been constructed, along with the gas station. Table 2-3 compares the proposed project to the project analyzed in the 2005 EIR. The 2005 EIR was certified in November 2005 (State Clearinghouse Number 2004112060) and assesses impacts from implementation of the Cochrane Road Planned Unit Development. The 2005 EIR is available on the City's website located at: <http://www.morgan-hill.ca.gov/2259/Cochrane-Commons-Phase-2>.

Table 2-3 Project Comparison to the 2005 EIR

Project Component	Proposed in 2005 EIR	Difference Between 2005 EIR Project and Existing Plus Proposed Project
Residential	None	+498 dwelling units (Phase I and II)
Hotel	None	+140 rooms (Phase II)
Retail	657,250 square feet (over Phase I and II)	-259,690 square feet (over Phase I and II)

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3 Environmental Setting

This section provides a general overview of the environmental setting for the proposed project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located in the City of Morgan Hill. The City is 13 square miles and located in the southern portion of Santa Clara County. It is approximately 20 miles south of downtown San José and 10 miles north of Gilroy. With an estimated 2021 population of 47,374, Morgan Hill is the ninth most populous of the county's 15 cities (Department of Finance 2021). The project site is located on the southwest corner of the intersection of Mission View Drive and Cochrane Road. Figure 2-1 in Section 2, *Project Description*, shows the location of the project site in the region. Figure 2-2 shows the location of the project site in relationship to the surrounding neighborhood.

A system of roadways, including arterials, collectors, and local streets, provide vehicular access throughout the City. Some of the major roadways include Monterey Road, Butterfield Boulevard, Hale/Santa Teresa Corridor, Cochrane Road, and Tennant Avenue. The closest freeway is U.S. 101, which bisects the City and provides north-south access. The project site is approximately 800 feet north of U.S. 101.

The City is part of the Santa Clara Valley, which is surrounded by mountains to the east, south, and west, while the Bay borders it to the north. Due to the influence of the topography and geography, the area has a Mediterranean climate with mild to moderate air temperatures year-round. The average maximum temperature during the summer is 87 degrees Fahrenheit and 61 degrees Fahrenheit during the winter. Annual the average temperature is 73 degrees Fahrenheit. Annually the City of Morgan Hill receives approximately 22 inches of precipitation with most of the rainfall concentrated in the winter months (Western Regional Climate Center 2022). The City of Morgan Hill is located approximately 17 miles inland from the coastline of the Pacific Ocean.

3.2 Project Site Setting

The project site is located in an urbanized area and is generally flat, with an average elevation of 388 feet above mean sea level. As shown in Figure 2-2 in Section 2, *Project Description*, the central and southern areas of the site are partially developed with parking lots, roadways, and paved areas. Trees are planted along Cochrane Road and De Paul Drive along the southern portion of the site. The southeast corner of the site near two existing commercial tenants is landscaped with ornamental trees and shrubs. The remainder of the site is undeveloped and contains ruderal vegetation, primarily mowed grasses and shrubs.

The project site is bordered by a commercial development (Cochrane Commons Phase I) to the west, Mission View Drive to the east, detached single-family residences to the north, and Cochrane Road to the south. Surrounding development includes detached single-family houses to the north, senior living apartments to the east, commercial retail in Phase I of the Shopping Center to the south, and single-family and industrial structures in agricultural operations to the west. Buildings range in height from one to two stories.

There are two existing commercial structures in the southern portion of the site, which are occupied by a gas station and a Burger King restaurant. In addition, the central and southern areas of the site are developed with parking lots, roadways, and paved areas, as shown in Figure 2-2. The site has both a land use designation of Mixed Use Flex and Commercial. The Mixed Use Flex designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre and a maximum floor area ratio of 0.5. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers. The maximum floor area ratio is 0.6. The project site is zoned Highway Commercial (CH), which seeks to provide areas adjacent to the freeway that can accommodate highway and tourist-oriented uses, and allows business services, restaurants and cafes, hotels, offices, retail services, and other related facilities (Morgan Hill 2018). Additionally, the project site has a Planned Unit Development Legacy Zone, which is a zoning district which was applied to a property prior to July 7, 2018 and remains the zoning in effect for the property (Morgan Hill 2018).

3.3 Cumulative Development

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be less than significant when analyzed separately but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. The cumulative scenario considered in the cumulative analysis in Section 4, *Environmental Impact Analysis*, is based on buildout of the City’s General Plan, which projects growth in the City through 2035. The City’s General Plan anticipates buildout to include an additional 963,545 square feet of retail development, 1,855 new single-family housing units, and 5,006 multifamily housing units. The Plan projects a population increase of approximately 50 percent from 2015 levels to a population of 68,057 (City of Morgan Hill 2017).

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the Cochrane Commons Phase II Project for the specific issue areas that were identified through the scoping process as having the potential to experience significant effects. A “significant effect” as defined by the *CEQA Guidelines* Section 15382:

means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the environmental setting related to the issue, which is followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City and other agencies, universally recognized, or developed specifically for this analysis to determine whether potential effects are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each effect under consideration for an issue area is separately listed in bold text with the discussion of the effect and its significance. Each bolded impact statement also contains a statement of the significance determination for the environmental impact as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per Section 15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under Section 15091 of the *CEQA Guidelines*.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact.** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a list of mitigation measures (if required) and the residual effects or level of significance remaining after implementation of the measure(s). In cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed and evaluated as a secondary impact. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area listed in Section 3, *Environmental Setting*.

The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

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4.1 Greenhouse Gas Emissions

This section analyzes impacts to greenhouse gas (GHG) emissions, including the potential for the project to generate GHG emissions in excess of standards or to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This resource area was not analyzed in the 2005 EIR; therefore, project-specific modeling was conducted for the purposes of this analysis.

4.1.1 Setting

a. Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases widely seen as the principal contributors to human-induced climate change include CO₂, CH₄, N₂O, fluorinated gases such as hydrofluorocarbons and perfluorocarbons, and sulfur hexafluoride.

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2020). However, since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by 47 percent, 156 percent, and 23 percent, respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

Globally, climate change has the potential to affect numerous environmental resources though potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century.

Regulatory Setting

a. Federal Regulations

Federal Clean Air Act

The U.S. Supreme Court determined in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) that the U.S. EPA has the authority to regulate motor vehicle GHG emissions pursuant to the federal Clean Air Act. The U.S. EPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the U.S. EPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 Supreme Court 2427 [2014]), the U.S. Supreme Court held the U.S. EPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a Prevention of Significant Deterioration or Title V permit. The Court also held that Prevention of Significant Deterioration permits otherwise required based on emissions of other pollutants may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

b. State Regulations

CARB is responsible for the coordination and oversight of state and local air pollution control programs in California. There are numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

California Advanced Clean Cars Program

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, the U.S. EPA granted the waiver of Clean Air Act preemption to California for its GHG emission standards for motor vehicles, beginning with the 2009 model year, which allows California to implement more stringent vehicle emission standards than those promulgated by the U.S. EPA. Pavley I regulates model years from 2009 to 2016 and Pavley II, now referred to as "LEV (Low Emission Vehicle) III GHG," regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles, and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, the rules will be fully implemented, and new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

California Global Warming Solutions Act of 2006 (AB 32 and Senate Bill [SB] 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT of CO₂e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

CARB approved the 2013 Scoping Plan update in May 2014. The update defined CARB's climate change priorities for the next 5 years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed SB 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with statewide per capita goals of 6 MT of CO₂e by 2030 and 2 MT of CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level) but not for specific individual projects, because they include all emissions sectors in the state (CARB 2017).

SB 375

The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy (categorized as "transit priority projects") can receive incentives to streamline CEQA processing.

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Metropolitan Transportation Commission (MTC)/Association of Bay Area Government (ABAG) was assigned targets of a 10 percent reduction GHGs from per capita GHG emissions from passenger vehicles by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles by 2035. The ABAG/MTC adopted the Plan Bay Area 2050 on October 21, 2021, which meets the requirements of SB 375.

California Integrated Waste Management Act (AB 341)

The California Integrated Waste Management Act of 1989, as modified by AB 341 in 2011, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities and (2) diversion of 50 percent of all solid waste on and after January 1, 2000.

SB 1383

Adopted in September 2016, SB 1383 (Lara, Chapter 395, Statutes of 2016) requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. SB 1383 requires the strategy to achieve the following reduction targets by 2030:

- CH₄ – 40 percent below 2013 levels

- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills.

SB 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state’s Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Executive Order B-55-18

On September 10, 2018, the former Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

California Building Standards Code

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards.

c. Local Regulations

Plan Bay Area 2050

Plan Bay Area 2050 is a state-mandated, integrated long-range transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (ABAG and MTC 2021). The SCS builds on earlier efforts to develop an efficient transportation network and grow in a financially and environmentally responsible way. Plan Bay Area 2050 focuses on advancing equity and improving resiliency in the Bay Area by creating strategies in the following four elements: Housing, Economy, Transportation, and Environment. The Plan discusses how the future is uncertain due to anticipated employment growth, lack of housing options, and outside forces, such as climate change and economic turbulence. These uncertainties will impact growth in the Bay Area and exacerbate issues for those who are historically and systemically marginalized and underserved and excluded. Thus, Plan Bay Area 2050 has created strategies and considered investments that will serve those systemically underserved communities and provide equitable opportunities. The Plan presents a total of 35 strategies to outline how the \$1.4 trillion dollar investment would be utilized. The strategies include, but are not limited to, the following: providing affordable housing, allowing higher-density in proximity to transit-corridors, optimizing the existing roadway network, creating complete streets, providing subsidies for public transit, reducing climate

emissions, and expanding open space area. To bring these strategies to fruition, it will require participation by agencies, policymakers, and the public. An implementation plan is also included as part of the Plan to assess the requirements needed to carry out the strategies, identify the roles of pertinent entities, create an appropriate method to implement the strategies, and create a timeline for implementation.

City of Morgan Hill General Plan

The City's 2035 General Plan Natural Resources and Environment Element contains the following policies related to GHG emissions (City of Morgan Hill 2017):

- **Policy NRE-15: Greenhouse Gas Emission Reduction Targets.** Maintain a greenhouse gas reduction trajectory that is consistent with the greenhouse gas reduction targets of Executive Orders B-30-15 (40 percent below 1990 levels by 2030) and S-03-05 (80 percent below 1990 levels by 2050) to ensure the City is consistent with statewide efforts to reduce greenhouse gas emissions
- **Policy NRE-15.2: Linking Land Use and Transportation.** Encourage land use and transportation patterns that reduce dependence on automobiles.
- **Policy NRE-15.4: Sustainable Land Use.** Promote land use patterns that reduce the number and length of motor vehicle trips.
- **Policy NRE-15.5: Jobs Housing Balance.** To the extent feasible, encourage a balance and match between jobs and housing.
- **Policy NRE-15.6: Residential Near Transit.** Encourage higher density residential and mixed-use development adjacent to commercial centers and transit corridors – the land along or within walking distance of a street served by transit.
- **Policy NRE-15.8: Walkable City.** Encourage retail and office areas to be located within walking and biking distance of existing and proposed residential developments.
- **Policy NRE-15.11: Green Building.** Promote green building practices in new development.

4.1.2 Impact Analysis

a. Significance Thresholds and Methodology

Significance Thresholds

The following thresholds are based on Appendix G of the *CEQA Guidelines*. GHG impacts would be considered significant if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when

viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]).

According to *CEQA Guidelines* Section 15183.5, project analysis can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. The City of Morgan Hill's CAP, adopted in December 2021, is not suitable for use under *CEQA Guidelines* Section 15183.5. Thus, this approach is not currently feasible for this analysis.

The next best approach would be to use a quantitative threshold from the local air district. According to the BAAQMD *CEQA Air Quality Guidelines* (2017), an efficiency threshold of 4.6 MT of CO₂e per service population per year is appropriate for mixed-use projects that include both residential and non-residential land uses. Therefore, this approach is appropriate for the project, which includes both residences and commercial space. Although the BAAQMD has not yet quantified a threshold for 2030, reduction of the 4.6 MT of CO₂e per service population per year threshold by 40 percent to 2.8 MT of CO₂e per service population per year would be consistent with the state reduction target established in SB 32. As such, the adjusted service population threshold of 2.8 MT of CO₂e per service population is the most appropriate threshold for the project. Additionally, this analysis qualitatively assesses consistency with local and statewide GHG reduction regulations.

Pursuant with the BAAQMD *CEQA Guidelines* (2017), new stationary sources should be evaluated separately from project operation emissions associated with land use. Therefore, GHG emissions from the three backup diesel generators are evaluated against a separate, standalone stationary source significance threshold established by BAAQMD. Stationary sources are not considered "cumulatively considerable" from a land use perspective if the stationary sources comply with the 10,000 MT of CO₂e per year threshold. Therefore, the significance threshold of 10,000 MT of CO₂e per year is used to determine the significance of the GHG emissions generated by the proposed diesel generators.

b. Methodology

GHG emissions associated with project construction and operation were estimated using California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., townhomes, mid-rise apartments, a hotel, and strip mall uses), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under Section 2, *Project Description*. As described in Section 1, *Introduction*, the CEQA baseline for the GHG analysis is existing conditions.

Construction

Construction emissions modeled include emissions generated by construction equipment used onsite and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the applicant-provided construction schedule and default-based construction equipment list. Construction would occur over approximately three overlapping phases (Phase 1, 2, and 3) from March 2023 to September 2025 (approximately 30 months/2.5 years). The schedule would be 6 days per week with construction active Monday through Saturday. The project would involve 37,510

cubic yards of cut material that would be balanced onsite, with no hauling export or import. It is assumed that construction equipment would be diesel-powered. This analysis assumes that the project would comply with applicable regulatory standards. In particular, the project would comply with the BAAQMD Regulation 8 Rule 3 for architectural coating. Additionally, the site is currently vacant, and no demolition would occur. Mitigation Measure 3.3-1 from the 2005 EIR was implemented during Phase I of the project when demolition occurred, and accordingly would not be implemented or required during Phase II.

Operation

Long-term operational emissions relate to area sources, energy use, solid waste, water use, and transportation. Operational emissions for the project were estimated using CalEEMod and adjustments to the CalEEMod inputs were implemented as described below.

Area Source Emissions

Emissions associated with area sources, including space and water heating, consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and use standard emission rates from CARB, USEPA, and emission factor values provided by the local air district. Pursuant to BAAQMD Regulation 8 Rule 3, volatile organic compound limits for nonflat coatings and traffic marking coatings were used in this analysis.

Energy Use Emissions

Emissions from energy use include electricity and natural gas use. The emissions factors for natural gas combustion are based on the U.S. EPA's AP-42 (*Compilation of Air Pollutant Emissions Factors*) and California Climate Action Registry General Reporting Protocol (2009). Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt-hour (California Air Pollution Control Officers Association [CAPCOA] 2021a). The electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies. CalEEMod currently incorporates California's 2019 Title 24 building energy efficiency standards. The Silicon Valley Clean Energy would be the energy provider for the project, and this is the utility provider used in the analysis.

Additionally, the developments proposed as part of the project would be fully electrified with no natural gas infrastructure. The default natural gas consumption assumed in the model was converted post-model into electricity consumption. The GHG emissions from the additional converted electricity consumption were added to the electricity GHG emissions computed by the model. The post-model conversion resulted in the addition of 4 MT CO₂e.

Solid Waste Emissions

GHG emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2021b). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by CalRecycle.

Water and Wastewater Use Emissions

GHG emissions from water and wastewater usage calculated in CalEEMod were based on the electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in

California using the average values for Northern and Southern California (CAPCOA 2021b). A 20 percent reduction in indoor potable water use was incorporated in the model in accordance with CALGreen standards, because the model does not capture this reduction.

Mobile Source Emissions

Mobile source emissions are generated by the increase in vehicle trips to and from the project site associated with operation of onsite development. The daily trip rates for the project were calculated using the transportation analysis provided by Hexagon Transportation Consultants Inc. (Appendix D). Mobile emissions also assumed 2030 fleet mixes and emission factors, as this is the year in which the project’s development is analyzed pursuant with the current GHG reduction goals.

Service Population

The project’s per person GHG emissions were calculated by dividing total GHG emissions by the project’s service population (residents plus employees). Average household size varies throughout California; therefore, the service population attributed to this project is based on average household size data specific to Morgan Hill. The average household size in Morgan Hill is 3.08 persons per household (California Department of Finance 2021). As such, the project would add an estimated 1,534 residents (498 units x 3.08 persons per unit) to the city. The project would also provide new employment opportunities. As shown in Table 4.1-1, the project would generate approximately 1,174 employees. Therefore, the project’s service population would be 2,708 persons.

Table 4.1-1 Service Population

Use	Area (sf)	Employee (sf) ¹	Total Persons
Hotel	203,280	1,500 sf per employee	136
Strip Mall	135,000	130 sf per employee	1,038
Residential Dwelling Units	498	3.08 persons per household	1,534
Total	–	–	2,708

sf = square feet
¹ Source: United States Green Building Council 2022

c. Prior Environmental Assessment

2005 EIR Summary

The 2005 EIR does not address the issue area of GHG emissions. Therefore, all of the CEQA checklist items listed above under Significance Criteria are addressed in the analysis below.

Threshold 1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact GHG-1 THE PROJECT WOULD GENERATE TEMPORARY AND LONG-TERM INCREASES IN GHG EMISSIONS, BUT SUCH EMISSIONS WOULD REMAIN BELOW THE ADJUSTED EFFICIENCY THRESHOLD INTENDED TO DEMONSTRATE CONSISTENCY WITH THE 2030 STATEWIDE GHG REDUCTION TARGET. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects

Construction

The BAAQMD does not have a recommended threshold for construction-related GHG emissions; therefore, emissions associated with construction are included only for informational purposes.

Construction of the proposed project would generate temporary GHG emissions primarily due to operation of construction equipment onsite as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. Construction of the proposed project would generate an estimated total of 2,676 MT of CO₂e (see Appendix C for modeling results).¹

Operation

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., architectural coating and landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 4.1-2, annual operational emissions generated by the proposed project would total approximately 5,790 MT of CO₂e per year, or approximately 2.1 MT of CO₂e per service person per year, which would not exceed the adjusted efficiency threshold of 2.8 MT of CO₂e per year. In addition, the GHG emissions emitted by the three emergency diesel generators would not exceed the BAAQMD stationary source threshold of 10,000 MT of CO₂e per year. Therefore, impacts would be less than significant.

Table 4.1-2 Annual Operational Emissions

Emission Source	Annual Emissions (MT of CO ₂ e per year)
Operation	
Area	6
Energy ¹	9
Mobile	5,521
Solid Waste	225
Water	29
Total Annual Emissions	5,790

¹ The construction schedule modeled in CalEEMod differs from the construction schedule described in Section 2, *Project Description*. However, the differences result in a more conservative analysis of GHG emissions.

Emission Source	Annual Emissions (MT of CO ₂ e per year)
Service Population (Residents + Employees)	2,708
Emissions per Service Person	2.1
Adjusted BAAQMD Efficiency Threshold (MT of CO ₂ e per service population per year)	2.8
Threshold Exceeded?	No
Stationary Source	
3x 150 kW Diesel Generators	12
BAAQMD Stationary Sources Threshold (MT of CO ₂ e per year)	10,000
Threshold Exceeded?	No
BAAQMD = Bay Area Air Quality Management District; kW = kilowatts; MT = metric ton; CO ₂ e = carbon dioxide equivalent ¹ The energy emission accounts for the post-model conversion of natural gas GHG emissions into electricity GHG emissions. Source: See Appendix C for modeling results.	

Threshold 2: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact GHG-2 THE PROJECT WOULD BE CONSISTENT WITH THE 2017 SCOPING PLAN AND PLAN BAY AREA 2050. THIS PROJECT WOULD NOT CONFLICT WITH AN APPLICABLE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS. NO IMPACT WOULD OCCUR.

Several plans and policies have been adopted to reduce GHG emissions in the state and Bay Area, including the State's 2017 Scoping Plan, Plan Bay Area 2050, and local policies contained in the City's General Plan. The proposed project's consistency with these plans is discussed in the following subsections.

2017 Scoping Plan

The principal state plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and VMT, maximizing recycling and diversion from landfills, and increasing water conservation. The project would be consistent with these goals through project design, which includes complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards and installing energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation, and electric vehicle charging stations. The project would be served by Silicon Valley Clean Energy (SVCE), which is required to increase its renewable energy procurement pursuant to SB 100 targets. The project site is located in an area served by transit and within walking and biking distance of several commercial and recreational destinations. There is a bus stop along Cochrane Road adjacent to the existing shopping center that is served by Valley Transportation Authority local Bus Route 87 and Rapid Route 568. VTA Bus Route 87 is a local bus route that provides services from Burnett Avenue in Morgan Hill to the Morgan Hill Civic Center. The Rapid Route 568 is a bus route that extends from the Gilroy Transit Center to the San Jose Diridon Station. Future residents, employees, and customers could travel to the project site via these bus routes. Additionally, onsite circulation would be provided between the project site the existing Cochrane Center shopping centers for

future residents and employees to walk between the sites. These factors would reduce future residents' and employees' VMT and associated fossil fuel usage.

Plan Bay Area 2050

SB 375, signed in August 2008, requires the inclusion of SCS in RTP to reduce GHG emissions. The MTC and ABAG adopted an SCS that meets the GHG reduction targets set forth by CARB. Plan Bay Area 2050 is a state-mandated, integrated long-range transportation, land-use, and housing plan that would support a growing economy, provide more housing and transportation choices and reduce transportation-related pollution in the nine-county San Francisco Bay Area (ABAG and MTC 2021). The Plan describes where and how the region can accommodate two million new people and one million new jobs from 2021 to 2050 and details the regional transportation investment strategy over the next 30 years. Growth in the plan area is promoted in Priority Development Areas and limited in Priority Conservation Areas to promote preservation of key resources. The RTP/SCS consists of 35 strategies and over 80 individual implementation actions, as well as an Implementation Plan that builds upon the Plan Bay Area 2040 Action Plan, which identifies specific actions that focuses and improves upon the categories of housing, economy, transportation, and environment. ABAG and MTC developed land use and transportation scenarios in the Plan known as Horizon that distribute the total amount of anticipated growth across the region and measure how well each scenario measures against the Plan goals. Based upon performance, the preferred scenario provides a regional pattern of household and employment growth and a corresponding transportation investment strategy (ABAG and MTC 2021). The strategies from Plan Bay Area 2050 related to GHG emissions and applicable to the project are shown in Table 4.1-3.

Table 4.1-3 Consistency with Plan Bay Area 2050

Policies	Consistency
Housing. Spur Housing Production for Residents of all Income Levels	
H3. Allow a greater mix of housing densities and types in Growth Geographies. Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and Select High-Resource Areas.	Consistent. The project would provide increased multifamily housing options in the City of Morgan Hill. The proposed residences would be in walking distance of existing retail uses, such as Target and Petco, and restaurants, like Red Robin Gourmet Burgers and Brew and Starbucks. There would be additional retail uses developed adjacent to the proposed residences.
Economic. Shift the Location of Jobs	
EC4. Allow greater densities for new commercial development in Growth Geographies. Allow greater densities for new commercial development in select Priority Development Areas and Transit-Rich Areas to encourage more jobs to locate near public transit.	Consistent. The project would include 135,000 square feet of new retail and a 140-room hotel, providing new employment opportunities for the City. The site is accessible via public transit (Valley Transportation Authority Local Bus Route 87 and Rapid Route 558) and by bicycle. Additionally, the site would increase walkability by constructing connecting streets, which would allow future residents and residents from the surrounding neighborhoods to walk to the project site.
Transportation. Build a Next-Generation Transit Network	
T8. Build a Complete Streets network. Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths.	Consistent. The project would include new sidewalks along Mission View Drive and provide a continuous connection to Cochrane Road. The onsite circulation would also allow customers, employees, and residents of the project to access the Cochrane Commons shopping center through the site.

Policies	Consistency
Environmental. Expand Access to Parks and Open Space.	
EN3. Fund energy upgrades to enable carbon neutrality in all existing commercial and public buildings. Support electrification and resilient power system upgrades in all public and commercial buildings.	Consistent. Pursuant to the City of Morgan Hill Municipal Code Chapter 15.63.040, the project would be all-electric with no natural gas infrastructure. The project would also procure electricity from Silicon Valley Clean Energy, which procured approximately 43 percent of its electricity from eligible renewable sources in its 2020 power content label (California Energy Commission 2021).
EN4. Maintain urban growth boundaries. Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions	Consistent. The project site is within the boundaries of Morgan Hill. The project would not disturb additional area nor would it require more space than what was analyzed in the 2005 Environmental Impact Report.
EN8. Expand clean vehicle initiatives. Expand investments in clean vehicles, including more fuel-efficient vehicles and electric vehicle subsidies and chargers.	Consistent. The project would provide electric vehicle charging spaces pursuant to the latest Title 24 building energy efficiency standards.
Source: ABAG and MTC 2021	

City of Morgan Hill General Plan

The City of Morgan Hill General Plan includes measures that would reduce GHG emissions by reducing energy use from buildings and equipment, encourage sustainable landscaping, and promoting alternative modes of transportation Table 4.1-4 summarizes the project’s consistency with applicable General Plan measures. As summarized therein, the project would be consistent with the applicable measures of the General Plan.

Table 4.1-4 Consistency with the City of Morgan Hill 2035 General Plan

Policies	Consistency
Policy TR-9.1 Private Development Connections. Ensure adequate pedestrian access in all developments, with special emphasis on pedestrian connections in the downtown area, in shopping areas, and major work centers, including sidewalks in industrial areas in accordance with the Trails and Natural Resources Master Plan.	Consistent. The project would include sidewalks and roadways that connect the Cochrane Commons Phase I and Phase II developments. Pedestrian connections would be provided onsite and there would be sidewalks along Cochrane Road, which would allow access to other commercial centers west of U.S. 101.
Policy NRE-10.4 Reduced Automobile Use. Reduced Automobile Use. To reduce air pollution the frequency and length of automobile trips and the amount of traffic congestion by controlling sprawl, promoting infill development, and encouraging mixed uses and higher density development near transit. Support the expansion and improvement of alternative modes of transportation. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that reduce vehicle trips.	Consistent. The project is an infill development that includes residences and commercial uses near transit corridors and in proximity to other mixed-use developments. There is a shopping center adjacent to the project site and additional commercial uses less than a mile west of the site. Valley Transportation Authority also has bus stops along Cochrane Road, which is within walking distance of the site, with routes traveling between San José and Gilroy.
Policy NRE-15.6 Residential Near Transit. Encourage higher density residential and mixed-use development adjacent to commercial centers and transit corridors—the land along or within walking distance of a street served by transit.	

Policies	Consistency
Policy NRE-15.11 Green Building. Promote green building practices in new development.	Consistent. The project would be developed in accordance with CALGreen and Title 24 building standards.
Policy NRE-16.1 Energy Standards for New Development. New Development, including public buildings, should be designed to exceed state standards for the use of energy.	Consistent. The project would be designed to exceed state standards.
Policy NRE-16.2 Energy Conservation. Promote energy conservation techniques and energy efficiency in building design, orientation, and construction	Consistent. The project would be constructed in accordance with City of Morgan Hill Municipal Code 15.63.040 and would not include natural gas (which is a greenhouse gas) infrastructure. Buildings would be 100 percent electric and would be served by SVCE.
Policy NRE-16.5 Energy Efficiency. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency	Consistent. The project would be constructed in accordance with City of Morgan Hill Municipal Code 15.63.040 and would not include natural gas (which is a greenhouse gas) infrastructure. Buildings would be 100 percent electric and would be served by SVCE. The base electricity from SVCE (e.g., GreenStart 2019 power mix) procures approximately 46 percent of its electricity from eligible renewable energy sources (CEC 2020). This percent procured from eligible renewable percent procurement would also increase over time in accordance with the State Bill 100 targets. Therefore, the project would be energy efficient and would minimize direct and indirect air pollutant emissions.
Policy SSI-14.2 Water Conservation. Support water conservation measures that comply with State and federal legislation and that are consistent with measures adopted in the Urban Water Management Plan.	Consistent. The project would comply and be consistent with the City's Urban Water Management Plan.
Source: City of Morgan Hill 2017	

As discussed in the table, the proposed project would not conflict with plans and policies aimed at reducing GHG emissions. No impact would occur.

Mitigation Measures

No mitigation measures required.

4.1.3 Cumulative Impacts

The geographic scope for related projects considered in the cumulative impact analysis for GHG emissions is global because impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources. Therefore, GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Section 4.1.1, *Setting*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed under Thresholds 1 and 2, project impacts related to GHG emissions would be less than significant and therefore not cumulatively considerable.

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4.2 Transportation

This section evaluates the impacts of the project on the local transportation system and VMT in the region. The analysis is based primarily on a Traffic Impact Study prepared by Hexagon Transportation Consultants in 2021, which is included as Appendix D to this SEIR.

4.2.1 Setting

The existing transportation-related context for the project is described below.

a. Existing Roadway Network

Regional

Regional access to the site is provided via U.S. 101, which is a north-south freeway that extends from San Francisco to Gilroy. U.S. 101 is an eight-lane freeway north of Cochrane Road and a six-lane freeway south of Cochrane Road.

Local Roads

Local access to the project site is provided via the following roadways:

- **Cochrane Road** is an arterial east-west roadway that runs from Monterey Road to the eastern foothills where it continues Malaguerra Avenue, east of U.S. 101. Cochrane Road is a four-lane road between Monterey Road and Cochrane Circle. Between Cochrane Circle and U.S. 101, Cochrane Road widens to three lanes eastbound and two lanes westbound, then narrows back to four lanes east of U.S. 101, and to two lanes east of Mission View Drive. Cochrane Road has posted speed limits of 40 and 45 miles per hour (mph).
- **De Paul Drive** is a north-south undivided local roadway that intersects Cochrane Road approximately 700 feet east of the U.S. 101 northbound ramps intersection and runs approximately 1,500 feet north and 1,000 feet south of Cochrane Road.
- **Half Road** is an east-east undivided collector roadway that runs from Condit Road to Cochrane Road. It has a posted speed limit of 35 mph.
- **Mission View Drive** is a north-south two-lane collector roadway that runs south from Eagle View Drive to Half Road. In the vicinity of the project site, Mission View Drive has a posted speed limit of 40 mph. Mission View Drive runs along the project's eastern frontage.
- **Main Avenue** is a two-lane arterial roadway that runs eastward from its intersection with DeWitt Avenue to Coyote Road at the base of the eastern foothills. The roadway has an overcrossing of U.S. 101, but no access to U.S. 101 is provided.
- **Condit Road** is a two-lane north-south collector roadway that extends from Half Road southward to Tennant Avenue. The speed limit on the roadway is 45 mph.

b. Bicycle Facilities

There are three categories of classified bikeways as defined by the Valley Transportation Authority (VTA).

- Class I bikeways are defined as off-street bike paths, which are shared with pedestrians and exclude general motor vehicle traffic.

- Class II bikeways are defined as striped bike lanes on street and rated streets. Rated streets are streets that are frequently used by bicyclists and the roadway is shared with motor vehicles.
- Class III bikeways are defined as bikeways that only have signs to help guide bicyclists on recommended routes to certain locations.

In the project vicinity, Class II bike lanes are currently provided along the extent of Cochrane Road and Mission View Drive north of Cochrane Road along the project's frontage. A Class I unpaved bike path, the Madrone Channel Trail, runs along the east side of U.S. 101, between Tennant Avenue and Cochrane Road.

c. Pedestrian Facilities

Pedestrian facilities include crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities.

In vicinity of the project site, sidewalks are provided along the following roadways:

- Cochrane Road: Sidewalks are provided along the north side of the street between Butterfield Boulevard and White Moon Drive. Along the south side of the street, sidewalks are provided from Monterey Road just east of Mission View Drive with the exception of the segments between U.S. 101 northbound ramps and De Paul Drive and a short segment west of Mission View Drive.
- Mission View Drive: Sidewalks are provided along the east side of the street between the northern end of Mission View Drive (at Eagle View Drive) until approximately 950 feet north of its intersection with Half Road. There are no sidewalks along the west side of Mission View Drive, with the exception of curb ramps located at the northwest and southwest corners of the Mission View Drive and Cochrane Road intersection.

Along De Paul Drive, sidewalk is only provided for a short segment near the existing Target store. Sidewalks are not provided on any other section or side of the roadway.

d. Transit Facilities

Transit service providers in the project site vicinity include VTA and Caltrain. VTA provides bus services, while Caltrain provides rail services.

VTA Bus Service

The two bus routes that are in proximity to the project site are Local Bus Route 87 and Rapid Route 568. Local Bus Route 87 runs along Burnett Avenue to the Civic Center in Morgan Hill. Route 87 operates between 7:00 a.m. and 6:00 p.m. with approximately 60-minute headways in the a.m. and p.m. commute periods. The nearest Route 87 bus stop to the project site is located near the De Paul Drive and Cochrane Road intersection. Rapid Route 568 operates on Butterfield Boulevard and Cochrane Road on its route between the Gilroy Transit Center and the San Jose Diridon Transit Center. Route 568 operates between 5:30 a.m. and 8:00 p.m. with approximately 30-minute headways in the peak commute periods. The nearest Route 568 bus stops to the project site are located near the Cochrane Circle and Cochrane Road intersection, approximately 1 mile west of the project site.

Caltrain

Caltrain provides commuter rail service between San Francisco and Gilroy. The Morgan Hill Caltrain Station is located along Depot Street, approximately 2.5 miles west of the project site. At the Morgan Hill Station, Caltrain provides three northbound trains during the morning commute period with approximately 30-minute headways and three southbound trains during the afternoon commute period with approximately 40- to 80-minute headways.

4.2.2 Regulatory Setting

a. State Regulations

Senate Bill 375

Senate Bill (SB) 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the California Air Resources Board (CARB) to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations to prepare a Sustainable Communities Strategy (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. On March 22, 2018, the regional targets were updated (CARB 2018).

The Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC) were assigned targets of a 10 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction by 2035. On October 21, 2021, ABAG and MTC adopted the most recent RTP/SCS, called Plan Bay Area 2050, to meet the assigned reduction targets through implementation of housing, economic, transportation, and environmental measures (ABAG and MTC 2021a).

Senate Bill 743

SB 743 was signed into law by Governor Brown in 2013 and tasked the Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also states that alternative measures of transportation impacts may include "vehicle miles traveled (VMT), vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

On September 27, 2013, California Governor Jerry Brown signed SB 743 into law and started the process to change transportation impact analysis as part of CEQA compliance. SB 743 required the Governor's OPR to identify new metrics for identifying and mitigating transportation impacts in CEQA. In January 2018, the OPR transmitted its proposed *CEQA Guidelines* implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the *CEQA Guidelines*, which incorporated SB 743 modifications that are now in effect. SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, Section 21099 (b)(2)). In addition to new exemptions for projects consistent with specific plans, the *CEQA Guidelines* replaced congestion-

based metrics, such as auto delay and level of service (LOS), with VMT as the basis for determining significant impacts, unless the *CEQA Guidelines* provide specific exceptions.

b. Regional Regulations

Metropolitan Transportation Commission

The current RTP/SCS produced by AMBAG and MTC, Plan Bay Area 2050, was adopted on October 21, 2021. The Plan sets forth regional transportation and land use policy, and provides capital program planning for all regional, state, and federally funded projects. In addition, the Plan provides strategic investment recommendations to improve regional transportation system performance through the year 2050, including investments in regional highway, transit, local roadway, bicycle, and pedestrian projects. Transportation projects programmed in the vicinity of Morgan Hill include ramp metering improvements (ABAG and MTC 2021b)

c. Local

City of Morgan Hill General Plan

The City of Morgan Hill 2035 General Plan was adopted on July 27, 2016 and revised on December 6, 2017. The Transportation Element includes goals, policies, and actions about traffic, circulation, parking, transit, bikeways, and pedestrian networks, and regional coordination. The following policies would be relevant to the project:

- **Policy TR-3.3: Timing of Street Construction from Private Development.** Require developers to provide for the construction of their portions of arterial and collector streets at the time of development.
- **Policy TR-3.6: Unacceptable Impacts from Mitigation Measures.** The types of impacts from identified vehicular traffic mitigation measures that may be determined by the City to be unacceptable include, but are not limited to the following:
 - Those that would encourage substantial neighborhood or community cut-through traffic;
 - Those that would eliminate or reduce the width of a sidewalk below minimum City standard, where there is not sufficient planned public right-of-way to relocate the sidewalk;
 - Those that would eliminate a bicycle lane or reduce its width below City standard, where there is not sufficient planned public right-of way to relocate the bicycle lane;
 - Those that would create unsafe pedestrian, bicycle, or vehicular operating conditions;
 - Those that would eliminate a bus stop or a parking lane that accommodates a bus stop, which cannot be relocated;
 - Those that would require acquisition of substantial existing buildings, and/or extraordinarily high cost of land acquisition, or an extraordinarily high project cost in relation to benefits achieved.
- **Policy TR-3.7: Alternate Mitigation Measures and Conditions of Approval.** Alternate mitigation measures and/or conditions of approval may include, but not be limited to making improvements to other facilities that assist with maintaining or improving projected levels of service, payment of an in-lieu fee to the City to be used to improve other components of the City's transportation system, developer installation of transportation improvements, and/or

incorporation of physical features and operational programs into a project that support Trip Reduction/Travel Demand Management goals.

- **Policy TR-3.8: Monitoring for Safety and Congestion Improvements.** While mitigation measures may not be required because level of service would not fall below an applicable LOS E or F standard, the City, developers, property owners, and others are not precluded from identifying and implementing improvements and strategies to improve level of service and reduce congestion. The City should periodically monitor actual traffic conditions and accident data and identify improvements and/or operational strategies that would improve safety and congestion levels, as practical and cost-effective.
- **Policy TR-3.16: Private Development Access along Arterials.** Require development that occurs along arterial streets to obtain access through a local street or major entrance and not through curb cuts directly onto the arterial street wherever possible.
- **Policy TR-3.17: Planned Development Access near Highway 101.** Require Planned Developments (PDs) for commercial, office, or industrial uses at the intersections of Highway 101 and arterial streets to take access from a public street intersecting with the arterial street at a minimum distance of 600 feet from the freeway on and off ramps, unless the City Engineer finds that direct access to the arterial street or closer access will meet safety standards, or that mitigating actions will be taken to ensure safe access and minimum interference with traffic flows.
- **Policy TR-3.20: Arterial Design and Landscaping.** Require development adjacent to arterial streets to minimize the use of fences and walls wherever possible. Strive to accommodate all modes of travel on arterial streets, and improve the Butterfield Corridor, Monterey Road Corridor, and Hale/Santa Teresa Corridor to the extent feasible as well-landscaped multi-modal boulevards. Continue to implement the program for planting street trees and landscaping arterial streets and major intersections.

4.2.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

VMT refers to the amount and distance of automobile travel “attributable to a project.” VMT re-routed from other origins or destinations as the result of a project would not be attributable to a project except to the extent that the re-routing results in a net increase in VMT. Daily VMT per worker is the average number of vehicle miles that a worker in a given area travels per day.

Pursuant to California Public Resources Code Section 21099(b)(2) and *CEQA Guidelines* Section 15064.3, “a project’s effect on automobile delay shall not constitute a significant environmental impact.” Therefore, this analysis uses the metric of VMT to analyze transportation-related impacts consistent with SB 743 and the *CEQA Guidelines*. Because the City has updated its CEQA thresholds in accordance with these state regulations, this analysis does not make significance conclusions with respect to changes to LOS, a term used to describe the operating conditions of a roadway by reviewing speed, travel time, congestion, delays, and safety on the road. The VTA developed a VMT Evaluation Tool to determine CEQA transportation impacts. However, the VMT Evaluation Tool can only analyze residential uses and is not capable of estimating VMT for non-residential or non-office/industrial uses.

For nonresidential or non-office projects, very large projects, or projects that can potentially shift travel patterns, a Travel Demand Forecasting (TDF) model must be used to determine project VMT. The VTA's VMT tool was used to estimate VMT for the residential uses proposed by the project. The VTA's VMT tool streamlines how project VMT is calculated using the following inputs: Assessors' Parcel Number, type of development, project location, and proposed trip reduction measures. However, since the proposed project would include retail for which the VMT tool is not capable of estimating VMT, the VTA's Countywide TDF model was utilized to complete the VMT evaluation for the proposed retail uses. The VTA's Countywide TDF model is a mathematical representation of travel that accounts for trip generation, trip distribution, mode choice, and trip assignment. The VMT computed by the TDF model also accounts for socioeconomic inputs that are aggregated by traffic analyses zones, which are specific geographic areas.

As described in Section 1, *Introduction*, the CEQA baseline for analysis in this section is the existing site conditions.

Significance Thresholds

The following thresholds are based on Appendix G of the *CEQA Guidelines*. Transportation impacts would be considered significant if the project would:

1. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
2. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)
3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)
4. Result in inadequate emergency access

Project VMT Threshold

According to the OPR's Technical Advisory on Evaluating Transportation Impacts, a 15 percent reduction in VMT per capita from existing development is "generally achievable" and supportive of California goals to reduce GHG emissions (OPR 2018). However, state guidance allows localities to set their own VMT standards based on substantial supporting evidence. The OPR recommends evaluating VMT impacts using an efficiency-based version of the metric, such as VMT per resident for residential developments or VMT per worker for office or other employment-based developments.

RESIDENTIAL VMT THRESHOLD

Based on the VTA's VMT Evaluation Tool, the citywide average VMT per capita is currently 24.64. Therefore, a 15 percent reduction would set the residential VMT significance threshold at 20.94 VMT per capita.

RETAIL USE VMT THRESHOLD

Pursuant to the technical advisory, projects that include retail uses are said to create a significant adverse impact on VMT when the project results in any increase in the total VMT.

HOTEL USE VMT THRESHOLD

For mixed-use projects, the OPR allows lead agencies to evaluate only the project's dominant use. Since the proposed residential and retail components of the project would be the dominant land use (both residential and retail uses would generate a much greater number of daily trips when compared with the proposed hotel uses), the CEQA impact evaluation for the project is based only on the residential and retail components of the project.

b. Prior Environmental Analysis

2005 EIR Summary

Impacts to Transportation and Circulation are analyzed in Section 3.12 of the 2005 EIR. The section analyzes the project's impacts on traffic in terms of LOS, site access, onsite circulation, public transit facilities, pedestrian facilities, bicycle facilities, and parking availability. The 2005 EIR does not address consistency with *CEQA Guidelines* Section 15064.3, subdivision (b), or the adequacy of emergency access.

Transportation and circulation impacts identified in the 2005 EIR are summarized below.

Intersection Level of Service Impacts

ROADWAY INTERSECTIONS

The 2005 EIR found that the project would generate 22,009 net new daily trips, 533 net-new AM Peak Hour trips, 1,869 net-new PM Peak Hour trips, and 2,415 net new Saturday midday peak-hour trips. These new additional trips would cause the unsignalized intersection of Cochrane Road/Mission View Drive to operate at unacceptable LOS during peak hours and the project would exacerbate unacceptable operations at the Dunne Avenue/Monterey Road intersection during PM Peak Hour. This was found to be a significant impact. However, implementation of the roadway geometry and required traffic signal described in Mitigation Measures 3.12-1a and 3.12-1b was found to reduce impacts to a less-than-significant level.

Freeways

The EIR found that the proposed project would generate new trips on U.S. 101 that would exacerbate current unacceptable LOS. The segment of U.S. 101 between Tennant Avenue and Dunne Avenue operates at LOS F, and the project would add a volume greater than 1 percent of the capacity to this segment. Therefore, the project would have a significant impact and Mitigation Measure 3.12-2 would be required. However, even with implementation of Mitigation Measure 3.12-2, the project's contribution to existing traffic levels would not be reduced, and impacts would be significant and unavoidable.

Site Access

The EIR found that impacts related to site access would be less than significant with implementation of Mitigation Measures 3.12-3 and 3.12-4. Mitigation Measure 3.12-3 would eliminate two driveways to reduce vehicle conflicts with pedestrians, and Mitigation Measure 3.12-4 would designate the southernmost provide driveway to be a right-turn-in and out-only driveway to avoid potential vehicle conflicts.

Onsite Circulation

The EIR found that to improve onsite circulation the project would need to implement Mitigation Measures 3.12-5 and 3.12-6 to reduce impacts to a less-than-significant level. Mitigation Measure 3.12-5 would reduce speeds on De Paul Drive by developing project design features that would discourage speeding. Mitigation Measure 3.12-6 would relocate the designated loading zone to avoid a driving hazard at a nearby onsite intersection.

Public Transit, Pedestrian, and Bicycle Facilities

PUBLIC TRANSIT FACILITIES

As described in the 2005 EIR, the existing bus stop on Mission View Drive south of Cochrane would not be able to properly accommodate transit riders generated by the project. To reduce the potentially significant impact, Mitigation Measure 3.12-7 would require that the project construct a new stop along the project frontage with transit amenities. With implementation of Mitigation Measure 3.12-7, the impact was found to be less than significant.

PEDESTRIAN FACILITIES

The 2005 EIR found that while the project would construct a continuous sidewalk along the project frontage, there would be no pedestrian crossings at the major intersections adjacent to the project. No pedestrian crosswalks would be provided at the four legs of the Cochrane Road/Mission View Drive intersection and the Cochrane Road/De Paul Drive intersections. There would be no safe pedestrian crossing at these intersections. Impacts would be potentially significant, but with incorporation of Mitigation Measure 3.12-8, a pedestrian crosswalk would be provided on all four legs of the Cochrane Road/Mission View Drive intersection and all legs of the Cochrane Road/De Paul Drive intersection except the west leg, because a separate pedestrian signal phase would degrade intersection operations along this leg. The impact would be reduced to a less-than-significant level.

BICYCLE FACILITIES

The 2005 EIR found that the project would create a demand for bicycle facilities but that no bicycle facilities were part of the preliminary project site plans. This was found to be a potentially significant impact. However, implementation of Mitigation Measure 3.12-9 would require that the project incorporate bicycle facilities into the project design, which would reduce the impact to a less-than-significant level.

Parking

The 2005 EIR found that the project would not provide sufficient parking supply to meet the demand generated by the proposed land uses. Mitigation Measure 3.12-10 would be required to ensure that the overall number of parking spaces is increased in the project design to reduce impacts to less-than-significant levels.

Table 4.2-1 lists the 2005 EIR's mitigation measures related to transportation and circulation. Pursuant to Public Resource Code, Section 21099 (b)(2), traffic congestion, while potentially an inconvenience to drivers, is not itself an environmental impact. Therefore, issues related to traffic congestion are currently outside the scope of the CEQA analysis but will be considered as conditions of approval as appropriate for consistency with the General Plan. This list also excludes mitigation measures relevant to cumulative development, because the 2005 EIR's cumulative setting consists

of recently approved projects when the project was originally proposed. This historic cumulative setting does not apply to the proposed project.

Table 4.2-1 2005 EIR Mitigation Measures: Transportation and Traffic

Mitigation Measure	Description
Impact 3.12-1 Intersection Level of Service Impacts	
Mitigation Measure 3.12-1a	At the Dunne Avenue/Monterey Road intersection, the westbound right-turn lane shall be restriped as a shared through/right-turn lane, and a northbound right-turn overlap phase shall be installed. This improvement would be required when 35 percent of the project has been constructed based on total PM Peak Hour trip generation
Mitigation Measure 3.12-1b	At the Cochrane Road/Mission View Drive intersections, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry: ▪ The northbound approach should include one left-turn lane and one shared through/right-turn lane. ▪ The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane. ▪ The southbound approach should include one left-turn, one shared through/right-turn lane, and one right-turn lane. ▪ The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.
Impact 3.12-2 Freeway Level of Service Impacts	
Mitigation Measure 3.12-2	The project shall implement the applicable actions listed in the <i>Immediate Implementation Action List</i> contained in the <i>Deficiency Plan Guidelines</i> of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system. The <i>Immediate Implementation Action List</i> comprises a general listing of the types of the measures which can be implemented by project sponsors and/or lead agencies. The listed actions which can be implemented at the project-specific level include improvements to the bicycle and pedestrian facilities, improvements to the public transit facilities, and information programs to encourage Transportation Demand Management measures, such as carpooling. (The full list is contained in Appendix H of the traffic report which is contained in Appendix D of this EIR.) The proposed project would implement several of these action items, either as part of the proposed project or as mitigation measures (for transportation and/or air quality impacts) identified elsewhere in this SEIR. These actions include: ▪ Pedestrian circulation system improvements including sidewalks along project frontages, crosswalks at adjacent intersections and project driveways, internal project sidewalks and marked pedestrian paths providing internal pedestrian circulation; ▪ Bicycle system improvements including dedication of right-of-way for Class II bike lane along project street frontages, and installation of on-site bicycle storage facilities; ▪ Transit improvements such as provision of transit stop on project Cochrane Road frontage, and posting of transit schedule and fare information on project employer's bulletin boards.

Mitigation Measure	Description
Impact 3.12-3 Site Access	
Mitigation Measure 3.12-3	The two driveways shown directly behind the movie theater complex on Mission View Drive (i.e., the second and third driveways north of the Cochrane Road intersection) should be eliminated from the proposed project, and a circulation aisle should be provided behind the movie theater complex
Impact 3.12-4 Site Access	
Mitigation Measure 3.12-4	The southernmost project driveway should be designated as a right-turn-in and out-only driveway (i.e., signs should be posted prohibiting left turn movements into or out of the project site at this driveway).
Impact 3.12-5 Onsite Circulation	
Mitigation Measure 3.12-5	The following modifications are identified on the main north-south circulation aisle to discourage speeding and provide more visible crosswalks for pedestrians: a) At the first intersection north of Cochrane (i.e., between Shops K and Pad 7, and between Shops B and Pad 2), stop signs should be installed on the side street approaches; b) At the second intersection north of Cochrane, provide one of the following alternative configurations: i) Provide raised intersection to provide vertical displacement, and provide stop signs on the side street approaches; or ii) Provide stop signs on all four approaches; c) At the third intersection north of Cochrane, provide stops signs on all four approaches.
Impact 3.12-6 Onsite Circulation	
Mitigation Measure 3.12-6	The designated loading zone shall be relocated far enough to the east to allow the intersection approach lane to be reduced to one lane.
Impact 3.12-7 Public Transit Facilities	
Mitigation Measure 3.12-7	The project applicant shall construct a new bus stop along the project frontage, including transit amenities such as a bus turnout, a shelter, and benches
Impact 3.12-8 Pedestrian Facilities	
Mitigation Measure 3.12-8	Pedestrian crosswalks shall be provided on all four legs of the Cochrane Road/De Paul Drive intersection.
Impact 3.12-9 Bicycle Facilities	
Mitigation Measure 3.12-9	The following bicycle facilities shall be incorporated into the project: a) Bicycle racks and/or lockers to accommodate bicycle travel by customers and employees. Bicycle parking facilities should be located in high visibility areas in order to encourage bicycle travel and discourage theft and vandalism. b) Class II bicycle lanes along the project street frontages.
Impact 3.12-10 Parking	
Mitigation Measure 3.12-10	The overall number of parking spaces included in the project shall be required to meet the aggregate parking demand of the various land uses proposed in the project, to be determined as follows. At the time of the subsequent discretionary approval (e.g., use permit, design review) for each individual restaurant pad or space, the parking supply provided for each such pad or space shall meet the peak parking demand for the specific type of restaurant proposed (e.g., site down, fast-food), as determined through either the applicable City code parking requirement, or through applications of the Institute of Transportation Engineers shared parking rates for 1 p.m. on a weekend day (plus 10 percent). After the center is 75 percent builtout on the basis of floor area (assuming the cinemas have been completed), the calculation

Mitigation Measure	Description
	of parking requirements for new restaurant uses may be adjusted based on the results of physical parking surveys conducted at the center by a qualified transportation consultant during the peak usage period. (If the cinemas have not been completed upon 75 percent project completion, then the buildout threshold for such calculations shall be 85 percent of project buildout.) As a guide to the approximate maximum floor area of restaurant that can be constructed without resulting in a parking deficiency for the project, the maximum floor area can range from 25,000 square feet (assuming 100 percent sit-down restaurant) to 41,000 square feet (assuming 100 percent fast-food restaurant), although the actual maximum will fall between these numbers if the project ultimately includes a mix of the two restaurant types. (These maximum figures assume floor areas for all other project uses will remain as proposed on the May 2, 2005 project site plan.)
Source: City of Morgan Hill 2005	

c. Project Impacts and Mitigation Measures

Threshold 1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Impact TRA-1 THE PROJECT WOULD NOT CONFLICT WITH APPLICABLE POLICIES ADDRESSING TRANSIT, BICYCLE, AND PEDESTRIAN FACILITIES. IMPACTS RELATED TO TRANSIT, BICYCLE AND PEDESTRIAN FACILITIES WOULD BE LESS THAN SIGNIFICANT.

Pedestrian Facilities

Pedestrian facilities exist along the east side of Mission View Drive and the north side of the section of Cochrane Road immediate to the project site. There are intermittent sidewalks along the southern side of Cochrane Road, a short segment of sidewalk west of Mission View Drive, and no sidewalks provided between the U.S. 101 northbound ramps and De Paul Drive. As discussed in the Transportation Analysis (Appendix D), the project would include the construction of sidewalks along the entire frontage of Mission View Drive that would connect to the existing sidewalks on the north side of Cochrane Road. Constructing a continuous sidewalk from Mission View Drive to Cochrane Road would provide a safe connection between the project site and the surrounding land uses for the new pedestrian trips that would be generated by the project. Pedestrian connectivity to and from the project site would be adequate. Therefore, the project would be consistent with City's policies related to pedestrian facilities, and this impact would be less than significant.

Bicycle Facilities

Class II bike lanes are located along Cochrane Road and Mission View Drive and there is a Class I unpaved bike path that runs along the east side of U.S. 101 from Tennant Avenue to Cochrane Road. The project would generate up to eight new bicycle trips during the peak hours (Appendix D), which would be accommodated by the existing bicycle facilities in proximity to the project site. Existing and planned bicycle facilities would provide adequate access for bicyclists (Appendix D). Therefore, the project would be consistent with the City's policies related to bicycle facilities, and this impact would be less than significant.

Transit Facilities

The VTA provides bus services and Caltrain provides rail services in Morgan Hill. The bus stops closest to the project site are served by Local Route 87 and Express Route 568, which also provide connections to the Morgan Hill Caltrain Station that is approximately 2.5 miles west of the project site.

The project involves the development of 498 townhomes/apartment units, a 140-room hotel, and 135,000 square feet of retail use. The project would be expected to generate a maximum of 24 new transit riders during each peak hour (Appendix D). With the completion of sidewalks along Mission View Drive, residents, employees, and customers would be able to walk to the Route 87 bus stop at the De Paul Drive and Cochrane Road intersection and to the Rapid Route 568 bus stop on Butterfield Boulevard and Cochrane Road. The existing public transit and school bus routes are adequate to accommodate the additional demand generated by the project, and existing bus stops accessible via continuous sidewalks are in an acceptable walking distance of the site (Appendix D). Therefore, the project would be consistent with City policies related to transit facilities, and this impact would be less than significant.

Mitigation Measures

Impacts would be less than significant without mitigation. Neither new mitigation measures nor mitigation measures included in the 2005 EIR would be required.

Threshold 2: Would the project conflict or be inconsistent with *CEQA Guidelines* section 15064.3, subdivision (b)?

Impact TRA-2 THE PROJECT WOULD EXCEED THE APPLICABLE SIGNIFICANCE THRESHOLD FOR VMT. EVEN WITH MITIGATION MEASURE TRA-1, THE PROJECT WOULD NOT FALL BELOW THE APPLICABLE RESIDENTIAL VMT PER CAPITA THRESHOLD. IMPACTS WOULD BE SIGNIFICANT AND UNAVOIDABLE.

As described in Section 4.2.3, *2005 EIR Summary*, the 2005 EIR did not discuss impacts related to VMT since LOS was the preferred methodology at the time of the analysis. In compliance with SB 743 and *CEQA Guidelines* Section 15064.3, this analysis uses the metric of VMT to analyze transportation-related impacts. The significance threshold for residential VMT per capita is 20.94 and for retail VMT any increase in VMT is the threshold (Appendix D).

Residential VMT

Based on the results of the VTA VMT Evaluation Tool, the project would generate 28.51 VMT per capita. This exceeds the threshold of 20.94 VMT per capita. This is a potentially significant impact.

Retail VMT

The results of the VTA's TDF are summarized in Table 4.2-2. As shown in Table 4.2-2, there would be an overall decrease in retail VMT with total VMT decreasing by 4,354 VMT per day. With the project, there would be 1,231 fewer daily work VMT and 3,123 fewer daily shop VMT (Appendix D). The decrease is largely due to the proximity of existing residences to the retail center and the proposed onsite residences. Having shopping opportunities nearby would shorten trips for employees and retail customers. Therefore, the proposed retail use would not generate new VMT.

Table 4.2-2 Retail VMT Analysis

VMT Analysis for TAZ's with Shifted Jobs	No Project	Project	Project – No Project
Home-Based Work VMT	161,830	160,599	-1,231
Home-Based Work VMT	140,496	137,373	-3,123
Total VMT	302,326	297,972	-4,354
Source: Hexagon Transportation Consultants, Inc., Transportation Analysis, Appendix D			

Mitigation Measures

The following new mitigation measure is required to address the significant impact related to residential VMT per capita. This measure was not included in the 2005 EIR.

TRA-1 VMT Reductions

The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below:

- **School Pool Programs:** Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT
- **Transit Service Expansion.** The project shall subsidize transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT
- **Voluntary Travel Behavior Change Programs.** Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT

Significance After Mitigation

Even with incorporation of Mitigation Measure TRA-1, VMT per capita would not be reduced by 27 percent, which is the percent needed to reduce the VMT per capita below the threshold. There are no feasible mitigation measures or combination of measures that would reduce the overall project VMT per capita by 27 percent. Therefore, the impact would remain significant and unavoidable.

Threshold 3: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?
--

Impact TRA-3 THE PROJECT WOULD NOT INTRODUCE DESIGN FEATURES OR INCOMPATIBLE USES THAT COULD INCREASE TRAFFIC HAZARDS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Site Access

Site access is proposed via a new right-turn only driveway along Cochrane Road, as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project would include frontage improvements along Mission View Drive to include curb, gutter and sidewalk along with the new access points. There would be no site access issues at any of the proposed driveways onsite. To enhance site access and safety conditions, Hexagon Transportation Consultants recommended that a center-striped median be provided along Mission View Drive between the Cochrane Road and the northern project site driveway; this will be considered by the City during project review but is not needed to address a significant environmental impact so is not included as a mitigation measure in this EIR. This improvement would allow left-turns into project driveways along Mission View Drive. However, due to the minimal amount of traffic expected along Mission View Drive, no significant queuing or operational issues would occur at the project driveways. Therefore, the project would not result in significant adverse safety impacts, nor would the project result in significant intersection safety concerns.

Onsite Circulation

There would be no significant safety issues with onsite circulation. The two main internal access roadways would be De Paul Drive and Mission View Drive. Secondary roadways and drive aisles would connect to the primary access roadways and provide access to the proposed residences and retail. There would be dead-end aisles but only in the townhome areas, and these areas would primarily be accessed by future residents. While the onsite circulation is adequate, to enhance safety, Hexagon Transportation Consultants recommended that speed-reducing measures be implemented along the primary access roadways to discourage speeding and that signage be posted at the entrances of the townhouse drive aisles restricting access only to residents. This will be considered by the City during project review but is not needed to address a significant environmental impact so is not included as a mitigation measure in this SEIR.

Intersection Operations – Queuing

As shown in Table 4.2-3, the left-turn queues during the PM Peak Hour at the Cochrane Road and Mission View Drive intersection are exceeded under existing conditions and would continue to be exceeded with the proposed project. The addition of project traffic would lengthen the projected queue by one vehicle (or approximately 25 feet) during PM Peak Hour conditions. To improve the queuing conditions at the intersection, Hexagon Transportation Consultants recommended that a second northbound left-turn lane be added; this will be considered by the City during project review but is not needed to address a significant environmental impact so is not included as a mitigation measure in this SEIR. Even though the queuing at the northbound left-turn pocket at Mission View Drive and Cochrane Road exceeds the available storage capacity and would increase further with addition of the project's traffic, significant adverse safety or operational effects would not occur (Appendix D).

Table 4.2-3 95th Percentile Left-Turn Queues at Nearby Intersections

Study Intersection	Cochrane Road and De Paul Drive Eastbound Left AM	Cochrane Road and De Paul Drive Eastbound Left PM	Cochrane Road and De Paul Drive Eastbound Left AM	Cochrane Road and De Paul Drive Eastbound Left PM	Mission View Drive and Cochrane Road Eastbound Left AM	Mission View Drive and Cochrane Road Eastbound Left PM	Mission View Drive and Cochrane Road Northbound Left AM	Mission View Drive and Cochrane Road Northbound left PM
Existing Conditions								
Cycle Length (seconds)	60	60	6	60	60	60	60	60
Lanes	1	1	2	2	1	1	1	1
Volume (vehicles per hour)	39	142	196	446	16	63	536	192
Volume (vehicle per hour per lane)	39	142	98	223	16	63	536	192
95th Percentile. Queue (vehicle/lane)	2	5	4	7	1	3	14	6
95th Percentile Queue (feet/lane)	50	125	100	175	25	75	350	150
Storage (feet/lane)	450	450	275	275	225	225	100	100
Adequate (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Existing Plus Proposed Project Conditions								
Cycle Length (seconds)	60	60	6	60	60	60	60	60
Lanes	1	1	2	2	1	1	1	1
Volume (vehicles per hour)	59	177	306	733	35	120	554	234
Volume (vehicle per hour per lane)	59	177	153	367	35	120	554	234
95th Percentile. Queue (vehicle/lane)	3	6	5	10	2	5	14	7

Study Intersection	Cochrane Road and De Paul Drive Eastbound Left AM	Cochrane Road and De Paul Drive Eastbound Left PM	Cochrane Road and De Paul Drive Eastbound Left AM	Cochrane Road and De Paul Drive Eastbound Left PM	Mission View Drive and Cochrane Road Eastbound Left AM	Mission View Drive and Cochrane Road Eastbound Left PM	Mission View Drive and Cochrane Road Northbound Left AM	Mission View Drive and Cochrane Road Northbound left PM
95th Percentile Queue (feet/lane)	75	150	125	250	50	125	350	175
Storage (feet/lane)	75	150	125	250	50	125	350	175
Adequate (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Source: Appendix D								

Mitigation Measures

Impacts would be less than significant without mitigation. Neither new mitigation measures nor mitigation measures included in the 2005 EIR would be required.

Threshold 4: Would the project result in inadequate emergency access?
--

Impact TRA-4 THE PROJECT COULD RESULT IN INADEQUATE EMERGENCY ACCESS TO THE PROJECT SITE. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH ADHERENCE TO MITIGATION MEASURE TRA-2.

The adequacy of emergency access depends on access to the site and the response times of emergency vehicles.

The project site would be accessible via a new right-turn only driveway along Cochrane Road, at the existing signalized Cochrane Road/De Paul Drive intersection, and via four driveways accessible via Mission View Drive. There would also be internal roadways onsite that would need to be accessible for emergency vehicles. Additionally, there are proposed short segments of internal roadways that would be dead-ends and not provide sufficient space for an emergency vehicle to turn around. The vehicles would need to back out of the roadway. Mitigation Measure TRA-2 would be required to ensure that the project's internal roadway network is designed to provide adequate emergency vehicle access.

Mitigation Measures

Mitigation Measure TRA-2 Emergency Vehicle Site Access

The project site shall be designed following City of Morgan Hill design standards and provide adequate width and turn-radii at and along all drive/parking aisles to allow for two-way circulation and adequate circulation of larger vehicles (such as emergency trucks, garbage trucks, and delivery trucks) throughout the project site. The project applicant shall provide detailed site development plans to the City of Morgan Hill Planning Division that demonstrate compliance with the City design standards prior to issuance of a building permit.

Significance After Mitigation

With incorporation of Mitigation Measure TRA-2, adequate emergency vehicle access would be provided onsite for all proposed uses.

4.2.4 Cumulative Impacts

Development that is considered part of the cumulative analysis includes buildout of the City's 2035 General Plans. As discussed in Impact TRA-2, the proposed project would have significant and unavoidable impact related to VMT. Based on technical guidance from the OPR, if a project has a less-than-significant impact on VMT using an efficiency-based threshold (e.g., VMT per resident), this implies that the project would not contribute to a cumulative VMT impact. Therefore, the project would have a considerable contribution to a cumulative VMT impact that would be exacerbated by projects planned in the City's 2035 General Plan. Therefore, there would be a significant and unavoidable cumulative VMT impact.

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5 Other CEQA Required Discussions

This section discusses growth-inducing impacts and irreversible environmental impacts that would be caused by the proposed project. The analysis in this section takes into account the other CEQA-required discussions analysis contained in the 2005 EIR, supplemented by analysis of potential changes as proposed by the project. The 2005 EIR concluded that the project would not result in significant growth inducement by way of setting a precedent for further urban expansion, by creating excess infrastructure capacities, or by removing obstacles to further growth.

5.1 Growth Inducement

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential would therefore be considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

As discussed in Section 19, *Population and Housing*, of the Initial Study (Appendix A), the proposed project would directly generate population growth because it includes residential uses. The proposed project would result in the development of 498 dwelling units, 140 hotel rooms, and 135,000 square feet of retail space. Assuming that the average household size of the proposed project would generally reflect that of the California Department of Finance's estimated 3.08 persons per household for the City of Morgan Hill, the proposed project would introduce an approximate population of 1,534 persons (2021).

The addition of retail space would also introduce new jobs, which could also result in an addition of residents to the City. As discussed in the following subsection, *Economic Growth*, the proposed project would generate approximately 1,174 new employees. Considering a maximum population growth scenario, if all projected employees were to relocate to Morgan Hill, there would be a population growth of 2,708 persons. It is unlikely that each employee would be a new resident to Morgan Hill, as most positions would be filled by current residents; therefore, the projection of 2,708 persons relocating to Morgan Hill represents a conservative, maximum growth scenario.

The current Morgan Hill population is estimated to be 47,374 in 2021 (California Department of Finance 2021). The addition of the proposed project 2,708 persons under a maximum growth scenario would result in an approximately 6 percent increase in the City's population, increasing the population to 50,055 persons. The ABAG projections for the population of Morgan Hill forecasts an increase to 50,165 persons by 2040 (ABAG and MTC 2018).¹ While this additional population is within ABAG population forecasts for Morgan Hill, it is unlikely that all residents and employees would relocate to Morgan Hill and be residents of the city; therefore, the project would realistically result in less than a 6 percent increase to the population. The proposed project would not induce

¹ The population projections from the Plan Bay Area 2040 are used because the Plan Bay Area 2050 growth forecasts are not provided at a city-scale.

substantial unplanned growth directly or indirectly and population growth would be in the City's growth projections.

Moreover, as discussed in Section 3, *Air Quality*, of the Initial Study, and Section 4.1, *Greenhouse Gas Emissions*, development and operation of the project would not generate air quality or GHG emissions that would result in a significant impact. Additionally, the project involves redevelopment in a fully urbanized area that lacks significant scenic resources, native biological habitats, known cultural resource remains, surface water, or other environmental resources. Therefore, population growth associated with the project would not result in significant long-term physical environmental effects.

5.1.2 Economic Growth

The proposed project would generate temporary employment opportunities during construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the project would not be growth-inducing from a temporary employment standpoint. However, the proposed project would also add long-term employment opportunities associated with operation of the proposed commercial buildings and the hotel. Table 5-1 shows the potential maximum increase in job opportunities resulting from the proposed project, conservatively assuming an unlikely scenario, for analysis purposes, in which all project employees move to Morgan Hill from other areas.

Table 5-1 Employment Increase Resulting from Proposed Project

Use	Area (sf)	Employee (sf) ¹	Total Employees
Hotel	203,280	1,500 sf per employee	136
Strip Mall	135,000	130 sf per employee	1,038
Total	–	–	1,174

sf = square feet

Source: United States Green Building Council 2022

ABAG and MTC forecasts that 19,600 jobs will be available in Morgan Hill by 2040 (ABAG and MTC 2018), which is an increase of 1,420 jobs from 2015 to 2040. The 1,174 jobs anticipated by the proposed commercial and hotel developments would be approximately 83 percent of job growth between 2015 and 2040 and, therefore, would be in employment forecasts.

The proposed project would not induce substantial economic expansion to the extent that direct significant physical environmental effects would result. Moreover, the environmental effects associated with future development in or around Morgan Hill would be addressed as part of the CEQA environmental review for such development projects.

5.1.3 Removal of Obstacles to Growth

The proposed project is located in a fully urbanized area that is served by existing infrastructure. As discussed in Section 17, *Utilities*, of the Initial Study (Appendix A) and Section 4.2, *Transportation*, of this SEIR, existing infrastructure in Morgan Hill would be adequate to serve the project. Minor improvements to water, sewer, and drainage connection infrastructure could be needed but would be sized to specifically serve the proposed project. No new roads would be required, and the existing roadways would be able to accommodate the expected traffic volumes. Because the project

constitutes redevelopment in an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 Irreversible Environmental Effects

CEQA Guidelines require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

Growth facilitated by the proposed project would require a long-term commitment of law enforcement, fire protection, water supply, and wastewater treatment. However, as discussed in Section 14, *Public Services*, and Section 17, *Utilities and Service Systems*, of the Initial Study, impacts to these service systems would not be significant.

The project involves residential and commercial development on a vacant site in the City of Morgan Hill. Construction and operation of the project would involve the use of non-renewable building materials and energy sources (e.g., fossil fuels). Consumption of these resources would occur with any development in the region and are not unique to the proposed project.

The proposed project would also irreversibly increase local demand for non-renewable energy resources such as petroleum products. However, increasingly efficient building design would offset this demand to some degree by reducing energy demands of the project. As discussed in Section 6, *Energy*, of the Initial Study (Appendix A), the buildings would be constructed to be all-electric with no natural gas infrastructure pursuant to City of Morgan Hill Municipal Code Section 15.63.040. In addition, the project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. Furthermore, residents and businesses would have access to electricity generated from renewable sources through Silicon Valley Clean Energy, a Community Choice Aggregation, which allows the purchase of electricity from renewable sources through Pacific Gas and Electric infrastructure. Even if residents and business choose to opt out of Silicon Valley Clean Energy, electricity supplied by Pacific Gas and Electric is required to comply with the State's Renewable Portfolio Standard, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent by 2030. Consequently, the project would not use unusual amounts of energy or construction materials and impacts related to consumption of non-renewable and renewable resources would be less than significant. Consumption of these resources would occur with any development in the region and is not unique to the proposed project.

Additional vehicle trips associated with the proposed project would incrementally increase local traffic and regional air pollutant and GHG emissions. However, as discussed in Section III, *Air Quality*, (Appendix A) and Section 4.1, *Greenhouse Gas Emissions*, of this SEIR, development and operation of the project would not generate air quality or GHG emissions that would result in a significant impact. Therefore, the project would not have significant irreversible environmental effects.

CEQA requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this SEIR concludes that the proposed project would result in a significant and unavoidable impact to transportation. The VMT generated by the future residents of the project would not meet the significance threshold of 20.94 VMT per capita. The project is anticipated to have a VMT per capita of 28.51. In order to meet threshold for VMT the project would need to reduce VMT by 27 percent. The project would be required to implement Mitigation Measure TRA-1, but even with the incorporation of this mitigation measure, VMT would not be reduced by 27 percent. Impacts related to VMT would remain significant and unavoidable.

6 Alternatives

As required by Section 15126.6 of the *CEQA Guidelines*, this SEIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic project objectives (stated in Section 2 of this SEIR) but would avoid or substantially lessen the significant adverse impacts.

As discussed in Section 2, *Project Description*, the objectives for the proposed project are as follows:

- Increase the viability of the existing Cochrane Commons anchors and tenants
- Create a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place
- Assist in protecting the tax revenue generated by the current and future tenants and the long-term viability of the city of Morgan Hill's retailers
- Provide much needed variety to the City's housing stock in the form of market rate and below market rate affordable housing
- Encourage the development of the remainder of the shopping center

Included in this analysis are three alternatives, including the CEQA-required No Project alternative, which involves changes to the project that may reduce the project-related environmental impacts as identified in this SEIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision-makers and the public understand the general implications of revising or eliminating certain components of the proposed project.

The following alternatives are evaluated in this SEIR:

- Alternative 1: No Project, No Build
- Alternative 2: No Project – Allowable Buildout Under Existing General Plan Designation
- Alternative 3: Mixed Use Flex Designation on North Half of the Site

As required by CEQA, this section includes a discussion of the “environmentally superior alternative” among those studied (see Section 6.5).

Section 15126.6(a) of the *CEQA Guidelines* states the following:

An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

The City of Morgan Hill, in its role as lead agency, has determined that the alternatives analyzed in this section of the SEIR represent a reasonable range of alternatives to the proposed project.

6.1 Alternative 1: No Project Alternative

6.1.1 Description

Under the No Project Alternative, the proposed residential, retail, and commercial buildings associated with the proposed project would not be constructed. Alternative 1 would involve no modification of the existing parcel. The site would remain vacant, and no land use designation or zoning changes would occur. Alternative 1 would not fulfill the project's objectives to develop the remainder of the shopping center, nor would it provide additional housing.

6.1.2 Impact Analysis

The proposed mixed-use development would not be constructed under Alternative 1, and existing conditions would remain unchanged. Alternative 1 would result in no new development, employees, or residents and would thus result in fewer environmental impacts related to all criteria analyzed under this SEIR, including GHG emissions and transportation. All impacts would be reduced as compared to impacts analyzed in this SEIR. There would be no impact, since existing conditions would remain unchanged. However, Alternative 1 would be inconsistent with the project's objectives to increase the viability of the Cochrane Commons Center, develop the rest of the shopping center, and provide additional housing in Morgan Hill.

6.2 Alternative 2: No Project – Allowable Buildout under Existing General Plan Designation

6.2.1 Description

The No Project – Allowable Buildout alternative assumes that the proposed residential, retail, and commercial buildings associated with the proposed project are not constructed. However, this alternative also assumes that buildout currently allowed by the existing Morgan Hill 2035 General Plan land use designations would occur. As described in Section 2, *Project Description*, the project site is currently split between two land use designations. Approximately 13 acres of the northwest corner of the site are designated Mixed Use Flex (7 to 24 dwelling units/acre) with the remaining 20.5 acres designated Commercial. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in stand-alone buildings or as part of shopping centers, with a maximum floor area ratio of 0.6. With 20.5 acres of the project site designated as Commercial, with a maximum floor area ratio of 0.6, Alternative 2 would allow a maximum of approximately 536,000 square feet of commercial development.¹ The Mixed Use Flex designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre and a maximum floor area ratio of 0.5. With 13 acres of the project site designated as Mixed Use Flex, a maximum of 312 dwelling units could be developed in the project site. Because lands designated as Mixed Use Flex have a maximum floor area ratio of 0.5, the maximum residential building footprint in the site would be approximately 283,000 square feet.² Altogether, Alternative 2 would result in the development of fewer residential units and more commercial area. Table 6-1 compares buildout of Alternative 2 to the proposed project.

¹ 20.5 acres multiplied by a floor area ratio of 0.6, converted to square feet, equals approximately 536,000 square feet of allowable commercial development.

² 13 acres multiplied by up to 24 dwelling units per acre equals 312 dwelling units. 13 acres multiplied by a floor area ratio of 0.5 converted to square feet, is approximately 283,000 square feet of residential development.

Table 6-1 Buildout Comparison of the Proposed Project and Alternative 2

Feature	Proposed Project	Alternative 2	Net Difference
Designated Mixed Use Flex area	33.5 acres	13 acres	-20.5 acres
Designated commercial area	0 acres	20.5 acres	+20.5 acres
Dwelling units	498 units	312 units	-186 units
Residential population ¹	1,534 persons	961 persons	-573 persons
Commercial area	135,000 sf	538,000 sf	+403,000 sf
Employee population ²	1,174 persons	4,675 persons	+3,501 persons

sf = square feet

¹Population calculated by multiplying number of dwelling units by average household size of Morgan Hill (3.08 persons) See the Initial Study (Appendix A) for further methodology.

²Employee population calculated by multiplying commercial area by average number of employees per commercial square foot, as established by US Green Building Council default occupancy counts (US Green Building Council 2021).

This alternative would meet most of the project objectives, but it would contribute less housing stock than the proposed project.

6.2.2 Impact Analysis

a. Greenhouse Gas Emissions

As described in Section 4.2, *Greenhouse Gas Emissions*, the project as proposed would result in the emission of GHGs during construction and operation. During construction, GHG emissions would be generated by construction equipment used onsite and by vehicle trips associated with construction, such as worker and vendor trips. Alternative 2 would involve construction of 538,000 square feet of commercial uses, 403,000 more square feet than the proposed project. Accordingly, Alternative 2 would have a longer construction period and involve greater square footage of construction, which would result in increased GHG emissions. As stated in Section 4.2, *Greenhouse Gas Emissions*, the BAAQMD does not have a recommended threshold for construction-related emissions; therefore, while construction of Alternative 2 would involve a greater amount of construction GHG emissions, construction would not generate GHG emissions that would have a significant impact on the environment. Similar to the proposed project, Alternative 2 would not include demolition as it has already occurred, and Mitigation Measure 3.3-1 of the 2005 EIR would not apply as it has already been complied with.

During operation, long-term operational emissions would relate to area sources, energy use, solid waste, water use, and transportation. Because this alternative would include substantially more commercial area than the proposed project, Alternative 2 would result in more annual GHG emissions than the proposed project. As shown in Table 4.2-2 of Section 4.2, *Greenhouse Gas Emissions*, the proposed project would have an emissions per service person ratio of 2.1, which is below the adjusted BAAQMD efficiency threshold of 2.8. Because Alternative 2 would involve a substantial increase in commercial area (403,000 square feet more than the proposed project), Alternative 2 would result in an increased amount of operational GHG emissions compared to the proposed project. Table 6-2 compares annual operational GHG emissions that would occur under Alternative 2 to the proposed project.

Table 6-2 Alternative 2 GHG Emissions

Feature	GHG/Unit (MT CO ₂ e/year)	Proposed Project		Alternative 2	
		Size	Emissions (MT CO ₂ e/year)	Size	MT CO ₂ e/year
Parking Lot (sf)	0.004	939,000	4	939,000	4
Hotel (sf)	10.142	140,000	1,420	0	0
Commercial (sf)	16	135,000	2,222	538,000	8,854
Residential (units)	10	498	5,215	312	3,268
Generators (3)			12		12
Total			8,872		12,137

GHG = greenhouse gas; MT CO₂e = metric ton of carbon dioxide equivalent; sf = square foot
Note: Values in this table are slightly different than values within the CalEEMod output (Appendix C) due to rounding.

As shown above, Alternative 2 would result in more annual operational GHG impacts than the proposed project. However, as shown in Table 6-1, the increased commercial area would increase the service population of the project site to 5,636 persons under Alternative 2. Therefore, the emissions per service person ratio under Alternative 2 would be approximately 2.1, which is below the adjusted BAAQMD efficiency threshold. Therefore, impacts related to GHG emissions under Alternative 2 would be greater than those of the proposed project but less than significant, similar to the proposed project.

Similar to the proposed project, residential and commercial buildout at the project site permitted by existing land use designations would be consistent with the applicable plans, policies, and regulations adopted to reduce the emission of GHGs listed in Section 4.2, *Greenhouse Gas Emissions*.

b. Transportation

As discussed in Section 4.2, *Transportation*, there are adequate pedestrian, bicycle, and transit facilities in the vicinity of the project site that would serve future residents and employees. Alternative 2 would generate fewer residents than the proposed project as it would result in the construction of fewer residential units, but at full buildout, Alternative 2 would generate more employees than the proposed project due to the construction of 403,000 square feet of additional commercial area. Alternative 2 would be generally consistent with City policies related to transit pedestrian, bicycle, and transit facilities, but would result in increased demand for such facilities. Furthermore, as discussed in Section 4.2, *Transportation*, the proposed project would result in a significant and unavoidable impact related to residential VMT. Alternative 2 would include 186 fewer dwelling units and 573 fewer persons at the project site compared to the proposed project and would likely result in a decreased VMT per capita. However, impacts related to residential VMT would remain significant and unavoidable under Alternative 2. Development of the project site under this alternative would be designed to avoid transportation hazards and to ensure emergency vehicle access similar to the proposed project. Mitigation Measure TRA-2, Emergency Vehicle Site Access, would apply to this alternative to ensure that internal roadways and drive aisles would provide sufficient space for emergency vehicles.

c. Other Resources

Impacts related to construction activities and operation under Alternative 2 would be similar to the proposed project since the alternative would also allow full buildout of the project site. Similar to the impacts of the proposed project, impacts of Alternative 2 related to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire would remain less than significant, less than significant with mitigation measures of the 2005 EIR incorporated, or would result in no impact.

6.3 Alternative 3: Mixed Use Flex Designation on North Half of the Site

6.3.1 Description

The extension of Mixed Use Flex designation to cover half the site alternative assumes that the 2035 General Plan land use designation of Mixed Use Flex would be extended beyond the northwestern portion of the project site to the east to encompass the northern half of the project site. Residential, retail, and commercial buildings would be constructed consistent with the adjusted land use designation. Approximately 16.75 acres on the northern side of the project site would be designated Mixed Use Flex, and 16.75 acres on the southern side of the project site would remain designated as Commercial. The 16.75 acres of land designated Mixed Use Flex would allow for up to 402 dwelling units to be built under Alternative 3,³ and 16.75 acres of land designated as Commercial would allow for up to approximately 435,600 square feet of commercial use.⁴ Alternative 3 would result in half as much area designated as Mixed Use Flex compared to the proposed project; thus, the extended Mixed Use Flex area under this alternative would allow the development of fewer dwelling units compared to the proposed project. Alternative 3 would also involve an increase in areas designated as Commercial compared to the proposed project. Table 6-3 compares buildout of Alternative 3 to the proposed project.

Table 6-3 Buildout Comparison of the Proposed Project and Alternative 3

Feature	Proposed Project	Alternative 3	Net Difference
Designated Mixed Use Flex area	33.5 acres	16.75 acres	-16.75 acres
Designated commercial area	0 acres	16.75 acres	+16.75 acres
Dwelling units	498 units	402 units	-96 units
Residential population ¹	1,534 persons	1,238 persons	-296 persons
Commercial area	135,000 sf	435,600 sf	+300,600 sf
Employee population ²	1,174 persons	3,492 persons	+2,318 persons

sf = square feet

¹Population calculated by multiplying number of dwelling units by average household size of Morgan Hill (3.08 persons) See the Initial Study (Appendix A) for further methodology.

²Employee population calculated by multiplying commercial area by average number of employees per commercial square foot, as established by US Green Building Council default occupancy counts (US Green Building Council 2021).

³ 16.75 acres multiplied by up to 24 dwelling units per acre equals 402 dwelling units.

⁴ 16.75 acres multiplied by a floor area ratio of 0.6, converted to square feet, equals approximately 435,600 square feet of allowable commercial development.

Similar to the proposed project, this alternative would meet the project objectives by increasing the viability of the existing Cochrane Commons anchors and tenants, developing the remainder of the shopping center, and adding variety to the city’s housing stock.

6.3.2 Impact Analysis

a. Greenhouse Gas Emissions

As described in Section 4.2, *Greenhouse Gas Emissions*, the project as proposed would result in the emission of GHGs during construction and operation. During construction, GHG emissions would be generated by construction equipment used onsite and by vehicle trips associated with construction, such as worker and vendor trips. Construction of Alternative 3 would involve construction of 435,600 square feet of commercial uses, 300,600 more square feet than the proposed project. Accordingly, Alternative 3 would require a longer construction period and greater square footage of construction, which would result in increased GHG emissions. As stated in Section 4.2, *Greenhouse Gas Emissions*, BAAQMD does not have a recommended threshold for construction-related emissions; therefore, while construction of Alternative 3 would involve a greater amount of construction GHG emissions, construction would not generate GHG emissions that would have a significant impact on the environment. Similar to the proposed project, Alternative 3 would not include demolition as the demolition has already occurred, and Mitigation Measure 3.3-1 of the 2005 EIR would not apply as it has already been complied with.

During operation, long-term operational emissions would relate to area sources, energy use, solid waste, water use, and transportation. Because this alternative would include substantially more commercial area than the proposed project, Alternative 3 would result in more annual GHG emissions than the proposed project. As shown in Table 4.2-2 of Section 4.2, *Greenhouse Gas Emissions*, the proposed project would have an emissions per service person ratio of 2.1, which is below the adjusted BAAQMD efficiency threshold of 2.8. Because Alternative 3 would involve a substantial increase in commercial area (300,600 square feet more than the proposed project), Alternative 3 would result in an increased amount of operational GHG emissions compared to the proposed project. Table 6-4 compares annual operational GHG emissions that would occur under Alternative 2 to the proposed project.

Table 6-4 Alternative 3 GHG Emissions

Feature	GHG/Unit (MT CO ₂ e/year)	Proposed Project		Alternative 3	
		Size	Emissions (MT CO ₂ e/year)	Size	MT CO ₂ e/year
Parking Lot (sf)	0.004	939,000	4	939,000	4
Hotel (sf)	10.142	140,000	1,420	0	0
Commercial (sf)	16	135,000	2,222	435,600	7,169
Residential (units)	10	498	5,215	402	4,210
Generators (3)			12		12
Total			8,872		11,394

GHG = greenhouse gas; MT CO₂e = metric ton of carbon dioxide equivalent; sf = square feet

Note: Values in this table are slightly different than values within the CalEEMod output (Appendix C) due to rounding.

As shown above, Alternative 3 would result in more annual operational GHG impacts than the proposed project. However, as shown in Table 6-1, the increased commercial area would increase

the service population of the project site to 5,026 persons under Alternative 3. Therefore, the emissions per service person ratio under Alternative 2 would be approximately 2.2, which is below the adjusted BAAQMD efficiency threshold. Therefore, impacts related to GHG emissions under Alternative 3 would be greater than those of the proposed project but less than significant, similar to the proposed project.

b. Transportation

As discussed in Section 4.2, *Transportation*, there are adequate pedestrian, bicycle, and transit facilities in the vicinity of the project site that would serve future residents and employees. Alternative 3 would generate 296 fewer residents than the proposed project as it would result in the construction of 96 fewer dwelling units, but at full buildout, Alternative 3 would generate more employees than the proposed project due to the construction of 300,600 square feet of additional commercial area. Alternative 3 would be generally consistent with City policies related to transit pedestrian, bicycle, and transit facilities, but would result in increased demand for such facilities. Furthermore, as discussed in Section 4.2, *Transportation*, the proposed project would result in a significant and unavoidable impact related to residential VMT. Alternative 3 would include 96 fewer dwelling units and 296 fewer persons at the project site compared to the proposed project and would likely result in a decreased VMT per capita. Impacts related to residential VMT would remain significant and unavoidable under Alternative 3 but would be reduced compared to the proposed project. Development of the project site under this alternative would be designed to avoid transportation hazards and to ensure emergency vehicle access similar to the proposed project. Mitigation Measure TRA-2, Emergency Vehicle Site Access, would apply to this alternative to ensure that internal roadways and drive aisles would provide sufficient space for emergency vehicles.

c. Other Resources

Impacts related to construction activities and operation would be similar to the proposed project since Alternative 3 would also allow similar buildout of the project site. Similar to the impacts of the proposed project, impacts of Alternative 3 related to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire would remain less than significant, less than significant with mitigation measures of the 2005 EIR incorporated, or would result in no impact.

6.4 Alternatives Considered but Rejected

The *CEQA Guidelines* state that an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination (*CEQA Guidelines* Section 15126.2(c).) The City did not consider and therefore did not reject alternatives other than the three alternatives described in this section.

6.5 Environmentally Superior Alternative

CEQA requires that an EIR identify the Environmentally Superior Alternative and discuss the facts that support that selection, as well as whether it would accomplish the project objectives or be

infeasible (Public Resources Section 21081.5, *CEQA Guidelines* Sections 15091, 15126.6).
Table 6-5 indicates whether each alternative’s environmental impact is greater than, less than, or similar to that of the proposed project for each of the issue areas studied.

Based on the alternatives analysis provided above, Alternative 1 would be the Environmentally Superior Alternative as it would result in fewer impacts compared to the proposed project and would reduce the significant and unavoidable impact associated with the project’s VMT. However, Alternative 1 would not meet any of the project objectives.

If the No Project Alternative is the Environmentally Superior Alternative, CEQA requires that an Environmentally Superior Build Alternative be identified. Based on this consideration, the proposed project would be the Environmentally Superior Alternative. As discussed above, both Alternative 2 and Alternative 3 would result in reduced transportation impacts compared to the proposed project, but transportation impacts under Alternative 2 and Alternative 3 would remain significant and unavoidable. Furthermore, the additional commercial buildout under Alternative 2 and Alternative 3 would result in an increased amount of annual operational GHG emissions. While these emissions do not exceed the adjusted BAAQMD emissions per service person threshold, both alternatives would result in more annual operational GHG emissions, which would result in further impacts to the environment.

Table 6-5 Impact Comparison of Alternatives

Issue	Proposed Project Impact Classification	Alternative 1: No Project, No Build	Alternative 2: No Project, Allowable Buildout	Alternative 3: Extension of Mixed-Use Flex
Greenhouse Gas Emissions	Less Than Significant	+	=	=
Transportation	Significant and Unavoidable	+	+	+
+ Superior to the proposed project (reduced level of impact)				
- Inferior to the proposed project (increased level of impact)				
= Similar level of impact to the proposed project				

7 References

7.1 Bibliography

Environmental Setting

California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2021, with 2010 Benchmark. May.
<https://dof.ca.gov/2022/03/15/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2011-2021-with-2010-census-benchmark/> (accessed January 2022).

Western Regional Climate Center. 2022. Period of Record Monthly Climate Summary Morgan Hill, California (045853). N.d. <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5853> (accessed January 2022).

Project Description

Morgan Hill, City of. 2018. City of Morgan Hill Zoning Code, Municipal Code Title 18. Adopted June 6, 2018. <https://www.morganhill.ca.gov/DocumentCenter/View/28563/Title-18-Zoning> (accessed January 2022).

Greenhouse Gas Emissions

Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC). 2021. Plan Bay Area 2050. October.
https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf (accessed January 2022).

Association of Environmental Professionals (AEP). 2016. Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California. October. https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf (accessed January 2022).

Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act: Air Quality Guidelines. May. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed January 2022).

California Air Pollution Control Officers Association (CAPCOA). 2021a. Appendix D Default Data Tables. June. <http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12> (accessed February 2022).

_____. 2021b. California Emissions Estimator Model Version 2020.4.0. May.
http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf?sfvrsn=6 (accessed February 2022).

California Air Resources Board (CARB). 2008. Climate Change Scoping Plan. December.
https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf (accessed January 2022).

- _____. 2011. Staff Report: Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider the “LEV III” Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedures and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Emission Requirements for Heavy-Duty Vehicles. December 7, 2011. <http://www.arb.ca.gov/regact/2012/leviiighg2012/levisor.pdf> (accessed January 2022).
- _____. 2014. AB 32 Scoping Plan Website. Updated June 2014. <http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm> (accessed January 2022).
- _____. 2016. Ambient Air Quality Standards. Last modified: May 4, 2016. <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf> (accessed January 2022).
- _____. 2017. California’s 2017 Climate Change Scoping Plan. December 14, 2017. https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf (accessed January 2022).
- _____. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO₂) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. June 26, 2020. https://ww3.arb.ca.gov/msei/emfac_off_model_co2_adjustment_factors_06262020-final.pdf?utm_medium=email&utm_source=govdelivery (accessed January 2022).
- _____. 2021. California Greenhouse Gas Emissions for 2000 to 2019 Trends of Emissions and Other Indicators. July. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf (accessed January 2022).
- California Climate Action Registry. General Reporting Protocol. 2009. Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1. https://sfenvironment.org/sites/default/files/fliers/files/ccar_grp_3-1_january2009_sfe-web.pdf (accessed February 2022).
- California Climate Change Center (CCCC). 2006. Climate Scenarios for California. March. <https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptation-library/united-states/west-coast-amp-hawaix27i/california---statewide/CCCC.--2006.--Climate-Scenarios-for-California.pdf> (accessed January 2022).
- California Department of Food and Agriculture. 2020. “California Agricultural Production Statistics.” <https://www.cdfa.ca.gov/statistics/> (accessed January 2022).
- California Department of Resources Recycling and Conservation. 2020. “California’s Statewide Recycling Rate.” Last modified: March 3, 2020. <https://www.calrecycle.ca.gov/75percent/recyclerate> (accessed January 2022).
- California Department of Water Resources. 2018. Indicators of Climate Change in California. May 2018. <https://oehha.ca.gov/media/downloads/climate-change/report/2018caindicatorsreportmay2018.pdf> (accessed January 2022).
- California Energy Commission. 2018. “2019 Building Energy Efficiency Standards.” 2018. https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf (accessed January 2022).
- _____. 2021. 2020 Power Content Label Silicon Valley Clean Energy. N.d. <https://www.energy.ca.gov/filebrowser/download/3899> (accessed January 2022).

- California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy. March 2009. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf (accessed January 2022).
- Intergovernmental Panel on Climate Change (IPCC). 2007. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf> (accessed January 2022).
- _____. 2021. Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)] Cambridge University Press. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (accessed January 2022).
- Morgan Hill, City of. Revised 2017. Morgan Hill 2035 General Plan. Adopted July 27, 2016. Revised December 6, 2017. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=> (accessed January 2022).
- _____. 2021. Morgan Hill 2021 Climate Action Plan. December. <https://www.morgan-hill.ca.gov/DocumentCenter/View/40166/Climate-Action-Plan-Draft-December-9-2021-?bidId=> (accessed February 2022).
- National Aeronautics and Space Administration. 2020. “Global Climate Change – Vital Signs of the Planet – Sea Level.” <https://climate.nasa.gov/vital-signs/sea-level/> (accessed January 2022).
- National Highway Traffic Safety Administration. 2020. “Fact Sheet: SAFE Vehicles Rule.” <https://www.nhtsa.gov/corporate-average-fuel-economy/safe-fact-sheet> (accessed January 2022).
- National Oceanic and Atmospheric Administration. 2020. “Global Climate Report for Annual 2019.” State of the Climate. January 2020. <https://www.ncdc.noaa.gov/sotc/global/201813> (accessed January 2022).
- Parmesan, C. 2006. Ecological and Evolutionary Responses to Recent Climate Change. August. https://www.fws.gov/southwest/es/documents/R2ES/LitCited/LPC_2012/Parmesan_2006.pdf (accessed January 2022).
- State of California. 2018. California’s Fourth Climate Change Assessment Statewide Summary Report. August 27, 2018. <http://www.climateassessment.ca.gov/state/> (accessed January 2022).
- United States Environmental Protection Agency (U.S. EPA). 2021a. Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases. Last updated April 2021. <https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases> (accessed January 2022).
- _____. 2021b. Climate Change Indicators: Global Greenhouse Gas Emissions. Last updated April 2021. <https://www.epa.gov/climate-indicators/climate-change-indicators-global-greenhouse-gas-emissions> (accessed January 2022).

_____. 2021c. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019. April 2021.
<https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2019> (accessed January 2022).

United States Green Building Council. 2022. Appendix 2. Default Occupancy Counts. N.d.
<https://www.usgbc.org/credits/new-construction-existing-buildings-commercial-interiors-core-and-shell-schools-new-constr-3> (accessed January 2022).

Transportation

ABAG/MTC. 2021a. Plan Bay Area 2050. October.
https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf (accessed January 2022).

_____. 2021b. Transportation Project List. October.
https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_Transportation_Project_List_October_2021.pdf (accessed January 2022).

CARB. 2018. SB 375 Regional Greenhouse Gas Emissions Reduction Targets. March.
https://ww2.arb.ca.gov/sites/default/files/2020-06/SB375_Final_Targets_2018.pdf (accessed January 2022).

Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation impacts in CEQA. April 2018. https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Other CEQA Related Discussions

Association of Bay Area Governments and Metropolitan Transportation Commissions (ABAG & MTC). 2018. Plan Bay Area Projections 2040. November.
http://mtcmedia.s3.amazonaws.com/files/Projections_2040-ABAG-MTC-web.pdf (accessed January 2022).

California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2021, with 2010 Benchmark. May.
<https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/> (accessed January 2022).

United States Green Building Council. 2022. Appendix 2. Default Occupancy Counts. N.d.
<https://www.usgbc.org/credits/new-construction-existing-buildings-commercial-interiors-core-and-shell-schools-new-constr-3> (accessed January 2022).

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Appendix A

Initial Study



Cochrane Commons Phase II Project

Initial Study

prepared by

City of Morgan Hill

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Morgan Hill, California 95037

Contact: Jennifer Carman, Development Services Director

prepared with the assistance of

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May 2022



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Appendix CUL	Cultural Resources Report
Appendix EN	Energy Calculation Sheets
Appendix WSA	Water Supply Assessment

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Initial Study

1. Project Title

Cochrane Commons Phase II Project

2. Lead Agency Name and Address

City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037

3. Contact Person and Phone Number

Jennifer Carman, Development Services Director, 408-778-6480

4. Project Location

The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Shopping Center (Shopping Center). It is bound by De Paul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101 (U.S. 101). Figure 1 shows the site's location in the region, and Figure 2 depicts the project site in its neighborhood context.

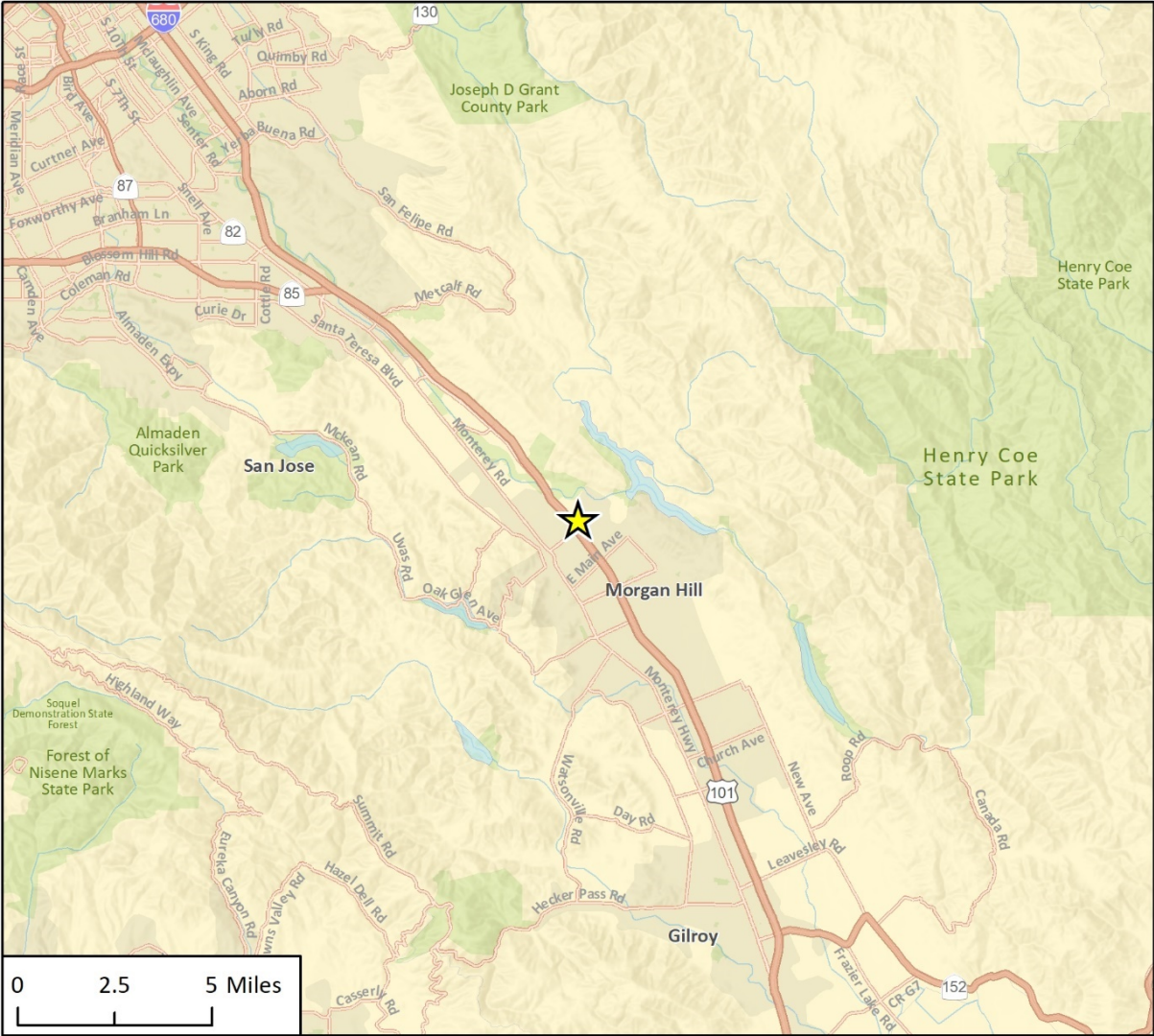
5. Project Sponsor's Name and Address

Browman Development
1556 Parkside Drive
Walnut Creek, California 94596

6. General Plan Designation

The project site is split between two City of Morgan Hill 2035 General Plan land use designations. The majority of the northwest corner of the site is designated Mixed Use Flex (7 to 24 dwelling units/acre) (with the remainder designated Commercial. The Commercial designation allows a wide range of retail businesses, administrative and executive office uses, and professional services, either in standalone buildings or as part of shopping centers. It allows a maximum floor area ratio of 0.6. The Mixed Use Flex designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre and a maximum floor area ratio of 0.5. (Morgan Hill 2016).

Figure 1 Regional Location



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★ Project Location

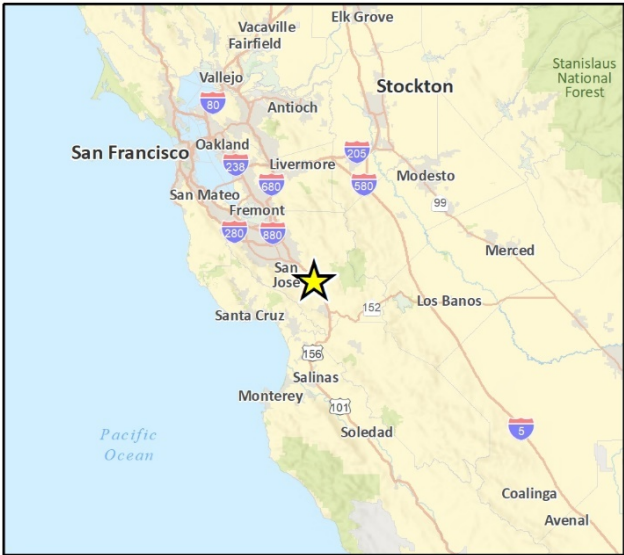
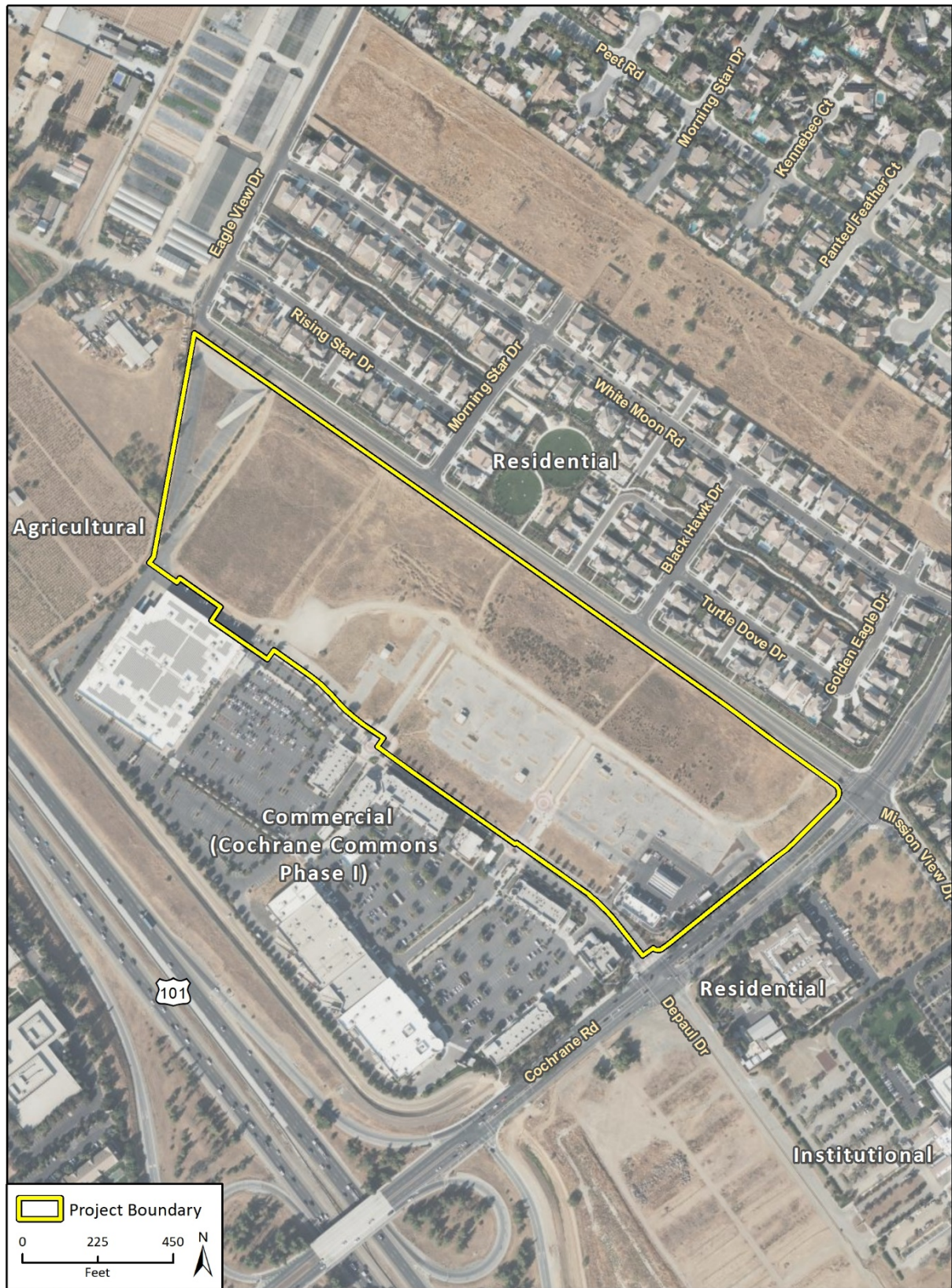


Fig X Regional Location

Figure 2 Project Site Location

7. Zoning

The project site is zoned as Highway Commercial (CH), which seeks to provide areas adjacent to the freeway that can accommodate highway and tourist-oriented uses, and allows for business services, restaurants and cafes, hotels, offices, retail services, and other related facilities (Morgan Hill 2018). The project site also has a Planned Unit Development (PUD) Legacy Zone, which is a zoning district applied to the property prior to July 7, 2018, and remains the zoning in effect for the property (Morgan Hill 2018).

8. Project Background

In 2005, an Environmental Impact Report (EIR) was certified for the Cochrane Commons Shopping Center, a project that included development of 590,100 square feet of retail space, a 12-pump gas station, and a 63,200-square-foot movie theatre. The project was proposed to be built out in two phases, with the first phase covering the southwest portion of the site and the second phase (the project that is the subject of this Initial Study) covering the northeast portion of the site. The 2005 EIR analyzed both phases of the project. Construction of Phase I of the project was completed in 2007, consisting of 262,560 square feet of commercial retail, including a 127,732-square-foot Target store. Two commercial structures were also constructed on the eastern portion of the project site in the Phase II area and are currently occupied by a gas station and fast-food restaurant. In total, 303,429 square feet of retail space has been constructed, along with the gas station.

9. Surrounding Land Uses

The project site is located in an urbanized area and is generally flat. There are two existing commercial structures in the southern portion of the site, which are occupied by a gas station and a Burger King restaurant. The central and southern areas of the site are developed with parking lots, roadways, and paved areas, as shown in Figure 2. Street trees are planted along Cochrane Road, fronting Burger King, the gas station, and De Paul Drive along the southern portion of the site. The southeast corner of the site, near the two existing commercial tenants, is landscaped with ornamental trees and shrubs. The remainder of the site is undeveloped and contains ruderal vegetation, primarily mowed grasses and shrubs.

Parcels to the east of the project site have a land use designation of Commercial and Commercial/Industrial and are zoned as General Commercial and Public Facilities with a PUD overlay. Parcels south of the project site include Phase I of the Shopping Center, which has a Commercial land use designation and is zoned CH with the PUD overlay. Parcels west of the site are located in Santa Clara County and Morgan Hill's sphere of influence. These parcels have a land use designation of Rural County. Parcels to the north of the site have a land use designation of Residential Detached Medium (up to 7 dwelling units/acre) and are zoned Residential Detached Medium Density (RDM 9,000 or 7,000) with a Planned Development overlay.

Surrounding development includes detached single-family houses to the north, senior living apartments to the east, commercial retail within Phase I of the Shopping Center to the south, and single-family and industrial structures within agricultural operations to the west. Buildings range in height from one to two stories.

10. Description of Project

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, a 140-room hotel, and amending the zoning and General Plan designation to Mixed Use Flex for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site, and the hotel and commercial retail would be located in the southern portion. Figure 3 shows the proposed site plan. Table 1 details the breakdown of proposed uses and square footage, and Table 2 compares the proposed project to the project analyzed in the 2005 EIR.

The project would also include various onsite amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, and swimming pool would also be provided for onsite residents.

Table 1 Project Summary

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet
Mixed Use Flex Zoning Standards	
Maximum Floor Area Ratio	0.5
Maximum Height	35 feet
Residential Densities	7 to 24 units per acre
Maximum Building Coverage	50%

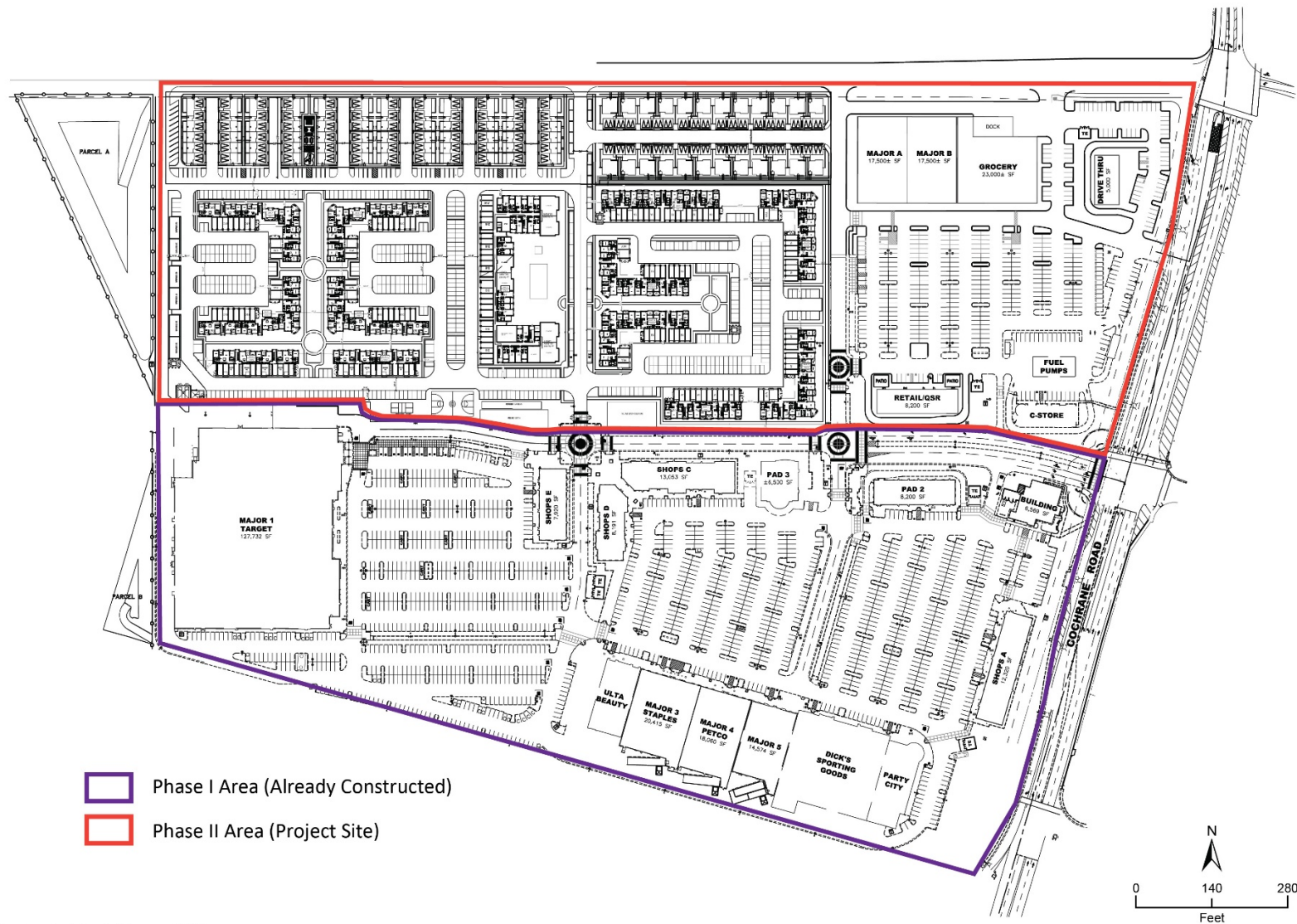
Table 2 Comparison to 2005 EIR

Project Component	Proposed in 2005 EIR	Difference Between 2005 EIR Project and Existing Plus Proposed Project
Residential	None	+498 dwelling units (Phase II)
Hotel	None	+140 rooms (Phase II)
Retail	657,250 square feet (over Phase I and Phase II)	-259,690 square feet (over Phase I and Phase II)

Site Access, Circulation, and Parking

Vehicles would access the project site primarily from De Paul Drive, which bisects the site horizontally from Cochrane Road. Access would be taken from two driveways off De Paul Drive leading to two central roadways which would connect to two driveways off Mission View Drive, as shown in Figure 3. An additional driveway would be located off Cochrane Road which would allow right-in and right-out vehicle movements. There would be a total of 1,367 parking spaces. Parking would be constructed in phases. During Construction Phase 1, the project would include 276 parking stalls for the proposed townhomes. During Construction Phase 2, 658 stalls would be added for the

Figure 3 Proposed Conceptual Site Plan



Source: Architects Orange, 2022.

rental apartment units, and during Construction Phase 3, 433 stalls would be added for the proposed retail uses and hotel.

Grading and Drainage

The project area has been previously graded and would further be modified by additional grading with excavation estimated at 37,510 square feet and balanced onsite fill. Stormwater drainage would be directed to catch basins located throughout the project site and then conveyed via underground storm drainpipes to a stormwater detention pond along the northern project boundary. The storm drain system design would incorporate City standards for pipe sizes, maximum slopes, minimum flow velocities, and pipe material. The detention basin would be sized in accordance with the City's detention design criteria. Stormwater would be temporarily stored in the planned detention pond and pumped to the adjacent Cochrane Channel at discharge rates at or below pre-development levels, as required by the Santa Clara Valley Water District.

Landscaping and Trees

The project would involve new landscaping elements, including trees and vegetation along Mission View Drive and Cochrane Road, shrubs along the building perimeters and trees in parking areas. Additional trees and landscaping would be located in building courtyards. The landscaping plan would be subject to review and approval by the City during the Design Permit process.

Electricity

Pursuant to Chapter 15.63 of the Morgan Hill Municipal Code, new residences and structures developed under the proposed project would not utilize natural gas and would be designed to be all-electric. The project would also be designed to exceed Title 24 Building Energy Efficiency Standards, which establish energy and water efficiency requirements for newly constructed buildings. However, the percentage by which standards would be exceeded is still to be determined.

Offsite Improvements

The project would include sidewalk and pavement improvements along road frontages that border the project site.

Construction

Construction would occur over three phases. Construction Phase 1 would consist of 104 units (175,000 square feet) of for-sale townhomes. Construction Phase 2 would consist of 394 units (410,000 square feet) of rental apartments. Construction Phase 3 would consist of the retail space and hotel. Construction would occur from March 2023 to September 2025 between the hours of 7 a.m. and 5 p.m. from Monday to Saturday. The construction schedule is detailed in Table 3. Construction would include 37,510 cubic yards of excavation, with balanced cut and fill.

Table 3 Proposed Construction Schedule

Phase of Construction	Dates	Phase 1	Phase 2	Phase 3
Site Preparation	Start Date:	3/2023 –	3/2024 –	3/2025 –
	End Date:	4/2023	4/2024	4/2025
Grading	Start Date:	5/2023 –	5/2024 –	5/2025 –
	End Date:	6/2023	6/2024	6/2025
Building Construction	Start Date:	7/2023 –	7/2024 –	4/2025 –
	End Date:	3/2025	11/2024	8/2025
Paving	Start Date:	6/2023 –	6/2024 –	6/2025 –
	End Date:	7/2023	7/2024	7/2025
Completion date for all construction: 9/2025				

11. Other Public Agencies Whose Approval is Required

The project would require discretionary approval by the City of Morgan Hill. No other public agency approval would be required.

12. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

Tamien Nation requested consultation pursuant to Public Resources Code Section 21080.3.1. Subsequent outreach and consultation has occurred and is summarized in Section 18, *Tribal Cultural Resources*.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that requires further study beyond the impacts identified in the certified 2005 EIR, as indicated by the checklist on the following pages. The checklist is a modified version of the California Environmental Quality Act (CEQA) *Guidelines* Appendix G Initial Study checklist, based on evaluating the need for supplemental CEQA documentation under *CEQA Guidelines* Section 15162, and oriented to identifying topics requiring further analysis in a Subsequent EIR. The following impact areas were determined to have at least one impact identified as “Potentially Significant” or “Less than Significant with Mitigation Incorporated” where new mitigation not included in the 1997 EIR may be required:

- | | | |
|--|--|--|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology and Soils | ☒ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☒ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities and Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
--	--	--	--	---	--

Except as provided in Public Resources Code Section 21099, would the project:

- | | | | | | |
|---|---------------------------------|----|----|----|-----|
| a. Have a substantial adverse effect on a scenic vista? | EIR Page 3.1-11 | No | No | No | N/A |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | EIR Page 3.1-11 | No | No | No | N/A |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized | EIR Pages 3.1-11 through 3.1-14 | No | No | No | Yes |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
area, would the project conflict with applicable zoning and other regulations governing scenic quality?					
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	EIR Pages 3.1-14 and 3.1-15	No	No	No	Yes

2005 EIR Summary

Section 3.1, *Aesthetics*, of the 2005 EIR analyzed the impacts of the project on aesthetics and visual character of the existing environmental setting. The section identifies the primary visual and aesthetic concerns of the area, including the change in character of the project site from rural residential and agricultural uses to commercial uses, and the potential impacts to views from adjacent viewpoints, including US 101, the Cochrane Road interchange, and surrounding properties. This section identifies the following scenic resources in the project area: the Diablo Mountain Range, Coyote Creek Parkway, and the Anderson Lake Reservoir. This section of the EIR also identified that lighting in the project area is dominated by surrounding residential uses located east of the project site and commercial uses located west of the project site, across US 101.

Visual impacts identified in the 2005 EIR are summarized as follows.

Degradation of a State Scenic Highway

The EIR found that the project site is located adjacent to US 101, which is not a State Scenic Highway. The project would therefore have no impact related to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings in a State Scenic Highway.

Substantial Degradation of the Visual Character or Quality of the Project Site and Surroundings

The EIR found that the proposed project would alter the project site from a rural residential and agricultural use to an urban use with construction of a commercial center at the US 101 and Cochrane Road interchange. While the change from existing uses to a shopping center would

change the character of the project site, it would not be a “substantial degradation” because the City design review and project approval process would ensure that the proposed project would meet City standards and would not degrade the visual quality of the City.

The EIR found that along the northbound US 101 viewpoints, the proposed project would further urbanize the area but would not obscure the scenic backdrop of the Diablo Mountain Range. Along southbound US 101, the proposed project would have greater visibility from vehicles traveling on southbound US 101. While the proposed project would include landscaping to screen the proposed project from the highway, the height and scale of the proposed structures would change the visual character of the northeastern gateway to the city. Compliance with the City of Morgan Hill General Plan and conformance with the City’s design and landscaping standards would reduce impacts to the visual quality of the city to less-than-significant levels.

Light and Glare

The 2005 EIR found that the proposed project would result in the introduction of new sources of nighttime lighting that would significantly impact night sky visibility and would result in significant impacts that would affect the Lick Observatory on Mount Hamilton. Lighting would therefore result in potentially significant impacts. Implementation of Mitigation Measure 3.1-1 from the 2005 EIR would reduce this impact to a less-than-significant level.

Table 4 lists the mitigation measures from the 2005 EIR related to aesthetics.

Table 4 2005 EIR Mitigation Measures: Visual Quality and Urban Design

Mitigation Measure	Description
Mitigation 3.1-1	The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the [2005] City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.

Source: City of Morgan Hill 2005

Impact Analysis

a. Would the project have a substantial adverse effect on a scenic vista?

A scenic vista is usually defined as a panoramic view from an elevated position or a long-range view from a public vantage point. This can include views of natural features or of the built environment, when architecture and landscaped boulevards offer high-value views of an area considered important to the sense of place. The General Plan EIR identifies El Toro Mountain and views of the Diablo Range to the east and the Santa Cruz Mountains to the west from the valley floor, as well as natural streams and riparian areas, as scenic vistas in the City. The 2005 EIR determined that less-than-significant impacts to scenic vistas would occur because policies and existing regulations are in place to protect views of scenic vistas in the City, because the General Plan does not designate the Greenbelt for urban development and because the height of new development is restricted by the Municipal Code and General Plan. Additionally, the 2005 EIR found that because the project would include landscaping to screen views from US 101, impacts to scenic vistas would be less than significant.

While the proposed residences, hotel, and reconfigured structures proposed in this project were not specifically considered in the 2005 EIR, full development of the site is analyzed, since the proposed

buildings are of similar height than to those analyzed in the 2005 EIR. Therefore, the project would not obstruct views of surrounding hillsides more substantially than what was determined by the 2005 EIR.

Because the proposed project site is not on a hillside, the project would not conflict with City goals and policies regarding hillside preservation in the City's 2035 General Plan. Furthermore, the project would comply with height regulations established in the Zoning Code. Therefore, impacts of the project on scenic vistas would be consistent with the findings of the 2005 EIR and would be less than significant. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The 2005 EIR found no impacts to scenic resources, because there are no designated State Scenic Highways in Morgan Hill. Therefore, similar to the conclusion in the 2005 EIR, there would be no impact to scenic resources in a State Scenic Highway. This topic will not be discussed in the Subsequent EIR.

NO IMPACT

- c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project is in an urbanized area in the city limits of Morgan Hill. The proposed residences and commercial structures would incrementally increase building coverage on the project site compared to what was originally proposed for the Phase II development and considered in the 2005 EIR. However, the residences and structures would have similar height, scale, and setback characteristics to the buildings considered in the 2005 EIR. The proposed project would require a General Plan amendment to change the land use designation to Mixed Use Flex, which would require compliance with residential and commercial design guidelines. Furthermore, the proposed project would continue development patterns in the area, would be subject to design review, and would be designed to meet City design standards and, as such, would not result in a substantial degradation of the visual quality of the City. Accordingly, the project would not substantially degrade the existing visual character or quality of the site and its surroundings beyond what was analyzed in the 2005 EIR, and impacts would be less than significant. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The 2005 EIR describes lighting impacts from the proposed project as potentially significant because of its potential adverse effects to night sky visibility and the Lick Observatory on Mount Hamilton. Similar to the project as analyzed in the 2005 EIR, the proposed project would be subject to the City's design review process and would be reviewed for consistency with the City's *Architectural Review Handbook*, which contains standards and guidelines regarding the appropriate use of lighting and avoidance of glare from lighting and other sources. The proposed project would also be required to be consistent with the California Building Code standards for outdoor lighting and the California Green Building Standards Code (CALGreen), which includes limitations on light fixtures (refer to Section 5.106.8 regarding light pollution reduction and Table 5.106.8 regarding the maximum allowable backlight). Furthermore, pursuant to the 2005 EIR, Mitigation Measure 3.1-1 would still apply to the proposed project. Project implementation would result in no new or more severe impacts concerning lighting beyond those previously identified in the 2005 EIR. Impacts would be less than significant with implementation of Mitigation Measure 3.1-1 from the 2005 EIR, and this topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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2 Agriculture and Forestry Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	EIR pages 3.2-7 through 3.2-11	No	No	No	N/A
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	EIR pages 3.2-7 through 3.2-11	No	No	No	N/A
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	EIR pages 3.2-7 through 3.2-11	No	No	No	N/A

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
d. Result in the loss of forest land or conversion of forest land to non-forest use?	N/A	No	No	No	N/A
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	EIR pages 3.2-7 through 3.2-11	No	No	No	N/A

2005 EIR Summary

Impacts to Agricultural Resources were analyzed in Section 3.2 of the 2005 EIR. The EIR concluded that the proposed project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, which would result in significant and unavoidable impacts. The 2005 EIR did not address forestry impacts.

Agricultural and Forestry impacts identified in the 2005 EIR are summarized as follows.

Prime Farmland Conversion

The 2005 EIR found that the project would result in the conversion of approximately 66.49 acres of Prime Farmland, as designated on the California Department of Conservation, Division of Land Resources Protection *Santa Clara County Important Farmland Map*. A California Agricultural Land Evaluation and Site Assessment model was conducted to determine whether or not impacts to agricultural resources at the project site would be considered significant. This model found that conversion of the agricultural land at the project site would be significant. Development of proposed commercial uses and paved parking areas removes the land from agricultural production, and the affected land cannot be recreated or reproduced elsewhere. There are no feasible mitigation measures available to reduce the impact of agricultural land conversion to a less-than-significant impact. Therefore, the conversion of the project site to commercial/retail uses was determined to be a significant and unavoidable impact.

Agricultural-Urban Land Use Conflicts

The 2005 EIR found that at buildout, the proposed project would place urban land uses adjacent to agricultural uses, which may impair agricultural production and result in land use compatibility conflicts. Existing agricultural operations could potentially affect the proposed commercial/retail uses. Potential conflicts from the adjacent agricultural activities to the proposed development may be dust, odors, pesticide or herbicides run-over. Plowing activities would generate dust, which could be carried to the project site. However, the potential for dust generation would occur only occasionally when fields are plowed or when bare soils are exposed under high-wind conditions. Development of the project site would reduce effects from dust from agricultural operations through screening by the large development and would reduce effects to persons on the site. This effect would also be somewhat reduced because of the relative short-term exposure of customers and employees at the commercial uses at the proposed project to agricultural dust generation, pesticides, and odors in the parking lots in comparison to residential uses located to the north and east of the project site. In addition, lands to the east of the project site are located in the City's sphere of influence and are designated for medium-density residential development in the General Plan. Given the proximity of existing residential and commercial development in the project vicinity, aerial application of pesticides on adjacent properties would be limited, because the agricultural users have already had to adjust to the intrusion of urban uses. Therefore, the potential for pesticide drift would be minimal. In light of these factors, the potential impacts due to agricultural-urban conflicts associated with the proposed project would be less than significant.

Agricultural Zoning and Williamson Act Contracts

The 2005 EIR found that the proposed project would not conflict with zoning for an agricultural use. None of the parcels at the project site are currently under a Williamson Act contract. While the 2005 EIR did find that a parcel located approximately 800 feet north of the project site was currently being used for greenhouse production and under a Williamson Act contract, it was determined that due to the distance and nature of the use of the property, the proposed project would not conflict with the Williamson Act contract.

Impact Analysis

- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The proposed project would remove the same land from agricultural use as the project studied in the 2005 EIR. The impact would therefore be the same as for the previous project and this issue was addressed adequately in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

As discussed in the 2005 EIR, neither the project site nor the directly adjacent parcels are under Williamson Act contracts. There would be no impact. This topic will not be discussed in the Subsequent EIR

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The City of Morgan Hill's General Plan does not identify land in the City as zoned for forest land or timberland, and according to the U.S. Department of Agriculture - Forest Service, there is no land in Morgan Hill identified as forestland or timberland (U.S. Department of Agriculture 2021). The project site does not contain forest land or forestry resources. Therefore, there would be no impact to forest land. This impact will not be discussed in the Subsequent EIR.

NO IMPACT

- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The proposed project would remove the same land from agricultural use as the project studied in the 2005 EIR and would introduce new development in the same location. The impact would therefore be the same as for the previous project, and this issue was addressed adequately in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

3 Air Quality

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	N/A	Yes	Yes	Yes	N/A
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	EIR Pages 3.3-14 to 3.3-19	Yes	Yes	Yes	No
c. Expose sensitive receptors to substantial pollutant concentrations?	EIR Pages 3.3-14 to 3.3-21	Yes	Yes	Yes	Yes
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	N/A	Yes	Yes	Yes	N/A

2005 EIR Summary

Impacts to air quality are analyzed in Section 3.3 of the 2005 EIR. The section reviews temporary construction emissions and long-term operational emissions. Emissions from demolition, site preparing, and grading activities are identified. For operational emissions, mobile source emissions, localized sources of carbon monoxide (CO), and stationary sources are analyzed. Furthermore, sources of toxic air contaminants (TAC) from construction and operational activities in proximity to

sensitive receptors are described. The section does not address the issues of conflicts with air quality plans or other emissions, such as odors. Air quality impacts identified in the 2005 EIR are summarized as follows.

Construction

DEMOLITION OF EXISTING BUILDINGS

The EIR finds that the demolition of existing buildings would result in the potential release of asbestos. Compliance with the Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2 and California Occupational Safety and Health Administration regulations and standards would be required. Mitigation Measure 3.3-1 is required to ensure that asbestos-containing material are removed and handled properly prior to demolition of existing structures. Impacts would be less than significant.

CONSTRUCTION-RELATED EMISSIONS

The EIR finds that construction activities would generate emissions in the form of dust, exhaust emissions, and TACs. The emissions are qualitatively addressed, since a quantitative analysis was not required by BAAQMD. It is concluded that exhaust emissions from operation of construction equipment onsite and vehicle activity would be less than significant due to the temporary nature of construction. However, fugitive particulate matter (particulate matter with a diameter of 10 microns or less [PM₁₀]) would be a potentially significant source of emissions due to site preparation and grading activities. Therefore, Mitigation Measure 3.3-2 is required to reduce impacts to less-than-significant levels.

Operation

MOBILE SOURCE EMISSIONS

The EIR finds that the proposed project would generate new trips and mobile source emission that would exceed the significance thresholds established by the BAAQMD. The weekday and weekend mobile source emissions would exceed the BAAQMD significance thresholds of 80 pounds per day for reactive organic gases, nitrogen oxides, and PM₁₀. As such, impacts from mobile source emissions would be potentially significant and would require Mitigation Measure 3.3-3 to reduce impacts to less-than-significant levels.

LOCALIZED EMISSIONS OF CARBON MONOXIDE

The EIR finds that the project would not be a source of localized CO emissions based on a screening analysis. The future CO concentrations anticipated at the nearby intersections would be below the California Ambient Air Quality Standard (CAAQS) of 9 parts per million (ppm). As such, impacts would be less than significant, and no mitigation measures would be required.

STATIONARY SOURCES – TOXIC AIR CONTAMINANTS

The EIR finds that the project would include the development of a new stationary source in the form of a 12-pump gasoline fuel facility. Operation of the gasoline fuel facility would release gasoline vapor emission during the storage and dispensing of gasoline. The new gasoline fuel facility would be required to obtain a permit to operate from the BAAQMD, which would review the fuel facility design and ensure that it does not present a significant cancer risk. As such, adherence to the

BAAQMD permitting process would result in less-than-significant impacts, and no mitigation measures would be required. Table 5 lists the 2005 EIR's mitigation measures related to air quality.

Table 5 2005 EIR Mitigation Measures: Air Quality

Mitigation Measure	Description
Impact 3.3-1: Short-Term Construction Emissions – Demolition of Existing Buildings	
Mitigation Measure 3.3-1	Prior to demolition of any onsite structures, the project applicant shall conduct a full site assessment for ACM by a California-certified asbestos consultant for all structures proposed for demolition. Prior to demolition and site clearing activity, all identified ACM shall be removed by a licensed asbestos abatement contractor, and clearance shall be obtained from the BAAQMD before proceeding with the demolition. All ACM shall be transported to a disposal site approved to accept non-friable asbestos-containing waste.
Impact 3.3-2: Short-Term Construction Emissions – Grading and Site Preparation	
Mitigation Measure 3.3-2	The project applicant shall implement the following recommended BAAQMD dust-control measures for construction emissions of PM₁₀. These dust-control measures shall be implemented during construction for all phases of the proposed project: ▪ Sprinkle water to all active construction areas at least twice daily and more often when conditions warrant ▪ Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard ▪ Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites ▪ Sweep daily all paved access roads, parking areas, and staging areas at construction sites ▪ Sweep streets daily if visible soil material is carried onto adjacent public streets ▪ Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas ▪ Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.) ▪ Limit traffic speeds on unpaved roads to 15 miles per hour ▪ Install sandbags or other erosion control measures to prevent silt runoff to public roadways ▪ Replant vegetation in disturbed areas as quickly as possible ▪ Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site ▪ Suspend grading activities when winds exceed 25 miles per hour and visible dust clouds cannot be prevented from extending beyond active construction areas ▪ Limit the area subject to excavation, grading, and other construction activity at any one time
Impact 3.3-3: Long-Term Operational Emissions – Mobile Source Emissions	
Mitigation Measure 3.3-3	A facilities "trip reduction plan" shall be implemented by the project applicant to reduce single occupant vehicle commute trips by employees and promote non-auto travel by both employees and patrons. The facilities trip reduction plan shall include, but not be limited to, elements that would reduce traffic and thus air pollutant emissions as described below: ▪ Provide one bus stop/shelter with pedestrian access to the project site. Implementation of this measure could reduce project emissions by approximately 2%. ▪ Bicycle amenities should be provided at the project site once the proposed project is in operation. Bicycle amenities could include secure bicycle parking for employees, bicycle racks for customers, and bike lane connections. This vehicle trip reduction measure may reduce emissions associated with the proposed project by approximately 2%. ▪ Pedestrian facilities should link the future transit stop and access roadways to the major sites uses. This trip reduction measure may reduce emissions by approximately 1%. ▪ Designate a portion of the parking lot for weekday "park-and-ride" parking spaces (the excess between weekday peak and weekend peak) which would reduce emissions from traffic to the project site by allowing commuters to park their car and carpool or take transit.

Mitigation Measure	Description
	Require employers at the project site to post transit rates and scheduling information on bulletin boards. This vehicle trip reduction measure may reduce emissions by 1%.
ACM = asbestos-containing materials	
Source: City of Morgan Hill 2005	

Overview of Air Pollution

The federal Clean Air Act and State Clean Air Act mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the CAAQS for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including CO, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), PM₁₀, particulate matter with diameters of 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the BAAQMD. As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met, and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SFBAAB is classified as being in “attainment” or “non-attainment.” In areas

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this Initial Study.

designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 6, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SFBAAB is designated a non-attainment area for state and federal ozone standards, state and federal PM_{2.5} standards, and state PM₁₀ standards and is in attainment or unclassified for the remaining criteria pollutants (BAAQMD 2017a). This non-attainment status is a result of several factors, including meteorology and topography, as well as high automobile emissions in the SFBAAB (BAAQMD 2017a).

Table 6 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.

Source: U.S. Environmental Protection Agency 2021

Air Quality Management

Because the SFBAAB currently exceeds the ozone and PM_{2.5} for NAAQS and the ozone, PM_{2.5}, and PM₁₀ for CAAQS, the BAAQMD is required to implement strategies to reduce pollutant levels to achieve attainment for NAAQS and CAAQS. The Bay Area 2017 Clean Air Plan provides a plan to improve Bay Area air quality and protect public health, as well as the climate. The legal impetus for the 2017 Clean Air Plan is to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with state air quality planning requirements as codified in the California Health and Safety Code. Although steady progress in reducing ozone levels in the SFBAAB has been made, the region continues to be designated as non-attainment for both the 1-hour and 8-hour state ozone standards. In addition, emissions of ozone precursors in the Bay Area contribute to air quality problems in neighboring air basins. Under these circumstances, state law requires the 2017 Clean Air Plan to include all feasible measures to reduce emissions of ozone precursors and reduce transport of ozone precursors to neighboring air basins. The 2017 Clean Air Plan determines that, with implementation of the proposed control strategy, the SFBAAB can expect to reach attainment of state ozone standards by approximately 2025 (BAAQMD 2017b).

In 2006, the U.S. EPA reduced the national 24-hour PM_{2.5} standard regarding short-term exposure to fine particulate matter from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³. Based on air quality monitoring data for the 2006 to 2008 cycle showing that the region was slightly above the

standard, the U.S. EPA designated the SFBAAB as non-attainment for the 24-hour national standard in December 2008. This triggered the requirement for the BAAQMD to prepare a State Implementation Plan (SIP) submittal to demonstrate how the region would attain the standard. However, data for both the 2008 to 2010 and the 2009 to 2011 cycles showed that PM_{2.5} levels in the SFBAAB currently meet the standard. On October 29, 2012, the U.S. EPA issued a proposed rulemaking to determine that the SFBAAB now attains the 24-hour PM_{2.5} national standard. Based on this, the SFBAAB is required to prepare an abbreviated SIP submittal, which includes an emission inventory for primary (directly-emitted) PM_{2.5}, as well as precursor pollutants that contribute to formation of secondary PM in the atmosphere and amendments to BAAQMD New Source Review to address PM_{2.5} (adopted December 2012). However, key SIP requirements to demonstrate how a region will achieve the standard (i.e., the requirement to develop a plan to attain the standard) will be suspended as long as monitoring data continues to show that the SFBAAB attains the standard.

In addition to preparing the “abbreviated” SIP submittal, the BAAQMD has prepared a report entitled “Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area” (BAAQMD 2012). The report helps guide the BAAQMD’s ongoing efforts to analyze and reduce PM in the Bay Area in order to better protect public health.² The SFBAAB will continue to be designated as non-attainment for the federal 24-hour PM_{2.5} standard until such time as the BAAQMD elects to submit a “redesignation request” and a “maintenance plan” to the U.S. EPA, and the U.S. EPA approves the proposed redesignation.

Air Pollutant Emission Thresholds

The BAAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its May 2017 *CEQA Air Quality Guidelines* (BAAQMD 2017a).

Regional Emission Thresholds

Table 7 presents the significance thresholds for construction-related criteria air pollutant and precursor emissions adopted by BAAQMD. These represent the levels at which a project’s individual emissions of criteria air pollutants or precursors during construction would result in a cumulatively considerable contribution to the SFBAAB’s existing air quality conditions. If the project’s construction-related criteria pollutant emissions exceed the thresholds shown in Table 7, the proposed project would result in a significant construction-related air quality impact.

Table 7 Criteria Air Pollutant Significance Thresholds for Construction

Pollutant	Average Daily Emissions (pounds/day)
ROG	54
NO _x	54
PM ₁₀	82 (exhaust)
PM _{2.5}	54 (exhaust)
Source: BAAQMD 2017a	

Table 8 presents the significance thresholds for operation-related criteria air pollutant and precursor emissions adopted by BAAQMD. These represent the levels at which a project’s individual

² PM is made up of particles that are emitted directly, such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from chemical reactions involving precursor pollutants such as oxides of nitrogen, sulfur oxides, volatile organic compounds, and ammonia.

emissions of criteria air pollutants or precursors during operation would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If the project's operation-related criteria pollutant emissions exceed the thresholds shown in Table 8, the proposed project would result in a significant operation-related air quality impact.

Table 8 Criteria Air Pollutant Significance Thresholds for Operation

Pollutant	Average Daily Emissions (pounds/day)	Average Annual Emissions (tons/year)
ROG	54	10
NO _x	54	10
PM ₁₀	82	15
PM _{2.5}	54	10

Source: BAAQMD 2017a

Carbon Monoxide

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

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

Toxic Air Contaminants

In the absence of a qualified Community Risk Reduction Plan, BAAQMD has established the following *Thresholds of Significance* for local community risks and hazards associated with TACs and PM_{2.5} for assessing individual source impacts at a local level. Impacts would be significant if:

- The project would result in an increased cancer risk of >10 in one-million
- The project would result in an increased non-cancer (i.e., Chronic or Acute) risk of >1.0 Hazard Index
- The project would result in an ambient PM_{2.5} concentration increase of >0.3 µg/m³ annual average

A project would be considered to have a cumulatively considerable impact if the aggregate total of current and proposed TAC sources within a 1,000 feet radius of the project fence-line, in addition to the project, would exceed the *Cumulative Thresholds of Significance*. Impacts would be significant if:

- The project would result in an increased cancer risk of >100 in one million
- The project would result in an increased non-cancer (i.e., Chronic or Acute) risk of >10 Hazard Index

- The project would result in an ambient PM_{2.5} concentration increase of >0.8 µg/m³ annual average

Excess cancer risks are defined as those occurring in excess of or above and beyond those risks that would normally be associated with a location or activity if toxic pollutants were not present. Non-carcinogenic health effects are expressed as a hazard index, which is the ratio of expected exposure levels to an acceptable reference exposure level.

Odor Sources

The BAAQMD provides minimum distances for siting of new odor sources shown in Table 9. A significant impact would occur if the project would result in other emissions (such as odors) affecting substantial numbers of people or would site a new odor source as shown in Table 9 in the specified distances of existing receptors.

Table 9 BAAQMD Odor Source Thresholds

Odor Source	Minimum Distance for Less-than-Significant Odor Impacts (in miles)
Wastewater Treatment Plant	2
Wastewater Pumping Facility	1
Sanitary Landfill	2
Transfer Station	1
Composting Facility	1
Petroleum Refinery	2
Asphalt Batch Plant	2
Chemical Manufacturing	2
Fiberglass Manufacturing	1
Painting/Coating Operations	1
Rendering Plant	2
Source: BAAQMD 2017a	

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., townhomes, mid-rise apartments, a hotel, and strip mall uses), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used onsite and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the applicant-provided construction schedule and default-based construction equipment list. Construction would occur over approximately three overlapping phases (Phase 1, 2, and 3) from March 2023 to September 2025 (approximately 30 months/2.5 years). The schedule would be 6 days per week with construction active Monday through Saturday. The site would cut 37,510 cubic

yards of material and balance with no hauling export or import onsite. It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with the BAAQMD Regulation 8 Rule 3 for architectural coating. Additionally, the site is currently vacant, and no demolition would occur. Mitigation Measure 3.3-1 from the 2005 EIR would not be applicable to this analysis, since no onsite structures would be demolished.

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. Emissions attributed to energy use include natural gas consumption by appliances, as well as for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coatings.

Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The California Clean Air Act requires that air districts create a Clean Air Plan that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the BAAQMD 2017 Clean Air Plan. The 2017 Clean Air Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and TACs. The 2017 Clean Air Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes control measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants (BAAQMD 2017b).

The 2017 Clean Air Plan focuses on two paramount goals:

- Protect air quality and health at the regional and local scale by attaining all national and state air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TACs
- Protect the climate by reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050

Under BAAQMD's methodology, a determination of consistency with the 2017 Clean Air Plan should demonstrate that a project:

- Supports the primary goals of the air quality plan
- Includes applicable control measures from the air quality plan
- Does not disrupt or hinder implementation of any air quality plan control measures

A project that would not support the 2017 Clean Air Plan's goals would not be consistent with the 2017 Clean Air Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the Clean Air Plan's goals. As shown in the response to Threshold 2 (see Table 10, Table 11, and Table 12 below), the project would not result in exceedances of BAAQMD thresholds for criteria air pollutants and thus would not conflict with the 2017 Clean Air Plan's goal to attain air quality standards. The 2017 Clean Air Plan includes goals and measures to increase the use of electric vehicles, promote the use of onsite renewable energy, and encourage energy efficiency. The project includes features that are consistent with these goals and measures, including meeting CALGreen, being an all-electric development, providing electric

vehicle parking stalls, and providing spaces of bicycle parking. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan and the project would have a less-than-significant impact. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The SFBAAB is designated non-attainment for the NAAQS for ozone and PM_{2.5} and the CAAQS for ozone, PM_{2.5}, and PM₁₀. The following subsections discuss emissions associated with construction and operation of the proposed project.

Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction equipment and construction vehicles in addition to ROG emissions that would be released during the drying phase of architectural coating. Table 10 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed BAAQMD thresholds. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

Table 10 Estimated Maximum Daily Construction Emissions (lbs/day)

Construction Year	ROG	NO _x	CO	SO ₂	Exhaust PM ₁₀	Exhaust PM _{2.5}
Phase 1						
2022	7	50	52	<1	2	2
2023	4	17	21	<1	1	1
2024	4	16	20	<1	1	1
Phase 2						
2023	20	45	43	<1	2	2
2024	20	19	28	<1	1	1
Phase 3						
2024	17	46	54	<1	2	2
Maximum Emissions	20	50	52	<1	2	2
BAAQMD Thresholds	54	54	N/A	N/A	82	54
Threshold Exceeded?	No	No	N/A	N/A	No	No

lbs/day = pounds per day; N/A = not applicable; ROG = reactive organic gases, NO_x = nitrogen oxides, CO = carbon monoxide, SO₂ = sulfur dioxide, PM₁₀ = particulate matter 10 microns in diameter or less, PM_{2.5} = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including BAAQMD Regulation 8 Rule 3) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

The BAAQMD does not have quantitative thresholds for fugitive dust emissions during construction. Instead, the BAAQMD recommends the implementation of best management practices (BMP) to reduce fugitive dust emissions. The project would need to implement Mitigation Measure 3.3-2 from the 2005 EIR. Adherence to the dust control measures listed in Mitigation Measure 3.3-2 would reduce impacts to less-than-significant levels.

Operational Emissions

The 2005 EIR utilized the URBan EMISSIONS (URBEMIS) computer program to determine project operational emissions. URBEMIS is a computer model that uses factors such as land use, existing traffic conditions, and existing transit infrastructure to estimate potential air quality impacts that could occur as a result of a proposed project. The 2005 EIR utilized URBEMIS version 7.5.0, which incorporates 2002 EMISSION FACTORS, or EMFAC, which are emissions factors developed by CARB that are used to assess vehicle emissions and support CARB's regulatory and air quality planning efforts. The 2005 EIR found that operational emissions from mobile sources would be significant and unavoidable, even with implementation of Mitigation Measure 3.3-3.

This Initial Study utilizes CalEEMod to model emissions. CalEEMod is an updated and more refined emissions modeling computer program. CalEEMod is a more accurate emissions model, because it incorporates cleaner technology (e.g., construction equipment with engines that emit fewer pollutants due to filters and design), more stringent state regulations (e.g., the 2019 Title 24 building code for building energy efficiency), and improved vehicle standards (e.g., accounting for increased electric vehicles in the average fleet and lower emission factors due to engine design improvements). Therefore, model outputs from CalEEMod will show different results than the URBEMIS 2002 model, because the model has newer inputs that incorporate the cleaner and more stringent standards required at the time of this analysis. Additionally, the CalEEMod model output will be different than what was modeled in the 2005 EIR, as the Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., architectural coatings, consumer products, and landscaping equipment) and mobile sources (i.e., vehicle trips to and from the project site). There would be no energy criteria pollutant emissions since the project would not use natural gas. Table 11 summarizes the project's maximum daily operational emissions by emission source. Table 12 summarizes the project's annual operational emissions by emission source.

Table 11 Estimated Maximum Daily Operational Emissions (lbs/day)

Emissions Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	23	<1	41	<1	<1	<1
Mobile	27	27	229	<1	48	13
Stationary	<1	<1	<1	<1	<1	<1
Total	<51	<29	<271	<3	<50	<15
BAAQMD Thresholds	54	54	N/A	N/A	82	54
Threshold Exceeded?	No	No	No	No	No	No

lbs/day = pounds per day; N/A = not applicable; ROG = reactive organic gases, NO_x = nitrogen oxides, CO = carbon monoxide, SO₂ = sulfur dioxide, PM₁₀ = particulate matter 10 microns in diameter or less, PM_{2.5} = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including BAAQMD Regulation 8 Rule 3) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

Table 12 Estimated Annual Operational Emissions (tons/year)

Emissions Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Sources	4	<1	4	<1	<1	<1
Mobile Sources	4	4	32	<1	7	2
Stationary Sources	<1	<1	<1	0	0	0
Total	<9	<6	<37	<2	<8	<3
BAAQMD Thresholds	10	10	N/A	N/A	15	10
Threshold Exceeded?	No	No	No	No	No	No

N/A = not applicable; ROG = reactive organic gases, NO_x = nitrogen oxides, CO = carbon monoxide, SO₂ = sulfur dioxide, PM₁₀ = particulate matter 10 microns in diameter or less, PM_{2.5} = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results, which account for compliance with regulations (including BAAQMD Regulation 8, Rule 3 for architectural coatings) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

As shown in Table 11 and Table 12, operational emissions would not exceed the BAAQMD regional thresholds for criteria pollutants. The proposed project’s operational emissions would be less than significant. Because this impact would be less than significant, Mitigation Measure 3.3-3 from the 2005 EIR would not be needed. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Therefore, the majority of sensitive receptor locations are schools, hospitals, and residences. Sensitive receptors in the project vicinity include single-family residences located immediately east of the project site, as well as Westmont of Morgan Hill, a retirement community, located approximately 175 feet south of the project site across Cochrane Road. The nearest sensitive receptors are the single-family residences adjacent to the project site’s eastern boundary. The project also includes the siting of new sensitive receptors. Localized air quality impacts to sensitive receptors typically result from CO hotspots and TACs, which are discussed in the following subsections.

Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal 1-hour standard of 35 ppm or the federal and state 8-hour standard of 9 ppm (CARB 2016).

The project would generate approximately 9,857 net new trips based on the CalEEMod output (Appendix A). Based on the Transportation Analysis prepared by Hexagon Transportation Consultants, Inc., the existing average daily traffic on Cochrane Road between U.S. 101 northbound ramp and DePaul Drive is 18,390 vehicles. The cumulative average daily trips (ADT) on Cochrane Road with the project would increase to 33,190 vehicles with the project contributing 7,500 daily trips to the overall total. The intersection would not exceed 44,000 vehicles per hour, nor would the project contribute enough trips to cause the intersection to exceed the threshold of 44,000 vehicles per hour. Therefore, the project would not expose sensitive receptors to substantial CO

concentrations, and localized air quality impacts related to CO hot spots would be less than significant.

Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

Construction

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Construction of the proposed project would occur over approximately 30 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period, but such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 30 months) is approximately 8 percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017a). Given the aforementioned discussion, DPM generated by project construction would not create conditions where the probability is greater than one-in-one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

Operation

Common sources of TACs and PM_{2.5} include gasoline stations, dry cleaners, diesel backup generators, truck distribution centers, freeways, and other major roadways (BAAQMD 2017b). The project would not involve construction of gas stations, dry cleaners, highways, or roadways, but would install diesel backup generators, which are a permitted source of TAC or PM_{2.5}.

The project would include three onsite emergency diesel generators rated at 150 kilowatts (kW) and powered by an approximately 201-horsepower engine. The locations are subject to change, but one

generator would be near the drainage basin, one near the leasing office, and one on the southern end of the apartments. Potential health risk impacts from the emergency generators were calculated using the BAAQMD *Risk and Hazards Emissions Screening Calculator* (Beta Version). The DPM emissions that would be generated by the emergency generators was computed using CalEEMod assuming that the generators would operate for a maximum of 50 hours per year for testing and maintenance purposes pursuant to the BAAQMD *Permit Handbook* (2021). The tons per year emissions were then converted into pounds per day emissions assuming operation could occur any day of the year (365 days). The pounds per day emissions were input into the *Risk and Hazards Emissions Screening Calculator* assuming the source was solely a diesel engine. Additionally, the risks from each generator were adjusted for distance to the closest sensitive receptor. Due to locations of each generator, a different distance was used for each one. For the emergency generator proposed by the drainage basin, the nearest sensitive receptor would be a single-family residence approximately 520 feet northwest. The emergency generator located near the leasing office is approximately 640 feet southwest of the single-family residences across Mission View Drive, and the generator south of the proposed apartments is approximately 315 feet south of the same single-family residences. Table 13 shows the potential health risks from the emergency generators the nearest existing sensitive receptors.

Table 13 Health Risks from Emergency Generator Testing and Maintenance Operation

Scenario	Distance (feet/meters)	Excess Cancer Risk (per million)	Chronic Health Risk ^{1,2}	PM _{2.5} Annual Average (µg/m ³)
Project Emergency Generator #1	520/155	1	<0.1	0
Project Emergency Generator #2	640/195	1	<0.1	0
Project Emergency Generator #3	315/95	2	<0.1	0
BAAQMD Significance Threshold		>10	>1	>0.3
Threshold Exceeded?		No	No	No

BAAQMD = Bay Area Air Quality Management District; PM_{2.5} = particulate matter less than 2.5 microns in size; µg/m³ = micrograms per cubic meter;

¹ Noncancer health impacts are determined by dividing the airborne concentration at the receptor by the appropriate Reference Exposure Level (REL) for that substance. A REL is defined as the concentration at which no adverse noncancer health effects are anticipated. Because noncancer health impacts are assessed as the ratio of airborne concentration versus the REL, the resulting hazard index is unitless.

² There is no acute reference exposure level for diesel exhaust to calculate acute health risk. Furthermore, except for unusual circumstances of high exposure, Office of Environmental Health Hazard Assessment does not recommend acute analysis for DPM.

Source: Appendix A

Additionally, there are two permitted emission sources identified within 1,000 feet of the project's fence line using BAAQMD's *Permitted Stationary Source Risk and Hazards* mapping tool (BAAQMD 2021). The Target Corporation source (Facility Identification 18384) is approximately 855 feet west of the sensitive receptors closest to the project generators and the source is a natural gas emergency generator. The other source is the Cochrane Commons Service Station, a gas dispensing facility, which is approximately 620 feet southwest of the sensitive receptors closest to the project generators. Other sources within 1,000 feet of the project fence line include Cochrane Road and U.S. 101. Both are major roadways with more than 10,000 ADT. Cochrane Road runs immediately

south of the project site (approximately 25 feet to the roadway centerline). U.S. 101 is approximately 705 feet west of the project site.

For screening purposes, BAAQMD provides raster data that indicates health risk associated with highways, major roadways, and railroads in the Bay Area. BAAQMD used AERMOD³ to model cancer risk and PM_{2.5} concentrations associated with each source. For this analysis, cancer risk and PM_{2.5} concentrations associated with each roadway were identified at the location of 17 sensitive receptors in proximity to the project site. To provide a conservative analysis, only the greatest cancer risk and PM_{2.5} concentrations are provided.

Table 14 provides the cumulative risks and hazards associated with project and nearby sources of TACs. As shown in Table 14, the total cumulative risks would not exceed the BAAQMD thresholds.

Table 14 Cumulative Health Risks Associated with the Project and Nearby TAC Sources

Source	Source Type	Distance (feet/meters)	Excess Cancer Risk (per million)	Chronic Health Risk	PM _{2.5} Annual Average (µg/m ³)
Project Emergency Generators	Diesel Generators	315/95	2	<0.1	0
Project Emergency Generators	Diesel Generators	520/155	1	<0.1	0
Project Emergency Generator	Diesel Generators	640/195	1	<0.1	0
Target Corporation #T2252(Facility ID 18384) (Plant Number 17945)	Natural Gas Generator	545/165	<1	<0.1	<0.01
Cochrane Commons Service Station (Facility ID 2002499) ²	Gas Dispensing Facility	275/85	<1	<0.1	0
U.S. 101	Roadway		21	N/A	0.3
Cochrane Road	Roadway		<1	N/A	<0.01
Cumulative Total			<32	<0.5	0.33
BAAQMD Significance Threshold			>100	>10	>0.8
Threshold Exceeded?			No	No	No

PM_{2.5} = particulate matter less than 2.5 microns in size; µg/m³ = micrograms per cubic meter; N/A = not applicable
Source: Appendix A

Impacts would be less than significant, and the project would not contribute to a cumulative risk associated with TACs. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

³ A steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain.

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. Overall, project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

Table 9 provides screening distances for land uses that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants (WWTP), landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017a). Apartments, townhomes, strip malls, and hotels are not included in this list, and operation of the project would not generate other emissions, such as those leading to odors that would affect a substantial number of people. No operational impacts would occur. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

- | | | | | | |
|--|--------------------------------|----|----|----|-----|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | EIR Pages 3.4-1 through 3.4-33 | No | No | No | Yes |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | EIR Pages 3.4-1 through 3.4-33 | No | No | No | N/A |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	EIR Pages 3.4-1 through 3.4-33	No	No	No	N/A
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	EIR Pages 3.4-1 through 3.4-3	No	No	No	Yes
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	EIR Pages 3.4-1 through 3.4-33	No	No	No	Yes

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Biological Resources were analyzed in Section 3.4 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to biological resources.

Biological Resources impacts identified in the 2005 EIR are summarized as follows.

Bay Checkerspot Butterfly

The 2005 EIR identified that the Bay checkerspot butterfly are known to occur within 1 mile of the project location. The project area is also centrally located between three critical habitat areas for the Bay checkerspot butterfly, one to the northeast, one to the northwest, and one to the southwest. However, the site was not identified as having host plants and habitat for the Bay checkerspot butterfly, the occurrence of which would likely be incidental, and impacts would be less than significant.

Burrowing Owl Habitat

The 2005 EIR found that implementation of the proposed project would result in temporary and direct alteration of site conditions that could support burrowing owls, a special-status wildlife species. Habitat at the project location provides a high potential of suitability for reproduction, cover, and foraging of the species. As such, impacts to the burrowing owl habitat would be potentially significant and would require Mitigation Measures 3.4-1a and 3.4-1b to reduce impacts to less than significant.

Raptors and Migratory Birds

The 2005 EIR found that the proposed project would result in temporary and direct disturbance to nesting raptors and migratory birds. According to the 2005 EIR, there are 118 various tree species that provide nesting habitat for raptors and migratory birds. Construction activities that would require disturbance of trees or other vegetation containing active nests could result in significant

impacts to nesting raptor and migratory birds. As such, Mitigation Measure 3.4-2 would be required to reduce impacts to less than significant.

San Joaquin Kit Fox Habitat

The 2005 EIR found that the habitat on the project site could provide a moderate potential of suitability for reproduction, cover, and foraging for the San Joaquin Kit Fox. However, the 2005 EIR concluded that based on a site inspection, kit fox breeding habitat is not expected to occur in Morgan Hill and impacts would be less than significant.

Special-Status Bat Species

The 2005 EIR found that implementation of the proposed project would result in temporary and direct alteration of site conditions that could support special-status bat species and/or their roosting habitat. Special-status bat species, including long-eared myotis bat, small-footed myotis bat, and Yuma myotis bat have the potential to occur at the project site in rural structures or various trees on site. As such, Mitigation Measure 3.4-3 would be required to reduce impacts to less-than-significant levels.

Removal of Protected Trees

The 2005 EIR found that implementation of the proposed project would result in potential removal of 118 various tree species, some of which are native, which would be required to comply with 2005 Morgan Hill Municipal Code Section 12.32.070. Mitigation Measure 3.4-4 would be required to reduce impacts to less-than-significant levels (Table 15).

Table 15 2005 EIR Mitigation Measures

Mitigation Measure	Description
Mitigation 3.4-1a	The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1st through August 30th), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity in the vicinity of the burrow (distance to be determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented, and the biologist deems disturbance potential to be minimal.
Mitigation 3.4-1b	The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003)

Mitigation Measure	Description
Mitigation 3.4-2	If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1st through August 31st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned, or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 250 feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through January 31st)
Mitigation 3.4-3	The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special-status bat species in the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified in the project area during preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum): - Identify species present in the roost (this may require the assistance of a biologist who specializes in bat ecology) - Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present) - Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available. Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.
Mitigation 3.4-4	Removal and/or relocation of trees at the project site shall be in compliance with Sections 12.32.030 through 12.32.080 of the [2005] City of Morgan Hill Municipal Code, Restrictions on Removal of Significant Trees. Should the City of Morgan Hill require the project applicant to preserve any existing trees in place and/or transplant any trees at the project site, the following tree protection standards shall be implemented during construction and demolition activities at the project site. Prior to commencement of construction activities, to the greatest extent feasible, the critical root zone (measurement of the dripline radius taken from the tree trunk to the tip of the farthest reaching branch as determined by a Certified Arborist or Registered Professional Forrester) of any tree to be retained shall be fenced with a 4-foot high brightly colored synthetic fence at the outermost edge of the critical root zone to prevent injury to the trees prior to grading and during construction activities in the project area. The fencing shall remain in place until all construction activities are complete. Trenching, grading, soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed in the critical root zone.

Source: City of Morgan Hill 2005

Impact Analysis

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The project site is located in an urbanized area of Morgan Hill, and since the preparation of the 2005 EIR, has been partially developed with a gas station and fast-food restaurant as part of Phase I of the proposed project. Rare, sensitive, or special-status species, including birds that require specific habitat conditions are not typically present in developed areas. Nonetheless, trees and other vegetation onsite could potentially provide habitat for migratory birds, burrowing owls, and special-status bat species protected by the California Fish and Game Code, serving as habitat or nesting sites. Buildout of the proposed project could include tree and vegetation removal on the site. Impacts to protected nesting birds could occur if active nests are present in vegetation to be removed, or if birds in the vicinity are disturbed. Impacts to burrowing owls could occur with construction activities and destruction of habitat onsite. Impacts to special-status bat species could still occur with demolition of rural structures onsite and/or removal of trees. Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3 of the 2005 EIR would still apply and would be required to reduce impacts to less-than-significant levels.

The City also adopted the Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) that provides a region-wide conservation strategy that mitigates impacts on covered species on the basis of species and habitat needs. All project applicants for covered activities in the local plan area shall comply with the conditions on covered activities listed in Chapter 6 of the HCP/NCCP. Each planning permit application (or building permit application where no planning permit is required) for a covered activity in the local plan area shall include details of the methods and timing in which the project would be required to comply with the HCP/NCCP in the form and manner required by the City. In addition, the project would be required to comply with the Morgan Hill Burrowing Owl Mitigation Plan, which establishes citywide measures for the protection of the burrowing owl, such as requiring preconstruction surveys and mitigation fees.

With implementation of Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3, nesting birds, burrowing owls, and special-status bat species would be protected from disturbance during construction on the project site. With mitigation, there would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The project site is located in an urbanized area of Morgan Hill and is generally in the same condition as was analyzed in the 2005 EIR. There are no riparian areas or other sensitive natural communities on or directly adjacent to the project site. According to the National Wetlands Inventory, the nearest mapped wetland area to the project site is a freshwater pond located approximately 1 mile southeast of the project site (USFWS 2021). The project site is located approximately 650 feet northeast of the Cochrane Channel, which is a tributary of Coyote Creek. Development of the proposed project would not take place within at least 100 feet from the freshwater pond of the Cochrane Channel or their banks. The project site lacks sensitive natural communities and protected wetlands, the project would not have a direct adverse impact on biological resources.

As discussed in Section 10, *Hydrology and Water Quality*, the project would not result in impacts to water quality or increases in flow during construction or operation of the project site at the nearby channel. Therefore, no impact would occur. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. These topics will not be discussed in the Subsequent EIR.

NO IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The project site is located in an urbanized area of Morgan Hill and lacks natural habitats or riparian corridors and does not connect habitat or open space areas. Therefore, with mitigation incorporated, the project would not interfere substantially with wildlife movement, and this impact would be less than significant. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City of Morgan Hill Municipal Code includes a tree preservation ordinance under Chapter 12.32 which establishes regulations for the removal of significant trees in the City. In addition, Chapter 18.132 of the Municipal Code outlines the HCP and the Morgan Hill Burrowing Owl Mitigation Plan and would serve to protect biological resources through various policies, which generally call for the protection of habitat, such as trees. The project site currently does not have any existing trees that would be removed by the proposed project. As discussed under criterion a, the project would comply with existing regulations, avoidance measures, and mitigation fees in the HCP and Burrowing Owl Mitigation Plan. Therefore, the project would not conflict with any local policies or ordinances, and impacts would be less than significant with implementation of mitigation measures.

There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The 2005 EIR did not explicitly address potential conflicts with the provisions of an adopted HCP, NCCP, or other HCP. The City of Morgan Hill adopted the Santa Clara Valley HCP on October 17, 2012 and incorporated the HCP by reference in Chapter 18.132 of the Morgan Hill Municipal Code. As discussed in criterion a, b, c, d, and e, the project site is located in an urbanized area of Morgan Hill and would be required to comply with Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3, and applicable mitigation fees and mitigation measures that are identified in Chapter 6 of the HCP. Therefore, the project would have a less-than-significant impact on implementation of such plans. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	EIR Pages 3.5-17 to 3.5-19	No	No	No	No
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	EIR Pages 3.5-17 to 3.5-19	No	No	No	N/A
c. Disturb any human remains, including those interred outside of formal cemeteries?	EIR Pages 3.5-17 to 3.5-19	No	No	No	N/A

2005 EIR Summary

The 2005 EIR identified three residences on the project site. They were identified as 1195 Cochrane Road A (built 1930), 1195 Cochrane Road B (built 1912), and 1195 Cochran Road C (built 1940). The 2005 EIR found these residences ineligible for listing in the California Register of Historical Resources, and they were demolished. Research completed for the 2005 EIR furthermore did not identify any prehistoric sites, historic sites, or isolated artifacts. The 2005 EIR determined that impacts to undiscovered archaeological resources would be reduced to less-than-significant levels with implementation of Mitigation Measures 3.5-1a, 3.5-1b, and 3.5-1c.

Table 16 2005 EIR Mitigation Measures

Mitigation Measure	Description
Mitigation 3.5-1a	Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 150 feet of the discovery shall be halted until such time as a qualified professional archaeologist can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant.
Mitigation 3.5-1b	In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of Santa Clara County has determined whether the remains are subject to the Coroner's authority. This is in accordance with Section 7050.5 of the [2005] California Health and Safety Code. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.98 of the [2005] Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.

Source: City of Morgan Hill 2005

Impact Analysis

- Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*
- Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*
- Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Rincon completed a cultural resource assessment for the Cochrane-Morgan Hill Retail Ventures Project in March 2020. The assessment included a California Historical Resources Information System (CHRIS) records search, Native American outreach, archival research, pedestrian field survey, and preparation of a letter report included as Appendix CUL.

The results of the study identified no prehistoric or historic-period cultural resources on the project site. The extant data indicate that the project site exhibits a relatively low sensitivity for containing intact, subsurface archaeological deposits. The lack of reported archaeological resources within 0.5 mile of the project site indicates that the area is not highly sensitive for prehistoric or historic archaeological remains. This is supported by the field survey, which did not indicate the presence of historic or archaeological resources. A review of historical topographic maps and aerial photographs found that the area has remained largely undeveloped and was primarily used for agricultural purposes prior to the 1980s. It is unlikely that early historic period archaeological remains dating to the late nineteenth or early twentieth centuries would be present in the project site. As such, the analysis in the 2005 EIR remains valid for the current project, which would involve similar site disturbance to that studied in the 2005 EIR. Therefore, impacts related to cultural resources would be less than significant with implementation of 2005 Mitigation Measures 3.5-1a and 3.5-1b. These topics will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

6 Energy

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

- | | | | | | |
|---|-----|----|----|----|-----|
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | N/A | No | No | No | N/A |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | N/A | No | No | No | N/A |

2005 EIR Summary

The 2005 EIR does not address the issue area of energy in a specific section. However, in Section 6.1, *Irreversible Environmental Changes*, increased energy resource demand due to the construction and operation of the project was identified and described as a justified irreversible change. No further quantitative or qualitative analysis of energy was done in the 2005 EIR.

Energy Setting

As a state, California is one of the lowest per capita energy users in the US, ranked 50th in the nation, due to its energy efficiency programs and mild climate (US Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest and Southwest in 2020, but the state does rely on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b). In addition, approximately 33 percent of California's electricity supply in 2020 derived from renewable energy sources, such as wind, solar

photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill (SB) 100 accelerated the state’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. Electricity service would be provided to the project by Silicon Valley Clean Energy (SVCE), which sources electricity from Pacific Gas and Electric (PG&E) and uses PG&E’s infrastructure to deliver it to customers. Pursuant to the City of Morgan Hill Municipal Code Chapter 15.63, natural gas infrastructure is prohibited in newly constructed buildings effective March 1, 2020. All future developments shall be all-electric developments with no natural gas infrastructure. Table 17 summarizes the electricity consumption for Santa Clara County, in which the project site would be located, and for PG&E, as compared to statewide consumption.

Table 17 2020 Annual Electricity Consumption

Energy Type	Santa Clara County	PG&E ¹	California	Proportion of PG&E Consumption	Proportion of Statewide Consumption ²
Electricity (GWh)	16,436	78,519	279,510	21%	6%

GWh = gigawatt-hours; PG&E = Pacific Gas and Electric

¹ Electricity would be provided by SVCE, which is delivered by PG&E.

² For reference, the population of Santa Clara County (1,934,171 persons) is approximately 5 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021c

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021d). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021e). Diesel, used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2021e (CEC 2021e). Table 18 summarizes the petroleum fuel consumption for Santa Clara County, in which the project site would be located, as compared to statewide consumption.

Table 18 2020 Annual Gasoline and Diesel Consumption

Fuel Type	Santa Clara (million gallons)	California (million gallons)	Proportion of Statewide Consumption ¹
Gasoline	511	12,572	4%
Diesel	35	1,744	2%

¹ For reference, the population of Santa Clara County (1,934,171 persons) is approximately 5 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021c

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

Methodology

Energy consumption from project construction and operational activities was estimated using the CalEEMod, version 2020.4.0 and post-model spreadsheets. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., townhomes, mid-rise apartments, a hotel, and strip mall uses), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction energy would be based on gasoline and diesel fuel consumed from construction equipment and vehicle trips traveling to and from the project site. Construction of the proposed project was analyzed based on the applicant-provided construction schedule and default-based construction equipment list. Construction would occur over approximately three overlapping phases (Phase 1, 2, and 3) from March 2023 to September 2025 (approximately 30 months/2.5 years). The schedule would be 6 days per week with construction active Monday through Saturday. The site would cut 37,510 cubic yards of material and balance with no hauling export or import onsite. It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with applicable regulatory standards. The CalEEMod default assumptions for equipment and vehicle trip quantities and types were used in a post-model spreadsheet to calculate energy consumption. The spreadsheet computed the number of gallons of gasoline and diesel used during the construction period.

For operational energy usage, CalEEMod was used to model the electricity used by the proposed developments. The model was modified to exclude natural gas usage but the modeled natural gas usage from CalEEMod was converted into electricity and added to the operational electricity usage post-model. Fuel consumption from vehicle trips was also calculated in a spreadsheet using the CalEEMod computed annual vehicle miles traveled (VMT). In addition, three 150 kW emergency generators with diesel engines would be installed onsite.

Impact Analysis

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The proposed project would use nonrenewable resources for construction and operation of the project. The anticipated use of these resources is detailed in the following subsections. Applicant-provided information and the CalEEMod outputs (Appendix AQ) were used to estimate energy consumption associated with the proposed project.

Construction Energy Demand

The project would require site preparation and grading, including hauling material offsite, pavement and asphalt installation, building construction, architectural coating, and landscaping and hardscaping. During project construction, energy would be consumed in the form of petroleum-

based fuels used to power off-road construction vehicles and equipment onsite, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. As shown in Table 19, project construction would require approximately 75,112 gallons of gasoline and approximately 238,463 gallons of diesel fuel. These construction energy estimates are conservative, because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 19 Estimated Fuel Consumption during Construction

Source	Fuel Consumption (gallons)	
	Gasoline	Diesel
Construction Equipment and Hauling Trips	N/A	238,463
Construction Worker Vehicle Trips	75,112	N/A
N/A = not applicable		
See Appendix EN for energy calculation sheets.		

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA. Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements, such as 2019 CALGreen, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and construction impacts related to energy consumption would be less than significant.

Operational Energy Demand

Operation of the project would contribute to regional energy demand by consuming electricity, gasoline, and diesel fuels. Electricity would be used for heating and cooling systems, lighting, appliances, and water and wastewater conveyance, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by customers and employees. Table 20 summarizes estimated operational energy consumption for the proposed project. As shown therein, project operation would require approximately 841,565 gallons of gasoline and 130,786 gallons of diesel for transportation fuels, and 9 GWh of electricity.⁴ Vehicle trips associated with future residents, workers, customers, and deliveries would represent the greatest operational use of energy associated with the proposed project.

⁴ The estimated natural gas consumption from the CalEEMod annual output was converted into electricity usage and added to the total electricity usage.

Table 20 Estimated Project Annual Operational Energy Consumption (Transportation Fuels)

Source	Energy Consumption ¹	
Gasoline	841,565 gallons	92,392 MMBtu
Diesel	130,786 gallons	16,670 MMBtu
Electricity	9 GWh	31,629 MMBtu

MMBtu = million metric British thermal units; GWh = gigawatt-hours

¹ Energy consumption is converted to MMBtu for each source

See Appendix EN for energy calculation sheets and Appendix AQ for CalEEMod output results for electricity and natural gas usage.

The project would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy-efficient performance, so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. In addition, pursuant to CALGreen, plumbing fixtures used for the proposed project would be high-efficiency fixtures, which would minimize the potential for the inefficient or wasteful consumption of energy related to water and wastewater. Also, the emergency generators installed onsite would primarily operate for maintenance checks and readiness testing, which is limited to 50 hours per year pursuant to the BAAQMD *Permit Handbook* (2021). During emergency situations when access to electricity from the state grid is unavailable, the generators would be allowed to operate continuously without restriction, although the operation of the generators for emergency purposes does not represent a wasteful, inefficient, or unnecessary consumption of energy.

Furthermore, the proposed project would increase housing density in proximity to existing commercial, retail, and office uses, which would facilitate the use of transit and alternative transportation modes such as walking and biking. For example, future residents and workers could walk to the adjacent Cochrane Commons Phase I development, which includes retail stores (e.g., Target) and various restaurant options (e.g., fast-food and sit-down restaurants) or walk to the proposed retail onsite. In addition, the project is along Cochrane Road, which is served by the Santa Clara Valley Transportation Authority. Bus Route 87 is a local bus route that connects to Bus Route 68 and Express Route 168 with both providing provides stop between the San José Diridon Station and Gilroy Transit Center. These factors would minimize the potential of the project to result in the wasteful, inefficient, or unnecessary consumption of vehicle fuels. Therefore, project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City of Morgan Hill has not adopted a specific renewable energy or energy efficiency plan. The 2035 General Plan (City of Morgan Hill 2016) contains goals and policies related to energy conservation, including compliance with Title 24 energy regulations and encouraging project design that increases energy efficiency. As demonstrated in Table 21, the proposed project would not conflict with the energy-related policies of the City's General Plan.

Table 21 Project Consistency with Applicable General Plan Policies

Policy	Consistency
Policy NRE-15.6 Residential Near Transit. Encourage higher density residential and mixed-use development adjacent to the commercial centers and <i>transit corridors</i> – the land along or within walking distance of a street served by transit.	Consistent. With construction of the project, new high-density residences would be located adjacent to existing and future commercial centers. Adjacent to the project site is the existing Cochrane Commons Shopping Center, which includes retail and restaurants. The project would also include additional retail uses on-site. Public transit is also accessible, with the Santa Clara Valley Transportation Authority's Bus Route 87 being in walking distance along Cochrane Road. Bus Route 87 is a local bus route that connects to Bus Route 68 and Express Route 168 with both providing provides stop between the San José Diridon Station and Gilroy Transit Center. Thus, siting higher-density residences near commercial centers and transit corridors would encourage multimodal travel and less single-occupancy vehicle travel.
Policy NRE-15.11 Green Building. Promote green building practices in new development.	Consistent. The project would be required to comply with the required CalGreen standards and California Building Energy Efficiency Standards for new developments.
Policy NRE-16.1 Energy Standards for New Development. New Development, including public buildings, should be designed to exceed state standards for the use of energy.	Consistent. The project would be designed to exceed the Title 24 building energy efficiency standards. Energy-efficient appliances and lighting would be installed onsite along with water-efficient applicants and fixtures. The project would also include a solar photovoltaic system, the size of the system to be determined.
Policy NRE-16.2 Energy Conservation. Promote energy conservation techniques and energy efficiency in building design, orientation, and construction.	Consistent. The project would be constructed in accordance with City of Morgan Hill Municipal Code 15.63.040 and not include natural gas (which is a greenhouse gas) infrastructure. All buildings would be 100 percent electric and would be served by SVCE.
Policy NRE-16.5 Energy Efficiency. Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.	Consistent. The project would be constructed in accordance with City of Morgan Hill Municipal Code 15.63.040 and would not include natural gas (which is a greenhouse gas) infrastructure. All buildings would be 100 percent electric and be served by SVCE. The base electricity from SVCE (e.g., GreenStart 2019 power mix) procures approximately 46% of its electricity from eligible renewable energy sources (CEC 2020b). This percent procured from eligible renewable percent procurement would also increase over time in accordance with State Bill 100 targets. Therefore, the project would construct developments that are energy efficiency and minimize direct and indirect air pollutant emissions.
Policy NRE-16.7. Renewable Energy. Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.	Consistent. The project would include renewable energy features such as a solar photovoltaic system. A percentage of the electricity provided by SVCE, which will serve the project, is sourced from renewable energy sources. Thus, the project would incorporate renewable energy features.
Source: City of Morgan Hill 2016	

The proposed project would be required to comply with the residential and nonresidential mandatory measures in the 2019 CALGreen, which would reduce energy consumption compared to standard building practices. The proposed project would also be required to comply with the energy standards in the California Building Energy Efficiency Standards. Measures included in the proposed project to meet these energy standards include low-flow plumbing fixtures, water-efficient irrigation systems, a photovoltaic system, and energy-efficient lighting. Compliance with these regulations would avoid potential conflicts with adopted energy conservation plans. Therefore, the project would result in no impact to state and local plans for renewable energy or energy efficiency. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

- a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A
2. Strong seismic ground shaking?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A

		Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
3.	Seismic-related ground failure, including liquefaction?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A
4.	Landslides?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A
b.	Result in substantial soil erosion or the loss of topsoil?	EIR pages 3.6-5 through 3.6-10	No	No	No	Yes
c.	Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	EIR pages 3.6-5 through 3.6-10	No	No	No	N/A
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Geology and Soils were analyzed in Section 3.6 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to geology and soils

Geology and Soils impacts identified in the 2005 EIR are summarized as follows.

Seismic Ground Shaking

With implementation of mitigation measures, the project site would be considered suitable for development provided that the recommendations contained in a geotechnical investigation conducted by Twining Laboratories in 2004 are implemented. Furthermore, the project would be required to comply with California Building Code requirements and 2005 EIR Mitigation Measure 3.6-1 which would reduce impacts to less than significant.

Liquefaction

The risk of liquefaction throughout the project site, according to the geotechnical investigation conducted by Twining Laboratories, is low. However, subsurface conditions on the project site and depth to groundwater across the site would indicate that there is some potential for liquefaction at the site. Therefore, the 2005 EIR requires implementation of Mitigation Measure 3.6-2 to reduce impacts to a less-than-significant level.

Seismic Settlement

The 2005 EIR found that maximum seismic settlements of 0.25 inch could be expected at the project site. However, combined seismic and static settlements of up to 1.25 inches are anticipated. These settlements would exceed the tolerances for conventional shallow spread foundations and slabs on grade planned for the project. The 2005 EIR required implementation of Mitigation Measure 3.6-3 to reduce this impact to less than significant.

Soil Compressibility and Collapse potential

The 2005 EIR found that due to the compressible nature of the near surface soils, they would not provide adequate support for the proposed improvements in their existing condition. The 2005 EIR further required implementation of Mitigation Measure 3.6-4 to reduce this impact to a less-than-significant level.

Expansive Soils

The 2005 EIR found that there is a less-than-significant impact from unstable soils or geologic units and expansive soils, as development standards and compliance with Mitigation Measures 3.6-5 through 3.6-7 (Table 22), the Morgan Hill Building Code, and California Building Code would ensure structures are constructed to accommodate unstable or expansive soil units.

Table 22 2005 EIR Mitigation Measures

Mitigation Measure	Description
Mitigation 3.6-1	Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code and implementing the recommendations of the project geotechnical engineer. Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures in areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals.
Mitigation 3.6-2	All proposed structures at the project site shall be evaluated for liquefaction potential on a case-by-case basis as part of subsequent design-level geotechnical engineering investigations. If there is determined to be a potential for liquefaction, mitigation will be accomplished through compliance with the recommendations contained in the design-level geotechnical engineering reports with recommendations included as specifications in the construction contract documents.
Mitigation 3.6-3	Near-surface soils beneath buildings, exterior slabs, and pavements shall be over-excavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.
Mitigation 3.6-4	The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.

Mitigation Measure	Description
Mitigation 3.6-5	All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report.
Mitigation 3.6-6	The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers' specifications.
Mitigation 3.6-7	Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.

Source: City of Morgan Hill 2005

Impact Analysis

- a.1. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*
- a.3. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The proposed project would introduce new development in the same location considered in the 2005 EIR. Geologic conditions onsite and in the region remain generally the same as when analyzed in the 2005 EIR, and the proposed development would be generally similar in terms of scale. The impact would therefore be the same as for the previous project, the same mitigation measures would apply, and the issue was addressed adequately in the 2005 EIR. Mitigation measures included in the 2005 EIR require project-specific evaluation and design review, which would apply to the proposed project. These topics will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project result in substantial soil erosion or the loss of topsoil?*

Grading and excavation activity during the construction of new proposed structures on the project site could result in soil erosion. However, as described in Section 10, *Hydrology and Water Quality*, with compliance with existing regulations, substantial erosion during construction would not occur. Therefore, this impact would be less than significant. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*
- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The proposed project would introduce new development in the same location considered in the 2005 EIR. Geologic conditions onsite and in the region remain generally the same as when analyzed in the 2005 EIR, and the proposed development would be generally similar in terms of scale. The impact would therefore be the same as for the previous project, the same mitigation measures would apply, and unstable and expansive soils were addressed adequately in the 2005 EIR. Mitigation measures included in the 2005 EIR require project-specific evaluation and design review, which would apply to the proposed project. These topics will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

As discussed in the 2005 EIR Section 3.13, *Utilities*, the project would be serviced by wastewater collection and treatment systems, and no septic tanks or alternative wastewater disposal systems would be installed, which would be the same for the modified project. Therefore, the project would have no impacts beyond those identified in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site has historically been used for agriculture and is heavily disturbed due to discing,⁵ tilling, and planting practices associated with agricultural operations that could have destroyed or covered resources. Due to the site's heavily disturbed area and a field inspection conducted in 2005, unique paleontological resources are unlikely to occur on the project site. Additionally, due to the nature of paleontological resources, no new resources since the 2005 survey would be present onsite. The City of Morgan Hill is in an active geological area that has resulted in the existence of a rare metamorphic stone, Poppy Jasper (City of Morgan Hill 2016). No paleontological resources have been explicitly found in the City (City of Morgan Hill 2016), but it is always possible to inadvertently uncover unique resources during ground-disturbing activities (e.g., grading and site preparation). As such, implementation of Mitigation Measure 3.5-1a would reduce impacts to unique paleontological resources to less than significant. As paleontological conditions have not changed since the 2005 EIR and the modified project would involve a similar level of site disturbance as the original project,

⁵ A tillage practice used for soil preparation

there would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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8 Greenhouse Gas Emissions

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	N/A	Yes	Yes	Yes	N/A
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	N/A	Yes	Yes	Yes	N/A

2005 EIR Summary

The 2005 EIR did not address the issue area of GHG emissions.

Impact Analysis

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Construction activities and the operation of the proposed project would generate GHG emissions. GHG emissions were not analyzed in the 2005 EIR, since it was not an environmental factor that needed to be considered under CEQA until 2010. Therefore, these are new circumstances that require an analysis and may result in new potentially significant impacts. This issue will be analyzed further in the Subsequent EIR.

POTENTIALLY SIGNIFICANT IMPACT

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9 Hazards and Hazardous Materials

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

- | | | | | | |
|--|--|----|----|----|-----|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | EIR
Pages
3.7-6
through
3.7-10 | No | No | No | No |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | EIR
Pages
3.7-6
through
3.7-10 | No | No | No | No |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? | N/A | No | No | No | N/A |
| d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | N/A | No | No | No | N/A |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	EIR Pages 3.7-6 through 3.7-10	No	No	No	N/A
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	EIR Pages 3.7-6 through 3.7-10	No	No	No	N/A
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	EIR Pages 3.7-6 through 3.7-10	No	No	No	N/A

2005 EIR Summary

Impacts to Hazards and Hazardous Materials were analyzed in Section 3.7 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts related to hazards and hazardous materials.

Hazards and Hazardous Materials impacts identified in the 2005 EIR are summarized as follows.

Soils Contaminated with Agricultural Chemicals

The 2005 EIR found that there are residual pesticides and metals, such as dichlorodiphenyldichloroethylene and Diazinon or chromium, present on the project site, but concentrations were low and not hazardous.

Asbestos-Containing Building Materials and Lead-Based Paint

The 2005 EIR found that the three residences and associated outbuildings constructed prior to 1978 on the project site include materials that contain asbestos, such as flooring materials, plaster, sheetrock/joint compound, insulators, exterior siding materials, and roofing materials. Implementation of Mitigation Measure 3.7-1 would reduce health and safety impacts associated with the removal of asbestos-containing material to less-than-significant levels. These single-family units have since been demolished.

Septic Systems and Water Wells

The 2005 EIR found that there are four septic tanks reportedly present on the project site, although their locations were not identified during the Phase I site reconnaissance. Implementation of Mitigation Measure 3.7-2 would reduce impacts from residual septic systems onsite to less than significant.

There are four existing wells on the project site that could result in being conduits for groundwater contamination if not properly destroyed. Mitigation Measure 3.7-3 would reduce impacts from groundwater contamination through onsite water wells.

Polychlorinated Biphenyls in Pole-Mounted Transformers

The 2005 EIR identified seven pole-mounted transformers located throughout the site that would need to be removed by PG&E prior to site development in conjunction with the undergrounding of project utilities. This would remove potential hazard from polychlorinated biphenyls, which may be contained in the transformers.

Planned Fuel Station

The 2005 EIR found that the proposed fuel station would involve potentially hazardous storage and handling of gasoline on the project site. The fuel station would be required to comply with 2005 California Health and Safety Code Section 25503.5, which would require that any activity involving the handling of hazardous materials requires the establishment and implementation of a Hazardous Materials Business Response Plan. Furthermore, this state law requirement is implemented locally by the City of Morgan Hill's Hazardous Materials Storage Ordinance, which is administered for the City by the Santa Clara County Department of Environmental Health. The ordinance requires that the gasoline operator obtain a Hazardous Materials Storage Permit, which includes preparation of a Hazardous Materials Management Plan, which is to include a Hazardous Materials Inventory Statement, provisions for emergency response planning, double containment, monitoring, and financial responsibility. The City also requires a separate permit for underground storage tank installation, and the City of Morgan Hill Fire Department will conduct a series of inspections at various stages of tank installation and construction to ensure compliance with all standards and requirements. Additional compliance with BAAQMD regulations for the control of gasoline vapor emissions would be required and would meet CARB-efficiency mandates. Implementation of Mitigation Measure 3.7-4 would reduce impacts to less than significant.

Emergency Response Plan/Emergency Evacuation Plan

The 2005 EIR found that the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. There would be no impacts to emergency response plans or emergency evacuation plans.

Wildland Fire

The 2005 EIR found that since the project site consisted of rural residential uses and agricultural land and is not located in an area prone to wildland fire or excessive fuel loading, there would be no impact related to the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

Table 23 lists mitigation measures related to hazards and hazardous materials in the 2005 EIR.

Table 23 2005 EIR Mitigation Measures

Mitigation Measure	Description
Mitigation 3.7-1	Prior to demolition of any onsite structures, a full site assessment for lead-based paint shall be conducted by a California Department of Health Services approved Lead Inspector/Assessor. Prior to general demolition and site clearing activity, all identified deteriorating lead-based paint shall be removed by a licensed lead paint abatement contractor and properly disposed of in accordance with Title 22 of the California Code of Regulations.
Mitigation 3.7-2	Septic systems at the project site shall be properly removed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department
Mitigation 3.7-3	Prior to commencement of site clearing and general demolition activities, the existing wells onsite shall be destroyed in accordance with state regulations and the requirements of the Santa Clara County Environmental Health Department and the Santa Clara Valley Water District (Ordinance 90-1).
Mitigation 3.7-4	The gasoline station operator shall obtain a Hazardous Materials Storage Permit from the Santa Clara County Fire Department for the proper handling and storage of gasoline and any other hazardous materials. In addition, air quality permits shall be required for the fuel station from the BAAQMD.

Source: City of Morgan Hill 2005

Impact Analysis

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

The proposed project would include residential and commercial retail land uses, which typically do not use or store large quantities of hazardous materials. Potentially hazardous materials such as fuels, lubricants, and solvents would be used by heavy machinery during construction of the project. The proposed project would be subject to current iterations of regulations discussed in the 2005 EIR regarding routine transport, use, or disposal of hazardous materials. The impact would therefore be the same as for the previous project, and the issue was addressed adequately in the 2005 EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The proposed project would introduce new development in the same location considered by the 2005 EIR. No known changes in the conditions of the soils or groundwater at the site have occurred since 2005, and the proposed development would not include activities that use or store more hazardous materials than the Phase II project analyzed in the EIR. Because demolition already

occurred under Phase I of site development and the proposed project would not involve demolition, Mitigation Measures 3.7-1 through 3.7-3 have already been complied with and are not required for the modified project. Further, the gas station was previously constructed under Phase I of site development, and Mitigation Measure 3.7-4 has been complied with. The impact would therefore be the same as for the previous project, and this issue was addressed adequately in the 2005 EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The 2005 EIR did not explicitly address the exposure of schools to hazardous materials from the project site. However, the nearest school to the project site is Live Oak High School, located approximately 3,600 feet (0.7 mile) southeast. Therefore, the project would not emit hazardous emissions or handle hazardous materials within 0.25 mile of a school. Impacts would be less than significant. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR. Further analysis is not warranted.

NO IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The 2005 EIR did not analyze potential impacts from listed hazardous material sites. However, as discussed in the 2005 EIR, a Phase I environmental site assessment was prepared for the project site that included a review of regulatory lists pursuant to Government Code Section 65962.5 and concluded the project site is not located on a hazardous materials site. In addition, a search of the Department of Toxic Substances Control (DTSC) Envirostor database and the State Water Resources Control Board (SWRCB) Geotracker database conducted on September 9, 2021, confirmed the project site is not located on a hazardous materials site on either database (DTSC 2021, SWRCB 2021). No known changes in the conditions of the soils or groundwater at the site have occurred since 2005. Therefore, there would be no impacts and there would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR. Further analysis is not warranted.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The proposed project would introduce new development in the same location considered by the 2005 EIR. The impact would therefore be the same as for the previous project, and airport safety and noise hazards were addressed adequately in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

As discussed above, the 2005 EIR found that the proposed project would not result in adverse effects on emergency response or evacuation plans. The project would be required to comply with federal, state, and local regulations, including the Morgan Hill Emergency Operations Plan.

Additionally, the City of Morgan Hill Fire Department reviews individual development proposals to ensure emergency access needs are met. The project would not impact or block existing roadways or prevent implementation of the Morgan Hill Emergency Operations Plan, which establishes policy direction for emergency planning, mitigation, response, and recovery activities in the City (City of Morgan Hill 2018). Therefore, impacts would be less than significant and there would be no new or substantially more severe impacts than the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Wildland fire is discussed further in Section 20, *Wildfire*. The project site is not located in or near a Very High Fire Hazard Severity Zone mapped by CAL FIRE (CAL FIRE 2021). Therefore, the project would not expose people or structures to significant risks involving wildland fires. This impact would be less than significant. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR. Further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	N/A	No	No	No	Yes
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A
(i) Result in substantial erosion or siltation on- or off-site;	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	EIR Pages 3.8-7 through 3.8-13	No	No	No	No
(iv) Impede or redirect flood flows?	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	EIR Pages 3.8-7 through 3.8-13	No	No	No	N/A
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Hydrology and Water Quality were analyzed in Section 3.8 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to hydrology and water quality.

Hydrology and Water Quality impacts identified in the 2005 EIR are summarized as follows.

Increased Stormwater Runoff

The 2005 EIR found that the proposed project would result in a substantial increase in stormwater runoff generated at the project site compared to existing conditions, but the project includes detention ponds, which have been designed to provide temporary storage of increased runoff in order to prevent increased flooding downstream. Detention basins on the project site would be fixed to accommodate Santa Clara Valley Water District (Valley Water) requirements and the City's detention design criteria. The stormwater to be temporarily stored in the planned detention ponds will be pumped to the adjacent Cochrane Channel at discharge rates, which are at or below pre-development levels, as required by Valley Water. Impacts would be less than significant.

Flooding

The 2005 EIR found that during a 100-year storm event, the project site may be subject to shallow flooding to depths of less than one foot; all finished floors will be on raised pads at least one foot above existing ground elevations to prevent flooding of the project buildings. During large storms such as a 100-year event, stormwater will back up at the storm drain inlets and allow to pond in the project parking areas. Final grades will be designed such that the resulting ponding depths will be less than 1 foot. In order to facilitate the conveyance of excess flood volumes from the project site, the proposed project will include overland release points to the north and northwest to direct surface flows toward Cochrane Channel. Incorporation of these features as part of the project design, as proposed, would ensure that the proposed project would have a less-than-significant impact on flooding.

Dam Failure Inundation

The 2005 EIR found that since the project site is located in the dam failure inundation area for Anderson Reservoir, development of the proposed project would have increased the number of people and structures exposed to dam failure risk and the potential for associated loss of life and property. However, studies conducted for the 2005 EIR found that the Anderson Dam was capable of withstanding a large-magnitude seismic event to the satisfaction of the California Division of Safety of Dams. Thus, the risk of total catastrophic dam failure was low, but there remained the potential for the containment dam to be structurally compromised resulting in a leak, which could have resulted in downstream flooding. This could have posed a public safety hazard to people who are at the project site during and immediately following such an event. Mitigation Measure 3.8-1 from the 2005 EIR would be required to reduce this impact to less than significant levels.

Construction-Related Impacts to Water Quality

The 2005 EIR found that during grading and construction, erosion of exposed soils and pollutants generated by site development activities may result in water quality impact to downstream bodies. Development of the proposed project would involve site clearing, mass grading, excavation, trenching, and final grading for roads, utilities, and building pads. Once vegetation is removed at the

project site, the exposed and disturbed soil would be susceptible to high rates of erosion from wind and rain, resulting in sediment transport from the project site. Delivery, handling and storage of construction materials and wastes, as well as use of construction equipment onsite during the construction phase of the project, will introduce a risk for stormwater contamination, which could impact water quality. Spills or leaks from heavy equipment and machinery can result in oil and grease contamination of stormwater. Implementation of 2005 EIR Mitigation Measure 3.8-2, compliance with a Stormwater Pollution Prevention Plan, National Pollutant Discharge Elimination System (NPDES) permit, and an Erosion and Sedimentation Control Plan would reduce this impact to less than significant.

Urban Non-Point Source Pollution

The 2005 EIR found that the proposed project would generate urban non-point contaminants, which may be carried in stormwater runoff from paved surfaces to downstream water bodies. The introduction of new structures and surface parking lots could introduce new urban runoff contaminants such as petroleum products, heavy metals, and sediments from vehicles and litter. To reduce impacts from non-point source pollution, implementation of Mitigation Measure 3.8-3 would be required to reduce this impact to less than significant.

Table 24 lists mitigation measures related to hydrology and water quality in the 2005 EIR.

Table 24 2005 EIR Mitigation Measures: Hydrology and Water Quality

Mitigation Measure	Description
Mitigation 3.8-1	Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers.
Mitigation 3.8-2	The project applicant shall prepare a comprehensive erosion control and water pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site.
Mitigation 3.8-3	The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads. Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion). Additional post-construction BMPs to be implemented will include, but not be limited to, the following: ▪ Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants. ▪ Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ Engineered products, such as storm drain inlet filters, oil/water separators, etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping

Mitigation Measure	Description
	practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials. - Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance, including minimizing use of fertilizer, herbicides and pesticides. - The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on stormwater quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations. - Storm drain inlets shall be labeled with the phrase “No dumping – flows to Bay,” or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system. - Restaurants in the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.

Source: City of Morgan Hill 2005

Impact Analysis

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Construction of the proposed project would involve development that would have the potential to impact water quality through increasing debris in stormwater runoff as well as the use of construction materials such as fuels, solvents, and paints. However, the project would be required to comply with the NPDES General Construction Permit and would be required to prepare a Stormwater Pollution Prevention Plan that requires the incorporation of BMPs to control sedimentation, erosion, and hazardous materials contamination of runoff during construction. In addition, projects must comply with Best Management Practices (BMPs) as specified in the City of Morgan Hill’s Urban Storm Water Quality Management and Discharge Control Ordinance, as specified in Chapter 13.30 of the Municipal Code, that requires project applicants to comply with erosion and sediment control practices.

Operation of the project could also impact water quality from typical oil, grease, fuel, pesticides in landscaping, and other pollutants that runoff into stormwater. The project would create additional impervious surfaces and therefore must treat runoff with an approved and appropriately sized LID treatment system prior to offsite discharge in compliance with the Central Coast Regional Water Quality Control Board’s Post-Construction Requirements and must control post-project peak flows to not exceed pre-project peak flows for the 2-year through 10-year storm events. In addition, a Stormwater Management Plan must be submitted to the City that describes how runoff and associated water quality impacts from the project will be controlled by the project’s post-construction requirements. As the project would be required to comply with regulations under the NPDES permit, Regional Water Quality Control Board, and adopted City regulations, which would address impacts to water quality, impacts would be less than significant, consistent with the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The 2005 EIR did not explicitly discuss impacts to groundwater. The project would increase the amount of impervious surfaces onsite, similar to what was analyzed under the 2005 EIR. However, the project would be required to implement site design measures, LID, and BMPs, which include infiltration features such as detention and retention basins that will contribute to groundwater recharge. Similar to the project as analyzed in the 2005 EIR, the project would not extract groundwater or directly interfere with the groundwater table through construction activities on the site, as ground disturbance would not occur below the water table.

Water for the project would be provided by the City of Morgan Hill from its existing supply sources, which include the underlying Santa Clara and Llagas Subbasins, which are actively managed in sustainable conditions by Valley Water as the exclusive Groundwater Sustainability Agency for both basins. As discussed under Section 19, *Utilities and Service Systems*, Valley Water uses imported surface water supplies to replenish the local ground water basins, including the Santa Clara and Llagas Subbasins, to maintain sustainable groundwater supply conditions. This is documented in the Water Supply Assessment (WSA), which is provided as Appendix WSA, and is informed by multiple long-range water supply planning and groundwater management documents, including:

- City of Morgan Hill 2020 Urban Water Management Plan
- Valley Water 2020 Urban Water Management Plan
- City of Morgan Hill 2021 Water System Management Plan
- Valley Water 2019 Annual Groundwater Report
- Valley Water 2020 Water Shortage Contingency Plan

The WSA provided as Appendix WSA determines that there is sufficient water supply available to meet the project's projected demands reliably over a 20-year projection and with consideration to varying climatic (drought) conditions. Therefore, the project would have no impacts beyond those previously identified in the 2005 EIR.

LESS THAN SIGNIFICANT IMPACT

- c.(i) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*
- c.(iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The proposed project would introduce new development in the same location considered in the 2005 EIR. Drainage patterns onsite remain generally the same as when analyzed in the 2005 EIR, and the proposed development would be generally similar in terms of scale. The impact would therefore be the same as for the previous project, the same mitigation measures would apply, and the issue was addressed adequately in the 2005 EIR. These topics will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The proposed project would introduce new development in the same location considered in the 2005 EIR. Since 2005, the Anderson Dam has been identified to have seismic safety concerns and is currently undergoing a capital earthquake retrofit to improve dam safety and to return the Anderson Reservoir to its original storage capacity. Flood hazard risk at the project is therefore slightly higher than the risk originally identified in the 2005 EIR. However, completion of the seismic retrofit repairs would ensure that the risk of flood to the project site is low. Tsunami, and seiche risk remain the same as when analyzed in the 2005 EIR, and the proposed development would be generally similar in terms of scale. The impact would therefore be the same as for the previous project, the same mitigation measures would apply, and the issue was addressed adequately in the 2005 EIR. Mitigation measures included in the 2005 EIR require an emergency evacuation plan, which would apply to the proposed project. These topics will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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11 Land Use and Planning

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Physically divide an established community?	EIR Pages 3.9-7 through 3.9-8	No	No	No	N/A
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	EIR Pages 3.9-8 through 3.9-9	No	No	No	No

2005 EIR Summary

Impacts to Land Use and Planning were analyzed in Section 3.9 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to land use and planning.

Land Use and Planning impacts identified in the 2005 EIR are summarized as follows.

Dividing an Established Community

The 2005 EIR found that impacts related to the disruption of an established community would be less than significant. The project site has a General Plan land use designation of Mixed Use Flex and Commercial in the City of Morgan Hill General Plan and a zoning designation of Planned Unit Development/Highway Commercial. The City of Morgan Hill General Plan designates the project site as the location of a subregional commercial site. The project would not physically divide an established community and the impact was determined to be less than significant.

Conflicts with Applicable Land Use Plan, Policy, or Regulations

The 2005 EIR found that the proposed project would not result in a conflict with existing policies adopted to avoid or mitigate an environmental impact. The proposed project includes Zoning and General Plan amendments to amend the zoning and General Plan designation to Mixed Use Flex for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site, and the hotel and commercial retail would be located in the southern

portion. In addition, the proposed Zoning amendment would establish a precise development plan and development guidelines for the proposed project. The General Plan amendment would provide for the relocation of a future collector street extending from Mission View Drive north of Cochrane Road instead of extending from De Paul Drive (formerly St. Louise Drive) as designated on the City of Morgan Hill General Plan map. With implementation of mitigation measures in other resource areas, the project would be consistent with applicable General Plan goals and policies. Section 18.24.010 of the City of Morgan Hill Zoning Code defines the “CH” district as providing areas adjacent to the freeway that can accommodate highway and tourist-oriented uses and uses which require the high visibility of thoroughfare locations, such as the proposed project. The proposed Zoning amendment application would establish a precise development plan and development guidelines for the proposed project. The proposed project would be required to obtain a design permit in compliance with Section 18.108.040, Design Permit, of the City of Morgan Hill Zoning Code. Impacts would be less than significant.

Impact Analysis

a. Would the project physically divide an established community?

The modified project would involve development in the same location as the original project studied in the 2005 EIR, and similarly would not divide an established community. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR, and further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The currently proposed project would amend the site-specific development standards from the original approved project. These development standards include permitted uses, parking and loading standards, and landscape treatment standards, among others. In addition, the project would maintain (with minor modifications) existing requirements for environmental protection as described in the 2005 EIR, which apply to the proper use of hazardous materials, energy and water conservation, waste reduction, dust suppression, noise reduction, and seismic safety. During buildout of the proposed project, new development would be required to adhere to site-specific development standards and environmental standards as listed throughout this document. The proposed project would require a General Plan amendment to change the land use designation to Mixed Use Flex, which would require compliance with residential and commercial design guidelines. Approval of the General Plan amendment would ensure that the proposed project would be consistent with policies in the City’s General Plan that intend to avoid or mitigate and environmental effect. New development on the project site would also be subject to the mitigation measures from the 2005 EIR as listed in this Initial Study, as well as standard conditions of approval that address environmental impacts and are applied by the City to individual projects. Therefore, if approved, the proposed project would not result in conflicts with Morgan Hill Municipal Code regulations adopted to avoid or mitigate environmental effects. Impacts would be less than significant. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	N/A	No	No	No	N/A
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to mineral resources were analyzed in Section 6 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to mineral resources, as the City of Morgan Hill General Plan and the General Plan EIR do not identify any mineral resource areas in the vicinity of the project site.

Impact Analysis

- Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The proposed project would introduce new development in the same location considered in the 2005 EIR. The impact would therefore be the same as for the previous project, and the issue was addressed adequately in the 2005 EIR. These topics will not be discussed in the Subsequent EIR.

ADDRESSED IN PRIOR EIR

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13 Noise

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	EIR Pages 3.10-11 through 3.10-17	No	No	No	N/A
b. Generation of excessive ground-borne vibration or groundborne noise levels?	N/A	No	No	No	N/A
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	N/A	No	No	No	N/A

2005 EIR Summary

Chapter 3.10 of the 2005 EIR analyzed the impacts related to onsite operational noise, traffic noise, and construction noise. The 2005 EIR found that operational activities, including delivery truck traffic, loading dock activity, the proposed outdoor garden center, roof-mounted mechanical equipment, trash service, parking lot cleaning, and parking lot activity could increase noise levels on the project site. This impact was determined to be less than significant with mitigation incorporated.

The 2005 EIR also stated that the project would increase the number of vehicle trips, which could increase noise levels at the surrounding sensitive receivers, resulting in a significant impact. The 2005 EIR addressed the traffic impact by analyzing the construction of a sound barrier to reduce noise levels attenuating at the surrounding residential uses, but it was concluded the sound barrier was infeasible due to required barrier openings and safety hazards related to inadequate sight distances for vehicle ingress and egress. Additionally, the 2005 EIR noted the nearby residential uses were located on commercial land use and determined the buildings to become commercial property due urbanization of the local area. Therefore, the impact was determined to be significant and unavoidable in the short term. The 2005 EIR estimated that construction and demolition would generate noise ranging from 85 to 88 dBA, causing a less-than-significant impact with mitigation incorporated. The 2005 EIR did not address the issue areas of groundborne vibration or aircraft noise.

Mitigation measures related to noise were not included in the 2005 EIR.

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy), that a change of 5 dBA is readily perceptible (8 times the sound energy), and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level and day-night noise level (L_{eq} and L_{dn}).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level in the sampling period, and the L_{min} is the lowest noise level in the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{DN}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or L_{DEN}), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).⁶ The relationship between the peak-hour L_{eq} value and the L_{dn} /CNEL depends on the distribution of noise during the day, evening, and night. However, noise levels described by L_{dn} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

⁶ Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures. Vibration may be felt, or manifest as an audible low-frequency rumbling noise (referred to as groundborne noise) and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared vibration velocity. The PPV and root mean squared velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high-impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 25.

Table 25 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5
in/sec = inches per second	
Source: Caltrans 2020	

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 26.

Table 26 Vibration Annoyance Potential Criteria

Human Response	Vibration Level (in/sec PPV)	
	Transient Sources	Continuous/Frequent Intermittent Sources ¹
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

¹ Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

Project Noise Setting

The predominant noise source on and around the project site is vehicular traffic on Cochrane Road and U.S. 101. Ambient noise levels are generally highest during the daytime and rush hour unless congestion substantially slows speeds. Three 15-minute noise level measurements were collected by Rincon on July 16, 2021, between 8:03 a.m. and 9:20 a.m. using an Extech (Model 407780A) ANSI Type 2 integrating sound level meter. Short Term Noise Measurement (ST) 1 was taken along the western boundary of the site along Cochrane Road; ST 2 was taken at the existing development south of the project site near U.S 101; and ST 3 was taken north of the project site along Mission View Drive to determine ambient noise levels near the residences adjacent to the project boundary.

Table 27 summarizes the noise measurement results and Figure 4 shows the noise measurement locations. Measured noise levels are provided in L_{eq} for the measurement period; L_{min} and L_{max} are also provided. Detailed sound level measurement data are included in Appendix NOI.

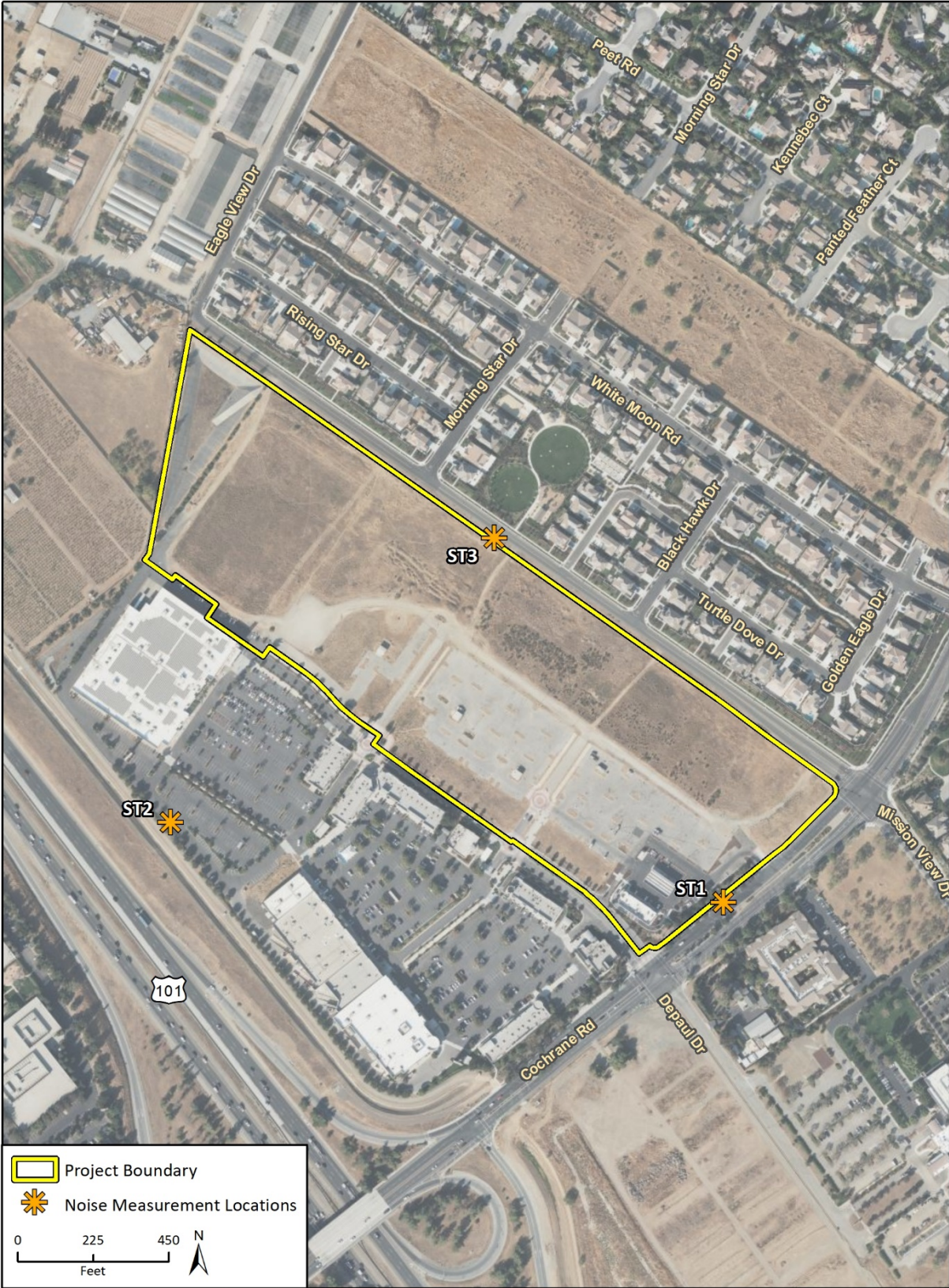
Table 27 Project Vicinity Sound Level Monitoring Results

#	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
ST1	Southeast of project site along Cochrane Road	8:03: a.m. – 8:18 a.m.	45 feet to centerline of Cochrane Road; parking lot activity from adjacent retail space audible	67.6	52.2	79.4
ST2	Southwest of project site, near U.S. 101	8:47 a.m. – 9:02 a.m.	320 feet to centerline of U.S. 101; adjacent retail and parking lot audible	62.5	59.3	68.9
ST3	North of project site near along Mission Drive adjacent from Lantana/Wisteria Community Park	9:20 a.m. – 9:35 a.m.	30 feet to centerline of Mission View Drive; adjacent park activity audible	54.8	51.0	72.4

See Appendix NOI for noise monitoring data.

Source: Rincon field visit on July 16, 2021.

Figure 4 Sound Level Measurement Locations



Regulatory Setting

a. Federal Regulations

FTA Transit and Noise Vibration Impact Assessment Manual

The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For residential, commercial, and industrial uses, the daytime noise threshold is 80 dBA L_{eq} , 85 dBA L_{eq} , and 90 dBA L_{eq} for an 8-hour period, respectively.

b. State Regulations

California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes a Noise Element prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. CEQA requires all known environmental effects of a project be analyzed, including environmental noise impacts.

California Noise Control Act of 1973

California Health and Safety Code Sections 46000 through 46080, known as the California Noise Control Act, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. The act also finds that there is a continuous and increasing bombardment of noise in urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the California to provide an environment for all Californians that is free from noise, which jeopardizes health and/or welfare.

c. Local Regulations

Morgan Hill General Plan

The City of Morgan Hill Safety, Services and Infrastructure Element (SSI) in the Morgan Hill 2035 General Plan contains goals and policies that are designed to include noise control in the planning process in order to maintain compatible land uses with acceptable environmental noise levels. The SSI Element establishes the following goals and policies that would apply to the proposed project:

Goal SSI-8: Prevention of noise from interfering with human activities or causing health problems.

Policy SSI-8.1: *Exterior Noise Levels.* Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (see Table 28), as follows:

- Apply a maximum exterior noise level of 60 dBA L_{dn} in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing an L_{dn} of 60 dBA or

lower cannot be achieved after the application of reasonable and feasible mitigation, an L_{dn} of 65 dBA may be permitted.

- Indoor noise levels should not exceed an L_{dn} of 45 dBA in new residential housing units.
- Noise levels in new residential development exposed to an exterior L_{dn} 60 dBA or greater should be limited to a maximum instantaneous noise level (e.g., trucks on busy streets, train warning whistles) in bedrooms of 50 dBA. Maximum instantaneous noise levels in all other habitable rooms should not exceed 55 dBA. The maximum outdoor noise level for new residences near the railroad shall be 70 dBA L_{dn} , recognizing that train noise is characterized by relatively few loud events.

Policy SSI-8.5: *Traffic Noise Level Standards.* Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} , or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.

Policy SSI-8.6: *Stationary Noise Level Standards.* Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.

Policy SSI-8.7: *Other Noise Sources.* Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.

Table 28 City of Morgan Hill Land Use Compatibility Standards

Land Use Category	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Residential Low-Density Single-Family, Duplex, Mobile Home	50-60	55-70	70-75	75-85
Residential, Multiple-Family	50-65	60-70	70-75	75-85
Transient Lodging, Motel, Hotels	50-65	60-70	70-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	80-85
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	65-85	NA
Sports Arena, Outdoor Spectator Sports	NA	50-75	70-85	NA
Playgrounds, Neighborhood Park	50-70	67-75	NA	73-85
Golf Course, Riding Stables, Water Recreation, Cemeteries	50-75	70-80	NA	80-85

Land Use Category	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Office Buildings, Businesses, Commercial and Professional	50-75	67-77	75-85	NA
Industrial, Manufacturing Utilities, Agricultural	50-75	70-80	75-85	NA

¹ Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

² Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

³ Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements shall be made and needed noise insulation features shall be included in the design.

⁴ Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: City of Morgan Hill 2016

City of Morgan Hill Municipal Code

To implement the City's noise policies, the City adopted Chapter 8.28 Noise (Noise Ordinance) in the Morgan Hill Municipal Code. The City's Noise Ordinance Section 8.28.10 declares as follows:

- That the making, creation or maintenance of loud, unnecessary, unnatural or unusual noises which are prolonged, unusual and unnatural in their time, place and use affect and are a detriment to the public health, comfort, convenience, safety, welfare and prosperity of the residents of the City
- That the necessity in the public interest for the provisions and prohibitions set forth in this chapter is declared as a matter of legislative determination and public policy, and it is further declared that the provisions of this chapter are in pursuance of, and for the purpose of, securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the City and its inhabitants

Section 8.28.040 states unlawful noises applicable to the project, which include:

- C. Blowers, Fans, and Combustion Engines. The operation of any noise-creating blower, power fan or internal combustion engine, the operation of which causes noise due to the explosion of operating gases or fluids, unless the noise from such blower or fan is muffled and such engine is equipped with a muffler device to deaden such noise;
- D. Construction Activities.
 1. "Construction activities" are defined as including, but not limited to, excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of 7:00 a.m. and 8:00 p.m., Monday through Friday and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including, but not limited to, landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership,

control or direction to violate this provision. Construction activities may occur in the following cases without violation of this provision:

- a. In the event of urgent necessity in the interests of the public health and safety, and then only with a permit from the chief building official, which permit may be granted for a period of not to exceed three days or less while the emergency continues and which permit may be renewed for periods of three days or less while the emergency continues.
 - b. If the chief building official determines that the public health and safety will not be impaired by the construction activities between the hours of 8:00 p.m. and 7:00 a.m., and that loss or inconvenience would result to any party in interest, the chief building official may grant permission for such work to be done between the hours of 8:00 p.m. and 7:00 a.m. upon an application being made at the time the permit for the work is issued or during the progress of the work.
 - c. The City Council finds that construction by the resident of a single residence does not have the same magnitude or frequency of noise impacts as a larger construction project. Therefore, the resident of a single residence may perform construction activities on that home during the hours in this subsection, as well as on Sundays and federal holidays from 9:00 a.m. to 6:00 p.m., provided that such activities are limited to the improvement or maintenance undertaken by the resident on a personal basis.
 - d. Public work projects are exempt from this section and the public works director shall determine the hours of construction for public works projects.
2. If it is determined necessary in order to ensure compliance with this section, the chief building official may require fences, gates or other barriers prohibiting access to a construction site by construction crews during hours in which construction is prohibited by this subsection. The project manager of each project shall be responsible for ensuring the fences, gates or barriers are locked and/or in place during hours in which no construction is allowed. This subsection shall apply to construction sites other than public works projects or single dwelling units which are not a part of larger projects.
- G. Loading or Unloading Vehicles and Opening Boxes. The creation of loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, boxes, crates and containers;
- J. Pile Drivers, Hammers and Similar Equipment. The operation, between the hours of 8:00 p.m. and 7:00 a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other appliance, the use of which is attended by loud or unusual noise;
- K. Radios, Phonographs, Musical Instruments and Similar Devices.
1. The using or operating, or permitting to be played, used or operated, of any radio receiving set, musical instrument, phonograph or other machine or device for the producing or reproducing of sound in such manner as to disturb the peace, quiet and comfort of the neighborhood inhabitants or at any time with louder volume than is necessary for convenient hearing for the persons who are in the room, vehicle or chamber in which such machine or device is operated and who are voluntary listeners thereto, and
 2. The operation of any such set, instrument, phonograph, machine or device between the hours of 11:00 p.m. and 7:00 a.m. in such manner as to be plainly audible at a distance

of fifty feet from the building, structure or vehicle in which such device is located which shall be prima facie evidence of a violation of the provisions of this section

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Some land uses are considered more sensitive to ambient noise and groundborne vibration levels than others. For example, residences, schools, and hospitals are generally more sensitive to noise than are people at commercial and industrial establishments (Morgan Hill 2016).

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences, schools, and hospitals. Vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment).

The approved EIR identified single-family residential receivers located on the southeast corner of the project site near Mission View Drive and Cochrane Road. These single-family units have since been demolished as the zoning was changed to commercial, and, hence, these are no longer considered noise-sensitive receivers in this analysis. Therefore, the sensitive receivers nearest to the site consist of single-family residences approximately 55 feet to the north of the project site across Mission View Drive.

Impact Analysis

- a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction related equipment noise levels for a variety of construction and demolition operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle⁷ of the activity to determine the L_{eq} of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project area, exposing surrounding sensitive receivers to increased noise levels. The project would involve site preparation, grading, building construction, paving, and architectural coating. Construction noise would typically be higher during the heavier periods of initial construction (i.e., grading) and would be lower during the

⁷ The cycle of operation of a machine or other device which operates intermittently rather than continuously

later construction phases. Typical heavy construction equipment during project grading could include dozers, front-end loaders, and graders. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Project construction would occur nearest to single-family residences to the north and northeast of the project site. Over the course of a typical construction day, construction equipment would be located as close as 55 feet to adjacent properties but would typically be located at an average distance farther away due to the nature of construction and the size of the project (i.e., construction equipment is mobile throughout a typical construction day, moving vertically and horizontally across the project site). Therefore, it is assumed that over the course of a typical construction day, the construction equipment would operate at an average distance 200 feet from the residences to the north of the project site.

Construction activities would be limited to between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturday pursuant to the City's Noise Ordinance Section 8.28.040(D)(1). A potential high-intensity construction scenario includes a dozer, grader and front-end loader working during grading to excavate and move soil. At a distance of 200 feet, a dozer, grader and front-end loader would generate a noise level of 71 dBA L_{eq} (RCNM calculations are included in Appendix NOI). This would be below the FTA threshold of 80 dBA L_{eq} (8-hour) for construction noise at a residential land use. In addition, construction would be required to occur in the Municipal Code allowed hours of 7:00 a.m. to 8:00 p.m., Monday through Friday, and 9:00 a.m. to 6:00 p.m. on Saturday. Therefore, impacts from construction equipment would be less than significant.

Operation

The proposed project would consist of vehicular noise on internal roadways and parking lots, delivery truck traffic, loading dock activity, trash service, parking lots, and HVAC noise.

Delivery Trucks

As described in the 2005 EIR, noise generated by delivery trucks depends primarily on the truck. Maximum noise levels generated by diesel trucks pulling in and out of loading docks ranges from 73 to 80 dBA measured at a distance of 50 feet. The maximum instantaneous A-weighted noise levels generated by step vans and smaller gasoline-powered delivery trucks ranges from 60 to 69 dBA at a distance of 50 feet. Estimated deliveries for the proposed commercial use would be assumed to occur no earlier or later than the approved store hours in the 2005 EIR. Estimated deliveries for the proposed project would occur from 8:00 a.m. to noon for local vendors and no deliveries are anticipated to occur between 10:00 p.m. and 6:00 a.m. Additionally, delivery trucks associated with the proposed project buildings would be located at a distance greater than 50 feet and would attenuate from the building locations to the nearest sensitive receivers through building attenuation and distance. Therefore, similar to the findings in the 2005 EIR, delivery truck noise would be less than significant.

Loading Docks

The 2005 EIR estimated noise for anticipated loading dock activities would generate noise levels of 80 dBA at a distance of 50 feet. According to the 2005 EIR, field observations made at similar facilities indicate that noise from the described loading activities are generally not audible or

measurable from offsite locations. The proposed commercial use loading dock activities would be consistent with previous field observations from the 2005 EIR and would not create any new or significant noise levels from loading dock activities. Therefore, similar to the findings in the 2005 EIR, delivery truck noise would be less than significant.

Parking Lot

As shown in the proposed project description, new parking spaces would be distributed through the project site next to internal roadways. Parking lot activities can generate instantaneous or short-term noise from car doors slamming, beeps, alarms, tire movements, engines, radios, and infrequent use of sweepers. However, parking lot noise would be consistent with adjacent commercial land uses in the vicinity of the project site. Parking lot noise also would not typically have a substantial contribution to hourly equivalent noise levels from transportation sources near the project site, relative to measured noise levels reaching 68 dBA L_{eq} along Cochrane Road and 55 dBA L_{eq} along Mission View Drive. Additional onsite noise sources such as parking lot cleaning would also be typical of noise generated by neighboring land uses and would not substantially increase ambient noise levels. Therefore, onsite operations would have a less-than-significant impact on noise-sensitive receivers.

Heating, Ventilation, and Air Conditioning Units

The primary onsite operational noise source from the project would be HVAC units. Specific planning data for the future HVAC systems are not available at this stage of project design, but this analysis assumes the use of typical HVAC systems for commercial or multifamily residential sites. The residential units used 2.5-ton Carrier 24ABA4030 air conditioner with Puron refrigerant, which has a sound power level of 76 dBA (see Appendix NOI for manufacturer's specifications). The project was assumed to contain 390 HVAC units based upon 1 ton of HVAC per 600 square feet of building space, as shown in Table 29. The commercial and hotel units used in this analysis include a 16.7-ton Carrier 38AUD25 split system condenser (see Appendix NOI for manufacturer's specifications). The project was assumed to contain 34 HVAC units based upon 1 ton of HVAC per 600 square feet of building space, as shown in Table 29. Based on the location of the proposed buildings, it is anticipated that the rooftop-mounted HVAC units would be installed on each of the proposed buildings located approximately 50 feet from the nearest offsite sensitive receivers north of the project site boundary (See Appendix NOI for the manufacturer's noise data and HVAC noise calculations).

Table 29 Modeled HVAC

Use/Description	Building Square Footage	Model	Estimated HVAC Tons	Estimated HVAC Units	Sound Power Level per Unit
Multi-Family Housing Use	585,000	24ABA4030	975	390	76
Commercial/Hotel Use	338,280	38AUD25	564	34	85

See Appendix NOI for sample HVAC specification sheets.

The project would include 34 HVAC units for the proposed commercial and hotel land use and 390 HVAC units for the proposed multifamily land use. HVAC units are considered continuous noise sources. Per Morgan Hill General Plan Policy Goal SSI-8.1, project impacts would be significant if exterior noise levels exceed 65 dBA L_{eq} in exterior areas. The combined operation of 424 HVAC units

would generate an estimated noise level of 52 dBA L_{eq} . The addition of a 52 dBA L_{eq} noise source to the ambient noise level of 55 dBA L_{eq} at the nearest offsite sensitive receivers north of the project site boundary noise level would only increase noise levels to approximately 57 dBA L_{eq} (Appendix NOI). This would be lower than the MHMC Section 30-469 exterior noise level threshold of 65 dBA L_{eq} . Therefore, impacts related to HVAC equipment noise would be less than significant.

Traffic Noise

Noise affecting the project site is primarily from traffic on US 101. Project traffic was estimated using the ADT, which utilized the trip rate derived from the project Traffic Impact Analysis PM Peak Hour rates and most recent project approved and proposed land uses. Project traffic intersection movements from the traffic study were used to estimate project ADT for each segment. PM Peak Hour traffic was shown to consist of higher traffic volumes than AM Peak Hour; therefore, PM Peak Hour traffic was utilized for conservative purposes. The total project trips for the proposed project were estimated to be approximately 9,857 ADT, while trips associated with the approved project considered by the 2005 EIR were estimated to be approximately 12,048 ADT (Hexagon Transportation Consultants, Inc. 2021).⁸ Existing traffic volume estimates along the adjacent street segments to the project site combined with proposed project ADT and approved project ADT are shown in Table 30, which shows a reduction of proposed ADT compared to approved ADT. Additionally, Year 2030 Cumulative traffic volumes were obtained from the traffic analysis traffic study and are shown in Table 31.

Table 30 Existing and Proposed ADT Volume

Street	Segment	Existing ADT	Existing Plus Approved Project ADT	Existing Plus Proposed Project ADT
Cochrane Road	De Paul Drive to Mission View Drive (West)	13,720	19,910	15,490
Cochrane Road	Mission View Drive to White Moon Drive (East)	5,440	6,060	5,700
Mission View Drive	Cochrane Road to Mission Avenida (North)	1,100	7,290	4,080
Mission View Drive	Black Hawk Drive to Cochrane Road (South)	8,280	12,540	10,870
Cochrane Road	U.S. 101 Northbound Ramps to DePaul Drive (West)	18,390	25,890	24,470
Cochrane Road	DePaul Drive to Mission View Drive (East)	12,560	18,750	14,410
DePaul Drive	Cochrane Road to Project Site (North)	10,740	16,930	16,290

⁸ ADT was derived from Hexagon Transportation Consultants, Inc. Traffic Impact Study, which utilized 498 dwelling units, 150 occupied hotel rooms, and 140,000 square feet of retail for the proposed project. Additionally, the study utilized 286,492 square feet of retail and 14 movie theater screens for the approved project.

Street	Segment	Existing ADT	Existing Plus Approved Project ADT	Existing Plus Proposed Project ADT
DePaul Drive	South to Cochrane Road (South)	470	470	470
Cochrane Road	U.S. 101 Southbound Ramps to U.S. 101 Northbound Ramps (West)	17,230	21,210	21,090
Cochrane Road	U.S. 101 Northbound Ramps to De Paul Drive (East)	18,520	24,540	24,150
US 101 Northbound Ramps	Cochrane Road to the North (North)	2,180	3,050	3,220
US 101 Southbound Ramps	From the south to Cochrane Road (South)	5,710	6,880	6,440

ADT = average daily trips.

Source: Hexagon Transportation Consultants, Inc. 2021

Table 31 Cumulative Year 2030 ADT Volumes

Street	Segment	Cumulative 2030 Without Project ADT	Cumulative 2030 With Approved Project ADT	Cumulative 2030 With Proposed Project ADT
Cochrane Road	De Paul Drive to Mission View Drive (West)	21,8550	28,040	23,620
Cochrane Road	Mission View Drive to White Moon Drive (East)	7,790	8,410	8,050
Mission View Drive	Cochrane Road to Mission Avenida (North)	1,100	1,025	35,800
Mission View Drive	Black Hawk Drive to Cochrane Road (South)	14,900	19,200	17,530
Cochrane Road	U.S. 101 Northbound Ramps to DePaul Drive (West)	25,690	33,190	31,770
Cochrane Road	De Paul Drive to Mission View Drive (East)	19,260	25,450	21,110
DePaul Drive	Cochrane Road to Project Site (North)	13,690	19,880	19,240
DePaul Drive	South to Cochrane Road (South)	1,580	1,580	1,580

Street	Segment	Cumulative 2030 Without Project ADT	Cumulative 2030 With Approved Project ADT	Cumulative 2030 With Proposed Project ADT
Cochrane Road	US 101 Southbound Ramps to US 101 Northbound Ramps (West)	22,380	26,360	26,240
Cochrane Road	US 101 Northbound Ramps to De Paul Drive (East)	24,530	30,550	30,160
US 101 Northbound Ramps	Cochrane Road to the North (North)	27,770	3,640	3,810
US 101 Southbound Ramps	From the south to Cochrane Road (South)	6,300	7,470	7,030

ADT = average daily trips
Source: Hexagon Transportation Consultants Inc. 2021

As shown in Table 30 and Table 31, the total project trips for the proposed project were estimated to be approximately 9,857 vehicles, while approved project trips were estimated to be approximately 12,048 vehicles (Hexagon Transportation Consultants, Inc. 2021). Trips are reduced for each roadway segment except for a minor increase on the U.S. 101 Northbound Ramps. This would lead to a net reduction of trips for the proposed project than what was in the approved project. The project would not make substantial alterations to roadway alignments⁹ or substantially change the vehicle classifications mix on local roadways. Therefore, the proposed project would not result in impacts beyond those identified in the approved 2005 EIR, which identified temporary significant and unavoidable impacts due to two single-family residential units existing on the southeast corner of the project site. The 2005 EIR did not find significant impacts to other sensitive receivers from traffic noise increases. These units have since been demolished onsite, and these sensitive receivers no longer exist, and the project would therefore not result in significant impacts to these receivers or any receivers from an increase in traffic noise. Offsite traffic would not create a new or substantially increased noise impact compared to those identified in the 2005 EIR and impacts would be less than significant. Further analysis in the Subsequent EIR is not warranted and this will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The greatest anticipated source of vibration during general project construction activities would be from a large dozer, which would be used during site preparation and grading activities and may be used in 55 feet of the nearby residential buildings along Mission View Drive. A dozer would create approximately 0.089 in./sec. PPV at 25 feet (Caltrans 2020). This would equal a vibration level of 0.037 in./sec. PPV at a distance of 55 feet.¹⁰ This would be lower than what is considered a distinctly perceptible impact for humans of 0.24 in./sec. PPV, and the structural damage impact to residential

⁹ The project would include the addition of a dedicated left turn lane and right turn lane on Tokay Avenue for movements in and out of the community; other than restriping lanes for the dedicated turn lanes, the project would not alter Tokay Avenue (e.g., no roadway widening required).

¹⁰ $PPV_{Equipment} = PPV_{Ref} (50/D)^n$ (in/sec), PPV_{Ref} = reference PPV at 50 feet, D = distance, and $n = 1.1$

structures of 0.4 in./sec. PPV. Therefore, temporary vibration impacts associated with the dozer (and other potential equipment) would be less than significant.

The project does not include substantial vibration sources associated with operation. Therefore, operational vibration impacts would be less than significant. Although groundborne vibration was not analyzed in the 2005, the proposed project would not introduce new or substantially severe impacts. Further analysis in the Subsequent EIR is not warranted.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

As discussed in Item 9, *Hazards and Hazardous Materials*, the nearest airport to the project site is the San Martin Airport, which is located approximately 6 miles south of the project site. The project site is outside of the area of the land use plan for the airport (Santa Clara County 2006). There are no private airstrips near the project site. Because there are no airports or airstrips near the project site, the project would not result in the exposure of people to excessive noise levels from aircraft. No impact would occur. Although airport noise was not analyzed in the 2005, the proposed project would not introduce new or substantially more severe impacts than what was analyzed in the 2005 EIR. Further analysis in the Subsequent EIR is not warranted.

NO IMPACT

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14 Population and Housing

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	N/A	No	No	No	N/A
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Population and Housing were analyzed in Section 6 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to population and housing. Population and housing impacts identified in the 2005 EIR are summarized as follows.

The EIR stated that the proposed project would involve demolition of three residential homes, with the existing residents being readily absorbed into the existing housing stock of Morgan Hill. The 2005 EIR also stated that the project as proposed was estimated to employ more than 945 people. Should employees relocate to Morgan Hill for job openings that occur as a result of the project, the EIR determined that the possible influx of people would be restricted by the growth management policies of Morgan Hill. The 2005 EIR concluded that the proposed project would have a less-than-significant impact on population and housing.

Impact Analysis

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The 2035 General Plan EIR conservatively estimated the City's population would increase to approximately 68,057 by 2035. The General Plan EIR determined that the projected level of growth under the 2035 General Plan would exceed regional projections but concluded that policies from the proposed General Plan would serve to provide a planning framework for this growth.

The proposed project would result in the development of 498 dwelling units, 140 hotel rooms, and 135,000 square feet of retail space. Assuming that household size of the proposed project would generally reflect that of the California Department of Finance's (DOF) estimated 3.08 persons per household for the City of Morgan Hill, the proposed project would introduce an approximate population of 1,534 persons. The addition of retail space would also introduce new jobs which could result in an addition of residents to the City, but due to the nature of these jobs most would likely be filled by people already residing in the City or region.

The current Morgan Hill population is estimated to be 47,374 (DOF 2021). ABAG projects that the population of Morgan Hill will increase to 50,165, an additional 2,791 people, by 2040. The addition of the proposed project's estimated 1,534 persons and the incremental contribution of new jobs to the City would be in the ABAG forecast and the General Plan's growth projection. Therefore, implementation of the proposed project and the additional population would be in population projections for the City and would not result in substantial cumulative impacts due to population growth. The proposed project would not induce substantial unplanned growth directly or indirectly. Impacts would be less than significant. Further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

There are currently no residences on the project site. Therefore, the project would not displace existing people or housing. No impact would occur. Further analysis is not warranted. This topic will not be discussed in the Subsequent EIR.

NO IMPACT

15 Public Services

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a. Fire protection?	EIR Pages 3.11-6 through 3.11-7	No	No	No	N/A
b. Police protection?	EIR Pages 3.11-5 through 3.11-6	No	No	No	Yes
c. Schools?	EIR Page 3.11-7	No	No	No	N/A
d. Parks?	EIR Pages 3.11-7 through 3.11-8	No	No	No	N/A
e. Other public facilities?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Public Services were analyzed in Section 3.11 of the 2005 EIR. The EIR concluded that the original project would not result in significant impacts to Public Services.

Public Services impacts identified in the 2005 EIR are summarized as follows.

Police Protection

The 2005 EIR found that the proposed project would not result in the need for new or physically altered governmental facilities but would increase service demands for police patrol and incident response. The proposed project would be required to conform to the applicable provisions of the City's building security ordinance found in Chapter 15.40 of the 2005 Morgan Hill Municipal Code. This ordinance mandates the incorporation of security features into building design and related site improvements to reduce crime. Implementation of this ordinance would be supplemented with Police Department review of development projects by staff trained in Crime Prevention Through

Environmental Design strategies. The proposed project would result in an increased demand for service due to the type of uses, late hours of operation, and proximity to U.S. 101. However, while an increase in demand upon police services can be expected, the level of increase is difficult to predict until a precise tenant mix is determined. Determinant factors include hours of operation (particularly after dark), type of merchandise, targeted consumer (e.g., teenagers vs. retirees), and whether the restaurants would serve alcohol and/or contain dedicated bars. Police service times could be expected to increase service demand. The project applicant would be subject to development impact fees for public safety facilities, equipment, and training collected by the City of Morgan Hill (Section 3.56.030 of the 2005 City of Morgan Hill Municipal Code). Payment of standard development impact fees would provide funds for the maintenance of acquisition of equipment such as patrol cars. The 2005 EIR found that with implementation of mitigation, this impact would be less than significant.

Fire Protection

The 2005 EIR found that the proposed project would increase the demand for fire protection. However, the proposed project would not result in the need for new or physically altered governmental facilities. The Morgan Hill Fire Department would provide fire protection service to the project site. The proposed project would have to meet all state and local codes for providing adequate fire flows, fire sprinklers, emergency vehicle access, and other fire prevention requirements. The project applicant would also be subject to development impact fees for public safety facilities, equipment, and training collected by the City of Morgan Hill (Section 3.56.030 of the 2005 City of Morgan Hill Municipal Code). Impacts were found to be less than significant.

Schools

The 2005 EIR found that the proposed project would generate employment opportunities which may attract additional residents with school-age children to Morgan Hill. The 2005 EIR analyzed that, due to the Residential Development Control System in place through 2020, City growth management policies that limit the number of dwelling units in the city would ensure that the additional population facilitated by the project would not exceed capacity of local schools. Further, the project applicant would be required to pay school development impact fees to Morgan Hill Unified School District. Impacts were found to be less than significant.

Table 32 lists the 2005 EIR’s mitigation measures related to public services.

Table 32 2005 EIR Mitigation Measures: Public Services

Mitigation Measure	Description
Mitigation 3.11-1	Subject to review and approval by the City of Morgan Hill Police Department, the project applicant shall install and maintain a video surveillance system throughout the proposed project and shall maintain onsite security personnel during all hours of operation.
Source: City of Morgan Hill 2005	

Impact Analysis

- a.1. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*
- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The Morgan Hill Police Department (MHPD) determined that the existing facilities are adequate to meet long-term needs (City of Morgan Hill 2005, Ramirez 2022, Good 2022). The proposed project is located in an urbanized area already served by the MHPD and is generally similar to the surrounding uses and would not substantially increase demand on local police or fire protection services. While the project could result in a need for additional MHPD personnel, existing and planned facilities would accommodate an increase in personnel (Ramirez 2022, Good 2022). The project is located approximately 1.3 miles northeast of the El Toro Fire Station, 3 miles north of the Dunne Hill Fire Station, and 2.7 miles north of the MHPD. The project would be reviewed by the MHPD for compliance with safety regulations. In addition, the project would be subject to applicable development impact fees to offset potential increases in demand. The proposed project would be required to implement Mitigation Measure 3.11-1 from the 2005 EIR to reduce impacts to less-than-significant levels. This impact would be less than significant and would not be greater than that analyzed in the 2005 EIR. There would be no new or substantially more severe impacts than what was analyzed in the 2005 EIR. Further analysis is not warranted.

The proposed project would introduce new development and population in the same location considered by the 2005 EIR. The impact would therefore be the same as for the previous project, and this issue was addressed adequately in the 2005 EIR.

ADDRESSED IN PRIOR EIR

LESS THAN SIGNIFICANT IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The 2005 EIR did not explicitly address the impacts of additional dwelling units and the increase in population of school aged children as a result of project implementation. The addition of multifamily dwelling units on the project site would result in an increase in school-aged children that would attend schools in the Morgan Hill Unified School District. The 2005 EIR anticipated growth in Morgan Hill based up on the Residential Development Control System, which included City growth management policies that limit the number of dwelling units in the city. Senate Bill 330 (SB 330) established the "Housing Crisis Act of 2019," effective January 1, 2020, suspending the City's Residential Development Control System which was a housing development pacing tool the City utilized for nearly 40 years prior to the new legislation. Accordingly, growth in the City of Morgan

Hill is increased compared to growth anticipated under the 2005 EIR. However, the project applicant would be required to pay school fees at the time of building permit to reduce impacts as a result of the proposed project. Pursuant to Section 65995 (3)(h) of the California Government Code (SB 50, chaptered August 27, 1998), the payment of statutory fees “is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization.” Thus, payment of the development fees is considered full mitigation for the proposed project’s impacts related to schools under CEQA and impacts would be less than significant. While the project would increase school-aged children in Morgan Hill, the project would have a less-than-significant impact that would not be greater than that analyzed in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

Please refer to Section 16, *Recreation*.

LESS THAN SIGNIFICANT IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The 2005 EIR did not explicitly address the impacts of the proposed project on other public facilities such as libraries. As of the end of 2020, the Morgan Hill Library finished a 10,600-square-foot expansion which would accommodate new residents of Morgan Hill. The proposed project does not include and would not require new or physically altered governmental facilities (Ramirez 2022, Good 2022). The project’s new residents would generate additional demand for library services, but the project’s growth is in the population forecasts in ABAG projections. While the project would result in an increase in the population of Morgan Hill and the population that the Morgan Hill Library would serve, the project would have a less-than-significant impact that would not be greater than that analyzed in the 2005 EIR. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

16 Recreation

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	EIR Pages 3.11-7 through 3.11-8	No	No	No	N/A
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	EIR Pages 3.11-7 through 3.11-8	No	No	No	N/A

2005 EIR Summary

Impacts to Recreation were analyzed in Section 3.11 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to recreation.

Recreation impacts identified in the 2005 EIR are summarized as follows.

The 2005 EIR found that the proposed project would not conflict with an established recreational land use in the area nor inhibit the future provision of recreational opportunities. While the proposed project would generate employment opportunities that may attract a limited number of new residents and with them incremental demand for recreational opportunities, this would be a less-than-significant impact.

Impact Analysis

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The 2005 EIR analysis relied on growth management policies which would limit the number of annual building permits for dwelling units through the Residential Development Control System (RDCS). California Senate Bill 330 (SB 330) established the “Housing Crisis Act of 2019”, effective January 1, 2020, making changes to the local approval process – this law supersedes City requirements, and suspends the City’s Residential Development Control System (RDCS) which was a housing development pacing tool the City utilized for nearly 40 years prior to the new legislation.

The proposed project would introduce new dwelling units to the City. As stated in Section 14, *Population and Housing*, the proposed project would introduce an approximate population of 1,534 persons. This increase in population would result in a proportionate increase in demand for recreational facilities. The project’s residential and commercial development would impact the parkland ratio in the City. The project includes a courtyard with outdoor open space near the proposed apartment units, a clubhouse, recreation hall, and swimming pool for the use of new residents. These amenities would reduce the demand for offsite recreational facilities generated by new residents. Additionally, the project applicant would be required to pay park impact fees for the development of additional offsite park facilities. While the project would result in an increase in the population of Morgan Hill and the population that parks and recreational facilities serve, impacts to parks and recreational facilities would be less than significant and would not be greater than those analyzed previously. This topic will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

17 Transportation

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	EIR Pages 3-.12-12 through 3.12-19, 3.12-22 through 3.12-23	Yes	Yes	Yes	No
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	N/A	Yes	Yes	Yes	N/A
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	EIR Pages 3.12-20 through 3.12-21, 3.12-27	Yes	No	No	No
d. Result in inadequate emergency access?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Transportation and Circulation were analyzed in Section 3.12 of the 2005 EIR. The section analyzes the project's impacts on traffic in terms of level of service (LOS), site access, onsite circulation, public transit facilities, pedestrian facilities, bicycle facilities, and parking availability. The 2005 EIR did not address the issue areas of consistency with *CEQA Guidelines* Section 15064.3, subdivision (b) or the adequacy of emergency access.

Transportation and circulation impacts identified in the 2005 EIR are summarized as follows.

Intersection Level of Service Impacts

Roadway Intersections

The 2005 EIR found that the project would generate 22,009 net-new daily trips, 533 net-new AM Peak Hour trips, 1,869 net-new PM Peak Hour trips, and 2,415 net-new Saturday midday peak hour trips. These new additional trips would cause the unsignalized intersection of Cochrane Road/Mission View Drive to operate at unacceptable LOS during peak hours, and the project would exacerbate unacceptable operations at the Dunne Avenue/Monterey Road intersection during PM Peak Hour. This would be a significant impact. However, implementation of the roadway geometry and required traffic signal described in Mitigation Measures 3.12-1a and 3.12-1b would reduce impacts to less than significant.

Freeways

The 2005 EIR found that the proposed project would generate new trips on US 101 that would exacerbate current unacceptable LOS. The segment of US 101 between Tennant Avenue and Dunne Avenue operates at an adequate LOS, and the project would add a volume greater than one percent of the capacity to this segment. Therefore, the project would have a significant impact and Mitigation Measure 3.12-2 would be required. However, even with implementation of Mitigation Measure 3.12-2, the project traffic contribution would not be reduced, and impacts would be significant and unavoidable.

Site Access

The 2005 EIR found that impacts related to site access would be less than significant with implementation of Mitigation Measures 3.12-3 and 3.12-4. Mitigation Measure 3.12-3 would eliminate two driveways to reduce vehicle conflicts with pedestrians, and Mitigation Measure 3.12-4 would designate the southernmost driveway to be a right-turn, in-and-out-only driveway to avoid potential vehicle conflicts.

Onsite Circulation

The 2005 EIR found that to improve onsite circulation the project would need to implement Mitigation Measures 3.12-5 and 3.12-6. Impacts would be reduced to less than significant. Mitigation Measure 3.12-5 would reduce speeds on De Paul Drive by developing project design features that would discourage speeding. Mitigation Measure 3.12-6 would relocate the designated loading zone to avoid a driving hazard at a nearby onsite intersection.

Public Transit, Pedestrian, and Bicycle Facilities

Public Transit Facilities

As described in the 2005 EIR, the existing bus stop on Mission View Drive south of Cochrane would not be able to properly accommodate transit riders generated by the project. To reduce the potentially significant impact, Mitigation Measure 3.12-7 would require that the project construct a new stop along the project frontage with transit amenities. The impact would be less than significant.

Pedestrian Facilities

The 2005 EIR found that the project would construct a continuous sidewalk along the project frontage but there would be no pedestrian crossings at the major intersections adjacent to the project. Impacts would be potentially significant but with Mitigation Measure 3.12-8 a pedestrian crosswalk would be provided at the major intersections. The impact would be less than significant.

Bicycle Facilities

The 2005 EIR found that the project would create a demand for bicycle facilities and no bicycle facilities were part of the preliminary project site plans. This would be a potentially significant impact. However, implementation of Mitigation Measure 3.12-9 would require that the project incorporate bicycle facilities into the project design.

Parking

The 2005 EIR found that the project would not provide sufficient parking supply to meet the demand generated by the proposed land uses. Mitigation Measure 3.12-10 would be required to ensure that the overall number of parking spaces is included in the project design to reduce impacts to less than significant.

Table 33 lists the 2005 EIR's mitigation measures related to transportation and circulation. Pursuant to Public Resource Code, Section 21099 (b)(2), traffic congestion, while potentially an inconvenience to drivers, is not itself an environmental impact. Therefore, issues related to traffic congestion are currently outside the scope of CEQA analysis. This list also excludes mitigation measures relevant to cumulative development, because the 2005 EIR's cumulative setting consists of approved projects when the project was proposed. This historic cumulative setting does not apply to the proposed project.

Table 33 2005 EIR Mitigation Measures: Transportation and Traffic

Mitigation Measure	Description
Impact 3.12-1 Intersection Level of Service Impacts	
Mitigation Measure 3.12-1a	At the Dunne Avenue/Monterey Road intersection, the westbound right-turn lane shall be restriped as a shared through/right-turn lane, and a northbound right-turn overlap phase shall be installed. This improvement would be required when 35 percent of the project has been constructed based on total PM Peak hour trip generation
Mitigation Measure 3.12-1b	At the Cochrane Road/Mission View Drive intersections, a traffic signal shall be installed with protected left-turn phasing on all approaches. In addition, this intersection shall be reconfigured to include the following geometry: ▪ The northbound approach should include one left-turn lane and one shared through/right-turn lane. ▪ The westbound approach should include one left-turn lane, one through lane, and one shared through/right-turn lane. ▪ The southbound approach should include one left-turn, one shared through/right-turn lane, and one right-turn lane. ▪ The eastbound approach should include one left-turn lane, one through lane, and one right-turn lane.

Mitigation Measure	Description
Impact 3.12-2 Freeway Level of Service Impacts	
Mitigation Measure 3.12-2	The project shall implement the applicable actions listed in the <i>Immediate Implementation Action List</i> contained in the <i>Deficiency Plan Guidelines</i> of the County's Congestion Management Program, which are intended to encourage the use of non-automobile transportation modes and to help maximize the efficiency of the existing transportation system. The <i>Immediate Implementation Action List</i> comprises a general listing of the types of the measures which can be implemented by project sponsors and/or lead agencies. The listed actions which can be implemented at the project-specific level include improvements to the bicycle and pedestrian facilities, improvements to the public transit facilities, and such information programs to encourage Transportation Demand Management measures such as carpooling. (The full list is contained in Appendix H of the traffic report which is contained in Appendix K of this EIR.) The proposed project would implement several of these action items, either as part of the proposed project or as mitigation measures (for transportation and/or air quality impacts) identified elsewhere in this EIR. These actions include: ▪ Pedestrian circulation system improvements, including sidewalks along project frontages, crosswalks at adjacent intersections and project driveways, internal project sidewalks, and marked pedestrian paths providing internal pedestrian circulation ▪ Bicycle system improvements, including dedication of right-of-way for Class II bike lane along project street frontages and installation of onsite bicycle storage facilities ▪ Transit improvements, such as provision of a transit stop on project Cochrane Road frontage and posting of transit schedule and fare information on project employer' bulletin boards
Impact 3.12-3 Site Access	
Mitigation Measure 3.12-3	The two driveways shown directly behind the movie theater complex on Mission View Drive (i.e., the second and third driveways north of the Cochrane Road intersection) should be eliminated from the proposed project, and a circulation aisle should be provided behind the movie theater complex
Impact 3.12-4 Site Access	
Mitigation Measure 3.12-4	The southernmost project driveway should be designated as a right-turn, in-and-out-only driveway (i.e., signs should be posted prohibiting left-turn movements into or out of the project site at this driveway).
Impact 3.12-5 Onsite Circulation	
Mitigation Measure 3.12-5	The following modifications are identified on the main north-south circulation aisle to discourage speeding and provide more visible crosswalks for pedestrians: a) At the first intersection north of Cochrane (i.e., between Shops K and Pad 7 and between Shops B and Pad 2), stop signs should be installed on the side-street approaches b) At the second intersection north of Cochrane, provide one of the following alternative configurations: i) Provide raised intersection to provide vertical displacement and provide stop signs on the side street approaches ii) Provide stop signs on all four approaches c) At the third intersection north of Cochrane, provide stops signs on all four approaches
Impact 3.12-6 Onsite Circulation	
Mitigation Measure 3.12-6	The designated loading zone shall be relocated far enough to the east to allow the intersection approach lane to be reduced to one lane.
Impact 3.12-7 Public Transit Facilities	
Mitigation Measure 3.12-7	The project applicant shall construct a new bus stop along the project frontage, including transit amenities such as a bus turnout, a shelter, and benches

Mitigation Measure	Description
Impact 3.12-8 Pedestrian Facilities	
Mitigation Measure 3.12-8	Pedestrian crosswalks shall be provided on all four legs of the Cochrane Road/De Paul Drive intersection.
Impact 3.12-9 Bicycle Facilities	
Mitigation Measure 3.12-9	The following bicycle facilities shall be incorporated into the project: a) Bicycle racks and/or lockers to accommodate bicycle travel by customers and employees. Bicycle parking facilities should be located in high-visibility areas in order to encourage bicycle travel and discourage theft and vandalism. b) Class II bicycle lanes along the project street frontages
Impact 3.12-10 Parking	
Mitigation Measure 3.12-10	The overall number of parking spaces included in the project shall be required to meet the aggregate parking demand of the various land uses proposed within the project, to be determined as follows: At the time of the subsequent discretionary approval (e.g., use permit, design review) for each individual restaurant pad or space, the parking supply provided for each such pad or space shall meet the peak parking demand for the specific type of restaurant proposed (e.g., sit-down, fast-food), as determined through either the applicable City code parking requirement, or through applications of the ITE shared parking rates for 1:00 p.m. on a weekend day (plus 10 percent). After the center is 75 percent built out on the basis of floor area (assuming the cinemas have been completed), the calculation of parking requirements for new restaurant uses may be adjusted based on the results of physical parking surveys conducted at the center by a qualified transportation consultant during the peak usage period. (If the cinemas have not been completed upon 75 percent project completion, then the buildout threshold for such calculations shall be 85 percent of project buildout.) As a guide to the approximate maximum floor area of restaurant that can be constructed without resulting in a parking deficiency for the project, the maximum floor area can range from 25,000 square feet (assuming 100 percent sit-down restaurant) to 41,000 square feet (assuming 100 percent fast-food restaurant), although the actual maximum will fall between these numbers if the project ultimately includes a mix of the two restaurant types. (These maximum figures assume floor areas for all other project uses will remain as proposed on the May 2, 2005 project site plan.)

Source: City of Morgan Hill 2005

Impact Analysis

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The project would construct land uses that were not analyzed in the 2005 EIR, including residences and a hotel and a reduction in overall commercial square footage, which would affect circulation. Therefore, the project would have a potentially significant impact related to conflicts with programs, plans, ordinances, and policies addressing the circulation system. This issue will be analyzed further in the Subsequent EIR.

POTENTIALLY SIGNIFICANT IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines Section 15064.3 requires an analysis of a project's effect on VMT. The 2005 EIR was certified before the adoption of statewide VMT standards pursuant to SB 743, and before the *CEQA Guidelines* was amended to incorporate the issue of VMT. This represents a change in the circumstances under which the 2005 EIR was prepared, requiring further analysis. Therefore, the project would have a potentially significant impact related to consistency with VMT standards. This issue will be analyzed further in the Subsequent EIR.

POTENTIALLY SIGNIFICANT IMPACT

- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*
- d. *Would the project result in inadequate emergency access?*

The proposed layout of the project would differ substantially from the site layout analyzed in the 2005 EIR, which could potentially result in new hazards due to geometric design features (e.g., pedestrian crossings of dangerous intersections) and effects on emergency access. These impacts would be potentially significant and will be analyzed further in the Subsequent EIR.

POTENTIALLY SIGNIFICANT IMPACT

18 Tribal Cultural Resources

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	N/A	No	Yes	No	N/A
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?	N/A	No	Yes	No	N/A

2005 EIR Summary

The 2005 EIR did not address the issue area of tribal cultural resources.

Impact Analysis

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” that are:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. Determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

As the Notice of Preparation for the EIR for this project was published before July 1, 2015, AB 52 consultation is not required, and changes under this addendum do not result in a need for AB 52 consultation. No cultural resources of Native American origin were identified onsite, and Section 5, *Cultural Resources*, of the 2005 EIR analyzed the potential for possible disturbance of previously unidentified resources and includes mitigation to reduce these impacts to a less-than-significant level. Mitigation Measures 3.5-1a and 3.5-1b address impacts to cultural resources, including those of Native American origin. If cultural resources of Native American origin are identified, relevant portions of AB 52 would apply.

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified,

upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005); "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places." SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9) and Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

On March 15, 2022, the City sent AB 52/SB 18 letters to five Native American Tribes identified on the NAHC list received in December 2019 (Ohlone Indian Tribe, Muwekma Ohlone Indian Tribe of SF Bar Area, Indian Canyon Mutsun Band of Costanoan, Amah Mutsun Tribal Band of San Juan Bautista and Amah Mutsun Tribal Band) as well as one additional tribe (Tamien Nation). The City received one response as a result from the Tamien Nation who requested a meeting with the City. The City held a meeting with the Tamien Nation on May 17, 2022, during which the Tribal Chairperson expressed concern regarding Tribal cultural resources sensitivity but did not identify any specific Tribal cultural resources near the project site.

Though no specific Tribal cultural resources were identified, there is always potential to uncover buried tribal cultural resources during ground disturbing activities, such as the excavation and grading that would be required for project construction. Should project construction activities encounter and damage or destroy a tribal cultural resource or resources, impacts would be potentially significant. However, the following mitigation measure, which was agreed upon by the Tamien Nation during consultation with the City, would ensure that potential impacts to tribal cultural resources would be less than significant.

Mitigation Measures

Mitigation Measure TCR-1: Inadvertent Discovery

Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply:

1. Prior to start of grading or earthmoving activity on the "first day of construction", the archeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of "cultural sensitivity training" with the general contractor and subcontractors.
2. A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
 - a. Work at the location of the find shall halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;

- b. If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist shall prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;
 - c. If the find appears significant and to qualify as a unique archaeological resource, the archaeologist shall determine if the resource can be avoided and shall detail avoidance procedures in a formal memo/letter; and
 - d. If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2. An archaeologist shall be on-call during ground disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:
3. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans.
 - a. If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
 - b. Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
 - c. Surgical masks should also be worn to prevent exposure to pathogens that may be associated with the remains.
4. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.
5. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time of discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find).
6. The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.

7. The contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - The City of Morgan Hill Development Services Director (408) 779-7247
 - The Contractor's Point(s) of Contact
 - The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900
 - The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082
 - The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C)
 - The Tamien Nation (707)295-4011 (office) and (925)336-5359 (THPO)
8. The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
9. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
10. Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
11. Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out.
12. If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

Significance After Mitigation

mitigation Measure TCR-1 would avoid and appropriately minimize potential project impacts to tribal cultural resources. Impacts would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
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Would the project:

- | | | | | | |
|--|----------------------------------|----|----|----|-----|
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | EIR Page 3.13-7 | No | No | No | N/A |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | EIR Pages 3.13-7 through 3.13-9 | No | No | No | N/A |
| c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to | EIR Pages 3.13-9 through 3.13-10 | No | No | No | N/A |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
the provider's existing commitments?					
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	EIR Pages 3.13-6 through 3.13-7	No	No	No	Yes
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	EIR Pages 3.13-6 through 3.13-7	No	No	No	Yes

2005 EIR Summary

Impacts to Utilities and Service Systems were analyzed in Section 3.13 of the 2005 EIR. The EIR concluded that the proposed project would not result in significant impacts to utilities and service systems.

Utilities and service systems impacts identified in the 2005 EIR are summarized as follows.

Potable Water

The 2005 EIR found that the proposed project would increase the demand for potable water. However, the existing water system would be able to adequately supply the project, and the increase would not be substantial in relation to the existing conditions. The proposed project includes water service infrastructure improvements. The four onsite wells currently servicing the property will be capped and replaced with 12-inch water lines extending westward from existing 10- and 12-inch water lines located beneath Cochrane Road. Additionally, fire hydrants will be provided in locations to be approved by the fire department. All work will be done by the applicant to City standards and in conformance with the City of Morgan Hill Water System Master Plan. Pursuant to Chapter 3.44 and 3.56 of the 2005 City of Morgan Hill Municipal Code, water impact fees will also be assessed for the cost of infrastructure necessary to service the proposed project. Impacts to water supply would be less than significant.

Wastewater

The 2005 EIR found that the proposed project would require onsite expansion and relocation of existing infrastructure, in addition to an increase in the amount of wastewater entering the sewer system. Neither the expansion, nor the increased flow, are substantial relative to current conditions and capacities. The proposed project would be required to comply with City standards for wastewater infrastructure and would also be required to comply with the City of Morgan Hill Sewer System Master Plan. In addition, Pursuant to Chapter 3.44 and 3.56 of the 2005 Morgan Hill Municipal Code, sewer impact fees would also be assessed to cover the cost of infrastructure necessary to service the proposed project. Impacts would be less than significant.

Solid Waste

The 2005 EIR found that the project as originally proposed would generate between 0.8 and 8.3 tons of solid waste per day. The waste management provider responsible for the project has sufficient capacity to accommodate the waste in the Pacheco Pass Landfill in Morgan Hill, Kirby Creek Landfill in Milpitas, or BFI Landfill in San Jose. Without sufficient waste diversion practices, however, the project may result in noncompliance with the California Integrated Waste Management Act of 1989. Implementation of 2005 EIR Mitigation Measure 3.13-1 would reduce this impact to a less-than-significant level.

Electric, Natural Gas, Telephone, and Cable Services

The 2005 EIR found that the project as originally proposed would increase the demand for electric, natural gas, telephone, and cable services. The 2005 EIR would require the project to obtain a “will-serve” letter from PG&E and SBC Communications, or equivalent providers, prior to Final Map approval and/or issuance of building permits to reduce this impact to a less-than-significant level.

Table 34 shows the 2005 EIR mitigation measures related to utilities and service systems.

Table 34 2005 EIR Mitigation Measures: Utilities and Service Systems

Mitigation Measure	Description
Mitigation 3.13-1	Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses or maintenance personnel generating such waste. Contracts for the collection of these recyclables shall also be maintained as available.

Source: City of Morgan Hill 2005

Impact Analysis

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Water

The City of Morgan Hill owns, operates, and maintains its own municipal water system, which consists of, among other facilities, 16 active groundwater wells and distribution mains to convey water throughout the incorporated city and its greater urban growth boundary area. The City's water supply is sourced entirely from locally groundwater supplies, which the City pumps from the underlying Santa Clara Subbasin of the Santa Clara Valley Groundwater Basin, and the adjacent Llagas Subbasin of the Gilroy-Hollister Valley Groundwater Basin. Valley Water is the DWR-approved exclusive Groundwater Sustainability Agency for both subbasins. Valley Water is a wholesale water agency that imports surface water supplies from both the State Water Project and the Central Valley Project and uses part of these imported supplies to replenish the local ground water basins, including the Santa Clara and Llagas subbasins, to maintain sustainable groundwater supply conditions.

As shown in Table 35, the project would result in a net increase in demand for water of approximately 129 acre-feet per year. This supply would be produced by the City of Morgan Hill from the local groundwater basins, consistent with the City's current water supply scenario. The local groundwater basins are sustainably managed by Valley Water and the City, along with other users of the groundwater. This is documented in the WSA, which is provided as Appendix WSA, and is informed by multiple long-range water supply planning and groundwater-management documents, including:

- City of Morgan Hill 2020 Urban Water Management Plan
- Valley Water 2020 Urban Water Management Plan
- City of Morgan Hill 2021 Water System Management Plan
- Valley Water 2019 Annual Groundwater Report
- Valley Water 2020 Water Shortage Contingency Plan

The WSA provided as Appendix WSA determines that there is sufficient water supply available to meet the project's projected demands reliably over a 20-year projection and with consideration to varying climatic (drought) conditions. Therefore, because there is adequate water supply available to serve the project, no additional impacts beyond those identified in the 2005 EIR would occur.

Table 35 Estimated Water Demand (Net Increase from 2005 EIR)

Water Demand Type	Size	Water Use Factor ¹ (Annual)	Water Demand (AFY)
Residential	498 units	106,229 gal/unit	162
Retail	135,000 sf	119 gal/sf	49
Hotel Rooms	140 units	28,186 gal/unit	12
Total Operational Demand²			223
Previously Assessed Retail ³	-259,690 sf	119 gal/ sf	-95
Total New Water Demand			129

AFY = acre-feet per year; gal/sf = gallons per square foot; sf = square foot

¹ CalEEMod provided the water use factors used to calculate water demands

² This total demand assumes the project is fully operational during the first year; this is an over-estimation of the project's operational water demands in the first few years, because the project would actually be constructed over an approximately 3-year period, with water demands correlating with when individual land uses are brought online. For example, water demands for residential would equate to 34 acre-feet at the end of the first year for the first 104 units, while residential demands would reach 162 acre-feet by the end of the second year for the next 394 units, reaching the design total of 498 new residential units, with an associated water demand of 162 AFY.

³ "Previously assessed retail" refers to those portions of the approved Cochrane Commons Project consisting of Phase II as assessed in the 2005 EIR, that were never constructed and are not included in the proposed project as assessed herein, although the associated water demands are accounted for in City planning documents including the General Plan and UWMP.

Wastewater

The City is served by the South County Regional Wastewater Authority (SCRWA). SCRWA's WWTP has a permitted capacity of 8.5 million gallons per day (MGD), average wastewater inflow of 6.2 MGD, and plans to expand the WWTP capacity to 11 MGD (SCRWA 2020). As shown in Table 36, the project would result in a net increase in demand for wastewater treatment services of approximately 0.062 MGD. This represents approximately 2.7 percent of the SCRWA WWTP's current remaining capacity, and 1.3 percent of the SCRWA WWTP's remaining capacity following the planned WWTP upgrade. Because there is adequate wastewater service available to serve the project, no additional impacts beyond those identified in the 2005 EIR would occur.

Table 36 Estimated Wastewater Generation (Net Increase from 2005 EIR)

Land Use	Size	Generation Rate ¹	Total (gallons/year)	Total (gallons/day)
Residential	+498 units	88,524 gallons/unit/year	+44,085,000	+120,780
Hotel	+140 rooms	23,488 gallons/room/year	+3,288,000	+9,008
Retail	-259,690 sf	99.2 gallons/sf/year	-24,761,000	-67,838
Total			+22,613,000	+61,950

Notes: sf = square feet

¹ Waste demand estimated as 120 percent of wastewater generation due to system losses.

Totals may not add due to rounding.

Additionally, as described in SCRWA's Urban Water Management Plan, SCRWA has adequate available water supply to serve its customers during average, single dry, and multiple dry years, with surplus water supply available during all scenarios through 2045 (SCRWA 2021). Impacts would be less than significant.

Electricity, Natural Gas, and Telecommunications

As described in Section 6, *Energy*, the project would require approximately 9 GWh of electricity. As stated in the 2005 EIR, because services are readily available near the project site, impacts would be less than significant. Because the City of Morgan Hill has prohibited the use of natural gas in new development, the project would not involve the use of natural gas. As circumstances have not changed with respect to electricity and telecommunications infrastructure, the project would continue to have a less-than-significant impact. This issue will not be analyzed further in a Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City disposes of solid waste at the Kirby Canyon Recycling and Disposal Facility. This landfill has a maximum permitted throughput of 2,600 tons per day and a remaining capacity of 16,191,000 cubic yards (CalRecycle 2021). Since 2014, Waste Solutions Group has contracted with the City of Morgan Hill to provide solid waste disposal services at John Smith Road Landfill for the waste collected by Recology. The John Smith Road Landfill is owned by San Benito County, and as of March 30, 2022, out-of-county waste will not be accepted at John Smooth Road Landfill for an indefinite period of time, presumably until capacity expansion efforts are finalized.

As shown in Table 37, the project would result in a net increase in solid waste generation of approximately 181 pounds per day (0.09 tons per day). This represents approximately 0.003 percent of the landfill's maximum permitted throughput. The project would be subject to 2005 EIR Mitigation Measure 3.13-1, which requires recycling receptacles be provided to further reduce solid waste generation of the project. Because there is adequate capacity available to serve the project, and mitigation would increase the solid waste diversion of project-generated waste, no additional impacts beyond those identified in the 2005 EIR would occur.

Table 37 Estimated Solid Waste Generation (Net Increase from 2005 EIR)

Land Use	Size	Generation Rate ¹	Total (lbs/year)	Total (lbs/day)
Residential	+498 units	920 lbs/unit/year	+458,160	+1,255
Hotel	+140 rooms	1,095 lbs/room/year	+153,300	+420
Retail	-259,690 sf	2,100 lbs/1,000 sf/year	-545,349	-1,494
Total²			+66,111	+181

Notes: lbs= pounds; sf = square feet

¹ Rates from CalEEMod.

Totals may not add due to rounding.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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20 Wildfire

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
--	---------------------------------------	---	--	--	--

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- | | | | | | |
|--|-----|----|----|----|-----|
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | N/A | No | No | No | N/A |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | N/A | No | No | No | N/A |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | N/A | No | No | No | N/A |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	N/A	No	No	No	N/A

2005 EIR Summary

Impacts to Wildfire were analyzed in Section 3.07 of the 2005 EIR. The EIR concluded that the proposed project would result in no impact to wildfire, as the project site consists of agricultural land and is not located in an area prone to wildland fire or excessive fuel loading.

Impact Analysis

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The proposed project is not located in a State Responsibility Area (SRA) or located near a VHFHSZ. According to the Fire Hazard Severity Zone Viewer prepared by CAL FIRE, the nearest VHFHSZ to the project site is approximately 1.3 miles southwest, across U.S. 101 (CAL FIRE 2021). Therefore, the project would result in less-than-significant impacts related to wildfire. These topics will not be discussed in the Subsequent EIR.

LESS THAN SIGNIFICANT IMPACT

21 Mandatory Findings of Significance

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
--	--	---	--	---	--

Does the project:

- | | | | | | |
|---|-----|-----|-----|----|-----|
| a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | N/A | Yes | Yes | No | N/A |
| b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of | N/A | Yes | Yes | No | N/A |

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
probable future projects)?					
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	N/A	Yes	Yes	No	N/A

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Consistent with the findings of the 2005 EIR and as discussed in this Initial Study in Section 4, *Biological Resources*, the project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Mitigation Measures 3.4-1a, 3.4-1b, 3.4-2, and 3.4-3 of the 2005 EIR would still apply and would be required to reduce impacts to less-than-significant levels.

As discussed in the 2005 EIR and in this Initial Study in Section 5, *Cultural Resources*, and Section 7, *Geology and Soils*, the project would not impact or eliminate important examples of the major periods of California history or prehistory, including archaeological or paleontological resources. Mitigation Measures 3.5-1a and 3.5-1b of the 2005 EIR would still apply and would be required to reduce impacts to less-than-significant levels. As such, the project would not result in impacts beyond those identified in the 2005 EIR.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Pursuant to *CEQA Guidelines* Section 15064(h)(3), cumulative impacts associated with some of the resource areas have been addressed in the individual resource sections above: Air Quality, Greenhouse Gases, Water Supply, Solid Waste, Population and Housing, and Transportation. As described in Section 3: *Air Quality*, Section 8: *Greenhouse Gas Emissions*, and Section 17: *Transportation* of the Environmental Checklist. Development of the proposed project could result in significant cumulative impacts. These impacts will be analyzed further in a Subsequent EIR.

Cumulative impacts of water supply and solid waste would be less than significant. Other issues (e.g., Aesthetics, Hazards and Hazardous Materials) are site-specific by nature, and impacts at one location do not typically add to impacts at other locations or create additive impacts.

POTENTIALLY SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, geologic hazards, GHGs, hazards and hazardous materials, noise, and traffic safety impacts. As described in Section 7, *Geology and Soils*, impacts related to geologic hazards would be less than significant with mitigation incorporated. As discussed in Section 9, *Hazards and Hazardous Materials*, impacts related to hazards and hazardous materials would be less than significant with mitigation incorporated. As discussed in Section 13, *Noise*, impacts related to noise would be less than significant with mitigation incorporated. However, as mentioned in criterion b, the project could result in significant effects on air quality, GHGs, and traffic safety that could be potentially significant and will be analyzed further in a Subsequent EIR.

POTENTIALLY SIGNIFICANT IMPACT

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References

Bibliography

- Bay Area Air Quality Management District (BAAQMD). 2012. Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area. November.
https://www.baaqmd.gov/~media/Files/Planning%20and%20Research/Plans/PM%20Planning/ParticulatesMatter_Nov%207.ashx (accessed January 2022).
- _____. 2017a. California Environmental Quality Act: Air Quality Guidelines. San Francisco, California. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed January 2022).
- _____. 2017b. Final 2017 Clean Air Plan. San Francisco, California. April 19, 2017.
http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed January 2022).
- _____. 2021. Permit Handbook. Revised August 2021.
<https://www.baaqmd.gov/~media/files/engineering/permit-handbook/baaqmd-permit-handbook.pdf?la=en> (accessed January 2022).
- California Air Resources Board. 2016. Ambient Air Quality Standards. Last modified: May 4, 2016.
<http://www.arb.ca.gov/research/aaqs/aaqs2.pdf> (accessed January 2022).
- _____. 2020. "Overview: Diesel Exhaust & Health." <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health> (accessed February 2021).
- California Department of Conservation. 2021. California Important Farmland Finder.
<https://maps.conservation.ca.gov/DLRP/CIFF/> (accessed January 2022).
- California Department of Finance (DOF). 2021. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark." May 2021.
<https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/> (accessed January 2022).
- California Department of Forestry and Fire Protection (CAL SC). 2021. Fire Hazard Severity Zones Maps. <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/> (accessed January 2022).
- California Department of Resources Recycling and Recovery (CalRecycle). 2021. SWIS Facility/Site Activity Details: Kirby Canyon Recycl. & Disp. Facility (43-AN-0008).
<https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1370?siteID=3393> (accessed January 2022).
- California Department of Toxic Substances Control (DTSC). 2021. EnviroStor database.
<https://www.envirostor.dtsc.ca.gov/public/> (accessed January 2022).
- California Energy Commission (CEC). 2021a. Total System Electric Generation.
<https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2019-total-system-electric-generation> (accessed May 2020).

- _____. 2021b. "Supply and Demand of Natural Gas in California." <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california> (accessed January 2022).
- _____. 2021c. "California Energy Consumption Database." <https://ecdms.energy.ca.gov/> (accessed January 2022).
- _____. 2021d. "California's Petroleum Market." <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market> (accessed January 2022).
- _____. 2021e. "California Retail Fuel Outlet Annual Reporting (CEC-A15) Results." <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting> (accessed January 2022).
- Good, Dwight. 2022. Assistant Chief Cooperative Fire Protection, City of Morgan Hill Fire Department. Personal communication via email and phone regarding fire protection services with Leslie Trejo, Environmental Planner, Rincon Consultants, Inc. April 14, 2022.
- Morgan Hill, City of. 2003. Citywide Burrowing Owl Habitat Mitigation Plan. June
- _____. 2005. Final Environmental Impact Report for the Cochrane Road Planned Unit Development (SCH #2004112060). <https://www.morganhill.ca.gov/DocumentCenter/View/40201/Final-EIR-pdf> (accessed January 2022).
- _____. 2016. General Plan 2035 Draft Environmental Impact Report. January 13, 2016. <https://www.morgan-hill.ca.gov/1495/MH2035-Final-EIR> (accessed January 2022).
- _____. 2018. City of Morgan Hill Zoning Code, Municipal Code Title 18. Adopted June 6, 2018. <https://www.morganhill.ca.gov/DocumentCenter/View/28563/Title-18-Zoning> (accessed January 2022).
- Morgan Hill, City of. 2021a. 2020 Urban Water Management Plan. October. https://www.morgan-hill.ca.gov/DocumentCenter/View/22998/MorganHill_2020-UWMP-?bidId= (accessed March 2022).
- _____. 2021b. Morgan Hill Water System Master Plan. Available: <https://www.morgan-hill.ca.gov/DocumentCenter/View/40073/2021-Water-System-Master-Plan-Update> (accessed February 2022).
- Ramirez, Mario. 2022. Captain, City of Morgan Hill Police Department (MHPD). Personal Communication via phone regarding police protection services with Leslie Trejo, Environmental Planner, Rincon Consultants, Inc. April 14, 2022.
- Santa Clara, County of. 2008. Comprehensive Land Use Plan, Santa Clara County: San Martin Airport. September 10, 2008. Amended November 18, 2020. https://stgenpln.blob.core.windows.net/document/ALUC_E16_CLUP.pdf (accessed January 2022).
- Santa Clara Valley Water District (Valley Water). 2015. 2015 Urban Water Management Plan. Adopted May 2016. https://www.valleywater.org/sites/default/files/SCVWD%202015%20UWMP-Report%20Only_0.pdf (accessed January 2022).
- _____. 2016. Groundwater Management Plan. <https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2016%20Groundwater%20Management%20Plan.pdf> (accessed January 2022)

- _____. 2020. 2019 Annual Groundwater Report.
https://www.valleywater.org/sites/default/files/2020-09/2019_Annual_Groundwater_Report_Web_Version.pdf (accessed February 2022).
- _____. 2021. 2020 Urban Water Management Plan. Jun 2021.
<https://fta.valleywater.org/dl/pggls1SeCr> (accessed January 2022).
- South County Regional Wastewater Authority (SCRWA). 2020. Wastewater Treatment Plan Facility Expansion Project Initial Study/Mitigated Negative Declaration. August 26, 2020.
<http://www.ci.gilroy.ca.us/DocumentCenter/View/10856/SCRWA-Initial-Study-Mitigated-Negative-Declaration?bidId=> (accessed January 2022).
- State Water Resources Control Board (SWRCB). 2021. GeoTracker database.
<https://geotracker.waterboards.ca.gov/> (accessed January 2022).
- United States Energy Information Administration. 2021. California State Profile and Energy Estimates. February 18, 2021. <https://www.eia.gov/state/?sid=CA> (accessed January 2022).
- United States Environmental Protection Agency (U.S. EPA). 2021. Criteria Air Pollutants. N.d.
<https://www.epa.gov/criteria-air-pollutants> (accessed January 2022).
- United States Fish and Wildlife Service (USFWS). 2021. National Wetlands Inventory.
<https://www.fws.gov/wetlands/> (accessed January 2022).
- _____. 2021a. 2020 Water Shortage Contingency Plan. <https://fta.valleywater.org/dl/UvrQU06QpP> (accessed February 21, 2022).
- _____. 2021b. 2020 Urban Water Management Plan. <https://fta.valleywater.org/dl/pggls1SeCr> (accessed February 21, 2022).

List of Preparers

Rincon prepared this Initial Study under contract to the City of Morgan Hill. Persons involved in data gathering analysis, project management, and quality control are listed below.

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Appendix AQ

California Emissions Estimator Model Outputs

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Cochrane Commons Phase II - Full Buildout GHG

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	939.00	Space	0.00	375,600.00	0
Hotel	140.00	Room	0.00	203,280.00	0
Apartments Mid Rise	394.00	Dwelling Unit	29.57	410,000.00	1127
Condo/Townhouse	104.00	Dwelling Unit	0.00	175,000.00	297
Strip Mall	135.00	1000sqft	0.00	135,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2030
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MWhr)	2	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Morgan Hill, Santa Clara County --> BAAQMD. Silicon Valley Clean Energy is the electricity provider.

Land Use - 104 Townhomes, 394 apartment units, 135,000 square feet of retail, and 140 key hotel. Parking lot with 939 stalls and 428 garage spaces, only modeling the parking lot stalls since residences include parking

Construction Phase - Operational Model, No Construction Scenario

Grading -

Vehicle Trips - modeling traffic in a separate output to be consistent with the traffic trip generation rate land uses

Woodstoves - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction no hearths

Area Coating - BAAQMD Regulation 8, Rule 3: Flat coatings 50 g/L and traffic markings 100 g/L

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Energy Use - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction

Water And Wastewater - Wastewater treated at a wastewater treatment plant managed by South County Regional Wastewater Authority, all aerobic plant

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps - 3x 150 kW diesel generators with 201 HP. Testing for 50 hours per year or 0.14 hours per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24NG	5,226.68	0.00
tblEnergyUse	T24NG	14,104.62	0.00
tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	2.34	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	59.10	0.00
tblFireplaces	NumberGas	15.60	0.00
tblFireplaces	NumberNoFireplace	15.76	0.00
tblFireplaces	NumberNoFireplace	4.16	0.00
tblFireplaces	NumberWood	66.98	0.00
tblFireplaces	NumberWood	17.68	0.00
tblLandUse	LandUseSquareFeet	394,000.00	410,000.00
tblLandUse	LandUseSquareFeet	104,000.00	175,000.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LotAcreage	8.45	0.00
tblLandUse	LotAcreage	4.67	0.00
tblLandUse	LotAcreage	10.37	29.57
tblLandUse	LotAcreage	6.50	0.00
tblLandUse	LotAcreage	3.10	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	ST_TR	4.91	0.00
tblVehicleTrips	ST_TR	8.14	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	4.09	0.00
tblVehicleTrips	SU_TR	6.28	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	5.44	0.00
tblVehicleTrips	WD_TR	7.32	0.00
tblVehicleTrips	WD_TR	8.36	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	7.88	0.00
tblWoodstoves	NumberCatalytic	2.08	0.00
tblWoodstoves	NumberNoncatalytic	7.88	0.00
tblWoodstoves	NumberNoncatalytic	2.08	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Highest

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Waste						0.0000	0.0000		0.0000	0.0000	90.8344	0.0000	90.8344	5.3682	0.0000	225.0384
Water						0.0000	0.0000		0.0000	0.0000	16.2741	0.3115	16.5856	0.0560	0.0354	28.5324
Total	4.3623	0.1118	3.7621	3.2000e-004	0.0000	0.0242	0.0242	0.0000	0.0242	0.0242	107.1085	22.4501	129.5586	5.4316	0.0354	275.8949

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Waste						0.0000	0.0000		0.0000	0.0000	90.8344	0.0000	90.8344	5.3682	0.0000	225.0384
Water						0.0000	0.0000		0.0000	0.0000	16.2741	0.3115	16.5856	0.0560	0.0354	28.5324
Total	4.3623	0.1118	3.7621	3.2000e-004	0.0000	0.0242	0.0242	0.0000	0.0242	0.0242	107.1085	22.4501	129.5586	5.4316	0.0354	275.8949

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/2/2022	5/1/2022	5	0	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

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

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Condo/Townhouse	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Hotel	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Parking Lot	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Strip Mall	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.52337e+006	1.3820	0.0000	0.0000	1.3820
Condo/Townhouse	504241	0.4574	0.0000	0.0000	0.4574
Hotel	1.50427e+006	1.3647	0.0000	0.0000	1.3647
Parking Lot	131460	0.1193	0.0000	0.0000	0.1193
Strip Mall	1.40265e+006	1.2725	0.0000	0.0000	1.2725
Total		4.5958	0.0000	0.0000	4.5958

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.52337e+006	1.3820	0.0000	0.0000	1.3820
Condo/Townhouse	504241	0.4574	0.0000	0.0000	0.4574
Hotel	1.50427e+006	1.3647	0.0000	0.0000	1.3647
Parking Lot	131460	0.1193	0.0000	0.0000	0.1193
Strip Mall	1.40265e+006	1.2725	0.0000	0.0000	1.2725
Total		4.5958	0.0000	0.0000	4.5958

6.0 Area Detail**6.1 Mitigation Measures Area**

No Hearths Installed

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Unmitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.5856	0.0560	0.0354	28.5324
Unmitigated	16.5856	0.0560	0.0354	28.5324

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	25.6707 / 16.1837	9.2597	0.0313	0.0198	15.9271
Condo/Townhouse	6.77602 / 4.27184	2.4442	8.2500e-003	5.2100e-003	4.2041
Hotel	3.55135 / 0.394594	1.2752	4.3200e-003	2.7300e-003	2.1975
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.99979 / 6.1289	3.6065	0.0122	7.6900e-003	6.2037
Total		16.5856	0.0560	0.0354	28.5324

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	25.6707 / 16.1837	9.2597	0.0313	0.0198	15.9271
Condo/Townhouse	6.77602 / 4.27184	2.4442	8.2500e-003	5.2100e-003	4.2041
Hotel	3.55135 / 0.394594	1.2752	4.3200e-003	2.7300e-003	2.1975
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.99979 / 6.1289	3.6065	0.0122	7.6900e-003	6.2037
Total		16.5856	0.0560	0.0354	28.5324

8.0 Waste Detail

8.1 Mitigation Measures Waste

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	90.8344	5.3682	0.0000	225.0384
Unmitigated	90.8344	5.3682	0.0000	225.0384

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	181.24	36.7901	2.1742	0.0000	91.1459
Condo/Townhouse	47.84	9.7111	0.5739	0.0000	24.0588
Hotel	76.65	15.5593	0.9195	0.0000	38.5474
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	141.75	28.7740	1.7005	0.0000	71.2863
Total		90.8344	5.3682	0.0000	225.0384

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	181.24	36.7901	2.1742	0.0000	91.1459
Condo/Townhouse	47.84	9.7111	0.5739	0.0000	24.0588
Hotel	76.65	15.5593	0.9195	0.0000	38.5474
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	141.75	28.7740	1.7005	0.0000	71.2863
Total		90.8344	5.3682	0.0000	225.0384

9.0 Operational Offroad

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.14	50	201	0.73	Diesel

Boilers

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Total	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213

11.0 Vegetation

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG****Bay Area AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	939.00	Space	0.00	375,600.00	0
Hotel	140.00	Room	0.00	203,280.00	0
Single Family Housing	498.00	Dwelling Unit	29.57	585,000.00	1424
Strip Mall	135.00	1000sqft	0.00	135,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2030
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MW hr)	2	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Morgan Hill, Santa Clara County --> BAAQMD. Silicon Valley Clean Energy is the electricity provider.

Land Use - 104 Townhomes, 394 apartment units modeled as 498 single-family DU for consistency with traffic, 135,000 square feet of retail, and 140 key hotel. Parking lot with 939 stalls

Construction Phase - Operational Model, No Construction Scenario

Grading -

Vehicle Trips - 8.02 trips/DU for residences, 31.8 trips/sf for retail, 11.79 trips/room for the hotel. The rates accounts for all reductions except passby reduction

Woodstoves - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction no hearths

Area Coating - BAAQMD Regulation 8, Rule 3: Nonflat coatings 100 g/L and traffic markings 100 g/L

Energy Use - Mobile Source Emissions Model

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - Mobile Source Emissions Model

Solid Waste - Mobile Source Emissions Model

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.35	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	5.25	0.00
tblEnergyUse	NT24E	3.22	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	2.68	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	1.83	0.00
tblEnergyUse	T24E	68.41	0.00
tblEnergyUse	T24E	2.46	0.00
tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	23,474.54	0.00
tblEnergyUse	T24NG	2.34	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	124.50	0.00
tblFireplaces	NumberNoFireplace	39.84	0.00

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFireplaces	NumberWood	214.14	0.00
tblGrading	AcresOfGrading	0.00	30.00
tblLandUse	LandUseSquareFeet	896,400.00	585,000.00
tblLandUse	LotAcreage	8.45	0.00
tblLandUse	LotAcreage	4.67	0.00
tblLandUse	LotAcreage	161.69	29.57
tblLandUse	LotAcreage	3.10	0.00
tblSolidWaste	SolidWasteGenerationRate	76.65	0.00
tblSolidWaste	SolidWasteGenerationRate	598.08	0.00
tblSolidWaste	SolidWasteGenerationRate	141.75	0.00
tblVehicleTrips	WD_TR	8.36	11.79
tblVehicleTrips	WD_TR	9.44	8.02
tblVehicleTrips	WD_TR	44.32	31.80
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	3,551,347.80	0.00
tblWater	IndoorWaterUseRate	32,446,704.76	0.00
tblWater	IndoorWaterUseRate	9,999,790.40	0.00
tblWater	OutdoorWaterUseRate	394,594.20	0.00
tblWater	OutdoorWaterUseRate	20,455,531.26	0.00
tblWater	OutdoorWaterUseRate	6,128,903.79	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	19.92	0.00
tblWoodstoves	NumberNoncatalytic	19.92	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Highest

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3749	3.1622	31.4363	0.0559	6.9736	0.0584	7.0320	1.8633	0.0558	1.9191	0.0000	5,440.5168	5,440.5168	0.3572	0.2610	5,527.2208

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3749	3.1622	31.4363	0.0559	6.9736	0.0584	7.0320	1.8633	0.0558	1.9191	0.0000	5,440.5168	5,440.5168	0.3572	0.2610	5,527.2208

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/2/2022	5/1/2022	5	0	

Acres of Grading (Site Preparation Phase): 30

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

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

3.1 Mitigation Measures Construction

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 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					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Unmitigated	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,650.60	1,146.60	833.00	2,777,319	2,777,319
Parking Lot	0.00	0.00	0.00		
Single Family Housing	3,993.96	4,750.92	4257.90	9,561,319	9,561,319
Strip Mall	4,293.00	5,675.40	2758.05	6,577,800	6,577,800
Total	9,937.56	11,572.92	7,848.95	18,916,438	18,916,438

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Parking Lot	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Single Family Housing	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Strip Mall	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

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

6.0 Area Detail**6.1 Mitigation Measures Area**

No Hearths Installed

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Unmitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

7.0 Water Detail**7.1 Mitigation Measures Water**

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

7.2 Water by Land Use**Unmitigated**

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

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

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

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

8.2 Waste by Land Use**Unmitigated**

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

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

9.0 Operational Offroad

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

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

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

11.0 Vegetation

Cochrane Commons Phase II

Natural Gas to Electricity Conversion and Emissions Estimation Tool

Total Estimated Natural Gas Usage (kBTU)	Equivalent Electricity Usage (kBtu)	Equivalent Electricity Usage (MWh)
14,339,300	14,339,300	4,203

GHG Emission Calculations

	UTILITY		CO ₂ e Conversion Calculations	
	Energy Intensity Factor (lbs/MWh)	Emissions (lbs)	Total CO ₂ e Emissions (lbs)	Total CO ₂ e Emissions (MT)
CO ₂	2.00	8,405	8,405	4
CH ₄	0.000	-	-	-
N ₂ O	0.000	-	-	-
TOTAL GHG EMISSIONS FROM ELECTRICITY				4

Notes

- MWh = megawatt-hours; lbs = pounds; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; MT = metric tons; IPCC = Intergovernmental Panel on Climate Change; CARB = California Air Resources Board

- Natural gas usage calculated in CalEEMod.

- Energy intensity factors for Silicon Valley Clean Energy based on 2021 energy intensity factor from CalEEMod

- Natural gas to electricity conversion assumes an equal energy demand would be supplied by electricity rather than natural gas.

- CH₄ conversion assumes 1 lb CH₄ is equivalent to 25 lbs CO₂e (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)

- N₂O conversion assumes 1 lb N₂O is equivalent to 298 lbs CO₂e (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)

Appendix CUL

Cultural Resources Assessment



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March 17, 2020

Project No: 19-07804

Richard Smeaton, AICP

Contract Planner

City of Morgan Hill

17575 Peak Avenue

Morgan Hill, California 95037-4128

Subject: Cultural Resources Assessment for the Cochrane-Morgan Hill Retail Ventures Project (ZA2019-0003), City of Morgan Hill, Santa Clara County, California

Dear Mr. Smeaton:

This report presents the updated findings of a cultural resources study for Phase II of the Cochrane-Morgan Hill Retail Ventures Project (project) in Morgan Hill, Santa Clara County, California. The City of Morgan Hill (City) previously completed an Environmental Impact Report (EIR) in 2005 for the Cochrane Retail Development and Phase I of the project was constructed. Construction of Phase II was not completed at that time. Rincon understands the project applicant proposes to complete Phase II of the project and that the project is being amended to be consistent with the new 2035 General Plan Updated and recent zoning code updates. Because the cultural resources documentation for the project was prepared over ten years ago, Rincon undertook this study to evaluate whether the project would result in new or substantially increased impacts. This study includes a search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park, California Native American Heritage Commission (NAHC) outreach, and an intensive-level survey of the project site. All work was completed in compliance with California Environmental Quality Act (CEQA). The City is the lead agency under CEQA.

Project Site

The project site is located at the southwest corner of Mission View Drive / Cochrane Road in the City of Morgan Hill (Figure 1). The project site is approximately 14 acres and located just north of Phase I of the Cochrane Commons Shopping Center (Shopping Center). It is bounded by Depaul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located in the northern edge of the City and is approximately 800 feet north of U.S. Highway 101 (U.S. 101). Figure 2 depicts the project site in its neighborhood context (Attachment A).

Previous EIR Findings

The 2005 EIR identified three residences in the current project area. They were identified as: 1195 Cochran Road A (built 1930), 1195 Cochrane Road B (built 1912), and 1195 Cochran Road C (built 1940). The 2005 EIR found these residences ineligible for listing in the California Register of Historical



Resources and they were demolished. Research completed for the 2005 EIR furthermore did not identify any prehistoric sites, historic sites, or isolated artifacts.

Cultural Resources Records Search

A search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) located at Sonoma State University was completed on January 3, 2020. The search was performed to identify all previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list.

The NWIC records search identified 27 previously conducted cultural resources studies that have been performed within a 0.5-mile radius of the project site; three of the studies overlap with the project site (Table 1). The NWIC records search did not identify any previously recorded cultural resources within a 0.5-mile radius of the project site. A summary of the record search results is provided in Attachment B.

Table 1 Previous Cultural Resources Studies within 0.5 mile of the Project Site

Report Number	Author(s)	Year	Title	Relationship to Project Site
S-004823	Haversat, Trudy and Gary S. Breschini	1979	<i>Preliminary Archaeological Reconnaissance of the Morgan Hill Business Park, South of Cochran Road, Santa Clara County, California</i>	Outside
S-005251	Carrier, Robert, Jan Whitlow, Charlene Detlefs, and Barbara Bocek	1979	<i>The Archeological Reconnaissance and Subsurface Testing of Three Pipeline Components of the District's In-County Water Distribution System: Anderson Force Main, Cross Valley Pipeline, and Almaden Valley Pipeline Unit II</i>	Inside
S-007955	Hampson, R. Paul and Gary S. Breschini	1986	<i>Summary Report on Archaeological Monitoring for the Cross Valley Pipeline Phase IV, Anderson Force Main and Coyote Discharge Line, Santa Clara County, California</i>	Inside
S-008906	Holman, Miley Paul	1986	<i>Archaeological Inspection of the Creekside Estates Project, Morgan Hill, Santa Clara County, California (letter report)</i>	Outside
S-008907	Holman, Miley Paul	1986	<i>Follow-up Backhoe Trenching of the Creekside Estates Project, Morgan Hill, Santa Clara County, California (letter report)</i>	Outside
S-009848	Hampson, R. Paul and Gary S. Breschini	1988	<i>Archaeological Testing at Parcel APN 727-67-14, Morgan Hill, Santa Clara County, California</i>	Outside
S-009853	Hampson, R. Paul and Gary S. Breschini	1988	<i>Preliminary Cultural Resources Reconnaissance of Parcel APN 727-67-14, Morgan Hill, Santa Clara County, California</i>	Outside
S-011077	Runnings, Anna and Trudy Haversat	1989	<i>Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Number 727-67-15, Morgan Hill, Santa Clara County, California</i>	Outside



Report Number	Author(s)	Year	Title	Relationship to Project Site
S-012550	Archaeological Resource Management	1990	<i>Cultural Resource Evaluation for a Parcel on Malaguerra Avenue in the City of Morgan Hill, County of Santa Clara</i>	Outside
S-021391	Holson, John	1998	<i>Archaeological Survey for Morgan Hill Property (letter report)</i>	Outside
S-023896	Far Western Anthropological Research Group, Inc.	2001	<i>Effects Assessment for Archaeological Sites Located Within the APE of the Proposed U.S. 101 Widening Project from Bernal Road in the City of San Jose to Cochrane Road in the City of Morgan Hill, K.P. 5.73 / 10.78 (P.M. R18.7/ R27.0)</i>	Inside
S-028820	Brown, R. Keith	1999	<i>Historical Cultural Resources Assessment, Proposed Telecommunications Facility, Cochrane Plaza, Site No. SF-815-01, 144 Cochrane Plaza, Morgan Hill, California (letter report)</i>	Outside
S-029506	Bignell, Don	2002	<i>Cultural Resources Review for Site SF-815-04, New Flagpole, 144 Cochrane Road, Morgan Hills, Santa Clara County, California (Vertex Project # TBA; ASC Project # QA 16658-02) (letter report)</i>	Outside
S-030283	Holson, John	2005	<i>Cultural Resources Assessment of the Proposed Cochrane Plaza Flagpole Cell Site, (SJ-902-01), Morgan Hill, CA. (PL-1170-104) (letter report)</i>	Outside
S-032250	Lapin, Philippe	2003	<i>Historic Property Survey Report, Mission Bells Project, State Route 82/Interstate 101, San Mateo and Santa Clara Counties, California</i>	Outside
S-032250a	Lapin, Philippe	2003	<i>Archaeological Survey Report, Mission Bells Project, State Route 82/Interstate 101, San Mateo and Santa Clara Counties, California</i>	Outside
S-034167	Holman, Miley Paul	2007	<i>Cultural Resources Study of the Silverwings Court/Lands of Eliert Project Area (APN-728-45-043), Morgan Hill, Santa Clara County, California (letter report)</i>	Outside
S-043988	Harris, Benjamin and Douglas Bright	2011	<i>Supplemental Historic Property Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)</i>	Outside
S-043988a	Harris, Benjamin and Kathryn Rosa	2012	<i>Supplemental Archaeological Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, 04-SCL-101 (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)</i>	Outside
S-043988b	Harris, Benjamin and Kathryn Rosa	2011	<i>Historic Property Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)</i>	Outside



Report Number	Author(s)	Year	Title	Relationship to Project Site
S-043988c	Harris, Benjamin	2011	<i>Archaeological Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, 04-SCL-101 (PM 0.0 - 26.55)</i>	Outside
S-043988d	McKee, Elizabeth	2012	<i>FHWA111128A: Supplemental Historic Property Survey Report (HPSR) - Finding of No Adverse Effect with Standard Conditions - ESAs for the Freeway Performance Initiative (FPI) project along Highway 101 in Santa Clara County, California (ESA 153301/Project ID 0400020304)</i>	Outside
S-046052	Fies, Robin	2014	<i>Cultural Resources Constraints Report, Morgan Hill 2108 Recondutor, Santa Clara County, California</i>	Outside
S-046205	Harris, Benjamin and Helen Blackmore	2015	<i>Historic Property Survey Report, Resurface and Repair Project, 04-SCL-101 PM 16.00-27.90, E-FIS Project Number 0414000303/EA 1J630</i>	Outside
S-046205a	Harris, Benjamin	2015	<i>Archaeological Survey Report for the US 101 Resurface and Repair Project, Santa Clara County, California, E-FIS / EA: 0414000303/1J6300, 04-SCL-101 (PM 16.00 -27.90)</i>	Outside
S-047015	Clark, Matthew R. and Gerald Starek	2015	<i>Final Archaeological Monitoring Report for the MH Ventura Investors LLC Development on Cochrane Road in the City of Morgan Hill, Santa Clara County, California</i>	Outside
S-048530	Hall, Jeffrey T. and Kelly McGuire	1985	<i>Results of an Intensive Cultural Resource Survey of the Proposed Coyote Transmission Line</i>	Outside

Source: Northwest Information Center 2020

S-005251

In 1979, Cartier et al. completed an archaeological reconnaissance and subsurface testing for three pipelines being laid for Santa Clara County's water distribution system (S-005251). They discovered 19 prehistoric archaeological sites, including habitation sites, Franciscan chert quarries, and lithic scatters. Ten sites were excavated, and six sites were determined to be potentially eligible for the NRHP and CRHR. No sites are located within the project boundaries.

S-007955

Hampson and Breschini completed a summary report on archaeological monitoring for the Cross Valley Pipeline Project in 1986. Surface areas impacted by the pipeline construction were examined for artifacts and monitoring consisted of observing freshly cut faces on trench sidewalls and cursory examination of the spoils. Two previously recorded prehistoric sites were located at Cochrane Road and Coyote Creek, northeast of the project. A thin scattering of lithic flakes was noted on near Cochrane Road and Peet Road, northeast of the project area. No cultural resources were noted as being within the project boundaries.



S-023896

In 2001, Far Western Anthropological Research Group, Inc. completed an effects assessment for archaeological sites for the U.S. 101 Widening Project. A total of 17 previously recorded archaeological sites and two reburial sites were identified within the S-023896 project area of potential effect (APE). Six of these sites had been considered eligible for the NRHP and CRHR. Seven were considered potentially eligible, and investigated with field inspection. One site, CA-SCL-178, required additional investigation with auger testing. No archaeological sites were located within the project boundaries.

Sacred Lands File Search

Rincon contacted the Native American Heritage Commission (NAHC) on December 27, 2019 to request a search of the Sacred Lands File (SLF) and a contact list of Native Americans culturally affiliated with the project area. A response was received from the NAHC on December 27, 2019 stating the SLF search had been completed with “negative” results (Attachment C). Rincon also sent letters to five local Native American groups on December 30, 2019 requesting information on Native American cultural resources that may be present in the project site. As of March 4, 2020, no responses have been received.

Historical Map and Aerial Imagery Review

A review of historic maps and aerial photographs available online at NETRonline (2019) indicates that the project site previously had three private residences but otherwise was largely undeveloped or used for agricultural purposes from the 1950s through 2000s. Circa 2009, the three residences were demolished and part of the area was covered with pavement to serve as overflow parking. The project site has not changed since this date. Residential development surrounding the project site only began in earnest in the 1990s as the area was subdivided for single-family residences. Residences in a subdivision were constructed immediately northeast of the project site from 2016-2019.

Field Survey

Rincon Archaeologist Elaine Foster conducted a field visit to the project site on February 5, 2020. The archaeologist surveyed the approximately 14-acre parcel that contains the project site using transects spaced no more than 15 meters apart. The survey transects were oriented generally in a north-south direction. The archaeologist examined exposed ground surface for the following: artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were inspected visually. Field notes of survey conditions and observations were recorded using Rincon field forms and a digital camera. Copies of the original field notes and photographs are maintained at Rincon’s Ventura office.

Results of the field survey identified no evidence of archaeological remains or historic built-environment resources within the project site. Ground visibility ranged from poor to fair (0 to 80 percent) with vegetation consisting of dense areas of grasses, bushes, and shrubs (Figure 7). Modern disturbances on the project site include refuse, gravel fill and dirt roads (Figures 8 and 9), construction debris, and above ground water infrastructure (Figure 10). Surface sediments consist mostly of a brown loamy soil. Scattered modern refuse and construction debris was observed throughout the project site.



Findings and Recommendations

The City of Morgan Hill retained Rincon to complete a cultural resource assessment for the Cochrane-Morgan Hill Retail Ventures Project. The assessment included a CHRIS records search, Native American outreach, archival research, pedestrian field survey, and preparation of this letter report. The study was conducted in accordance with the requirements of CEQA.

The results of the study identified no prehistoric or historic period cultural resources on the project site. The extant data indicate that the project site exhibits a relatively low sensitivity for containing intact, subsurface archaeological deposits. The lack of reported archaeological resources within 0.5 miles of the project site indicates that the area is not highly sensitive for prehistoric or historic archaeological remains. This is supported by the field survey, which did not indicate the presence of historic or archaeological resources. A review of historical topographic maps and aerial photographs found that the area has remained largely undeveloped and was primarily used for agricultural purposes prior to the 1980s. As such, it is unlikely that early historic period archaeological remains dating to the late 19th or early 20th centuries would be present within the project site.

Based on these findings, Rincon recommends a finding of ***no impact to historical resources*** and ***less than significant impact with mitigation for archaeological resources*** under CEQA.

Rincon presents the following measure in case of unanticipated discovery of cultural resources during project development. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

Unanticipated Discovery of Archaeological Resources

If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access.

Please do not hesitate to contact Rincon with any questions regarding this archaeological study.

Sincerely,
Rincon Consultants, Inc.



A handwritten signature in cursive script that reads "Hannah Haas".

Hannah Haas, M.A., RPA
Senior Archaeologist

A handwritten signature in cursive script that reads "Elaine Foster".

Elaine Foster, B.A.
Associate Archaeologist

A handwritten signature in cursive script that reads "Christopher Duran".

Christopher Duran, M.A., RPA
Archaeological Resources Program Manager &
Principal Investigator



Attachments

Attachment A Figures

Attachment B CHRIS Cultural Resource Report List

Attachment C NAHC SLF Results



References

National Park Service (NPS)

- 1983 Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document accessed December 27, 2019. Online at http://www.nps.gov/history/local-law/Arch_Standards.htm.

NETRonline

- 2019 Historic Aerials of Project Area, City of Morgan Hill, CA. Electronic maps accessed online at <https://www.historicaerials.com/viewer>, accessed January 10, 2020.

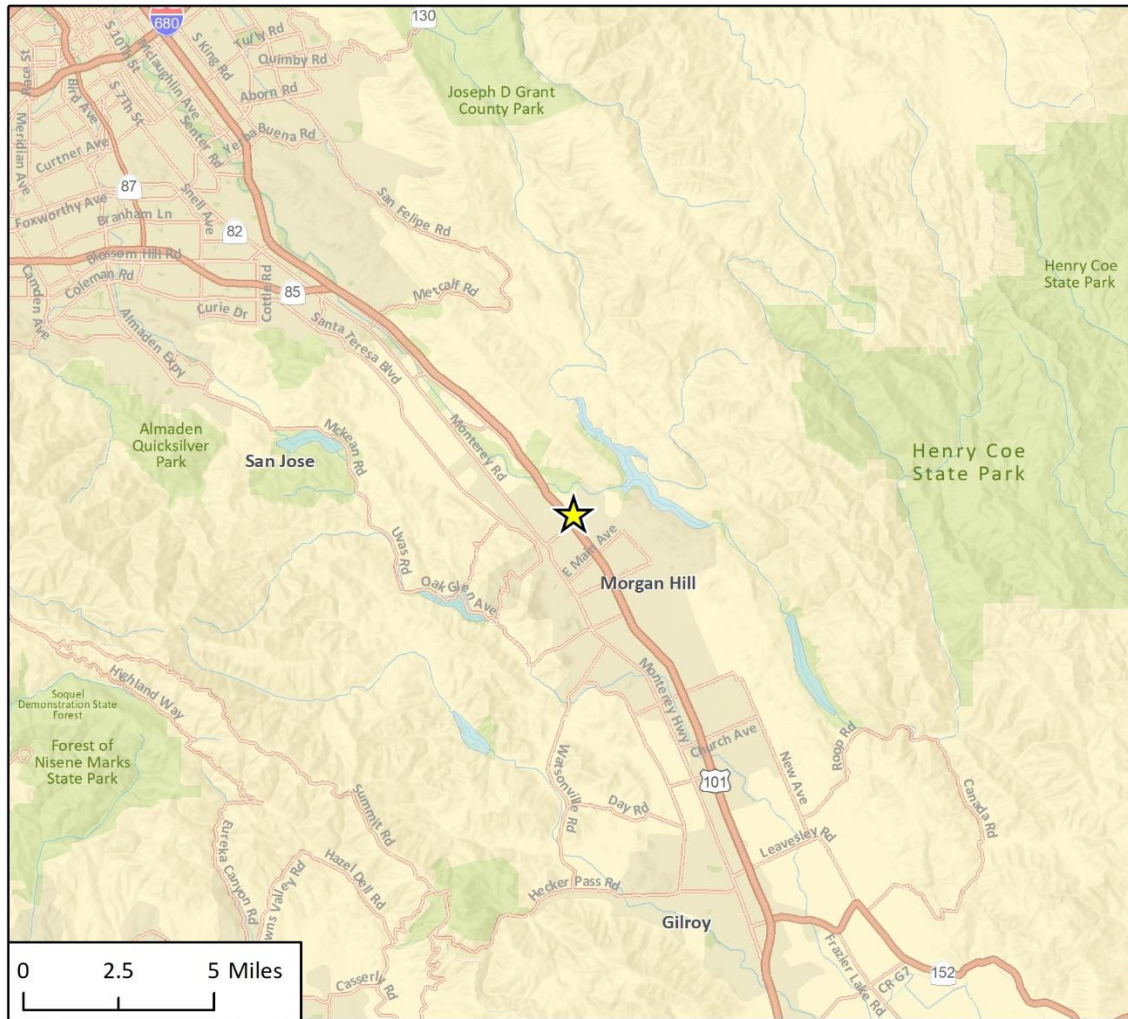
Pacific Municipal Consultants

- 2005 Archaeological and Historical Investigations for the Cochrane Road Planned Unit Development Project in the City of Morgan Hill, Santa Clara County. Appendix E. January 2005.

Appendix A

Figures

Figure 1 Regional Vicinity Map



Imagery provided by Esri and its licensors © 2020.

★ Project Location

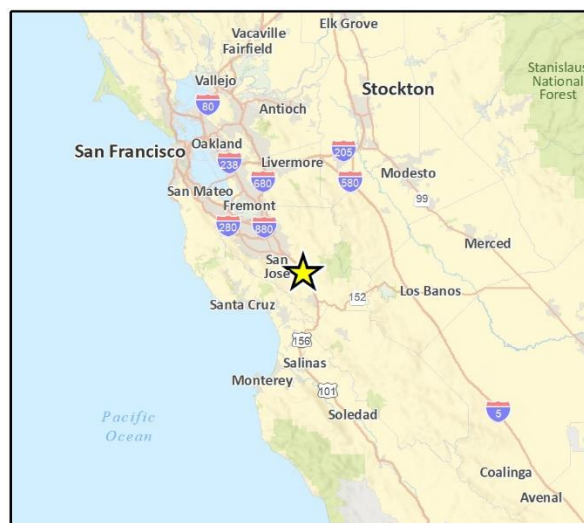


Fig. X Regional Location

Figure 2 Project Location Map



Figure 3 Northwestern Corner of Project Site Facing South



Figure 4 Southwestern Corner of Project Site Facing North



Figure 5 Northeast Corner of Project Site Facing West



Figure 6 Southeast Corner of Project Site Facing West



Figure 7 Bushes and Brush at Center of Project Site



Figure 8 Dirt and Gravel Road at Southwest Corner Facing East



Figure 9 Dirt Road at Southwest Corner Facing North



Figure 10 Above-Ground Water Infrastructure at Northern Border of Project Site



Attachment B

CHRIS Cultural Resource Report List

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-004823	Voided - E-713 SCL	1979	Trudy Haversat and Gary S. Breschini	Preliminary Archaeological Reconnaissance of the Morgan Hill Business Park, South of Cochran Road, Santa Clara County, California	Archaeological Consulting	
S-005251	Voided - E-725 SCL	1979	Robert Cartier, Jan Whitlow, Charlene Detlefs, and Barbara Bocek	The Archeological Reconnaissance and Subsurface Testing of Three Pipeline Components of the District's In-County Water Distribution System: Anderson Force Main, Cross Valley Pipeline, and Almaden Valley Pipeline Unit II	Archeological Resource Management	43-000081, 43-000119, 43-000120, 43-000145, 43-000152, 43-000153, 43-000168, 43-000171, 43-000173, 43-000203, 43-000210, 43-000323, 43-000347, 43-000362, 43-000363, 43-000364, 43-000368, 43-000371, 43-000372, 43-000965
S-007955	Submitter - AC Project 577	1986	R. Paul Hampson and Gary S. Breschini	Summary Report on Archaeological Monitoring for the Cross Valley Pipeline Phase IV, Anderson Force Main and Coyote Discharge Line, Santa Clara County, California	Archaeological Consulting	43-000171, 43-000364
S-008906		1986	Miley Paul Holman	Archaeological Inspection of the Creekside Estates Project, Morgan Hill, Santa Clara County, California (letter report)	Holman & Associates	43-000170
S-008907		1986	Miley Paul Holman	Followup Backhoe Trenching of the Creekside Estates Project, Morgan Hill, Santa Clara County, California (letter report)	Holman & Associates	43-000170
S-009848		1988	R. Paul Hampson and Gary S. Breschini	Archaeological Testing at Parcel APN 727-67-14, Morgan Hill, Santa Clara County, California	Archaeological Consulting	43-000364
S-009853		1988	R. Paul Hampson and Gary S. Breschini	Preliminary Cultural Resources Reconnaissance of Parcel APN 727-67-14, Morgan Hill, Santa Clara County, California	Archaeological Consulting	43-000364
S-011077		1989	Anna Runnings and Trudy Haversat	Preliminary Cultural Resources Reconnaissance of Assessor's Parcel Number 727-67-15, Morgan Hill, Santa Clara County, California	Archaeological Consulting	43-000364
S-012550		1990	Archaeological Resource Management	Cultural Resource Evaluation for a Parcel on Malaguerra Avenue in the City of Morgan Hill, County of Santa Clara	Archaeological Resource Management	
S-021391		1998	John Holson	Archaeological Survey for Morgan Hill Property (letter report)	Pacific Legacy, Inc.	43-000171

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-023896		2001		Effects Assessment for Archaeological Sites Located Within the APE of the Proposed U.S. 101 Widening Project from Bernal Road in the City of San Jose to Cochrane Road in the City of Morgan Hill, K.P. 5.73 / 10.78 (P.M. R18.7 / R27.0)	Far Western Anthropological Research Group, Inc.	43-000181, 43-000183, 43-000245, 43-000246, 43-000247, 43-000568, 43-001095
S-028820	Submitter - BMI Project No. 99S-249	1999	R. Keith Brown	Historical Cultural Resources Assessment, Proposed Telecommunications Facility, Cochrane Plaza, Site No. SF-815-01, 144 Cochrane Plaza, Morgan Hill, California (letter report)	Brown & Mills, Inc.	
S-029506		2002	Don Bignell	Cultural Resources Review for Site SF-815-04, New Flagpole, 144 Cochrane Road, Morgan Hills, Santa Clara County, California (Vertex Project # TBA; ASC Project # QA 166 58-02) (letter report)	Anthropological Studies Center, Sonoma State University	
S-030283		2005	John Holson	Cultural Resources Assessment of the Proposed Cochrane Plaza Flagpole Cell Site, (SJ-902-01), Morgan Hill, CA. (PL-1170-104) (letter report)	Pacific Legacy, Inc.	
S-032250		2003	Philippe Lapin	Historic Property Survey Report, Mission Bells Project, State Route 82/Interstate 101, San Mateo and Santa Clara Counties, California	California Department of Transportation	
S-032250a		2003	Philippe Lapin	Archaeological Survey Report, Mission Bells Project, State Route 82/Interstate 101, San Mateo and Santa Clara Counties, California	California Department of Transportation	
S-034167		2007	Miley Paul Holman	Cultural Resources Study of the Silverwings Court/Lands of Eliert Project Area (APN-728-45-043), Morgan Hill, Santa Clara County, California (letter report)	Holman & Associates	
S-043988	Caltrans - EA 153300; Caltrans - Project #0400020304; OHP PRN - FHWA 111128 A	2011	Benjamin Harris and Douglas Bright	Supplemental Historic Property Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)	California Department of Transportation, District 4	43-000106, 43-000175, 43-000181, 43-000189, 43-000247, 43-000568, 43-000573, 43-000626, 43-001078, 43-002463, 43-002464

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-043988a		2012	Benjamin Harris and Kathryn Rosa	Supplemental Archaeological Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, 04-SCL-101 (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)	California Department of Transportation, District 4	
S-043988b		2011	Benjamin Harris and Douglas Bright	Historic Property Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, (PM 7.0-7.2, 21.55-22.3 and 26.2-26.55)	California Department of Transportation, District 4	
S-043988c		2011	Benjamin Harris Benjamin Harris	Archaeological Survey Report for the Freeway Performance Initiative along Highway 101 in Santa Clara County, California, 04-SCL-101 (PM 0.0 - 26.55)	California Department of Transportation, District 4	
S-043988d		2012	Elizabeth McKee	FHWA111128A: Supplemental Historic Property Survey Report (HPSR) - Finding of No Adverse Effect with Standard Conditions - ESAs for the Freeway Performance Initiative (FPI) project along Highway 101 in Santa Clara County, California (ESA 153301 / Project ID 0400020304)	California Department of Transportation	
S-046052	Other - 31028417	2014	Robin Fies	Cultural Resources Constraints Report, Morgan Hill 2108 Reconstructor, Santa Clara County, California	Garcia and Associates	43-000364
S-046205	Caltrans - 0414000303/EA 1J630	2015	Benjamin Harris and Helen Blackmore	Historic Property Survey Report, Resurface and Repair Project, 04-SCL-101 PM 16.00-27.90, E-FIS Project Number 0414000303/EA 1J630	Caltrans, District 4	43-000175, 43-000181, 43-000183, 43-000189, 43-000247, 43-000250, 43-000251, 43-000345, 43-000415, 43-000416, 43-000568, 43-001001, 43-001095
S-046205a		2015	Benjamin Harris	Archaeological Survey Report for the US 101 Resurface and Repair Project, Santa Clara County, California, E-FIS / EA: 0414000303/1J6300, 04-SCL-101 (PM 16.00 - 27.90)	Caltrans, District 4	
S-047015		2015	Matthew R. Clark and Gerald Starek	Final Archaeological Monitoring Report for the MH Ventura Investors LLC Development on Cochrane Road in the City of Morgan Hill, Santa Clara County, California	Holman & Associates Archaeological Consultants	43-000364
S-048530		1985	Jeffrey T. Hall and Kelly McGuire	Results of an Intensive Cultural Resource Survey of the Proposed Coyote Transmission Line	Far Western Anthropological Research Group	43-000178, 43-000179, 43-000189, 43-000247

Attachment C

NAHC SLF Results

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



December 27, 2019

Courtney Montgomery
Rincon Consultants, Inc.

VIA Email to: cmontgomery@rinconconsultants.com

RE: Cochrane-Morgan Hill Project, Santa Clara County

Dear Ms. Montgomery:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Nancy Gonzalez-Lopez".

Nancy Gonzalez-Lopez
Staff Services Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Santa Clara County
12/27/2019

Amah Mutsun Tribal Band

Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org

Costanoan
Northern Valley
Yokut

***Amah Mutsun Tribal Band of
Mission San Juan Bautista***

Irenne Zwielerlein, Chairperson
789 Canada Road
Woodside, CA, 94062
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com

Costanoan

***Indian Canyon Mutsun Band of
Costanoan***

Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyon.org

Costanoan

***Muwekma Ohlone Indian Tribe
of the SF Bay Area***

Monica Arellano,
20885 Redwood Road, Suite 232
Castro Valley, CA, 94546
Phone: (408) 205 - 9714
marellano@muwekma.org

Costanoan

The Ohlone Indian Tribe

Andrew Galvan,
P.O. Box 3388
Fremont, CA, 94539
Phone: (510) 882 - 0527
Fax: (510) 687-9393
chochenyo@AOL.com

Bay Miwok
Ohlone
Patwin
Plains Miwok

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Cochrane-Morgan Hill Project, Santa Clara County.



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

December 30, 2019

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA 95632

Subject: Cultural Resources Study for the Cochrane-Morgan Hill Retail Venture Project, Morgan Hill, Santa Clara County, California

Dear Chairperson Lopez,

Rincon Consultants, Inc. (Rincon) has been retained by the City of Morgan Hill to conduct a cultural resources study for the Cochrane-Morgan Hill Retail Project (project) located in the City of Morgan Hill. The proposed project involves a General Plan update to include senior and affordable housing, medical and hospitality businesses, as well as recreational and educational uses. Goals of the project include general plan designation change, and the construction of senior and affordable house, medical and hospitality businesses, and retail locations. This project is subject to the California Environmental Quality Act (CEQA) and the City of Morgan Hill is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Morgan Hill.

This letter serves to inquire about your knowledge of potential cultural resources within the vicinity that may be impacted by the project. Rincon contacted the Native American Heritage Commission to request a Sacred Lands File search of the project site that was returned with "negative results". However, we are aware that the results of this search do not negate the possibility of cultural resources existing within the project site.

If you have knowledge of cultural resources that may exist within or near the project site that you wish to be documented in our report, please contact me at (559) 228-9925, extension 3005, or at cmontgomery@rinconconsultants.com. Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Courtney Montgomery", is written over a light blue horizontal line.

Courtney Montgomery
Archaeologist

Enclosed: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

December 30, 2019

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
789 Canada Road
Woodside, CA 94062

Subject: Cultural Resources Study for the Cochrane-Morgan Hill Retail Venture Project, Morgan Hill, Santa Clara County, California

Dear Chairperson Zwierlein,

Rincon Consultants, Inc. (Rincon) has been retained by the City of Morgan Hill to conduct a cultural resources study for the Cochrane-Morgan Hill Retail Project (project) located in the City of Morgan Hill. The proposed project involves a General Plan update to include senior and affordable housing, medical and hospitality businesses, as well as recreational and educational uses. Goals of the project include general plan designation change, and the construction of senior and affordable house, medical and hospitality businesses, and retail locations. This project is subject to the California Environmental Quality Act (CEQA) and the City of Morgan Hill is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Morgan Hill.

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Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Courtney Montgomery", is written over a light blue horizontal line.

Courtney Montgomery
Archaeologist

Enclosed: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

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www.rinconconsultants.com

December 30, 2019

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024

Subject: Cultural Resources Study for the Cochrane-Morgan Hill Retail Venture Project, Morgan Hill, Santa Clara County, California

Dear Chairperson Sayers,

Rincon Consultants, Inc. (Rincon) has been retained by the City of Morgan Hill to conduct a cultural resources study for the Cochrane-Morgan Hill Retail Project (project) located in the City of Morgan Hill. The proposed project involves a General Plan update to include senior and affordable housing, medical and hospitality businesses, as well as recreational and educational uses. Goals of the project include general plan designation change, and the construction of senior and affordable house, medical and hospitality businesses, and retail locations. This project is subject to the California Environmental Quality Act (CEQA) and the City of Morgan Hill is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Morgan Hill.

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Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Courtney Montgomery", is written over a light blue horizontal line.

Courtney Montgomery
Archaeologist

Enclosed: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

December 30, 2019

Muwekma Ohlone Indian Tribe of the SF Bay Area
Monica Arellano, Chairperson
20885 Redwood Road, Suite 232
Castro Valley, CA, 94546

Subject: Cultural Resources Study for the Cochrane-Morgan Hill Retail Venture Project, Morgan Hill, Santa Clara County, California

Dear Chairperson Arellano,

Rincon Consultants, Inc. (Rincon) has been retained by the City of Morgan Hill to conduct a cultural resources study for the Cochrane-Morgan Hill Retail Project (project) located in the City of Morgan Hill. The proposed project involves a General Plan update to include senior and affordable housing, medical and hospitality businesses, as well as recreational and educational uses. Goals of the project include general plan designation change, and the construction of senior and affordable house, medical and hospitality businesses, and retail locations. This project is subject to the California Environmental Quality Act (CEQA) and the City of Morgan Hill is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Morgan Hill.

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Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "C. Montgomery", is written over a light blue horizontal line.

Courtney Montgomery
Archaeologist

Enclosed: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

December 30, 2019

The Ohlone Indian Tribe
Andrew Galvan, Chairperson
P.O. Box 3388
Fremont, CA, 94539

Subject: Cultural Resources Study for the Cochrane-Morgan Hill Retail Venture Project, Morgan Hill, Santa Clara County, California

Dear Chairperson Galvan,

Rincon Consultants, Inc. (Rincon) has been retained by the City of Morgan Hill to conduct a cultural resources study for the Cochrane-Morgan Hill Retail Project (project) located in the City of Morgan Hill. The proposed project involves a General Plan update to include senior and affordable housing, medical and hospitality businesses, as well as recreational and educational uses. Goals of the project include general plan designation change, and the construction of senior and affordable house, medical and hospitality businesses, and retail locations. This project is subject to the California Environmental Quality Act (CEQA) and the City of Morgan Hill is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Morgan Hill.

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Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Courtney Montgomery", is written over a light blue horizontal line.

Courtney Montgomery
Archaeologist

Enclosed: Project Location Map

Appendix EN

Construction and Operational Energy Consumption

Cochrane Commons Phase II - Phase 1

Last Updated: 1/28/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per		Load Factor	Construction Phase	Fuel Used (gallons)
		Day	Horsepower			
Rubber Tired Dozers	3	8	247	0.4	Site Preparation Phase	6,517.64
Tractors/Loaders/Backhoes	4	8	97	0.37	Site Preparation Phase	3,509.46
Excavators	1	8	158	0.38	Grading Phase	1,345.63
Graders	1	8	187	0.41	Grading Phase	1,718.34
Rubber Tired Dozers	1	8	247	0.4	Grading Phase	2,214.33
Tractors/Loaders/Backhoes	3	8	97	0.37	Grading Phase	2,682.71
Cranes	1	7	231	0.29	Building Construction Phase	14,872.30
Forklifts	3	8	89	0.2	Building Construction Phase	15,062.45
Generator Sets	1	8	84	0.74	Building Construction Phase	17,533.36
Tractors/Loaders/Backhoes	3	7	97	0.37	Building Construction Phase	26,574.00
Welders	1	8	46	0.45	Building Construction Phase	5,838.81
Air Compressors	1	6	78	0.48	Architectural Coating Phase	7,920.48
Pavers	2	8	130	0.42	Paving Phase	2,447.41
Paving Equipment	2	8	132	0.36	Paving Phase	2,130.06
Rollers	2	8	80	0.38	Paving Phase	1,514.89
Total Fuel Used						111,881.88
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	52
Grading Phase	53
Building Construction Phase	600
Paving Phase	53
Architectural Coating Phase	600
Total Days	1358

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	18	10.8	419.45
Grading Phase	24.1	15	10.8	356.27
Building Construction Phase	24.1	86	10.8	23123.65
Paving Phase	24.1	15	10.8	356.27
Architectural Coating Phase	24.1	17	10.8	4570.95
Total				28,826.59

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	20.0	0.00
Grading Phase	7.5	0	20.0	0.00
Building Construction Phase	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
Architectural Coating Phase	7.5	0	20.0	0.00
Total				-
VENDOR TRIPS				
Site Preparation Phase	7.5	0	7.3	0.00
Grading Phase	7.5	0	7.3	0.00
Building Construction Phase	7.5	16	7.3	9344.00
Paving Phase	7.5	0	7.3	0.00
Architectural Coating Phase	7.5	0	7.3	0.00
Total				9,344.00

Total Gasoline Consumption (gallons)	28,826.59
Total Diesel Consumption (gallons)	121,225.88

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Cochrane Commons Phase II - Phase 2

Last Updated: 1/28/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
--------------	--------	----------------------	--------

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per		Load		Fuel Used (gallons)
		Day	Horsepower	Factor	Construction Phase	
Rubber Tired Dozers	3	8	247	0.4	Site Preparation Phase	6,642.98
Tractors/Loaders/Backhoes	4	8	97	0.37	Site Preparation Phase	3,576.95
Excavators	2	8	158	0.38	Grading Phase	2,691.26
Graders	1	8	187	0.41	Grading Phase	1,718.34
Rubber Tired Dozers	1	8	247	0.4	Grading Phase	2,214.33
Scrapers	2	8	367	0.48	Grading Phase	7,896.27
Tractors/Loaders/Backhoes	2	8	97	0.37	Grading Phase	1,788.47
Cranes	1	7	231	0.29	Building Construction Phase	3,866.80
Forklifts	3	8	89	0.2	Building Construction Phase	3,916.24
Generator Sets	1	8	84	0.74	Building Construction Phase	4,558.67
Tractors/Loaders/Backhoes	3	7	97	0.37	Building Construction Phase	6,909.24
Welders	1	8	46	0.45	Building Construction Phase	1,518.09
Air Compressors	1	6	78	0.48	Architectural Coating Phase	2,059.32
Pavers	2	8	130	0.42	Paving Phase	1,246.80
Paving Equipment	2	8	132	0.36	Paving Phase	1,085.12
Rollers	2	8	80	0.38	Paving Phase	771.74
Total Fuel Used						52,460.62 (Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	53
Grading Phase	53
Building Construction Phase	156
Paving Phase	27
Architectural Coating Phase	156
Total Days	445

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	18	10.8	427.52
Grading Phase	24.1	20	10.8	475.02
Building Construction Phase	24.1	357	10.8	24957.41
Paving Phase	24.1	15	10.8	181.49
Architectural Coating Phase	24.1	71	10.8	4963.52
Total				31,004.96

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	20.0	0.00
Grading Phase	7.5	0	20.0	0.00
Building Construction Phase	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
Architectural Coating Phase	7.5	0	20.0	0.00
Total				-
VENDOR TRIPS				
Site Preparation Phase	7.5	0	7.3	0.00
Grading Phase	7.5	0	7.3	0.00
Building Construction Phase	7.5	71	7.3	10780.64
Paving Phase	7.5	0	7.3	0.00
Architectural Coating Phase	7.5	0	7.3	0.00
Total				10,780.64

Total Gasoline Consumption (gallons)	31,004.96
Total Diesel Consumption (gallons)	63,241.26

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Cochrane Commons Phase II - Phase 3

Last Updated: 1/28/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per		Load Factor	Construction Phase	Fuel Used (gallons)
		Day	Horsepower			
Rubber Tired Dozers	3	8	247	0.4	Site Preparation Phase	6,517.64
Tractors/Loaders/Backhoes	4	8	97	0.37	Site Preparation Phase	3,509.46
Excavators	1	8	158	0.38	Grading Phase	1,371.02
Graders	1	8	187	0.41	Grading Phase	1,750.77
Rubber Tired Dozers	1	8	247	0.4	Grading Phase	2,256.11
Tractors/Loaders/Backhoes	3	8	97	0.37	Grading Phase	2,733.33
Cranes	1	7	231	0.29	Building Construction Phase	3,247.12
Forklifts	3	8	89	0.2	Building Construction Phase	3,288.63
Generator Sets	1	8	84	0.74	Building Construction Phase	3,828.12
Tractors/Loaders/Backhoes	3	7	97	0.37	Building Construction Phase	5,801.99
Welders	1	8	46	0.45	Building Construction Phase	1,274.81
Air Compressors	1	6	78	0.48	Architectural Coating Phase	1,729.30
Pavers	2	8	130	0.42	Paving Phase	2,401.24
Paving Equipment	2	8	132	0.36	Paving Phase	2,089.87
Rollers	2	8	80	0.38	Paving Phase	1,486.31
Total Fuel Used						43,285.70
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	52
Grading Phase	54
Building Construction Phase	131
Paving Phase	52
Architectural Coating Phase	131
Total Days	420

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	24.1	18	10.8	419.45
Grading Phase	24.1	15	10.8	362.99
Building Construction Phase	24.1	201	10.8	11799.78
Paving Phase	24.1	15	10.8	349.54
Architectural Coating Phase	24.1	40	10.8	2348.22
Total				15,279.98

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	20.0	0.00
Grading Phase	7.5	0	20.0	0.00
Building Construction Phase	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
Architectural Coating Phase	7.5	0	20.0	0.00
Total				-
VENDOR TRIPS				
Site Preparation Phase	7.5	0	7.3	0.00
Grading Phase	7.5	0	7.3	0.00
Building Construction Phase	7.5	84	7.3	10710.56
Paving Phase	7.5	0	7.3	0.00
Architectural Coating Phase	7.5	0	7.3	0.00
Total				10,710.56

Total Gasoline Consumption (gallons)	15,279.98
Total Diesel Consumption (gallons)	53,996.26

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Cochrane Commons Phase II

Last Updated: 1/28/2022

Populate one of the following tables (Leave the other blank):

Annual VMT	OR	Daily Vehicle Trips
Annual VMT: 18,916,438		Daily Vehicle Trips: Average Trip Distance:

Fleet Class	Fleet Mix	Fuel Economy (MPG) [1]	
Light Duty Auto (LDA)	0.553893	Passenger Vehicles	24.1
Light Duty Truck 1 (LDT1)	0.058700	Light-Med Duty Trucks	17.6
Light Duty Truck 2 (LDT2)	0.188468	Heavy Trucks/Other	7.5
Medium Duty Vehicle (MDV)	0.120786	Motorcycles	44
Light Heavy Duty 1 (LHD1)	0.022796		
Light Heavy Duty 2 (LHD2)	0.005663		
Medium Heavy Duty (MHD)	0.010629		
Heavy Heavy Duty (HHD)	0.007566		
Other Bus (OBUS)	0.000983		
Urban Bus (UBUS)	0.000556		
Motorcycle (MCY)	0.026354		
School Bus (SBUS)	0.000841		
Motorhome (MH)	0.002820		

Fleet Mix					
Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	55.39%	Gasoline	10477683	0.00	434,759
Light-Medium Duty Trucks	36.80%	Gasoline	6960379	0.00	395,476
Heavy Trucks/Other	5.19%	Diesel	980893	0.00	130,786
Motorcycle	2.64%	Gasoline	498524	0.00	11,330

Total Gasoline Consumption (gallons)	841,565
Total Diesel Consumption (gallons)	130,786

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Equipment	Horsepower	Load Factor
Aerial Lifts	63	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	221	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	231	0.29
Crawler Tractors	212	0.43
Crushing/Proc. Equipment	85	0.78
Excavators	158	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	187	0.41
Off-Highway Tractors	124	0.44
Off-Highway Trucks	402	0.38
Other Construction Equipment	172	0.42
Other General Industrial Equipment	88	0.34
Other Material Handling Equipment	168	0.4
Pavers	130	0.42
Paving Equipment	132	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.3
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	247	0.4
Rubber Tired Loaders	203	0.36
Scrapers	367	0.48
Signal Boards	6	0.82
Skid Steer Loaders	65	0.37
Surfacing Equipment	263	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	78	0.5
Welders	46	0.45

Appendix WSA

Water Supply Assessment



Cochrane Commons Phase II Project

Water Supply Assessment

prepared by
City of Morgan Hill
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Morgan Hill, California 95037
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prepared with the assistance of
Rincon Consultants, Inc.
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April 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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Acronyms

AF	Acre-feet
AFY	Acre-feet per year
CEQA	California Environmental Quality Act
CVP	Central Valley Project
EIR	Environmental Impact Report
GSA	Groundwater Sustainability Agency
GMP	Groundwater Management Plan
IRWM	Integrated Regional Water Management
MGD	Million gallons per day
MUF	Mixed-Use Flex zoning designation
PFAS	Per- and polyfluoroalkyl substances
SFPUC	San Francisco Public Utilities Commission
SEIR	Supplemental Environmental Impact Report
SGMA	Sustainable Groundwater Management Act
SWP	State Water Project
TDS	Total Dissolved Solids
UGB	Urban Growth Boundary
UWMP	Urban Water Management Plan
WSA	Water Supply Assessment
WSMP	Water Supply Master Plan

1 Introduction

In 2001, California adopted Senate Bill (SB) 610, which amended California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water availability and land use planning by ensuring greater communication between water providers and local planning agencies and ensuring that land use decisions for large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. Certain types of development projects are required to provide detailed water supply assessments to planning agencies. Any proposed project which is subject to the California Environmental Quality Act (CEQA) and would demand more than 75 acre-feet per year (AFY) of water, or an amount of water equivalent to, or greater than, the amount of water required by a residential development with 500 or more dwelling units, is subject to SB 610 and is required to prepare a Water Supply Assessment (WSA).

This WSA has been prepared for a development project (“proposed project”) that meets the threshold requirements for a WSA as defined in SB 610. The project details are discussed in Section 2, *Project Description*; this discussion includes calculation of the water supply needs of the proposed project. The applicability of SB 610 to the proposed project is determined in Section 3, *Senate Bill 610 Applicability*, where it is illustrated that the proposed project requires an WSA. An analysis of the sources and management of the water supply that would be necessary for implementation of the proposed project is included in Section 4, *Water Supply Overview*, and a discussion and analysis of the reliability of those supplies, including under future conditions of reduced supply due to drought, is included in Section 5, *Water Supply Reliability*.

SB 610 requires a WSA to characterize water supply availability over a 20-year projection; this WSA assumes the proposed project would begin operation in 2023, such that the 20-year projection for the purposes of the WSA would end in 2043. However, the primary planning documents that inform this analysis, which include the City’s UWMP and WSMP, as well as Valley Water’s UWMP and Groundwater Management Plan (GWMP), generally address planning horizons through 2045. Therefore, this WSA extends beyond the timeframe required by SB 610.

As discussed below, this WSA has been prepared to inform decisions from project applicants, local and regional agencies, and the public about the availability of a water supply to support the proposed project in the decades to come after implementation. This document is not intended to address any CEQA impact issues; those issues are discussed in other environmental documents for the proposed project. Rather, this document is intended to provide a baseline analysis of the water supplies available to the project and of its impact upon those supplies.

1.1 Project Background

The proposed project is defined in detail in Section 2, *Project Description*, and consists of changes to a previously approved project. In 2005, an Environmental Impact Report (EIR) was prepared for the Cochrane Commons Project, and certified by the City of Morgan Hill as the CEQA lead agency. The 2005 Cochrane Commons Project consisted of two phases referred to as Phase I and Phase II, which collectively included development of 590,100 square feet of retail space, a 12-pump gas station, and a 63,200-square-foot movie theatre; no residential development was included in the 2005 project.

Construction of Phase I of the approved Cochrane Commons Project was completed in 2007 and consisted of 262,560 square feet of commercial retail space. Two commercial structures were also constructed on the eastern portion of the project site within the Phase II area and are currently occupied by a gas station and fast-food restaurant. In total, 303,429 square feet of retail space has been constructed, along with the gas station. Construction of Phase II of the approved project has not occurred, and since certification of the 2005 EIR, Phase II has been revised, as addressed herein.

The proposed project includes a revised version of the previously approved Phase II of the Cochrane Commons Project. As currently proposed, Phase II consists of more residential and less commercial space than previously approved, as well as a zoning change to accommodate the increased residential use. As discussed below in Section 3, *Senate Bill 610 Applicability*, this WSA is being prepared because the current Phase II meets water demand thresholds that were not met by the previously approved Phase II.

Aspects of the previously approved Cochrane Commons Project, including the fully-constructed Phase I, have been accounted for and incorporated into long-range planning efforts by the City of Morgan Hill and relevant agencies, such as, but not limited to, the Santa Clara Valley Water District (Valley Water). This WSA identifies where previous estimates of the project’s water use have been included in planning documents, and discusses changes between water demands for the previously approved project compared to the currently proposed Phase II. Table 1 below provides an overview of the current Phase II compared to the previously approved Phase II.

Table 1 Changes to Phase II of the Previously Approved Cochran Commons Project

Project Component	Previously Approved Phase II	Currently Proposed Phase II
Residential	None	+498 dwelling units (Phase II)
Hotel	None	+140 rooms (Phase II)
Retail	657,250 square feet (Phase I and II)	-259,690 square feet (Phase I and II)

As shown above, the revised Phase II as assessed herein includes 498 new residential dwelling units and 140 additional hotel rooms that were not included under the previously approved project; the water demands associated with these project changes are assessed herein with respect to long-term water supply availability and reliability.

2 Project Description

The City of Morgan Hill proposes to implement Phase II of the previously approved Cochrane Commons Project; Phase I of the previously approved project has been constructed and is currently operational. The proposed project consists of revisions to the previously approved Phase II that was analyzed in the 2005 EIR. The proposed project includes: 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to Mixed Use Flex ([MUF] which approves 7 to 24 dwelling units per acre) for the entire Phase II development area, which is defined in Section 2.1, *Project Location*, below. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents, including a courtyard with outdoor open space, as well as a clubhouse, recreation hall, and swimming pool for on-site residents.

2.1 Project Location

The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Project. It is bounded by Depaul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101 (U.S. 101). Figure 1 shows the regional location and Figure 2 depicts the proposed project site.

2.2 Existing Site Characteristics

The project area is urbanized area and generally flat. There is a gas station and a fast food restaurant in the southern portion of the site. In addition, the central and southern areas of the site are developed with parking lots, roadways, and paved areas, as shown in Figure 2. The remainder of the site is undeveloped.

2.2.1 Current Land Use Designation and Zoning

The project site is currently split between two City of Morgan Hill 2035 General Plan land use designations, MUF and Commercial. The Commercial designation allows a wide range of business uses either in stand-alone buildings or as part of shopping centers. The MUF designation allows for a mix of residential, commercial, and office uses, with 7 to 24 dwelling units per acre (Morgan Hill 2016). The proposed change of the Commercial-designated area of the project site to MUF would be required for implementation of the project's residential component. The project site is zoned as Highway Commercial (CH), which seeks to provide areas adjacent to the freeway that can accommodate highway and tourist-oriented uses, and allows business services, restaurants and cafes, hotels, offices, retail services, and other related facilities (Morgan Hill 2016).

2.2.2 Surrounding Land Uses

The project site is bordered by a commercial development to the west, South Almont Drive to the east, Wilshire Boulevard to the north, and an unnamed alley to the south. There is a six-story retail and office building immediately to the west of the project site, a three-story office building to the east across South Almont Drive, a three-story office building to the north across Wilshire Boulevard, and a single-family home to the south of the alley.

Surrounding development includes detached single-family houses to the north, senior living apartments to the east, commercial retail within Phase I of the Cochrane Commons Project to the south, and single-family and industrial structures within agricultural operations to the west. Buildings range in height from one to two stories.

2.3 Proposed Project Characteristics

The project would involve construction of Phase II of the Cochrane Commons Project on the undeveloped site adjacent to the completed Phase I and would consist of 498 residential units; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to MUF for the proposed project development area. Table 2 details the breakdown of proposed uses and square footage.

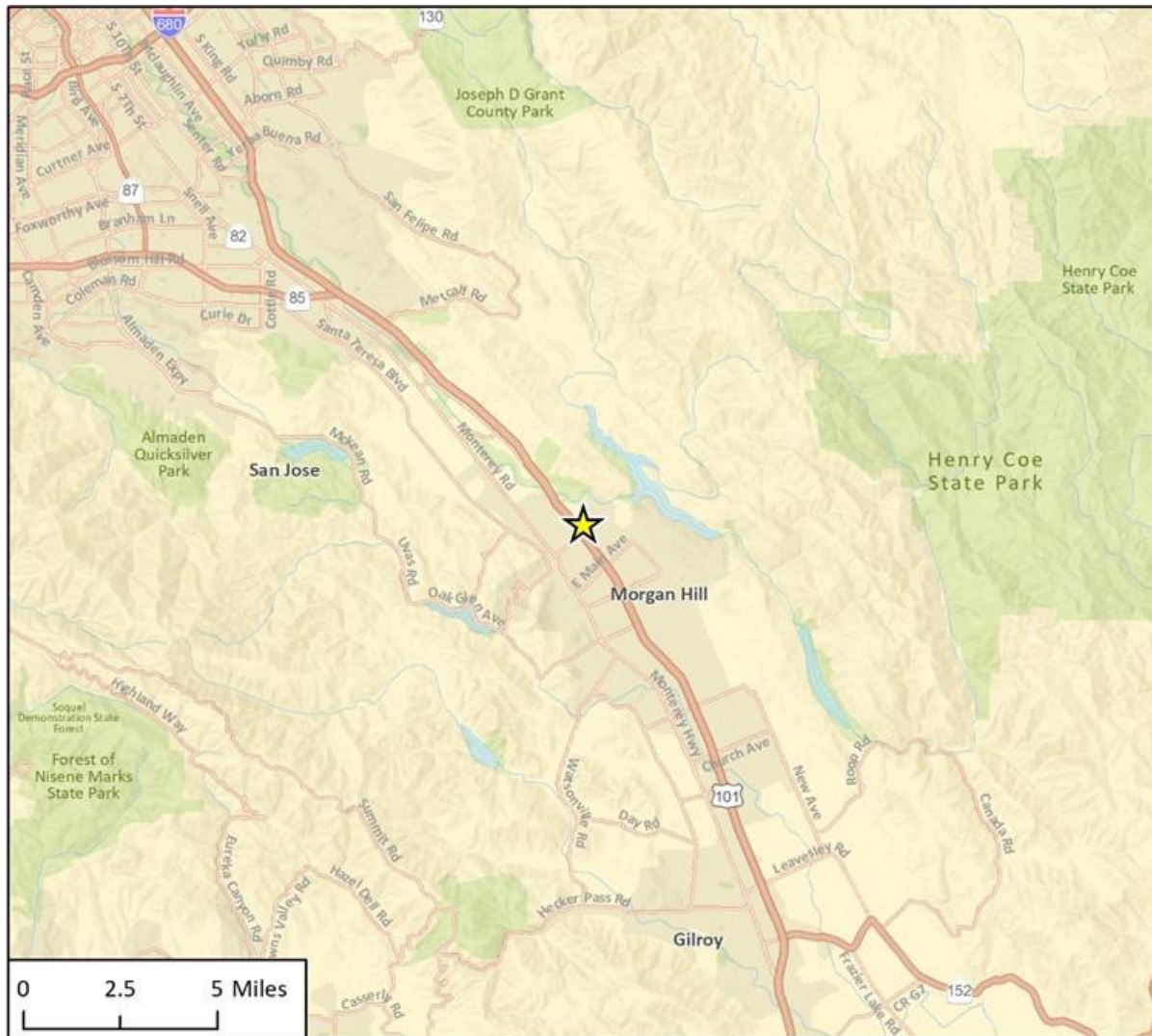
Table 2 Project Details

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet

The project area has been previously graded and would further be modified by additional grading. Stormwater drainage would be directed to catch basins located throughout the project site and then conveyed via underground storm drainage pipes to a stormwater detention pond along the northern project boundary, where it would be temporarily stored in the planned detention pond and pumped to the adjacent Cochrane Channel. The project would also involve new landscaping elements and construction of new driveways and central roadways.

Construction would occur over three phases. Phase 1 would consist of 104 units (175,000 square feet) of for-sale townhomes. Phase II would consist of 394 units (410,000 square feet) of rental apartments. Phase 3 would consist of the retail space and hotel. The first two phases are expected to last approximately one year each, and the third phase to last for approximately eight months. Construction would include 37,510 cubic yards of excavation, with balanced cut and fill anticipated.

Figure 1 Proposed Project Regional Location



★ Project Location



Figure 2 Proposed Project Site Location



2.4 Water Demands

The water demand calculations in this WSA are based upon water use factors utilized by the California Emissions Estimator Model (CalEEMod) modeling software; CalEEMod is a standard software package utilized for environmental analysis throughout the State. The water use factors are average values from data throughout the State and are often independent of use type (i.e. single- vs multi-family home). Table 3 shows the proposed project's total projected water demand based on the standard assumptions utilized by CalEEMod, and adjusted to account for water demands of the previously approved Phase II, as those demands are already accounted for in the City's 2016 General Plan, zoning, and land use designations, as well as the City's UWMP. Therefore, the "Total New Water Demand" reflects only the amount of water that is in addition to the amount of water associated with operation of the previous Phase II components which are not included under the project.

Table 3 Operational Water Demand for the Proposed Project

Water Demand Type	Size	Water Use Factor ¹ (annual)	Water Demand (AFY)
Residential	498 units	106,229 gal/unit	162
Retail	135,000 sf	119 gal/sf	49
Hotel Rooms	140 units	28,186 gal/unit	12
Total Operational Demand²			223
<i>Previously assessed retail³</i>	<i>-259,690 sf</i>	<i>119 gal/ sf</i>	<i>-95</i>
Total New Water Demand			128

1. CalEEMod provided the water use factors used to calculate water demands
2. This total demand assumes the project is fully operational during the first year; this is an over-estimation of the project's operational water demands in the first few years, because the project would actually be constructed over an approximately three-year period, with water demands correlating with when individual land uses are brought online. For example, water demands for residential would equate to 34 acre-feet at the end of the first year for the first 104 units, while residential demands would reach 162 acre-feet by the end of the second year for the next 394 units, reaching the design total of 498 new residential units, with an associated water demand of 162 FY.
3. Previously assessed retail refers to those portions of the approved Cochrane Commons Project consisting of Phase II as assessed in the 2005 EIR, that were never constructed and are not included in the proposed project as assessed herein, although the associated water demands are accounted for in City planning documents including the General Plan and UWMP.

As shown above, the total new water demand that would be introduced by operation of the proposed project is approximately 129 AFY.

3 Senate Bill 610 Applicability

Water requirements associated with the project are described in Section 2.4. The applicability of SB 610 to the proposed project is discussed in the following sections.

California Water Code, as amended by SB 610, requires a WSA to address the following questions:

- Is there a public water system that will service the proposed project? (see Section 3.3)
- Is there a current Urban Water Management Plan (UWMP) that accounts for the project demand? (see Section 3.4)
- Is groundwater a component of the supplies for the project? (see Section 3.5)
- Are there sufficient supplies to serve the project over the next twenty years? (see Section 3.6)

The primary question to be answered in a WSA is:

Will the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection meet the projected water demand of the proposed project, in addition to existing and planned future uses of the identified water supplies, including agricultural and manufacturing uses?

The following sections address the SB 610 WSA questions as they relate to the proposed project.

3.1 Is the Proposed Project Subject to CEQA?

California Water Code Section 10910(a) states that any city or county that determines a project (as defined in Section 10912) is subject to CEQA shall comply with Section 10910 of the California Water Code. The proposed project requires multiple discretionary approvals from the City of Morgan Hill including updates to the General Plan land use designation and zoning and certification of an SEIR analyzing the changes to the proposed project since certification of the original EIR. Therefore, the project is subject to CEQA.

3.2 Is the Proposed Project a “Project” Under SB 610?

California Water Code Section 10912(a) states that any proposed action which meets the definition of “project” under SB 610 is required to be analyzed in a WSA. SB 610 defines a “project” as any one of seven different development types, each of which is considered below.

3.2.1 Residential Development

A proposed residential development of more than 500 dwelling units is defined as a “project” under SB 610. Buildout of the proposed project would create 498 additional residential units.

3.2.2 Shopping Center or Business Establishment

A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space is defined as a “project” under SB 610. The proposed project would introduce 135,000 square feet of commercial and retail area.

3.2.3 Commercial Office Building

A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space is defined as a “project” under SB 610. The proposed project does not include any component specifically proposed as commercial office space and therefore does not classify as a project based on commercial office development.

3.2.4 Hotel or Motel

A proposed hotel or motel, or both, having more than 500 rooms is defined as a “project” under SB 610. The proposed project would introduce 140 new hotel rooms.

3.2.5 Industrial, Manufacturing, or Processing Plant or Industrial Park

A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area is defined as a “project” under SB 610. The proposed project does not include the proposed development of an industrial, manufacturing, or processing plant, or an industrial park and therefore does not classify as a project based on industrial development.

3.2.6 Mixed-Use Project

A proposed mixed-use project that includes one or more of the projects specified earlier is defined as a “project” under SB 610. The proposed project is a mixed-use residential, business, and hotel project, however none of the components individually count as a “project” under SB 610 and therefore the proposed project does not classify as a mixed-use project including one or more previously defined projects.

3.2.7 Equivalent Project

Any proposed use, regardless of type, which would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project is defined as a “project” under SB 610. As detailed in Section 2.4, the proposed project has an estimated water demand of 223 AFY as proposed (129 AFY over the previously approved Phase II plans) and includes residential, business, and hotel uses. Combined, the projected water demand of the proposed uses is equivalent to 684 dwelling units, therefore the proposed project is classified as a project under SB 610 and is required to prepare this WSA.

3.3 Is There a Public Water System that Will Serve the Proposed Project?

California Water Code Section 10912(c) defines a “public water system” as a system that has 3,000 or more service connections and provides piped water to the public for human consumption. The project area lies within the service area of the City of Morgan Hill Water Division (City). The City has more than 3,000 connections (Morgan Hill 2021a) and is therefore a public water system.

3.4 Is There a Current UWMP that Accounts for the Project Demand?

In California, every urban water supplier (publicly or privately owned) that delivers more than 3,000 AFY of water annually or serves more than 3,000 connections is required to prepare an UWMP to assess, among other metrics, the reliability of the supplier's water sources over a 20-year period, and including with consideration to normal water-year, single-dry water-year (periodic drought), and multiple-dry water-year (sustained drought) scenarios. These are the same requirements of a WSA, as specified by SB 610, and therefore UWMPs, when available for the subject area, are used to inform project-specific WSAs. UWMPs must be updated and submitted to the California Department of Water Resources (DWR) every five years for review and approval, and are publicly available for review (DWR 2020).

The proposed project is located within the service territory of the City of Morgan Hill, and water demands associated with development on the project site are addressed in the City's 2020 UWMP. The City's 2020 UWMP includes water supply availability and reliability projections through year 2045, and accounts for current zoning of the project site as reflected in the 2016 General Plan. However, the proposed project would change part of the planned zoning of the Phase II site from that which was used to inform the UWMP. The potential water demands associated with build-out of the Phase II site under the zoning revision proposed under Phase II are higher than currently assumed in the City's UWMP. Therefore, the current UWMP does not fully account for water demands that would be introduced to the Phase II site under the proposed project.

However, the City's 2020 UWMP relies on water demand projections provided in the City's Water System Master Plan (WSMP), which was originally published in 2017 and relied upon land use and population projections provided in the City's 2016 General Plan; the WSMP was updated in 2021, after the 2020 UWMP was finalized, and therefore this analysis utilizes the updated projections in the 2021 WSMP, where they differ from the 2017 WSMP (Morgan Hill 2016, 2020, 2021).

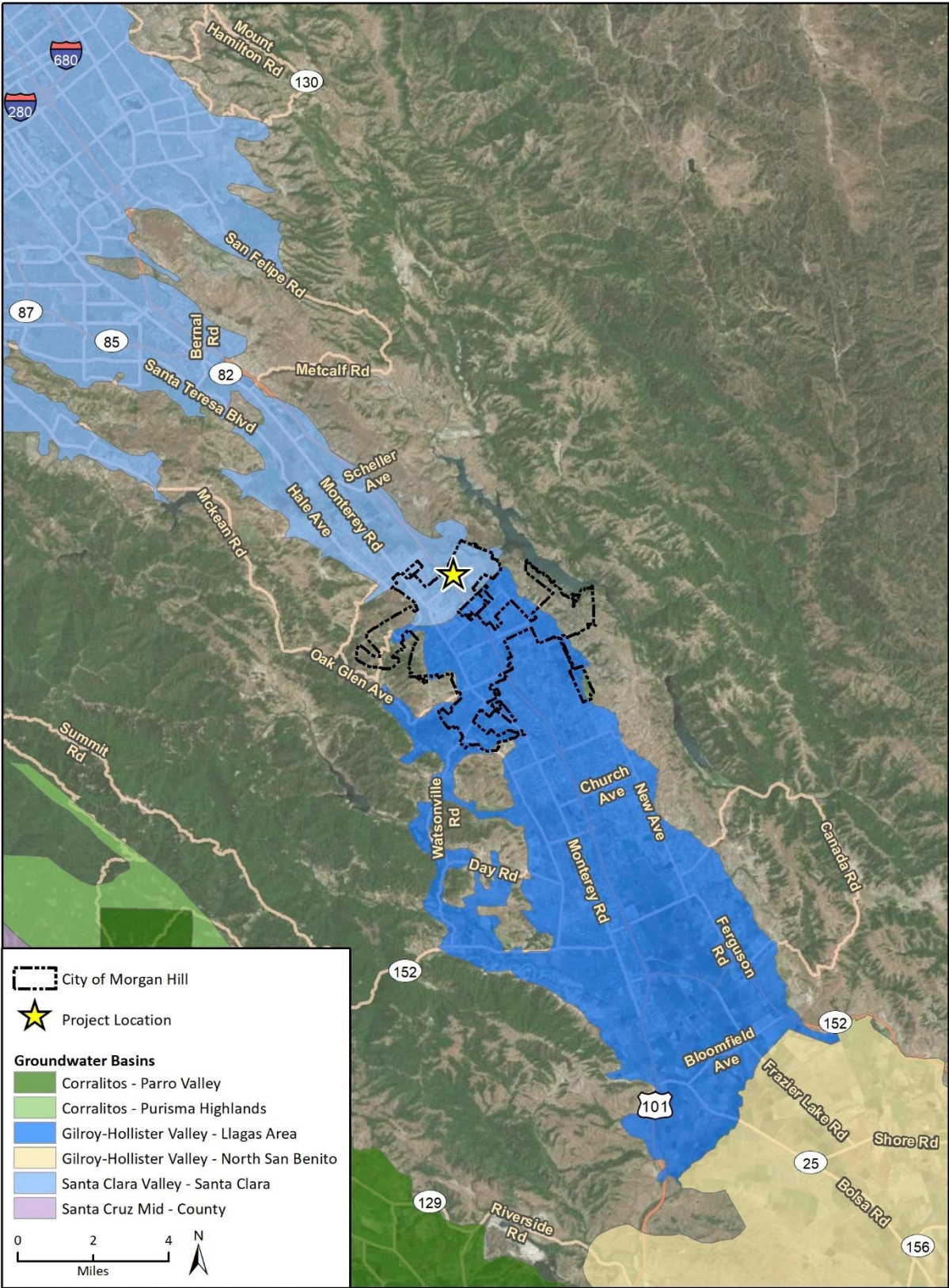
3.5 Is Groundwater a Component of the Supplies for the Project?

All water supply for the proposed project would be provided by the City of Morgan Hill, which relies entirely local groundwater produced from the Llagas Subbasin of the Gilroy-Hollister Groundwater Basin, and the Santa Clara Subbasin (Coyote Valley Subarea) of the Santa Clara Valley Groundwater Basin. There is no surface or recycled water use in the city and it does not purchase imported water from a wholesaler. The city's location relative to these groundwater basins is depicted in Figure 3, while Figure 4 provides a localized view of the Phase II site over the Santa Clara Subbasin.

3.6 Are There Sufficient Supplies to Serve the Project Over the Next Twenty Years?

The sufficiency of water supplies identified as potential sources to serve the growth facilitated by the proposed project is assessed in the following sections, which address existing and potential future supplies. Water supply sources available in the project area are described in Section 4, *Water Supply Overview*, and water supply reliability is discussed in Section 5, *Water Supply Reliability*.

Figure 3 Regional Groundwater Basin Boundaries



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Additional data provided by CWDR, 2020.

Fig. 3 Regional Groundwater Basins

Figure 4 Local Groundwater Basin Boundaries



Fig. K Regional Groundwater Basins

4 Water Supply Overview

The City of Morgan Hill relies entirely on locally-pumped groundwater supplies to meet the needs of its residents. The following sections examine the condition of the local groundwater as well as its overall availability to the city and the larger regional management structure. The region's water supplies are primarily managed by Valley Water, which is the imported water wholesaler for Santa Clara County overall. Valley Water also serves as the exclusive Groundwater Sustainability Agency (GSA) for both the Santa Clara Subbasin and the Llagas Subbasin, for compliance with the Sustainable Groundwater Management Act (SGMA); Section 4.2.1, *Groundwater Management*, provides detailed discussion of SGMA and other groundwater management efforts.

4.1 City of Morgan Hill Water Supply System

The City of Morgan Hill's water supply system provides water to both the incorporated city and its greater Urban Growth Boundary (UGB), which encompasses approximately 17,660 acres of varying land use types, including approximately 4,944 acres of residential, 2,192 acres of commercial, industrial, institutional, and landscape irrigation, and approximately 10,525 acres of other non-demand generating land-use types such as open space (Morgan Hill 2021a).

The city's municipal water system consists of 16 active groundwater wells and more than 187 miles of pipelines. The water distribution system is comprised of 21 pressure zones, with 12 storage tanks regulating system operation through the pressure zones and 13 booster stations serving to pump water from lower pressure to higher pressure zones. The current total tested system supply capacity is approximately 16.16 million gallons per day (MGD), and the firm capacity is approximately 12.63 MGD (where the "firm capacity" assumes the city's two largest supply wells are not functioning, causing the overall system to operate under stress conditions). The city's average domestic daily water demand is approximately seven MGD (Morgan Hill 2021).

The City of Morgan Hill does not purchase imported surface water supplies from Valley Water, and does not directly consume surface or recycled water as part of its water supply; however, the groundwater basins from which it withdraws water are kept in sustainable condition through the management actions of Valley Water, which serves as the GSA for both the Llagas and the Santa Clara Subbasins. The City's current Capital Improvement Program includes six new groundwater wells within the UGB through year 2045, in order to meet the increasing water demands associated with population and usage projections (Valley Water 2021b).

4.2 Local Groundwater Resources

The City of Morgan Hill relies entirely upon locally pumped groundwater for its water supply, and does not utilize any surface water supply, recycled water, or purchase any imported water (Morgan Hill 2021a). However, although the City does not purchase any imported water directly, the groundwater basins from which the City extracts water are managed by Valley Water, which does use imported water to recharge and replenish the groundwater supply. Therefore, a discussion of Valley Water's supply system is provided under Section 4.1, *Valley Water Supply System*, as it is relevant to long-term water supply availability in the basins that provide the city's water.

The city overlies the southeastern portion of the Santa Clara Subbasin of the Santa Clara Valley Groundwater Basin, as shown on Figure 3 and Figure 4. This portion of the Santa Clara Subbasin is referred to as the Coyote Valley Subarea, discussed further below. The City pumps its water supply from the Santa Clara Subbasin as well as the Llagas Subbasin of the Gilroy-Hollister Valley Groundwater Basin, which is adjacent to the south of the Santa Clara Subbasin. As shown in Figure 3, the Llagas Subbasin is adjacent to the North San Benito Subbasin, also of the Gilroy-Hollister Valley Groundwater Basin.

Santa Clara Subbasin, Santa Clara Valley Groundwater Basin

The Santa Clara Subbasin is identified as a high-priority basin by DWR but is not considered to be in critical overdraft conditions (DWR 2022). Groundwater levels declined during the 2012-2016 drought but recovered and have remained fairly stable since (Valley Water 2021). In 2021 groundwater levels in the subbasin were about the same as the 5-year average (Morgan Hill 2021a). As mentioned, the project site overlies the Coyote Valley Subarea of the Santa Clara Valley Subbasin; the subarea is approximately seven miles long and two miles wide, between Metcalf Road and Cochrane Road over approximately 15 square miles. The City of Morgan Hill is the only incorporated city that pumps groundwater from the Coyote Valley Subarea, although numerous agricultural farms and unincorporated areas also pump from the subarea (Valley Water 2020).

Llagas Subbasin, Gilroy-Hollister Valley Groundwater Basin

The Llagas Subbasin is approximately 15 miles long, and ranges from three miles wide along its northern boundary with the Coyote Valley Subarea to approximately six miles wide along its southeastern boundary of the Pajaro River and the North San Benito Subbasin (also of the Gilroy-Hollister Valley Groundwater Basin). The Llagas Subbasin has confined and unconfined areas within its boundary. It is primarily drained by the Pajaro River and its tributaries including the Uvas and Llagas Creeks. Annual precipitation ranges from less than 16 inches in the south to 24 inches in the northern areas (DWR 2004b).

The Llagas Subbasin is identified as a high-priority basin by DWR but is not considered to be in critical overdraft (DWR 2022). Groundwater levels declined during the 2012-2016 drought but recovered and have remained fairly stable since (Valley Water 2021). In 2021, groundwater levels in the subbasin were about 13 feet below the 5-year average, likely resulting from 2020 pumping rates being higher than the 5-year average, while estimated recharge was below the 5-year average (Morgan Hill 2021a). Both the City of Morgan Hill and the City of Gilroy are reliant on water from the Llagas Subbasin, as are numerous 'Other Users' such as agricultural farms and unincorporated areas identified by Valley Water (Valley Water 2020).

4.2.1 Groundwater Management

In 2014, SGMA was signed into law and established a framework for local groundwater management, under which the DWR assigns priority levels to groundwater basins based on existing water balance conditions. Designated Groundwater Sustainability Agencies (GSAs) are then required to develop and implement Groundwater Sustainability Plans (GSPs) according to a schedule of prioritization specified by SGMA. The overall purpose of SGMA is to bring overdrafted basins into sustainable conditions.

As described above, the City of Morgan Hill overlies two groundwater subbasins; the Llagas Subbasin of the Gilroy-Hollister Groundwater Basin, and Santa Clara Subbasin (Coyote Valley Subarea) of the Santa Clara Valley Groundwater Basin. Both Subbasins were rated by DWR as "High

Priority” but not critically overdrafted (DWR 2022). SGMA requires that GSAs prepare a GSP for all medium and high priority basins; SGMA also allows specified Alternatives to a GSP, subject to approval of the DWR.

Valley Water is the exclusive GSA for both the Llagas and Santa Clara Subbasins, and is therefore responsible for managing both subbasins in sustainable condition, in accordance with a GSP or a DWR-approved Alternative GSP. Valley Water’s 2016 GWMP for the Santa Clara and Llagas Subbasins was submitted to DWR as an Alternative on Dec. 21, 2016. On July 17, 2019, DWR approved the Alternative for both subbasins, determining it satisfies the objectives of SGMA. SGMA also requires GSAs to submit periodic evaluations of approved Alternatives at least once every five years, with the first due by January 1, 2022. To meet this requirement, Valley Water prepared the 2021 GWMP, which was adopted by Valley Water’s Board of Directors on November 19, 2021, after a public hearing.

4.2.2 Groundwater in Storage

Table 4 shows estimated storage amounts from 2018-2019 in the two aquifers from Valley Water’s 2019 Annual Groundwater Report, which has not been updated since 2019 (Valley Water 2020). Although storage has increased due to increased recharge efforts by Valley Water, both subareas have low excess storage available to ensure water extraction remains sustainable without the input of imported recharge water from Valley Water. The ability of the Llagas and Santa Clara Valley Subbasins to support continued extraction is discussed further in Section 5, *Water Supply Reliability*.

Table 4 Estimated Groundwater in Storage

Groundwater Basin	Water in Storage (AF)		
	End of 2018	End of 2019	Change
Santa Clara Valley Subbasin (Coyote Valley Subarea), Santa Clara Valley Groundwater Basin	10,800	12,800	+2,000
Llagas Subbasin, Gilroy-Hollister Valley Groundwater Basin	21,300	28,200	+6,900
Total	32,100	41,000	+8,900

Source: Valley Water 2020

AF: Acre-feet

4.2.3 Groundwater Quality

The City monitors local groundwater quality at each of its supply wells, and Valley Water monitors overall quality throughout its management area, which includes the subbasins that the City pumps from. The following information is based primarily on the most recently issued 2019 Annual Groundwater Report from Valley Water (Valley Water 2020), which is also the source of quality information in the City UWMP (Morgan Hill 2021a). Overall, groundwater within the two subbasins is considered to be of good quality, with the exception of elevated levels of nitrate and total dissolved solids (TDS), as discussed below. Water quality testing indicates that groundwater met drinking water quality standards for most parameters at wells tested throughout Santa Clara County, largely due to the high quality of water imported by Valley Water and used to recharge the subbasins at its recharge facilities, including within Llagas Subbasin. Water at these facilities did not contain contaminants above primary or secondary drinking water standards, indicating that water entering the groundwater basins as recharge is already of high quality.

A summary of groundwater quality conditions is depicted in Table 5 below.

Table 5 Groundwater Quality Summary

Groundwater Basin	Quality Parameter	Concentration Range (mg/L)	Percentage of Wells with Stable Concentrations	Percentage of Wells with Decreasing Concentrations	Percentage of Wells with Increasing Concentrations
Coyote Valley	Nitrate (as N)	0.5 – 1.6	63	27	10
	TDS	256 – 1,640	96	0	4
Llagas Subbasin-- Shallow Aquifer	Nitrate (as N)	Not tested	76	12	12
	TDS	214 - 834	81	5	14
Llagas Subbasin Deep Aquifer	Nitrate (as N)	<0.4 – 4.6	61	30	9
	TDS	254 - 760	96	0	4

Source: Valley Water 2020
mg/L: milligrams per liter

As mentioned, nitrates and TDS affect groundwater quality in the area, and the groundwater management objectives for nitrate defined within Valley Water’s GWMP for the Santa Clara and Llagas Subbasins were not met in the 2019 report (Valley Water 2020). Nitrate was found at levels above regulatory standards in 23 percent of the wells analyzed by Valley Water and the City (Valley Water 2020; Morgan Hill 2021a). Nitrates occur naturally in the groundwater within the subbasins but is increased by anthropogenic inputs; primary sources of nitrate contamination are agricultural fertilizer runoff, along with septic tank leaching and leaking sewage lines and piping. Almost all of the wells sampled exhibited TDS concentrations below the drinking water standards and levels have not changed significantly compared to prior years (Valley Water 2020; Morgan Hill 2021a).

4.3 Santa Clara Valley Water District

The information in this section is primarily drawn from Valley Water’s 2020 UWMP (Valley Water 2021b) and its 2021 GWMP, which also serves as an Alternative GSP for the Llagas and Santa Clara Subbasins, in accordance with SGMA (Valley Water 2021c).

This section is also informed by information developed under the Integrated Regional Water Management (IRWM) Program, which provides funding to IRWM Groups for the development of IRWM Plans and the implementation of infrastructure improvements assessed therein. The purpose of an IRWM Plan is to provide long-term, coordinated water resource planning amongst as many stakeholders as possible, as well as to assist in obtaining state and federal funding for local programs by demonstrating that such programs have been discussed and agreed upon by a larger set of stakeholders than simply the local agency. Valley Water is a key stakeholder in the San Francisco Bay Area (“Bay Area”) IRWM Group, and seeks to secure funding for its infrastructure improvements through this involvement. The Bay Area’s most recent IRWM Plan was published in 2019 (San Francisco Bay Area IRWM Group 2019).

4.3.1 Imported Surface Water

Eight retailers in the northern part of Santa Clara County, including Valley Water, have contracts with the San Francisco Public Utilities Commission (SFPUC) to receive water from the SFPUC Regional Water System. Much of Valley Water’s water supply is imported water pumped out of the Sacramento-San Joaquin Delta (the Delta) and brought into Santa Clara County through the complex

infrastructure of the State Water Project (SWP) and the Central Valley Project (CVP). Valley Water has contractual rights (known as ‘Table A’ amounts) for 100,000 AFY from the SWP and additional rights for 152,500 AFY from the CVP. The actual amount of water delivered is virtually always less than the contractual amounts depending on hydrological conditions, environmental regulations, and conveyance limitations or infrastructure conditions.

Imported water may also be transferred and exchanged among CVP and SWP contractors as needed and available. Imported supplies are sent to Valley Water’s three drinking water treatment plants, sent to managed groundwater recharge areas, or stored in local, State, and federal reservoirs. Valley Water currently has 20 appropriative water rights licenses and one filed water right permit with the State Water Resources Control Board (SWRCB). Valley Water’s water rights total over 227,300 AFY. San José Water Company and Stanford University, which are both Valley Water retailers, also have their own surface water rights and contribute to local surface water availability.

4.3.2 Local Surface Water

In addition to purchasing imported surface water supplies, Valley Water also captures local surface water runoff in a system of ten reservoirs with a total storage capacity of about 166,000 acre-feet. Most of the reservoirs are sized for annual operations, storing water in winter for use in summer and fall. Supplies from the reservoirs are sent to drinking water treatment plants or diverted for aquatic habitat maintenance and groundwater recharge. On average, about 50,000 AFY of local runoff is recharged through existing recharge facilities, and Valley Water has multiple ongoing projects designed to increase stormwater capture and reuse capacity throughout the 2045 planning horizon. (Valley Water 2021b, 2021d).

4.3.3 Recycled Water

Recycled water is wastewater that goes through multiple levels of treatment and is generally suitable for non-potable use such as landscape irrigation, and purified water is highly treated wastewater that has passed through multiple treatment processes including microfiltration, reverse osmosis, and ultraviolet disinfection and produces water of potable quality as regulated by the SWRCB Division of Drinking Water. Using recycled and purified water can augment drinking and groundwater supplies and provide a reliable, drought-resilient, local water supply. Valley Water leads water reuse planning efforts within the County, resulting in current recycled water use of 17,000 AFY, or about five percent of the county’s water supply. Recycled water is used for non-potable uses such as landscape irrigation, industrial cooling, and dual plumbed facilities. This recycled water is produced at the four wastewater treatment plants in the county. It is important to note that the City of Morgan Hill does not currently utilize any recycled water.

Valley Water completed a Countywide Water Reuse Master Plan (CoRe Plan) in 2021 to “identify feasible opportunities to expand water reuse, improve water supply reliability, and increase regional self-reliance” (Valley Water 2021d). The CoRe Plan outlines Valley Water’s strategies toward achieving up to 24,000 AFY for purified, potable water reuse, and further contributes to groundwater sustainability by increasing overall supply availability and reliability.

5 Water Supply Reliability

As discussed in Section 4, *Water Supply Overview*, the City of Morgan Hill relies on two local groundwater subbasins which are managed for sustainability by Valley Water as the exclusive GSA for both subbasins. The City maintains a current UWMP which includes supply and use availability projections and is informed by Valley Water UWMP, thereby providing general consistency across the water supply planning documents. The following sections detail water supply availability and reliability projections from both local and regional water supply management plans.

5.1 Local Water Supply Projections

This section details the City's pre-project water demands, which reflect the amount of water consumed within its service territory prior to implementation of the proposed project (Table 6), as well as the amount of groundwater produced under pre-project conditions (Table 7). In addition, this section identifies projected future water supplies (Table 8), including with consideration to varying climatic conditions (Table 9) towards the purpose of assessing water supply availability and reliability for the proposed project.

5.1.1 Supply and Demand

Table 6, below, shows the city's actual water demands for 2020, which include Phase I of the previously approved Cochrane Commons Project.

Table 6 City of Morgan Hill Water Demand, Actual - 2020

Use Type	Volume (AF)
Single Family	3,736
Multi Family	1,214
Commercial	730
Landscape	1,255
Other	45
Losses	827
Total	7,808

Source: Morgan Hill 2021a

AF: Acre-feet

As discussed in Section 4.1.1, the City currently has a capacity to pump approximately 18,600 AFY and its firm capacity (a reliable estimate assuming the two largest wells are out of service) is approximately 16,700 AFY. Therefore, in comparison with the actual water demand of 7,808 AFY as shown above for 2020, there is sufficient supply available in the city to meet pre-project demands.

For comparison to 2020 demands, Table 7, below, shows the city's actual volume of groundwater pumped for years 2016 through 2020. The city has overlying landowner rights to the beneficial use of groundwater beneath its service area, as long as such use does not interfere with the sustainable management of the affected basin(s). As discussed previously, the Santa Clara and Llagas Subbasins are actively managed by Valley Water as the exclusive GSA for both subbasins, and both are

currently in sustainable conditions, actively replenished with imported surface water by Valley Water. Due to this successful management, the City of Morgan Hill is able to increase its available supply by constructing new groundwater wells and increasing the amount of groundwater pumped from the underlying subbasins, to meet increasing demands within the city. Therefore, the volumes of groundwater pumped by the City are directly correlated to water demands within the city.

Table 7 Groundwater Volume Pumped, 2016 - 2020

Groundwater Basin	Volume Pumped (AF)				
	2016	2017	2018	2019	2020
Santa Clara Subbasin	1,716	1,935	1,988	1,978	2,134
Llagas Subbasin	4,563	5,144	5,284	5,258	5,674
Total	6,279	7,079	7,272	7,236	7,808

Source: Morgan Hill 2021a

AF: Acre-Feet

The comparison provided above indicates a general upward trend in total water demand over the five years between 2016 and 2020. These are pre-project water demands, which include demands associated with the fully constructed Phase I, but do not include water demands associated with the revised Phase II, assessed herein as the proposed project.

As discussed in Section 4, *Water Supply Overview*, the City's 2021 WSMP assesses the construction of up to six new wells throughout the UGB to increase the available supply to match projected demands (Morgan Hill 2021b). The 2021 WSMP also discusses the construction of future recycled water infrastructure capable of producing up to 700 AFY of recycled water by 2030 and increasing to 2,900 AFY by 2045 (Morgan Hill 2021b). Table 8, below, identifies the water supply volumes projected to be available to the City through year 2045, which directly reflect the calculated natural recharge and sustainable yield rates of the Santa Clara and Llagas Subbasins, respectively, and the projected future development of recycled water.

Table 8 Projected Future Water Supplies 2025 - 2045

Water Supply Type	Water Supply Source	Volume (AF)				
		2025	2030	2035	2040	2045
Groundwater	Santa Clara Subbasin	2,300	2,300	2,300	2,300	2,300
Groundwater	Llagas Subbasin	22,500	22,500	22,500	22,500	22,500
Recycled Water	South Bay Water Recycling	0	700	1,500	2,200	2,900
Total		24,800	25,500	26,300	27,000	27,700

Source: Morgan Hill 2021a

AF: Acre-feet

Comparison of the tables above indicate that the projected supplies for years 2024 through 2045 are substantially greater than previous water demand, with a difference of nearly 17,000 acre-feet between the water demand in 2020 and the available supply in 2025. Table 3, *Projected Total Water Demand*, indicates that the proposed project water demand is approximately 223 AFY, 95 AFY of which was previously accounted for in the original design of Phase II, which was assessed in the 2005 EIR and informed the long-range planning documents including the City's UWMP. This

indicates that in total, the proposed project would increase local water demand by approximately 129 AFY, which is well within the available supplies, based upon the information provided above.

5.1.2 Supply Reliability

The primary source of disruption to city water supplies would be prolonged drought throughout the State which affected both natural recharge rates of the underlying subbasins and Valley Water's ability to recharge the basins with imported water. Therefore, the City's UWMP features a Water Service Reliability Assessment, which projects supply and demand under normal-water year, single-dry water year (drought), and consecutive-dry water year (sustained drought) conditions (Morgan Hill 2021a). These projections are shown below, in Table 9. The demands shown below are specific to the City of Morgan Hill and do not account for other users within the Santa Clara and Llagas Subbasins, which are detailed in the following Section 5.2, *Regional Water Supply Projections*.

Table 9 Morgan Hill Water Demand and Supply in Single and Multiple Dry Years

Use Type	Water Amount (AF)				
	2025	2030	2035	2040	2045
Average Year					
Supply	24,800	25,500	26,300	27,000	27,700
Demand	8,671	10,181	11,623	13,008	14,372
Difference	16,129	15,319	14,677	13,992	13,328
Single Dry Year					
Supply	19,840	20,400	21,040	21,600	22,160
Demand	8,671	10,181	11,623	13,008	14,372
Difference	11,169	10,219	9,417	8,592	7,788
Multiple Dry Year (Fifth Year of Drought¹)					
Supply	19,096	19,635	20,251	20,790	21,329
Demand	8,671	10,181	11,623	13,008	14,372
Difference	10,425	9,454	8,628	7,782	6,957

Source: Morgan Hill 2021a

1. Estimates from the fifth year of a prolonged drought are shown, as this would be the year with the highest demand and the proportionally smallest supply. Factors such as increased conservation during drought years are not included and it is assumed that projected demand would remain constant throughout the drought.

For the purposes of Table 9, above, the reduction in normal supply during the single driest year on record (1977) was utilized to calculate the reduction in supply during a single dry year in the future, and similar calculations were performed for the driest five-year period on record (1988-1992). In addition, to model the possibility for future supply disruption, such as but not limited to a substantial contamination event or condition, the city's largest supply well was assumed to be offline. To calculate the total projected potable water demand through the UWMP planning horizon of 2045, the City's 2020 urban water use target of 159 gallons per capita per day (gpcd) was applied to population projections contained in the 2016 General Plan. In addition, future water use reductions of up to five percent were calculated (Morgan Hill 2021a).

As shown in Table 9 above, the excess supply available beyond projected demands ranges from 16,129 AFY in a normal-year 2025 to 13,328 in normal-year 2045, and from 11,169 in a single-year

drought 2025 to 6,957 at the end of a five-year drought. These projections indicate that even in the case of severe drought there is excess supply available for the city to meet its water needs and the city currently has the firm capacity (16,700 AFY) to meet the supply need even without construction of future wells. However, as noted above, these projections do not account for other demands on the Santa Clara and Llagas Subbasins, which are detailed below, in Section 5.2.

5.2 Regional Water Supply Projections

Other entities that produce water supply from the Santa Clara and Llagas Subbasins include the City of Gilroy, which has higher water demands than the City of Morgan Hill, in addition to “Other Users” as identified by Valley Water (Valley Water 2021b). As discussed in Section 4.3, *Santa Clara Valley Water District*, Valley Water is the exclusive GSA for both the Santa Clara and Llagas Subbasins, and also supplements the Llagas Subbasin with imported surface water supplies as needed to maintain sustainable conditions (Valley Water 2021a, 2021b, 2021c). Table 10, below, provides an overview supply and demand by all known producers within the Llagas and Santa Clara Subbasins, during normal water year conditions. The supply shown below accounts for all sources available to Valley Water, including natural recharge, imported surface water, and recycled water.

Table 10 Projected Supply vs Demand Comparison, Regional Subbasins, Normal Water Year

Water User or Source	Volume (AF)				
	2025	2030	2035	2040	2045
Llagas Subbasin of the Gilroy-Hollister Valley Groundwater Basin					
City of Gilroy Demand	8,646	9,314	10,034	10,809	11,645
City of Morgan Hill Demand	6,301	6,890	7,357	7,855	8,337
Other Users Demand	32,019	30,674	29,954	28,534	27,390
Total Demand	46,966	46,878	47,345	47,198	47,372
Total Supply	47,320	47,580	48,373	48,188	48,342
Balance (Supply-Demand)	354	702	1,028	990	970
Santa Clara Subbasin (Coyote Valley Subarea) of the Santa Clara Valley Groundwater Basin					
City of Morgan Hill Demand	2,134	2,370	2,591	2,767	2,954
Other Users Demand	8,988	9,093	9,516	9,911	10,071
Total Demand	11,122	11,463	12,107	12,678	13,025
Total Supply	12,465	13,162	13,764	14,313	14,650
Balance (Supply-Demand)	1,343	1,699	1,657	1,635	1,625
Combined Available Supply	1,697	2,401	2,685	2,625	2,595

Source: Morgan Hill 2021a; Valley Water 2021b

AF: Acre-feet

Table 10 indicates that Valley Water projects excess supply to be available in non-drought conditions, with consideration to projected demands from the City of Morgan Hill, the City of Gilroy, and other users in the area.

5.3 Additional Future Supply

Additional future water supply sources that may be developed by the City are summarized below, and include increased recycled water development and use, infrastructure improvements to increase the ability to capture and store wet-year water in order to maintain supplies during drought, and increased conservation efforts to reduce overall demands on local supplies.

Regional Recycled Water

As mentioned in Section 4.3.3, recycled water currently consists of approximately five percent of Valley Water's total water supply. Total recycled water utilized for non-potable uses during 2020 was 17,000 AFY and Valley Water is actively planning to create the infrastructure necessary to also be purifying 24,000 AFY of potable water annually by 2045. In addition, as depicted in Table 8, the City plans to begin utilizing recycled water for non-potable uses as well. Recycled and purified water will become an increasingly important part of the total water supply in the coming decades, and is anticipated to reduce future reliance on imported water (Valley Water 2021d).

Infrastructure Improvements

Morgan Hill's 2020 WSMP identifies numerous infrastructure improvements that can serve to both increase local water supply and increase the ability to capture and store wet-year water in order to maintain supplies during drought (Morgan Hill 2021b). Valley Water's GWMP and WSCP similarly identify and assess infrastructure improvements designed to improve supply reliability through expanded storage (Valley Water 2021a, 2021c). These projects include dam improvements, seismic retrofits, and transfer pipelines; in total Valley Water expects to see an increase of up to 27,440 AFY in available supply from these infrastructure improvements (Valley Water 2021a, 2021c).

Conservation Efforts

Valley Water's 2020 WSCP includes a number of conservation measures to be implemented both short-and long-term in the event of prolonged drought, organized across various stages. In addition, Valley Water has invested heavily in conservation efforts including demand management and stormwater recapture. Water savings from these efforts were approximately 75,000 AFY region-wide in 2020, and Valley Water's WSMP anticipates raising these savings to 99,000 AFY by 2030 and 110,000 AFY by 2040 (Valley Water 2021a). In addition, the City of Morgan Hill has implemented numerous water conservation measures, including appointing a Water Conservation Coordinator, offering conservation rebates, extensive public outreach programs, and using conservation pricing in their water rates (Morgan Hill 2021a).

6 Conclusions

In accordance with California Water Code, as amended by SB 610, this WSA identifies and characterizes all known and potential water demands of the project, in comparison to the water supplies available to the project over a 20-year projection, with consideration to varying drought conditions and ongoing long-term supply management activities. Water supplies considered for the purposes of this WSA include the supply of the local purveyor, the City, and the supply of the agency responsible for management of those supplies, Valley Water.

The project's annual water demand after full buildout is conservatively estimated at approximately 223 AFY; of this amount, 94 AFY was previously assessed in the certified 2005 EIR for the Cochrane Commons Project. Those 94 AFY have been accounted for in the local water supply management documents, including the UWMPs of both the City and Valley Water, which are used to inform this WSA. Therefore, the new water demand associated with the proposed project, that is not already accounted for in local supply management plans, is approximately 129 AFY. This new demand is well within the available supply, including at the end of a five-year drought, which has been calculated to be 6,957 AFY, as shown in Table 9, *Morgan Hill Water Demand and Supply in Single and Multiple Dry Years*. The project's projected water demand of 129 AFY represents approximately two percent of the available surplus supply during extended drought conditions. This increases to approximately seven percent (during a normal water year) of available supply in 2025, reducing to approximately five percent of available supply in 2045, when accounting for other users of the Santa Clara and Llagas Subbasin, as reported by Valley Water.

The information and analysis provided in this WSA indicate that sufficient water supply is available to meet the water demands of the proposed project under average water year, single-dry water year, and multiple-dry water year scenarios, over a future projection of at least 20 years. Therefore, based on the information and analysis provided in this WSA, it is reasonably determined that sufficient water supply is available to the proposed project.

7 References

- DWR (California Department of Water Resources). 2003. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. Available: http://www.water.ca.gov/pubs/use/sb_610_sb_221_guidebook/guidebook.pdf. Accessed March 2022.
- _____. 2004a. California's Groundwater Bulletin 118: Santa Clara Valley Groundwater Basin, Santa Clara Subbasin. Available: http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/2-9.02.pdf. Accessed February 2022.
- _____. 2004b. California's Groundwater Bulletin 118: Gilroy-Hollister Groundwater Basin, Llagas Subbasin. Available: http://www.water.ca.gov/pubs/groundwater/bulletin_118/basindescriptions/3-3.01.pdf. Accessed February 2022.
- _____. 2020. Urban Water Management Plan Guidebook 2020. Available: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf>. Accessed February 2022
- _____. 2022. SGMA Data Portal web tool. Available: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer>. Accessed February 2022.
- Morgan Hill, City of. 2016. Morgan Hill 2035 General Plan. Adopted July 27, 2016. Revised December 6, 2017. Available: <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>. Accessed February 2022.
- _____. 2021a. 2020 Urban Water Management Plan (UWMP). October. Available: https://www.morgan-hill.ca.gov/DocumentCenter/View/22998/MorganHill_2020-UWMP-?bidId=. Accessed March 2022.
- _____. 2021b. Morgan Hill Water System Master Plan (WSMP). Available: <https://www.morgan-hill.ca.gov/DocumentCenter/View/40073/2021-Water-System-Master-Plan-Update->. Accessed February 2022.
- San Francisco Bay Area IRWM (Integrated Regional Water Management) Group. 2019. Integrated Regional Water Management Plan. October. Available: <https://sfpuc.sharefile.com/share/view/sa1510f92ac4a4743a8330af44426bb07>. Accessed February 2022
- Valley Water (Santa Clara Valley Water District). 2020. 2019 Annual Groundwater Report. Available : https://www.valleywater.org/sites/default/files/2020-09/2019_Annual_Groundwater_Report_Web_Version.pdf. Accessed February 2022.
- _____. 2021a. 2020 Water Shortage Contingency Plan (WSCP). Available: <https://fta.valleywater.org/dl/UvrQU06QpP>. Accessed February 21, 2022.
- _____. 2021b. 2020 Urban Water Management Plan. Available: <https://fta.valleywater.org/dl/pggls1SeCr>. Accessed February 21, 2022.

- _____. 2021c. 2021 Groundwater Management Plan (GWMP) for the Santa Clara and Llagas Subbasins. Available: https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2021_GWMP_web_version.pdf. Accessed March 2022.
- _____. 2021d. Countywide Water Reuse Master Plan (CoRe Plan). June. Available: <https://fta.valleywater.org/fl/XNyG7Fja6T#folder-link/?p=a767632b-f3ee-48c7-853e-db56202eba5b>. Accessed March 2022.

Appendix B

Notice of Preparation (NOP) and Comments on the NOP



17575 Peak Avenue
Morgan Hill, CA 95037-4128
TEL: (408) 778-6480
FAX: (408) 779-7236
www.morganhill.ca.gov

NOTICE OF PREPARATION

Date **Dec 3, 2021**

Subject: **Notice of Preparation of a Draft Supplemental Environmental Impact Report and Scoping Meeting for the Cochrane Commons Phase II Project**

This Notice of Preparation is sent pursuant to Section 15082 of the California Environmental Quality Act (CEQA) Guidelines to announce the initiation of the SEIR process and to solicit comments from responsible and trustee agencies and interested parties concerning the scope of issues to be addressed in the SEIR. The Draft SEIR will address the potential physical and environmental effects of the proposed project in accordance with the CEQA. In preparing the Draft SEIR, the City will consider comments on the scope of the Draft SEIR received in response to this Notice of Preparation.

The City of Morgan Hill (City), acting as Lead Agency, will prepare a Draft Supplemental Environmental Impact Report (Draft SEIR) for the **Cochrane Commons Phase II Project** (project) as described below.

Lead Agency: City of Morgan Hill

Project Title: Cochrane Commons Phase II Project

Project Proponent: Morgan Hill Retail Ventures LP, 1556 Parkside Drive, Walnut Creek, California

Project Location: The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Shopping Center. It is bounded by Depaul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101. (Assessor's Parcel Numbers: 728-37-024 thru 026, 028, 042 thru 052, and 067 thru 068)

Project Background: In 2005, an EIR was certified for the Cochrane Commons Shopping Center, a project that included development of 590,100 square feet of retail space, a 12-pump gas station, and a 63,200 square-foot movie theatre. The project was proposed to be built out in two phases, with the first phase covering the southwest portion of the site, and the second phase covering the northeast portion of the site. The 2005 EIR covered both Phase I and Phase II of project construction. Construction of Phase I of the project was completed in 2007, consisting of 262,560 square feet of commercial retail, including a 127,732 square-foot Target store. Two commercial structures were also constructed on the eastern portion of the project site within the Phase II area and are currently occupied by a gas station and fast-food restaurant. In total, 303,429 square feet of retail space has been constructed, along with the gas station.

Project Description:

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to Mixed Use Flex (MUF) for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, and swimming pool would also be provided for on-site residents. The project would include 1,367 parking spaces.

Required Project Approvals include a General Plan Amendment and Planned Development Amendment (Zoning Amendment).

Potential Impacts of the Project: The Draft SEIR will identify the significant environmental effects anticipated to result from the development and operation of the project as proposed. The SEIR will address the following specific environmental categories as related to the proposed project:

- Air Quality
- Greenhouse Gas Emissions
- Noise
- Transportation

Additional topics may be included based on the results of the scoping process. All other topics included on CEQA Guidelines Appendix G checklist will be discussed in an Initial Study that will be included as an appendix to the SEIR.

Public Review Period: A 30-day public review period will begin on December 3, 2021. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but no later than 30 days after receipt of this notice. Please focus your comments on the project's potential environmental impacts and recommendations for methods of avoiding, reducing, or otherwise mitigating those impacts. If you are a governmental agency with discretionary authority over initial or subsequent aspects of this project, describe that authority and provide comments regarding potential environmental effects that are germane to your agency's area of responsibility. (No responsible or trustee agencies have been identified for this project.) We also respectfully request the name of a contact person for your agency.

Written comments must be submitted to the Lead Agency by mail, email or in person no later than 5:00 p.m. on January 3, 2022.

Please submit comments to:

City of Morgan Hill
Development Services
Attention: Jennifer Carman, Development Services Director
17575 Peak Avenue, Morgan Hill, California 95037
Email: Jennifer.carman@morganhill.ca.gov

PUBLIC SCOPING MEETING

A public scoping meeting will be held on Thursday, December 16, 2021 at 6pm via zoom and is open to the public. The scoping meeting gives interested persons the opportunity to submit comments verbally rather than in writing. All interested persons may participate and be heard by joining the meeting at: <https://bit.ly/12162021ScopingMeeting> or by calling into the meeting at (669) 900-9128 and entering in the Webinar ID: 837 8128 4506.

SCOPING MEETING

DATE: Thursday, December 16, 2021

TIME: 6:00 p.m.

LOCATION: Video Conference
Weblink: <https://bit.ly/12162021ScopingMeeting>
Phone: (669) 900-9128 Webinar ID: 837 8128 4506

Due to the March 16, 2020 Santa Clara County Public Health Department Order to shelter in place, the project location, summary description and list of potential environmental effects may be viewed on-line at: <http://www.morgan-hill.ca.gov/2069/Cochrane-Commons> rather than in person. Further details may be obtained from the Development Services Department at telephone number (408) 778-6480 or planning@morganhill.ca.gov.



TN-20211202-01

TAMIEN NATION
P.O. Box 8053, San Jose, California 95155
(707) 295-4011 tamien@tamien.org

January 4, 2022

Jennifer Carman, Development Services Director

City of Morgan Hill

Sent Via Email: Jennifer.carman@morganhill.ca.gov

RE: Formal Request for Tribal Consultation Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21080.3.1, subds. (b),(d) and (e),

Project: Cochrane Commons Phase II Project

Dear Ms. Carman,

This letter constitutes a formal request for tribal consultation under the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)) for the mitigation of potential project impacts to tribal cultural resource for the above referenced project. Tamien Nation requested formal notice and information for all projects within your agency's geographical jurisdiction and received a notification letter December 3, 2021.

Tamien Nation requests consultation on the following topics checked below, which shall be included in consultation if requested (Public Resources Code section 21080.3.2

- ☒ Alternatives to the project
- ☒ Recommended mitigation measures
- ☒ Significant effects of the project

Tamien Nation also requests consultation on the following discretionary topics checked below (Public Resources Code section 21080.3.2(, subd. (a):

- ☒ Type of environmental review necessary
- ☒ Significance of tribal cultural resources, including any regulations, policies standards used by you agency or to determine significance of tribal cultural resources
- ☒ Significance of the project's impacts on tribal cultural resources

Project alternatives and/or appropriate measures for preservation or mitigation that we may recommend, including, but not limited to:

- (1) Avoidance and preservation of the resources in place, pursuant to Public Resources Code section 21084.3, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
- (2) Treating the resources with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resources, including but not limited to the following:
 - a. Protecting the cultural character and integrity of the resource;
 - b. Protection the traditional use of the resource; and
 - c. Protecting the confidentiality of the resource.
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- (4) Protecting the resource.

Additionally, Tamien Nation would like to receive any cultural resources assessments or other assessments that have been completed on all or part of the project's potential "area of project effect" (APE), including, but not limited to:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. The request form can be found at http://www.nahc.ca.gov/slf_request.html. USGS 7.5-minute quadrangle name, township, range, and section required for the search.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

We would like to remind your agency that CEQA Guidelines section 15126.4, subdivision (b)(3) states that preservation in place is the preferred manner of mitigating impacts to archaeological sites. Section 15126.4, subd. (b)(3) of the CEQA Guidelines has been interpreted by the California Court of Appeal to mean that “feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of impacts.” *Madera Oversight Coalition v. County of Madera* (2011) 199 Cal.App.4th 48, disapproved on other grounds, *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439.

Tamien Nation expects to begin consultation within 30 days of your receipt of this letter. Please contact Tamien Nation lead contacts:

Quirina Geary,
Chairwoman
PO Box 8053
San Jose, CA 95155
(707) 295-4011
qgeary@tamien.org

Johnathan Costillas
Tamien Nation, THPO
PO Box 866
Clearlake Oaks, CA 95423
(925) 336-5359
jcostillas@tamien.org

Please refer to identification number TN-20211202-01 in any correspondence concerning this project. Thank you for providing us with this notice and the opportunity to comment.

Sincerely,



Quirina Geary
Chairwoman

cc: Native American Heritage Commission



File: 33033
Cochrane Channel

January 3, 2022

Ms. Jennifer Carman
Development Services Director
City of Morgan Hill Development Services
17575 Peak Avenue
Morgan Hill, CA 95037
Jennifer.Carman@morganhill.ca.gov

Subject: Notice of Preparation for Draft Supplemental Environmental Impact Report (SEIR) - Phase 2
Cochrane Commons Development

Dear Ms. Carman:

The Santa Clara Valley Water District (Valley Water) has received the Notice of Preparation for the Draft SEIR, which will consider the proposed changes to Phase 2 of the Cochrane Commons development. Valley Water staff have reviewed the proposed changes to Phase 2 and have the following comments:

Hydraulics and Hydrology

1. The runoff analysis from the 2005 EIR should be reviewed to ensure that Phase 2 will not result in any increases in runoff (volume and rate) or changes to where runoff will be directed; if either of these are different from what was initially considered in the 2005 EIR, the SEIR should analyze and/or address these differences.

Water Supply/Water Quality

1. The Supplemental EIR should include a Water Supply Assessment (WSA) (or update if there was a previous WSA) and incorporate it into the EIR. Valley Water requests the opportunity to review the draft WSA to comment on the consistency with countywide water supply planning efforts; especially as future growth will be relying on the Llagas groundwater basin, which is managed by Valley Water.
2. New development should minimize water and associated energy use by incorporating on-site reuse for both storm and graywater and requiring water conservation measures above State standards (i.e., CALGreen). To reduce or avoid adverse impacts to water supply, the City and applicant should consider implementing measures from the Model Water Efficient New Development Ordinance, which include:



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January 3, 2022

Notice of Preparation for Draft Supplemental EIR for Phase 2 Cochrane Commons Project

- Hot water recirculation systems.
 - Graywater dual distribution plumbing.
 - Alternate water sources collection (like cisterns) and recycled water connections as feasible.
 - Pool and spa covers.
 - Encourage non-potable reuse of water like recycled water, graywater, and rainwater/stormwater in new development and remodels through installation of dual plumbing for irrigation, toilet flushing, cooling towers, and other non-potable water uses.
 - Require dedicated landscape meters where applicable.
 - Require installation of separate submeters to each unit in multi-family developments and individual spaces within commercial buildings to encourage efficient water use.
 - Weather- or soil-based irrigation controllers.
3. The project site provides natural groundwater recharge. Development of the site will reduce natural groundwater recharge. The impact of reduced natural groundwater recharge should be analyzed as a cumulative impact. To minimize impacts, Valley Water recommends incorporating Low Impact Development / Green Infrastructure (LID/GI) best practices such as preserving natural landscape features and minimizing effective imperviousness. By creating functional and appealing site drainage, stormwater can be treated as a resource rather than a waste product, while also protecting ground and surface water quality.

If you have any questions, please feel free to contact me.

Thank you,

DocuSigned by:

2810C0F620844F8...

BENJAMIN HWANG, P.E.

ASSISTANT ENGINEER II - CIVIL

Community Projects Review Unit

Watersheds Design and Construction Division

bhwang@valleywater.org

Tel. (408) 630-3066 Cell. (408) 510-0768

Cc: U. Chatwani, Y. Arroyo, B. Hwang., M. Richert., M. Martin, S. Greene, V. De La Piedra, File

From: Dipak Padia <dipakpadia8@gmail.com>

Sent: Monday, January 3, 2022 9:19 AM

To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>

Subject: [EXTERNAL] Notice of Preparation of a Draft Supplemental Environmental Impact Report and Scoping Meeting for the Cochrane Commons Phase II Project

Hello Jennifer,

Happy New Year!

January 3, 2022

Dear City of Morgan Hill CA,

RE: Notice of Preparation – **Date:** Dec 3, 2021

Subject: Notice of Preparation of a Draft Supplemental Environmental Impact Report and Scoping Meeting for the Cochrane Commons Phase II Project

I submit my comments regarding Cochrane Commons Phase II Project. I am against this project moving forward, as it is going to cause a major environmental hazard in and around the residential area. (Mission Ranch) Major traffic impact on and off the Cochrane Road exit to and from HWY 101. The cars that will be moving in out of the Cochrane Commons Phase II Project is going to add additional pollution in and around Mission Ranch Neighborhood.

Additionally, a School is forthcoming off Peet Rd - S.G. Borello School, which will bring additional traffic to the neighborhood. The pollution that will be caused will not only harm the individuals in Morgan Hill but will also harm the crops that are grown locally. This will impact many households on a financial level. I am hoping Morgan Hill City Council members realize the traffic impact it is going to bring on Cochrane Road. Please provide details of the Traffic impact on this project to the Morgan Hill CA Residents, as well as the financial impact it will have on families. Also, information will need to be provided on the health impact that will be caused to society.

This is also going to cause a devalue of housing value for the Mission Range Neighborhood in the longer run due to the Traffic impact etc.

I understand that Morgan Hill CA City has a shortfall of its budget for the next 5 years; thus, cause and making and voting for projects that disregards with no care of the Morgan Hill CA Residents. This must stop as you are elected officials for the Morgan Hill CA Residents.

As per our elected officials it is their responsibility for the well-being of all Morgan Hill Residents.

Dipak Padia
Morgan Hill CA Resident

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov



December 30, 2021

SCH #: 2021110402
GTS #: 04-SCL-2021-00980
GTS ID: 24850
Co/Rt/Pm: SCL/101/17.96

Jennifer Carman
Development Services Director
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

Re: Cochrane Commons Phase 2 Project Notice of Preparation (NOP) for Draft Environmental Impact Report (DEIR)

Dear Jennifer Carman:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Cochrane Commons Phase 2 Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated, and efficient transportation system. The following comments are based on our review of the December 2021 NOP.

Project Understanding

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I site near US-101. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to Mixed Use Flex (MUF) for the Phase II development area. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, and swimming pool would also be provided for on-site residents. The project would include 1,367 parking spaces.

Travel Demand Analysis

With the enactment of Senate Bill (SB) 743, Caltrans is focused on maximizing efficient development patterns, innovative travel demand reduction strategies, and multimodal improvements. For more information on how Caltrans assesses Transportation Impact Studies, please review Caltrans' Transportation Impact Study Guide ([link](#)).

If the project meets the screening criteria established in the City's adopted Vehicle Miles Traveled (VMT) policy to be presumed to have a less-than-significant VMT impact and exempt from detailed VMT analysis, please provide justification to support the exempt status in align with the City's VMT policy. Projects that do not meet the screening criteria should include a detailed VMT analysis in the DEIR, which should include the following:

- VMT analysis pursuant to the City's guidelines. Projects that result in automobile VMT per capita above the threshold of significance for existing (i.e. baseline) city-wide or regional values for similar land use types may indicate a significant impact. If necessary, mitigation for increasing VMT should be identified. Mitigation should support the use of transit and active transportation modes. Potential mitigation measures that include the requirements of other agencies such as Caltrans are fully enforceable through permit conditions, agreements, or other legally-binding instruments under the control of the City.
- A schematic illustration of walking, biking and auto conditions at the project site and study area roadways.
- The project's primary and secondary effects on pedestrians, bicycles, travelers with disabilities and transit performance should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access to pedestrians, bicycle, and transit facilities must be maintained.
- Clarification of the intensity of events/receptions to be held at the location and how the associated travel demand and VMT will be mitigated.

Transportation Impact Fees

Please identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multi-modal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. We also strongly support measures to increase sustainable mode shares, thereby reducing VMT.

Construction-Related Impacts

Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: <https://dot.ca.gov/programs/traffic-operations/transportation-permits>. Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the STN.

Utilities

Any utilities that are proposed, moved or modified within Caltrans' ROW shall be discussed. If utilities are impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications require a Caltrans-issued encroachment permit.

Lead Agency

As the Lead Agency, the City of Morgan Hill is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

Encroachment Permit

Please be advised that any permanent work or temporary traffic control that encroaches onto the State ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating the State ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

Jennifer Carman, Development Services Director
December 30, 2021
Page 4

To download the permit application and to obtain more information on all required documentation, visit <https://dot.ca.gov/programs/traffic-operations/ep/applications>.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,

A handwritten signature in black ink that reads "Mark Leong". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

County of Santa Clara

Roads and Airports Department

101 Skyport Drive
San Jose, CA 95110-1302
(408) 573-2460 FAX 441-0276



December 29, 2021

Jennifer Carman,
Development Services,
17575 Peak Avenue,
Morgan Hill, CA 95037,
jennifer.carman@morganhill.ca.gov

SUBJECT: Notice of Preparation of a Draft Supplemental Environmental Impact Report and Scoping Meeting for the Cochrane Commons Phase II Project

The County of Santa Clara Roads and Airports Department (The County) appreciates the opportunity to review the Notice of Preparation of a Draft Supplemental Environmental Impact Report and Scoping Meeting for the Cochrane Commons Phase II Project. We submit the following comments:

- Please identify and provide mitigations for impacted County facilities as a result of the Phase II project amendment in the SEIR.
- Has the City of Morgan Hill adopted a Mitigation Monitoring and Reporting Program (MMRP) as identified in Mitigation Monitoring Section of the 2005 EIR?

Thank you again for your continued outreach and coordination with the County. If you have any questions or concerns about these comments, please feel free to contact me at ben.aghegnehu@rda.sccgov.org

Thank you,



From: Caroline Hobbs <caroline@rewardrealty.org>
Sent: Friday, December 3, 2021 10:43 AM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Cochrane Commons

Hi Jennifer,

RE: Notice of Preparation – **Date:** Dec 3, 2021

Subject: Cochrane Commons

Our neighbor received a letter regarding a meeting on 10/16, however most of our neighbors did not, and we live adjacent to the proposed development.

Although I appreciate that you have addressed our concerns regarding apartments and protecting our homes values, I want to point out that our home are now selling for over \$2M. Any kind of rentals or attached dwellings will not be good for our needs as a community.

As a community we are vehemently against a hotel going in next to our homes. We have expressed this in the past as well.

As mentioned, your plans would propose a change in zoning which we are also against. When we purchased our homes, it was sold to us with the understanding that restaurants, stores, grocery, maybe a movie theater would go in here. I do not believe any of the changes to current zoning are in the best interest for us as neighbors and residents of Morgan Hill.

This corner of town is the nicest and most expensive area. Many local business owners have homes here for the luxury feel this area has to offer. Please look at communities like Los Gatos, Saratoga, Los Altos, Palo Alto, Willow Glen for inspiration on what our community both wants and needs.

--

Caroline Hobbs-Broker

Silicon Valley Real Estate Expert, DRE #: 01901869

Phone 650-440-0050

Email Caroline@RewardRealty.org

Website www.RewardRealty.org

From: Andy Froumis <afroumis@aol.com>
Sent: Friday, December 3, 2021 6:37 AM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Cochrane Commons Phase II Project

RE: Notice of Preparation – **Date:** Dec 3, 2021

Subject: Cochrane Commons Phase II Project

Since I will not be able to attend the meeting, I wanted to provide some input for your consideration. I saw the plans included a 12 pump gas station but did not identify any charging stations for electric vehicles. The transition to EV's is accelerating here in California and a Tesla supercharger location is already in the Target parking lot. For other EV vehicles, besides Teslas, charging stations are needed to help with the transition from Internal combustion vehicles to electric. It would show forward thinking to include these facilities for the future. Please consider including electric charging stations that give their drivers time to shop in close proximity facilities.

Respectfully,

A.J. Froumis Ph.D.

Appendix C

California Emissions Estimator Model Outputs

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Cochrane Commons Phase II - Full Buildout GHG

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	939.00	Space	0.00	375,600.00	0
Hotel	140.00	Room	0.00	203,280.00	0
Apartments Mid Rise	394.00	Dwelling Unit	29.57	410,000.00	1127
Condo/Townhouse	104.00	Dwelling Unit	0.00	175,000.00	297
Strip Mall	135.00	1000sqft	0.00	135,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2030
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MWhr)	2	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Morgan Hill, Santa Clara County --> BAAQMD. Silicon Valley Clean Energy is the electricity provider.

Land Use - 104 Townhomes, 394 apartment units, 135,000 square feet of retail, and 140 key hotel. Parking lot with 939 stalls and 428 garage spaces, only modeling the parking lot stalls since residences include parking

Construction Phase - Operational Model, No Construction Scenario

Grading -

Vehicle Trips - modeling traffic in a separate output to be consistent with the traffic trip generation rate land uses

Woodstoves - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction no hearths

Area Coating - BAAQMD Regulation 8, Rule 3: Flat coatings 50 g/L and traffic markings 100 g/L

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Energy Use - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction

Water And Wastewater - Wastewater treated at a wastewater treatment plant managed by South County Regional Wastewater Authority, all aerobic plant

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps - 3x 150 kW diesel generators with 201 HP. Testing for 50 hours per year or 0.14 hours per day

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	T24NG	5,226.68	0.00
tblEnergyUse	T24NG	14,104.62	0.00
tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	2.34	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	59.10	0.00
tblFireplaces	NumberGas	15.60	0.00
tblFireplaces	NumberNoFireplace	15.76	0.00
tblFireplaces	NumberNoFireplace	4.16	0.00
tblFireplaces	NumberWood	66.98	0.00
tblFireplaces	NumberWood	17.68	0.00
tblLandUse	LandUseSquareFeet	394,000.00	410,000.00
tblLandUse	LandUseSquareFeet	104,000.00	175,000.00

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblLandUse	LotAcreage	8.45	0.00
tblLandUse	LotAcreage	4.67	0.00
tblLandUse	LotAcreage	10.37	29.57
tblLandUse	LotAcreage	6.50	0.00
tblLandUse	LotAcreage	3.10	0.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.14
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	ST_TR	4.91	0.00
tblVehicleTrips	ST_TR	8.14	0.00
tblVehicleTrips	ST_TR	8.19	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	4.09	0.00
tblVehicleTrips	SU_TR	6.28	0.00
tblVehicleTrips	SU_TR	5.95	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	5.44	0.00
tblVehicleTrips	WD_TR	7.32	0.00
tblVehicleTrips	WD_TR	8.36	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	7.88	0.00
tblWoodstoves	NumberCatalytic	2.08	0.00
tblWoodstoves	NumberNoncatalytic	7.88	0.00
tblWoodstoves	NumberNoncatalytic	2.08	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Highest

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Waste						0.0000	0.0000		0.0000	0.0000	90.8344	0.0000	90.8344	5.3682	0.0000	225.0384
Water						0.0000	0.0000		0.0000	0.0000	16.2741	0.3115	16.5856	0.0560	0.0354	28.5324
Total	4.3623	0.1118	3.7621	3.2000e-004	0.0000	0.0242	0.0242	0.0000	0.0242	0.0242	107.1085	22.4501	129.5586	5.4316	0.0354	275.8949

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Stationary	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Waste						0.0000	0.0000		0.0000	0.0000	90.8344	0.0000	90.8344	5.3682	0.0000	225.0384
Water						0.0000	0.0000		0.0000	0.0000	16.2741	0.3115	16.5856	0.0560	0.0354	28.5324
Total	4.3623	0.1118	3.7621	3.2000e-004	0.0000	0.0242	0.0242	0.0000	0.0242	0.0242	107.1085	22.4501	129.5586	5.4316	0.0354	275.8949

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/2/2022	5/1/2022	5	0	

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

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

3.1 Mitigation Measures Construction

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2022

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	0.00	0.00	0.00		
Condo/Townhouse	0.00	0.00	0.00		
Hotel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Condo/Townhouse	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Hotel	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Parking Lot	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Strip Mall	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4.5958	4.5958	0.0000	0.0000	4.5958
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.52337e+006	1.3820	0.0000	0.0000	1.3820
Condo/Townhouse	504241	0.4574	0.0000	0.0000	0.4574
Hotel	1.50427e+006	1.3647	0.0000	0.0000	1.3647
Parking Lot	131460	0.1193	0.0000	0.0000	0.1193
Strip Mall	1.40265e+006	1.2725	0.0000	0.0000	1.2725
Total		4.5958	0.0000	0.0000	4.5958

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.52337e+006	1.3820	0.0000	0.0000	1.3820
Condo/Townhouse	504241	0.4574	0.0000	0.0000	0.4574
Hotel	1.50427e+006	1.3647	0.0000	0.0000	1.3647
Parking Lot	131460	0.1193	0.0000	0.0000	0.1193
Strip Mall	1.40265e+006	1.2725	0.0000	0.0000	1.2725
Total		4.5958	0.0000	0.0000	4.5958

6.0 Area Detail**6.1 Mitigation Measures Area**

No Hearths Installed

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Unmitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

7.0 Water Detail

7.1 Mitigation Measures Water

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.5856	0.0560	0.0354	28.5324
Unmitigated	16.5856	0.0560	0.0354	28.5324

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	25.6707 / 16.1837	9.2597	0.0313	0.0198	15.9271
Condo/Townhouse	6.77602 / 4.27184	2.4442	8.2500e-003	5.2100e-003	4.2041
Hotel	3.55135 / 0.394594	1.2752	4.3200e-003	2.7300e-003	2.1975
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.99979 / 6.1289	3.6065	0.0122	7.6900e-003	6.2037
Total		16.5856	0.0560	0.0354	28.5324

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	25.6707 / 16.1837	9.2597	0.0313	0.0198	15.9271
Condo/Townhouse	6.77602 / 4.27184	2.4442	8.2500e-003	5.2100e-003	4.2041
Hotel	3.55135 / 0.394594	1.2752	4.3200e-003	2.7300e-003	2.1975
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	9.99979 / 6.1289	3.6065	0.0122	7.6900e-003	6.2037
Total		16.5856	0.0560	0.0354	28.5324

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	90.8344	5.3682	0.0000	225.0384
Unmitigated	90.8344	5.3682	0.0000	225.0384

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	181.24	36.7901	2.1742	0.0000	91.1459
Condo/Townhouse	47.84	9.7111	0.5739	0.0000	24.0588
Hotel	76.65	15.5593	0.9195	0.0000	38.5474
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	141.75	28.7740	1.7005	0.0000	71.2863
Total		90.8344	5.3682	0.0000	225.0384

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	181.24	36.7901	2.1742	0.0000	91.1459
Condo/Townhouse	47.84	9.7111	0.5739	0.0000	24.0588
Hotel	76.65	15.5593	0.9195	0.0000	38.5474
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	141.75	28.7740	1.7005	0.0000	71.2863
Total		90.8344	5.3682	0.0000	225.0384

9.0 Operational Offroad

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

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.14	50	201	0.73	Diesel

Boilers

Cochrane Commons Phase II - Full Buildout GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Equipment Type	Number
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10.1 Stationary Sources**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213
Total	0.0247	0.0691	0.0631	1.2000e-004		3.6400e-003	3.6400e-003		3.6400e-003	3.6400e-003	0.0000	11.4810	11.4810	1.6100e-003	0.0000	11.5213

11.0 Vegetation

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG****Bay Area AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	939.00	Space	0.00	375,600.00	0
Hotel	140.00	Room	0.00	203,280.00	0
Single Family Housing	498.00	Dwelling Unit	29.57	585,000.00	1424
Strip Mall	135.00	1000sqft	0.00	135,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2030
Utility Company	Silicon Valley Clean Energy				
CO2 Intensity (lb/MW hr)	2	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Morgan Hill, Santa Clara County --> BAAQMD. Silicon Valley Clean Energy is the electricity provider.

Land Use - 104 Townhomes, 394 apartment units modeled as 498 single-family DU for consistency with traffic, 135,000 square feet of retail, and 140 key hotel. Parking lot with 939 stalls

Construction Phase - Operational Model, No Construction Scenario

Grading -

Vehicle Trips - 8.02 trips/DU for residences, 31.8 trips/sf for retail, 11.79 trips/room for the hotel. The rates accounts for all reductions except passby reduction

Woodstoves - City of Morgan Hill Chapter 15.63, 15.63.040 ordinance: All electric construction no hearths

Area Coating - BAAQMD Regulation 8, Rule 3: Nonflat coatings 100 g/L and traffic markings 100 g/L

Energy Use - Mobile Source Emissions Model

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water And Wastewater - Mobile Source Emissions Model

Solid Waste - Mobile Source Emissions Model

Area Mitigation -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblEnergyUse	LightingElect	2.35	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	LightingElect	5.25	0.00
tblEnergyUse	NT24E	3.22	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24E	2.68	0.00
tblEnergyUse	NT24NG	4.75	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	1.83	0.00
tblEnergyUse	T24E	68.41	0.00
tblEnergyUse	T24E	2.46	0.00
tblEnergyUse	T24NG	39.16	0.00
tblEnergyUse	T24NG	23,474.54	0.00
tblEnergyUse	T24NG	2.34	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	124.50	0.00
tblFireplaces	NumberNoFireplace	39.84	0.00

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFireplaces	NumberWood	214.14	0.00
tblGrading	AcresOfGrading	0.00	30.00
tblLandUse	LandUseSquareFeet	896,400.00	585,000.00
tblLandUse	LotAcreage	8.45	0.00
tblLandUse	LotAcreage	4.67	0.00
tblLandUse	LotAcreage	161.69	29.57
tblLandUse	LotAcreage	3.10	0.00
tblSolidWaste	SolidWasteGenerationRate	76.65	0.00
tblSolidWaste	SolidWasteGenerationRate	598.08	0.00
tblSolidWaste	SolidWasteGenerationRate	141.75	0.00
tblVehicleTrips	WD_TR	8.36	11.79
tblVehicleTrips	WD_TR	9.44	8.02
tblVehicleTrips	WD_TR	44.32	31.80
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	3,551,347.80	0.00
tblWater	IndoorWaterUseRate	32,446,704.76	0.00
tblWater	IndoorWaterUseRate	9,999,790.40	0.00
tblWater	OutdoorWaterUseRate	394,594.20	0.00
tblWater	OutdoorWaterUseRate	20,455,531.26	0.00
tblWater	OutdoorWaterUseRate	6,128,903.79	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	19.92	0.00
tblWoodstoves	NumberNoncatalytic	19.92	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
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Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Highest

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3749	3.1622	31.4363	0.0559	6.9736	0.0584	7.0320	1.8633	0.0558	1.9191	0.0000	5,440.5168	5,440.5168	0.3572	0.2610	5,527.2208

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3749	3.1622	31.4363	0.0559	6.9736	0.0584	7.0320	1.8633	0.0558	1.9191	0.0000	5,440.5168	5,440.5168	0.3572	0.2610	5,527.2208

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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	5/2/2022	5/1/2022	5	0	

Acres of Grading (Site Preparation Phase): 30

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

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

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 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					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Site Preparation - 2022****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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137
Unmitigated	3.0374	3.1196	27.7373	0.0557	6.9736	0.0378	7.0115	1.8633	0.0353	1.8986	0.0000	5,434.4549	5,434.4549	0.3514	0.2610	5,521.0137

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	1,650.60	1,146.60	833.00	2,777,319	2,777,319
Parking Lot	0.00	0.00	0.00		
Single Family Housing	3,993.96	4,750.92	4257.90	9,561,319	9,561,319
Strip Mall	4,293.00	5,675.40	2758.05	6,577,800	6,577,800
Total	9,937.56	11,572.92	7,848.95	18,916,438	18,916,438

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Parking Lot	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Single Family Housing	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638
Strip Mall	0.555148	0.059467	0.187500	0.120419	0.022094	0.005825	0.011277	0.007430	0.000952	0.000505	0.025870	0.000875	0.002638

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Mitigated**

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

6.0 Area Detail**6.1 Mitigation Measures Area**

No Hearths Installed

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Unmitigated	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.5960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.6302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1113	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071
Total	4.3375	0.0426	3.6990	2.0000e-004		0.0206	0.0206		0.0206	0.0206	0.0000	6.0618	6.0618	5.8100e-003	0.0000	6.2071

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

7.2 Water by Land Use**Unmitigated**

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

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

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Category/Year**

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

8.2 Waste by Land Use**Unmitigated**

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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Mitigated**

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

9.0 Operational Offroad

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

10.0 Stationary Equipment**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

Cochrane Commons Phase II - Full Buildout (Mobile Only) GHG - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

11.0 Vegetation

Cochrane Commons Phase II

Natural Gas to Electricity Conversion and Emissions Estimation Tool

Total Estimated Natural Gas Usage (kBTU)	Equivalent Electricity Usage (kBtu)	Equivalent Electricity Usage (MWh)
14,339,300	14,339,300	4,203

GHG Emission Calculations

	UTILITY		CO ₂ e Conversion Calculations	
	Energy Intensity Factor (lbs/MWh)	Emissions (lbs)	Total CO ₂ e Emissions (lbs)	Total CO ₂ e Emissions (MT)
CO ₂	2.00	8,405	8,405	4
CH ₄	0.000	-	-	-
N ₂ O	0.000	-	-	-
TOTAL GHG EMISSIONS FROM ELECTRICITY				4

Notes

- MWh = megawatt-hours; lbs = pounds; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; MT = metric tons; IPCC = Intergovernmental Panel on Climate Change; CARB = California Air Resources Board

- Natural gas usage calculated in CalEEMod.

- Energy intensity factors for Silicon Valley Clean Energy based on 2021 energy intensity factor from CalEEMod

- Natural gas to electricity conversion assumes an equal energy demand would be supplied by electricity rather than natural gas.

- CH₄ conversion assumes 1 lb CH₄ is equivalent to 25 lbs CO₂e (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)

- N₂O conversion assumes 1 lb N₂O is equivalent to 298 lbs CO₂e (consistent with IPCC AR4 [2007], which informs CARB's 2017 Scoping Plan)

Appendix D

Transportation Analysis



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Cochrane Commons Mixed-Use Development

Transportation Analysis

Prepared for:

City of Morgan Hill

May 26, 2022

Hexagon Transportation Consultants, Inc.

Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230

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Hexagon Job Number: 19RD18

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Executive Summary

This report presents the results of the Transportation Analysis (TA) conducted for the proposed Cochrane Commons Mixed-Use Development in Morgan Hill, California. The project site is located along the north side of Cochrane Road between Mission View Drive and De Paul Drive.

Project Description

The proposed project site is part of a larger commercial development site that was approved for 590,100 square feet (s.f.) of retail space, a 12-pump gas station, and a 14-screen movie theater. A Traffic Impact Analysis (TIA) for the approved development was completed in 2005. Since the approval, 303,608 s.f. of retail space has been constructed along with the gas station. In 2016, as part of the City's update of its General Plan (*Morgan Hill 2035 General Plan*, adopted July 27, 2016), the land use designation on a portion of the undeveloped project site was changed from commercial to mixed-use flex. The mixed-use flex designation allows for a variety of both commercial and residential uses.

The project as now proposed on the remaining undeveloped portion of the site will consist of a mixed-use development that includes up to 498 townhomes/apartments, up to 140,000 s.f. of retail space, and a potential 150-room hotel in lieu of either a portion of the retail square footage or a portion of the residential unit count. To allow for future development flexibility, this analysis evaluates a "worst-case" development scenario in which the hotel uses are considered in addition to the maximum retail, with no reduction in corresponding retail or residential uses. The proposed project also will require a change in the General Plan designation from Commercial to Mixed Use Flex for the remaining portions of the project site that are not currently designated as such. The revised General Plan designation will provide consistency throughout the remaining project site, will be compatible with the amended PUD, and allow for the appropriate mix and integration of uses for the proposed project.

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive.

Scope of Study

The TA consists of a California Environmental Quality Act (CEQA) required vehicle-miles-traveled (VMT) analysis. The CEQA VMT impact analysis was completed using the Valley Transportation Authority's (VTA) VMT tool and Travel Demand Forecasting (TDF) Model. The City of Morgan Hill is currently developing the framework for new transportation policies based on VMT as the primary measure of transportation impacts. The new policies will replace the City's current transportation policies that are based on levels of service per the Morgan Hill 2035 General Plan. However, since the City has not formally adopted its own city-specific VMT policies, this study utilizes VMT analysis

methodology and impact thresholds recommended in the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018. The traffic operations analysis also includes an evaluation of the effects of the project on other transportation issues relating to queuing, on-site access, on-site circulation, parking, pedestrian, bicycle, and transit facilities, freeway segments, and related safety elements in the immediate area of the project

A supplemental traffic operations analysis, provided in a separate report, also was completed to demonstrate the project's consistency with the *Morgan Hill 2035 General Plan* goals and policies. The traffic operations analysis supplements the CEQA required VMT analysis. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

CEQA VMT Analysis

Residential VMT

The results of the VMT analysis using the VTA's VMT Evaluation Tool indicate that the existing VMT for residential uses in the project vicinity is 31.68 VMT per capita. The results also indicate that the project is projected to generate VMT per capita (28.51), which would exceed the OPR's recommended impact threshold of 20.94 VMT per capita. Therefore, the residential component of the project would result in an impact on the transportation system based on OPR's VMT impact criteria.

Retail VMT

The model results show that the retail component of the project would cause a net decrease of 4,354 VMT per day. The work trips would result in 1,231 fewer daily VMT and the shopping trips would account for a decrease of 3,123 daily VMT. Therefore, the proposed retail uses of the project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria.

Hotel VMT

For mixed-use projects, OPR allows lead agencies to evaluate only the project's dominant use. Since the proposed residential and retail components of the project would be the dominant land use (both residential and retail uses would generate a much greater number of daily trips when compared with the proposed hotel uses), the CEQA impact evaluation for the project is based only on the residential and retail components of the project.

VMT Impacts and Mitigation

Using OPR's impact thresholds, the project would need to implement VMT reduction measures to achieve a 27% reduction (28.51 to 20.94) in its VMT per capita for the proposed residential uses to reduce its impact to less than significant levels. However, per the VMT tool, the maximum reduction possible is 25.34. Further reductions in VMT are not likely feasible for residential projects due to the limited alternative modes of transportation and supporting employment land uses within the City.

The project's VMT per capita could be reduced to 25.34 with the implementation of the following Travel Demand Management (TDM) strategies, however, the reduced VMT per capita would still be greater than the OPR's recommended impact threshold of 20.94 VMT per capita.

- TP01 – School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private

schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT. **and**

- **TP07 – Subsidized or Discounted Transit Programs:** Provide fully (100%) subsidized transit passes for all project residents. Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT. **and**
- **TP14 – Transit Service Expansion:** The project subsidizes transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT. **and**
- **TP18 – Voluntary Travel Behavior Change Programs:** Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT.

OPR's recommended 15% below existing VMT impact threshold encourages developments in transit-rich, highly mixed-use areas to implement design features and trip reduction measures to take advantage of existing multi-modal infrastructure and land use mixes in reducing trip making and/or trip lengths. However, many communities such as Morgan Hill have very limited multi-modal transportation infrastructure and lack a mix of complementary land uses. The lack of employment in these communities along with minimal transit options results in a greater number and longer commute trips. Therefore, it is highly unlikely that developments like the proposed project in these cities can achieve OPR's recommended 15% reduction in VMT. Therefore, absent of the City adopting its own City-specific VMT policies and impact thresholds, the proposed project's VMT impact must be deemed significant and unavoidable.

Other Transportation Issues

Site Access

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project would include frontage improvements along Mission View Drive to include curb, gutter and sidewalk along with the new access points.

On-Site Circulation

The site plan shows two primary internal access roadways running between De Paul Drive and Mission View Drive. Access to each of the proposed retail buildings, townhome units, apartment complexes, and parking areas will be provided by secondary roadways and drive aisles that connect to the primary access roadways and each of the site driveways. The straight nature of the primary internal roadways running between De Paul Drive and Mission View Drive could result in drivers traveling at greater speeds than recommended. Therefore, it may be desirable to implement speed-reducing measures along the internal roadways. These measures could include the installation of speed bumps/humps, bulb-outs at drive aisle intersections, and parking along the primary internal roadways.

Recommendation: Speed-reducing measures such as speed bumps/humps, bulb-outs at drive aisle intersections, and parking should be considered along the two primary internal access roadways

running between De Paul Drive and Mission View Drive. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

There are no dead-end aisles on site, except for those located within the townhome area, present allowing for continuous circulation within the project site. The dead-end aisles within the townhome area should not be problematic as the drive aisles provide access to only the private townhome garages.

Recommendation: Signage should be placed at the entrances to the townhouse drive aisles restricting access to residents only. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Emergency Vehicle Access and Circulation

The internal roadways and drive aisles would need to be at least 20 feet wide to provide emergency vehicles (fire trucks) sufficient space to access each of the residential units, retail and hotel uses on-site. There are several dead-end drive aisles located within the townhome area that would not provide sufficient space for emergency vehicles to turn around. However, the dead-ends will be located along short segments of roadways. Thus, vehicles would be able to back out of the roadways.

Intersection Operations Analysis

The queuing analysis also indicates that the maximum vehicle queue for northbound left-turn movement at the Cochrane Road and Mission View Drive intersection currently exceeds the provided turn pocket storage space during the AM and PM peak hours under existing conditions.

The addition of project traffic is not projected to lengthen the projected queue during the AM peak hour. However, the addition of project traffic is projected to lengthen the projected queue by one vehicle or 25 feet during the PM peak hour under existing plus project conditions, which would exceed the existing storage capacity by 75 feet.

Recommendation: The northbound left-turn pocket can be lengthened by 250 feet to accommodate the projected queue during the AM peak hour. However, a second northbound left-turn lane is recommended to improve intersection operations. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Project Driveway Operations

Based on the project trip generation and trip assignment, a maximum of 64 peak-hour left-turns into the project driveways are projected during the PM peak hour along Mission View Drive. Mission View Drive would have a minimal amount of traffic along the project's frontage, thus queuing and operational issues would not occur at the project driveways along Mission View Drive. However, a center striped median should be provided along Mission View Drive as part of the project site frontage improvements.

Recommendation: A center-striped median should be provided along Mission View Drive between Cochrane Road and the northern project site driveway. The current width of Mission View Drive along the project frontage is not adequate to provide left-turn pockets into the project driveways. Mission View Drive would need to be widened along its west side, along the project frontage to provide striped left-turn pockets into the project site as well as streets along the east side of Mission View Drive. The

recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Parking

Based on Tables 18.72-2 and 18.72-3 of Section 18.72.030 of the Morgan Hill City Code, retail uses are required to provide one parking space per 250 s.f. and hotel uses are required to provide one parking space per guest room plus an additional space for every 10 rooms. Based on these requirements, the project will be required to provide 560 parking spaces for the proposed 140,000 s.f. of retail space and 165 parking spaces for the proposed 150-room hotel.

The townhomes are required to provide two covered parking spaces per unit, and the required parking spaces for the multi-family apartments are dependent upon the number of bedrooms in each unit. Since the breakdown of the townhomes vs. apartments and the number of bedrooms in each apartment unit are not available, the required parking spaces for residential uses cannot be determined.

Transit, Pedestrian, and Bicycle Analysis

Project's Effect on Pedestrian Facilities

It can be expected that new pedestrian traffic would be generated by the proposed project. The project site is located within walking distance from other residential and commercial uses along Cochrane Road both east and west of US 101.

Controlled crossings at the intersections of Cochrane Road with Mission View Drive and De Paul Drive would provide a connection between the project site and the pedestrian generators in the project vicinity mentioned above.

The project would provide sidewalks along its entire frontages along Mission View Drive and result in a continuous connection to the existing sidewalks on the north side of Cochrane Road to provide a safe connection between the project site and other surrounding land uses in the area.

Bicycle Facilities

Project's Effect on Bicycle Facilities

The proposed project could increase the demand on bicycle facilities in the vicinity of the project site. Assuming bicycle trips would comprise no more than one percent of the total project-generated trips, the project could generate up to eight new bicycle trips during each of the peak hours. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site.

Transit Services

Project's Effect on Transit Services

Since there is currently only one local bus route (Route 87) serving the City of Morgan Hill, the use of public transportation by residents of the proposed project would be limited. Nevertheless, assuming an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately no more than 24 new transit riders during each of the peak hours.

Recommendation: With the development of the project, as well as other ongoing residential development along Cochrane Road in the vicinity of the project site, there will be an opportunity for VTA to expand the existing service area to this part of the City, which is currently underserved. A bus stop could be provided along the project site frontage along Mission View Drive to serve the project site and adjacent residential neighborhoods. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

1.

Introduction

This report presents the results of the Transportation Analysis (TA) conducted for the proposed Cochrane Commons Mixed-Use Development in Morgan Hill, California. The project site is located along the north side of Cochrane Road between Mission View Drive and De Paul Drive. The project site location and the surrounding study area are shown in Figure 1.

Project Description

The proposed project site is part of a larger commercial development site that was approved for 590,100 square feet (s.f.) of retail space, a 12-pump gas station, and a 14-screen movie theater. A Traffic Impact Analysis (TIA) for the approved development was completed in 2005. Since the approval, 303,608 s.f. of retail space has been constructed along with the gas station. In 2016, as part of the City's update of its General Plan (*Morgan Hill 2035 General Plan*, adopted July 27, 2016), the land use designation on a portion of the undeveloped project site was changed from commercial to mixed-use flex. The mixed-use flex designation allows for a variety of both commercial and residential uses.

The project as now proposed on the remaining undeveloped portion of the site will consist of a mixed-use development that includes up to 498 townhomes/apartments, up to 140,000 s.f. of retail space, and a potential 150-room hotel in lieu of either a portion of the retail square footage or a portion of the residential unit count. To allow for future development flexibility, this analysis evaluates a "worst-case" development scenario in which the hotel uses are considered in addition to the maximum retail, with no reduction in corresponding retail or residential uses. The proposed project also will require a change in the General Plan designation from Commercial to Mixed Use Flex for the remaining portions of the project site that are not currently designated as such. The revised General Plan designation will provide consistency throughout the remaining project site, will be compatible with the amended PUD, and allow for the appropriate mix and integration of uses for the proposed project.

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project site plan is shown in Figure 2.

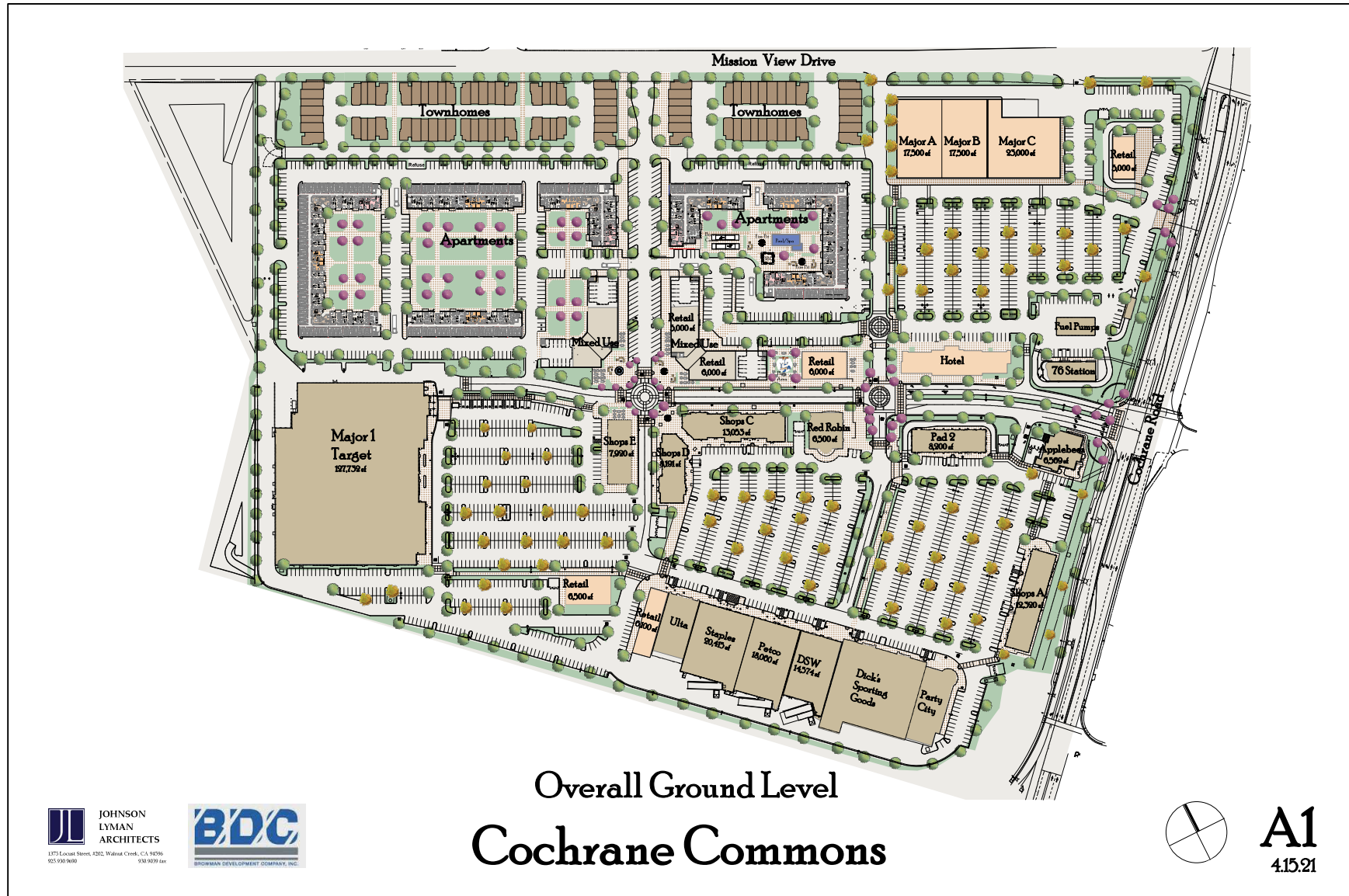
Scope of Study

The TA consists of a California Environmental Quality Act (CEQA) required vehicle-miles-traveled (VMT) analysis. The TA also includes an evaluation of the effects of the project on other transportation issues relating to queuing, on-site access, on-site circulation, parking, pedestrian, bicycle, and transit facilities, and related safety elements in the immediate area of the project.

Figure 1
Project Site Location



Figure 2
Project Site Plan



Historically, traffic impact analysis has utilized vehicular delay to identify traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, with the adoption of Senate Bill (SB) 743 legislation, public agencies are required (effective July 2020) to base transportation impacts on Vehicle-Miles-Traveled (VMT) rather than level of service that typically uses delay as its metric. The change in measurement is intended to better evaluate the effects on the state's goals for climate change and multi-modal transportation. Therefore, to adhere to the state's legislation, all new development projects are required to analyze transportation impacts using the VMT metric.

The CEQA VMT impact analysis was completed using the Valley Transportation Authority's (VTA) VMT tool and Travel Demand Forecasting (TDF) Model. The City of Morgan Hill is currently developing the framework for new transportation policies based on VMT as the primary measure of transportation impacts. The new policies will replace the City's current transportation policies that are based on levels of service per the Morgan Hill 2035 General Plan. However, since the City has not formally adopted its own city-specific VMT policies, this study utilizes VMT analysis methodology and impact thresholds recommended in the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018.

Report Organization

The remainder of this report is divided into three chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the CEQA VMT analysis. Chapter 4 presents the analysis of other transportation-related issues, including site access. Chapter 5 presents the conclusions of the transportation analysis.

2. Existing Transportation System

This chapter describes the existing transportation system within the project area. It describes transportation facilities for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project site is provided via US 101. Local access to the site is provided by Cochrane Road, De Paul Drive, Half Road, Mission View Drive, Main Avenue, and Condit Road. These facilities are described below.

US 101 is a north-south freeway extending northward to San Francisco and southward through Gilroy. US 101 is an eight-lane freeway (three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) north of Cochrane Road. South of Cochrane Road, it is a six-lane freeway with no HOV lanes. Access to and from the project site is provided via its interchange at Cochrane Road.

Cochrane Road is designated as an arterial in the project vicinity per the City of Morgan Hill 2035 General Plan and is an east-west divided roadway that runs from Monterey Road to Malaguerra Avenue, east of US 101. Currently, Cochrane Road is a four-lane road between Monterey Road and Cochrane Circle. Between Cochrane Circle and US 101, Cochrane Road widens to three lanes eastbound and two lanes westbound, then narrows back to four lanes east of US 101, and to two lanes east of Mission View Drive. Cochrane Road has posted speed limits of 40 and 45 miles per hour (mph). Access to the project site is provided via its intersections with De Paul Drive, Mission View Drive, and one driveway just west of Mission View Drive.

De Paul Drive is designated as a local street per the City of Morgan Hill 2035 General Plan and is a north-south undivided roadway that intersects Cochrane Road approximately 700 feet east of the US-101 northbound ramps intersection and runs approximately 1,500 feet north and 1,000 feet south of Cochrane Road. Direct access to the project site would be provided via driveways along De Paul Drive north of Cochrane Road.

Half Road is designated as a collector per the City of Morgan Hill 2035 General Plan and is an east-west undivided roadway that runs from Condit Road to Cochrane Road. Half Road has a posted speed limit of 35 miles per hour (mph). Access to the project site is provided via its intersection with Mission View Drive.

Mission View Drive is designated as a collector per the City of Morgan Hill 2035 General Plan and is a north-south two-lane undivided roadway that runs south from Eagle View Drive to Half Road. In the vicinity of the project site, Mission View Drive has a posted speed limit of 40 miles per hour (mph). Mission View Drive runs along the project's eastern frontage. Direct Access to the project site would be provided via driveways along Mission View Drive.

Main Avenue is designated as an arterial per the City of Morgan Hill 2035 General Plan and is a two-lane roadway that runs eastward from its intersection with DeWitt Avenue to Coyote Road at the base of the eastern foothills. The roadway has an overcrossing of US 101, however, no access to US 101 is provided. Access to the project site is provided via its intersection with Condit Road.

Condit Road is designated as a collector per the City of Morgan Hill 2035 General Plan and is a two-lane north-south roadway that extends from Half Road southward to Tennant Avenue. The posted speed limit on Condit Road is 45 mph. Access to the project site is provided via its transition to Half Road.

Existing Bicycle and Pedestrian Facilities

As defined by the Valley Transportation Authority (VTA), bicycle facilities include Class I bikeways (defined as off-street bike paths, which are shared with pedestrians and exclude general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), and rated streets. The latter refers to streets frequently used by bicyclists, sharing the roadway with motor vehicles, and includes city-designated Class III bike routes. Rated streets include extreme caution (heavy traffic volumes with high traffic speeds), alert (moderate traffic volumes and speeds), and moderate (low traffic volumes and moderate to low traffic speeds). Class III bikeways only have signs to help guide bicyclists on recommended routes to certain locations.

In the project vicinity, bike lanes are currently provided along the extent of Cochrane Road and Mission View Drive north of Cochrane Road along the project's frontage. An unpaved bike path, the Madrone Channel Trail, runs along the east side of US 101, between Tennant Avenue and Cochrane Road.

The remaining bicycle facilities in the area are located beyond the immediate project vicinity. Bike lanes are currently provided along the following roadways:

- Main Avenue, between Live Oak High School and Peak Avenue;
- Dunne Avenue west of Gallop Drive;
- Hill Road between Dunne Avenue and Diana Avenue;
- Murphy Avenue between Dunne Avenue and Kelly Park Circle;
- Butterfield Boulevard, along its entire length;
- Sutter Boulevard, between Cochrane Road and Butterfield Boulevard;
- Central Avenue, between Butterfield Boulevard and its termination point west of US 101;
- Monterey Road, nearly its entire length within City of Morgan Hill limits, with the exception of the segment that runs through downtown between Dunne Avenue and Main Avenue;
- Tennant Avenue, between Condit Road and Olympic Drive
- Depot Street, along its entire length;
- Peak Avenue, between Dunne Avenue and Wright Avenue;
- Hale Avenue, between Main Avenue and north of the City of Morgan Hill.

Other bicycle facilities in the City include the following:

- A bike route on Monterey Road, between Dunne Avenue and Main Avenue;

- A paved bike path on the east side of Butterfield Boulevard, between San Pedro Avenue and Central Avenue.
- Along the west bank of Little Llagas Creek, extending from Watsonville Road north to Spring Avenue.

The existing bicycle facilities in the study area are presented graphically in Figure 3.

Pedestrian facilities in the study areas consist primarily of sidewalks, pedestrian push buttons, marked crosswalks, and signal heads at signalized intersections. Sidewalks are provided along at least one of the sides of the following roadways in the vicinity of the project site:

Cochrane Road – sidewalks are provided along the north side of the street between Butterfield Boulevard and White Moon Drive. Along the south side of the street, sidewalks are provided from Monterey Road just east of Mission View Drive with the exception of the segments between US 101 northbound ramps and De Paul Drive and a short segment west of Mission View Drive.

Mission View Drive – sidewalks are provided along the east side of the street between the northern end of Mission View Drive (at Eagle View Drive) until approximately 950 feet north of its intersection with Half Road. There are no sidewalks along the west side of Mission View Drive, with the exception of curb ramps located at the northwest and southwest corners of the Mission View Drive and Cochrane Road intersection.

Sidewalks are not provided on either side of De Paul Drive with the exception of the short segment near the existing Target store.

Existing Transit Service

Existing transit service to the study area is provided by the VTA and Caltrain. The transit services are described below and shown in Figure 4.

VTA Bus Services

The study area is served directly by one local bus (Local Bus Route 87). In addition, Rapid Route 568 operates along Cochrane Road west of US 101.

Local Bus Route 87 operates on Cochrane Road, Mission View Drive, and Half Road in the study area. It runs from Burnett Avenue to the Civic Center (Main and Dewitt) in Morgan Hill. Route 87 operates between 7:00 AM and 6:00 PM with approximately 60-minute headways in the AM and PM commute periods. The nearest Route 87 bus stops to the project site are located near the De Paul Drive and Cochrane Road intersection.

Rapid Route 568 operates on Butterfield Boulevard and Cochrane Road on its route between the Gilroy Transit Center and the San Jose Diridon Transit Center. Route 568 operates between 5:30 AM and 8:00 PM with approximately 30-minute headways in the peak commute periods. The nearest Route 568 bus stops to the project site are located near the Cochrane Circle and Cochrane Road intersection, approximately one mile west of the project site.

Caltrain

Commuter rail service between San Francisco and Gilroy is provided by Caltrain. The Morgan Hill Caltrain Station is located along Depot Street, with main access and parking off of Butterfield Boulevard, approximately 2.5 miles west of the project site. At the Morgan Hill Station, Caltrain provides only three northbound trains during the morning commute period with approximately 30-minute headways and only three southbound trains during the afternoon commute period with approximately 40- to 80-minute headways.

Figure 3
Existing Bicycle Facilities

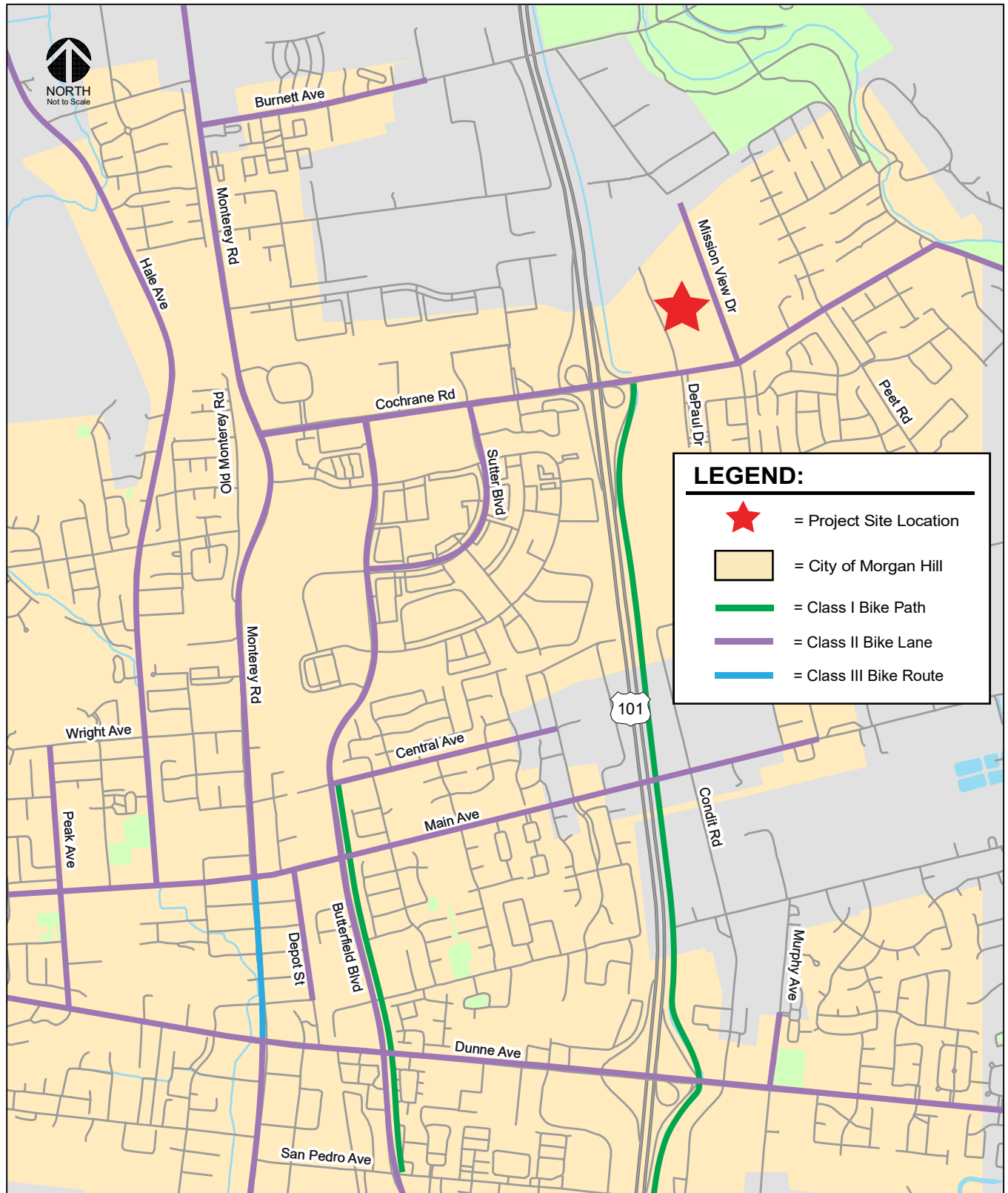
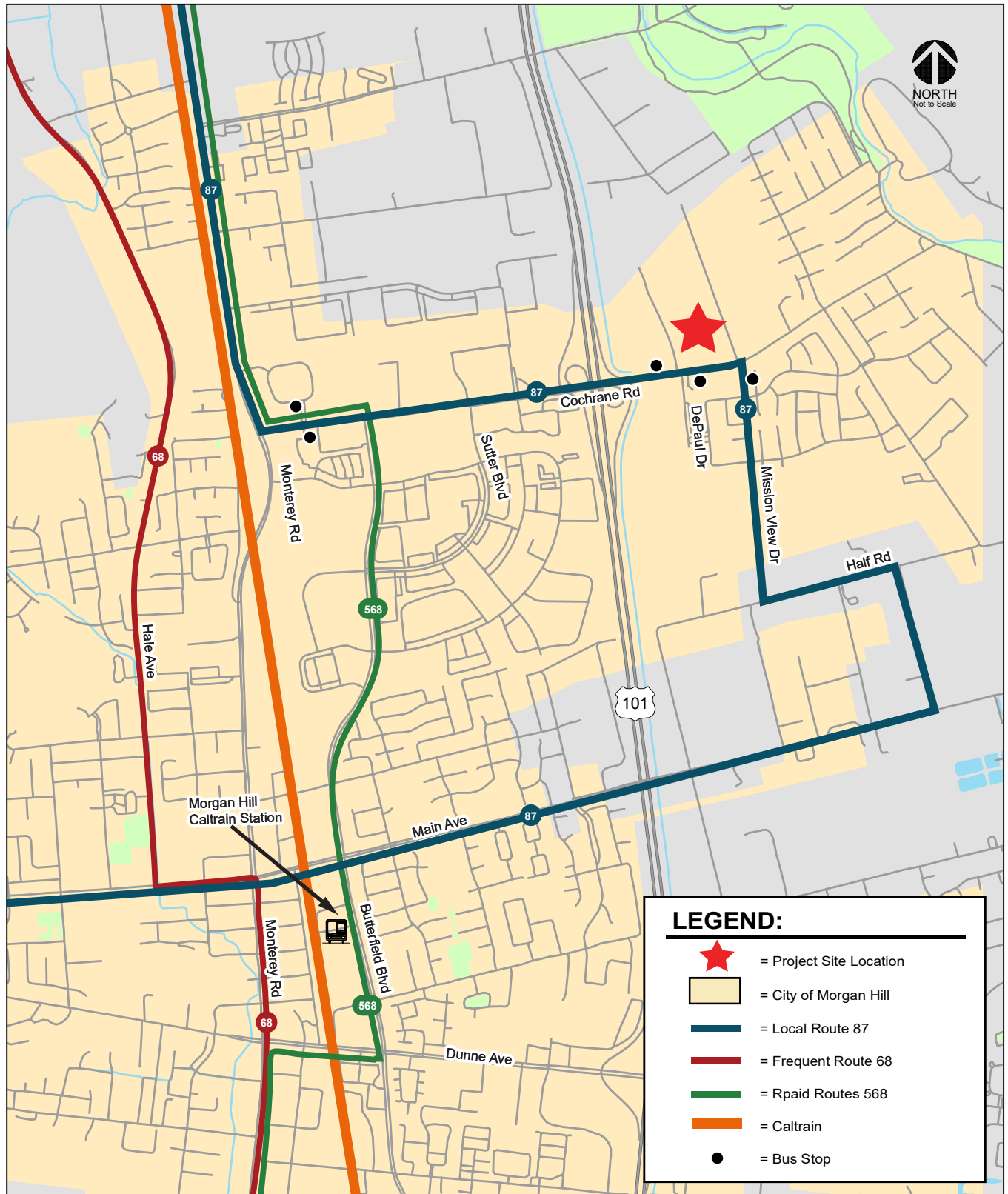


Figure 4
Existing Transit Services



3.

CEQA VMT Evaluation

This chapter provides an evaluation of the proposed project's effect on Vehicle Miles Traveled (VMT). Pursuant to Senate Bill (SB) 743, the California Environmental Quality Act (CEQA) 2019 Update Guidelines Section 15064.3, subdivision (b) states that VMT will be the metric in analyzing transportation impacts for land use projects for CEQA purposes.

VMT Evaluation Methodology

VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle trips with one end within the project. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit serve in the project vicinity.

To determine whether a project would result in CEQA transportation impacts related to VMT, VTA has developed a VMT Evaluation Tool to streamline the analysis for development projects. However, the VMT tool is not capable of estimating VMT for non-residential or non-office/industrial uses. For non-residential or non-office projects, very large projects, or projects that can potentially shift travel patterns, a Travel Demand Forecasting (TDF) model must be used to determine project VMT. The VTA's VMT tool was used to estimate VMT for the residential uses proposed by the project. However, since the proposed project will include retail for which the VMT tool is not capable of estimating VMT, the VTA's Countywide TDF model was utilized to complete the VMT evaluation for the proposed retail uses.

VTA VMT Evaluation Tool

The VTA VMT Evaluation Tool provides a streamlined method to determine whether residential and office/industrial uses of a proposed development would result in CEQA transportation impacts related to VMT. The VMT tool identifies the existing average VMT per capita and VMT per employee for the project area based on the assessor's parcel number (APN) of a project. Based on the project location, type of development, project description, and proposed trip reduction measures, the evaluation tool

calculates the project VMT. Projects located in areas where the existing VMT is above the established threshold are referred to as being in “high-VMT areas”. Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible.

VTA Countywide Travel Demand Forecasting Model

Hexagon utilized the VTA Countywide transportation model to complete the VMT evaluation for the proposed retail uses of the project. The VTA model can provide VMT projections for the County as well as cities within the County and is readily available and up to date in terms of regional land use and forecasting methodology. The VTA model is a mathematical representation of travel within Santa Clara County and is mainly composed of four components: 1) trip generation, 2) trip distribution, 3) mode choice, and 4) trip assignment. The model uses socioeconomic inputs (i.e. households, number of jobs, travel mode-share defaults) to estimate travel within Santa Clara County. Socioeconomic inputs are aggregated into geographic areas or traffic analysis zones (TAZs). There are 1,490 TAZs within the model to represent Santa Clara County. The City of Morgan Hill is represented by 34 TAZs.

VMT Policies and Impact Criteria

A project’s VMT is compared to established thresholds of significance based on the project location and type of development. When assessing a residential project, the project’s VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project’s VMT is divided by the number of employees to determine the VMT per employee/job. Retail uses are assessed based on their effects on total VMT.

To adhere to the state’s legislation, the City of Morgan Hill is currently developing the framework for new transportation policies based on the implementation of VMT as the primary measure of transportation impacts for CEQA purposes. The new policies will replace the City’s current transportation policies that are based on levels of service. However, since the City has not formally adopted its own City-specific VMT policies, this study utilizes VMT analysis methodology and impact thresholds recommended in the Governor’s Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018. The impact criteria and thresholds used for the evaluation of the proposed project are described below.

Residential Use Impact Thresholds

As stated in the technical advisory, OPR recommends an impact threshold of 15% below the existing VMT levels for residential land uses. OPR allows the existing VMT to be measured as regional or citywide VMT per capita. Therefore, 15% below the citywide residential VMT per capita is used as the impact threshold for the evaluation of the residential uses of the project. The VTA’s VMT Evaluation Tool indicates that the citywide average VMT per capita is currently 24.64. Therefore, the OPR recommended impact threshold of 15% below the citywide average VMT per capita equates to 20.94 VMT per capita.

*Residential Impact Threshold: **20.94 VMT per Capita***

Retail Use Impact Thresholds

The thresholds of significance for retail development projects, as recommended in the OPR technical advisory, are based on the existing regional average total VMT. However, the proposed retail uses are not reflective of larger regional retail development, such as large shopping centers, which would attract new trips from outside the general city limits. Rather, the proposed retail uses of the project will

redistribute trips that are currently made to other surrounding similar retail uses and result in shorter and fewer vehicular trips. Therefore, the total VMT for all existing retail development within selected TAZs of the TDF model, from which trips would be redistributed to the project site, serves as the baseline from which the retail uses of the project are evaluated. Per the technical advisory, projects that include retail uses are said to create a significant adverse impact on VMT when the project results in any increase in the total VMT.

*Retail Impact Threshold: **Any Increase in VMT***

Hotel Uses

For mixed-use projects, OPR allows lead agencies to evaluate only the project's dominant use. Since the proposed residential and retail components of the project would be the dominant land use (both residential and retail uses would generate a much greater number of daily trips when compared with the proposed hotel uses), the CEQA impact evaluation for the project is based only on the residential and retail components of the project.

VMT Evaluation

Residential VMT

The results of the VMT analysis using the VTA's VMT Evaluation Tool indicate that the existing VMT for residential uses in the project vicinity is 31.68 VMT per capita. The results also indicate that the project is projected to generate VMT per capita (28.51), which would exceed the OPR's recommended impact threshold of 20.94 VMT per capita. Therefore, the residential component of the project would result in an impact on the transportation system based on OPR's VMT impact criteria.

The VTA VMT Evaluation Tool output sheets are shown in Figure 5 and also included in Appendix A.

Retail VMT

The VTA Travel Forecasting Model (VTA Model) was used to estimate VMT for the proposed retail use of the project site. The VTA Model was used since it can estimate the diversion of traffic and change in traffic patterns due to land use changes/additions like those proposed by the project. The retail uses of the proposed project are not reflective of larger regional retail development, such as large shopping centers, which would attract new trips from outside the City of Morgan Hill. Rather, the proposed retail use of the project will result in a redistribution +of trips that are currently made to other surrounding similar retail uses located outside the immediate project area and city limits. The underlying premise is that the proposed retail would not cause an increase in trips but rather result in a change in trip making because some people would shop at the proposed retail center instead of shopping at other nearby retail centers.

In order to estimate the impact on VMT for the proposed retail uses with the model, the project's 140,000 square feet of commercial building area was converted to 350 retail jobs, using a ratio of one retail job per 400 square feet. Hexagon has prepared a map of similar neighborhood shopping areas near the project site (see Figure 6). For the purpose of modeling VMT, some employees were assumed to leave their jobs at these nearby shopping centers and go to work at the proposed project site. In order to reflect this, retail jobs from TAZs 332, 336, and 348 were shifted to project TAZ 334. These job changes were made in the 2015 base year land use file. The VTA model was then run without and with the project. Daily VMT for work and shop trips, without and with the project, were calculated for the affected TAZs to estimate the change in daily VMT.

Figure 5
Residential VMT Analysis

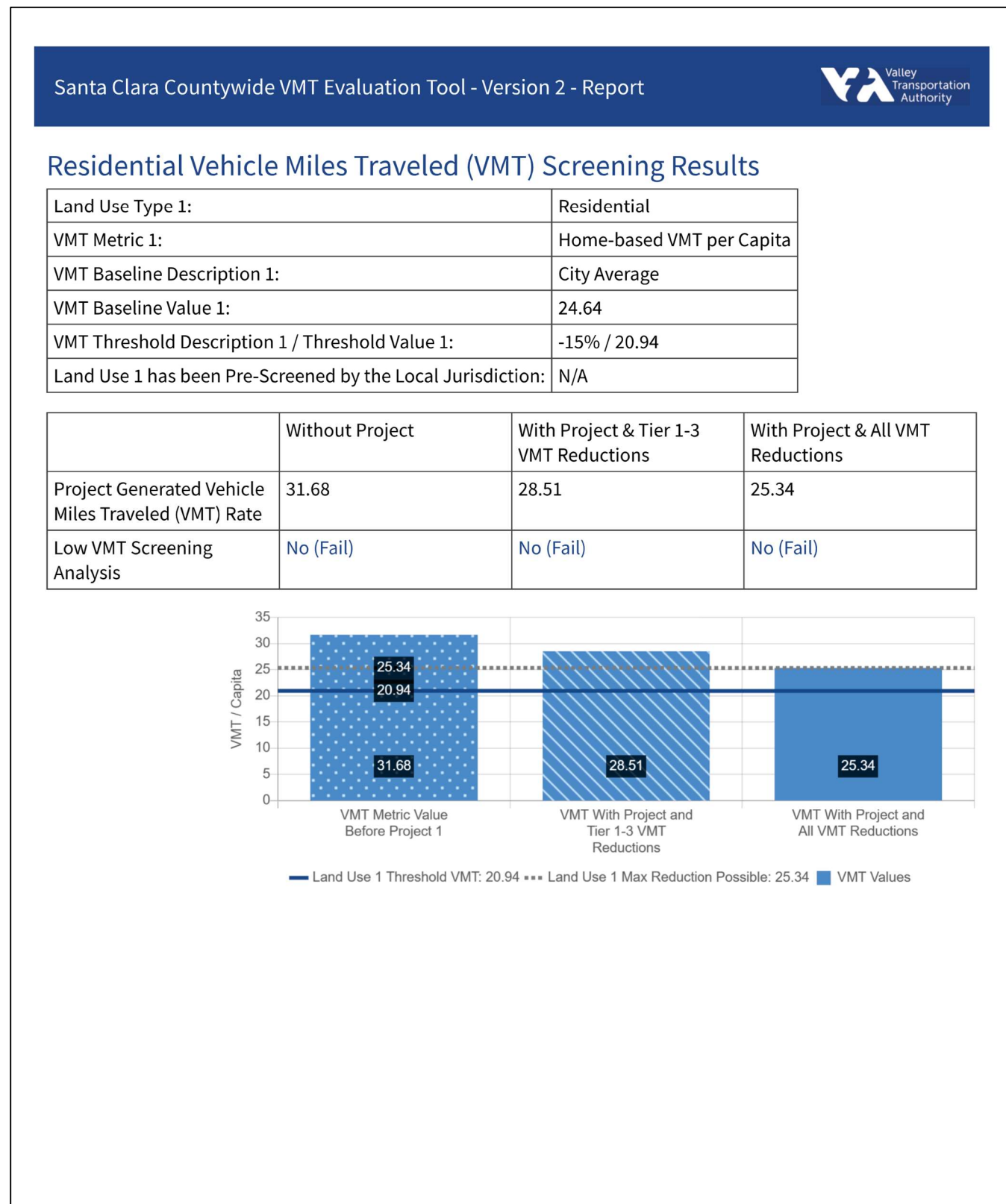
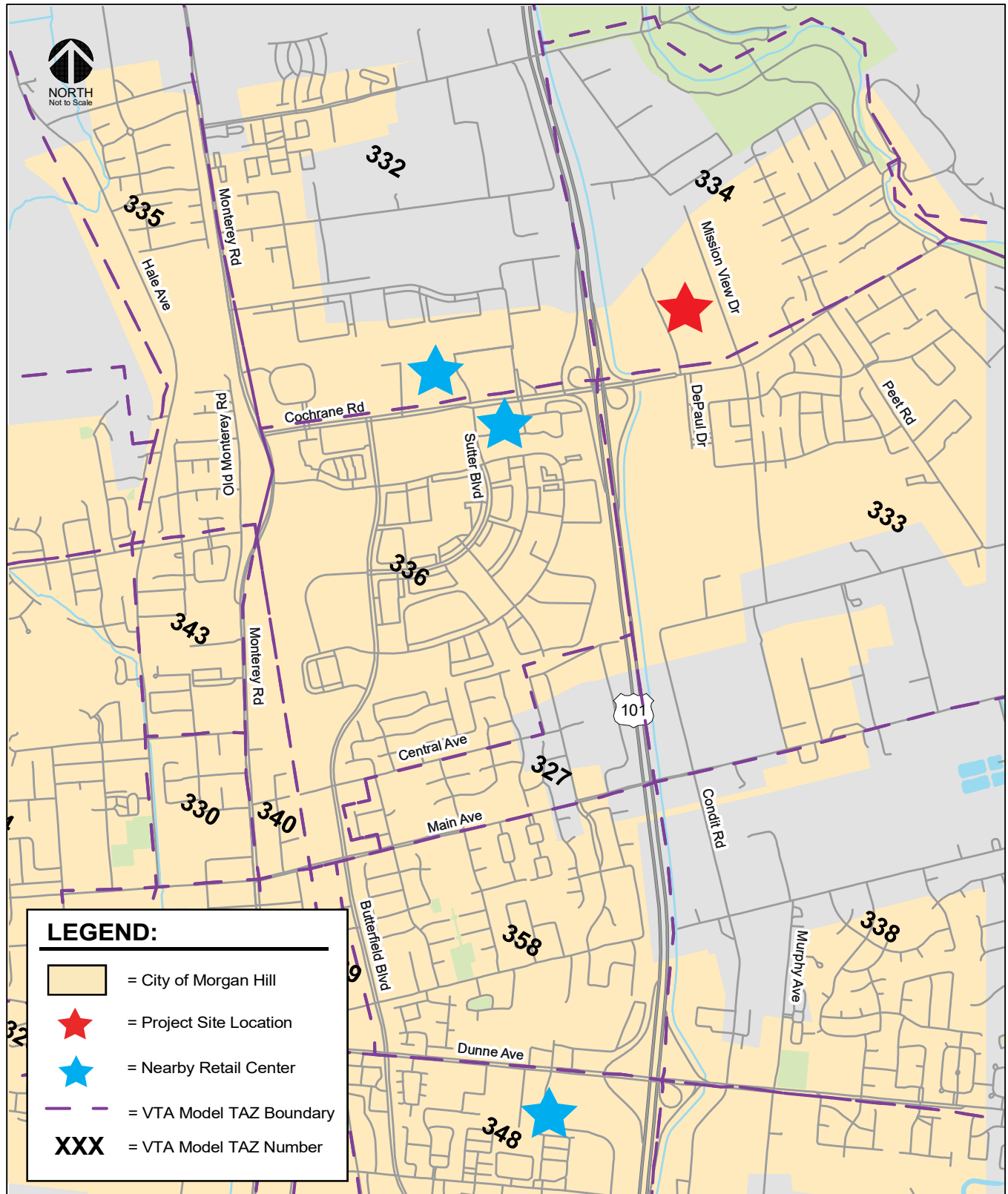


Figure 6
Similar Retail Centers in the Project Vicinity



The model results summarized in Table 1 show that the retail component of the project would cause a net decrease of 4,354 VMT per day. The work trips would result in 1,231 fewer daily VMT and the shopping trips would account for a decrease of 3,123 daily VMT. Therefore, the proposed retail uses of the project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria.

The total decrease of 4,354 in daily VMT for the retail center is largely caused by the addition of 498 housing units, which is part of the project. The close proximity of housing units near the retail center results in work and shopping opportunities nearby and would result in shorter trips for workers and retail customers.

Table 1
Retail VMT Analysis

VMT Analysis for TAZ's with Shifted Jobs	No Project	Project	Project - No Project
Home-Based Work VMT	161,830	160,599	-1,231
Home-Based Shop VMT	140,496	137,373	-3,123
Total VMT	302,326	297,972	-4,354

VMT Impacts and Mitigation

Using OPR's impact thresholds, the project would need to implement VMT reduction measures to achieve a 27% reduction (28.51 to 20.94) in its VMT per capita for the proposed residential uses to reduce its impact to less than significant levels. However, per the VMT tool, the maximum reduction possible is 25.34. Further reductions in VMT are not likely feasible for residential projects due to the limited alternative modes of transportation and supporting employment land uses within the City.

The project's VMT per capita could be reduced to 25.34 with the implementation of the following Travel Demand Management (TDM) strategies, however, the reduced VMT per capita would still be greater than the OPR's recommended impact threshold of 20.94 VMT per capita.

- TP01 – School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT. **and**
- TP07 – Subsidized or Discounted Transit Programs: Provide fully (100%) subsidized transit passes for all project residents. Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT. **and**
- TP14 – Transit Service Expansion: The project subsidizes transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT. **and**
- TP18 – Voluntary Travel Behavior Change Programs: Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass

communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT.

OPR's recommended 15% below existing VMT impact threshold encourages developments in transit-rich, highly mixed-use areas to implement design features and trip reduction measures to take advantage of existing multi-modal infrastructure and land use mixes in reducing trip making and/or trip lengths. However, many communities such as Morgan Hill have very limited multi-modal transportation infrastructure and lack a mix of complementary land uses. The lack of employment in these communities along with minimal transit options results in a greater number and longer commute trips. Therefore, it is highly unlikely that developments like the proposed project in these cities can achieve OPR's recommended 15% reduction in VMT. Therefore, absent of the City adopting its own City-specific VMT policies and impact thresholds, the proposed project's VMT impact must be deemed significant and unavoidable.

4. Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project site, including:

- Vehicular site access
- A review of required on-site parking
- On-site circulation
- Intersection operations analysis – vehicle queuing and left-turn pocket storage at intersections
- Potential impacts to bike, pedestrian and transit facilities

Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community. Any recommended transportation improvements identified as part of the review may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Site Access and Circulation

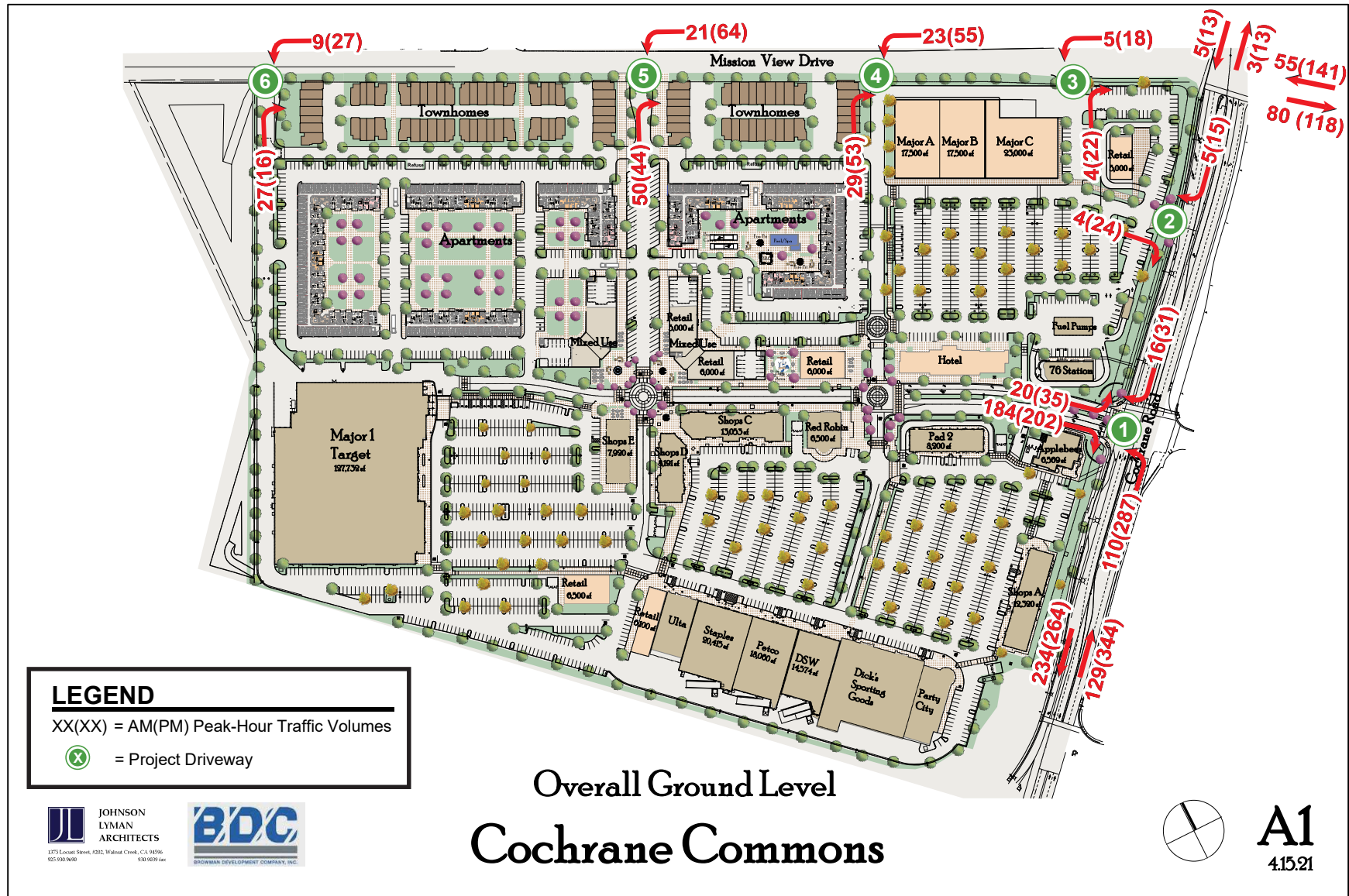
The site plan for the proposed project was reviewed to determine if adequate site access is provided and to identify any access and circulation issues that should be improved. This review was completed in accordance with generally accepted traffic engineering standards.

Site Access

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project would include frontage improvements along Mission View Drive to include curb, gutter and sidewalk along with the new access points. Project trips at each of the site access points are presented in Figure 7.

Based on the project trip generation and trip assignment, a maximum of 64 peak-hour left-turns into the project driveways are projected during the PM peak hour along Mission View Drive. Mission View Drive would have a minimal amount of traffic along the project's frontage, thus queuing and operational issues would not occur at the project driveways along Mission View Drive. However, a center striped median should be provided along Mission View Drive as part of the project site frontage improvements.

Figure 7
Proposed Project Trips at Site Access Points



Recommendation: A center-striped median should be provided along Mission View Drive between Cochrane Road and the northern project site driveway. The current width of Mission View Drive along the project frontage is not adequate to provide left-turn pockets into the project driveways. Mission View Drive would need to be widened along its west side, along the project frontage to provide striped left-turn pockets into the project site as well as streets along the east side of Mission View Drive. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

On-Site Circulation

The site plan shows two primary internal access roadways running between De Paul Drive and Mission View Drive. Access to each of the proposed retail buildings, townhome units, apartment complexes, and parking areas will be provided by secondary roadways and drive aisles that connect to the primary access roadways and each of the site driveways. The straight nature of the primary internal roadways running between De Paul Drive and Mission View Drive could result in drivers traveling at greater speeds than recommended. Therefore, it may be desirable to implement speed-reducing measures along the internal roadways. These measures could include the installation of speed bumps/humps, bulb-outs at drive aisle intersections, and parking along the primary internal roadways.

Recommendation: Speed-reducing measures such as speed bumps/humps, bulb-outs at drive aisle intersections, and parking should be considered along the two primary internal access roadways running between De Paul Drive and Mission View Drive. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

There are no dead-end aisles on site, except for those located within the townhome area, present allowing for continuous circulation within the project site. The dead-end aisles within the townhome area should not be problematic as the drive aisles provide access to only the private townhome garages.

Recommendation: Signage should be placed at the entrances to the townhouse drive aisles restricting access to residents only. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

The site plan is conceptual only and does not show detail in regard to widths of the internal access roadways and drive aisles. The project site should be designed following City of Morgan Hill design standards and provide adequate width and turn-radii at and along all drive/parking aisles to allow for two-way circulation and adequate circulation of larger vehicles (such as emergency trucks, garbage trucks, and delivery trucks) throughout the project site. Adhering to the City of Morgan Hill standards and requirements, and implementing the above recommendations, the proposed site access points and layout of the surface parking areas would be adequate to accommodate the circulation of both passenger and emergency vehicles.

Emergency Vehicle Access and Circulation

The internal roadways and drive aisles would need to be at least 20 feet wide to provide emergency vehicles (fire trucks) sufficient space to access each of the residential units, retail and hotel uses on-site. There are several dead-end drive aisles located within the townhome area that would not provide sufficient space for emergency vehicles to turn around. However, the dead-ends will be located along short segments of roadways. Thus, vehicles would be able to back out of the roadways.

Intersection Operations Analysis

The analysis of the intersection level of service was supplemented with an analysis of intersection operations for selected intersections where the project would add a significant number of left-turning vehicles. The operations analysis is based on vehicle queuing for high-demand left-turn movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of “n” vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

P (x=n) = probability of “n” vehicles in queue per lane

n = number of vehicles in the queue per lane

λ = average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile number of queued vehicles per cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated 95th percentile queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future left-turn storage requirements at intersections. The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Likewise, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length).

Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the “design queue length”.

The vehicle queue estimates and a tabulated summary of the findings are provided in Table 2. The vehicular queuing analysis (Poisson probability calculations) is included in Appendix B.

Mission View Drive and Cochrane Road

The queuing analysis indicates that the estimated 95th vehicle queue for northbound left-turn movement at the Cochrane Road and Mission View Drive intersection currently exceeds the provided turn pocket storage space during the AM and PM peak hours under existing conditions.

The northbound left-turn pocket currently provides approximately 100 feet of vehicle storage, which can accommodate approximately 4 vehicles. The estimated 95th percentile vehicle queues for the northbound left-turn movement currently are approximately 14 and 6 vehicles during the AM and PM peak hours under existing conditions, respectively.

The addition of project traffic is not projected to lengthen the projected queue during the AM peak hour. However, the addition of project traffic is projected to lengthen the projected queue by one vehicle or 25 feet during the PM peak hour under existing plus project conditions, which would exceed the existing storage capacity by 75 feet.

Recommendation: The northbound left-turn pocket can be lengthened by 250 feet to accommodate the projected queue during the AM peak hour. However, a second northbound left-turn lane is recommended to improve intersection operations. The recommended improvements may be included

Table 2
Vehicle Queuing Analysis

Measurement	Cochrane Road and DePaul Drive				Mission View Drive and Cochrane Road			
	Southbound Left		Eastbound Left		Eastbound Left		Northbound Left	
	AM	PM	AM	PM	AM	PM	AM	PM
Existing Conditions								
Cycle Length (sec)	60	60	60	60	60	60	60	60
Lanes	1	1	2	2	1	1	1	1
Volume (vph)	39	142	196	446	16	63	536	192
Volume (vphpl)	39	142	98	223	16	63	536	192
95 th %. Queue (veh/ln.)	2	5	4	7	1	3	14	6
95 th %. Queue (ft./ln.) ¹	50	125	100	175	25	75	350	150
Storage (ft./ ln.)	450	450	275	275	225	225	100	100
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	NO	NO
Existing Plus Proposed Project Conditions								
Cycle Length (sec)	60	60	60	60	60	60	60	60
Lanes	1	1	2	2	1	1	1	1
Volume (vph)	59	177	306	733	35	120	554	234
Volume (vphpl)	59	177	153	367	35	120	554	234
95 th %. Queue (veh/ln.)	3	6	5	10	2	5	14	7
95 th %. Queue (ft./ln.) ¹	75	150	125	250	50	125	350	175
Storage (ft./ ln.)	450	450	275	275	225	225	100	100
Adequate (Y/N)	YES	YES	YES	YES	YES	YES	NO	NO
Notes: ¹ Assumes 25 feet per vehicle queued								

as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Project-generated traffic at other locations would be too low to have a measurable effect on queue lengths.

Parking

Based on Tables 18.72-2 and 18.72-3 of Section 18.72.030 of the Morgan Hill City Code, retail uses are required to provide one parking space per 250 s.f. and hotel uses are required to provide one parking space per guest room plus an additional space for every 10 rooms. Based on these requirements, the project will be required to provide 560 parking spaces for the proposed 140,000 s.f. of retail space and 165 parking spaces for the proposed 150-room hotel.

The townhomes are required to provide two covered parking spaces per unit, and the required parking spaces for the multi-family apartments are dependent upon the number of bedrooms in each unit. Since the breakdown of the townhomes vs. apartments and the number of bedrooms in each apartment unit are not available, the required parking spaces for residential uses cannot be determined.

Transit, Pedestrian, and Bicycle Analyses

Pedestrian Facilities

Sidewalks are provided along the east side of Mission View Drive and the north side of Cochrane Road in the immediate project area. However, sidewalks along the south side of Cochrane Road are intermittent, with no sidewalk currently provided between the US 101 northbound ramps and De Paul Drive, and a short segment west of Mission View Drive.

Project's Effect on Pedestrian Facilities

It can be expected that new pedestrian traffic would be generated by the proposed project. The project site is located within walking distance from other residential and commercial uses along Cochrane Road both east and west of US 101.

Controlled crossings at the intersections of Cochrane Road with Mission View Drive and De Paul Drive would provide a connection between the project site and the pedestrian generators in the project vicinity mentioned above.

The project would provide sidewalks along its entire frontages along Mission View Drive and result in a continuous connection to the existing sidewalks on the north side of Cochrane Road to provide a safe connection between the project site and other surrounding land uses in the area.

Bicycle Facilities

Bike lanes in the project vicinity are currently provided along the extent of Cochrane Road and Mission View Drive north of Cochrane Road along the project's frontage. An unpaved bike path, the Madrone Channel Trail, runs along the east side of US 101, between Tennant Avenue and Cochrane Road.

Project's Effect on Bicycle Facilities

The proposed project could increase the demand on bicycle facilities in the vicinity of the project site. Assuming bicycle trips would comprise no more than one percent of the total project-generated trips, the project could generate up to eight new bicycle trips during each of the peak hours. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site.

Transit Services

The project site is served by Local Route 87 with bus stops along Mission View Drive and Cochrane Road. In addition, Express Route 568 also provides service along Cochrane Road west of US 101. These two bus routes provide a connection to the Morgan Hill Caltrain Station located on the east side of Depot Street approximately 2.5 miles west of the project site. The Caltrain Station provides a connection to most transit lines serving Morgan Hill in addition to Caltrain.

Project's Effect on Transit Services

Since there is currently only one local bus route (Route 87) serving the City of Morgan Hill, the use of public transportation by residents of the proposed project would be limited. Nevertheless, assuming an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately no more than 24 new transit riders during each of the peak hours.

Recommendation: With the development of the project, as well as other ongoing residential development along Cochrane Road in the vicinity of the project site, there will be an opportunity for VTA to expand the existing service area to this part of the City, which is currently underserved. A bus stop could be provided along the project site frontage along Mission View Drive to serve the project site and adjacent residential neighborhoods. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

5. Conclusions

The potential impacts of the project were evaluated in accordance with the California Environmental Quality Act (CEQA) guidelines and the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018.

A supplemental traffic operations analysis, provided in a separate report, also was completed to demonstrate the project's consistency with the *Morgan Hill 2035 General Plan* goals and policies. The traffic operations analysis supplements the CEQA required VMT analysis. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

CEQA VMT Analysis

Residential VMT

The results of the VMT analysis using the VTA's VMT Evaluation Tool indicate that the existing VMT for residential uses in the project vicinity is 31.68 VMT per capita. The results also indicate that the project is projected to generate VMT per capita (28.51), which would exceed the OPR's recommended impact threshold of 20.94 VMT per capita. Therefore, the residential component of the project would result in an impact on the transportation system based on OPR's VMT impact criteria.

Retail VMT

The model results show that the retail component of the project would cause a net decrease of 4,354 VMT per day. The work trips would result in 1,231 fewer daily VMT and the shopping trips would account for a decrease of 3,123 daily VMT. Therefore, the proposed retail uses of the project would not result in an impact on the transportation system based on OPR's recommended VMT impact criteria.

Hotel VMT

For mixed-use projects, OPR allows lead agencies to evaluate only the project's dominant use. Since the proposed residential and retail components of the project would be the dominant land use (both residential and retail uses would generate a much greater number of daily trips when compared with

the proposed hotel uses), the CEQA impact evaluation for the project is based only on the residential and retail components of the project.

VMT Impacts and Mitigation

Using OPR's impact thresholds, the project would need to implement VMT reduction measures to achieve a 27% reduction (28.51 to 20.94) in its VMT per capita for the proposed residential uses to reduce its impact to less than significant levels. However, per the VMT tool, the maximum reduction possible is 25.34. Further reductions in VMT are not likely feasible for residential projects due to the limited alternative modes of transportation and supporting employment land uses within the City.

The project's VMT per capita could be reduced to 25.34 with the implementation of the following Travel Demand Management (TDM) strategies, however, the reduced VMT per capita would still be greater than the OPR's recommended impact threshold of 20.94 VMT per capita.

- TP01 – School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT. **and**
- TP07 – Subsidized or Discounted Transit Programs: Provide fully (100%) subsidized transit passes for all project residents. Providing subsidies for transit use encourages people to use transit rather than driving, thereby reducing VMT. **and**
- TP14 – Transit Service Expansion: The project subsidizes transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT. **and**
- TP18 – Voluntary Travel Behavior Change Programs: Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT.

OPR's recommended 15% below existing VMT impact threshold encourages developments in transit-rich, highly mixed-use areas to implement design features and trip reduction measures to take advantage of existing multi-modal infrastructure and land use mixes in reducing trip making and/or trip lengths. However, many communities such as Morgan Hill have very limited multi-modal transportation infrastructure and lack a mix of complementary land uses. The lack of employment in these communities along with minimal transit options results in a greater number and longer commute trips. Therefore, it is highly unlikely that developments like the proposed project in these cities can achieve OPR's recommended 15% reduction in VMT. Therefore, absent of the City adopting its own City-specific VMT policies and impact thresholds, the proposed project's VMT impact must be deemed significant and unavoidable.

Other Transportation Issues

Site Access

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project would include frontage improvements along Mission View Drive to include curb, gutter and sidewalk along with the new access points.

On-Site Circulation

The site plan shows two primary internal access roadways running between De Paul Drive and Mission View Drive. Access to each of the proposed retail buildings, townhome units, apartment complexes, and parking areas will be provided by secondary roadways and drive aisles that connect to the primary access roadways and each of the site driveways. The straight nature of the primary internal roadways running between De Paul Drive and Mission View Drive could result in drivers traveling at greater speeds than recommended. Therefore, it may be desirable to implement speed-reducing measures along the internal roadways. These measures could include the installation of speed bumps/humps, bulb-outs at drive aisle intersections, and parking along the primary internal roadways.

Recommendation: Speed-reducing measures such as speed bumps/humps, bulb-outs at drive aisle intersections, and parking should be considered along the two primary internal access roadways running between De Paul Drive and Mission View Drive. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

There are no dead-end aisles on site, except for those located within the townhome area, present allowing for continuous circulation within the project site. The dead-end aisles within the townhome area should not be problematic as the drive aisles provide access to only the private townhome garages.

Recommendation: Signage should be placed at the entrances to the townhouse drive aisles restricting access to residents only. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Emergency Vehicle Access and Circulation

The internal roadways and drive aisles would need to be at least 20 feet wide to provide emergency vehicles (fire trucks) sufficient space to access each of the residential units, retail and hotel uses on-site. There are several dead-end drive aisles located within the townhome area that would not provide sufficient space for emergency vehicles to turn around. However, the dead-ends will be located along short segments of roadways. Thus, vehicles would be able to back out of the roadways.

Intersection Operations Analysis

The queuing analysis also indicates that the maximum vehicle queue for northbound left-turn movement at the Cochrane Road and Mission View Drive intersection currently exceeds the provided turn pocket storage space during the AM and PM peak hours under existing conditions.

The addition of project traffic is not projected to lengthen the projected queue during the AM peak hour. However, the addition of project traffic is projected to lengthen the projected queue by one vehicle or 25 feet during the PM peak hour under existing plus project conditions, which would exceed the existing storage capacity by 75 feet.

Recommendation: The northbound left-turn pocket can be lengthened by 250 feet to accommodate the projected queue during the AM peak hour. However, a second northbound left-turn lane is recommended to improve intersection operations. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Project Driveway Operations

Based on the project trip generation and trip assignment, a maximum of 64 peak-hour left-turns into the project driveways are projected during the PM peak hour along Mission View Drive. Mission View Drive would have a minimal amount of traffic along the project's frontage, thus queuing and operational issues would not occur at the project driveways along Mission View Drive. However, a center striped median should be provided along Mission View Drive as part of the project site frontage improvements.

Recommendation: A center-striped median should be provided along Mission View Drive between Cochrane Road and the northern project site driveway. The current width of Mission View Drive along the project frontage is not adequate to provide left-turn pockets into the project driveways. Mission View Drive would need to be widened along its west side, along the project frontage to provide striped left-turn pockets into the project site as well as streets along the east side of Mission View Drive. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.

Parking

Based on Tables 18.72-2 and 18.72-3 of Section 18.72.030 of the Morgan Hill City Code, retail uses are required to provide one parking space per 250 s.f. and hotel uses are required to provide one parking space per guest room plus an additional space for every 10 rooms. Based on these requirements, the project will be required to provide 560 parking spaces for the proposed 140,000 s.f. of retail space and 165 parking spaces for the proposed 150-room hotel.

The townhomes are required to provide two covered parking spaces per unit, and the required parking spaces for the multi-family apartments are dependent upon the number of bedrooms in each unit. Since the breakdown of the townhomes vs. apartments and the number of bedrooms in each apartment unit are not available, the required parking spaces for residential uses cannot be determined.

Transit, Pedestrian, and Bicycle Analysis

Project's Effect on Pedestrian Facilities

It can be expected that new pedestrian traffic would be generated by the proposed project. The project site is located within walking distance from other residential and commercial uses along Cochrane Road both east and west of US 101.

Controlled crossings at the intersections of Cochrane Road with Mission View Drive and De Paul Drive would provide a connection between the project site and the pedestrian generators in the project vicinity mentioned above.

Cochrane Commons Mixed-Use Development Technical Appendices

May 26, 2022

Appendix A

VTA VMT Evaluation Tool Output Sheets

Project Details

Timestamp May 26, 2022, 08:29:55 AM
of Analysis

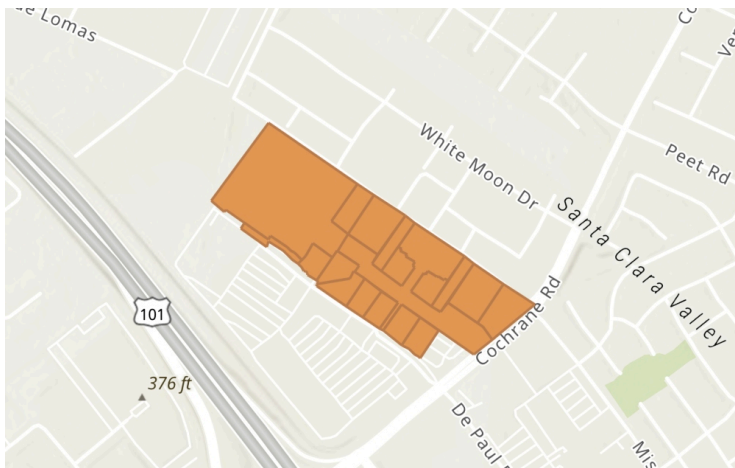
Project Name Cochrane Commons Mixed-Use Development

Project Description 498 townhomes/apartments, 140,000 s.f. of retail space, and a 150-room hotel

Project Location Map

Jurisdiction:
Morgan Hill

APN	TAZ	APN	TAZ
72837056	334	72837047	334
72837067	334	72837026	334
72837052	334	72837048	334
72837068	334	72837069	334
72837051	334	72837040	334
72837044	334	72837041	334
72837045	334	72837042	334
72837046	334	72837043	334
72837049	334		
72837050	334		



Analysis Details

Data Version VTA Countywide Model December 2019

Analysis Methodology Parcel Buffer Method

Baseline Year 2015

Project Land Use

Residential:

Single Family DU: 498

Multifamily DU:

Total DUs: 498

Non-Residential:

Office KSF:

Local Serving Retail KSF:

Industrial KSF:

Residential Affordability (percent of all units):

Extremely Low Income: 0 %

Very Low Income: 0 %

Low Income: 0 %

Parking:

Motor Vehicle Parking:

Bicycle Parking:

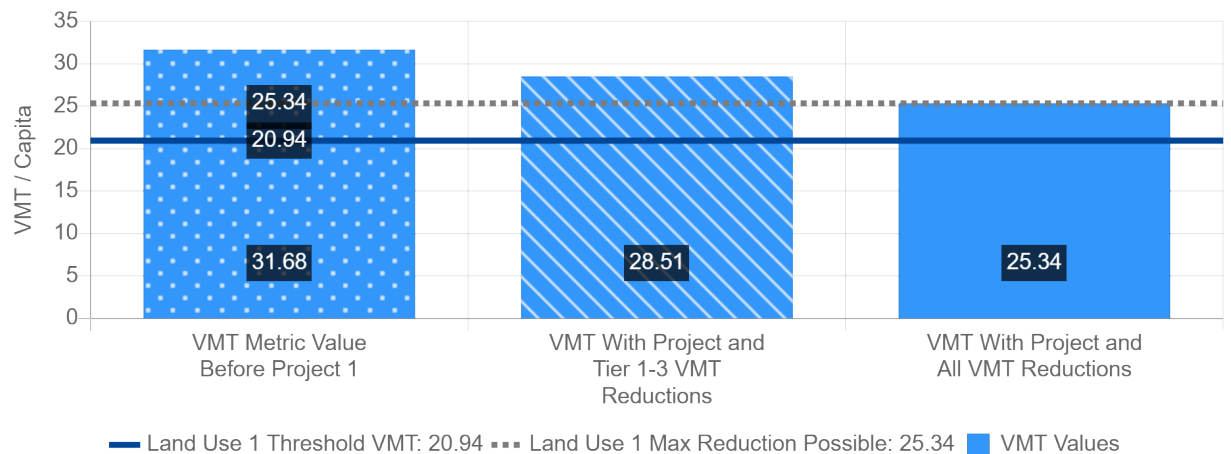
Proximity to Transit Screening

Inside a transit priority area? No (Fail)

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Metric 1:	Home-based VMT per Capita
VMT Baseline Description 1:	City Average
VMT Baseline Value 1:	24.64
VMT Threshold Description 1 / Threshold Value 1:	-15% / 20.94
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	31.68	28.51	25.34
Low VMT Screening Analysis	No (Fail)	No (Fail)	No (Fail)



Tier 1 Project Characteristics

PC01 Increase Residential Density

Existing Residential Density:	2.5
With Project Residential Density:	5.61

PC02 Increase Residential Diversity

Existing Residential Diversity Index:	0.53
With Project Residential Diversity Index:	0.33

PC03 Affordable Housing

PC04 Increase Employment Density

Existing Employment Density:	7.21
With Project Employment Density:	7.21

Tier 4 TDM Programs

TP01 School Pool Programs

School Pool Program Percent of Expected Participant Households:	100 %
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TP07 Subsidized Transit Program

Percent of Transit Subsidy:	100 %
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TP14 Transit Service Expansion

Percent Increase in Transit Frequency:	100 %
Percent of Routes Serving the Project with Upgrades:	100 %

TP18 Voluntary Travel Behavior Change Program

Percent of Behavior Program Participants :	100 %
--	-------

Appendix B

Intersection Queuing Calculations

DePaul/Cochrane
SBT/L
AM

Existing Conditions

Avg. Queue Per Lane in Veh=

0.7

Percentile = 95%

2

DePaul/Cochrane
SBT/L
AM

Existing Plus Approved Project Conditions

Avg. Queue Per Lane in Veh=

1.0

Percentile = 95%

3

DePaul/Cochrane
SBT/L
AM

Existing Plus Proposed Project Conditions

Avg. Queue Per Lane in Veh=

1.0

Percentile = 95%

3

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.4966	0.4966	0
0.3476	0.8442	1
0.1217	0.9659	2
0.0284	0.9942	3
0.0050	0.9992	4
0.0007	0.9999	5
0.0001	1.0000	6
0.0000	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
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0.0000	1.0000	62
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0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.3679	0.3679	0
0.3679	0.7358	1
0.1839	0.9197	2
0.0613	0.9810	3
0.0153	0.9963	4
0.0031	0.9994	5
0.0005	0.9999	6
0.0001	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
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0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.3679	0.3679	0
0.3679	0.7358	1
0.1839	0.9197	2
0.0613	0.9810	3
0.0153	0.9963	4
0.0031	0.9994	5
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0.0000	1.0000	65

DePaul/Cochrane

SBT/L

PM

Existing Conditions

Avg. Queue Per Lane in Veh=

2.4

Percentile = 95%

5

DePaul/Cochrane

SBT/L

PM

Existing Plus Approved Project Conditions

Avg. Queue Per Lane in Veh=

4.4

Percentile = 95%

8

DePaul/Cochrane

SBT/L

PM

Existing Plus Proposed Project Conditions

Avg. Queue Per Lane in Veh=

3.0

Percentile = 95%

6

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0907	0.0907	0
0.2177	0.3084	1
0.2613	0.5697	2
0.2090	0.7787	3
0.1254	0.9041	4
0.0602	0.9643	5
0.0241	0.9884	6
0.0083	0.9967	7
0.0025	0.9991	8
0.0007	0.9998	9
0.0002	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
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0.0000	1.0000	15
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0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0123	0.0123	0
0.0540	0.0663	1
0.1188	0.1851	2
0.1743	0.3594	3
0.1917	0.5512	4
0.1687	0.7199	5
0.1237	0.8436	6
0.0778	0.9214	7
0.0428	0.9642	8
0.0209	0.9851	9
0.0092	0.9943	10
0.0037	0.9980	11
0.0013	0.9993	12
0.0005	0.9998	13
0.0001	0.9999	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
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0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0498	0.0498	0
0.1494	0.1991	1
0.2240	0.4232	2
0.2240	0.6472	3
0.1680	0.8153	4
0.1008	0.9161	5
0.0504	0.9665	6
0.0216	0.9881	7
0.0081	0.9962	8
0.0027	0.9989	9
0.0008	0.9997	10
0.0002	0.9999	11
0.0001	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
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0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

DePaul/Cochrane
EBL
AM
Existing Conditions
Avg. Queue Per Lane in Veh= 1.6
Percentile = 95% 4

DePaul/Cochrane
EBL
AM
Existing Plus Approved Project Conditions
Avg. Queue Per Lane in Veh= 2.1
Percentile = 95% 5

DePaul/Cochrane
EBL
AM
Existing Plus Proposed Project Conditions
Avg. Queue Per Lane in Veh= 2.6
Percentile = 95% 5

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.2019	0.2019	0
0.3230	0.5249	1
0.2584	0.7834	2
0.1378	0.9212	3
0.0551	0.9763	4
0.0176	0.9940	5
0.0047	0.9987	6
0.0011	0.9997	7
0.0002	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
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0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.1225	0.1225	0
0.2572	0.3796	1
0.2700	0.6496	2
0.1890	0.8386	3
0.0992	0.9379	4
0.0417	0.9796	5
0.0146	0.9941	6
0.0044	0.9985	7
0.0011	0.9997	8
0.0003	0.9999	9
0.0001	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
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0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0743	0.0743	0
0.1931	0.2674	1
0.2510	0.5184	2
0.2176	0.7360	3
0.1414	0.8774	4
0.0735	0.9510	5
0.0319	0.9828	6
0.0118	0.9947	7
0.0038	0.9985	8
0.0011	0.9996	9
0.0003	0.9999	10
0.0001	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

DePaul/Cochrane

EBL

PM

Existing Conditions

Avg. Queue Per Lane in Veh=

3.7

Percentile = 95%

7

DePaul/Cochrane

EBL

PM

Existing Plus Approved Project Conditions

Avg. Queue Per Lane in Veh=

5.3

Percentile = 95%

9

DePaul/Cochrane

EBL

PM

Existing Plus Proposed Project Conditions

Avg. Queue Per Lane in Veh=

6.1

Percentile = 95%

10

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0247	0.0247	0
0.0915	0.1162	1
0.1692	0.2854	2
0.2087	0.4942	3
0.1931	0.6872	4
0.1429	0.8301	5
0.0881	0.9182	6
0.0466	0.9648	7
0.0215	0.9863	8
0.0089	0.9952	9
0.0033	0.9984	10
0.0011	0.9995	11
0.0003	0.9999	12
0.0001	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0050	0.0050	0
0.0265	0.0314	1
0.0701	0.1016	2
0.1239	0.2254	3
0.1641	0.3895	4
0.1740	0.5635	5
0.1537	0.7171	6
0.1163	0.8335	7
0.0771	0.9106	8
0.0454	0.9559	9
0.0241	0.9800	10
0.0116	0.9916	11
0.0051	0.9967	12
0.0021	0.9988	13
0.0008	0.9996	14
0.0003	0.9999	15
0.0001	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0022	0.0022	0
0.0137	0.0159	1
0.0417	0.0577	2
0.0848	0.1425	3
0.1294	0.2719	4
0.1579	0.4298	5
0.1605	0.5902	6
0.1399	0.7301	7
0.1066	0.8367	8
0.0723	0.9090	9
0.0441	0.9531	10
0.0244	0.9776	11
0.0124	0.9900	12
0.0058	0.9958	13
0.0025	0.9984	14
0.0010	0.9994	15
0.0004	0.9998	16
0.0001	0.9999	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Mission View/Cochrane
EBL
AM
Existing Conditions
Avg. Queue Per Lane in Veh= 0.3
Percentile = 95% 1

Mission View/Cochrane
EBL
AM
Existing Plus Approved Project Conditions
Avg. Queue Per Lane in Veh= 1.2
Percentile = 95% 3

Mission View/Cochrane
EBL
AM
Existing Plus Proposed Project Conditions
Avg. Queue Per Lane in Veh= 0.6
Percentile = 95% 2

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.7408	0.7408	0
0.2222	0.9631	1
0.0333	0.9964	2
0.0033	0.9997	3
0.0003	1.0000	4
0.0000	1.0000	5
0.0000	1.0000	6
0.0000	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.3012	0.3012	0
0.3614	0.6626	1
0.2169	0.8795	2
0.0867	0.9662	3
0.0260	0.9923	4
0.0062	0.9985	5
0.0012	0.9997	6
0.0002	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.5488	0.5488	0
0.3293	0.8781	1
0.0988	0.9769	2
0.0198	0.9966	3
0.0030	0.9996	4
0.0004	1.0000	5
0.0000	1.0000	6
0.0000	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Mission View/Cochrane
EBL
PM
Existing Conditions
Avg. Queue Per Lane in Veh= 1.1
Percentile = 95% 3

Mission View/Cochrane
EBL
PM
Existing Plus Approved Project Conditions
Avg. Queue Per Lane in Veh= 4.2
Percentile = 95% 8

Mission View/Cochrane
EBL
PM
Existing Plus Proposed Project Conditions
Avg. Queue Per Lane in Veh= 2.0
Percentile = 95% 5

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.3329	0.3329	0
0.3662	0.6990	1
0.2014	0.9004	2
0.0738	0.9743	3
0.0203	0.9946	4
0.0045	0.9990	5
0.0008	0.9999	6
0.0001	1.0000	7
0.0000	1.0000	8
0.0000	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0150	0.0150	0
0.0630	0.0780	1
0.1323	0.2102	2
0.1852	0.3954	3
0.1944	0.5898	4
0.1633	0.7531	5
0.1143	0.8675	6
0.0686	0.9361	7
0.0360	0.9721	8
0.0168	0.9889	9
0.0071	0.9959	10
0.0027	0.9986	11
0.0009	0.9996	12
0.0003	0.9999	13
0.0001	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.1353	0.1353	0
0.2707	0.4060	1
0.2707	0.6767	2
0.1804	0.8571	3
0.0902	0.9473	4
0.0361	0.9834	5
0.0120	0.9955	6
0.0034	0.9989	7
0.0009	0.9998	8
0.0002	1.0000	9
0.0000	1.0000	10
0.0000	1.0000	11
0.0000	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
0.0000	1.0000	21
0.0000	1.0000	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
0.0000	1.0000	30
0.0000	1.0000	31
0.0000	1.0000	32
0.0000	1.0000	33
0.0000	1.0000	34
0.0000	1.0000	35
0.0000	1.0000	36
0.0000	1.0000	37
0.0000	1.0000	38
0.0000	1.0000	39
0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
0.0000	1.0000	43
0.0000	1.0000	44
0.0000	1.0000	45
0.0000	1.0000	46
0.0000	1.0000	47
0.0000	1.0000	48
0.0000	1.0000	49
0.0000	1.0000	50
0.0000	1.0000	51
0.0000	1.0000	52
0.0000	1.0000	53
0.0000	1.0000	54
0.0000	1.0000	55
0.0000	1.0000	56
0.0000	1.0000	57
0.0000	1.0000	58
0.0000	1.0000	59
0.0000	1.0000	60
0.0000	1.0000	61
0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Mission View/Cochrane
NBL
AM
Existing Conditions
Avg. Queue Per Lane in Veh= 8.9
Percentile = 95% 14

Mission View/Cochrane
NBL
AM
Existing Plus Approved Project Conditions
Avg. Queue Per Lane in Veh= 9.5
Percentile = 95% 15

Mission View/Cochrane
NBL
AM
Existing Plus Proposed Project Conditions
Avg. Queue Per Lane in Veh= 9.2
Percentile = 95% 14

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0001	0.0001	0
0.0012	0.0014	1
0.0054	0.0068	2
0.0160	0.0228	3
0.0357	0.0584	4
0.0635	0.1219	5
0.0941	0.2160	6
0.1197	0.3357	7
0.1332	0.4689	8
0.1317	0.6006	9
0.1172	0.7178	10
0.0948	0.8126	11
0.0703	0.8829	12
0.0481	0.9311	13
0.0306	0.9617	14
0.0182	0.9798	15
0.0101	0.9899	16
0.0053	0.9952	17
0.0026	0.9978	18
0.0012	0.9991	19
0.0005	0.9996	20
0.0002	0.9998	21
0.0001	0.9999	22
0.0000	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
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0.0000	1.0000	62
0.0000	1.0000	63
0.0000	1.0000	64
0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0001	0.0001	0
0.0007	0.0008	1
0.0034	0.0042	2
0.0107	0.0149	3
0.0254	0.0403	4
0.0483	0.0885	5
0.0764	0.1649	6
0.1037	0.2687	7
0.1232	0.3918	8
0.1300	0.5218	9
0.1235	0.6453	10
0.1067	0.7520	11
0.0844	0.8364	12
0.0617	0.8981	13
0.0419	0.9400	14
0.0265	0.9665	15
0.0157	0.9823	16
0.0088	0.9911	17
0.0046	0.9957	18
0.0023	0.9980	19
0.0011	0.9991	20
0.0005	0.9996	21
0.0002	0.9999	22
0.0001	0.9999	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
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Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0001	0.0001	0
0.0009	0.0010	1
0.0043	0.0053	2
0.0131	0.0184	3
0.0302	0.0486	4
0.0555	0.1041	5
0.0851	0.1892	6
0.1118	0.3010	7
0.1286	0.4296	8
0.1315	0.5611	9
0.1210	0.6820	10
0.1012	0.7832	11
0.0776	0.8607	12
0.0549	0.9156	13
0.0361	0.9517	14
0.0221	0.9738	15
0.0127	0.9865	16
0.0069	0.9934	17
0.0035	0.9969	18
0.0017	0.9986	19
0.0008	0.9994	20
0.0003	0.9998	21
0.0001	0.9999	22
0.0001	1.0000	23
0.0000	1.0000	24
0.0000	1.0000	25
0.0000	1.0000	26
0.0000	1.0000	27
0.0000	1.0000	28
0.0000	1.0000	29
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0.0000	1.0000	31
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0.0000	1.0000	40
0.0000	1.0000	41
0.0000	1.0000	42
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0.0000	1.0000	65

Mission View/Cochrane
NBL
PM
Existing Conditions
Avg. Queue Per Lane in Veh= 3.2
Percentile = 95% 6

Mission View/Cochrane
NBL
PM
Existing Plus Approved Project Conditions
Avg. Queue Per Lane in Veh= 5.0
Percentile = 95% 9

Mission View/Cochrane
NBL
PM
Existing Plus Proposed Project Conditions
Avg. Queue Per Lane in Veh= 3.9
Percentile = 95% 7

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0408	0.0408	0
0.1304	0.1712	1
0.2087	0.3799	2
0.2226	0.6025	3
0.1781	0.7806	4
0.1140	0.8946	5
0.0608	0.9554	6
0.0278	0.9832	7
0.0111	0.9943	8
0.0040	0.9982	9
0.0013	0.9995	10
0.0004	0.9999	11
0.0001	1.0000	12
0.0000	1.0000	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
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Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0067	0.0067	0
0.0337	0.0404	1
0.0842	0.1247	2
0.1404	0.2650	3
0.1755	0.4405	4
0.1755	0.6160	5
0.1462	0.7622	6
0.1044	0.8666	7
0.0653	0.9319	8
0.0363	0.9682	9
0.0181	0.9863	10
0.0082	0.9945	11
0.0034	0.9980	12
0.0013	0.9993	13
0.0005	0.9998	14
0.0002	0.9999	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
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0.0000	1.0000	65

Individual Probability	Cumulative Probability	Number of Queued Vehicles
0.0202	0.0202	0
0.0789	0.0992	1
0.1539	0.2531	2
0.2001	0.4532	3
0.1951	0.6484	4
0.1522	0.8006	5
0.0989	0.8995	6
0.0551	0.9546	7
0.0269	0.9815	8
0.0116	0.9931	9
0.0045	0.9977	10
0.0016	0.9993	11
0.0005	0.9998	12
0.0002	0.9999	13
0.0000	1.0000	14
0.0000	1.0000	15
0.0000	1.0000	16
0.0000	1.0000	17
0.0000	1.0000	18
0.0000	1.0000	19
0.0000	1.0000	20
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The project would provide sidewalks along its entire frontages along Mission View Drive and result in a continuous connection to the existing sidewalks on the north side of Cochrane Road to provide a safe connection between the project site and other surrounding land uses in the area.

Bicycle Facilities

Project's Effect on Bicycle Facilities

The proposed project could increase the demand on bicycle facilities in the vicinity of the project site. Assuming bicycle trips would comprise no more than one percent of the total project-generated trips, the project could generate up to eight new bicycle trips during each of the peak hours. The demand generated by the proposed project could be accommodated by the existing bicycle facilities in the vicinity of the project site.

Transit Services

Project's Effect on Transit Services

Since there is currently only one local bus route (Route 87) serving the City of Morgan Hill, the use of public transportation by residents of the proposed project would be limited. Nevertheless, assuming an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately no more than 24 new transit riders during each of the peak hours.

Recommendation: With the development of the project, as well as other ongoing residential development along Cochrane Road in the vicinity of the project site, there will be an opportunity for VTA to expand the existing service area to this part of the City, which is currently underserved. A bus stop could be provided along the project site frontage along Mission View Drive to serve the project site and adjacent residential neighborhoods. The recommended improvements may be included as part of the project's Conditions of Approval. However, the improvements are not required to mitigate project impacts per CEQA guidelines.



Cochrane Commons Phase II Project

Final Environmental Impact Report

prepared by

City of Morgan Hill

17575 Peak Avenue

Morgan Hill, California 95037

Contact: Jennifer Carman, Development Services Director

prepared with the assistance of

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

September 2022

Cochrane Commons Phase II Project

Final Environmental Impact Report

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September 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

1 Responses to Comments on the Draft SEIR

1.1 Purpose of the Response to Comments on the Draft SEIR

This section contains responses to comments received on the Draft Subsequent Environmental Impact Report (SEIR) prepared for the Cochrane Commons Phase II Project (proposed project). The Draft EIR identifies the likely environmental consequences associated with implementation of the proposed project. This document, together with the Draft SEIR, constitutes the Final SEIR for the proposed project.

1.2 Environmental Review Process

Pursuant to the California Environmental Quality Act (CEQA), lead agencies are required to consult with public agencies having jurisdiction over a proposed project and to provide the general public with an opportunity to comment on the Draft SEIR.

On December 3, 2021, the City of Morgan Hill circulated a Notice of Preparation (NOP) for a 30-day comment period to request input on the types of impacts that could result from the proposed project. The Draft SEIR was made available for public review for a 45-day comment period that began on June 10, 2022 and ended on July 25, 2022. The Notice of Availability of a Draft SEIR was posted with the County Clerk, sent to the State Clearinghouse, published on the City's website, and mailed to responsible agencies. The City also held a virtual community open house as an opportunity for the public to submit verbal comments on the SEIR at 7:00 p.m. on July 13, 2022.

1.3 Comments and Responses

This section includes written comments received during the circulation of the Draft SEIR prepared for the proposed project, and responses to those comments.

During the 45-day public review period described above, the City of Morgan Hill received seven comment letters on the Draft SEIR. The commenters and the page number on which each commenter's letter appear are listed below.

Letter No. and Commenter		Page No.
1	Mark Leong, District Branch Chief, California Department of Transportation	1-3
2	Benjamin Hwang, P.E., Assistant Engineer II – Civil, Valley Water	1-8
3	Richard Martinez	1-12
4	Tony Burquez	1-15
5	Natalie Sparrer	1-17
6	Daniel F. Flynn	1-22
7	Doug Muirhead	1-24

The comment letters and responses follow. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1).

In some cases, specific changes to the text of the Draft SEIR have been made in response to comments received. In no case do these revisions involve new significant impacts or a substantial increase in the severity of impacts identified in the Draft SEIR. Where revisions to the main text are called for, the page and paragraph are set forth, followed by the appropriate revision. Added text is indicated with underlined and deleted text is indicated with ~~strikeout~~. Page numbers correspond to the page numbers of the Draft SEIR.

The full, revised version of the Executive Summary is appended to this document.

California Department of Transportation

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D | OAKLAND, CA 94623-0660
www.dot.ca.gov



Letter 1

July 22, 2022

SCH #: 2022060200
GTS #: 04-SCL-2021-01069
GTS ID: 24850
Co/Rt/Pm: SCL/101/17.96

Jennifer Carman, Development Services Director
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, CA 95037

Re: Cochrane Commons Phase II Project Subsequent Environmental Impact Report (SEIR)

Dear Jennifer Carman:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Cochrane Commons Phase II Project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the June 2022 SEIR.

Project Understanding

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to Mixed Use Flex (MUF) for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, and swimming pool would also be provided for on-site residents. The project would include 1,367 parking spaces.

1.1

Significant and Unavoidable VMT Impacts- Mitigation

The project VMT analysis and significance determination are undertaken in a manner consistent with the Office of Planning and Research's (OPR) Technical Advisory. Per the SEIR, this project is found to have significant VMT impacts. Please consider measures to mitigate the project's VMT impacts:

- Upgrade existing Class II bike lanes to Class IV cycle tracks;
- Better bicycle access with protected bike lanes to the Caltrain station, Santa Teresa VTA light rail, and VTA Rapid Bus line 568 at the Morgan Hill Transit Center;
- Install green thermoplastic conflict markings;
- Plant shade trees along sidewalks, install pedestrian refuge islands at Cochrane Rd, and install directional curb ramps;
- Due to potential conflicts at the US-101 ramps, provide crosswalk enhancements at uncontrolled crosswalks on all ramps at the interchange of US-101 and Cochrane Road:
 - Crosswalk at NB 101 On-ramp from WB Cochrane Road.
 - Crosswalk at SB 101 On-ramp from WB Cochrane Road.
 - Crosswalk at SB 101 On-ramp from EB Cochrane Road.
 - Crosswalk at NB 101 On-ramp from EB Cochrane Road.

1.2

Construction-Related Impacts

Potential impacts to the State Right-of-Way (ROW) from project-related temporary access points should be analyzed. Mitigation for significant impacts due to construction and noise should be identified. Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, visit: <https://dot.ca.gov/programs/traffic-operations/transportation-permits>. Prior to construction, coordination may be required with Caltrans to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

1.3

Lead Agency

As the Lead Agency, the City of Morgan Hill is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

1.4

Equitable Access

If any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. As well, the project must maintain bicycle and pedestrian access during construction. These access considerations support Caltrans' equity mission to provide a safe, sustainable, and equitable transportation network for all users.

1.5

Encroachment Permit

Please be advised that any permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. As part of the encroachment permit submittal process, you may be asked by the Office of Encroachment Permits to submit a completed encroachment permit application package, digital set of plans clearly delineating Caltrans' ROW, digital copy of signed, dated and stamped (include stamp expiration date) traffic control plans, this comment letter, your response to the comment letter, and where applicable, the following items: new or amended Maintenance Agreement (MA), approved Design Standard Decision Document (DSDD), approved encroachment exception request, and/or airspace lease agreement. Your application package may be emailed to D4Permits@dot.ca.gov.

1.6

Please note that Caltrans is in the process of implementing an online, automated, and milestone-based Caltrans Encroachment Permit System (CEPS) to replace the current permit application submittal process with a fully electronic system, including online payments. The new system is expected to be available during 2022. To obtain information about the most current encroachment permit process and to download the permit application, please visit <https://dot.ca.gov/programs/traffic-operations/ep/applications>.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, or for future notifications and requests for review of new projects, please email LDR-D4@dot.ca.gov.

Sincerely,



MARK LEONG
District Branch Chief
Local Development Review

c: State Clearinghouse

Letter 1

COMMENTER: Mark Leong, District Branch Chief, California Department of Transportation

DATE: July 22, 2022

Response 1.1

The commenter thanks the applicant for their inclusion in the environmental review process for the proposed project. The commenter notes the purpose of the project and their understanding of the project description.

The comment does not pertain to the adequacy of the Draft SEIR, and no response is required. No revisions to the Draft SEIR are required in response to this comment.

Response 1.2

The commenter notes that the project analysis and significance determination are undertaken in a manner consistent with the Office of Planning and Research's (OPR) Technical Advisory. The commenter notes that the Draft SEIR found that that proposed project is found to have significant VMT impacts. The commenter suggests considering several measures to mitigate the project's VMT impacts.

The measures the commenter suggest include adding sidewalks and crosswalks in the project vicinity. As described in Section 2, *Project Description*, on Page 2-7 of the Draft SEIR, the project would include sidewalk and pavement improvements along road frontages that border the project site. While additional sidewalk and crosswalk improvements could be included in the proposed project, it is unlikely that such improvements would result in a substantial reduction of VMT associated with the project.

Please refer to Mitigation Measure TRA-1 in Section 4.2, *Transportation*, of the Draft SEIR. In order to reduce VMT impacts, the proposed project would include additional mitigation to reduce impacts that were not previously included in the 2005 EIR. Mitigation Measure TRA-1 would aim to decrease VMT impacts by developing a Transportation Demand Management (TDM) plan. The TDM plan would include measures such as, but not limited to, school pool programs, transit service expansion, and voluntary travel behavior change programs. No revisions to the Draft SEIR are required in response to this comment.

Response 1.3

The commenter requests that impacts to the State Right-of-Way (ROW) from project-related temporary access points be analyzed. The commenter suggests that mitigation measures for construction and noise should be identified. The commenter states that project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans and provides the permit application link. The commenter states that coordination with Caltrans may be required to develop a Transportation Management Plan (TMP) to reduce construction traffic impacts to the State Transportation Network (STN).

The applicant would be required to coordinate and obtain permits with Caltrans should construction result in impacts to the State ROW from project-related temporary access points and the STN. If applicable, the applicant would prepare a TMP to reduce construction traffic impacts to the STN.

Please refer to Appendix A, *Initial Study*, for a full evaluation of construction-related noise impacts. Construction activities would be required to comply with all construction noise-related policies found in the Morgan Hill General Plan and Municipal Code. Construction would be required to occur between the hours of 7:00 a.m. and 8:00 p.m. on weekdays and between the hours of 9:00 a.m. and 6:00 p.m. on Saturday pursuant to the City's Noise Ordinance Section 8.28.040(D)(1). Impacts related to construction noise would be less than significant.

No revisions to the Draft SEIR are required in response to this comment.

Response 1.4

The commenter states that as the Lead Agency, the City of Morgan Hill is responsible for all project mitigation, including any needed improvements to the STN. The commenter suggests that the project's fair share, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

This comment is noted. A mitigation monitoring and reporting program (MMRP) will be adopted by the City of Morgan Hill at the time of the certification of the SEIR. Information included in the MMRP shall include, but is not limited to, the implementation responsibilities of the lead agency and scheduling details. No revisions to the Draft SEIR are required in response to this comment.

Response 1.5

The commenter notes that if any Caltrans facilities are impacted by the project, those facilities must meet American Disabilities Act (ADA) Standards after project completion. The commenter notes that bicycle and pedestrian access should be maintained during construction.

The City would ensure that the applicant would comply with ADA Standards as part of the project permitting process. Work that would occur within the public ROW would be subject to the provisions of Chapter 12.08 of the Morgan Hill Municipal Code. No revisions to the Draft SEIR are required in response to this comment.

Response 1.6

The commenter advises that permanent work or temporary traffic control that encroaches onto Caltrans' ROW requires a Caltrans-issued encroachment permit. The commenter describes the permit application process and required documentation.

While encroachment into Caltrans ROW is not anticipated, the applicant would be required to coordinate and obtain permits with Caltrans should construction result in encroachment within a Caltrans' ROW. Necessary documentation would be prepared and submitted to Caltrans prior to project construction. No revisions to the Draft SEIR are required in response to this comment.



File: 33033
Cochrane Channel

July 21, 2022

Letter 2

Ms. Jennifer Carman
Development Services Director
City of Morgan Hill Development Services
17575 Peak Avenue
Morgan Hill, CA 95037
Jennifer.Carman@morganhill.ca.gov

Subject: Draft Subsequent Environmental Impact Report (SEIR) – Phase II Cochrane Commons

Dear Ms. Carman:

The Santa Clara Valley Water District (Valley Water) has reviewed the Draft Subsequent Environmental Impact Report (SEIR) for the construction of Phase II of the Cochrane Commons development and have the following comments:

Hydrology

1. The SEIR states that the drainage from the site will be directed to the detention basins which will be sized to discharge at rates at or below pre-development rates. Furthermore, SEIR Appendix A states that there are no impacts to hydrology due to the drainage patterns generally remaining the same as studied in the 2005 EIR. These statements do not adequately demonstrate that there will be no new impacts to Cochrane Channel from development of the site. The detention basins are already sized based on the 2005 EIR development, and Valley Water has already approved the allowable pumping discharge rate from the detention basin into Cochrane Channel so as not to increase flooding downstream in Coyote Creek. If changes to the detention basin are required, the study needs to demonstrate there is sufficient space to increase their size. It may not be feasible to deepen them depending on allowable side slopes and normal wet season groundwater levels, which may decrease available capacity.

2.1

The SEIR should compare the new Phase II project with the original project that was considered in the 2005 EIR and determine if there are any changes in impervious areas, parameters which may change the peak runoff (volume and rate), and to the required detention basin size based on the existing pump discharge rate, as determined in Schaaf and Wheeler's Hydrology Report (Appendix H, 2005 EIR). Schaaf and Wheeler's study should be re-evaluated to ensure that the proposed mitigation measures from the 2005 EIR are still applicable to the new Phase II project and definitively determine whether the existing detention basins and existing pump



Page 2

July 21, 2022

Draft Supplemental EIR for Phase II Cochrane Commons Project

discharge rates are sufficient to accommodate the currently proposed Phase II project, or whether modifications to the system are required.

2.1
Cont.

Groundwater/Water Supply

2. Due to the long agricultural history of the Santa Clara and Llagas subbasins and subsequent land development, there are likely many abandoned wells in the subbasins. While some of these abandoned wells may have been sealed prior to well permitting requirements, many have open casings and may be discovered during construction of the Phase II project. If abandoned wells are encountered during construction, they must be properly destroyed with related work permitted by Valley Water.
3. Buildout of the project will increase water use an estimated 223 acre-feet per year. Although the Water Supply Assessment concludes that the project can be accommodated by existing and planned water sources, given regional and state-wide challenges with water supply, water use should still be reduced to the greatest extent possible. Additionally, the WSA notes the importance of water conservation efforts, however the EIR does not call out any specific actions to reduce water use. Potential opportunities to minimize water and associated energy use include requiring water conservation measures from the Model Water Efficient New Development Ordinance, which include:
 - Hot water recirculation systems
 - Graywater dual distribution plumbing
 - Encourage non-potable reuse of water like recycled water, graywater and rainwater/stormwater in new development and remodels through installation of dual plumbing for irrigation, toilet flushing, cooling towers, and other non-potable water uses
 - Require dedicated landscape meters where applicable
 - Require installation of separate submeters to each unit in multi-family developments and individual spaces within commercial buildings to encourage efficient water use
 - Weather- or soil-based irrigation controllers.

2.2

2.3

If you have any further questions regarding Valley Water's comments, please feel free to email me at bhwang@valleywater.org or call me at (408) 510-0768 and reference file number 33033.

Thank you,

DocuSigned by:


BENJAMIN HWANG, P.E.

ASSISTANT ENGINEER II - CIVIL

Community Projects Review Unit

Watersheds Design and Construction Division

bhwang@valleywater.org

Tel. (408) 630-3066 Cell. (408) 510-0768

Cc: Y. Arroyo, B. Hwang, M. Richert, M. Martin, S. Greene, V. De La Piedra, G. Cook, 1-9
J. Gurdak, File

Letter 2

COMMENTER: Benjamin Hwang, P.E., Assistant Engineer II – Civil, Valley Water

DATE: July 21, 2022

Response 2.1

The commenter suggests that the SEIR should compare the new Phase II project with the original project that was considered in the 2005 EIR and determined if there are any changes in impervious areas which may change the peak runoff, and to the required detention basin size based on the existing pump discharge rate, as determined in Appendix WSA of the Initial Study (Appendix A).

As discussed in Section 10, *Hydrology and Water Quality*, of the Initial Study, the proposed project would create additional impervious surfaces beyond those analyzed in the 2005 EIR. Therefore, the project must treat runoff with an approved and appropriately sized LID treatment system prior to off-site discharge in compliance with the Central Coast Regional Water Quality Control Board's Post-Construction Requirements and must control post-project peak flows to not exceed pre-project peak flows for the 2-year through 10-year storm events. In addition, a Stormwater Management Plan would be required to be submitted to the City that describes how runoff and associated water quality impacts from the project would be controlled by the project's post-construction requirements. The project would be required to comply with the National Pollutant Discharge Elimination System Construction General Permit, regulations enforced by the Regional Water Quality Control Board, and adopted City regulations, which would address impacts to water quality and ensure impacts would be less than significant. As such, no revisions to the Draft SEIR are required in response to this comment.

Response 2.2

The commenter notes that due to the long agricultural history of the Santa Clara and Llagas subbasins, there may be abandoned wells which may have been sealed or have open casings. The commenter notes that if abandoned wells are discovered on the project site during construction, the well must be properly destroyed with related work permitted by Valley Water.

Should abandoned well(s) be encountered during project construction, the project applicant would properly destroy the wells and obtain appropriate permits from Valley Water, as abandoned wells encountered during project construction must be destroyed in accordance with the California Well Standards as established by the California Department of Water Resources. No revisions to the Draft SEIR are required in response to this comment.

Response 2.3

The commenter suggests that the proposed project's water use should be reduced to the greatest extent possible. The commenter notes that while it was stated in the Water Supply Assessment (WSA) that conservation measures are important, the Draft SEIR does not specifically call out water conservation actions. The commenter suggests several water conservation measures from the Model Water Efficient New Development Ordinance.

As discussed in Section 6, *Energy*, of Appendix A, the proposed project would be required to comply with current CalGreen standards and, as such, would be required to comply with the Model Water Efficient Landscape Ordinance and additional water conservation measures as directed by CalGreen,

and the project would not require additional mitigation for water conservation. Additionally, as stated in Section 19, *Utilities and Service Systems*, there is adequate water supply available to serve the project. No revisions to the Draft SEIR are required in response to this comment. However, this comment will be forwarded to the project applicant and decisionmakers for their consideration.

From: Richard <rimartinez1@gmail.com>
Sent: Sunday, June 12, 2022 6:22 PM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Draft SEIR Comment

Letter 3

Development Services Team,

I'd like to express my concern with the negative impact to the surrounding community should you move forward with Phase II of the Cochrane Commons development as is currently planned. While I want to be supportive of responsible growth for our city and helping to bring new means of economic vitality - I urge you to please not just follow the standard template that many other cities have undertaken and think first about your existing community / residents. We need to break the mold that developers have set for cities wherein new development is packed so densely, parking is crowded with very narrow spaces, ingress/egress is frustrating for shoppers meanwhile local residents (like ourselves) are now subject to this frustrating level of traffic effectively at all times. We are in a highly desirable community with lots of commercial promise and we should not sell the allure of our town short. Developers and corporate interests need to exhibit a long term commitment to our community and not just expect that we will allow our easy going way of life to yield to their desire for a prompt return on investment.

3.1

To be more specific, the concern for my family is predicated on the fact that even today (or pre-pandemic for that matter), traffic on Cochrane was already a reality for us. I am asking that you please show us that you have truly thought about us residents that have to live next door to this project by not just speaking to information based on the Impact Report findings (which itself states that traffic will be above the recommended levels). But that's just a starting point for us, I want to know that our city leaders truly understand the impact for those of us residents that will be most directly impacted, those of us living in the neighborhood today. This means that you actually spend time seeing for yourself, and experiencing the traffic that we experience during commute times, or on the weekends when families typically run their errands. I believe anything short of expanding all the roadways around Cochrane will be leading us down the same path of congestion and frustrated shoppers that creates more work for public services, and takes away from our sense of community.

3.2

Additionally, I would like to ask that you help us bridge the communication with other agencies beyond our city. For example, I've tried to no avail to address the confusion / issue with the NB101 onramp from Cochrane (Westbound entrance). Keep in mind, the traffic for this onramp is only going to get worse with this proposed project. Yet, anytime I've asked our city for help having the onramp signage / signal cycles, or any other concern, i've been placated by being told to contact state agencies because it doesn't fall under our city's purview. As you can imagine, such a response is quite insufficient as I see these boundaries as being a handshake between agencies with which our city should (if they don't already have) close working relationships because it directly impacts your residents.

3.3

I sincerely appreciate your time in considering my family's perspective and I welcome you to reach out if I can help provide any further clarity or comment.

Thank you.

Sincerely,
Martinez Family
310-343-8445
18510 Serra Avenida

Letter 3

COMMENTER: Richard Martinez

DATE: June 12, 2022

Response 3.1

The commenter opines that current development plans involve densely planned development that may increase parking demand and traffic. The commenter states that the needs of existing residents should be prioritized.

The commenter expresses concerns related to traffic congestion, which is typically quantified with the metric of level of service (LOS). However, pursuant to California Public Resources Code section 21099(b)(2) and *CEQA Guidelines* Section 15064.3, “a project’s effect on automobile delay shall not constitute a significant environmental impact.” Therefore, the transportation analysis uses the metric of VMT to analyze transportation-related impacts consistent with Senate Bill 743 and the *CEQA Guidelines*.

Transportation impacts related to the project are analyzed in Section 4.2, *Transportation*. Because the City has updated its CEQA thresholds in accordance with these state regulations, the transportation analysis does not make significance conclusions with respect to changes to LOS, a term used to describe the operating conditions of a roadway by reviewing speed, travel time, congestion, delays, and safety on the road. Pursuant to recent CEQA court decisions, parking is also not considered an environmental impact and is not required to be analyzed under CEQA (*Save Our Access – San Gabriel Mountains v. Watershed Conservation Authority* [2021 Cal. App. 5th]). Although the commenter’s concerns in this regard are noted, traffic level of service is not a CEQA topic and therefore not pertinent to the Draft SEIR. No revisions to the Draft SEIR are required in response to this comment.

Response 3.2

The commenter notes that preexisting traffic levels present issues to existing residents. The commenter suggests that anything except expanding roadways will increase congestion, create additional work for public services, and damage the area’s sense of community.

As stated in Response 3.1, the transportation analysis does not make impact significance conclusions with respect to changes to LOS, and congestion is no longer allowable as a basis for finding a significant environmental impact. Additionally, the Initial Study prepared for the project, included as Appendix A to the SEIR, determined in Section 15, *Public Services*, that impacts related to public services would be less than significant. While sense of community is not an environmental issue area analyzed under CEQA, this comment will be passed onto decisionmakers for their consideration. No revisions to the Draft SEIR are required in response to this comment.

Response 3.3

The commenter suggests that there be increased interagency communication in order to address community concerns. The commenter notes that there is insufficient signage located at an onramp for the US 101 northbound from Cochrane Road, and that the commenter had been told by the City that addressing the issue is outside of the City’s jurisdiction. The commenter suggests that building interagency communication may help to address such issues.

This comment is noted and will be passed on to decision-makers for their consideration; however, it is addressing an existing condition and not an environmental impact of the proposed project. No revisions to the Draft SEIR are required in response to this comment.

From: Tony Burquez <tonyburquez@hotmail.com>
Sent: Wednesday, June 15, 2022 10:20 PM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Cochrane Commons: Draft SEIR Comment

Letter 4

Hello Morgan Hill Team,

>

> First off, thank you for all of your effort and hard work managing the city and all of its parts.

>

> I wanted to share my thoughts about the recent Cochrane Commons plan shared in the letter I received this week. I'm one of families directly impacted by this development because I live next door to the empty lot in the proposed plan.

>

> I'm excited for the development but have grave concerns about the tall buildings proposed by the developer. It is my belief that any housing developed in this land should not exceed two-stories to fit in with the existing neighborhood and feel / be a natural fit to the rural area surrounding it. When I see in the plan proposed building between 68-75 feet is wildly out of place in our city since these are effectively 6-7 story buildings which would be monstrosities in this setting not to mention giving people in these building unobstructed views inside our homes and backyards.

4.1

>

> My secondary concern with this housing explosion is the direct impact to traffic and parking in my neighborhood which would become overflow for the housing development. It's well known, drive around any of the townhomes in the area, that there is no free parking in these developments and this mean people would clog our quiet streets with cars and traffic.

4.2

>

> I also am very perplexed at the housing expansion adding more strain on resources such as water shortages and schools at max capacity. Is this the best time to put more pressure on our infrastructure, fire departments, and city? I look forward to your thoughts.

4.3

>

> Best Regards,

> Tony Burquez

> 18741 Rising Sun Drive

> Morgan Hill, CA 95037

> (408) 373-8427

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Letter 4

COMMENTER: Tony Burquez

DATE: June 15, 2022

Response 4.1

The commenter expresses concern about the height of the proposed buildings, stating that they believe housing should not exceed two stories in order to match the existing neighborhood and to protect the privacy of other residences near to the project site.

As stated in Appendix A, Initial Study, to the Draft SEIR, the project site is located in a Planned Unit Development (PUD) Legacy Zone, which is a zoning district applied to the property prior to July 7, 2018, which remains the zoning in effect for the property. As such, the proposed height of the project would be consistent with the current zoning designation of the site. Additionally, as discussed in the Initial Study, the residences and structures would have similar height, scale, and setback characteristics to the buildings considered in the 2005 EIR. The proposed project would continue development patterns in the area, would be subject to design review, and would be designed to meet City design standards and, as such, would not result in a substantial degradation of the visual quality of the site or surroundings. Furthermore, the proposed project would be consistent with existing development completed as part of Phase I of the Cochrane Commons project. No revisions to the Draft SEIR are required in response to this comment.

Response 4.2

The commenter states that additional traffic will be induced that will have negative impacts on the existing community. The commenter expresses concern that residents of the proposed project may utilize the surrounding neighborhood for parking which may decrease the availability of parking for existing residents.

Please refer to Response 3.1 regarding traffic and parking impacts. No revisions to the Draft SEIR are required in response to this comment.

Response 4.3

The commenter expresses concern stating that expansion of housing may create strain on resources such as water, school capacity, and other public services such as emergency response.

The commenter does not provide specific facts or analysis to challenge the analysis and conclusions of the Draft SEIR. Please refer to the Initial Study for the proposed project, included as Appendix A to the EIR. As discussed in Section 16, *Public Services*, and Section 19, *Utilities and Service Systems*, impacts related to water supply, school capacity, and public services within the surrounding area of the proposed project were determined to be less than significant. No revisions to the Draft SEIR are required in response to this comment.

From: Natalie Sparrer <natalie119311@yahoo.com>
Sent: Friday, June 24, 2022 7:50 PM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: Re: [EXTERNAL] Cochrane Commons Phase II

Letter 5

I will be out of the country on July 13 when the community open house virtual meeting will be held so I would like to voice my one concern about the project, not sure if it's part of the draft SEIR but it is still a concern for me and for the other residents of my community which has been discussed at our open Board meetings (I am a Board member). There is no proposed children's park with swings and a play structure for the children of the 498 residential units being built. In our complex there is a children's park with swings and a play structure with an open entrance directly across Mission View Drive. Part of our HOA dues is for upkeep of the children's park and is only for use of our residents. Without a children's park at Cochrane Commons Phase II, it is our concern that the parents and children from Cochrane Commons phase II will start using our park. We would like for the builder to include a children's park on his property.

5.1

Natalie Sparrer
18612 Turtle Dove Drive
Morgan Hill CA 95037

On Tuesday, June 21, 2022 at 12:41:05 PM PDT, Jennifer Carman
<jennifer.carman@morganhill.ca.gov> wrote:

Hi Natalie:

If the owner decided to put a hotel in (should the Planned Development be approved), they would need to do a minor Master Plan amendment and Design Review. There would be a public notice that will go out to the neighborhood when/if there is a future application. During the Design Review process, all sides of the building are concerned.

Jennifer

From: Natalie Sparrer <natalie119311@yahoo.com>
Sent: Monday, June 20, 2022 2:08 PM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: Re: [EXTERNAL] Cochrane Commons Phase II

Should the owner decide to put in a hotel, can they choose to put it anywhere on their property or would they have to show a drawing where it will be and then have to get approval for that location? My concern is if the hotel front or back could face our community.

5.2

Natalie

On Monday, June 20, 2022, 12:07:09 PM PDT, Jennifer Carman <jennifer.carman@morganhill.ca.gov> wrote:

Hi Natalie:

The proposed area for housing is directly next to Target and moves south to about 2/3 of the overall Phase 2 area. Below is a link to the pdf available on the project page. The hotel isn't shown on the proposed master plan at this time. As part of the proposed amendments to the zoning overlay, the applicant wants the ability to build one should there be an opportunity.

Site Plan: <https://www.morgan-hill.ca.gov/DocumentCenter/View/41416/Cochrane-Commons-Updated-Site-Plan->

Project Page: <https://www.morgan-hill.ca.gov/2069/Cochrane-Commons>

Please let me know if you have any additional questions.

Thank you,

Jennifer

From: Natalie Sparrer <natalie119311@yahoo.com>
Sent: Saturday, June 18, 2022 8:08 PM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Cochrane Commons Phase II

Jennifer,

I live in the housing development (formerly Lantana/Wisteria) that is on the same side of Cochrane and directly across Mission View from the empty lot of Cochrane Commons.

I have tried to find a layout drawing showing the proposed development for Phase II, specifically showing where all the 498 residential units will be built as well as where the hotel and 135,000 retail space will be. The only one I found is shown so small that it is hard to tell what the areas are. Can you send me a link so I can visually see (without straining my eyes) the layout for the proposed phase II.

5.3

Thanks,

Natalie Sparrer

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Letter 5

COMMENTER: Natalie Sparrer

DATE: June 24, 2022

Response 5.1

The commentor expresses a concern that no children's park is proposed, and that without one, residents of the proposed project may visit park space funded by homeowners associations outside of the project site.

The commenter does not provide specific facts or analysis to challenge the analysis and conclusions of the Draft SEIR. As discussed in Section 16, *Recreation*, of the Initial Study for the proposed project, included as Appendix A to the Draft SEIR, the proposed project would result in an increase in demand for recreational facilities. The project's residential and commercial development would impact the parkland ratio in the city. The project would also include a courtyard with outdoor open space near the proposed apartment units, a clubhouse, recreation hall, and swimming pool for the use of new residents. These amenities would reduce the demand for off-site recreational facilities generated by new residents. Additionally, the project applicant would be required to pay park impact fees for the development of additional offsite park facilities. While the project would result in an increase in the population of Morgan Hill and the population that parks and recreational facilities serve, impacts to parks and recreational facilities would be less than significant and would not be greater than those analyzed previously in the 2005 EIR. No revisions to the Draft SEIR are required in response to this comment.

Response 5.2

The commenter expresses concern that the hotel component of the proposed project may face their community.

This comment is on the project itself and not on the Draft SEIR. The commenter does not reference the analysis or conclusions of the Draft SEIR. As such, no revisions to the Draft SEIR are required in response to this comment.

Response 5.3

The commenter requests a copy of the site plans and any other visual aid that demonstrates the layout of the proposed project be provided, stating that the current version is not clear.

This comment is on the project itself and not on the Draft SEIR. This comment was addressed by City staff, who responded to the commenter with resources. The proposed conceptual site plan is included as Figure 2-3 in Section 2, *Project Description*. Section 2 provides information on the proposed uses and site plan, which is sufficient to base analysis within the SEIR on. As such, no revisions to the Draft SEIR are required in response to this comment.

June 27, 2022

Jennifer Carman
Morgan Hill Development Services
17575 Peak Avenue
Morgan Hill, CA 95037

JUN 29 2022
CITY OF MORGAN HILL

Letter 6

Subject: Cochrane Commons Phase II Proposal

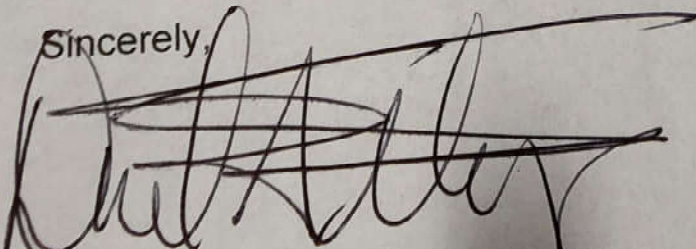
Dear Morgan Hill Development Services,

I am writing to express my concerns and opposition to the inclusion of a hotel in the Cochrane Commons Phase II development proposal. A hotel right up against residential areas makes no sense from a planning perspective and will only lead to problems. Hotels are 24/7 operations with all the noise, traffic, light pollution, rowdiness, etc. associated with people coming and going at all hours of the night and wee hours of the morning. At least with retail, most if not all businesses are closed by 10 PM and do not open until 8 AM or later. Hotels are always open and never close.

Including a hotel in this project is not in the best interests of Morgan Hill residents. It appears to me to be simply developer greed and is inconsistent with the close proximity to personal residences. There are many locations in Morgan Hill near existing hotels that would be far better suited for a new hotel.

It also appears to me to be another example of the Morgan Hill Development Department supporting any and all development in Morgan Hill regardless of the impact on Morgan Hill residents (think Trammel Crow among many). Please, for once, do the right thing and remove the hotel from the proposed Cochrane Commons Phase II development.

Sincerely,



Letter 6

COMMENTER: David F. Flynn

DATE: June 27, 2022

Response 6.1

The commenter expresses opposition to the proposed project. The commenter states that the proposed project is located adjacent to a residential area, and suggests that the project would cause a disturbance to residents through an increase in noise, traffic, and light pollution.

Impacts related to new sources of light and glare are addressed in the Initial Study for the proposed project, included as Appendix A to the Draft SEIR, in Section 1, *Aesthetics*. Impacts related to new sources of light and noise were determined to be less than significant, similar to impacts found in the 2005 EIR. Impacts related to noise are addressed in Section 13, *Noise*, in Appendix A to the Draft SEIR. Impacts related to construction and operational noise were determined to be less than significant. Impacts related to transportation are addressed in Section 4.2, *Transportation*; however, traffic delay (LOS) is not analyzed pursuant to Senate Bill 743 and the *CEQA Guidelines*. As determined in Section 4.2, *Transportation*, the project would result in significant and unavoidable impacts related to VMT. The commenter does not provide specific facts or analysis to challenge the analysis and conclusions of the Draft SEIR or initial study related to these topics; nevertheless, these comments will be considered by the City's decision makers in their review of the project.

No revisions to the Draft SEIR are required in response to this comment.

Response 6.2

The commenter states an opinion that the hotel component of the project seems inconsistent with typical zoning, as the project is located near a residential area rather than near other hotels. The commenter requests that the hotel portion of the proposed project be removed.

As stated in Section 2, *Project Description*, of the SEIR, the project site is zoned as Highway Commercial (CH), which seeks to provide areas adjacent to the freeway that can accommodate highway and tourist-oriented uses, and allows for business services, restaurants and cafes, hotels, offices, retail services, and other related facilities. The project site also has a Planned Unit Development (PUD) Legacy Zone. As such, the hotel development is consistent with current zoning of the proposed project. However, this comment is noted and will be passed on to decisionmakers for their consideration. No revisions to the Draft SEIR are required in response to this comment.

From: D. Muirhead <doug.muirhead@stanfordalumni.org>
Sent: Monday, July 25, 2022 7:55 AM
To: Jennifer Carman <Jennifer.Carman@morganhill.ca.gov>
Subject: [EXTERNAL] Draft SEIR Comment Cochrane Commons Phase II Project

Letter 7

Hello Director Carman,
A comment and a curiosity question on Cochrane Commons Phase II Project.
The comment period for the SEIR closes July 25.
Thank you, Doug Muirhead, Morgan Hill

Comment #1

The VTA #87 bus is a weekday-only school start-end service and the SEIR implies a level-of-service greater than what is actually provided.
VTA #87 bus operates 3 morning trips between 7AM-9AM
and 4 afternoon trips between 2PM-6PM.
The Project Impacts and Mitigation Measures / Transit Facilities (pg 4.2-12) says
"The existing public transit and school bus routes are adequate to accommodate the additional demand generated by the project..."
The 2017 Scoping Plan (pg 4.1-10) says
"Future residents, employees, and customers could travel to the project site via [this] bus route."
The Transportation / Transit Facilities / VTA Bus Service (pg 4.2-2) says
"Local Bus Route 87 runs along Burnett Avenue to the Civic Center in Morgan Hill. Route 87 operates between 7:00 a.m. and 6:00 p.m. with approximately 60-minute headways in the a.m. and p.m. commute periods."

7.1

Comment #2

The 2017 Scoping Plan (pg 4.1-10) and Consistency with Morgan Hill 2035 General Plan (pg 4.1-13) indicate that the project buildings would be 100 percent electric and would be served by Silicon Valley Clean Energy (SVCE).
Are the electric transmission facilities and meters installed and serviced by PGE?

7.2

Letter 7

COMMENTER: Doug Muirhead

DATE: July 25, 2022

Response 7.1

The commenter states an opinion that the Level of Service described for VTA bus route #87 in the Draft SEIR is greater than the actual level of service provided by that bus route.

The following revision has been made to Section 4.2, *Transportation*, on Page 4.2-2 of the Draft SEIR:

The two bus routes that are in proximity to the project site are Local Bus Route 87 and Rapid Route 568. Local Bus Route 87 runs along Burnett Avenue to the Civic Center in Morgan Hill. Route 87 operates weekdays between 7:00 a.m. and 6:00 p.m. with approximately 60-minute headways in the a.m. and p.m. commute periods.

However, the conclusion that the existing public transit and school bus routes are adequate to accommodate the demand generated by the project remains accurate, and no changes to the conclusions of the SEIR are warranted.

Response 7.2

The commenter states that the 2017 Scoping Plan and consistency with the Morgan Hill 2035 General Plan as described in the Draft SEIR indicate that the proposed project would be 100 percent electric and would be served by Silicon Valley Clean Energy (SVCE). The commenter asks if electric transmission facilities and meters would be installed and serviced by Pacific Gas & Electric (PG&E).

As discussed in Section 6, *Energy*, of the Initial Study prepared for the project, included as Appendix A to the Draft SEIR, “electricity service would be provided to the project by Silicon Valley Clean Energy (SVCE), which sources electricity from Pacific Gas and Electric (PG&E) and uses PG&E’s infrastructure to deliver it to customers. Pursuant to the City of Morgan Hill Municipal Code Chapter 15.63, natural gas infrastructure is prohibited in newly constructed buildings effective March 1, 2020.” Regarding the commenter’s question about electric transmission facilities and meters, the Section 6, *Energy*, of the Initial Study (Appendix A of the Draft SEIR) states that the infrastructure used to deliver SVCE energy is PG&E infrastructure. No revisions to the Draft SEIR are required in response to this comment.

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2 Revisions to the Draft Supplemental EIR

The following pages provide a summary record of proposed changes to the text of the Draft Supplemental EIR. Most changes are the result of comments received during the public review period, and directly respond to those comments, or correct typographical errors within the Draft Supplemental EIR. These amendments serve as clarifications and amplifications on the content of the Draft Supplemental EIR. None of the changes would warrant recirculation of the SEIR pursuant to CEQA Guidelines Section 15088.5. The amendments serve to clarify and strengthen the content of the SEIR, but do not introduce significant new information.

Changes in text are signified by strikeouts (~~strikeouts~~) where text is removed and by underlined font (underline font) where text is added. Other minor clarifications and corrections to typographical errors are also shown as corrected in this format, including corrections not based on responses to comments.

2.1 Initial Study

Air Quality

Page 21:

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	N/A	<u>No</u> Yes	<u>No</u> Yes	<u>No</u> Yes	N/A
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	EIR Pages 3.3-14 to 3.3-19	<u>No</u> Yes	<u>No</u> Yes	<u>No</u> Yes	No

	Where was Impact Analyzed in the EIR?	Does the Proposed Project Require Major Revisions to the EIR?	Do New Circumstances Require Major Revisions to the EIR?	Any New Information Resulting in New or Substantially More Severe Significant Impacts?	Do EIR Mitigation Measures Address and/or Resolve Impacts?
c. Expose sensitive receptors to substantial pollutant concentrations?	EIR Pages 3.3-14 to 3.3-21	<u>No</u> Yes	<u>No</u> Yes	<u>No</u> Yes	Yes
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	N/A	<u>No</u> Yes	<u>No</u> Yes	<u>No</u> Yes	N/A

Tribal Cultural Resources

Page 117:

~~... As the Notice of Preparation for the EIR for this project was published before July 1, 2015, AB 52 consultation is not required, and changes under this addendum do not result in a need for AB 52 consultation.~~ No cultural resources of Native American origin were identified onsite, and Section 5, *Cultural Resources*, of the 2005 EIR analyzed...

2.2 Draft Supplemental EIR

Executive Summary

Page ES-6:

TRA-1 VMT Reductions

The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below:

- School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT

- ~~Transit Service Expansion. The project shall subsidize transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT~~
- Voluntary Travel Behavior Change Programs. Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT

Section 2, Project Description

Page 2-5:

Table 2-1 Project Summary

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet
Mixed Use Flex Zoning Information	
Maximum Floor Area Ratio	0.5
Maximum Height	35 feet
Residential Densities	7 to 24 units per acre
Maximum Building Coverage	50%
Planned Development Overlay Zoning Information	
Maximum Height	68 feet

Section 4.1, Greenhouse Gas Emissions

Page 4.1-1:

This section analyzes impacts to greenhouse gas (GHG) emissions, including the potential for the project to generate GHG emissions in excess of standards or to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This resource area was not analyzed in the 2005 EIR; therefore, project-specific modeling was conducted for the purposes of this analysis.

The issue of climate change was widely known prior to the certification of the 2005 EIR. The United Nations Framework Convention on Climate Change was established in 1992. Also, in 1992, the United Nations Conference on Environment and Development -- better known as the Earth Summit -- was held in Rio de Janeiro and was attended by 172 countries. The regulation of GHG emissions to reduce climate change was debated and analyzed throughout the 1990s. For example, the Intergovernmental Panel on Climate Change (IPCC), a body established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO), has been publishing reports on the current state of climate change and its potential environmental and socio-economic consequences since the 1990s. These studies, along with others, resulted in the adoption

of the Kyoto Protocol in 1997. The IPCC's Third Assessment Report, released in 2001, presented the consensus view of hundreds of scientists on key issues relating to climate change. See also Center for Biological Diversity v. National Highway Traffic Safety Admin. (9th Cir. 2009) 538 F.3d 1172, 1190 (National Environmental Policy Act case citing the IPCC 2001 Third Assessment Report); Kostka and Zischke, Practice Under the California Quality Act, Second Edition, Volume 2, §19.21 (stating that "a lead agency evaluating new information claims under [Guidelines] § 15162 could support a factual finding that climate change is not significant new information by reference to documents such as the 2001 Third Assessment Report of the Intergovernmental Panel on Climate Change"). Therefore, even though the CEQA Guidelines did not require analysis of GHG emissions before certification of the 2005 EIR, the impacts of GHG emissions were known at the time.

Section 4.2, Transportation

Page 4.2-2:

... The two bus routes that are in proximity to the project site are Local Bus Route 87 and Rapid Route 568. Local Bus Route 87 runs along Burnett Avenue to the Civic Center in Morgan Hill. Route 87 operates weekdays between 7:00 a.m. and 6:00 p.m. with approximately 60-minute headways in the a.m. and p.m. commute periods ...

Page 4.2-9:

... Therefore, issues related to traffic congestion are currently outside the scope of the CEQA analysis but will be considered as conditions of approval as appropriate for consistency with the General Plan. This list also excludes mitigation measures relevant to cumulative development, because the 2005 EIR's cumulative setting consists of recently approved projects when the project was originally proposed. This historic cumulative setting does not apply to the proposed project. It should be noted that the following mitigation measures were either completed since the certification of the 2005 EIR or are no longer necessary ...

Page 4.2-13:

Table 2.2-2 Retail VMT Analysis

VMT Analysis for TAZ's with Shifted Jobs	No Project	Project	Project – No Project
Home-Based Work VMT	161,830	160,599	-1,231
Home-Based Work <u>Shop</u> VMT	140,496	137,373	-3,123
Total VMT	302,326	297,972	-4,354

Source: Hexagon Transportation Consultants, Inc., Transportation Analysis, Appendix D

TRA-1 VMT Reductions

The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below:

- **School Pool Programs:** Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT
- ~~Transit Service Expansion. The project shall subsidize transit service through fees and contributions to the transit provider, thereby improving transit service to the project, resulting in increased use of transit and reduced VMT~~
- **Voluntary Travel Behavior Change Programs.** Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT

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3 Executive Summary

This document is an Environmental Impact Report (EIR) that has been prepared as a Subsequent EIR (SEIR) to the Cochrane Road Planned Unit Development Project 2005 EIR (2005 EIR, State Clearinghouse Number 2004112060). The proposed Cochrane Commons Phase II Project is hereafter referred to as the “proposed project” or “project.”¹ The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The Phase II project would consist of 498 residential units, consisting of a mix of townhomes and apartments, 135,000 square feet of retail space, a 140-room hotel. The General Plan land use designation would be amended from Commercial to Mixed Use Flex and the zoning from Highway Commercial/Planned Unit Development to Mixed Use Flex/Planned Development for the Phase II development area.

This section summarizes the characteristics of the proposed project, alternatives to the proposed project, and the environmental impacts and mitigation measures associated with the proposed project.

Project Synopsis

Project Applicant

Browman Development
1556 Parkside Drive
Walnut Creek, California 94596

Lead Agency Contact Person

Jennifer Carman, Development Services Director
City of Morgan Hill
17575 Peak Avenue
Morgan Hill, California 95037
(408) 776-6480

Project Description

The following is a summary of the full project description, which can be found in Section 2, *Project Description*.

The project site is located at the southwest corner of Mission View Drive and Cochrane Road in the City of Morgan Hill. The site is approximately 33.5 acres and is located just north of Phase I of the Cochrane Commons Shopping Center (Shopping Center). It is bounded by De Paul Drive to the south, Cochrane Road to the east, Mission View Drive to the north, and adjacent agriculture, single-family residential, and industrial development to the west. The site is located on the northern edge of the City of Morgan Hill and is approximately 800 feet north of U.S. Highway 101 (U.S. 101).

¹ In the Initial Study prepared for the project (Appendix A), the Cochrane Commons Phase II Project is also referred to as the “modified project.”

The project would involve construction of Phase II of the Cochrane Commons development on the undeveloped site adjacent to the completed Phase I. The Phase II project currently proposed is different from the originally proposed Phase II that was analyzed in the 2005 EIR. The project would consist of 498 residential units, consisting of a mix of homes, townhomes, condos, and apartments; 135,000 square feet of retail space; a 140-room hotel; and amending the zoning and General Plan designation to MUF for the Phase II development area. The residential uses would be located in the northern and middle portion of the project site and the hotel and commercial retail would be located in the southern portion. The project would also provide various on-site amenities for residents. A courtyard with outdoor open space would be provided near the proposed apartment units. A clubhouse, recreation hall, swimming pool would also be provided for on-site residents. Table ES-3 details the breakdown of proposed uses and square footage.

Table ES-3 Project Characteristics

Project Component	Size or Unit Amount
Residential	
Townhomes/Apartments	498
Commercial	
Hotel	140 rooms
Retail	135,000 square feet
Mixed Use Flex Zoning Information	
Maximum Floor Area Ratio (FAR)	0.5
Maximum Height	35 feet
Residential Densities	7-24 units per acre
Maximum Building Coverage	50%

Project Characteristics

SITE ACCESS, CIRCULATION, AND PARKING

Vehicles would access the project site primarily from De Paul Drive, which bisects the site horizontally from Cochrane Road, which would have two driveways leading to two central roadways which would connect to two driveways off Mission View Drive. An additional driveway would be located off Cochrane Road which would allow right-in and right-out vehicle movements. There would be a total of 1,367 parking spaces. Parking would be constructed in phases. During Phase I, the project would include 276 parking stalls. During Phase 2, 658 stalls would be added and during Phase 3, 433 stalls would be added.

GRADING AND DRAINAGE

The project area has been previously graded and would further be modified by additional grading, which would be balanced on site. Stormwater drainage would be directed to catch basins located throughout the project site and then conveyed via underground storm drainpipes to a stormwater detention pond along the northern project boundary. The storm drain system design would incorporate City standards for pipe sizes, maximum slopes, minimum flow velocities, and pipe material. The detention basin would be sized in accordance with the City's detention design criteria. Stormwater would be temporarily stored in the planned detention pond and pumped to the adjacent Cochrane Channel at discharge rates at or below pre-development levels, as required by the Santa Clara Valley Water District.

Landscaping and Trees

The project would involve new landscaping elements, including trees and vegetation along Mission View Drive and Cochrane Road, shrubs along the building perimeters and trees within parking areas. Additional trees and landscaping would be located within building courtyards. The landscaping plan would be subject to review and approval by the City's Architectural Review Board.

OFF-SITE IMPROVEMENTS

The project includes sidewalk and pavement improvements along road frontages that border the project site.

CONSTRUCTION

Construction would occur over three phases. Construction Phase 1 would consist of 104 units (175,000 square feet) of for-sale townhomes. Construction Phase 2 would consist of 394 units (410,000 square feet) of rental apartments. Construction Phase 3 would consist of the retail space and hotel. Construction would occur from May 2023 to December 2025 between the hours of 7 a.m. and 5 p.m. from Monday to Saturday. Construction would include 37,510 cubic yards of excavation, with balanced cut and fill anticipated.

Project Objectives

The applicant's objectives for the project are to:

- Increase the viability of the existing Cochrane Commons anchors and tenants
- Create a vibrant and exciting place for the residents of Morgan Hill to live, work, and shop all in one place
- Assist in protecting the tax revenue generated by the current and future tenants and the long-term viability of the City of Morgan Hill's retailers
- Provide much needed variety to the City's housing stock in the form of market rate and below market rate affordable housing
- Encourage the development of the remainder of the shopping center

Alternatives

As required by the California Environmental Quality Act (CEQA), this EIR examines alternatives to the proposed project. Studied alternatives include the following three alternatives. Based on the alternatives analysis, the proposed project was determined to be the environmentally superior alternative.

- Alternative 1: No Project, No Build
- Alternative 2: No Project – Allowable Buildout Under Existing General Plan Designation
- Alternative 3: Mixed Use Flex Designation on North Half of the Site

Refer to Section 5, *Alternatives*, for the complete alternatives analysis.

Areas of Known Controversy

The EIR scoping process did not identify any areas of known controversy for the proposed project. Responses to the Notice of Preparation of a Draft EIR and input received at the EIR scoping meeting held by the City are summarized in Section 1, *Introduction*.

Issues to be Resolved

The proposed project would require an amendment to the City's zoning map and General Plan land use map to convert the Phase II development area to Mixed Use Flex. The project would also require a revised Planned Development Combining District and associated Master Plan to allow the proposed commercial and residential uses, and issuance of Design Permits consistent with the Master Plan.

Issues Not Studied in Detail in the EIR

As indicated in the Initial Study (Appendix A), there is no substantial evidence that significant and unmitigable impacts would occur to the following issue areas: Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire. Impacts to Greenhouse Gas Emissions and Transportation were found to be potentially significant and are addressed in this EIR.

Summary of Impacts and Mitigation Measures

Table ES-4 summarizes the environmental impacts of the proposed project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required) identified in the SEIR. Table ES-5 summarizes mitigation measures included in the 2005 EIR that would continue to be implemented under the proposed project. Because some mitigation measures have been previously complied with during development of Phase I, the already developed area adjacent to the project site, not every mitigation measure from the 2005 EIR would be included in the proposed project. Impacts are categorized as follows:

- **Significant and Unavoidable.** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated.** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant.** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table ES-4 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts of the SEIR

Impact	Mitigation Measure(s)	Residual Impact
Greenhouse Gas Emissions		
Impact GHG-1. The project would generate temporary and long-term increases in GHG emissions, but such emissions would remain below the adjusted efficiency threshold intended to demonstrate consistency with the 2030 statewide GHG reduction target. Impacts would be less than significant.	None required.	Less than Significant
Impact GHG-2. The project would be consistent with the 2017 Scoping Plan and Plan Bay Area 2050. This Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur.	None required.	No Impact
Transportation		
Impact TRA-1. The project would not conflict with applicable policies addressing transit, bicycle, and pedestrian facilities. Impacts related to transit, bicycle and pedestrian facilities would be less than significant.	None required.	Less than Significant
Impact TRA-2. The project would exceed the applicable significance threshold for VMT. Even with Mitigation Measure TRA-1, the project would not fall below the applicable residential VMT per capita threshold. Impacts would be significant and unavoidable.	TRA-1 VMT Reductions The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below: ▪ School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT	Significant and Unavoidable

Impact	Mitigation Measure(s)	Residual Impact
	Voluntary Travel Behavior Change Programs. Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT	
Impact TRA-3. The project would not introduce design features or incompatible uses that could increase traffic hazards. This impact would be less than significant.	None required.	Less than Significant
Impact TRA-4. The project could result in inadequate emergency access to the project site. This impact would be less than significant with adherence to Mitigation Measure TRA-2.	TRA-2 Emergency Vehicle Site Access The project site shall be designed following City of Morgan Hill design standards and provide adequate width and turn-radii at and along all drive/parking aisles to allow for two-way circulation and adequate circulation of larger vehicles (such as emergency trucks, garbage trucks, and delivery trucks) throughout the project site. The project applicant shall provide detailed site development plans to the City of Morgan Hill Planning Division that demonstrate compliance with the City design standards prior to issuance of a building permit.	Less than Significant
Tribal Cultural Resources¹		
Impact TCR. There is always potential to uncover buried tribal cultural resources during ground disturbing activities. Should project construction activities encounter and damage or destroy a tribal cultural resource or resource, Mitigation measure CR-1 would ensure that potential impacts to tribal cultural resources would be less than significant.	TCR-1 Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply: - Prior to start of grading or earthmoving activity on the “first day of construction”, the archeologist and Tamien Nation Tribal Monitor shall hold a pre-construction meeting for the purposes of “cultural sensitivity training” with the general contractor and subcontractors. - A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: - Work at the location of the find shall halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter; - If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist shall prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the	Less than Significant with Mitigation

Impact	Mitigation Measure(s)	Residual Impact
	significance of the resource, including a discussion of the methods used to determine significance for the find; ▫ If the find appears significant and to qualify as a unique archaeological resource, the archaeologist shall determine if the resource can be avoided and shall detail avoidance procedures in a formal memo/letter; and ▫ If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2. An archaeologist shall be on-call during ground disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: ▪ The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans. ▫ If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld. ▫ Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled. ▫ Surgical masks should also be worn to prevent exposure to pathogens that may be associated with the remains. ▪ In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below. ▪ An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time or discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find).	

Impact	Mitigation Measure(s)	Residual Impact
	▪ The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances. ▪ The contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition: ▫ The City of Morgan Hill Development Services Director (408) 779-7247 ▫ The Contractor's Point(s) of Contact ▫ The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900 ▫ The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082 ▫ The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C) ▫ The Tamien Nation (707)295-4011 (office) and (925) 336-5359 (THPO) ▪ The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC. ▪ The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.) ▪ Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose. ▪ Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out. ▪ If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.	
¹ The analysis for Tribal Cultural Resources and this mitigation measure are included in the Initial Study prepared for this project (Appendix A).		

Table ES-5 Summary of Mitigation Measures Included from the 2005 EIR

Topic	Mitigation Measure(s)
Aesthetics	Mitigation 3.1-1. The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the [2005] City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.
Biological Resources	Mitigation 3.4-1a. The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1st through August 30th), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity in the vicinity of the burrow (distance to be determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented, and the biologist deems disturbance potential to be minimal. Mitigation 3.4-1b. The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003). Mitigation 3.4-2. If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1st through August 31st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned, or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 250 feet around the nest) or alteration of the construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through January 31st) Mitigation 3.4-3. The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special-status bat species in the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified in the project area during preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum): - Identify species present in the roost (this may require the assistance of a biologist who specializes in bat ecology) - Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present) - Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available. Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.

Topic	Mitigation Measure(s)
Cultural Resources	Mitigation 3.5-1a. Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 150 feet of the discovery shall be halted until such time as a qualified professional archaeologist can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant. Mitigation 3.5-1b. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of Santa Clara County has determined whether the remains are subject to the Coroner's authority. This is in accordance with Section 7050.5 of the [2005] California Health and Safety Code. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.98 of the [2005] Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendent" to inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.
Geology and Soils	Mitigation 3.6-1. Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code and implementing the recommendations of the project geotechnical engineer. Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures in areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals. Mitigation 3.6-2. All proposed structures at the project site shall be evaluated for liquefaction potential on a case-by-case basis as part of subsequent design-level geotechnical engineering investigations. If there is determined to be a potential for liquefaction, mitigation will be accomplished through compliance with the recommendations contained in the design-level geotechnical engineering reports with recommendations included as specifications in the construction contract documents. Mitigation 3.6-3. Near-surface soils beneath buildings, exterior slabs, and pavements shall be over-excavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas. Mitigation 3.6-4. The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas. Mitigation 3.6-5. All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report. Mitigation 3.6-6. The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers' specifications. Mitigation 3.6-7. Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.

Topic	Mitigation Measure(s)
Hydrology and Water Quality	Mitigation 3.8-1. Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers. Mitigation 3.8-2. The project applicant shall prepare a comprehensive erosion control and water pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site. Mitigation 3.8-3. The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads. Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion). Additional post-construction BMPs to be implemented will include, but not be limited to, the following: ▪ Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants. ▪ Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ Engineered products, such as storm drain inlet filters, oil/water separators, etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. ▪ The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials. ▪ Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance, including minimizing use of fertilizer, herbicides and pesticides. ▪ The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on stormwater quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations. ▪ Storm drain inlets shall be labeled with the phrase “No dumping – flows to Bay,” or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system. Restaurants in the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.
Utilities and Service Systems	Mitigation 3.13-1. Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses or maintenance personnel generating such waste. Contracts for the collection of these recyclables shall also be maintained as available.

Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to be used by the City of Morgan Hill to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Final Environmental Impact Report (EIR), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
Aesthetics							
Mitigation 3.1-1 [2005]							
The project applicant shall prepare and submit a detailed exterior lighting plan that indicates the location and type of lighting that will be used at the project site. The lighting plan shall be consistent with Section 18.74.370 of the [2005] City of Morgan Hill Municipal Code. All external lighting shall be indicated on project improvement plans, subject to review and approval by the City of Morgan Hill.	Review and approve the lighting plan for consistency with Section 18.74.370 of the [2005] City of Morgan Hill Municipal Code.	Prior to construction	Once	City of Morgan Hill Development Services Department			
Biological Resources							
Mitigation 3.1-1a [2005]							
The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a preconstruction survey for nesting burrowing owls at the project site no more than 30 days prior to ground disturbance. Depending on whether construction will begin during the nesting season (typically February 1st through August 30th), any owls inhabiting the site shall either: (a) during the nesting season be protected from disturbance through establishment of avoidance areas where no personnel or equipment are allowed to enter within a certain distance of the occupied burrow (distance determined by the biologist onsite following Burrowing Owl Consortium recommendations) or (b) outside of the nesting season be excluded and/or passively relocated by the biologist. Also, the qualified biologist shall be present during all phases of initial ground clearing to monitor for the presence of burrowing owl. Should a previously undetected owl emerge during clearing, all activity in the vicinity of the burrow (distance to be	Require the project applicant to retain a qualified biologist to conduct a preconstruction survey for nesting burrowing owls at the project site. Ensure that the qualified biologist is present at all phases of initial ground clearing activities, and that activity is halted upon discovery of new nesting burrowing owls until the proper avoidance/exclusion measures are implemented.	Prior to construction and grading	Once for preconstruction survey Periodically during construction to ensure protection of burrowing owls if observed on site	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
determined by the biologist) shall cease until the proper avoidance/exclusion measures are implemented, and the biologist deems disturbance potential to be minimal.							
Mitigation 3.4-b [2005]							
The project applicant shall compensate for loss of burrowing owl habitat located at the site by complying with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program (Morgan Hill 2003).	Ensure compliance with the Citywide Burrowing Owl Habitat Mitigation Plan and fee program.	Prior to and during construction and grading activities	Once prior to approval of grading permit	City of Morgan Hill Development Services Department, Santa Clara Valley Habitat Agency			
Mitigation 3.4-2 [2005]							
If proposed construction activities are planned to occur during the nesting seasons for local avian species (typically February 1st through August 31st), the project applicant shall retain a qualified biologist approved by the City to conduct a focused survey for active nests of raptors and migratory birds in the vicinity (i.e., any suitable breeding habitat in accessible parcels adjacent to the project area that the biologist deems could be disturbed by construction activities) of the construction area no more than 30 days prior to ground disturbance. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned, or the biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 250 feet around the nest) or alteration of the	Approve a qualified biologist and require completion of a focused survey for active nests of raptors and migratory birds in the vicinity of the project site. If active nests are located during preconstruction surveys, construction activities shall be restricted as deemed necessary by the qualified biologist to avoid disturbance of the nest until it is abandoned.	Prior to and during construction and grading activities	Once for focused survey Periodically during construction to ensure the protection of raptors and migratory birds observed on site	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
construction schedule. No action is necessary if construction will occur during the nonbreeding season (generally September 1st through January 31st)							
Mitigation 3.4-3 [2005]							
The project applicant shall retain a qualified biologist approved by the City of Morgan Hill to conduct a focused preconstruction survey for possible roost sites of special-status bat species in the project area. The survey shall be conducted no more than 45 days prior to the onset of ground disturbance or major construction activities. If bat species or roosts are identified in the project area during preconstruction surveys, the biologist in coordination with the applicant shall (at a minimum): - Identify species present in the roost (this may require the assistance of a biologist who specializes in bat ecology) - Install bat boxes at a location determined through obtaining technical guidance from the USFWS and/or DFG (box specifications and number to be determined based on the size of the roost and type of species present) - Install one-way bat doors at the roost to prohibit bat re-entry once the bat boxes are available. Additionally, the applicant shall postpone any project-related activity that would damage or disturb the roost site until the biologist deems no bat species to be in jeopardy. The project applicant, to the extent possible, shall also implement USFWS and/or DFG recommendations (obtained through technical guidance) for minimizing the potential to take	Ensure the project applicant retain a qualified biologist to conduct a focused preconstruction survey for possible roost sites of special-status bat species in the vicinity of the project site. Require postponement of any project-related activities until all mitigation actions and USFWS and/or DFG recommendations are implemented.	Prior to and during construction and grading activities	Once for preconstruction survey Periodically during construction to ensure protection of special-status bats observed on site	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
bat species during construction. If bat species are not identified onsite during the preconstruction survey, no further action is necessary.							
Cultural Resources							
Mitigation 3.5-1a [2005]							
Should any previously undisturbed cultural, historic, or archaeological resources be uncovered in the course of site preparation, clearing or grading activities, all operations within 150 feet of the discovery shall be halted until such time as a qualified professional archaeologist can be consulted to evaluate the find and recommend appropriate action. If the find is determined to be significant, appropriate mitigation measures shall be formulated by the City of Morgan Hill and implemented by the project applicant.	Require that all site preparation, clearing or grading activities be halted within 150 feet of a previously undisturbed cultural, historical or archaeological resource if it be uncovered. Ensure retainment of a qualified archaeologist to recommend appropriate action upon discovery and implementation of all mitigation measures designed by the City are carried out.	Prior to and during grading activities	Periodically during ground disturbance activities	City of Morgan Hill Development Services Department			
Mitigation 3.5-1b [2005]							
In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the Coroner of Santa Clara County has determined whether the remains are subject to the Coroner's authority. This is in accordance with Section 7050.5 of the [2005] California Health and Safety Code. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of identification. Pursuant to Section 5097.98 of the [2005] Public Resource Code, the Native American Heritage Commission will identify a "Native American Most Likely Descendent" to	Require that the Coroner of Santa Clara County be contacted in the event human remains are discovered on the project site. Ensure the Coroner notified the NAHC of any discoveries.	Prior to and during grading and construction activities	Periodically during ground disturbance activities	City of Morgan Hill Development Services Department, Coroner of Santa Clara County, NAHC			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
inspect the site and provide recommendations for the proper treatment of the remains and any associated grave goods.							
Geology and Soils							
Mitigation 3.6-1 [2005]							
Structural damage to buildings resulting from ground shaking shall be minimized by following the requirements of the California Building Code and implementing the recommendations of the project geotechnical engineer. Structures at the site shall be designed and constructed to withstand anticipated earthquake loads. A structural engineer, experienced in the design and construction of commercial structures in areas of high seismicity, shall be retained by the project applicant to provide design and construction recommendations, as required by the City of Morgan Hill. Any such recommendations shall be made in conjunction with Final Map submittals.	Require that all requirements of the California Building Code and project geotechnical engineer are implemented. Require that a structural engineer provide design and construction recommendations.	Prior to and during construction activities.	Periodically during construction to ensure compliance with design and construction recommendations	City of Morgan Hill Development Services Department			
Mitigation 3.6-2 [2005]							
All proposed structures at the project site shall be evaluated for liquefaction potential on a case-by-case basis as part of subsequent design-level geotechnical engineering investigations. If there is determined to be a potential for liquefaction, mitigation will be accomplished through compliance with the recommendations contained in the design-level geotechnical engineering reports with recommendations included as specifications in the construction contract documents.	Require that the project site be evaluated for liquefaction potential. Ensure compliance of all design-level geotechnical recommendations.	Prior to and during construction and grading activities.	Periodically to evaluate for liquefaction during ground disturbing activities Periodically during construction and grading to ensure compliance with design	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
			recommendations				
Mitigation 3.6-3 [2005]							
Near-surface soils beneath buildings, exterior slabs, and pavements shall be over-excavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.	Ensure that near-surface soils beneath buildings, exterior slabs, and pavements are over-excavated and recompacted, in accordance with the specifications to be recommended by the project geotechnical engineer	During construction activities	Periodically during construction activities	City of Morgan Hill Development Services Department			
Mitigation 3.6-4 [2005]							
The effects of soil compressibility and collapse potential shall be mitigated through over-excavation and compaction of soil beneath proposed structures, in accordance with the specifications to be recommended by the project geotechnical engineer. The depth of required over-excavation will vary depending on whether the improvements to be supported consist of building pads or foundations, exterior slabs on grade, or pavement areas.	Require mitigation of soil compressibility and collapse through over-excavation and compaction in accordance with the specifications of the project geotechnical engineer.	During construction activities	Periodically during construction activities	City of Morgan Hill Development Services Department			
Mitigation Measure 3.6-5 [2005]							
All final design specifications to be recommended by the project geotechnical engineer shall be incorporated into the project design, including placement of non-expansive engineered fill below foundation slabs, and other measures to prevent saturation of soils beneath structures to be specified by the geotechnical report.	Ensure that all recommendations made by the geotechnical engineer are incorporated into the project design.	Prior to and during construction and grading activities	Once for geotechnical report Periodically during construction and grading to ensure compliance with design	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
			recommendations				
Mitigation 3.6-6 [2005]							
The proposed project shall utilize corrosion-resistant materials in construction. Buried metal objects would be protected by selecting materials resistant to mild corrosion per manufacturers’ specifications.	Require use of corrosion-resistant materials.	During construction activities	Periodically during construction activities	City of Morgan Hill Development Services Department			
Mitigation 3.6-7 [2005]							
Design-level geotechnical studies shall investigate the potential of bank instability at the proposed stormwater detention basins and recommend appropriate setbacks, if warranted. Final design recommendations to be recommended by the project geotechnical engineer shall be included as specifications in the construction contract documents.	Require compliance with all recommendations made in the design-level geotechnical studies concerning bank instability.	Prior to and during construction and grading activities	Once for design-level geotechnical survey Periodically during construction for compliance with recommendation	City of Morgan Hill Development Services Department			
Hydrology and Water Quality							
Mitigation 3.8-1 [2005]							
Prior to occupancy of the structures, the project applicant shall prepare an emergency evacuation plan for the proposed project. The emergency evacuation plan procedures shall be developed jointly with the project owner, City public safety staff, and potential tenants/users to identify appropriate emergency procedures in order to ensure the efficient and safe evacuation of employees and customers.	Require the preparation of an emergency evacuation plan. Ensure that procedures are made in conjunction with the City public safety staff.	Prior to construction and grading activities	Once for preparation of emergency evacuation plan	City of Morgan Hill Development Services Department, Morgan Hill Police Department, Morgan Hill Fire Department			
Mitigation 3.8-2 [2005]							
The project applicant shall prepare a comprehensive erosion control and water	Require the preparation and approve an erosion control and	Prior to and during	Once for preparation of	City of Morgan Hill			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
pollution prevention program, subject to review and approval by the City of Morgan Hill Public Works Department. This erosion and water pollution prevention program shall be implemented during grading and construction activities at the project site.	water pollution prevention program.	construction and grading activities	erosion control and pollution prevention program Periodically checked during construction and grading for compliance	Public Works Department			
Mitigation 3.8-3 [2005]							
The proposed project shall include structural and non-structural stormwater controls, in order to reduce non-point source pollutant loads. Specifically, the detention ponds planned at the northern end of the project site to temporarily store post-development runoff shall be designed to provide water quality treatment through settling of sediments prior to the discharge of the stormwater to Cochrane Channel. These dual-purpose ponds will provide both stormwater detention and water quality treatment, to a sufficient level to comply with the amended Provision C.3 of the SCVURPPP NPDES Phase 2 Permit requirements, if those requirements are deemed to be applicable to the proposed project (see Section 3.8.2 Regulatory Setting, above, for a full discussion). Additional post-construction BMPs to be implemented will include, but not be limited to, the following:	Require compliance with all structural and non-structural stormwater controls.	Prior to, during, and after construction and grading activities	Periodically before, during, and after construction and grading to ensure compliance with stormwater controls	City of Morgan Hill Development Services Department, City of Morgan Hill Environmental Services Department			
Impervious surfaces such as roads, parking lots, and driveways shall be routinely cleaned during both the “wet” and “dry” seasons to limit the accumulation of “first flush” contaminants.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
- Features such as detention ponds shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. - Engineered products, such as storm drain inlet filters, oil/water separators, etc., shall be utilized to capture pollutants before the stormwater runoff enters the storm drainage system. - The developer shall distribute educational materials to the first tenants of properties included in the project development. These materials shall address good housekeeping practices relating to stormwater quality, prohibited discharges, and proper disposal of hazardous materials. - Common landscaped areas shall be subject to a program of efficient irrigation and proper maintenance, including minimizing use of fertilizer, herbicides and pesticides. - The project tenants and users shall implement a trash management and litter control program to mitigate the impacts of gross pollutants on stormwater quality. This program shall include litter patrol, emptying trash receptacles in common areas, and reporting and investigating trash disposal violations. - Storm drain inlets shall be labeled with the phrase "No dumping – flows to Bay," or a similar phrase to mitigate the impact of potential for discharges of pollutants to the storm drain system. Restaurants in the development shall be designed to include contained areas for cleaning mats, containers and sinks connected to the sanitary sewers. Grease shall be collected and							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
stored in a contained area and shall be removed regularly by a disposal recycling service. To this end, sinks shall be equipped with grease traps to provide for its collection.							
Transportation							
TRA-1: VMT Reductions							
The applicant shall develop and implement a Transportation Demand Management (TDM) plan that is aimed at achieving a reduction in residential vehicle trips to and from the site. The TDM plan will need to be prepared by a qualified traffic consultant and in coordination with the City of Morgan Hill Development Services Director or Designee. The TDM plan shall quantify the reduction in VMT. The TDM plan may include, but shall not be limited to, the following elements described below: ▪ School Pool Programs: Organize a program that matches families in carpools for school pick-up and drop-off of all households from the project. Organizing a school pool program helps match parents who transport students to schools without a busing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program would be open to all families in the development. School pools reduce the total number of vehicle trips traveling to and from schools, thereby reducing VMT ▪ Voluntary Travel Behavior Change Programs. Provide a program that targets individual attitudes towards travel and providing tools for individuals to analyze and alter their travel behavior with 100% expected resident participation. These programs include mass	Coordinate on the development of a Transportation Demand Management (TDM) plan with the project applicant in order to reduce VMT.	Prior to construction	Once for TDM development Periodically after construction to ensure compliance with TDM	City of Morgan Hill Development Services Department			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
communication campaigns and travel feedback programs, such as travel diaries or feedback on calories burned from activities and travel. This strategy encourages the use of shared ride modes, transit, walking, and biking, thereby reducing VMT							
TRA-2: Emergency Vehicle Site Access							
The project site shall be designed following City of Morgan Hill design standards and provide adequate width and turn-radii at and along all drive/parking aisles to allow for two-way circulation and adequate circulation of larger vehicles (such as emergency trucks, garbage trucks, and delivery trucks) throughout the project site. The project applicant shall provide detailed site development plans to the City of Morgan Hill Planning Division that demonstrate compliance with the City design standards prior to issuance of a building permit.	Ensure that all city design standards are incorporated into project site plans. Check for compliance with City design standards prior to issuance of a building permit.	Prior to issuance of building permit	Once	City of Morgan Hill Development Services Department			
Tribal Cultural Resources							
TCR-1: Significant Historical or Archaeological Materials							
Significant historic or archaeological materials: A moderate potential exists for unrecorded historic-period archaeological resources to be within the project area. The developer shall enter into written contracts with an archaeologist and the Tamien Nation Tribe, and pay all fees associated with the activities required by this condition. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply: Prior to start of grading or earthmoving activity on the "first day of construction", the archeologist and Tamien Nation Tribal	Require that the project developer contracts with an archaeologist and the Tamien Nation Tribe, and all fees are paid. Ensure that the general contractor and subcontractors attend the pre-construction meeting prior to grading. Halt all work within 50 feet of an archaeological find. Follow all procedures described by the archaeologist based on the significance determination of an archaeological find on the project site. Ensure that all human remains	Prior to and during grading permit approval and during construction	Periodically prior to and during construction and grading activities	City of Morgan Hill Development Services Department, Tamien Nation Tribe			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Monitor shall hold a pre-construction meeting for the purposes of “cultural sensitivity training” with the general contractor and subcontractors. ▪ A Tamien Nation Tribal Monitor shall be present on-site to monitor all ground-disturbing activities and an archaeologist shall be on-call. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: ▫ Work at the location of the find shall halt immediately within fifty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter; ▫ If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist shall prepare a brief informal memo/letter in collaboration with a tribal representative that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find; ▫ If the find appears significant and to qualify as a unique archaeological resource, the archaeologist shall determine if the resource can be avoided and shall detail avoidance procedures in a formal memo/letter; and	are treated with respect and not handled by anyone other than the appropriate parties. In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Ensure that the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the City of Morgan Hill Development Services Director, the Contractor’s point(s) of contact, the Coroner of the County of Santa Clara, the Native American Heritage Commission, The Amah Mutsun Tribal Band, and the Tamien Nation. Review and approve or deny recommendations made by the MLD.						

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
▫ If the resource cannot be avoided, the archaeologist in collaboration with a tribal representative shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the Development Services Director. The action plan shall be in conformance with California Public Resources Code 21083.2. An archaeologist shall be on-call during ground disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below: ▪ The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans. ▫ If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld. ▫ Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
▫ Surgical masks should also be worn to prevent exposure to pathogens that may be associated with the remains. ▪ In the event that known or suspected Native American remains are encountered, or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials and historic structure remains such as stone lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below. ▪ An “exclusion zone” where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the contractor foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time of discovery, by the monitoring archaeologist and tribal representative (typically twenty-five to fifty feet for single burial or archaeological find). ▪ The discovery locale shall be secured (e.g., 24-hour surveillance) as directed by the City							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
or County if considered prudent to avoid further disturbances. ▪ The contractor foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition: ▫ The City of Morgan Hill Development Services Director (408) 779-7247 ▫ The Contractor's Point(s) of Contact ▫ The Coroner of the County of Santa Clara (if human remains found) (408) 793-1900 ▫ The Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082 ▫ The Amah Mutsun Tribal Band (916) 481-5785 (H) or (916) 743-5833 (C) ▫ The Tamien Nation (707)295-4011 (office) and (925) 336-5359 (THPO) ▪ The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC. ▪ The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD). (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.) ▪ Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Development Services Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the appropriate tribe may be considered and carried out. - If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.							
Utilities and Service Systems							
Mitigation 3.13-1							
Subject to review and approval by the City of Morgan Hill, the project applicant shall locate and maintain recycling receptacles for corrugated cardboard, mixed paper, food and beverage containers, and landscaping waste. Such receptacles shall be located adjacent to the garbage dumpsters serving the businesses or maintenance personnel generating such waste. Contracts for the collection of these recyclables shall also be maintained as available.	Review and approve all siting of recycling and waste receptacles. Ensure maintenance of contracts for collection.	Prior to construction and grading activities	Once to locate waste receptacles Periodically to ensure receptacle maintenance	City of Morgan Hill Environmental Services Department			

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HEXAGON TRANSPORTATION CONSULTANTS, INC.



Cochrane Commons Mixed-Use Development

Transportation Operations Analysis

Prepared for:

City of Morgan Hill

December 10, 2021

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Executive Summary

This report presents the results of the Transportation Operations Analysis (TOA) conducted for the proposed Cochrane Commons Mixed-Use Development in Morgan Hill, California. The project site is located along the north side of Cochrane Road between Mission View Drive and DePaul Drive.

Project Description

The proposed project site is part of a larger commercial development site that was approved for 590,100 square feet (s.f.) of retail space, a 12-pump gas station, and a 14-screen movie theater. A Traffic Impact Analysis (TIA) for the approved development was completed in 2005. Since the approval, 303,608 s.f. of retail space has been constructed along with the gas station. In 2016, as part of the City's update of its General Plan (*Morgan Hill 2035 General Plan*, adopted July 27, 2016), the land use designation on a portion of the undeveloped project site was changed from commercial to mixed-use flex. The mixed-use flex designation allows for a variety of both commercial and residential uses.

The project as now proposed on the remaining undeveloped portion of the site will consist of a mixed-use development that includes up to 498 townhomes/apartments, up to 140,000 s.f. of retail space, and a potential 150-room hotel in lieu of either a portion of the retail square footage or a portion of the residential unit count. To allow for future development flexibility, this analysis evaluates a "worst-case" development scenario in which the hotel uses are considered in addition to the maximum retail, with no reduction in corresponding retail or residential uses. The proposed project also will require a change in the General Plan designation from Commercial to Mixed Use Flex for the remaining portions of the project site that are not currently designated as such. The revised General Plan designation will provide consistency throughout the remaining project site, will be compatible with the amended PUD, and allow for the appropriate mix and integration of uses for the proposed project.

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive.

Scope of Study

The study consists of a traffic operations analysis that demonstrates the project's consistency with the *Morgan Hill 2035 General Plan* goals and policies.

The current General Plan, *Morgan Hill 2035 General Plan*, adopted in July 2016 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, a traffic operations analysis based upon peak hour intersection level of service analysis is included for consistency with the General Plan goals and policies. The traffic operations analysis

supplements the CEQA required vehicle-miles-traveled (VMT) analysis, which was prepared separately. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

Traffic Operations Analysis

Project Trip Generation

Proposed Project

Based on the ITE rates with trip reductions, the proposed project would generate a total of 9,857 daily vehicle trips, with 506 trips (189 inbound and 317 outbound) occurring during the AM peak hour and 813 trips (457 inbound and 356 outbound) occurring during the PM peak hour.

Approved Project

Based on the ITE rates with trip reductions, the remaining unconstructed portion of the approved commercial/retail development would generate a total of 12,048 daily trips, with 221 trips (143 inbound and 78 outbound) occurring during the AM peak hour and 993 trips (508 inbound and 485 outbound) occurring during the PM peak hour.

Approved Development vs. Proposed Project Trip Differences

The trip estimates indicate that the now proposed mixed-use development on the project site would result in 2,191 fewer daily trips with 285 additional trips during the AM peak hour and 180 fewer trips occurring during the PM peak hour when compared to the previously approved commercial/retail development on the project site.

Intersection Operations Analyses

The results of the traffic operations analysis indicate that based on the City's operating standards, the proposed project would have an adverse effect on intersection operations at the following two study intersections under Year 2030 Cumulative with project conditions.

1. Mission View Drive and Cochrane Road (Without and With Both Projects – AM and PM Peak Hours)
9. Condit Road and Main Avenue (Without and With Both Projects – AM and PM Peak Hours)

However, it must be noted that the intersection operations analysis indicates that the proposed mixed-use project would result in adverse effects at intersections that also are projected to be adversely affected by the previously approved commercial/retail development. Therefore, the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development. Furthermore, two intersections (Monterey Road/Dunne Avenue and Cochrane Road/Mission View Road) were shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation measures of the 2005 EIR have since been completed.

Nevertheless, descriptions of the adverse effects on intersection operations and potential improvement measures that may be included as part of the project's Conditions of Approval are provided below. However, the identified roadway operations and improvements are not required or considered project impacts per CEQA guidelines.

1. Cochrane Road and Mission View Drive

This intersection is projected to operate at unacceptable LOS F and E during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to decrease or increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during at least one of the peak hours analyzed. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation, with the exception of a second southbound right-turn lane, have been completed. Dual right-turn lanes at intersections are no longer considered pedestrian and bicyclist friendly and are not recommended. This analysis also does not identify the need for dual right-turn lanes. Therefore, the mitigation for the approved commercial/retail development can be deemed complete.

The addition of a second northbound left-turn lane on Mission View Drive and a cycle length adjustment would be necessary to improve intersection operations. The addition of the second northbound left-turn lane will require lane striping and signal modification but will fit within the existing curb-to-curb pavement width on Mission View Drive. Implementation of this improvement would improve the intersection's level of service to LOS C during both the AM and PM peak hours under Year 2030 Cumulative with both project conditions.

9. Condit Road and Main Avenue

This intersection is projected to operate at unacceptable LOS E and F during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during both the AM and PM peak hours. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was not shown to be impacted by the approved commercial/retail development in the 2005 EIR. The addition of an exclusive southbound right-turn lane on Condit Road and a cycle length adjustment would be necessary to improve intersection operations. The addition of the right-turn lane will require signal modifications and lane striping on the southbound approach. Implementation of this improvement would improve the intersection's level of service to LOS D during the PM peak hour under Year 2030 Cumulative with both the approved and proposed project conditions. This intersection is under the jurisdiction of both the City of Morgan Hill and Santa Clara County. Therefore, implementation of the recommended improvements will require City and County approval.

Freeway Segment Level of Service Analysis

The results of the freeway segment analysis show that ten directional mixed-flow lanes and one directional HOV lane on the freeway segments analyzed are projected to operate at an unacceptable LOS F during at least one peak hour under existing conditions and would continue to operate at LOS F conditions with the addition of traffic due to the approved or proposed project.

Improvement of freeway segment operations would require freeway widening to construct additional through lanes, thereby increasing freeway capacity. VTA's Valley Transportation Plan (VTP) 2040 identifies freeway express lane projects along US 101 between Cochrane Road and Whipple Avenue. The planned improvements consist of the conversion of the existing HOV lane to an express lane and

the construction of a second express lane in each direction on US 101. These improvements would increase the capacity of the freeway and help to address the deficiency in freeway operations. However, it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements due to constraints in the acquisition and cost of right-of-way.

1.

Introduction

This report presents the results of the Transportation Analysis (TA) conducted for the proposed Cochrane Commons Mixed-Use Development in Morgan Hill, California. The project site is located along the north side of Cochrane Road between Mission View Drive and DePaul Drive. The project site location and the surrounding study area are shown in Figure 1.

Project Description

The proposed project site is part of a larger commercial development site that was approved for 590,100 square feet (s.f.) of retail space, a 12-pump gas station, and a 14-screen movie theater. A Traffic Impact Analysis (TIA) for the approved development was completed in 2005. Since the approval, 303,608 s.f. of retail space has been constructed along with the gas station. In 2016, as part of the City's update of its General Plan (*Morgan Hill 2035 General Plan*, adopted July 27, 2016), the land use designation on a portion of the undeveloped project site was changed from commercial to mixed-use flex. The mixed-use flex designation allows for a variety of both commercial and residential uses.

The project as now proposed on the remaining undeveloped portion of the site will consist of a mixed-use development that includes up to 498 townhomes/apartments, up to 140,000 s.f. of retail space, and a potential 150-room hotel in lieu of either a portion of the retail square footage or a portion of the residential unit count. To allow for future development flexibility, this analysis evaluates a "worst-case" development scenario in which the hotel uses are considered in addition to the maximum retail, with no reduction in corresponding retail or residential uses. The proposed project also will require a change in the General Plan designation from Commercial to Mixed Use Flex for the remaining portions of the project site that are not currently designated as such. The revised General Plan designation will provide consistency throughout the remaining project site, will be compatible with the amended PUD, and allow for the appropriate mix and integration of uses for the proposed project.

Access to the project site is proposed via a new right-turn only driveway along Cochrane Road as well as the existing signalized Cochrane Road/De Paul Drive intersection. Four driveways also are proposed along Mission View Drive. The project site plan is shown in Figure 2.

Scope of Study

The current General Plan, *Morgan Hill 2035 General Plan*, adopted in July 2016 uses Level of Service (LOS) as its primary metric for the evaluation of the projected operation of the City's roadway system. Therefore, this traffic operations analysis based upon peak hour intersection level of service analysis

Figure 1
Project Site Location

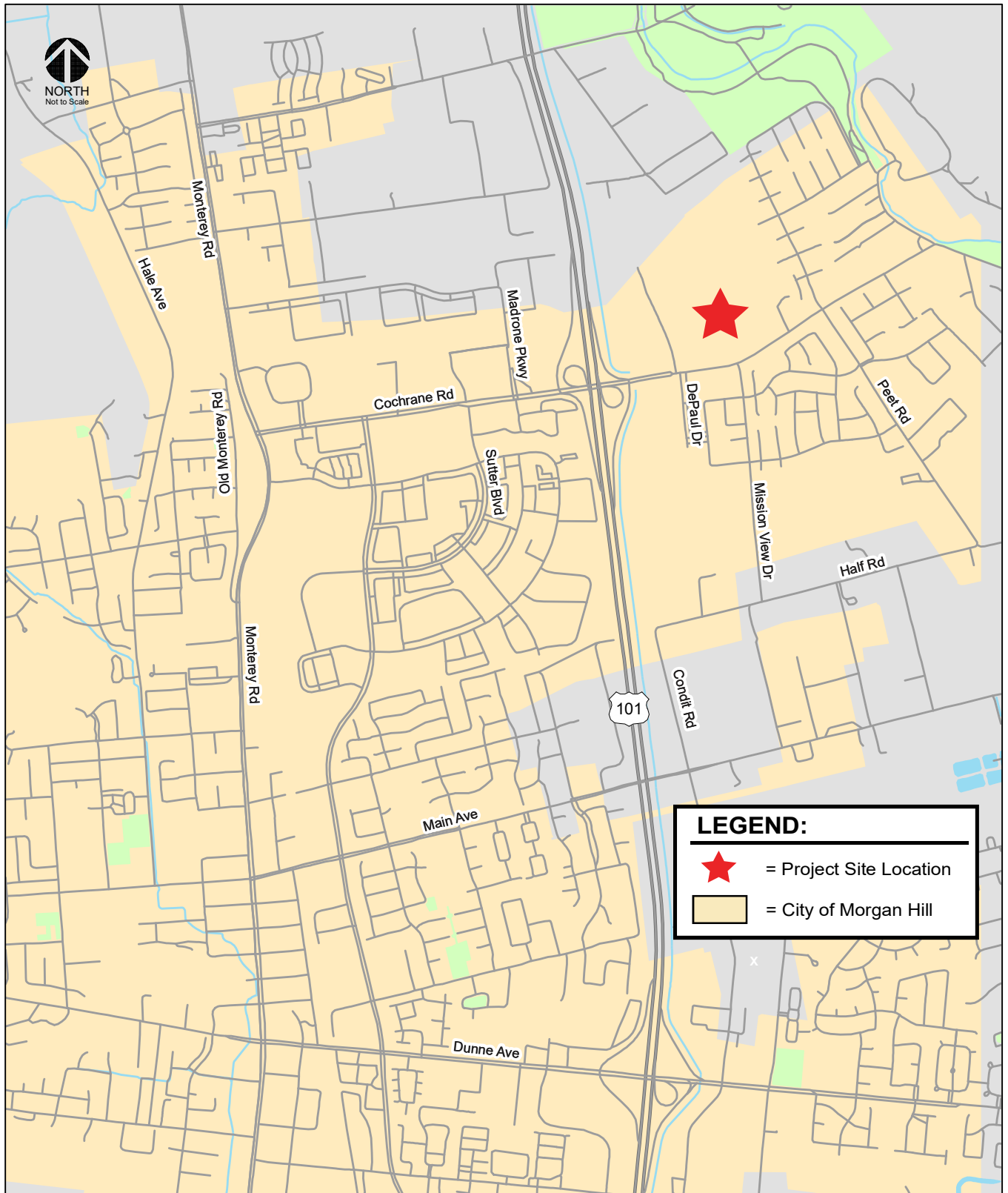
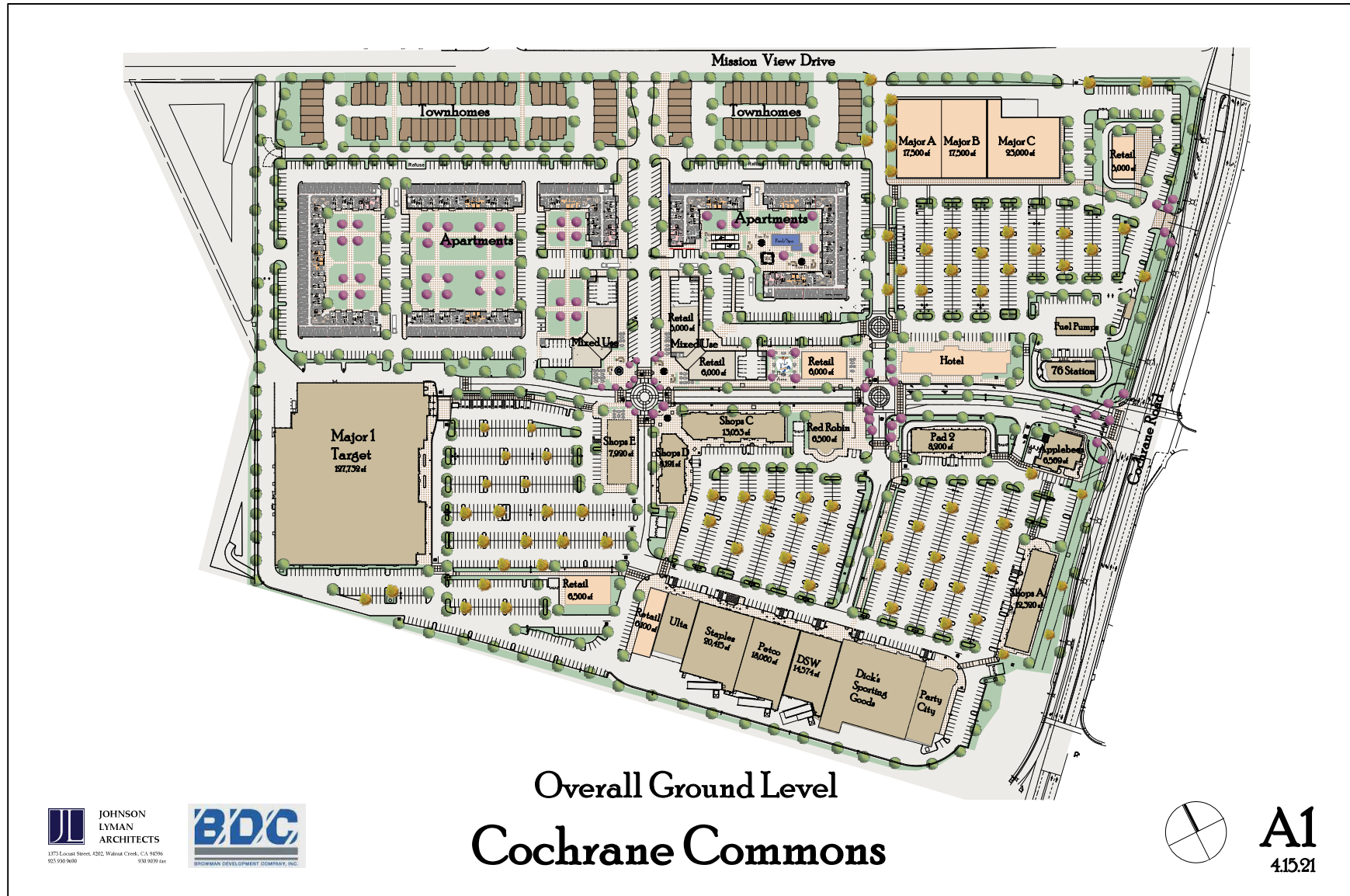


Figure 2
Project Site Plan



has been completed to demonstrate the project's consistency with the *Morgan Hill 2035 General Plan* goals and policies.

The traffic operations analysis supplements the CEQA required VMT analysis, which has been prepared separately. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis. The traffic operations analysis also provides a comparative evaluation of the proposed project and originally approved commercial/retail development to show consistency with the certified EIR. The traffic operations analysis includes the evaluation of a sub-set of intersections studied in the original EIR during the weekday AM and PM peak hours.

The effects of the proposed development on traffic operations on the surrounding roadway system were evaluated following the standards and methodologies set forth by the City of Morgan Hill in its *Guidelines for Preparation of Transportation Impact Reports*, February 2010, Morgan Hill 2035 General Plan, and the Santa Clara Valley Transportation Authority (VTA). The VTA administers the County Congestion Management Program (CMP).

Report Organization

The remainder of this report is divided into three chapters. Chapter 2 describes existing conditions in terms of the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 presents the traffic operations analysis and the project's effects on the transportation system and describes the recommended roadway improvements. Chapter 4 presents the conclusions of the transportation analysis.

2. Existing Transportation System

This chapter describes the existing transportation system within the project area. It describes transportation facilities for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project site is provided via US 101. Local access to the site is provided by Cochrane Road, DePaul Drive, Half Road, Mission View Drive, Main Avenue, and Condit Road. These facilities are described below.

US 101 is a north-south freeway extending northward to San Francisco and southward through Gilroy. US 101 is an eight-lane freeway (three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction) north of Cochrane Road. South of Cochrane Road, it is a six-lane freeway with no HOV lanes. Access to and from the project site is provided via its interchange at Cochrane Road.

Cochrane Road is designated as an arterial in the project vicinity per the City of Morgan Hill 2035 General Plan and is an east-west divided roadway that runs from Monterey Road to Malaguerra Avenue, east of US 101. Currently, Cochrane Road is a four-lane road between Monterey Road and Cochrane Circle. Between Cochrane Circle and US 101, Cochrane Road widens to three lanes eastbound and two lanes westbound, then narrows back to four lanes east of US 101, and to two lanes east of Mission View Drive. Cochrane Road has posted speed limits of 40 and 45 miles per hour (mph). Access to the project site is provided via its intersections with DePaul Drive, Mission View Drive, and one driveway just west of Mission View Drive.

DePaul Drive is designated as a local street per the City of Morgan Hill 2035 General Plan and is a north-south undivided roadway that intersects Cochrane Road approximately 700 feet east of the US-101 northbound ramps intersection and runs approximately 1,500 feet north and 1,000 feet south of Cochrane Road. Direct access to the project site would be provided via driveways along DePaul Drive north of Cochrane Road.

Half Road is designated as a collector per the City of Morgan Hill 2035 General Plan and is an east-west undivided roadway that runs from Condit Road to Cochrane Road. Half Road has a posted speed limit of 35 miles per hour (mph). Access to the project site is provided via its intersection with Mission View Drive.

Mission View Drive is designated as a collector per the City of Morgan Hill 2035 General Plan and is a north-south two-lane undivided roadway that runs south from Eagle View Drive to Half Road. In the vicinity of the project site, Mission View Drive has a posted speed limit of 40 miles per hour (mph). Mission View Drive runs along the project's eastern frontage. Direct Access to the project site would be provided via driveways along Mission View Drive.

Main Avenue is designated as an arterial per the City of Morgan Hill 2035 General Plan and is a two-lane roadway that runs eastward from its intersection with DeWitt Avenue to Coyote Road at the base of the eastern foothills. The roadway has an overcrossing of US 101, however, no access to US 101 is provided. Access to the project site is provided via its intersection with Condit Road.

Condit Road is designated as a collector per the City of Morgan Hill 2035 General Plan and is a two-lane north-south roadway that extends from Half Road southward to Tennant Avenue. The posted speed limit on Condit Road is 45 mph. Access to the project site is provided via its transition to Half Road.

Existing Bicycle and Pedestrian Facilities

As defined by the Valley Transportation Authority (VTA), bicycle facilities include Class I bikeways (defined as off-street bike paths, which are shared with pedestrians and exclude general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), and rated streets. The latter refers to streets frequently used by bicyclists, sharing the roadway with motor vehicles, and includes city-designated Class III bike routes. Rated streets include extreme caution (heavy traffic volumes with high traffic speeds), alert (moderate traffic volumes and speeds), and moderate (low traffic volumes and moderate to low traffic speeds). Class III bikeways only have signs to help guide bicyclists on recommended routes to certain locations.

In the project vicinity, bike lanes are currently provided along the extent of Cochrane Road and Mission View Drive north of Cochrane Road along the project's frontage. An unpaved bike path, the Madrone Channel Trail, runs along the east side of US 101, between Tennant Avenue and Cochrane Road.

The remaining bicycle facilities in the area are located beyond the immediate project vicinity. Bike lanes are currently provided along the following roadways:

- Main Avenue, between Live Oak High School and Peak Avenue;
- Dunne Avenue west of Gallop Drive;
- Hill Road between Dunne Avenue and Diana Avenue;
- Murphy Avenue between Dunne Avenue and Kelly Park Circle;
- Butterfield Boulevard, along its entire length;
- Sutter Boulevard, between Cochrane Road and Butterfield Boulevard;
- Central Avenue, between Butterfield Boulevard and its termination point west of US 101;
- Monterey Road, nearly its entire length within City of Morgan Hill limits, with the exception of the segment that runs through downtown between Dunne Avenue and Main Avenue;
- Tennant Avenue, between Condit Road and Olympic Drive
- Depot Street, along its entire length;
- Peak Avenue, between Dunne Avenue and Wright Avenue;
- Hale Avenue, between Main Avenue and north of the City of Morgan Hill.

Other bicycle facilities in the City include the following:

- A bike route on Monterey Road, between Dunne Avenue and Main Avenue;

- A paved bike path on the east side of Butterfield Boulevard, between San Pedro Avenue and Central Avenue.
- Along the west bank of Little Llagas Creek, extending from Watsonville Road north to Spring Avenue.

The existing bicycle facilities in the study area are presented graphically in Figure 3.

Pedestrian facilities in the study areas consist primarily of sidewalks, pedestrian push buttons, marked crosswalks, and signal heads at signalized intersections. Sidewalks are provided along at least one of the sides of the following roadways in the vicinity of the project site:

Cochrane Road – sidewalks are provided along the north side of the street between Butterfield Boulevard and White Moon Drive. Along the south side of the street, sidewalks are provided from Monterey Road just east of Mission View Drive with the exception of the segments between US 101 northbound ramps and DePaul Drive and a short segment west of Mission View Drive.

Mission View Drive – sidewalks are provided along the east side of the street between the northern end of Mission View Drive (at Eagle View Drive) until approximately 950 feet north of its intersection with Half Road. There are no sidewalks along the west side of Mission View Drive, with the exception of curb ramps located at the northwest and southwest corners of the Mission View Drive and Cochrane Road intersection.

Sidewalks are not provided on either side of DePaul Drive with the exception of the short segment near the existing Target store.

Existing Transit Service

Existing transit service to the study area is provided by the VTA and Caltrain. The transit services are described below and shown in Figure 4.

VTA Bus Services

The study area is served directly by one local bus (Local Bus Route 87). In addition, Rapid Route 568 operates along Cochrane Road west of US 101.

Local Bus Route 87 operates on Cochrane Road, Mission View Drive, and Half Road in the study area. It runs from Burnett Avenue to the Civic Center (Main and Dewitt) in Morgan Hill. Route 87 operates between 7:00 AM and 6:00 PM with approximately 60-minute headways in the AM and PM commute periods. The nearest Route 87 bus stops to the project site are located near the DePaul Drive and Cochrane Road intersection.

Rapid Route 568 operates on Butterfield Boulevard and Cochrane Road on its route between the Gilroy Transit Center and the San Jose Diridon Transit Center. Route 568 operates between 5:30 AM and 8:00 PM with approximately 30-minute headways in the peak commute periods. The nearest Route 568 bus stops to the project site are located near the Cochrane Circle and Cochrane Road intersection, approximately one mile west of the project site.

Caltrain

Commuter rail service between San Francisco and Gilroy is provided by Caltrain. The Morgan Hill Caltrain Station is located along Depot Street, with main access and parking off of Butterfield Boulevard, approximately 2.5 miles west of the project site. At the Morgan Hill Station, Caltrain provides only three northbound trains during the morning commute period with approximately 30-minute headways and only three southbound trains during the afternoon commute period with approximately 40- to 80-minute headways.

Figure 3
Existing Bicycle Facilities

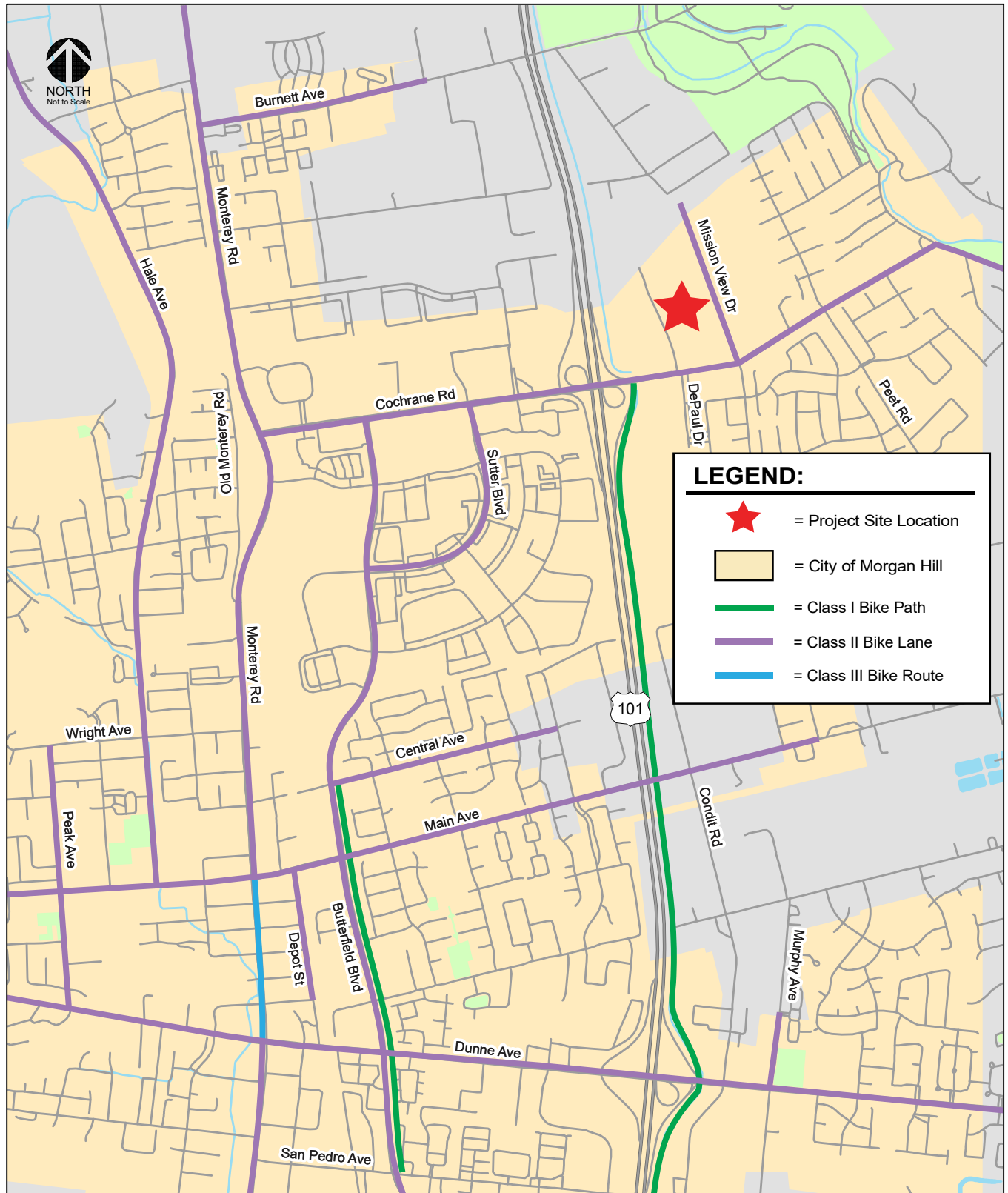
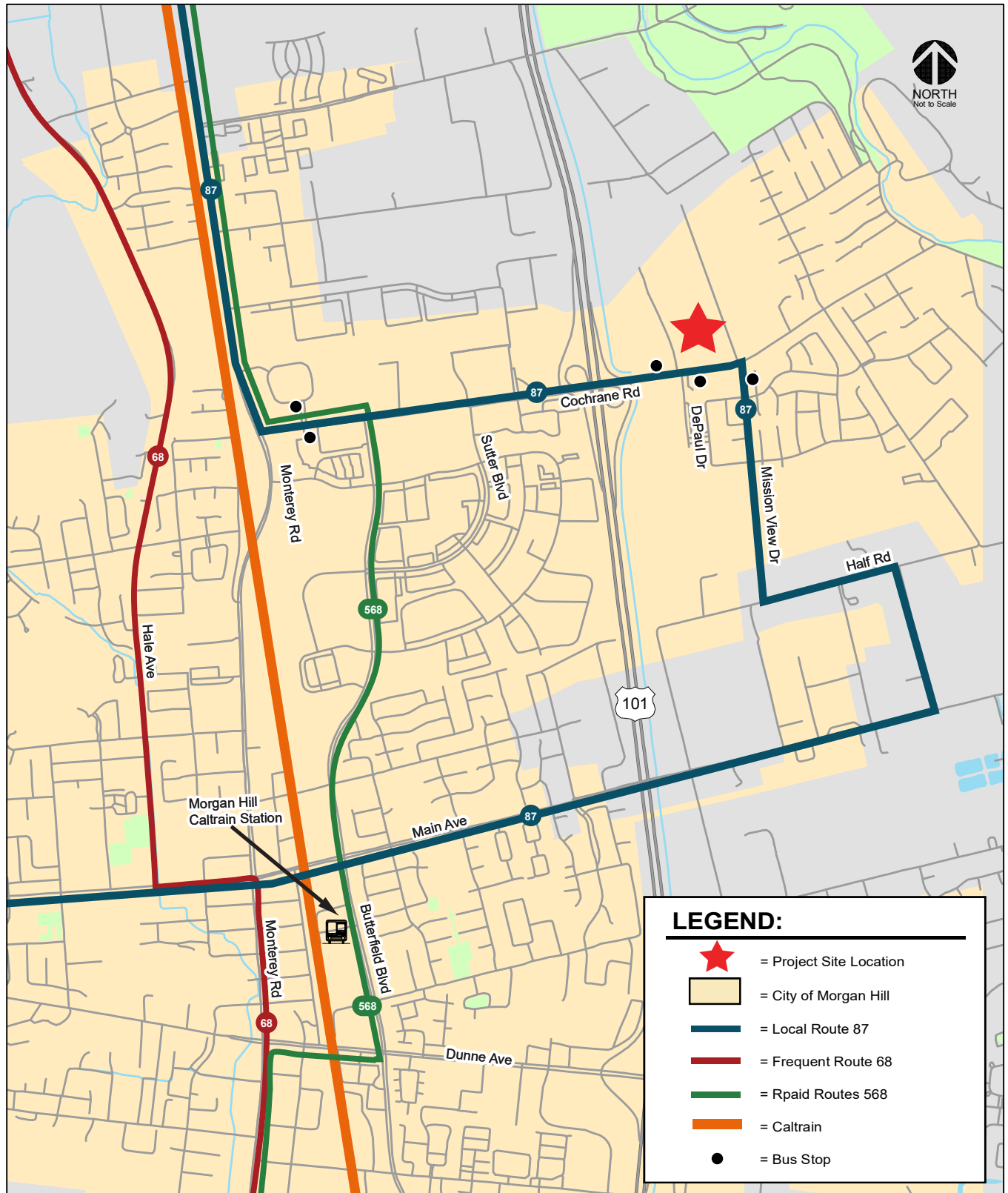


Figure 4
Existing Transit Services



3.

Traffic Operations Analysis

This chapter describes the traffic operations analysis which is used by the City of Morgan Hill in identifying potential improvement of the transportation system that may be included as part of the project's Conditions of Approval. However, the identified roadway operations and improvements are not required or considered project impacts per CEQA guidelines. The traffic operations analysis also provides a comparative evaluation of the proposed project and originally approved commercial/retail development, referred to as the "approved project" within this report, to show consistency with the certified EIR.

The chapter presents the method by which project traffic is estimated, intersection operations analysis for existing, existing plus project, Year 2030 Cumulative conditions, Year 2035 General Plan conditions the identification of any adverse effects on study intersections caused by the previously approved commercial/retail development and now proposed project generated trips, and recommended improvements to alleviate the identified operational issues.

Project Description

The proposed project site is part of a larger commercial development site that was approved for 590,100 square feet (s.f.) of retail space, a 12-pump gas station, and a 14-screen movie theater. A Traffic Impact Analysis (TIA) for the approved development was completed in 2005. Since the approval, 303,608 s.f. of retail space has been constructed along with the gas station. In 2016, as part of the City's update of its General Plan (*Morgan Hill 2035 General Plan*, adopted July 27, 2016), the land use designation on a portion of the undeveloped project site was changed from commercial to mixed-use flex. The mixed-use flex designation allows for a variety of both commercial and residential uses.

The project as now proposed on the remaining undeveloped portion of the site will consist of a mixed-use development that includes up to 498 townhomes/apartments, up to 140,000 s.f. of retail space, and a potential 150-room hotel in lieu of either a portion of the retail square footage or a portion of the residential unit count. To allow for future development flexibility, this analysis evaluates a "worst-case" development scenario in which the hotel uses are considered in addition to the maximum retail, with no reduction in corresponding retail or residential uses. The proposed project also will require a change in the General Plan designation from Commercial to Mixed Use Flex for the remaining portions of the project site that are not currently designated as such. The revised General Plan designation will provide

consistency throughout the remaining project site, will be compatible with the amended PUD, and allow for the appropriate mix and integration of uses for the proposed project.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution step, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment step, the project trips are assigned to specific streets and intersections in the study area. These procedures are described further in the following sections.

Proposed Project Trips

Through empirical research, data have been collected that correlate to common land uses their propensity for producing traffic. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. Hexagon prepared trip estimates for the proposed project based on trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Eleventh Edition, 2021. Single-Family Detached Housing (Land Use #210), Shopping Center (Land Use #820), and Hotel (Land Use #310) generation rates were used to estimate the number of trips that would be generated by the proposed project. Single-family detached housing trip generation rates were used to estimate the number of trips that would be generated by the proposed townhomes and apartments because the trip-making characteristics of varying types of residential units would be similar due to the limited transit services and employment opportunities within Morgan Hill. In addition, both the proposed townhomes and apartment units are shown to have individual enclosed garages, similar to what is typically provided with single-family homes. Based on ITE trip rates, single-family detached homes generate the greatest number of per unit trips for residential uses. Therefore, the use of single-family detached trip rates provides a conservative estimate of trips for the proposed townhome and apartment units.

Trip Reductions

The trip estimates for each of the proposed land use components of the project were reduced to account for internalization, or trips made between each of the proposed land uses. The reductions are based on the assumption that vehicle trips to each of the proposed land uses of the site would be reduced due to the internalization of trips. As prescribed by the VTA *Transportation Impact Analysis Guidelines* (October 2014), trip reduction of 15 and 10 percent (%) to account for the internalization between residential and retail land uses and between hotel and retail uses was applied to the estimated trips for the project, respectively.

In addition, trip generation for retail uses is typically adjusted to account for pass-by-trips. Pass-by-trips are trips that would already be on the adjacent roadways (and are therefore already counted in the existing traffic) but would turn into the site while passing by the retail uses. Justification for applying the pass-by-trip reduction is founded on the observation that such retail traffic is not actually generated by the retail development but is already part of the ambient traffic levels. Pass-by-trips are therefore excluded from the traffic projections (although pass-by traffic is accounted for at the site entrances). A typical pass-by trip reduction of 20% for retail development within the City of Morgan Hill was applied to the retail component of the proposed project.

Based on the ITE rates with trip reductions, the proposed project would generate a total of 9,857 daily vehicle trips, with 506 trips (189 inbound and 317 outbound) occurring during the AM peak hour and 813 trips (457 inbound and 356 outbound) occurring during the PM peak hour. The trip generation estimates for the proposed project are shown in Table 1.

Approved Commercial/Retail Development Project Trips

The project trips for the remaining unconstructed portion of the previously approved commercial/retail development (286,492 s.f. of retail space and a 14-screen movie theater) were estimated based on the trip rates and trip reductions used in the 2005 Cochrane Road PUD TIA prepared by Fehr & Peers.

Based on these trip rates and trip reductions, the remaining unconstructed portion of the approved commercial/retail development would generate a total of 12,048 daily trips, with 221 trips (143 inbound and 78 outbound) occurring during the AM peak hour and 993 trips (508 inbound and 485 outbound) occurring during the PM peak hour. The trip generation estimates for the remaining unconstructed portion of the approved commercial/retail development are shown in Table 1.

Approved Development vs. Proposed Project Trip Differences

The trip estimates indicate that the now proposed mixed-use development on the project site would result in 2,191 fewer daily trips with 285 additional trips during the AM peak hour and 180 fewer trips occurring during the PM peak hour when compared to the previously approved commercial/retail development on the project site. It should be noted that the estimated trips conservatively include trips associated with the potential hotel use in addition to the maximum 140,000 s.f. of retail use. However, the number of residential units and/or retail s.f. would be reduced, if the hotel were to be included in the project. Therefore, the reduction in daily trips for the proposed mixed-use development would be greater than identified above. The difference between the approved and proposed project trip estimates is shown in Table 1.

Trip Distribution and Assignment

The trip distribution patterns for project-generated traffic for the proposed land use were estimated based on existing travel patterns on the surrounding roadway system, locations of complementary land uses, and use of the City of Morgan Hill Traffic Demand Forecasting (TDF) Model. The peak-hour trips associated with the proposed project were added to the transportation network in accordance with the distribution patterns discussed above. The project trip distribution patterns are shown graphically in Figure 5. Figures 6 and 7 show the assignment of the approved commercial/retail development and proposed project traffic on the local transportation network, respectively. A tabular summary of project traffic at each study intersection is contained in Appendix C.

Intersection Operations Methodology

This section presents the methods used to evaluate traffic operations at each of the study intersections for each study scenario. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards, and the criteria defining adverse effects at the study intersections. The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection is not considered a CEQA impact metric.

Table 1
Project Trip Generation Estimates

Land Use	Reduction		Daily		AM Peak Hour						PM Peak Hour					
					Split			Trip			Split			Trip		
	%	Size	Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Land Uses																
#210 - Single-Family Detached Housing ¹		498 Dwelling Units	9.430	4,696	0.700	26%	74%	91	258	349	0.940	63%	37%	295	173	468
Residential & Retail Reduction ³	15%			-704				-7	-11	-18				-44	-26	-70
#820 - Shopping Center (>150k) ¹		140,000 Square Feet	37.010	5,181	0.840	62%	38%	73	45	118	3.400	48%	52%	228	248	476
Residential & Retail Reduction ³	15%			-704				-11	-7	-18				-26	-44	-70
Hotel & Retail Reduction ⁴	10%			-184				-4	-5	-9				-6	-5	-11
Passby Reduction ⁵	20%			-79				0	0	0				-39	-40	-79
#310 - Hotel ¹		150 Occupied Rooms	12.230	1,835	0.620	56%	44%	52	41	93	0.730	49%	51%	54	56	110
Hotel & Retail Reduction ⁴	10%			-184				-5	-4	-9				-5	-6	-11
Total Project Trips				9,857				189	317	506				457	356	813
Remaining Approved Land Uses²																
Shopping Center		286,492 Square Feet	36.490	10,454	1.030	61%	39%	180	115	295	3.420	48%	52%	470	510	980
Passby (20% daily, 25% peak hours)				-2,091				-37	-37	-74				-123	-122	-245
Movie Theater		14 Screens	292.500	4,095	0.000	0%	0%	0	0	0	23.020	60%	40%	193	129	322
Mixed-Use Reduction (10% daily, 20% PM peak hour)				-410				0	0	0				-32	-32	-64
Total Project Trips				12,048				143	78	221				508	485	993
Difference (Proposed - Approved Uses)				-2,191				46	239	285				-51	-129	-180
Notes: ¹ ITE Trip Generation Manual, 11 th Edition 2021. ² Trip rates and reduction percentages were based on the July 2005 Cochrane Road PUD by Fehr & Peers. ³ As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail components is equal to 15% off the smaller trip generator. ⁴ As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with hotel and retail components is equal to 10% of the smaller trip generator. ⁵ A 20% PM pass-by reduction is typically applied for retail development within Morgan Hill.																

Figure 5 Project Trip Distribution

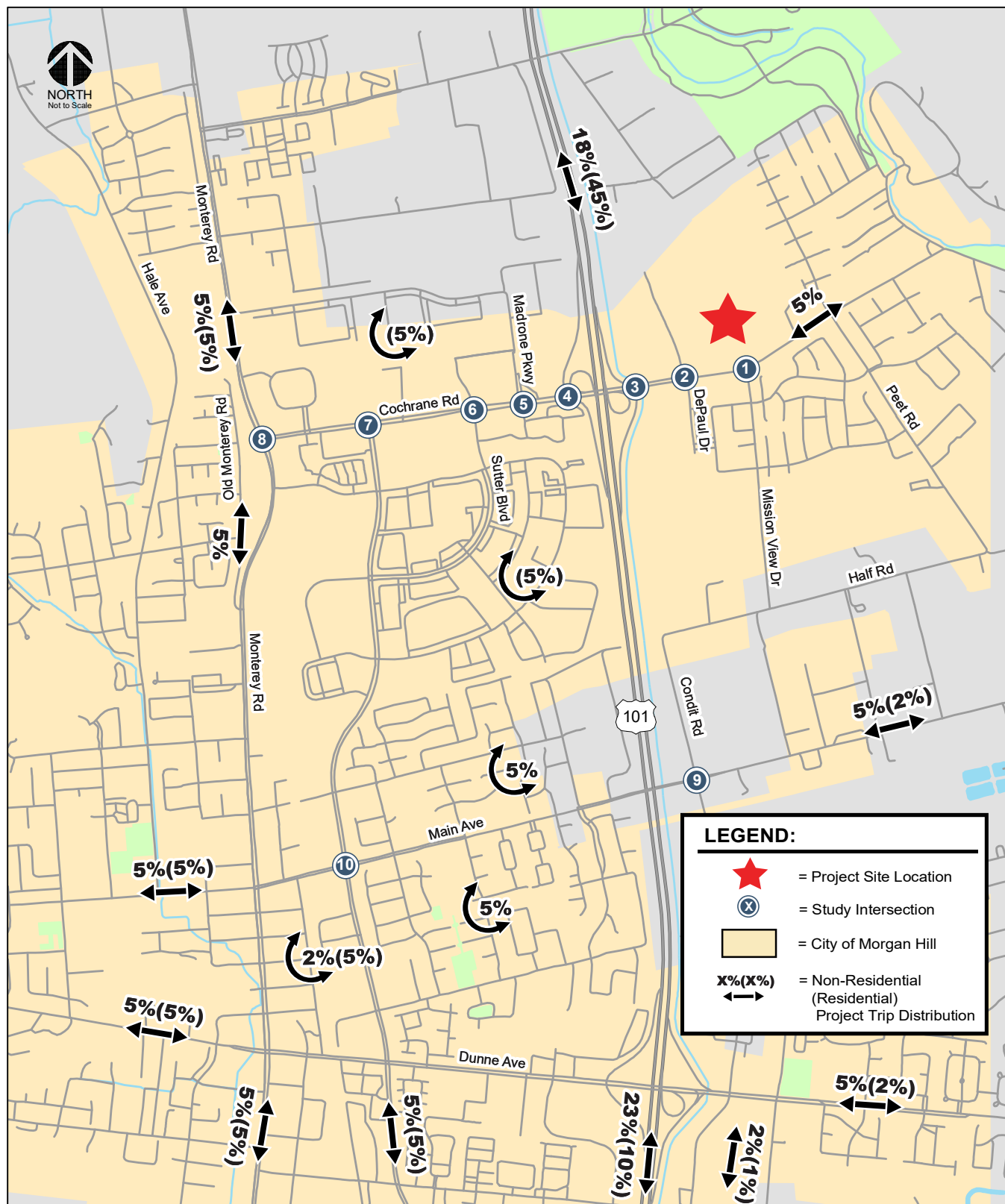


Figure 6
Approved Project Trip Assignment

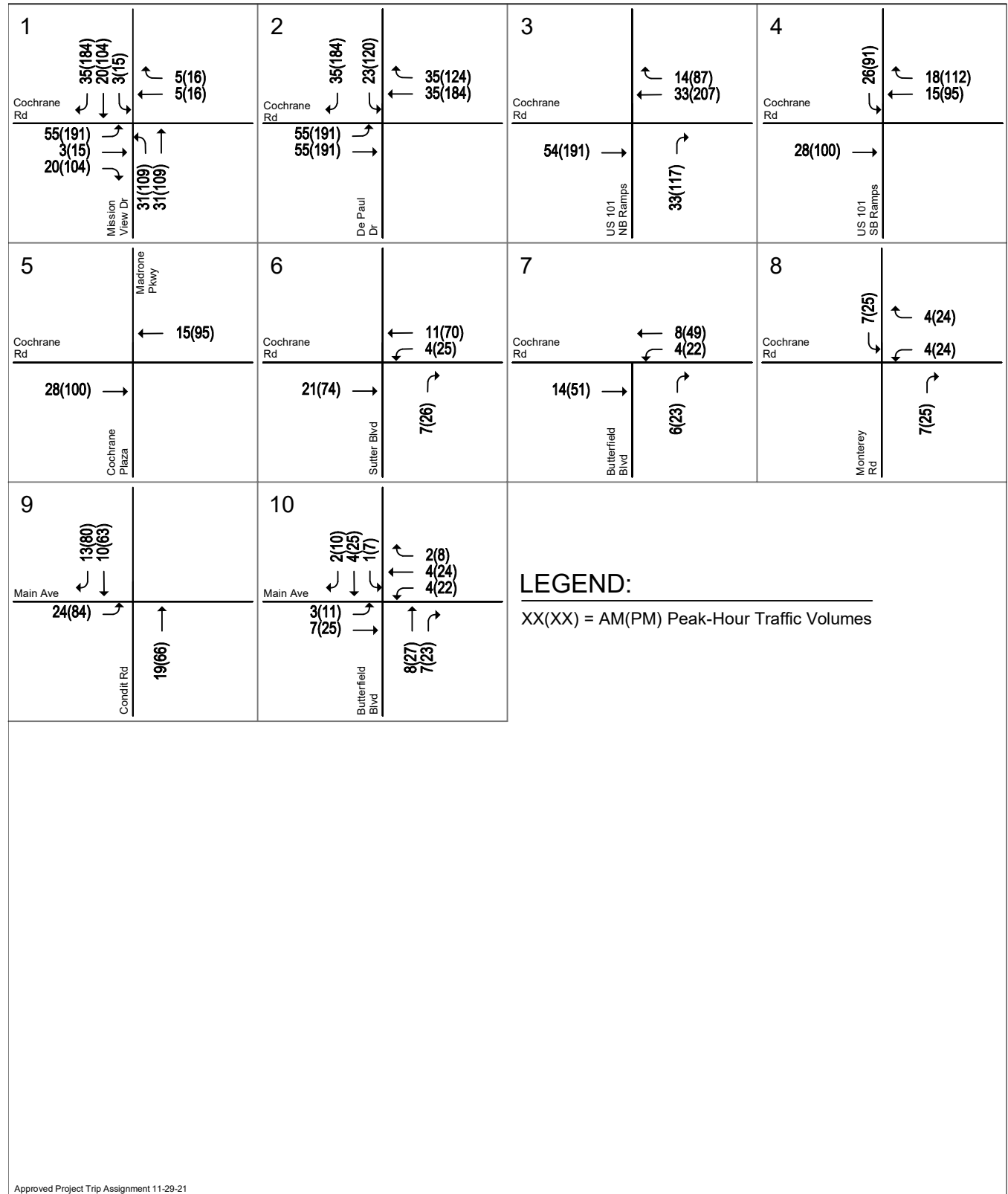
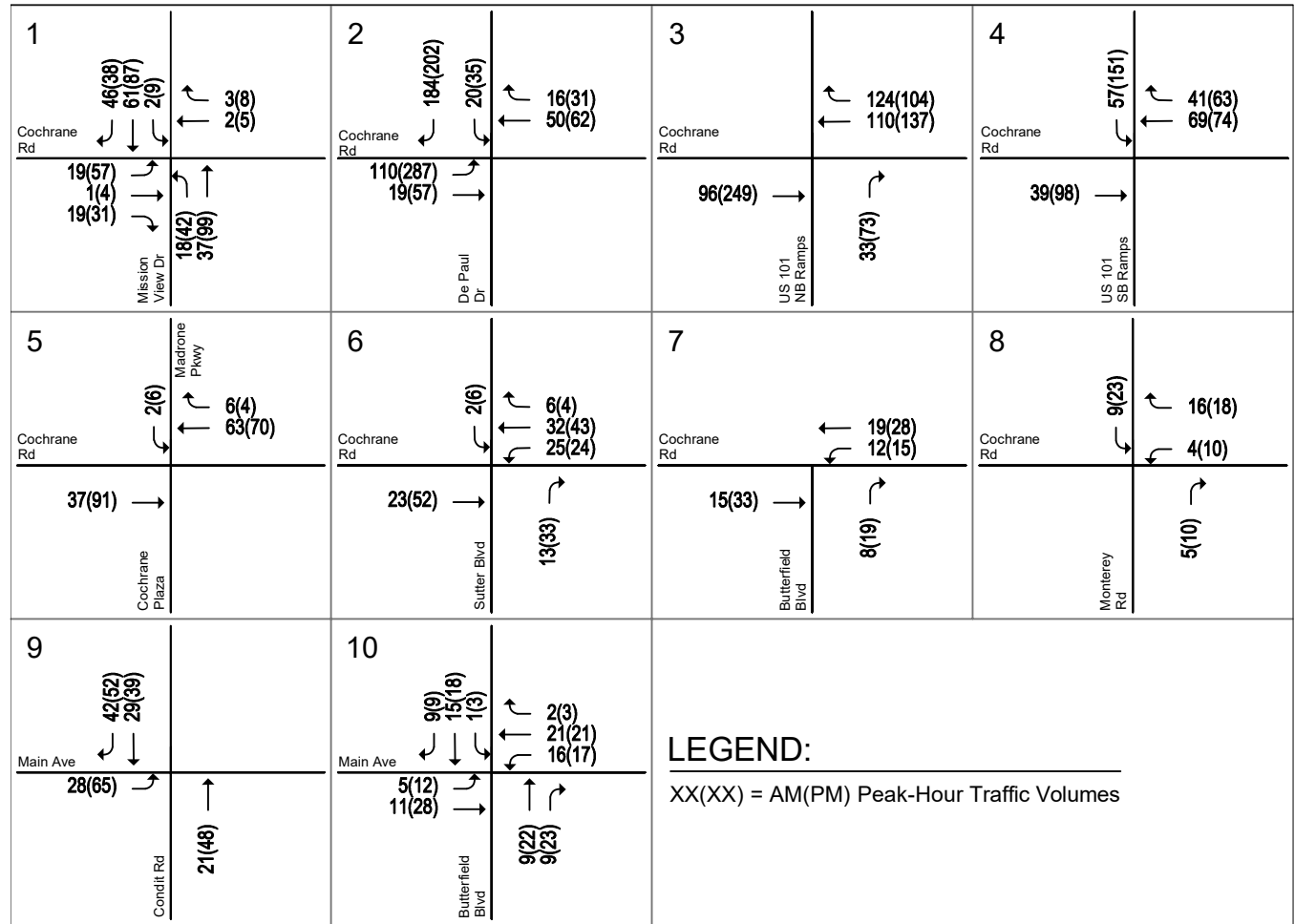


Figure 7
Proposed Project Trip Assignment



Proposed Project Trip Assignment 11-29-21

Study Intersections

The traffic operations analysis includes an analysis of AM and PM peak-hour traffic conditions for ten signalized intersections. The study intersections were selected in coordination with City staff. The selected intersections are comprised of a sub-set of those intersections studied in the original traffic study for the approved commercial/retail development that would be most affected by any net additional peak hour trips generated by the proposed mixed-use development. The study intersections are identified below.

1. Mission View Drive and Cochrane Road
2. De Paul Drive and Cochrane Road
3. US 101 Northbound Ramps and Cochrane Road
4. US 101 Southbound Ramps and Cochrane Road
5. Madrone Parkway/Cochrane Plaza and Cochrane Road
6. Sutter Boulevard and Cochrane Road
7. Butterfield Boulevard and Cochrane Road
8. Monterey Road and Cochrane Road
9. Condit Road and Main Avenue
10. Butterfield Boulevard and Main Avenue

Traffic conditions at all of the study intersections were analyzed for the weekday AM and PM peak hours. The weekday AM peak hour of traffic is generally between 7:00 AM and 9:00 AM and the weekday PM peak hour is typically between 4:00 PM and 6:00 PM. It is during these periods that the most congested traffic conditions occur on a typical weekday.

Traffic conditions were evaluated for the conditions described below:

- Scenario 1: *Existing Conditions*. Existing conditions represent the existing peak-hour traffic volumes on the existing roadway network. New traffic counts are not currently being collected due to the current COVID-19 pandemic and its effects on normal traffic conditions. Therefore, existing traffic volumes were represented by pre-pandemic traffic counts with a 1.5% compound annual growth factor applied to counts more than two years old. This growth rate is the net percentage increase in Morgan Hill's population between 2019 and 2020, per the California Department of Finance.
- Scenario 2: *Existing Plus Approved Project Conditions*. Approved project-generated traffic volumes were added to existing traffic volumes to estimate existing plus approved project conditions. Existing plus approved project conditions were evaluated relative to existing conditions in order to determine potential adverse effects due to the project.
- Scenario 3: *Existing Plus Proposed Project Conditions*. Proposed project-generated traffic volumes were added to existing traffic volumes to estimate existing plus proposed project conditions. Existing plus proposed project conditions were evaluated relative to existing conditions in order to determine potential adverse effects due to the project.
- Scenario 4: *Year 2030 Cumulative without Project Conditions*. Year 2030 Cumulative without project conditions represent traffic growth projected to occur in the Year 2030 without the proposed project on the existing transportation network. Projected 2030 traffic growth was developed by interpolating the projected Year 2035 traffic growth.
- Scenario 5: *Year 2030 Cumulative with Approved Project Conditions*. Approved project-generated traffic volumes were added to Year 2030 Cumulative without project to estimate Year 2030 Cumulative with approved project conditions. Year 2030 Cumulative with approved

project conditions were evaluated relative to Year 2030 Cumulative without project conditions in order to determine potential adverse effects due to the project.

- Scenario 6: *Year 2030 Cumulative with Proposed Project Conditions.* Proposed project-generated traffic volumes were added to Year 2030 Cumulative without project to estimate Year 2030 Cumulative with proposed project conditions. Year 2030 Cumulative with proposed project conditions were evaluated relative to Year 2030 Cumulative without project conditions in order to determine potential adverse effects due to the project.
- Scenario 7: *Year 2035 General Plan No Project Conditions.* Year 2035 General Plan No Project conditions represent future traffic volumes on the future transportation network. Year 2035 General Plan No Project conditions includes land use growth and transportation improvements associated with buildout of the City's General Plan.
- Scenario 8: *Year 2035 General Plan with Project Conditions.* Year 2035 General Plan with Project conditions consist of Year 2035 General Plan No Project traffic conditions with the addition of traffic due to the proposed project and its associated land use amendment for the project site.

Data Requirements

The data required for the analysis were obtained from recently completed traffic studies, the City of Morgan Hill General Plan traffic model, the 2018 CMP Monitoring and Conformance Report, and field observations. The following data were collected from these sources:

- lane configurations
- existing traffic volumes
- signal timing and phasing
- average speeds on freeway segments
- Year 2035 traffic forecasts

Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown in Figure 8. It is assumed in this analysis that the roadway network and intersection configurations under existing plus project and Year 2030 cumulative without and with project conditions would be the same as described under existing conditions.

Year 2035 General Plan Transportation Network

The Year 2035 General Plan traffic forecasts include land use growth and transportation improvements associated with the buildout of the City's General Plan as identified in the City's *2010 General Plan Circulation Element*. Several new roadways are planned under Year 2035 General Plan conditions to provide for enhanced connectivity and circulation throughout the City. The roadway improvements presented in Table 2 and Figure 9 are planned and assumed to be completed under Year 2035 General Plan conditions. Some of these roadway improvements will result in changes to intersection lane geometrics, as also identified in the *2010 General Plan Circulation Element*, which will be required to implement the Year 2035 GP roadway improvements. Figure 10 shows the planned intersection geometries under Year 2035 General Plan conditions.

Figure 8
Existing Lane Configurations

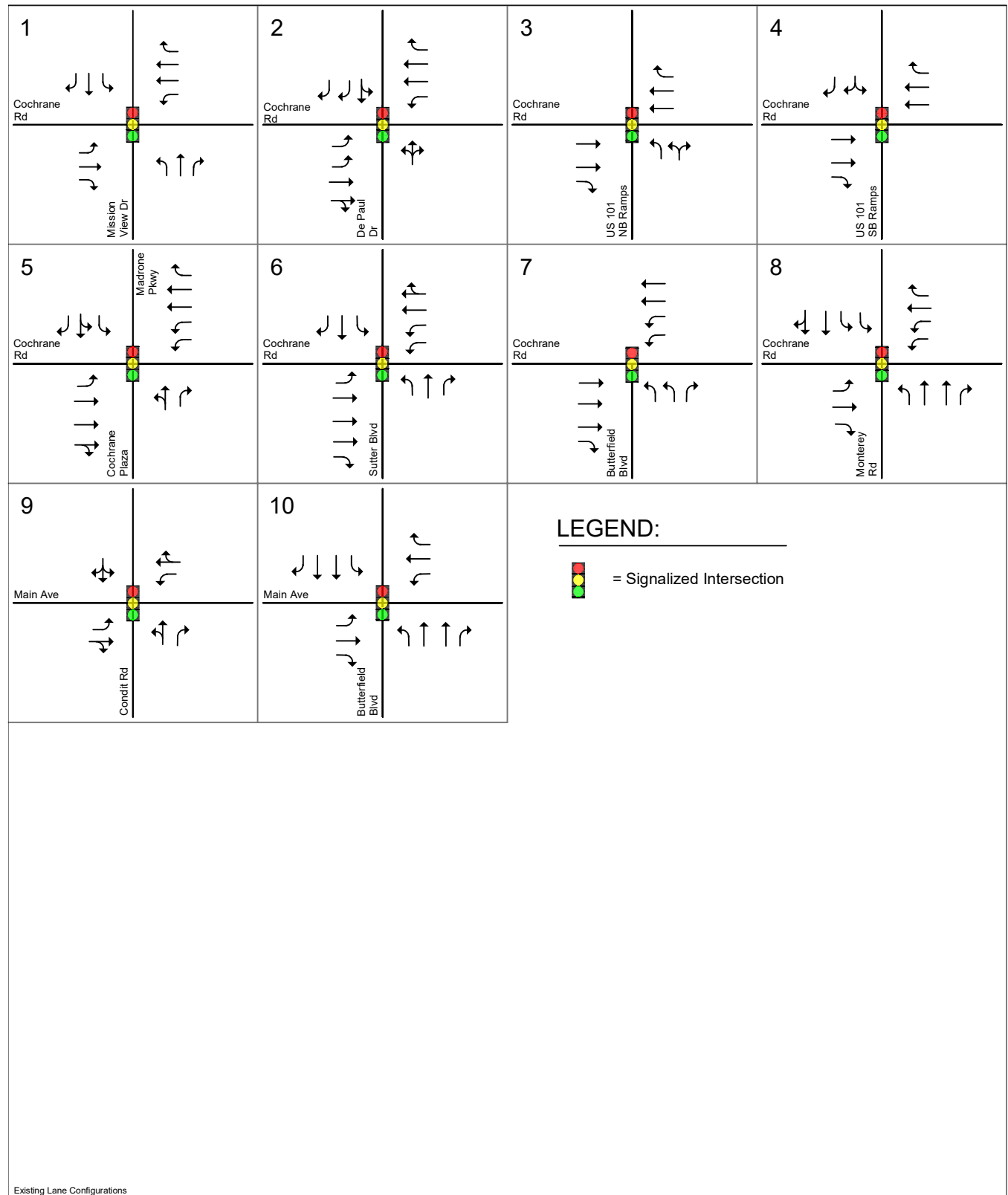


Figure 9
Year 2035 General Plan Roadway Improvements

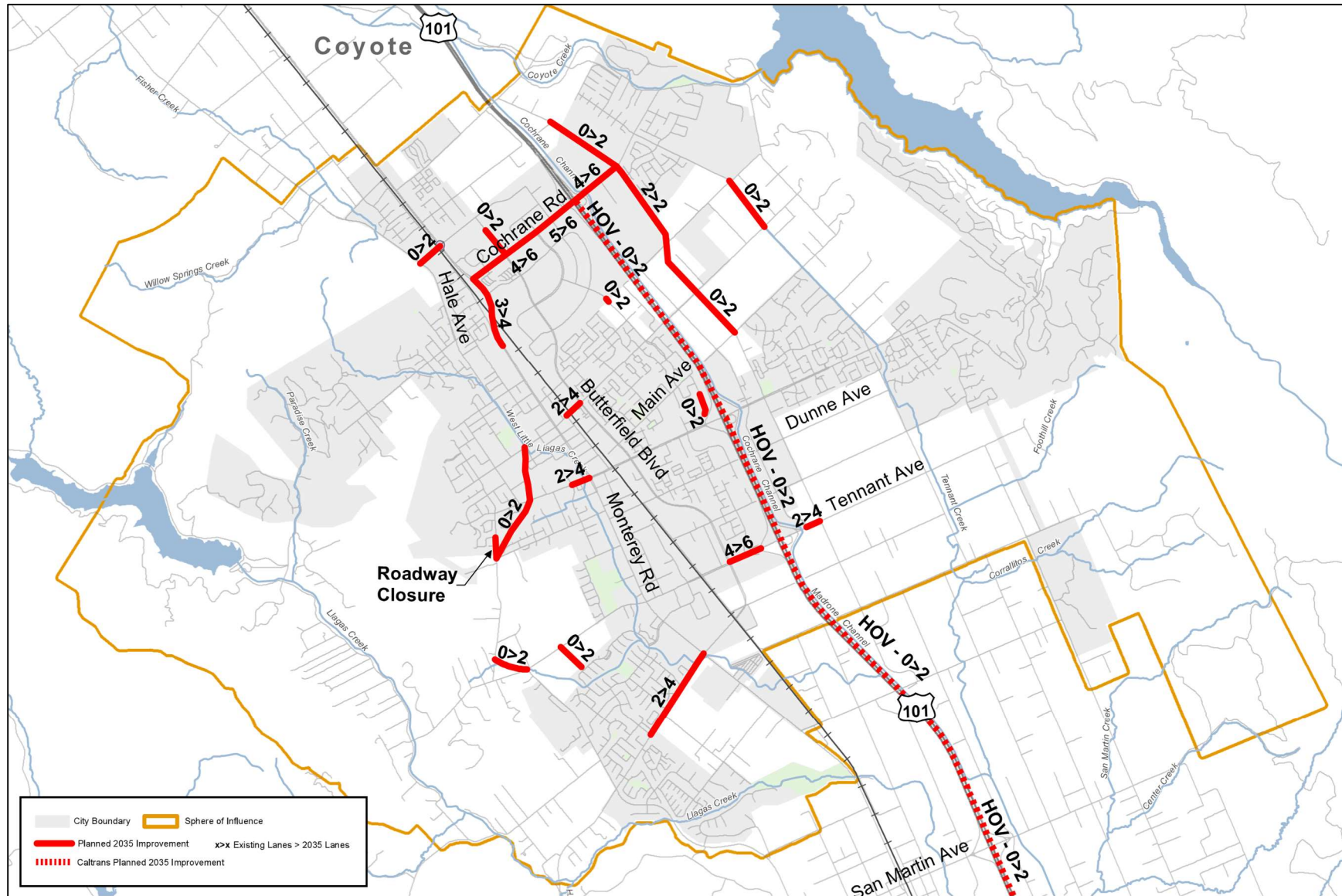


Figure 10
Year 2035 General Plan Intersection Lane Geometrics

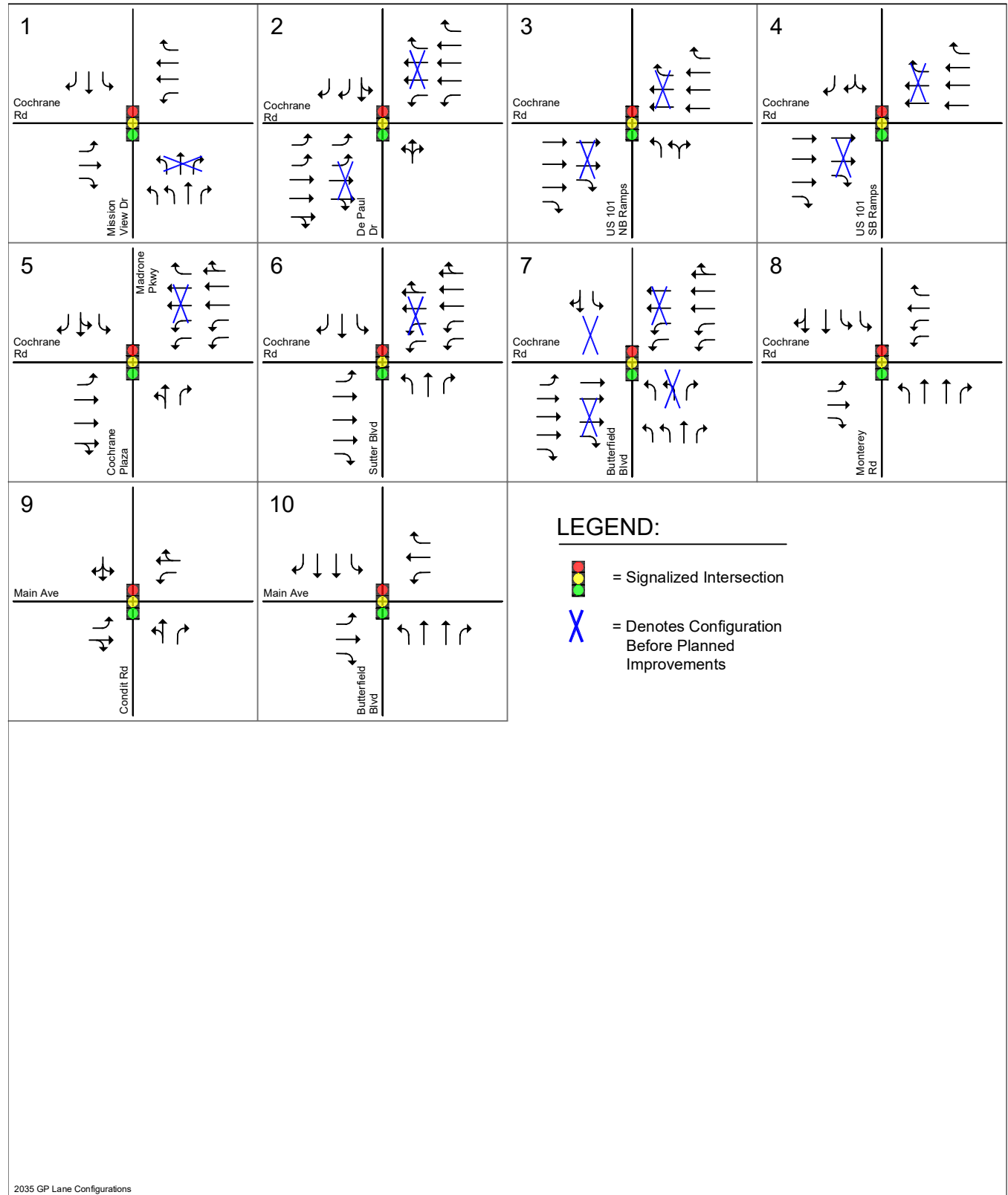


Table 2
Year 2035 General Plan Roadway Improvements

No	2035 Roadway Improvements
1	Extension of Butterfield Blvd as a 2-lane collector between Madrone Pkwy and Cochrane Rd
2	Extension of Hale Ave/Santa Teresa Blvd as a 2-lane multi-modal arterial between Main Ave and Spring Ave
3	Closure of DeWitt Ave between Price Drive and Spring Ave
4	Extension of Walnut Grove as a 2-lane collector between Dunne Ave and Diana Ave
5	Tennant Ave widening as a 4-lane arterial between Condit Rd and Murphy Ave
6	Monterey Rd widened to a 4-lane arterial between Cochrane Rd and Old Monterey Rd / Llagas Creek Dr
7	Dunne Ave widened to a 4-lane arterial between Monterey Rd and Del Monte Ave
8	Modifications to intersection control and access at San Pedro Ave and Monterey Rd
9	Extension of Madrone Parkway as a 2-lane arterial between Hale Ave and Monterey Rd
10	Realignment of DeWitt Ave as a 2-lane arterial with Sunnyside Ave
11	Extension of Mission View Dr as a 2-lane collector between Cochrane Rd and Vista del Lomas Ave
12	Mission View Dr upgraded to a 2-lane multi-modal arterial between Cochrane Rd and Half Rd
13	Extension of Murphy Ave/Mission View Dr as a 2-lane multi-modal arterial between Half Rd and Diana Ave
14	Cochrane Rd widened to a 6-lane arterial between Monterey Rd and Mission View Dr
15	Main Ave widened to a 4-lane arterial between Depot St and Butterfield Blvd
16	Watsonville Rd widened to a 4-lane arterial between La Alameda and Monterey Rd
17	Extension of Serene Dr as a 2-lane collector between Jarvis Dr and Central Ave
18	Dunne Avenue intersection at Depot Street closed with Dunne Avenue grade separation from Union Pacific railroad tracks
19	Extension of McKevly Lane as a 2-lane collector between West Edmundson Ave and La Crosse Dr
20	Tennant Ave widened to a 6-lane arterial between US 101 and Butterfield Blvd
21	Extension of Hill Rd/Peet Rd as a 2-lane collector between Half Rd and Main Ave

Source: City of Morgan Hill General Plan Circulation Element Network and Policy Revisions Transportation Impact Analysis, prepared by Fehr & Peers Transportation Consultants, July 2009.

Traffic Volumes

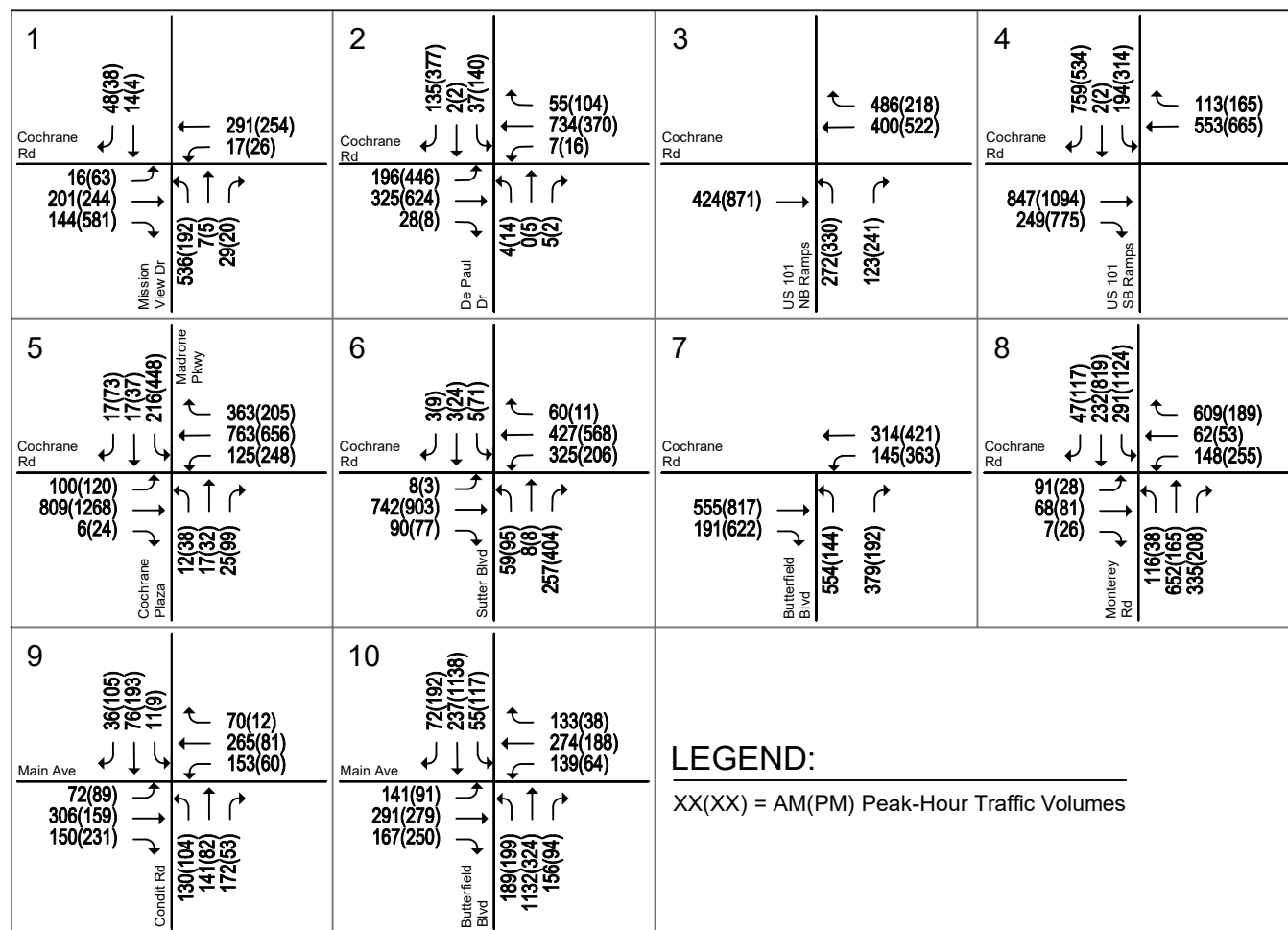
Existing Traffic Volumes

Existing conditions represent the existing peak-hour traffic volumes on the existing roadway network. New traffic counts are not currently being collected due to the current COVID-19 pandemic and its effects on normal traffic conditions. Therefore, existing traffic volumes were represented by pre-pandemic traffic counts with a 1.5% compound annual growth factor applied to counts more than two years old. This growth rate is the net percentage increase in Morgan Hill's population between 2019 and 2020, per the California Department of Finance. The existing peak-hour intersection volumes are shown in Figure 11. Appendix B lists each of the components used to tabulate traffic volumes at each study intersection for each of the study conditions.

Year 2035 General Plan Land Use and Traffic Forecasts

Traffic volume forecasts were completed by Hexagon based on the proposed Morgan Hill 2035 General Plan land use projections and using the City of Morgan Hill's TDF model. Model volume forecasts were developed for both the Base Year 2015 baseline conditions and the Year 2035 General Plan no project and with project conditions. These forecasts are considered "raw" model volume forecasts, which on their own do not represent future volume conditions but are simply used to forecast growth and travel pattern changes expected in the future due to the land use changes associated with the Morgan Hill 2035 General Plan. To obtain the final traffic volume forecasts, adjustments are made to raw model volume forecasts and used in conjunction with existing count data. This process is further explained below.

Figure 11
Existing Traffic Volumes



Existing Traffic Volumes 11-29-21

Turn-Movement Adjustments

Adjustments were made to the raw forecasted volumes from the model to account for instances where the turn movements produced by the model are relatively coarse. The adjustment process begins by comparing and adjusting baseline model forecasts (Year 2015 forecasts representing existing conditions) with existing traffic counts. By adjusting the baseline model forecasts with existing volumes, model projections are calibrated with actual travel patterns on the existing roadway network. Once the base model forecasts are calibrated, future model forecasts are developed for Year 2035 General Plan conditions. These represent the “raw” model volume forecasts.

Final future traffic volume forecasts are developed by adding to the existing traffic count data the projected growth between the baseline (Year 2015) and the General Plan (Year 2035) raw model volume forecasts. The adjustment process is outlined below:

Final Traffic Volume Forecast = Existing Count + (2035 GP Forecast - 2015 Forecast)

It should be noted that as a conservative approach, it was assumed in this analysis that, unless a major change in the roadway network or existing land use is projected for the future conditions, all future model forecast volumes would be no less than the existing traffic counts. Figure 12 shows the Year 2035 General Plan no project traffic volumes. Appendix C lists 2035 General Plan no project traffic volumes at each study intersection.

Year 2035 Project Trip Generation Estimates

The 2035 General Plan land uses and traffic model include development on the project site. Therefore, the trips associated with the adopted General Plan land uses for the project site were removed to develop Year 2035 General Plan no project traffic volumes. The adopted 2035 GP land uses for the project site include 188 multi-family residential units, 130,000 s.f. of retail space, and 91,000 s.f. of office space. Hexagon prepared trip estimates for the project site land uses included in the City's General Plan traffic model and compared with those of the proposed development plan. The trip estimates indicate that the proposed development plan is of greater intensity than that assumed in the General Plan traffic model for the project site. The proposed development plan would result in additional 151 AM and 187 PM peak-hour trips to be generated by the project site when compared with the land uses included in the City's General Plan traffic model. The comparison of trip generation per the General Plan traffic model and proposed project is presented in Table 3.

Year 2030 Cumulative Land Use and Traffic Forecasts

The Year 2030 Cumulative without project traffic volumes were then estimated using a growth method that involved adding a proportion (15 Years or 75%) of the 2035 projected growth, with the removal of the trips associated with the adopted General Plan land uses for the project, to existing traffic counts at each of the study intersections. Figure 13 shows the Year 2030 Cumulative without project traffic volumes.

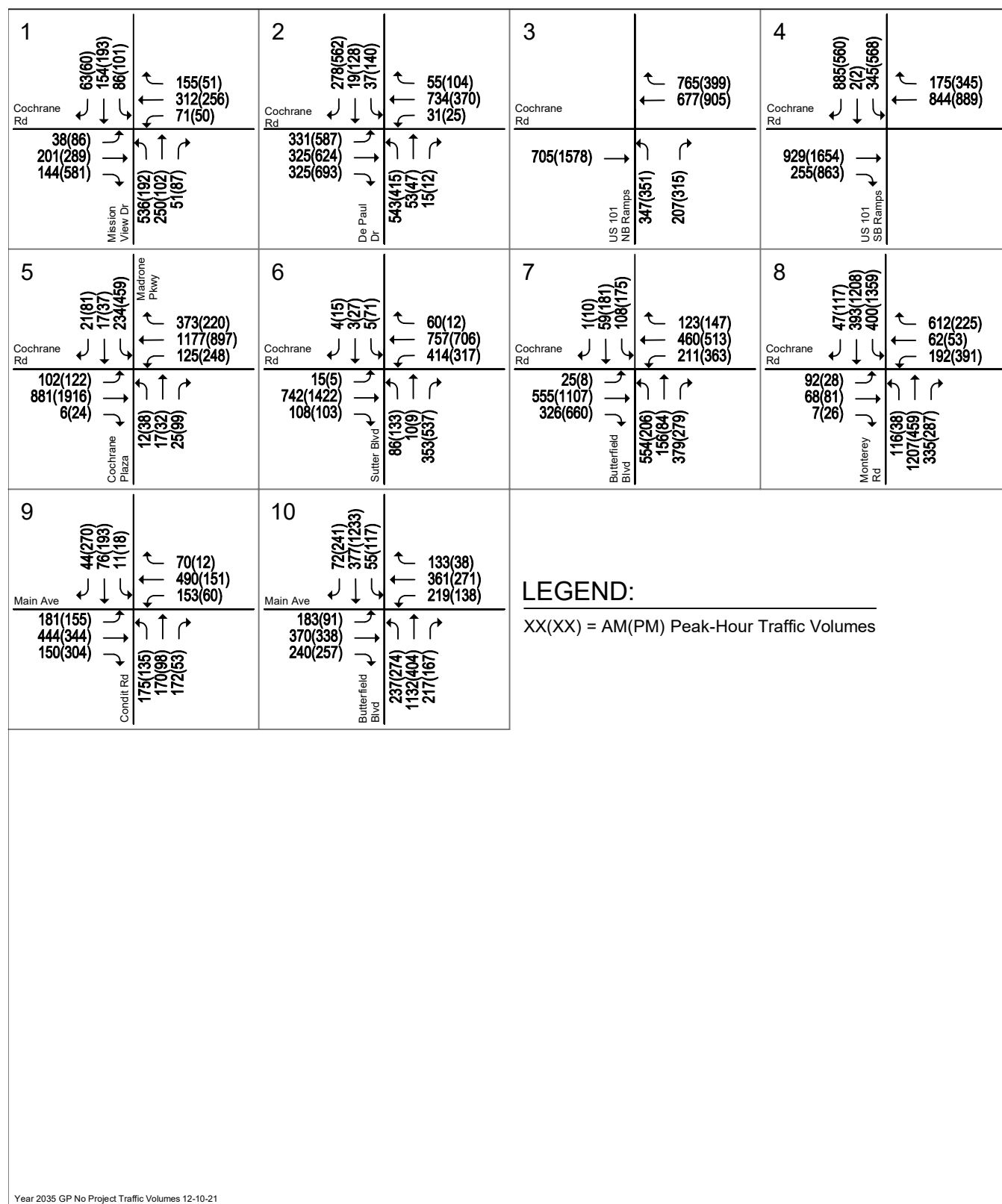
Existing and Year 2030 Cumulative Plus Project Traffic Volumes

The approved commercial/retail and proposed project trips as represented in the project trip assignment were added to the existing traffic, Year 2030 Cumulative without project traffic, and Year 2035 General Plan no project traffic volumes to obtain with project traffic volumes for both the approved commercial/retail and proposed projects under each of the study scenarios. The existing plus project, Year 2030 Cumulative with project, and Year 2035 General Plan with project traffic volumes for both the approved commercial/retail and proposed projects are shown in Figures 14-18.

Table 3
General Plan 2035 Trip Generation Estimates

Land Use	Reduction		Daily		AM Peak Hour						PM Peak Hour					
					Split			Trip			Split			Trip		
	%	Size	Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Land Uses																
#210 - Single-Family Detached Housing ¹		498 Dwelling Units	9.430	4,696	0.700	26%	74%	91	258	349	0.940	63%	37%	295	173	468
Residential & Retail Reduction ²	15%			-704				-7	-11	-18				-44	-26	-70
#820 - Shopping Center (>150k) ¹		140,000 Square Feet	37.010	5,181	0.840	62%	38%	73	45	118	3.400	48%	52%	228	248	476
Residential & Retail Reduction ²	15%			-704				-11	-7	-18				-26	-44	-70
Hotel & Retail Reduction ³	10%			-184				-4	-5	-9				-6	-5	-11
Passby Reduction ⁵	20%			-79				0	0	0				-39	-40	-79
#310 - Hotel ¹		150 Occupied Rooms	12.230	1,835	0.620	56%	44%	52	41	93	0.730	49%	51%	54	56	110
Hotel & Retail Reduction ³	10%			-184				-5	-4	-9				-5	-6	-11
Total Project Trips				9,857				189	317	506				457	356	813
Approved Land Uses																
#210 - Single-Family Detached Housing ¹		188 Dwelling Units	9.430	1,773	0.700	26%	74%	34	98	132	0.940	63%	37%	112	65	177
Residential & Employment Reduction ⁴	3%			-32				-1	-3	-4				-4	-1	-5
Residential & Retail Reduction ²	15%			-266				-6	-10	-16				-17	-10	-27
#820 - Shopping Center (>150k) ¹		130,000 Square Feet	37.010	4,811	0.840	62%	38%	68	41	109	3.400	48%	52%	212	230	442
Residential & Retail Reduction ²	15%			-266				-10	-6	-16				-10	-17	-27
Passby Reduction ⁵	20%			-83				0	0	0				-40	-43	-83
#710 - General Office Building ¹		91,000 Square Feet	11.747	1,069	1.696	88%	12%	136	18	154	1.687	17%	83%	26	128	154
Residential & Employment Reduction ⁴	3%			-32				-3	-1	-4				-1	-4	-5
Total Project Trips				6,974				218	137	355				278	348	626
Difference (Proposed - Approved Uses)				2,883				-29	180	151				179	8	187
Notes:																
¹ ITE Trip Generation Manual, 11 th Edition 2021.																
² As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail components is equal to 15% off the smaller trip generator.																
³ As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with hotel and retail components is equal to 10% of the smaller trip generator.																
⁴ As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with residential and employment components is equal to 3% of the smaller trip generator.																
⁵ A 20% PM pass-by reduction is typically applied for retail development within Morgan Hill.																

Figure 12
Year 2035 General Plan No Project Traffic Volumes



Year 2035 GP No Project Traffic Volumes 12-10-21

Figure 13
Year 2030 Cumulative without Project Traffic Volumes

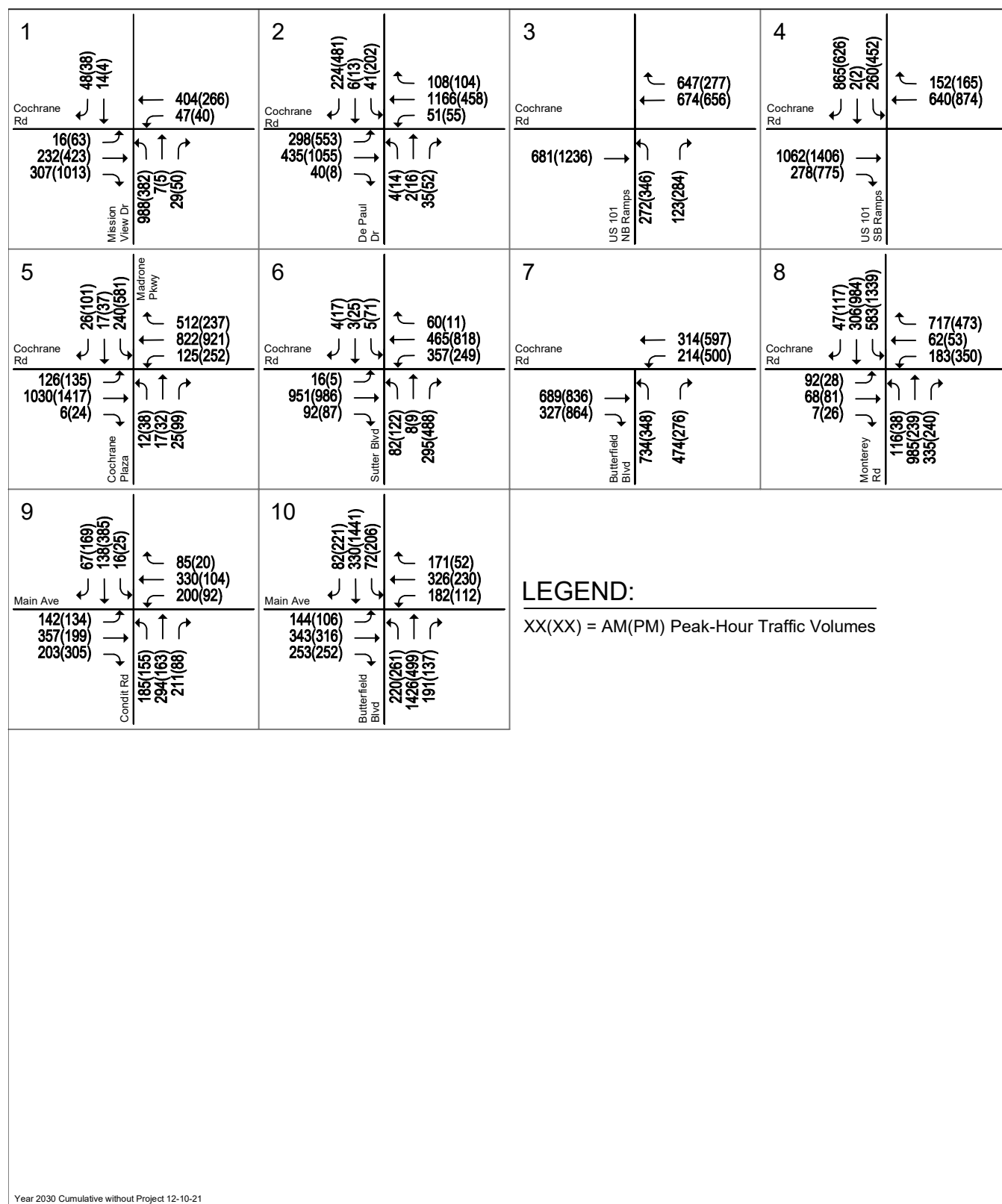
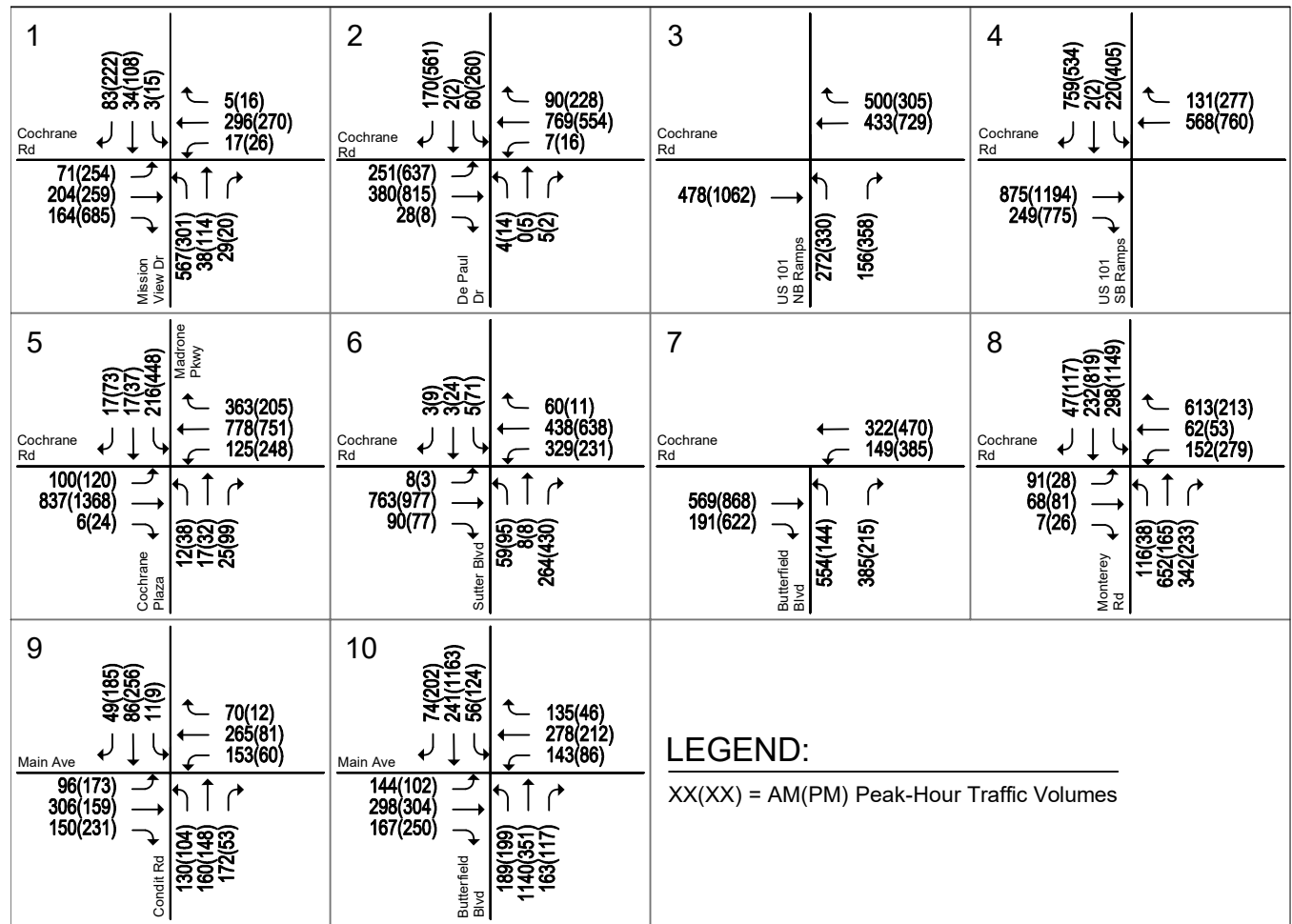


Figure 14
Existing Plus Approved Project Traffic Volumes



Existing Plus Approved Project Traffic Volumes 11-29-21

Figure 15
Existing Plus Proposed Project Traffic Volumes

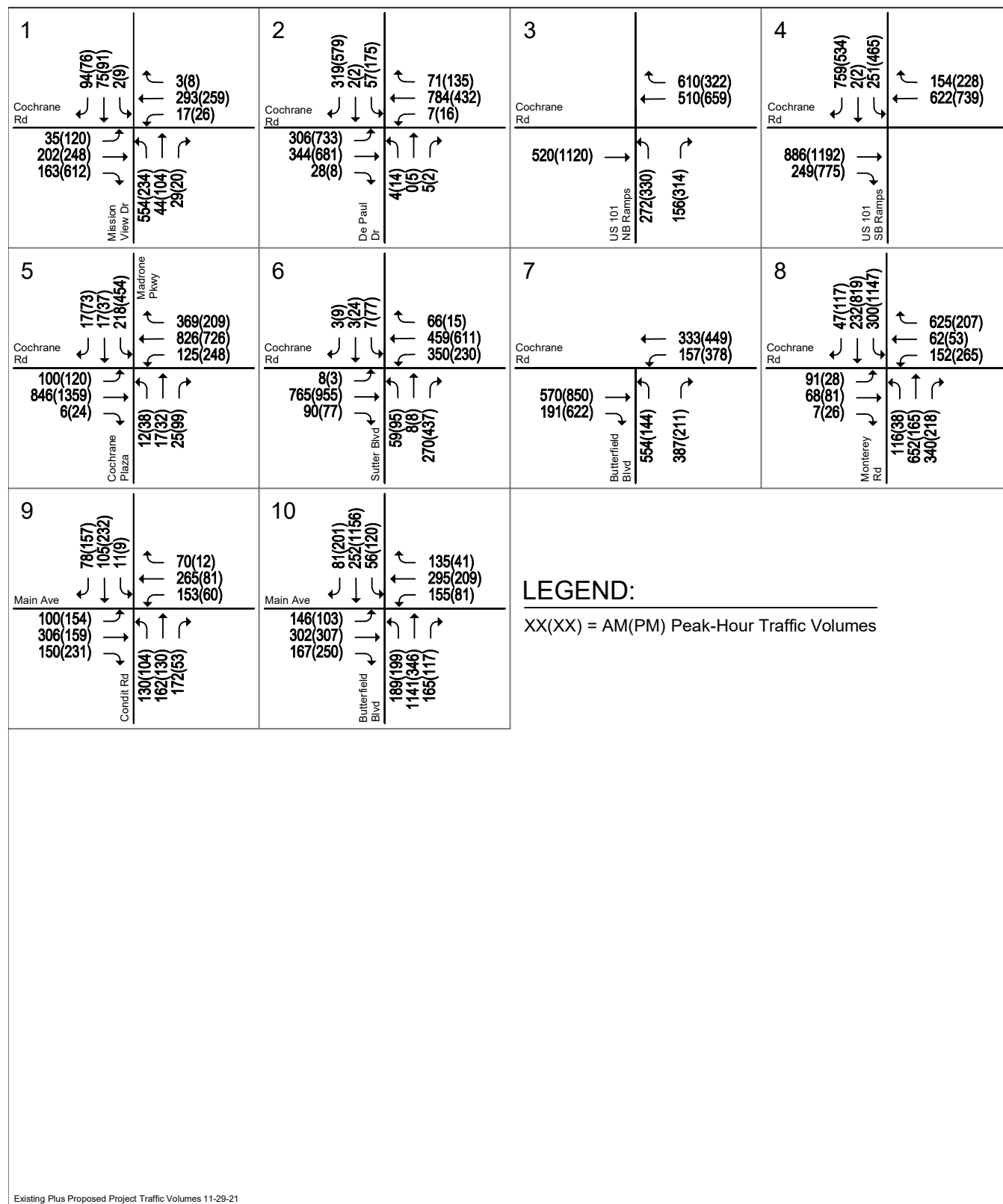
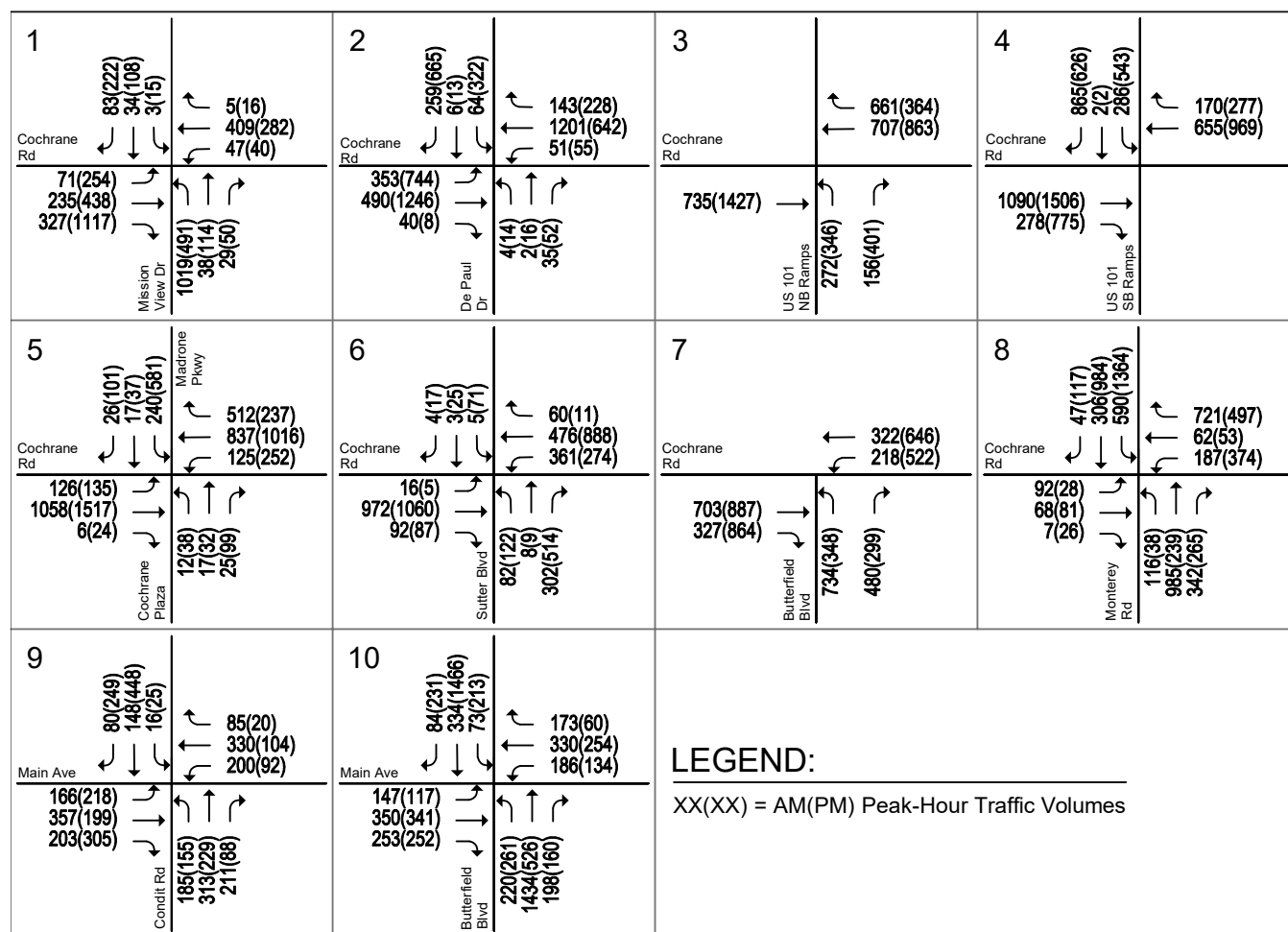


Figure 16
Year 2030 Cumulative with Approved Project Traffic Volumes



Year 2030 Cumulative with Approved Project 12-10-21

Figure 17
Year 2030 Cumulative with Proposed Project Traffic Volumes

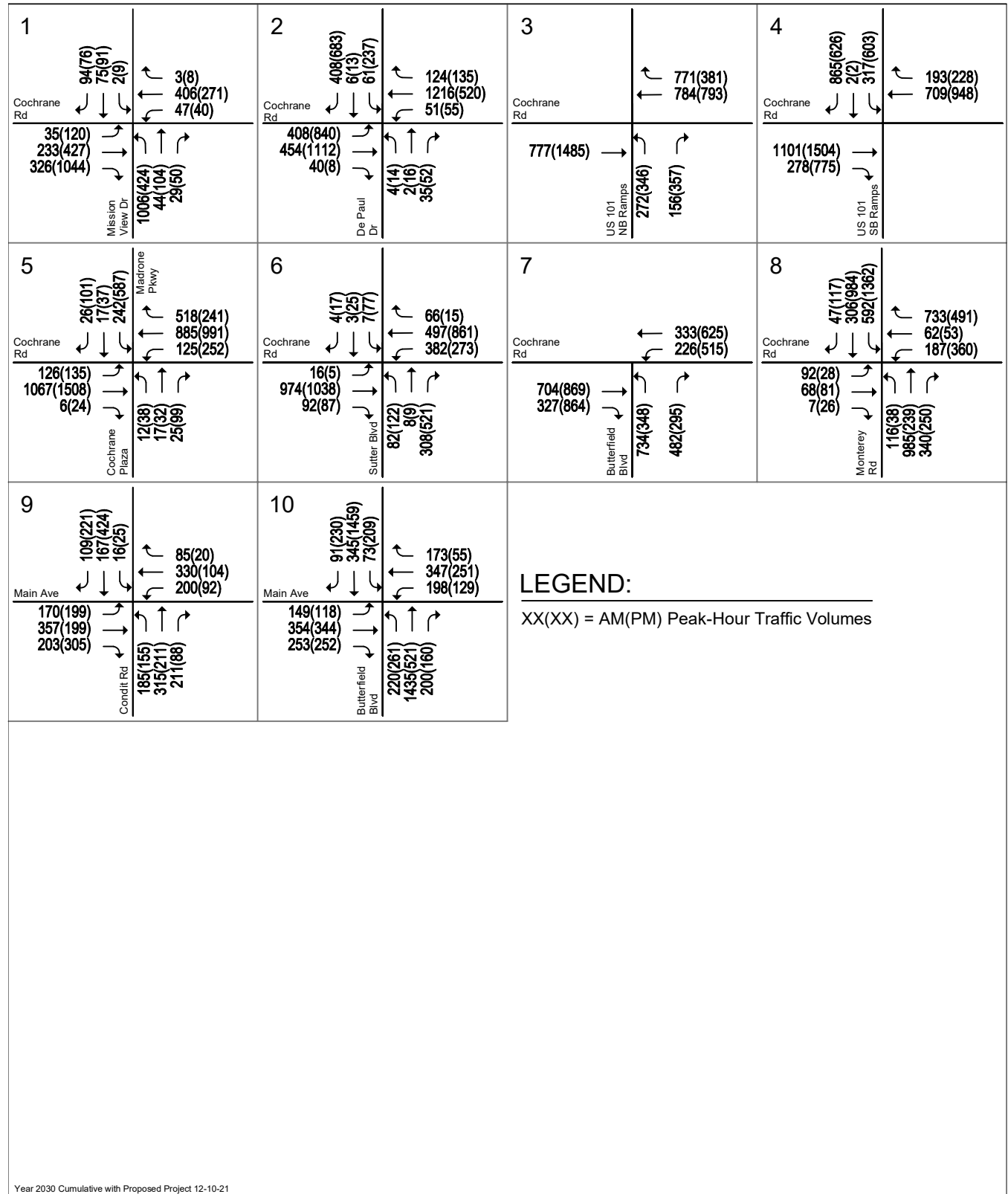
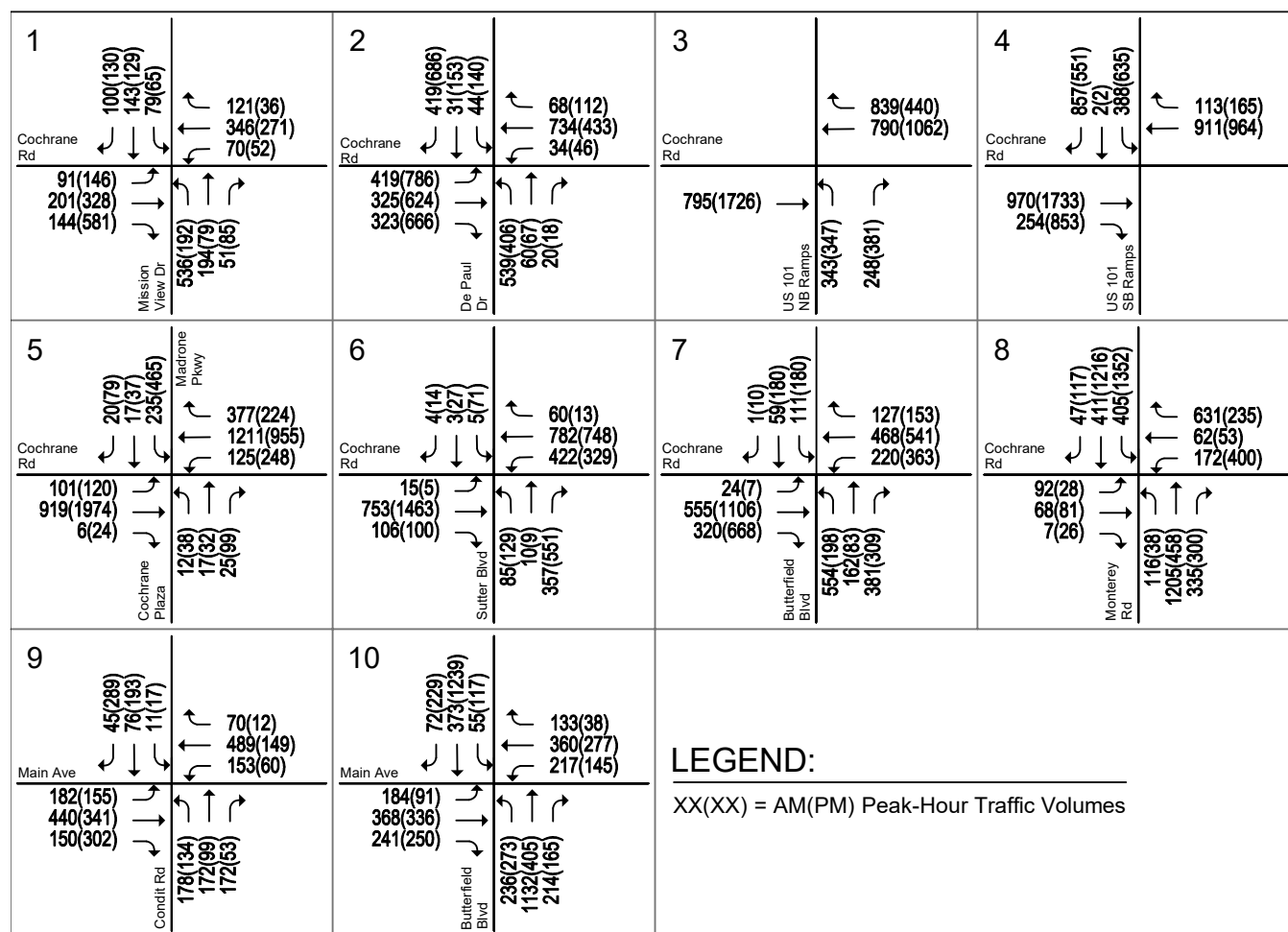


Figure 18
Year 2035 General Plan with Project Traffic Volumes



Year 2035 GP with Project Traffic Volumes 11-30-21

Intersection Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The analysis methods are described below.

Signalized Intersections

Signalized study intersections are subject to the City of Morgan Hill's level of service standards. The City of Morgan Hill's level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of the following:

- **LOS F** for Downtown intersections and segments including at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Street;
- **LOS E** for the following intersections and freeway zones:
 - Main Avenue and Del Monte Avenue
 - Main Avenue and Depot Street
 - Dunne Avenue and Del Monte Avenue
 - Dunne Avenue and Monterey Avenue
 - Dunne Avenue and Church Street
 - Dunne Avenue and Depot Street
 - Cochrane Road and Monterey Road
 - Tennant Avenue and Monterey Road
 - Tennant Avenue and Butterfield Boulevard
 - Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane Road/DePaul Drive
 - Dunne Avenue Freeway Zone: from Walnut Grove Drive/East Dunne Avenue to Condit Road/East Dunne Avenue
 - Tennant Avenue Freeway Zone: from Butterfield Boulevard/Tennant Avenue to Condit Road/Tennant Avenue

The correlation between average delay and level of service for signalized intersections is shown in Table 4.

Definition of Adverse Intersection Operations Effects

According to the City of Morgan Hill level of service guidelines, a development is said to create a significant adverse effect on traffic conditions at a signalized intersection if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under no project conditions to an unacceptable level (LOS E or F) under project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under no project conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by 0.01.

Table 4
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay per Vehicle (sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Sources: Transportation Research Board, *2000 Highway Capacity Manual* (Santa Clara County and City of Gilroy adopted level of service methodology). *Traffic Level of Service Analysis Guidelines*, Santa Clara County Transportation Authority Congestion Management Program, June 2003.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

Intersection Operations Analysis

Existing Plus Project Intersection Operations Analysis

The results of the intersection level of service analysis under existing and existing plus project conditions are summarized in Table 5. The level of service calculation sheets are included in Appendix D.

The results of the level of service analysis indicate that, when measured against the City of Morgan Hill level of service standards, all of the study intersections currently operate and are projected to operate at acceptable levels of service, LOS D or better, under existing, existing plus approved project, and existing plus proposed project conditions during each of the peak hours analyzed.

Table 5
Existing Plus Project Intersection Levels of Service

Int. #	Intersection	LOS Standard	Peak Hour	Count Date	Existing		Existing Plus Approved Project				Existing Plus Proposed Project			
					Delay ¹	LOS	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Avg. Delay	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Mission View Drive and Cochrane Road	D	AM	05/08/18	24.8	C	27.2	C	2.3	0.039	25.6	C	2.0	0.054
			PM	05/08/18	16.2	B	20.7	C	4.0	0.143	17.7	B	1.5	0.079
2	De Paul Drive and Cochrane Road	E	AM	05/08/18	17.9	B	18.8	B	1.4	0.049	19.4	B	2.7	0.074
			PM	05/08/18	18.9	B	23.7	C	7.2	0.220	20.6	C	3.7	0.159
3	US 101 Northbound Ramps and Cochrane Road	E	AM	05/08/18	8.7	A	9.1	A	0.8	0.081	8.7	A	1.3	0.151
			PM	05/08/18	11.4	B	12.7	B	1.7	0.124	12.0	B	1.3	0.119
4	US 101 Southbound Ramps and Cochrane Road	E	AM	05/08/18	13.0	B	13.3	B	0.4	0.025	13.6	B	0.7	0.048
			PM	05/08/18	16.9	B	18.5	B	2.2	0.085	19.6	B	3.5	0.121
5	Madrone Parkway/Cochrane Plaza and Cochrane Road	E	AM	05/08/18	19.2	B	19.2	B	0.0	0.000	19.0	B	-3.2	0.013
			PM	05/08/18	31.8	C	31.1	C	-0.5	0.020	31.3	C	-0.3	0.020
6	Sutter Boulevard and Cochrane Road	D	AM	05/08/18	17.3	B	17.4	B	0.0	0.006	17.5	B	0.2	0.015
			PM	05/08/18	18.3	B	17.4	B	-1.9	-0.058	18.8	B	0.2	0.021
7	Butterfield Boulevard and Cochrane Road	D	AM	05/08/18	12.4	B	12.5	B	0.1	0.004	12.6	B	0.2	0.008
			PM	05/08/18	12.1	B	12.2	B	0.3	0.008	12.2	B	0.2	0.005
8	Monterey Road and Cochrane Road	E	AM	05/08/18	32.0	C	32.1	C	0.1	0.003	32.2	C	0.2	0.010
			PM	05/08/18	23.0	C	23.5	C	0.8	0.018	23.2	C	0.3	0.012
9	Condit Road and Main Avenue	D	AM	05/08/18	28.4	C	29.5	C	1.4	0.028	31.3	C	3.6	0.061
			PM	05/08/18	27.0	C	36.4	D	10.4	0.143	32.1	C	5.7	0.095
10	Butterfield Boulevard and Main Avenue	D	AM	05/08/18	28.2	C	28.5	C	0.5	0.010	29.0	C	1.2	0.020
			PM	05/08/18	30.5	C	31.9	C	2.1	0.036	31.7	C	1.9	0.033

Year 2030 Cumulative with Project Intersection Operations Analysis

The results of the intersection level of service analysis under Year 2030 Cumulative without and with project are summarized in Table 6.

The results of the level of service analysis indicate that the following two intersections would operate at unacceptable levels of service (LOS E or F) during both peak hours under Year 2030 Cumulative without and with both the approved and proposed project conditions when measured against the City of Morgan Hill's level of service standards.

1. Mission View Drive and Cochrane Road (Without and With Both Projects – AM and PM Peak Hours)
9. Condit Road and Main Avenue (Without and With Both Projects – AM and PM Peak Hours)

The remaining study intersections are projected to operate at acceptable levels of service under Year 2030 Cumulative without and with both the approved and proposed project conditions, during each of the peak hours analyzed.

Based on the City's operating standards, both the approved and proposed projects would have an adverse effect on intersection operations at the two intersections identified above during at least one of the peak hours analyzed.

Adverse Intersection Operations Effects and Potential Improvements

This section discusses the adverse intersection operation effects identified under Year 2030 Cumulative with project conditions. However, it must be noted that the intersection operations analysis indicates that the proposed mixed-use project would result in adverse effects at intersections that also are projected to be adversely affected by the previously approved commercial/retail development. Therefore, the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development. Furthermore, two intersections (Monterey Road/Dunne Avenue and Cochrane Road/Mission View Road) were shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation measures of the 2005 EIR have since been completed.

Nevertheless, descriptions of the adverse effects on intersection operations and potential improvement measures that may be included as part of the project's Conditions of Approval are provided below. However, the identified roadway operations and improvements are not required or considered project impacts per CEQA guidelines.

1. Cochrane Road and Mission View Drive

This intersection is projected to operate at unacceptable LOS F and E during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to decrease or increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during at least one of the peak hours analyzed. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation, with the exception of a second southbound right-turn lane, have been completed. Dual right-turn lanes at intersections are no longer considered pedestrian and bicyclist friendly and are not recommended. This analysis also does not identify the need for dual right-turn lanes. Therefore, the mitigation for the approved commercial/retail development can be deemed complete.

Table 6
Year 2030 Cumulative Intersection Levels of Service

Int. #	Intersection	LOS Standard	Peak Hour	Year 2030 Cumulative Without Project		Year 2030 Cumulative with Approved Project				Year 2030 Cumulative with Proposed Project			
				Delay ¹	LOS	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Mission View Drive and Cochrane Road	D	AM	154.2	F	155.9	F	-15.8	0.034	150.0	F	0.5	0.054
			PM	62.7	E	80.9	F	37.9	0.143	66.2	E	8.4	0.079
2	De Paul Drive and Cochrane Road	E	AM	24.0	C	27.7	C	6.1	0.049	32.3	C	13.9	0.074
			PM	21.6	C	39.0	D	29.5	0.148	26.6	C	8.7	0.130
3	US 101 Northbound Ramps and Cochrane Road	E	AM	7.7	A	8.2	A	1.4	0.081	8.1	A	2.2	0.151
			PM	11.6	B	13.5	B	2.9	0.123	12.7	B	2.2	0.113
4	US 101 Southbound Ramps and Cochrane Road	E	AM	14.6	B	15.0	B	0.7	0.025	15.6	B	1.5	0.048
			PM	21.7	C	27.9	C	10.4	0.085	33.1	C	18.7	0.121
5	Madrone Parkway/Cochrane Plaza and Cochrane Road	E	AM	19.4	B	19.3	B	0.0	0.000	19.4	B	0.1	0.005
			PM	33.0	C	32.7	C	-0.2	0.020	32.8	C	-0.1	0.020
6	Sutter Boulevard and Cochrane Road	D	AM	17.9	B	18.0	B	0.1	0.006	18.1	B	0.4	0.015
			PM	18.2	B	20.4	C	3.3	0.229	20.5	C	3.3	0.231
7	Butterfield Boulevard and Cochrane Road	D	AM	12.9	B	12.9	B	0.1	0.004	13.0	B	0.2	0.008
			PM	15.1	B	15.3	B	0.4	0.008	15.2	B	0.3	0.005
8	Monterey Road and Cochrane Road	E	AM	36.2	D	36.3	D	0.1	0.003	36.7	D	0.6	0.010
			PM	24.8	C	25.5	C	1.0	0.018	25.1	C	0.6	0.012
9	Condit Road and Main Avenue	D	AM	52.7	D	58.7	E	7.6	0.028	66.0	E	17.0	0.061
			PM	77.1	E	124.8	F	58.2	0.143	107.6	F	37.5	0.095
10	Butterfield Boulevard and Main Avenue	D	AM	32.0	C	32.4	C	0.8	0.010	33.2	C	1.9	0.020
			PM	37.1	D	39.8	D	4.5	0.036	39.5	D	4.0	0.033
Bold indicates unacceptable level of service. Bold and boxed indicate significant impact.													

The addition of a second northbound left-turn lane on Mission View Drive and a cycle length adjustment would be necessary to improve intersection operations. The addition of the second northbound left-turn lane will require lane striping and signal modification but will fit within the existing curb-to-curb pavement width on Mission View Drive. Implementation of this improvement would improve the intersection's level of service to LOS C during both the AM and PM peak hours under Year 2030 Cumulative with both project conditions.

9. Condit Road and Main Avenue

This intersection is projected to operate at unacceptable LOS E and F during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during both the AM and PM peak hours. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was not shown to be impacted by the approved commercial/retail development in the 2005 EIR. The addition of an exclusive southbound right-turn lane on Condit Road and a cycle length adjustment would be necessary to improve intersection operations. The addition of the right-turn lane will require signal modifications and lane striping on the southbound approach. Implementation of this improvement would improve the intersection's level of service to LOS D during the PM peak hour under Year 2030 Cumulative with both the approved and proposed project conditions. This intersection is under the jurisdiction of both the City of Morgan Hill and Santa Clara County. Therefore, implementation of the recommended improvements will require City and County approval.

Year 2035 General Plan with Project Intersection Operations Analysis

The results of the intersection level of service analysis under Year 2035 General Plan no project and with project are summarized in Table 7.

The results of the level of service analysis indicate that the Condit Road/Main Avenue intersection would operate at an unacceptable LOS E during the PM peak hour under Year 2035 General Plan no project conditions when measured against the City of Morgan Hill's level of service standards. However, the addition of the proposed project traffic would not cause the critical delay to increase by more than four seconds or the volume-to-capacity ratio (V/C) to increase by more than 0.01. Therefore, the proposed would not have an adverse effect on the intersection operations.

All of the remaining study intersections are projected to operate at acceptable levels of service under Year 2035 General Plan no project and with project conditions, during each of the peak hours analyzed.

Freeway Segment Evaluation

The City is still required to conform to the requirements of the Valley Transit Authority (VTA) which establishes a uniform program for evaluating the transportation impacts of land-use decisions on the designated CMP Roadway System. The VTA's Congestion Management Program (CMP) has yet to adopt and implement guidelines and standards for the evaluation of the CMP roadway system using VMT. Therefore, the effects of the proposed project on freeway segments in the vicinity of the project area following the current methodologies, as outlined in the *VTA Transportation Impact Analysis Guidelines*, were completed. However, this analysis is presented for informational purposes only. The following seven freeway segments were evaluated:

Table 7
Year 2035 General Plan Intersection Levels of Service

Int. #	Intersection	LOS Standard	Peak Hour	Year 2035 GP No Project		Year 2035 GP with Proposed Project			
				Delay ¹	LOS	Delay ¹	LOS	Incr. In Crit. Delay	Incr. In Crit. V/C
1	Mission View Drive and Cochrane Road	D	AM	18.5	B	18.7	B	-0.1	-0.008
			PM	17.5	B	16.7	B	-1.1	-0.041
2	De Paul Drive and Cochrane Road	E	AM	40.9	D	46.2	D	-11.6	0.092
			PM	68.3	E	68.9	E	-3.6	0.025
3	US 101 Northbound Ramps and Cochrane Road	E	AM	9.9	A	10.8	B	2.7	0.072
			PM	12.3	B	13.1	B	1.0	0.063
4	US 101 Southbound Ramps and Cochrane Road	E	AM	15.2	B	15.8	B	0.6	0.026
			PM	21.3	C	23.3	C	3.0	0.052
5	Madrone Parkway/Cochrane Plaza and Cochrane Road	E	AM	18.7	B	18.7	B	0.0	0.008
			PM	29.7	C	29.6	C	0.1	0.013
6	Sutter Boulevard and Cochrane Road	D	AM	17.7	B	17.8	B	0.1	0.005
			PM	22.8	C	23.7	C	1.2	0.019
7	Butterfield Boulevard and Cochrane Road	D	AM	19.0	B	19.1	B	0.1	0.004
			PM	23.6	C	23.8	C	-0.1	0.005
8	Monterey Road and Cochrane Road	E	AM	35.1	D	35.6	D	0.9	0.012
			PM	30.7	C	30.9	C	0.2	0.000
9	Condit Road and Main Avenue	D	AM	37.9	D	38.2	D	0.1	0.001
			PM	70.0	E	73.0	E	3.6	0.009
10	Butterfield Boulevard and Main Avenue	D	AM	32.3	C	32.2	C	-0.2	-0.002
			PM	37.0	D	37.4	D	0.4	0.004

Study Freeway Segments

1. US 101 between SR-85 and Bailey Avenue
2. US 101 between Bailey Avenue and Coyote Creek Golf Drive
3. US 101 between Coyote Creek Golf Drive and Cochrane Road
4. US 101 between Cochrane Road and Dunne Avenue
5. US 101 between Dunne Avenue and Tennant Avenue
6. US 101 between Tennant Avenue and San Martin Avenue
7. US 101 between San Martin Avenue and Masten Avenue

Freeway Segment Level of Service Methodology

As prescribed in the CMP technical guidelines, the level of service for freeway segments is estimated based on vehicle density. Density is calculated by the following formula:

$$D = V / S$$

Where:

D= density, in vehicles per mile per lane (vpml)

V= peak hour volume, in vehicles per hour per lane (vphpl)

S= average travel speed, in miles per hour (mph)

The vehicle density on a segment is correlated to the level of service as shown in Table 8. The CMP specifies that a capacity of 2,300 vehicles per hour per lane (vphpl) be used for mixed-flow lane segments that are three lanes or wider in one direction, and a capacity of 2,200 vphpl be used for mixed-flow lane segments that are two lanes wide in one direction. A capacity of 1,650 vphpl was used for high occupancy vehicle (HOV) lanes. The CMP defines an acceptable level of service for freeway segments as LOS E or better.

Table 8
Freeway Level of Service Definitions Based on Density

Level of Service	Description	Density (vehicles/mile/lane)
A	Average operating speeds at the free-flow speed generally prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0-11
B	Speeds at the free-flow speed are generally maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.	>11-18
C	Speeds at or near the free-flow speed of the freeway prevail. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more vigilance on the part of the driver.	>18-26
D	Speeds begin to decline slightly with increased flows at this level. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort levels.	>26-46
E	At this level, the freeway operates at or near capacity. Operations in this level are volatile, because there are virtually no usable gaps in the traffic stream, leaving little room to maneuver within the traffic stream.	>46-58
F	Vehicular flow breakdowns occur. Large queues form behind breakdown points.	>58

Sources: Transportation Research Board, *2000 Highway Capacity Manual. Traffic Level of Service Analysis Guidelines*, Santa Clara County Transportation Authority Congestion Management Program, June 2003.

Freeway Segment Analysis

The results of the CMP freeway level of service analysis under existing plus approved and proposed project conditions are summarized in Tables 9 and 10. Traffic volumes on the study freeway segments under existing plus project conditions were estimated by adding project trips to the existing volumes obtained from the 2018 CMP Monitoring and Conformance Report.

The results show that ten directional mixed-flow lanes and one directional HOV lane on the freeway segments analyzed are projected to operate at an unacceptable LOS F during at least one peak hour under existing conditions and would continue to operate at LOS F conditions with the addition of traffic due to the approved or proposed project. All other freeway segments analyzed operate at LOS E or better conditions during the AM and PM peak hours.

Improvement of freeway segment operations would require freeway widening to construct additional through lanes, thereby increasing freeway capacity. VTA's Valley Transportation Plan (VTP) 2040 identifies freeway express lane projects along US 101 between Cochrane Road and Whipple Avenue. The planned improvements consist of the conversion of the existing HOV lane to an express lane and the construction of a second express lane in each direction on US 101. These improvements would increase the capacity of the freeway and help to address the deficiency in freeway operations. However, it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements due to constraints in the acquisition and cost of right-of-way.

Table 9
Freeway Segment Levels of Service for Approved Project

#	Freeway	Segment	Direction	Peak Hour	Existing Plus Approved Project										Project Trips				
					Mixed-Flow Lane					HOV Lane					Mixed-Flow Lane		HOV Lane		
					Speed ¹ (mi/h)	# of Lanes	Capacity (pc/hr/ln)	Volume (pc/hr/ln)	Density (pc/hr/ln)	LOS	Speed ¹ (mi/h)	Capacity (vph)	Volume (pc/hr/ln)	Density (pc/hr/ln)	LOS	Volume (pc/hr/ln)	% of Capacity	Volume (pc/hr/ln)	% of Capacity
1	US 101	from Masten Avenue to San Martin Avenue	NB	AM	34.20	3	2,300	1,837	54	E	--	--	--	--	11	0.5	--	--	
			NB	PM	51.80	3	2,300	2,103	41	D	--	--	--	--	39	1.7	--	--	
2	US 101	from San Martin Avenue to Tennant Avenue	NB	AM	10.40	3	2,300	894	86	F	--	--	--	--	11	0.5	--	--	
			NB	PM	60.00	3	2,300	1,899	32	D	--	--	--	--	39	1.7	--	--	
3	US 101	from Tennant Avenue to East Dunne Avenue	NB	AM	9.40	3	2,300	829	88	F	--	--	--	--	11	0.5	--	--	
			NB	PM	59.80	3	2,300	1,910	32	D	--	--	--	--	39	1.7	--	--	
4	US 101	from East Dunne Avenue to Cochrane Road	NB	AM	21.00	3	2,300	1,432	68	F	--	--	--	--	11	0.5	--	--	
			NB	PM	61.60	3	2,300	1,791	29	D	--	--	--	--	39	1.7	--	--	
5	US 101	from Cochrane Road to Coyote Creek Golf Drive	NB	AM	22.20	3	2,300	1,458	66	F	71.41	1,650	815	11.0	B	4	0.2	2	0.1
			NB	PM	64.20	3	2,300	1,446	23	C	72.66	1,650	633	9.0	A	25	1.1	11	0.7
6	US 101	from Coyote Creek Golf Drive to Bailey Avenue	NB	AM	32.20	3	2,300	1,771	55	E	75.29	1,650	-- ²	-- ²	-- ²	5	0.2	0	0.0
			NB	PM	64.00	3	2,300	1,489	23	C	76.15	1,650	-- ²	-- ²	-- ²	29	1.3	0	0.0
7	US 101	from Bailey Avenue to SR 85	NB	AM	37.60	3	2,300	1,883	50	E	65.21	1,650	1,332	20.0	C	4	0.2	3	0.2
			NB	PM	63.40	3	2,300	1,564	25	C	72.91	1,650	586	8.0	A	26	1.1	10	0.6
8	US 101	from SR 85 to Bailey Avenue	SB	AM	62.40	3	2,300	1,625	26	D	73.82	1,650	391	5.0	A	8	0.3	2	0.1
			SB	PM	16.00	3	2,300	1,237	77	F	39.99	1,650	1,782	45.0	D	20	0.9	30	1.8
9	US 101	from Bailey Avenue to Coyote Creek Golf Drive	SB	AM	64.00	3	2,300	1,426	22	C	73.79	1,650	397	5.0	A	8	0.3	2	0.1
			SB	PM	14.80	3	2,300	1,175	79	F	41.99	1,650	1,779	42.0	D	20	0.9	31	1.9
10	US 101	from Coyote Creek Golf Drive to Cochrane Road	SB	AM	62.80	3	2,300	1,579	25	C	63.14	1,650	1,427	23.0	C	7	0.3	6	0.4
			SB	PM	12.60	3	2,300	1,053	84	F	21.57	1,650	1,686	78.0	F	20	0.9	32	1.9
11	US 101	from Cochrane Road to East Dunne Avenue	SB	AM	62.00	3	2,300	1,657	27	D	--	--	--	--	--	6	0.3	--	--
			SB	PM	25.00	3	2,300	1,659	66	F	--	--	--	--	--	37	1.6	--	--
12	US 101	from East Dunne Avenue to Tennant Avenue	SB	AM	63.00	3	2,300	1,555	25	C	--	--	--	--	--	6	0.3	--	--
			SB	PM	27.00	3	2,300	1,724	64	F	--	--	--	--	--	37	1.6	--	--
13	US 101	from Tennant Avenue to San Martin Avenue	SB	AM	63.00	3	2,300	1,555	25	C	--	--	--	--	--	6	0.3	--	--
			SB	PM	25.40	3	2,300	1,673	66	F	--	--	--	--	--	37	1.6	--	--
14	US 101	from San Martin Avenue to Masten Avenue	SB	AM	60.00	3	2,300	1,800	30	D	--	--	--	--	--	6	0.3	--	--
			SB	PM	37.80	3	2,300	1,988	53	E	--	--	--	--	--	37	1.6	--	--
Notes: ¹ Santa Clara Valley Transportation Authority CMP Monitoring & Conformance Report, 2018. ² Speed exceeds the bound of the equation used to derive volume and density. Bold indicates unacceptable LOS.																			

Table 10
Freeway Segment Levels of Service for Proposed Project

#	Freeway	Segment	Direction	Peak Hour	Existing Plus Proposed Project										Project Trips				
					Mixed-Flow Lane					HOV Lane					Mixed-Flow Lane		HOV Lane		
					Speed ¹ (mi/h)	# of Lanes	Capacity (pc/hr/ln)	Volume (pc/hr/ln)	Density (pc/hr/ln)	LOS	Speed ¹ (mi/h)	Capacity (vph)	Volume (pc/hr/ln)	Density (pc/hr/ln)	LOS	Volume (pc/hr/ln)	% of Capacity	Volume (pc/hr/ln)	% of Capacity
1	US 101	from Masten Avenue to San Martin Avenue	NB	AM	34.20	3	2,300	1,837	54	E	--	--	--	--	--	11	0.5	--	--
			NB	PM	51.80	3	2,300	2,059	40	D	--	--	--	--	--	24	1.1	--	--
2	US 101	from San Martin Avenue to Tennant Avenue	NB	AM	10.40	3	2,300	894	86	F	--	--	--	--	--	11	0.5	--	--
			NB	PM	60.00	3	2,300	1,855	31	D	--	--	--	--	--	24	1.1	--	--
3	US 101	from Tennant Avenue to East Dunne Avenue	NB	AM	9.40	3	2,300	829	88	F	--	--	--	--	--	11	0.5	--	--
			NB	PM	59.80	3	2,300	1,866	31	D	--	--	--	--	--	24	1.1	--	--
4	US 101	from East Dunne Avenue to Cochrane Road	NB	AM	21.00	3	2,300	1,432	68	F	--	--	--	--	--	11	0.5	--	--
			NB	PM	61.60	3	2,300	1,747	28	D	--	--	--	--	--	24	1.1	--	--
5	US 101	from Cochrane Road to Coyote Creek Golf Drive	NB	AM	22.20	3	2,300	1,550	70	F	71.41	1,650	833	12.0	B	35	1.5	20	1.2
			NB	PM	64.20	3	2,300	1,460	23	C	72.66	1,650	636	9.0	A	30	1.3	14	0.8
6	US 101	from Coyote Creek Golf Drive to Bailey Avenue	NB	AM	32.20	3	2,300	1,881	58	E	75.29	1,650	-- ²	-- ²	-- ²	41	1.8	0	0.0
			NB	PM	64.00	3	2,300	1,506	24	C	76.15	1,650	-- ²	-- ²	-- ²	35	1.5	0	0.0
7	US 101	from Bailey Avenue to SR 85	NB	AM	37.60	3	2,300	1,972	52	E	65.21	1,650	1,353	21.0	C	33	1.4	24	1.5
			NB	PM	63.40	3	2,300	1,579	25	C	72.91	1,650	588	8.0	A	31	1.3	12	0.7
8	US 101	from SR 85 to Bailey Avenue	SB	AM	62.40	3	2,300	1,654	27	D	73.82	1,650	393	5.0	A	18	0.8	4	0.2
			SB	PM	16.00	3	2,300	1,277	80	F	39.99	1,650	1,802	45.0	D	34	1.5	50	3.0
9	US 101	from Bailey Avenue to Coyote Creek Golf Drive	SB	AM	64.00	3	2,300	1,454	23	C	73.79	1,650	400	5.0	A	17	0.8	5	0.3
			SB	PM	14.80	3	2,300	1,214	82	F	41.99	1,650	1,800	43.0	D	33	1.4	52	3.2
10	US 101	from Coyote Creek Golf Drive to Cochrane Road	SB	AM	62.80	3	2,300	1,603	26	D	63.14	1,650	1,434	23.0	C	15	0.6	13	0.8
			SB	PM	12.60	3	2,300	1,091	87	F	21.57	1,650	1,708	79.0	F	32	1.4	54	3.3
11	US 101	from Cochrane Road to East Dunne Avenue	SB	AM	62.00	3	2,300	1,680	27	D	--	--	--	--	--	14	0.6	--	--
			SB	PM	25.00	3	2,300	1,610	64	F	--	--	--	--	--	21	0.9	--	--
12	US 101	from East Dunne Avenue to Tennant Avenue	SB	AM	63.00	3	2,300	1,578	25	C	--	--	--	--	--	14	0.6	--	--
			SB	PM	27.00	3	2,300	1,675	62	F	--	--	--	--	--	21	0.9	--	--
13	US 101	from Tennant Avenue to San Martin Avenue	SB	AM	63.00	3	2,300	1,578	25	C	--	--	--	--	--	14	0.6	--	--
			SB	PM	25.40	3	2,300	1,624	64	F	--	--	--	--	--	21	0.9	--	--
14	US 101	from San Martin Avenue to Masten Avenue	SB	AM	60.00	3	2,300	1,823	30	D	--	--	--	--	--	14	0.6	--	--
			SB	PM	37.80	3	2,300	1,939	51	E	--	--	--	--	--	21	0.9	--	--
Notes: ¹ Santa Clara Valley Transportation Authority CMP Monitoring & Conformance Report, 2018. ² Speed exceeds the bound of the equation used to derive volume and density. Bold indicates unacceptable LOS.																			

4. Conclusions

This supplemental traffic operations analysis was completed to demonstrate the project's consistency with the *Morgan Hill 2035 General Plan* goals and policies. The traffic operations analysis supplements the CEQA required VMT analysis. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

Traffic Operations Analysis

Project Trip Generation

The trip estimates indicate that the now proposed mixed-use development on the project site would result in 2,191 fewer daily trips with 285 additional trips during the AM peak hour and 180 fewer trips occurring during the PM peak hour when compared to the previously approved commercial/retail development on the project site.

Intersection Operations Analyses

The results of the traffic operations analysis indicate that based on the City's operating standards, the proposed project would have an adverse effect on intersection operations at the following two study intersections under Year 2030 Cumulative with project conditions.

1. Mission View Drive and Cochrane Road (Without and With Both Projects – AM and PM Peak Hours)
9. Condit Road and Main Avenue (Without and With Both Projects – AM and PM Peak Hours)

However, it must be noted that the intersection operations analysis indicates that the proposed mixed-use project would result in adverse effects at intersections that also are projected to be adversely affected by the previously approved commercial/retail development. Therefore, the proposed mixed-use project would not result in any new or substantially more severe effects on intersection operations than the previously approved commercial/retail development. Furthermore, two intersections (Monterey Road/Dunne Avenue and Cochrane Road/Mission View Road) were shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation measures of the 2005 EIR have since been completed.

Nevertheless, descriptions of the adverse effects on intersection operations and potential improvement measures that may be included as part of the project's Conditions of Approval are provided below.

However, the identified roadway operations and improvements are not required or considered project impacts per CEQA guidelines.

1. Cochrane Road and Mission View Drive

This intersection is projected to operate at unacceptable LOS F and E during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to decrease or increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during at least one of the peak hours analyzed. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was shown to be impacted by the approved commercial/retail development in the 2005 EIR. The identified mitigation, with the exception of a second southbound right-turn lane, have been completed. Dual right-turn lanes at intersections are no longer considered pedestrian and bicyclist friendly and are not recommended. This analysis also does not identify the need for dual right-turn lanes. Therefore, the mitigation for the approved commercial/retail development can be deemed complete.

The addition of a second northbound left-turn lane on Mission View Drive and a cycle length adjustment would be necessary to improve intersection operations. The addition of the second northbound left-turn lane will require lane striping and signal modification but will fit within the existing curb-to-curb pavement width on Mission View Drive. Implementation of this improvement would improve the intersection's level of service to LOS C during both the AM and PM peak hours under Year 2030 Cumulative with both project conditions.

9. Condit Road and Main Avenue

This intersection is projected to operate at unacceptable LOS E and F during the AM and PM peak hours, respectively, under Year 2030 Cumulative without project conditions. Traffic associated with both the approved and proposed projects would cause the critical delay to increase by more than four seconds and the volume-to-capacity ratio (V/C) to increase by more than 0.01 during both the AM and PM peak hours. This constitutes an adverse effect on intersection operations based on the City of Morgan Hill's level of service standards.

This intersection was not shown to be impacted by the approved commercial/retail development in the 2005 EIR. The addition of an exclusive southbound right-turn lane on Condit Road and a cycle length adjustment would be necessary to improve intersection operations. The addition of the right-turn lane will require signal modifications and lane striping on the southbound approach. Implementation of this improvement would improve the intersection's level of service to LOS D during the PM peak hour under Year 2030 Cumulative with both the approved and proposed project conditions. This intersection is under the jurisdiction of both the City of Morgan Hill and Santa Clara County. Therefore, implementation of the recommended improvements will require City and County approval.

Freeway Segment Level of Service Analysis

The results of the freeway segment analysis show that ten directional mixed-flow lanes and one directional HOV lane on the freeway segments analyzed are projected to operate at an unacceptable LOS F during at least one peak hour under existing conditions and would continue to operate at LOS F conditions with the addition of traffic due to the approved or proposed project.

Improvement of freeway segment operations would require freeway widening to construct additional through lanes, thereby increasing freeway capacity. VTA's Valley Transportation Plan (VTP) 2040 identifies freeway express lane projects along US 101 between Cochrane Road and Whipple Avenue. The planned improvements consist of the conversion of the existing HOV lane to an express lane and the construction of a second express lane in each direction on US 101. These improvements would increase the capacity of the freeway and help to address the deficiency in freeway operations. However, it is not feasible for an individual development project to bear responsibility for implementing such extensive transportation system improvements due to constraints in the acquisition and cost of right-of-way.

Cochrane Commons Mixed-Use Development Technical Appendices

December 10, 2021

Appendix A

Traffic Counts



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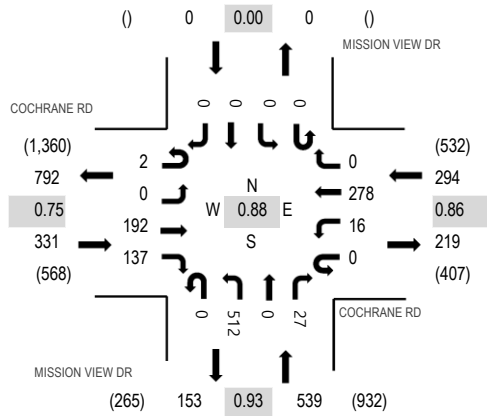
Location: 10 MISSION VIEW DR & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

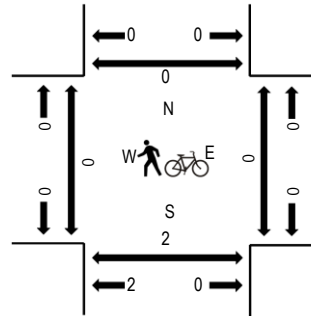
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				MISSION VIEW DR Northbound				MISSION VIEW DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	33	17	0	7	58	0	0	128	0	18	0	0	0	0	261	1,135	0	0	1	1
7:15 AM	1	0	31	17	0	5	70	0	0	123	0	10	0	0	0	0	257	1,164	0	0	0	0
7:30 AM	0	0	43	24	0	6	84	0	0	124	0	5	0	0	0	0	286	1,127	0	0	1	0
7:45 AM	1	0	61	55	0	4	77	0	0	125	0	8	0	0	0	0	331	1,054	0	0	0	0
8:00 AM	0	0	57	41	0	1	47	0	0	140	0	4	0	0	0	0	290	897	0	0	1	0
8:15 AM	1	0	51	16	0	3	47	0	0	94	0	8	0	0	0	0	220		0	0	0	0
8:30 AM	0	0	27	34	0	9	57	0	0	74	0	12	0	0	0	0	213		0	0	0	1
8:45 AM	2	0	32	24	0	2	55	0	0	52	0	7	0	0	0	0	174		0	0	0	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	5	0	0	0	1	0	0	1	0	0	0	0	0	0	7
Lights	2	0	176	130	0	16	276	0	0	505	0	26	0	0	0	0	1,131
Mediums	0	0	11	7	0	0	1	0	0	6	0	1	0	0	0	0	26
Total	2	0	192	137	0	16	278	0	0	512	0	27	0	0	0	0	1,164



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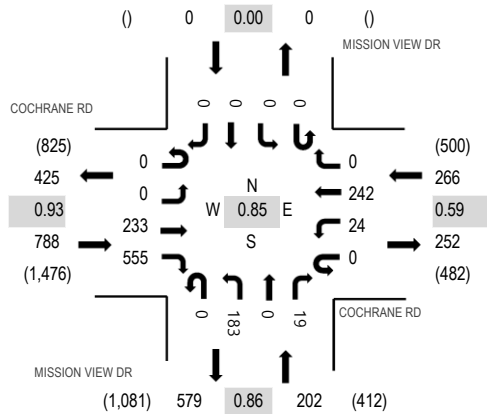
Location: 10 MISSION VIEW DR & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 05:00 PM - 06:00 PM

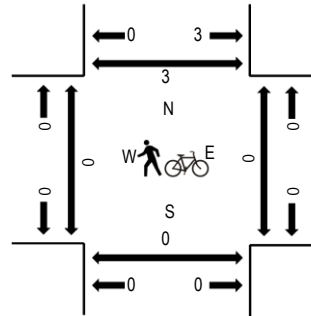
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				MISSION VIEW DR Northbound				MISSION VIEW DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	5	0	48	114	0	14	49	0	0	70	0	3	0	0	0	0	303	1,132	0	1	0	0
4:15 PM	2	0	58	119	0	2	46	0	0	31	0	4	0	0	0	0	262	1,133	0	0	0	0
4:30 PM	2	0	53	108	0	8	59	0	0	57	0	5	0	0	0	0	292	1,174	0	1	0	2
4:45 PM	0	0	56	123	0	14	42	0	0	37	0	3	0	0	0	0	275	1,252	0	0	0	0
5:00 PM	0	0	44	140	0	9	57	0	0	49	0	5	0	0	0	0	304	1,256	0	0	0	3
5:15 PM	0	0	62	134	0	2	41	0	0	57	0	7	0	0	0	0	303		0	0	0	0
5:30 PM	0	0	59	137	0	10	113	0	0	47	0	4	0	0	0	0	370		0	0	0	0
5:45 PM	0	0	68	144	0	3	31	0	0	30	0	3	0	0	0	0	279		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	0	230	550	0	24	241	0	0	180	0	18	0	0	0	0	1,243
Mediums	0	0	2	5	0	0	1	0	0	3	0	1	0	0	0	0	12
Total	0	0	233	555	0	24	242	0	0	183	0	19	0	0	0	0	1,256



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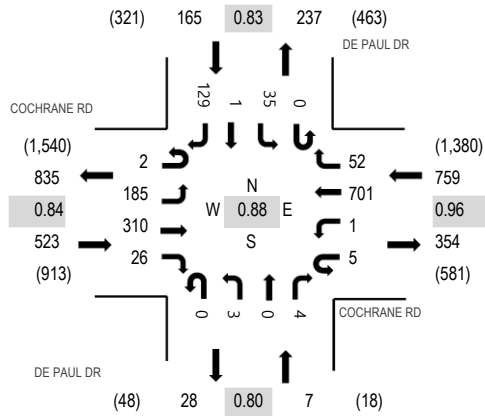
Location: 9 DE PAUL DR & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

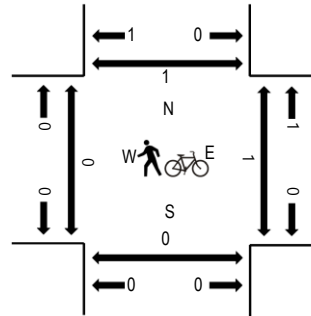
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD				COCHRANE RD				DE PAUL DR				DE PAUL DR				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound									
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	22	41	0	0	0	170	13	0	0	0	0	0	8	0	31	285	1,343	2	0	0	2
7:15 AM	0	32	46	3	1	0	175	20	0	0	0	1	0	5	0	34	317	1,442	0	0	0	0
7:30 AM	1	35	54	2	1	0	194	10	0	0	0	0	0	10	0	22	329	1,454	0	0	0	0
7:45 AM	0	47	109	11	2	0	191	15	0	0	0	1	0	12	0	24	412	1,419	0	0	0	0
8:00 AM	0	53	82	8	2	0	167	17	0	0	0	2	0	10	0	43	384	1,289	0	1	0	1
8:15 AM	1	50	65	5	0	1	149	10	0	3	0	1	0	3	1	40	329		0	0	0	0
8:30 AM	1	63	55	9	1	0	112	11	0	4	0	1	0	5	0	32	294		0	0	0	2
8:45 AM	0	53	57	8	2	0	106	10	0	3	2	0	0	4	0	37	282		0	0	0	2

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	4	0	0	0	3	0	0	0	0	0	0	0	0	1	10
Lights	2	178	292	26	5	1	684	52	0	3	0	4	0	33	1	126	1,407
Mediums	0	5	14	0	0	0	14	0	0	0	0	0	0	2	0	2	37
Total	2	185	310	26	5	1	701	52	0	3	0	4	0	35	1	129	1,454



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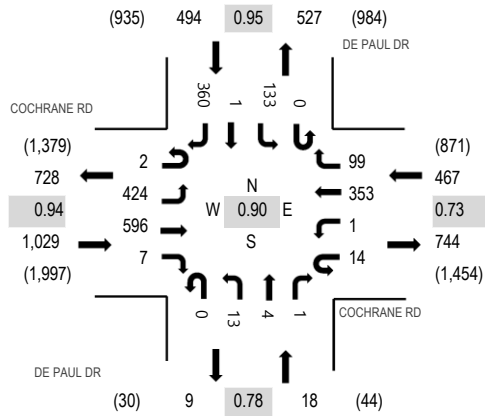
Location: 9 DE PAUL DR & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:45 PM - 05:45 PM

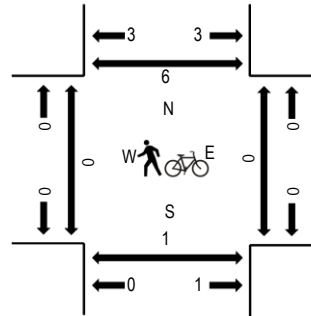
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				DE PAUL DR Northbound				DE PAUL DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	79	128	6	2	1	94	24	0	4	2	0	0	35	1	79	455	1,846	0	0	0	0
4:15 PM	0	88	149	3	5	0	68	18	0	4	3	2	0	27	1	87	455	1,880	0	0	0	0
4:30 PM	1	97	130	6	2	1	93	26	0	5	0	1	0	22	0	82	466	1,916	0	0	0	0
4:45 PM	1	101	150	2	5	1	68	16	0	4	3	0	0	25	0	94	470	2,008	0	0	1	5
5:00 PM	0	107	148	1	2	0	82	26	0	3	1	1	0	33	1	84	489	2,001	0	0	0	1
5:15 PM	0	105	145	2	5	0	78	24	0	5	0	0	0	41	0	86	491		0	0	0	0
5:30 PM	1	111	153	2	2	0	125	33	0	1	0	0	0	34	0	96	558		0	0	0	0
5:45 PM	0	107	172	2	2	0	56	12	0	4	0	1	1	32	0	74	463		0	1	0	2

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	2	421	589	7	14	1	347	99	0	13	4	1	0	132	1	360	1,991
Mediums	0	3	6	0	0	0	6	0	0	0	0	0	0	1	0	0	16
Total	2	424	596	7	14	1	353	99	0	13	4	1	0	133	1	360	2,008



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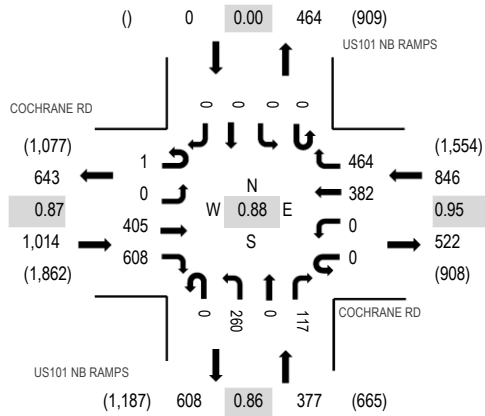
Location: 8 US101 NB RAMPS & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

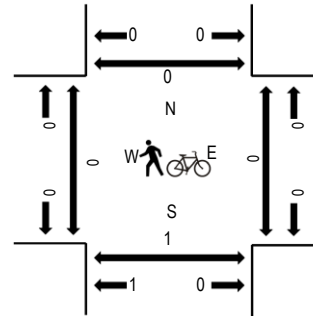
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				US101 NB RAMPS Northbound				US101 NB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	47	211	0	0	52	144	0	22	0	17	0	0	0	0	493	2,142	0	0	1	0
7:15 AM	0	0	56	172	0	0	69	144	0	21	0	20	0	0	0	0	482	2,208	0	0	0	0
7:30 AM	0	0	73	162	0	0	101	127	0	51	0	18	0	0	0	0	532	2,237	0	0	1	0
7:45 AM	0	0	132	163	0	0	121	99	0	90	0	30	0	0	0	0	635	2,171	0	0	0	0
8:00 AM	0	0	110	157	0	0	78	124	0	54	0	36	0	0	0	0	559	1,939	0	0	0	0
8:15 AM	1	0	90	126	0	0	82	114	0	65	0	33	0	0	0	0	511		0	0	0	0
8:30 AM	0	0	83	121	0	0	67	88	0	64	0	43	0	0	0	0	466		0	0	0	0
8:45 AM	0	0	83	75	0	0	75	69	0	64	0	37	0	0	0	0	403		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	8	0	0	1	4	0	7	0	3	0	0	0	0	26
Lights	1	0	386	571	0	0	372	454	0	251	0	108	0	0	0	0	2,143
Mediums	0	0	16	29	0	0	9	6	0	2	0	6	0	0	0	0	68
Total	1	0	405	608	0	0	382	464	0	260	0	117	0	0	0	0	2,237



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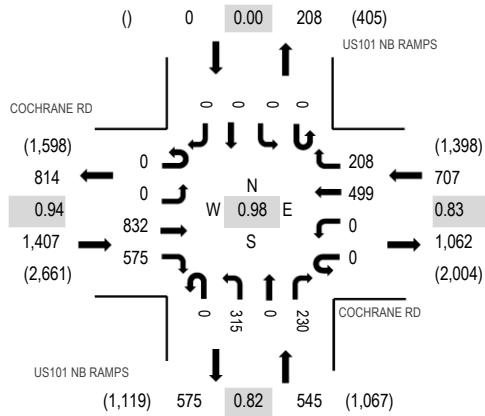
Location: 8 US101 NB RAMPS & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 05:00 PM - 06:00 PM

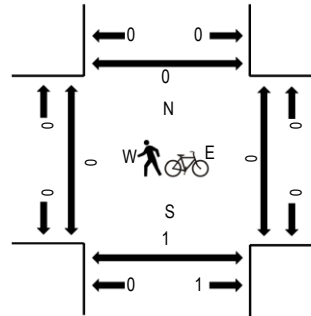
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				US101 NB RAMPS Northbound				US101 NB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	148	145	0	0	117	54	0	74	0	61	0	0	0	0	599	2,467	0	0	0	0
4:15 PM	0	0	193	135	0	0	122	41	0	81	0	56	0	0	0	0	628	2,529	0	0	0	0
4:30 PM	0	0	186	154	0	0	132	56	0	65	0	53	0	0	0	0	646	2,582	0	0	0	0
4:45 PM	0	0	183	110	0	0	123	46	0	70	0	62	0	0	0	0	594	2,613	0	0	2	0
5:00 PM	0	0	206	162	0	0	124	47	0	75	0	47	0	0	0	0	661	2,659	0	0	0	0
5:15 PM	0	0	200	143	0	0	126	43	0	100	0	69	0	0	0	0	681		0	0	0	0
5:30 PM	0	0	205	118	0	0	144	76	0	74	0	60	0	0	0	0	677		0	0	0	0
5:45 PM	0	0	221	152	0	0	105	42	0	66	0	54	0	0	0	0	640		0	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	9	0	0	0	0	0	6	0	0	0	0	0	0	15
Lights	0	0	828	555	0	0	495	207	0	303	0	223	0	0	0	0	2,611
Mediums	0	0	4	11	0	0	4	1	0	6	0	7	0	0	0	0	33
Total	0	0	832	575	0	0	499	208	0	315	0	230	0	0	0	0	2,659

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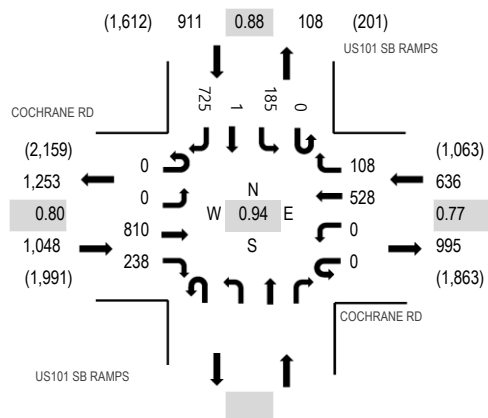
Location: 7 US101 SB RAMPS & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

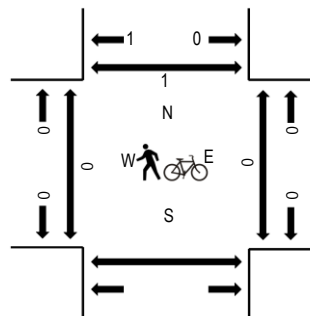
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD				COCHRANE RD				US101 SB RAMPS				US101 SB RAMPS				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM	0	0	240	42	0	0	60	11					0	30	1	109	493	2,311	0	0		0
7:15 AM	0	0	201	40	0	0	63	28					0	26	0	159	517	2,480	0	0		0
7:30 AM	0	0	188	64	0	0	110	39					0	45	0	162	608	2,595	0	0		0
7:45 AM	0	0	178	50	0	0	179	27					0	61	0	198	693	2,495	0	0		0
8:00 AM	0	0	257	71	0	0	118	18					0	36	0	162	662	2,355	0	0		1
8:15 AM	0	0	187	53	0	0	121	24					0	43	1	203	632		0	0		0
8:30 AM	0	0	172	54	0	0	108	23					0	33	0	118	508		0	0		0
8:45 AM	0	0	127	67	0	0	103	31					0	39	0	186	553		0	0		0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	8	2	0	0	7	2					0	2	0	7	28
Lights	0	0	767	222	0	0	515	101					0	175	1	701	2,482
Mediums	0	0	35	14	0	0	6	5					0	8	0	17	85
Total	0	0	810	238	0	0	528	108					0	185	1	725	2,595



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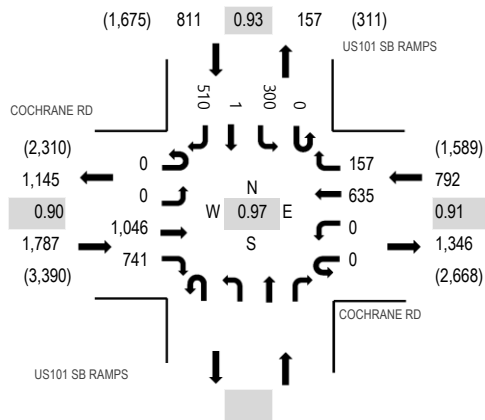
Location: 7 US101 SB RAMPS & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:30 PM - 05:30 PM

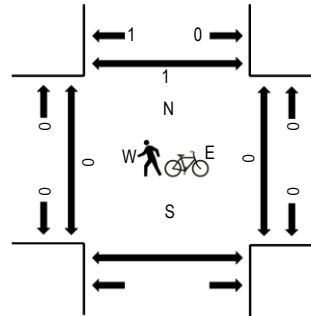
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				US101 SB RAMPS Northbound				US101 SB RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	279	188	0	0	159	37					0	55	0	113	831	3,289	0	0		0
4:15 PM	0	0	228	188	0	0	167	34					0	80	0	97	794	3,335	0	0		0
4:30 PM	0	0	307	193	0	0	157	35					0	56	0	122	870	3,390	0	0		0
4:45 PM	0	0	219	205	0	0	149	37					0	74	1	109	794	3,350	0	0		0
5:00 PM	0	0	273	177	0	0	158	38					0	87	0	144	877	3,365	0	0		0
5:15 PM	0	0	247	166	0	0	171	47					0	83	0	135	849		0	0		1
5:30 PM	0	0	221	122	0	0	185	44					0	113	0	145	830		0	0		0
5:45 PM	0	0	252	125	0	0	132	39					0	94	0	167	809		0	0		1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	7	7	0	0	11	0					0	0	0	5	30
Lights	0	0	1,026	729	0	0	618	156					0	298	1	489	3,317
Mediums	0	0	13	5	0	0	6	1					0	2	0	16	43
Total	0	0	1,046	741	0	0	635	157					0	300	1	510	3,390



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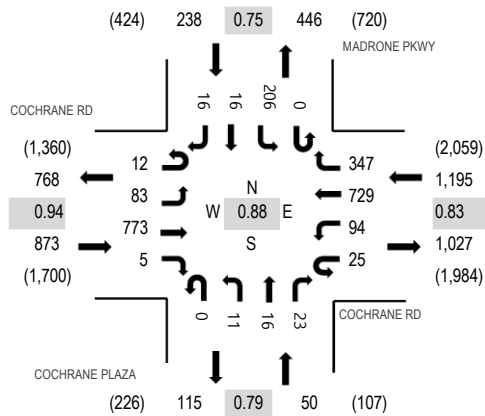
Location: 6 COCHRANE PLAZA & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

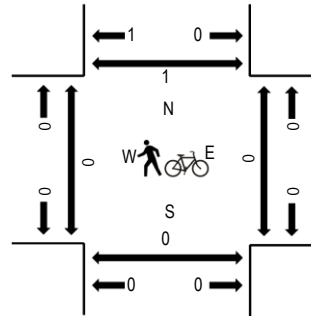
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				COCHRANE PLAZA Northbound				MADRONE PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	1	23	233	4	4	23	101	43	0	2	3	9	0	32	4	3	485	2,223	0	0	0	1
7:15 AM	2	12	231	0	6	17	135	47	0	1	3	15	0	42	2	4	517	2,298	0	0	0	0
7:30 AM	2	18	210	2	5	18	159	71	0	3	3	4	0	48	5	7	555	2,356	0	0	0	0
7:45 AM	2	18	218	2	8	18	214	120	0	3	9	5	0	44	3	2	666	2,263	0	0	0	0
8:00 AM	3	24	185	1	8	27	148	72	0	3	1	9	0	75	3	1	560	2,067	0	0	0	0
8:15 AM	5	23	160	0	4	31	208	84	0	2	3	5	0	39	5	6	575		0	0	0	1
8:30 AM	5	19	155	2	8	22	136	54	0	2	2	6	0	36	4	11	462		0	0	0	0
8:45 AM	1	16	122	1	7	27	184	50	0	2	2	10	0	41	5	2	470		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	9	0	0	0	9	2	0	0	0	0	0	2	0	0	22
Lights	12	83	724	5	24	92	703	341	0	11	16	23	0	202	16	16	2,268
Mediums	0	0	40	0	1	2	17	4	0	0	0	0	0	2	0	0	66
Total	12	83	773	5	25	94	729	347	0	11	16	23	0	206	16	16	2,356



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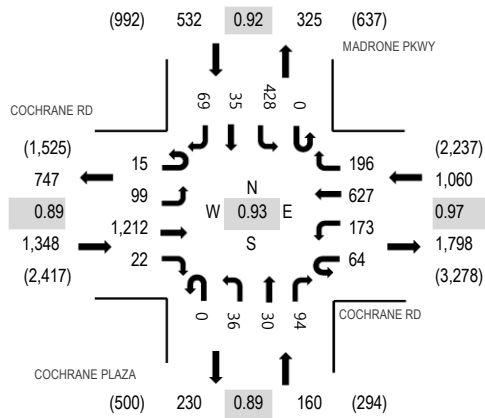
Location: 6 COCHRANE PLAZA & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

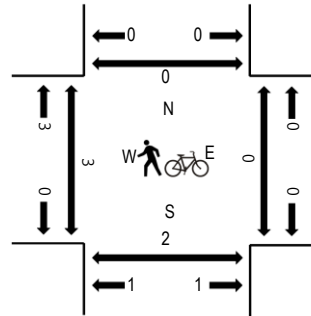
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				COCHRANE PLAZA Northbound				MADRONE PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	4	15	305	3	24	43	135	58	0	9	7	15	1	91	11	15	736	3,044	0	0	0	0
4:15 PM	6	22	279	6	19	46	154	58	0	5	10	21	0	99	11	14	750	3,100	2	0	0	0
4:30 PM	2	24	345	6	20	43	162	40	0	12	9	25	0	117	10	18	833	3,081	0	0	0	0
4:45 PM	2	23	293	4	16	42	138	42	0	14	5	24	0	97	9	16	725	2,908	0	0	2	0
5:00 PM	5	30	295	6	9	42	173	56	0	5	6	24	0	115	5	21	792	2,896	1	0	0	0
5:15 PM	2	35	229	5	19	59	180	44	0	7	10	22	0	103	11	5	731		0	0	0	1
5:30 PM	2	18	217	5	17	49	189	54	0	4	5	17	0	61	9	13	660		1	0	0	0
5:45 PM	6	24	196	3	31	54	189	32	0	5	9	24	0	109	18	13	713		0	0	0	2

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	5	0	0	0	15	4	0	0	0	0	0	2	0	0	27
Lights	15	98	1,193	22	63	173	596	190	0	35	30	94	0	422	34	68	3,033
Mediums	0	0	14	0	1	0	16	2	0	1	0	0	0	4	1	1	40
Total	15	99	1,212	22	64	173	627	196	0	36	30	94	0	428	35	69	3,100



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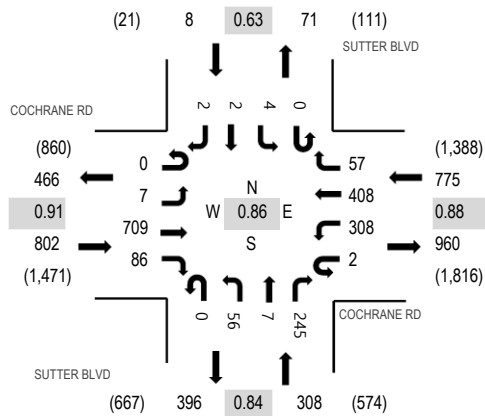
Location: 5 SUTTER BLVD & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

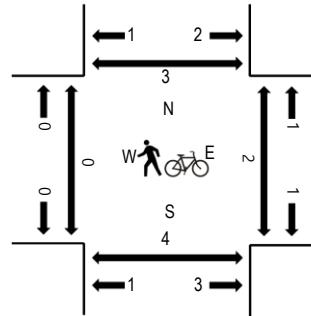
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				SUTTER BLVD Northbound				SUTTER BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	1	207	6	0	44	66	2	0	7	1	65	0	1	1	0	401	1,818	0	0	0	0
7:15 AM	0	0	178	9	1	57	84	5	0	22	0	74	0	1	0	0	431	1,885	1	0	0	1
7:30 AM	0	0	193	14	0	71	90	6	0	7	1	54	0	0	0	1	437	1,893	0	2	0	1
7:45 AM	0	3	184	43	1	83	112	17	0	15	0	89	0	0	1	1	549	1,819	0	0	1	0
8:00 AM	0	2	183	18	1	69	92	13	0	21	0	67	0	2	0	0	468	1,636	0	0	1	2
8:15 AM	0	2	149	11	0	85	114	21	0	13	6	35	0	2	1	0	439		0	0	1	0
8:30 AM	0	2	142	6	0	58	88	10	0	10	3	38	0	2	3	1	363		0	0	0	1
8:45 AM	0	0	111	7	0	80	104	14	0	10	2	34	0	2	0	2	366		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	0	0	3	6	0	0	0	1	3	0	1	0	0	17
Lights	0	7	684	83	2	298	388	57	0	56	6	222	0	3	2	2	1,810
Mediums	0	0	22	3	0	7	14	0	0	0	0	20	0	0	0	0	66
Total	0	7	709	86	2	308	408	57	0	56	7	245	0	4	2	2	1,893



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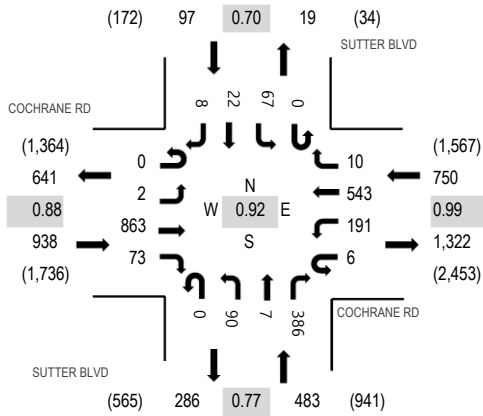
Location: 5 SUTTER BLVD & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:15 PM - 05:15 PM

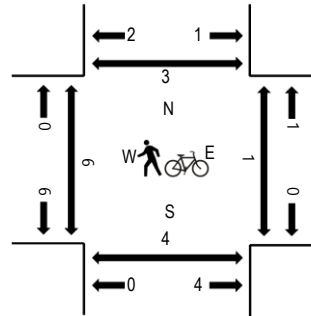
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				SUTTER BLVD Northbound				SUTTER BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	1	208	28	0	40	141	2	0	29	5	131	0	12	2	5	604	2,258	0	0	0	2
4:15 PM	0	1	196	27	4	54	127	4	0	21	1	88	0	5	4	2	534	2,268	0	0	0	0
4:30 PM	0	1	252	17	1	43	140	2	0	26	3	106	0	21	4	3	619	2,268	2	0	2	0
4:45 PM	0	0	201	15	0	46	117	2	0	21	2	76	0	16	3	2	501	2,178	1	0	0	1
5:00 PM	0	0	214	14	1	48	159	2	0	22	1	116	0	25	11	1	614	2,158	2	1	2	2
5:15 PM	0	0	188	16	1	49	159	1	0	18	0	84	0	15	2	1	534		0	0	1	1
5:30 PM	0	0	167	16	0	46	166	2	0	34	0	76	0	16	4	2	529		3	0	2	1
5:45 PM	0	0	154	20	0	53	154	3	0	14	1	66	0	13	3	0	481		2	2	3	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	5	0	0	7	7	0	0	0	0	0	0	1	1	0	21
Lights	0	2	848	71	6	176	526	10	0	89	6	379	0	66	19	8	2,206
Mediums	0	0	10	2	0	8	10	0	0	1	1	7	0	0	2	0	41
Total	0	2	863	73	6	191	543	10	0	90	7	386	0	67	22	8	2,268



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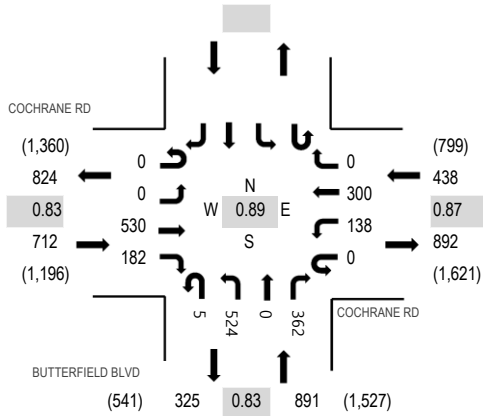
Location: 3 BUTTERFIELD BLVD & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:30 AM - 08:30 AM

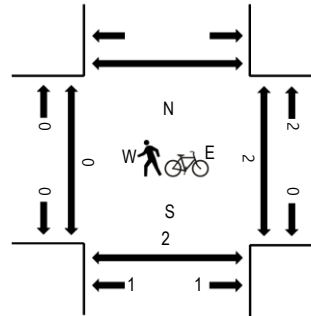
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				BUTTERFIELD BLVD Northbound				Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	114	16	0	23	42	0	0	100	0	122					417	1,912	0	0	0	
7:15 AM	0	0	111	17	0	27	61	0	0	82	0	107					405	2,010	0	0	1	
7:30 AM	0	0	107	34	0	26	68	0	0	176	0	107					518	2,041	0	2	0	
7:45 AM	0	0	171	44	0	39	72	0	0	159	0	87					572	1,872	0	0	1	
8:00 AM	0	0	131	52	0	30	76	0	0	126	0	100					515	1,610	0	0	0	
8:15 AM	0	0	121	52	0	43	84	0	5	63	0	68					436		0	0	1	
8:30 AM	0	0	90	23	0	39	60	0	1	78	0	58					349		0	0	0	
8:45 AM	0	0	85	28	0	42	67	0	0	46	0	42					310		0	0	0	

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	3	4	0	0	2	0	0					13
Lights	0	0	514	173	0	133	282	0	5	515	0	343					1,965
Mediums	0	0	12	9	0	2	14	0	0	7	0	19					63
Total	0	0	530	182	0	138	300	0	5	524	0	362					2,041



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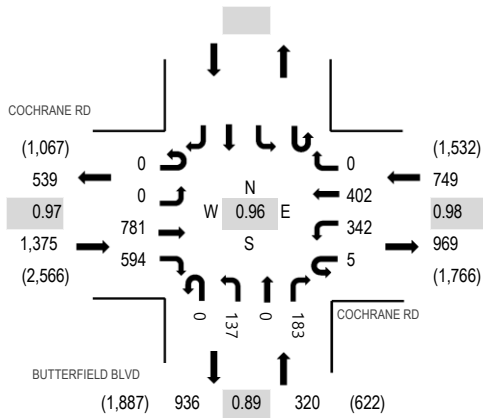
Location: 3 BUTTERFIELD BLVD & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:00 PM - 05:00 PM

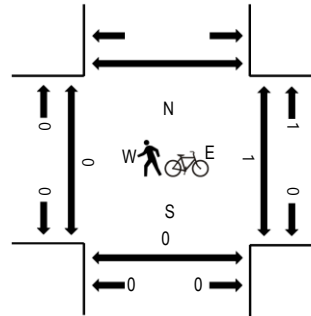
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				BUTTERFIELD BLVD Northbound				Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	188	149	1	100	129	0	0	29	0	43					639	2,444	0	0	0	0
4:15 PM	0	0	184	149	1	79	82	0	0	47	0	42					584	2,422	0	0	0	0
4:30 PM	0	0	223	130	1	87	112	0	0	39	0	47					639	2,436	0	0	0	0
4:45 PM	0	0	186	166	2	76	79	0	0	22	0	51					582	2,337	0	0	0	0
5:00 PM	0	0	171	156	0	93	100	0	0	44	0	53					617	2,276	0	1	3	
5:15 PM	0	0	159	157	0	101	98	0	0	33	0	50					598		0	0	0	
5:30 PM	0	0	148	128	0	90	107	0	0	28	0	39					540		0	0	0	
5:45 PM	0	0	142	130	1	95	98	0	1	20	0	34					521		0	0	2	

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	2	0	1	4	0	0	1	0	0					11
Lights	0	0	768	587	5	332	392	0	0	133	0	176					2,393
Mediums	0	0	10	5	0	9	6	0	0	3	0	7					40
Total	0	0	781	594	5	342	402	0	0	137	0	183					2,444



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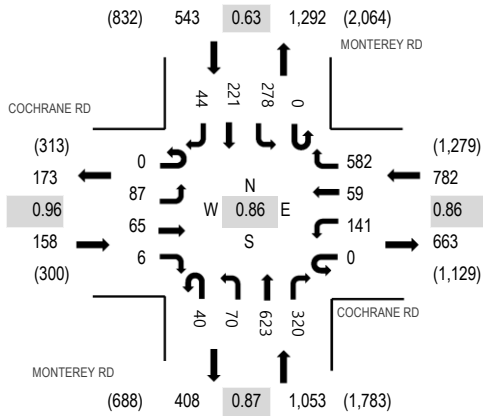
Location: 1 MONTEREY RD & COCHRANE RD AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:15 AM - 08:15 AM

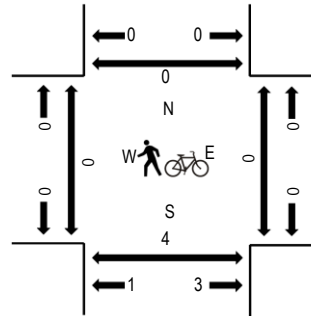
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				MONTEREY RD Northbound				MONTEREY RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	21	20	1	0	17	12	107	5	14	134	60	0	29	16	5	441	2,272	0	0	0	0
7:15 AM	0	18	19	0	0	32	8	74	11	18	150	74	0	43	20	11	478	2,536	0	0	2	0
7:30 AM	0	24	17	0	0	28	14	190	10	22	151	77	0	52	24	7	616	2,511	0	0	0	0
7:45 AM	0	20	19	2	0	33	15	179	8	18	180	97	0	79	80	7	737	2,315	0	0	0	0
8:00 AM	0	25	10	4	0	48	22	139	11	12	142	72	0	104	97	19	705	1,922	0	0	1	0
8:15 AM	0	17	21	1	0	37	10	80	8	21	97	76	0	44	30	11	453		0	0	0	0
8:30 AM	0	20	13	3	0	35	12	84	12	16	92	64	0	29	31	9	420		0	0	0	0
8:45 AM	0	10	13	2	0	41	4	58	4	16	52	59	0	38	37	10	344		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	3	0	0	1	1	0	2	0	0	7
Lights	0	87	63	6	0	139	56	571	40	70	616	315	0	263	219	43	2,488
Mediums	0	0	2	0	0	2	3	8	0	0	6	4	0	13	2	1	41
Total	0	87	65	6	0	141	59	582	40	70	623	320	0	278	221	44	2,536



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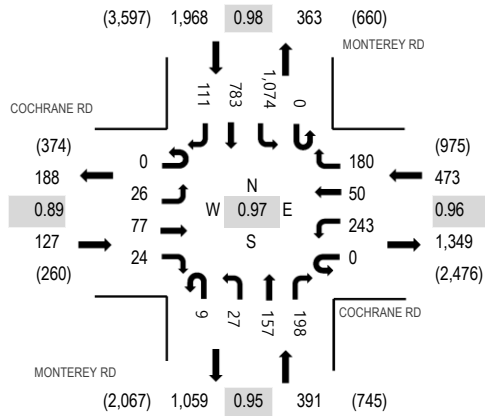
Location: 1 MONTEREY RD & COCHRANE RD PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:00 PM - 05:00 PM

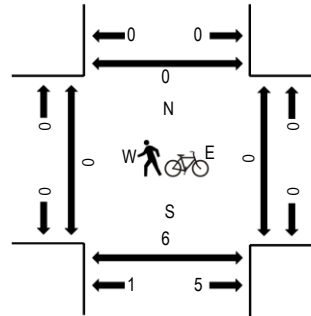
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	COCHRANE RD Eastbound				COCHRANE RD Westbound				MONTEREY RD Northbound				MONTEREY RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	4	18	5	0	67	18	49	2	4	34	54	0	250	189	29	723	2,959	0	0	1	0
4:15 PM	0	9	19	5	0	59	17	45	4	6	43	50	0	269	207	21	754	2,924	0	0	1	0
4:30 PM	0	5	20	6	0	71	11	48	1	12	36	45	0	288	186	30	759	2,868	0	0	0	0
4:45 PM	0	8	20	8	0	46	4	38	2	5	44	49	0	267	201	31	723	2,766	0	0	2	0
5:00 PM	0	9	26	5	0	63	17	49	5	10	23	42	0	232	174	33	688	2,618	0	0	1	0
5:15 PM	0	6	22	5	0	67	12	52	4	10	16	46	0	213	218	27	698		0	0	0	0
5:30 PM	0	5	25	4	0	78	8	40	4	8	35	56	0	213	163	18	657		0	0	0	0
5:45 PM	0	7	16	3	0	71	18	27	3	6	28	58	0	178	141	19	575		0	0	0	0

Peak Rolling Hour Flow Rates

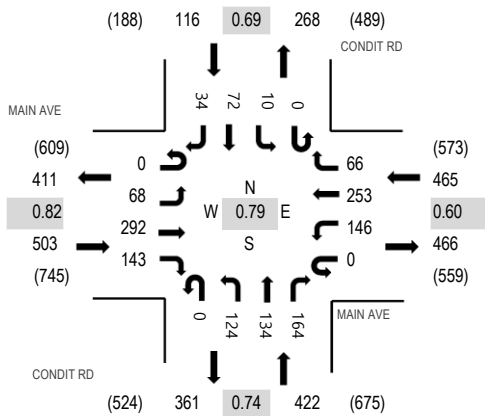
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	3	0	0	0	1	0	5	0	0	9
Lights	0	26	76	24	0	243	50	173	9	27	153	195	0	1,062	771	111	2,920
Mediums	0	0	1	0	0	0	0	4	0	0	4	2	0	7	12	0	30
Total	0	26	77	24	0	243	50	180	9	27	157	198	0	1,074	783	111	2,959



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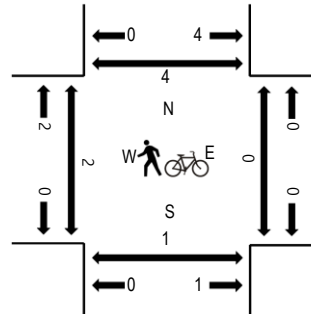
Location: 20 CONDIT RD & MAIN AVE AM
Date and Start Time: Tuesday, May 8, 2018
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	MAIN AVE Eastbound				MAIN AVE Westbound				CONDIT RD Northbound				CONDIT RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	24	4	16	0	3	15	2	0	18	39	8	0	0	6	7	142	1,169	0	0	0	0
7:15 AM	0	24	14	33	0	7	14	8	0	26	35	13	0	0	15	7	196	1,504	0	0	1	0
7:30 AM	0	21	62	60	0	26	48	8	0	30	37	28	0	1	36	5	362	1,506	0	0	0	0
7:45 AM	0	8	120	29	0	41	88	19	0	38	43	63	0	4	5	11	469	1,325	2	0	0	3
8:00 AM	0	20	94	28	0	71	91	32	0	27	23	61	0	2	16	12	477	1,012	0	0	0	0
8:15 AM	0	19	16	26	0	8	26	7	0	29	31	12	0	3	15	6	198		0	0	0	0
8:30 AM	0	15	20	33	0	10	17	3	0	28	32	7	0	0	8	8	181		0	0	0	0
8:45 AM	0	15	21	23	0	6	22	1	0	20	23	4	0	2	3	16	156		0	1	0	0

Peak Rolling Hour Flow Rates

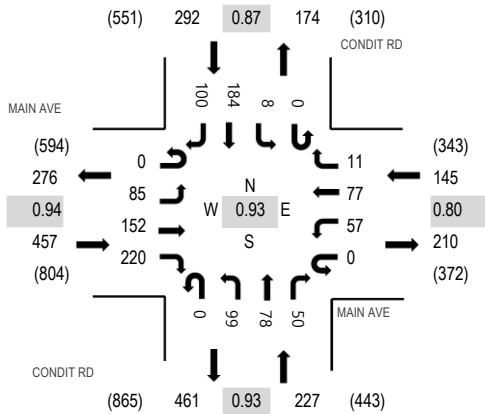
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	1	0	0	0	0	0	0	3	1	0	0	0	0	6
Lights	0	68	289	139	0	143	249	66	0	122	127	162	0	10	72	34	1,481
Mediums	0	0	2	3	0	3	4	0	0	2	4	1	0	0	0	0	19
Total	0	68	292	143	0	146	253	66	0	124	134	164	0	10	72	34	1,506



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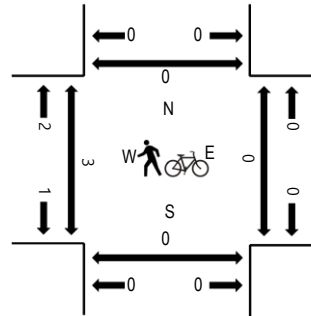
Location: 20 CONDIT RD & MAIN AVE PM
Date and Start Time: Tuesday, May 8, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	MAIN AVE Eastbound				MAIN AVE Westbound				CONDIT RD Northbound				CONDIT RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	16	26	35	0	23	30	5	0	25	22	12	0	1	41	23	259	1,020	0	0	0	2
4:15 PM	0	15	34	52	0	13	32	3	0	28	15	3	0	4	35	21	255	1,031	0	1	0	0
4:30 PM	0	14	31	49	0	20	37	5	0	35	18	14	0	3	33	20	279	1,049	0	0	0	0
4:45 PM	0	10	22	43	0	12	17	1	0	24	12	8	0	4	48	26	227	1,047	0	0	0	0
5:00 PM	0	22	31	57	0	6	14	0	0	25	23	7	0	1	59	25	270	1,121	0	0	0	0
5:15 PM	0	26	41	55	0	13	9	5	0	21	24	10	0	4	39	26	273		1	0	0	0
5:30 PM	0	18	39	55	0	14	27	3	0	27	17	12	0	1	41	23	277		2	0	0	0
5:45 PM	0	19	41	53	0	24	27	3	0	26	14	21	0	2	45	26	301		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	85	151	218	0	56	76	11	0	99	74	50	0	8	183	100	1,111
Mediums	0	0	1	2	0	1	1	0	0	0	4	0	0	0	1	0	10
Total	0	85	152	220	0	57	77	11	0	99	78	50	0	8	184	100	1,121



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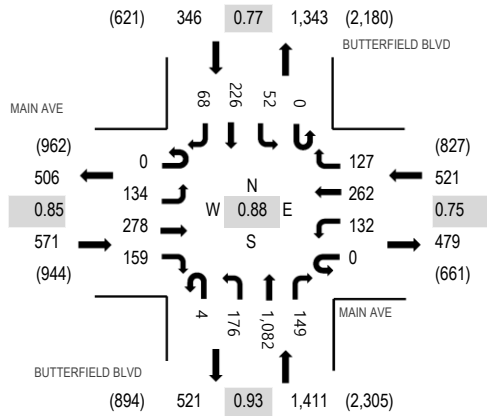
Location: 19 BUTTERFIELD BLVD & MAIN AVE AM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 07:15 AM - 08:15 AM

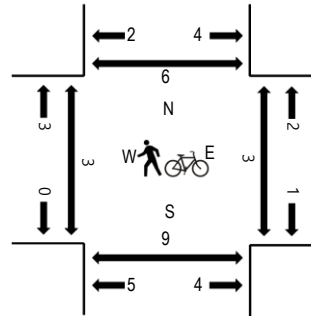
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	MAIN AVE Eastbound				MAIN AVE Westbound				BUTTERFIELD BLVD Northbound				BUTTERFIELD BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	18	15	23	0	18	29	25	0	16	253	10	0	3	25	7	442	2,524	1	0	3	2
7:15 AM	0	20	42	28	0	20	27	23	0	37	235	31	0	15	32	6	516	2,849	0	0	0	0
7:30 AM	0	34	73	45	0	28	64	43	1	34	296	50	0	10	60	15	753	2,825	2	3	4	3
7:45 AM	0	40	92	39	0	46	96	37	1	39	286	51	0	11	51	24	813	2,557	0	0	2	0
8:00 AM	0	40	71	47	0	38	75	24	2	66	265	17	0	16	83	23	767	2,173	1	0	3	1
8:15 AM	0	33	30	35	0	21	49	14	2	60	163	0	0	6	58	21	492		0	1	1	0
8:30 AM	0	28	46	40	0	10	53	21	0	73	140	9	0	2	39	24	485		0	3	3	0
8:45 AM	0	27	43	35	0	17	42	7	0	53	108	7	0	11	50	29	429		0	2	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	2	0	0	0	0	0	0	2	0	0	1	1	0	6
Lights	0	129	275	153	0	132	259	125	4	176	1,059	147	0	48	219	67	2,793
Mediums	0	5	3	4	0	0	3	2	0	0	21	2	0	3	6	1	50
Total	0	134	278	159	0	132	262	127	4	176	1,082	149	0	52	226	68	2,849



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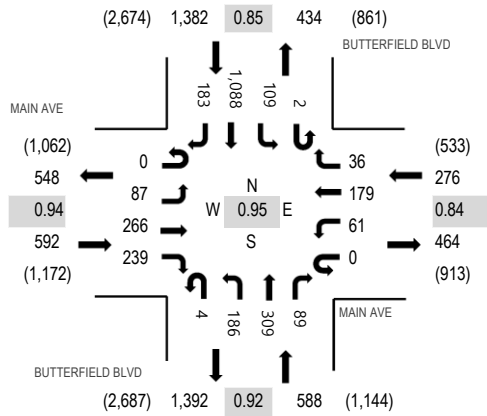
Location: 19 BUTTERFIELD BLVD & MAIN AVE PM

Date and Start Time: Tuesday, May 8, 2018

Peak Hour: 04:15 PM - 05:15 PM

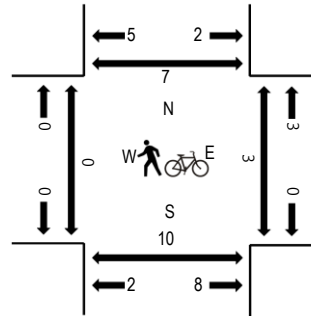
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	MAIN AVE Eastbound				MAIN AVE Westbound				BUTTERFIELD BLVD Northbound				BUTTERFIELD BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	31	56	57	0	16	41	10	0	45	72	23	0	14	282	48	695	2,785	0	0	2	0
4:15 PM	0	25	79	45	0	17	50	7	1	50	82	24	1	29	271	44	725	2,838	0	0	2	2
4:30 PM	0	18	77	65	0	21	53	10	1	36	70	19	0	24	253	27	674	2,825	0	0	4	2
4:45 PM	0	25	50	66	0	9	42	7	2	61	84	20	1	23	263	38	691	2,808	0	3	0	0
5:00 PM	0	19	60	63	0	14	34	12	0	39	73	26	0	33	301	74	748	2,738	0	0	1	2
5:15 PM	0	34	63	60	0	14	39	10	1	51	81	35	0	28	257	39	712		0	0	1	0
5:30 PM	0	39	59	50	0	19	37	4	2	52	67	25	0	34	234	35	657		1	0	0	1
5:45 PM	0	23	65	43	0	15	44	8	1	38	47	16	1	31	244	45	621		0	2	4	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	1	0	0	1	0	0	0	4	0	7
Lights	0	85	261	237	0	61	177	34	4	186	301	89	2	109	1,066	182	2,794
Mediums	0	2	4	2	0	0	2	1	0	0	7	0	0	0	18	1	37
Total	0	87	266	239	0	61	179	36	4	186	309	89	2	109	1,088	183	2,838

Appendix B

Volume Summary

Intersection Number: 1
 Traffic Node Number: 110
 Intersection Name: Cochrane Road and Mission View Drive
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	45	13	0	0	278	16	27	6	512	137	192	15	1,241
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	48	14	0	0	291	17	29	7	536	144	201	16	1,303
Approved Project Trips (b)	35	20	3	5	5	0	0	31	31	20	3	55	208
Proposed Project Trips (c)	46	61	2	3	2	0	0	37	18	19	1	19	208
Existing + Approved Project Conditions (a+b)	83	34	3	5	296	17	29	38	567	164	204	71	1,511
Existing + Proposed Project Conditions (a+c)	94	75	2	3	293	17	29	44	554	163	202	35	1,511
2015 Model (d)	0	0	0	0	487	35	24	0	452	151	169	0	1,318
2030 No Project Model (e)	0	0	0	0	600	65	20	0	904	314	200	0	2,103
2030 No Project Conditions f=(a+MAX(e-d,0))	48	14	0	0	404	47	29	7	988	307	232	16	2,092
2030 + Approved Project Conditions (f+b)	83	34	3	5	409	47	29	38	1019	327	235	71	2,300
2030 + Proposed Project Conditions (f+c)	94	75	2	3	406	47	29	44	1006	326	233	35	2,300
2035 GP No Project Model (g)	15	140	86	155	508	89	46	243	234	61	134	22	1,733
2035 GP No Project Conditions (a+MAX(g-d,0))	63	154	86	155	312	71	51	250	536	144	201	38	2,061
2035 GP + Project Model (h)	52	129	79	121	542	88	46	187	301	84	141	75	1845
2035 GP + Project Conditions (a+MAX(h-d,0))	100	143	79	121	346	70	51	194	536	144	201	91	2,076

Intersection Number: 2
 Traffic Node Number: 109
 Intersection Name: Cochrane Road and De Paul Drive
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	129	1	35	52	701	6	4	0	3	26	310	187	1,454
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	135	2	37	55	734	7	5	0	4	28	325	196	1,528
Approved Project Trips (b)	35	0	23	35	35	0	0	0	0	0	55	55	238
Proposed Project Trips (c)	184	0	20	16	50	0	0	0	0	0	19	110	399
Existing + Approved Project Conditions (a+b)	170	2	60	90	769	7	5	0	4	28	380	251	1,766
Existing + Proposed Project Conditions (a+c)	319	2	57	71	784	7	5	0	4	28	344	306	1,927
2015 Model (d)	138	1	24	82	858	0	0	1	23	31	296	305	1,759
2030 No Project Model (e)	227	5	28	135	1290	44	30	3	0	43	406	407	2,618
2030 No Project Conditions f=(a+MAX(e-d,0))	224	6	41	108	1166	51	35	2	4	40	435	298	2,410
2030 + Approved Project Conditions (f+b)	259	6	64	143	1201	51	35	2	4	40	490	353	2,648
2030 + Proposed Project Conditions (f+c)	408	6	61	124	1216	51	35	2	4	40	454	408	2,809
2035 GP No Project Model (g)	281	18	0	0	734	24	10	54	562	328	207	440	2,658
2035 GP No Project Conditions (a+MAX(g-d,0))	278	19	37	55	734	31	15	53	543	325	325	331	2,746
2035 GP + Project Model (h)	422	30	31	95	784	27	15	61	558	326	255	528	3132
2035 GP + Project Conditions (a+MAX(h-d,0))	419	31	44	68	734	34	20	60	539	323	325	419	3,016

Intersection Number: 3
 Traffic Node Number: 108
 Intersection Name: Cochrane Road and US 101 Northbound Ramps
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	0	0	0	464	382	0	117	0	260	0	405	0	1,628
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	0	0	0	486	400	0	123	0	272	0	424	0	1,705
Approved Project Trips (b)	0	0	0	14	33	0	33	0	0	0	54	0	134
Proposed Project Trips (c)	0	0	0	124	110	0	33	0	0	0	96	0	363
Existing + Approved Project Conditions (a+b)	0	0	0	500	433	0	156	0	272	0	478	0	1,839
Existing + Proposed Project Conditions (a+c)	0	0	0	610	510	0	156	0	272	0	520	0	2,068
2015 Model (d)	0	0	0	427	593	0	192	0	540	0	440	0	2,192
2030 No Project Model (e)	0	0	0	588	867	0	175	0	391	0	697	0	2,718
2030 No Project Conditions f=(a+MAX(e-d,0))	0	0	0	647	674	0	123	0	272	0	681	0	2,397
2030 + Approved Project Conditions (f+b)	0	0	0	661	707	0	156	0	272	0	735	0	2,531
2030 + Proposed Project Conditions (f+c)	0	0	0	771	784	0	156	0	272	0	777	0	2,760
2035 GP No Project Model (g)	0	0	0	706	870	0	276	0	615	0	721	0	3,188
2035 GP No Project Conditions (a+MAX(g-d,0))	0	0	0	765	677	0	207	0	347	0	705	0	2,701
2035 GP + Project Model (h)	0	0	0	780	983	0	317	0	611	0	811	0	3502
2035 GP + Project Conditions (a+MAX(h-d,0))	0	0	0	839	790	0	248	0	343	0	795	0	3,015

Intersection Number: 4
 Traffic Node Number: 107
 Intersection Name: Cochrane Road and US 101 Southbound Ramps
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	725	1	185	108	528	0	0	0	0	238	810	0	2,595
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	759	2	194	113	553	0	0	0	0	249	847	0	2,717
Approved Project Trips (b)	0	0	26	18	15	0	0	0	0	0	28	0	87
Proposed Project Trips (c)	0	0	57	41	69	0	0	0	0	0	39	0	206
Existing + Approved Project Conditions (a+b)	759	2	220	131	568	0	0	0	0	249	875	0	2,804
Existing + Proposed Project Conditions (a+c)	759	2	251	154	622	0	0	0	0	249	886	0	2,923
2015 Model (d)	438	0	182	157	976	0	0	0	0	234	825	0	2,812
2030 No Project Model (e)	544	0	248	196	1063	0	0	0	0	263	1040	0	3,354
2030 No Project Conditions f=(a+MAX(e-d,0))	865	2	260	152	640	0	0	0	0	278	1062	0	3,259
2030 + Approved Project Conditions (f+b)	865	2	286	170	655	0	0	0	0	278	1090	0	3,346
2030 + Proposed Project Conditions (f+c)	865	2	317	193	709	0	0	0	0	278	1101	0	3,465
2035 GP No Project Model (g)	564	0	333	219	1267	0	0	0	0	240	907	0	3,530
2035 GP No Project Conditions (a+MAX(g-d,0))	885	2	345	175	844	0	0	0	0	255	929	0	3,435
2035 GP + Project Model (h)	536	0	376	0	1334	0	0	0	0	239	948	0	3433
2035 GP + Project Conditions (a+MAX(h-d,0))	857	2	388	113	911	0	0	0	0	254	970	0	3,495

Intersection Number: 5
 Trafix Node Number: 106
 Intersection Name: Cochrane Road and Madrone Parkway/Cochrane Plaza
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	16	16	206	347	729	119	23	16	11	5	773	95	2,356
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	17	17	216	363	763	125	25	17	12	6	809	100	2,470
Approved Project Trips (b)	0	0	0	0	15	0	0	0	0	0	28	0	43
Proposed Project Trips (c)	0	0	2	6	63	0	0	0	0	0	37	0	108
Existing + Approved Project Conditions (a+b)	17	17	216	363	778	125	25	17	12	6	837	100	2,513
Existing + Proposed Project Conditions (a+c)	17	17	218	369	826	125	25	17	12	6	846	100	2,578
2015 Model (d)	19	2	84	214	1025	174	82	2	0	0	894	78	2,574
2030 No Project Model (e)	28	2	108	363	1084	160	80	1	0	0	1115	104	3,045
2030 No Project Conditions f=(a+MAX(e-d,0))	26	17	240	512	822	125	25	17	12	6	1030	126	2,958
2030 + Approved Project Conditions (f+b)	26	17	240	512	837	125	25	17	12	6	1058	126	3,001
2030 + Proposed Project Conditions (f+c)	26	17	242	518	885	125	25	17	12	6	1067	126	3,066
2035 GP No Project Model (g)	23	2	102	224	1439	167	79	1	0	0	966	80	3,083
2035 GP No Project Conditions (a+MAX(g-d,0))	21	17	234	373	1177	125	25	17	12	6	881	102	2,990
2035 GP + Project Model (h)	22	2	103	228	1473	168	80	1	0	0	1004	79	3160
2035 GP + Project Conditions (a+MAX(h-d,0))	20	17	235	377	1211	125	25	17	12	6	919	101	3,065

Intersection Number: 6
 Trafix Node Number: 105
 Intersection Name: Cochrane Road and Sutter Boulevard
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	2	2	4	57	408	310	245	7	56	86	709	7	1,893
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	3	3	5	60	427	325	257	8	59	90	742	8	1,987
Approved Project Trips (b)	0	0	0	0	11	4	7	0	0	0	21	0	43
Proposed Project Trips (c)	0	0	2	6	32	25	13	0	0	0	23	0	101
Existing + Approved Project Conditions (a+b)	3	3	5	60	438	329	264	8	59	90	763	8	2,030
Existing + Proposed Project Conditions (a+c)	3	3	7	66	459	350	270	8	59	90	765	8	2,088
2015 Model (d)	5	1	10	32	735	278	144	1	64	102	817	22	2,211
2030 No Project Model (e)	6	1	9	29	773	310	182	1	87	104	1026	30	2,558
2030 No Project Conditions f=(a+MAX(e-d,0))	4	3	5	60	465	357	295	8	82	92	951	16	2,338
2030 + Approved Project Conditions (f+b)	4	3	5	60	476	361	302	8	82	92	972	16	2,381
2030 + Proposed Project Conditions (f+c)	4	3	7	66	497	382	308	8	82	92	974	16	2,439
2035 GP No Project Model (g)	6	1	10	30	1065	367	240	3	91	120	795	29	2,757
2035 GP No Project Conditions (a+MAX(g-d,0))	4	3	5	60	757	414	353	10	86	108	742	15	2,557
2035 GP + Project Model (h)	6	1	10	31	1090	375	244	3	90	118	828	29	2825
2035 GP + Project Conditions (a+MAX(h-d,0))	4	3	5	60	782	422	357	10	85	106	753	15	2,602

Intersection Number: 7
 Traffic Node Number: 103
 Intersection Name: Butterfield Boulevard and Cochrane Road
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	0	0	0	0	300	138	362	0	529	182	530	0	2,041
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	0	0	0	0	314	145	379	0	554	191	555	0	2,138
Approved Project Trips (b)	0	0	0	0	8	4	6	0	0	0	14	0	32
Proposed Project Trips (c)	0	0	0	0	19	12	8	0	0	0	15	0	54
Existing + Approved Project Conditions (a+b)	0	0	0	0	322	149	385	0	554	191	569	0	2,170
Existing + Proposed Project Conditions (a+c)	0	0	0	0	333	157	387	0	554	191	570	0	2,192
2015 Model (d)	0	0	0	0	530	202	354	0	515	204	625	0	2,430
2030 No Project Model (e)	0	0	0	0	510	271	449	0	695	340	759	0	3,024
2030 No Project Conditions f=(a+MAX(e-d,0))	0	0	0	0	314	214	474	0	734	327	689	0	2,752
2030 + Approved Project Conditions (f+b)	0	0	0	0	322	218	480	0	734	327	703	0	2,784
2030 + Proposed Project Conditions (f+c)	0	0	0	0	333	226	482	0	734	327	704	0	2,806
2035 GP No Project Model (g)	1	59	108	123	676	268	347	156	426	339	535	25	3,063
2035 GP No Project Conditions (a+MAX(g-d,0))	1	59	108	123	460	211	379	156	554	326	555	25	2,957
2035 GP + Project Model (h)	1	59	111	127	684	277	356	162	418	333	552	24	3104
2035 GP + Project Conditions (a+MAX(h-d,0))	1	59	111	127	468	220	381	162	554	320	555	24	2,982

Intersection Number: 8
 Traffic Node Number: 101
 Intersection Name: Monterey Road and Cochrane Road
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	44	221	278	582	59	141	320	623	110	6	65	87	2,536
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	47	232	291	609	62	148	335	652	116	7	68	91	2,658
Approved Project Trips (b)	0	0	7	4	0	4	7	0	0	0	0	0	22
Proposed Project Trips (c)	0	0	9	16	0	4	5	0	0	0	0	0	34
Existing + Approved Project Conditions (a+b)	47	232	298	613	62	152	342	652	116	7	68	91	2,680
Existing + Proposed Project Conditions (a+c)	47	232	300	625	62	152	340	652	116	7	68	91	2,692
2015 Model (d)	1	331	556	906	2	142	263	462	1	0	1	0	2,665
2030 No Project Model (e)	1	405	848	1014	2	177	243	795	1	0	1	1	3,488
2030 No Project Conditions f=(a+MAX(e-d,0))	47	306	583	717	62	183	335	985	116	7	68	92	3,501
2030 + Approved Project Conditions (f+b)	47	306	590	721	62	187	342	985	116	7	68	92	3,523
2030 + Proposed Project Conditions (f+c)	47	306	592	733	62	187	340	985	116	7	68	92	3,535
2035 GP No Project Model (g)	1	492	665	909	2	186	220	1017	1	0	1	1	3,495
2035 GP No Project Conditions (a+MAX(g-d,0))	47	393	400	612	62	192	335	1207	116	7	68	92	3,531
2035 GP + Project Model (h)	1	510	670	928	2	166	225	1015	1	0	1	1	3520
2035 GP + Project Conditions (a+MAX(h-d,0))	47	411	405	631	62	172	335	1205	116	7	68	92	3,551

Intersection Number: 9
 Traffic Node Number: 120
 Intersection Name: Main Avenue and Condit Road
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	34	72	10	66	253	146	164	134	124	143	292	68	1,506
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	36	76	11	70	265	153	172	141	130	150	306	72	1,582
Approved Project Trips (b)	13	10	0	0	0	0	0	19	0	0	0	24	66
Proposed Project Trips (c)	42	29	0	0	0	0	0	21	0	0	0	28	120
Existing + Approved Project Conditions (a+b)	49	86	11	70	265	153	172	160	130	150	306	96	1,648
Existing + Proposed Project Conditions (a+c)	78	105	11	70	265	153	172	162	130	150	306	100	1,702
2015 Model (d)	38	36	2	6	127	68	72	32	91	75	130	78	755
2030 No Project Model (e)	69	98	7	21	192	115	111	185	146	128	181	148	1,401
2030 No Project Conditions f=(a+MAX(e-d,0))	67	138	16	85	330	200	211	294	185	203	357	142	2,228
2030 + Approved Project Conditions (f+b)	80	148	16	85	330	200	211	313	185	203	357	166	2,294
2030 + Proposed Project Conditions (f+c)	109	167	16	85	330	200	211	315	185	203	357	170	2,348
2035 GP No Project Model (g)	46	31	0	2	352	18	10	61	136	64	268	187	1,175
2035 GP No Project Conditions (a+MAX(g-d,0))	44	76	11	70	490	153	172	170	175	150	444	181	2,136
2035 GP + Project Model (h)	47	33	0	2	351	18	9	63	139	64	264	188	1178
2035 GP + Project Conditions (a+MAX(h-d,0))	45	76	11	70	489	153	172	172	178	150	440	182	2,138

Intersection Number: 10
 Traffic Node Number: 119
 Intersection Name: Butterfield Boulevard and Main Avenue
 Peak Hour: AM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	68	226	52	127	262	132	149	1082	180	159	278	134	2,849
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	72	237	55	133	274	139	156	1132	189	167	291	141	2,986
Approved Project Trips (b)	2	4	1	2	4	4	7	8	0	0	7	3	42
Proposed Project Trips (c)	9	15	1	2	21	16	9	9	0	0	11	5	98
Existing + Approved Project Conditions (a+b)	74	241	56	135	278	143	163	1140	189	167	298	144	3,028
Existing + Proposed Project Conditions (a+c)	81	252	56	135	295	155	165	1141	189	167	302	146	3,084
2015 Model (d)	132	190	76	226	176	172	122	846	191	225	127	219	2,702
2030 No Project Model (e)	142	283	93	264	228	215	157	1140	222	311	179	222	3,456
2030 No Project Conditions f=(a+MAX(e-d,0)	82	330	72	171	326	182	191	1426	220	253	343	144	3,740
2030 + Approved Project Conditions (f+b)	84	334	73	173	330	186	198	1434	220	253	350	147	3,782
2030 + Proposed Project Conditions (f+c)	91	345	73	173	347	198	200	1435	220	253	354	149	3,838
2035 GP No Project Model (g)	129	330	52	125	263	252	183	842	239	298	206	261	3,180
2035 GP No Project Conditions (a+MAX(g-d,0)	72	377	55	133	361	219	217	1132	237	240	370	183	3,596
2035 GP + Project Model (h)	131	326	52	124	262	250	180	842	238	299	204	262	3170
2035 GP + Project Conditions (a+MAX(h-d,0)	72	373	55	133	360	217	214	1132	236	241	368	184	3,585

Intersection Number: 1
 Traffic Node Number: 110
 Intersection Name: Cochrane Road and Mission View Drive
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	36	3	0	0	242	24	19	4	183	555	233	60	1,359
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	38	4	0	0	254	26	20	5	192	581	244	63	1,427
Approved Project Trips (b)	184	104	15	16	16	0	0	109	109	104	15	191	863
Proposed Project Trips (c)	38	87	9	8	5	0	0	99	42	31	4	57	380
Existing + Approved Project Conditions (a+b)	222	108	15	16	270	26	20	114	301	685	259	254	2,290
Existing + Proposed Project Conditions (a+c)	76	91	9	8	259	26	20	104	234	612	248	120	1,807
2015 Model (d)	0	0	0	0	202	14	14	0	187	497	450	0	1,364
2030 No Project Model (e)	0	0	0	0	214	28	44	0	377	929	629	0	2,221
2030 No Project Conditions f=(a+MAX(e-d,0))	38	4	0	0	266	40	50	5	382	1013	423	63	2,284
2030 + Approved Project Conditions (f+b)	222	108	15	16	282	40	50	114	491	1117	438	254	3,147
2030 + Proposed Project Conditions (f+c)	76	91	9	8	271	40	50	104	424	1044	427	120	2,664
2035 GP No Project Model (g)	22	189	101	51	204	38	81	97	103	226	495	23	1,630
2035 GP No Project Conditions (a+MAX(g-d,0))	60	193	101	51	256	50	87	102	192	581	289	86	2,048
2035 GP + Project Model (h)	92	125	65	36	219	40	79	74	142	309	534	83	1798
2035 GP + Project Conditions (a+MAX(h-d,0))	130	129	65	36	271	52	85	79	192	581	328	146	2,094

Intersection Number: 2
 Traffic Node Number: 109
 Intersection Name: Cochrane Road and De Paul Drive
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	360	1	133	99	353	15	1	4	13	7	596	426	2,008
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	377	2	140	104	370	16	2	5	14	8	624	446	2,108
Approved Project Trips (b)	184	0	120	124	184	0	0	0	0	0	191	191	994
Proposed Project Trips (c)	202	0	35	31	62	0	0	0	0	0	57	287	674
Existing + Approved Project Conditions (a+b)	561	2	260	228	554	16	2	5	14	8	815	637	3,102
Existing + Proposed Project Conditions (a+c)	579	2	175	135	432	16	2	5	14	8	681	733	2,782
2015 Model (d)	383	4	156	47	341	0	0	4	46	40	790	265	2,076
2030 No Project Model (e)	487	15	218	39	429	39	50	15	36	0	1221	372	2,921
2030 No Project Conditions f=(a+MAX(e-d,0))	481	13	202	104	458	55	52	16	14	8	1055	553	3,011
2030 + Approved Project Conditions (f+b)	665	13	322	228	642	55	52	16	14	8	1246	744	4,005
2030 + Proposed Project Conditions (f+c)	683	13	237	135	520	55	52	16	14	8	1112	840	3,685
2035 GP No Project Model (g)	568	130	0	0	321	9	10	46	447	725	733	406	3,395
2035 GP No Project Conditions (a+MAX(g-d,0))	562	128	140	104	370	25	12	47	415	693	624	587	3,707
2035 GP + Project Model (h)	692	155	133	55	404	30	16	66	438	698	777	605	4069
2035 GP + Project Conditions (a+MAX(h-d,0))	686	153	140	112	433	46	18	67	406	666	624	786	4,137

Intersection Number: 3
 Traffic Node Number: 108
 Intersection Name: Cochrane Road and US 101 Northbound Ramps
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	0	0	0	208	499	0	230	0	315	0	832	0	2,084
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	0	0	0	218	522	0	241	0	330	0	871	0	2,182
Approved Project Trips (b)	0	0	0	87	207	0	117	0	0	0	191	0	602
Proposed Project Trips (c)	0	0	0	104	137	0	73	0	0	0	249	0	563
Existing + Approved Project Conditions (a+b)	0	0	0	305	729	0	358	0	330	0	1062	0	2,784
Existing + Proposed Project Conditions (a+c)	0	0	0	322	659	0	314	0	330	0	1120	0	2,745
2015 Model (d)	0	0	0	208	563	0	219	0	245	0	877	0	2,112
2030 No Project Model (e)	0	0	0	267	697	0	262	0	261	0	1242	0	2,729
2030 No Project Conditions f=(a+MAX(e-d,0))	0	0	0	277	656	0	284	0	346	0	1236	0	2,799
2030 + Approved Project Conditions (f+b)	0	0	0	364	863	0	401	0	346	0	1427	0	3,401
2030 + Proposed Project Conditions (f+c)	0	0	0	381	793	0	357	0	346	0	1485	0	3,362
2035 GP No Project Model (g)	0	0	0	389	946	0	293	0	266	0	1584	0	3,478
2035 GP No Project Conditions (a+MAX(g-d,0))	0	0	0	399	905	0	315	0	351	0	1578	0	3,548
2035 GP + Project Model (h)	0	0	0	430	1103	0	359	0	262	0	1732	0	3886
2035 GP + Project Conditions (a+MAX(h-d,0))	0	0	0	440	1062	0	381	0	347	0	1726	0	3,956

Intersection Number: 4
 Traffic Node Number: 107
 Intersection Name: Cochrane Road and US 101 Southbound Ramps
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	510	1	300	157	635	0	0	0	0	741	1046	0	3,390
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	534	2	314	165	665	0	0	0	0	775	1094	0	3,549
Approved Project Trips (b)	0	0	91	112	95	0	0	0	0	0	100	0	398
Proposed Project Trips (c)	0	0	151	63	74	0	0	0	0	0	98	0	386
Existing + Approved Project Conditions (a+b)	534	2	405	277	760	0	0	0	0	775	1194	0	3,947
Existing + Proposed Project Conditions (a+c)	534	2	465	228	739	0	0	0	0	775	1192	0	3,935
2015 Model (d)	403	0	369	271	537	0	0	0	0	492	953	0	3,025
2030 No Project Model (e)	495	0	507	212	746	0	0	0	0	449	1265	0	3,674
2030 No Project Conditions f=(a+MAX(e-d,0))	626	2	452	165	874	0	0	0	0	775	1406	0	4,300
2030 + Approved Project Conditions (f+b)	626	2	543	277	969	0	0	0	0	775	1506	0	4,698
2030 + Proposed Project Conditions (f+c)	626	2	603	228	948	0	0	0	0	775	1504	0	4,686
2035 GP No Project Model (g)	429	0	623	451	761	0	0	0	0	580	1513	0	4,357
2035 GP No Project Conditions (a+MAX(g-d,0))	560	2	568	345	889	0	0	0	0	863	1654	0	4,881
2035 GP + Project Model (h)	420	0	690	0	836	0	0	0	0	570	1592	0	4108
2035 GP + Project Conditions (a+MAX(h-d,0))	551	2	635	165	964	0	0	0	0	853	1733	0	4,903

Intersection Number: 5
 Traffic Node Number: 106
 Intersection Name: Cochrane Road and Madrone Parkway/Cochrane Plaza
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	69	35	428	196	627	237	94	30	36	22	1212	114	3,100
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	73	37	448	205	656	248	99	32	38	24	1268	120	3,248
Approved Project Trips (b)	0	0	0	0	95	0	0	0	0	0	100	0	195
Proposed Project Trips (c)	0	0	6	4	70	0	0	0	0	0	91	0	171
Existing + Approved Project Conditions (a+b)	73	37	448	205	751	248	99	32	38	24	1368	120	3,443
Existing + Proposed Project Conditions (a+c)	73	37	454	209	726	248	99	32	38	24	1359	120	3,419
2015 Model (d)	97	7	270	110	714	117	229	7	0	0	946	59	2,556
2030 No Project Model (e)	125	6	403	142	979	121	216	6	0	0	1095	74	3,167
2030 No Project Conditions f=(a+MAX(e-d,0))	101	37	581	237	921	252	99	32	38	24	1417	135	3,874
2030 + Approved Project Conditions (f+b)	101	37	581	237	1016	252	99	32	38	24	1517	135	4,069
2030 + Proposed Project Conditions (f+c)	101	37	587	241	991	252	99	32	38	24	1508	135	4,045
2035 GP No Project Model (g)	105	5	281	125	955	110	218	6	0	0	1594	61	3,460
2035 GP No Project Conditions (a+MAX(g-d,0))	81	37	459	220	897	248	99	32	38	24	1916	122	4,173
2035 GP + Project Model (h)	103	5	287	129	1013	114	222	5	0	0	1652	59	3589
2035 GP + Project Conditions (a+MAX(h-d,0))	79	37	465	224	955	248	99	32	38	24	1974	120	4,295

Intersection Number: 6
 Traffic Node Number: 105
 Intersection Name: Cochrane Road and Sutter Boulevard
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	8	22	67	10	543	197	386	7	90	73	863	2	2,268
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	9	24	71	11	568	206	404	8	95	77	903	3	2,379
Approved Project Trips (b)	0	0	0	0	70	25	26	0	0	0	74	0	195
Proposed Project Trips (c)	0	0	6	4	43	24	33	0	0	0	52	0	162
Existing + Approved Project Conditions (a+b)	9	24	71	11	638	231	430	8	95	77	977	3	2,574
Existing + Proposed Project Conditions (a+c)	9	24	77	15	611	230	437	8	95	77	955	3	2,541
2015 Model (d)	26	2	33	10	652	149	273	2	165	104	698	11	2,125
2030 No Project Model (e)	34	3	31	10	902	192	357	3	192	114	781	13	2,632
2030 No Project Conditions f=(a+MAX(e-d,0))	17	25	71	11	818	249	488	9	122	87	986	5	2,888
2030 + Approved Project Conditions (f+b)	17	25	71	11	888	274	514	9	122	87	1060	5	3,083
2030 + Proposed Project Conditions (f+c)	17	25	77	15	861	273	521	9	122	87	1038	5	3,050
2035 GP No Project Model (g)	32	5	32	11	790	260	406	3	203	130	1217	13	3,102
2035 GP No Project Conditions (a+MAX(g-d,0))	15	27	71	12	706	317	537	9	133	103	1422	5	3,357
2035 GP + Project Model (h)	31	5	33	12	832	272	420	3	199	127	1258	13	3205
2035 GP + Project Conditions (a+MAX(h-d,0))	14	27	71	13	748	329	551	9	129	100	1463	5	3,459

Intersection Number: 7
 Traffic Node Number: 103
 Intersection Name: Butterfield Boulevard and Cochrane Road
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	0	0	0	0	402	347	183	0	137	594	781	0	2,444
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	0	0	0	0	421	363	192	0	144	622	817	0	2,559
Approved Project Trips (b)	0	0	0	0	49	22	23	0	0	0	51	0	145
Proposed Project Trips (c)	0	0	0	0	28	15	19	0	0	0	33	0	95
Existing + Approved Project Conditions (a+b)	0	0	0	0	470	385	215	0	144	622	868	0	2,704
Existing + Proposed Project Conditions (a+c)	0	0	0	0	449	378	211	0	144	622	850	0	2,654
2015 Model (d)	0	0	0	0	488	414	247	0	375	456	521	0	2,501
2030 No Project Model (e)	0	0	0	0	664	551	331	0	579	698	540	0	3,363
2030 No Project Conditions f=(a+MAX(e-d,0))	0	0	0	0	597	500	276	0	348	864	836	0	3,421
2030 + Approved Project Conditions (f+b)	0	0	0	0	646	522	299	0	348	864	887	0	3,566
2030 + Proposed Project Conditions (f+c)	0	0	0	0	625	515	295	0	348	864	869	0	3,516
2035 GP No Project Model (g)	10	181	175	147	580	389	334	84	437	494	811	8	3,650
2035 GP No Project Conditions (a+MAX(g-d,0))	10	181	175	147	513	363	279	84	206	660	1107	8	3,733
2035 GP + Project Model (h)	10	180	180	153	608	389	364	83	429	502	810	7	3715
2035 GP + Project Conditions (a+MAX(h-d,0))	10	180	180	153	541	363	309	83	198	668	1106	7	3,798

Intersection Number: 8
 Traffic Node Number: 101
 Intersection Name: Monterey Road and Cochrane Road
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	111	783	1074	180	50	243	198	157	36	24	77	26	2,959
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	117	819	1124	189	53	255	208	165	38	26	81	28	3,103
Approved Project Trips (b)	0	0	25	24	0	24	25	0	0	0	0	0	98
Proposed Project Trips (c)	0	0	23	18	0	10	10	0	0	0	0	0	61
Existing + Approved Project Conditions (a+b)	117	819	1149	213	53	279	233	165	38	26	81	28	3,201
Existing + Proposed Project Conditions (a+c)	117	819	1147	207	53	265	218	165	38	26	81	28	3,164
2015 Model (d)	1	629	813	621	2	227	155	130	1	2	3	1	2,585
2030 No Project Model (e)	1	794	1028	905	2	322	187	204	1	2	3	1	3,450
2030 No Project Conditions f=(a+MAX(e-d,0))	117	984	1339	473	53	350	240	239	38	26	81	28	3,968
2030 + Approved Project Conditions (f+b)	117	984	1364	497	53	374	265	239	38	26	81	28	4,066
2030 + Proposed Project Conditions (f+c)	117	984	1362	491	53	360	250	239	38	26	81	28	4,029
2035 GP No Project Model (g)	1	1018	1048	657	2	363	234	424	1	2	3	1	3,754
2035 GP No Project Conditions (a+MAX(g-d,0))	117	1208	1359	225	53	391	287	459	38	26	81	28	4,272
2035 GP + Project Model (h)	1	1026	1041	667	2	372	247	423	1	2	3	1	3786
2035 GP + Project Conditions (a+MAX(h-d,0))	117	1216	1352	235	53	400	300	458	38	26	81	28	4,304

Intersection Number: 9
 Traffic Node Number: 120
 Intersection Name: Main Avenue and Condit Road
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	100	184	8	11	77	57	50	78	99	220	152	85	1,121
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	105	193	9	12	81	60	53	82	104	231	159	89	1,178
Approved Project Trips (b)	80	63	0	0	0	0	0	66	0	0	0	84	293
Proposed Project Trips (c)	52	39	0	0	0	0	0	48	0	0	0	65	204
Existing + Approved Project Conditions (a+b)	185	256	9	12	81	60	53	148	104	231	159	173	1,471
Existing + Proposed Project Conditions (a+c)	157	232	9	12	81	60	53	130	104	231	159	154	1,382
2015 Model (d)	63	123	6	2	59	62	51	30	95	82	71	49	693
2030 No Project Model (e)	127	315	22	10	82	94	86	111	146	156	111	94	1,354
2030 No Project Conditions f=(a+MAX(e-d,0))	169	385	25	20	104	92	88	163	155	305	199	134	1,839
2030 + Approved Project Conditions (f+b)	249	448	25	20	104	92	88	229	155	305	199	218	2,132
2030 + Proposed Project Conditions (f+c)	221	424	25	20	104	92	88	211	155	305	199	199	2,043
2035 GP No Project Model (g)	228	120	15	1	129	15	20	46	126	155	256	115	1,226
2035 GP No Project Conditions (a+MAX(g-d,0))	270	193	18	12	151	60	53	98	135	304	344	155	1,793
2035 GP + Project Model (h)	247	109	14	1	127	15	20	47	125	153	253	115	1226
2035 GP + Project Conditions (a+MAX(h-d,0))	289	193	17	12	149	60	53	99	134	302	341	155	1,804

Intersection Number: 10
 Traffic Node Number: 119
 Intersection Name: Butterfield Boulevard and Main Avenue
 Peak Hour: PM
 Count Date: 5/8/18

Scenario:	Movements												Int. Total
	North Approach			East Approach			South Approach			West Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Counts	183	1088	111	36	179	61	89	309	190	239	266	87	2,838
Existing Conditions (with 1.5% compound growth if older than 2 years) (a)	192	1138	117	38	188	64	94	324	199	250	279	91	2,974
Approved Project Trips (b)	10	25	7	8	24	22	23	27	0	0	25	11	182
Proposed Project Trips (c)	9	18	3	3	21	17	23	22	0	0	28	12	156
Existing + Approved Project Conditions (a+b)	202	1163	124	46	212	86	117	351	199	250	304	102	3,156
Existing + Proposed Project Conditions (a+c)	201	1156	120	41	209	81	117	346	199	250	307	103	3,130
2015 Model (d)	239	935	239	70	80	111	121	447	204	304	125	183	3,058
2030 No Project Model (e)	268	1238	328	84	122	159	164	622	266	306	162	198	3,917
2030 No Project Conditions f=(a+MAX(e-d,0))	221	1441	206	52	230	112	137	499	261	252	316	106	3,833
2030 + Approved Project Conditions (f+b)	231	1466	213	60	254	134	160	526	261	252	341	117	4,015
2030 + Proposed Project Conditions (f+c)	230	1459	209	55	251	129	160	521	261	252	344	118	3,989
2035 GP No Project Model (g)	288	1030	144	47	163	185	194	527	279	311	184	178	3,530
2035 GP No Project Conditions (a+MAX(g-d,0))	241	1233	117	38	271	138	167	404	274	257	338	91	3,569
2035 GP + Project Model (h)	276	1036	145	46	169	192	192	528	278	304	182	181	3529
2035 GP + Project Conditions (a+MAX(h-d,0))	229	1239	117	38	277	145	165	405	273	250	336	91	3,565

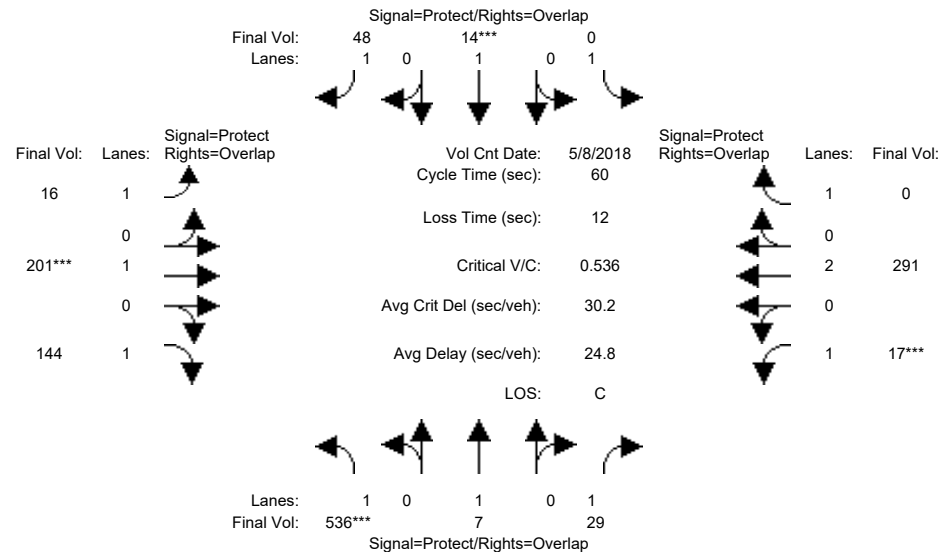
Appendix C

Level of Service Calculations

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #110: Mission View Drive and Cochrane Road

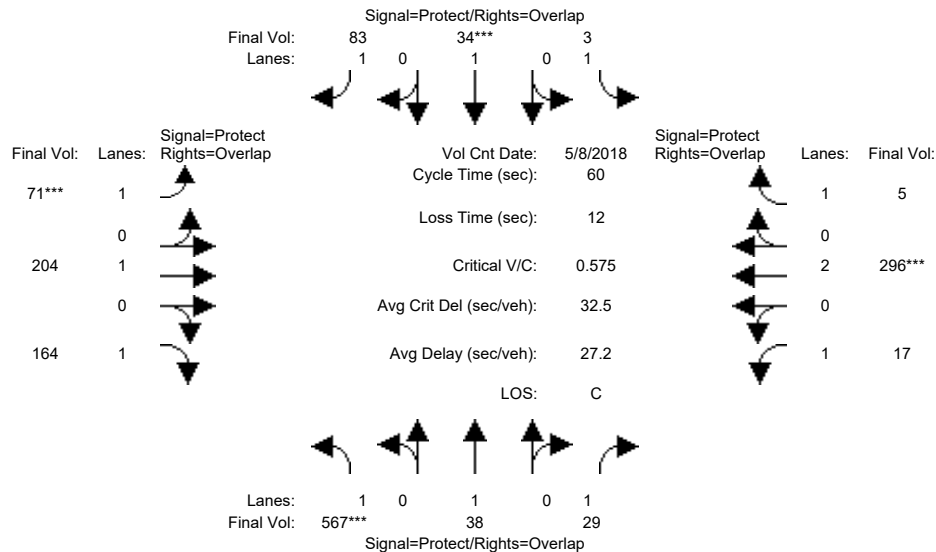


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	536	7	29	0	14	48	16	201	144	17	291	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:	536	7	29	0	14	48	16	201	144	17	291	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	536	7	29	0	14	48	16	201	144	17	291	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:	536	7	29	0	14	48	16	201	144	17	291	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	536	7	29	0	14	48	16	201	144	17	291	0
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:	536	7	29	0	14	48	16	201	144	17	291	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.31	0.00	0.02	0.00	0.01	0.03	0.01	0.11	0.08	0.01	0.08	0.00
Crit Moves:	***				***		***			***		
Green Time:	21.0	31.0	38.0	0.0	10.0	17.0	7.0	10.0	31.0	7.0	10.0	0.0
Volume/Cap:	0.88	0.01	0.03	0.00	0.04	0.10	0.08	0.63	0.16	0.08	0.46	0.00
Delay/Veh:	31.6	7.0	4.1	0.0	21.0	15.9	23.8	27.5	7.7	23.8	23.1	0.0
User DelAdj:	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:	31.6	7.0	4.1	0.0	21.0	15.9	23.8	27.5	7.7	23.8	23.1	0.0
LOS by Move:	C	A	A	A	C	B	C	C	A	C	C	A
HCM2k95thQ:	25	0	0	0	1	2	1	7	3	1	6	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #110: Mission View Drive and Cochrane Road

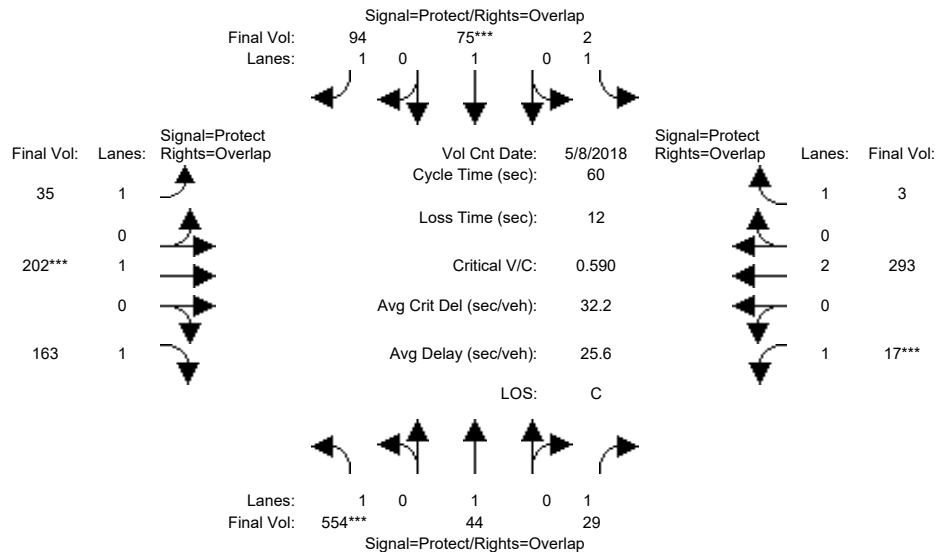


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	536	7	29	0	14	48	16	201	144	17	291	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:	536	7	29	0	14	48	16	201	144	17	291	0
Added Vol:	31	31	0	3	20	35	55	3	20	0	5	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	567	38	29	3	34	83	71	204	164	17	296	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:	567	38	29	3	34	83	71	204	164	17	296	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	567	38	29	3	34	83	71	204	164	17	296	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:	567	38	29	3	34	83	71	204	164	17	296	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.32	0.02	0.02	0.00	0.02	0.05	0.04	0.11	0.09	0.01	0.08	0.00
Crit Moves:	***				***		***				***	
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	0.93	0.07	0.04	0.01	0.11	0.17	0.35	0.64	0.18	0.08	0.47	0.01
Delay/Veh:	38.9	14.9	10.3	18.6	21.4	16.3	25.4	27.9	7.8	23.8	23.1	11.6
User DelAdj:	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:	38.9	14.9	10.3	18.6	21.4	16.3	25.4	27.9	7.8	23.8	23.1	11.6
LOS by Move:	D	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	28	1	1	0	1	3	3	7	3	1	6	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #110: Mission View Drive and Cochrane Road



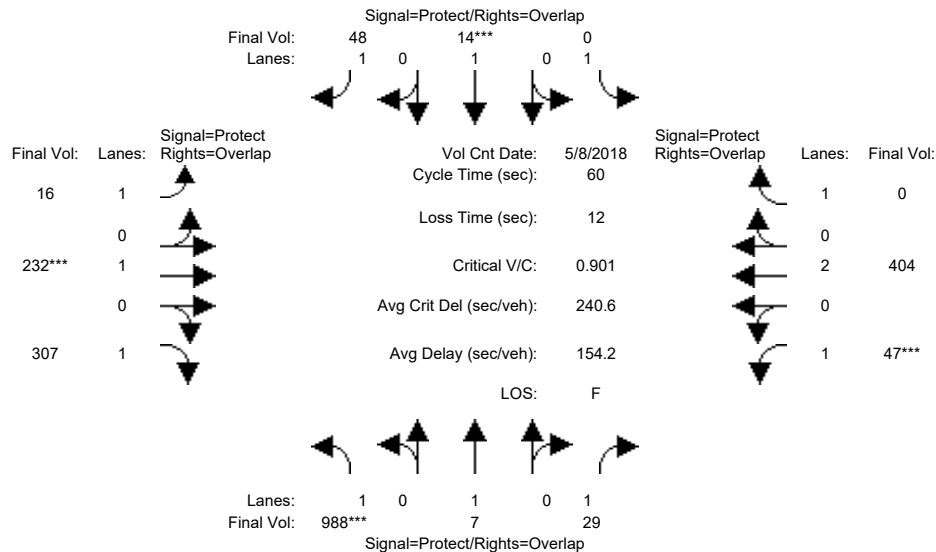
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	536	7	29	0	14	48	16	201	144	17	291	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:	536	7	29	0	14	48	16	201	144	17	291	0
Added Vol:	18	37	0	2	61	46	19	1	19	0	2	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	554	44	29	2	75	94	35	202	163	17	293	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:	554	44	29	2	75	94	35	202	163	17	293	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	554	44	29	2	75	94	35	202	163	17	293	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
Final Volume:	554	44	29	2	75	94	35	202	163	17	293	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.32	0.02	0.02	0.00	0.04	0.05	0.02	0.11	0.09	0.01	0.08	0.00
Crit Moves:	***			***			***			***		
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	0.90	0.08	0.04	0.01	0.24	0.19	0.17	0.64	0.18	0.08	0.46	0.00
Delay/Veh:	35.5	14.9	10.3	18.6	22.1	16.5	24.3	27.6	7.8	23.8	23.1	11.6
User DelAdj:	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:	35.5	14.9	10.3	18.6	22.1	16.5	24.3	27.6	7.8	23.8	23.1	11.6
LOS by Move:	D	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	27	1	1	0	3	3	1	7	3	1	6	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #110: Mission View Drive and Cochrane Road

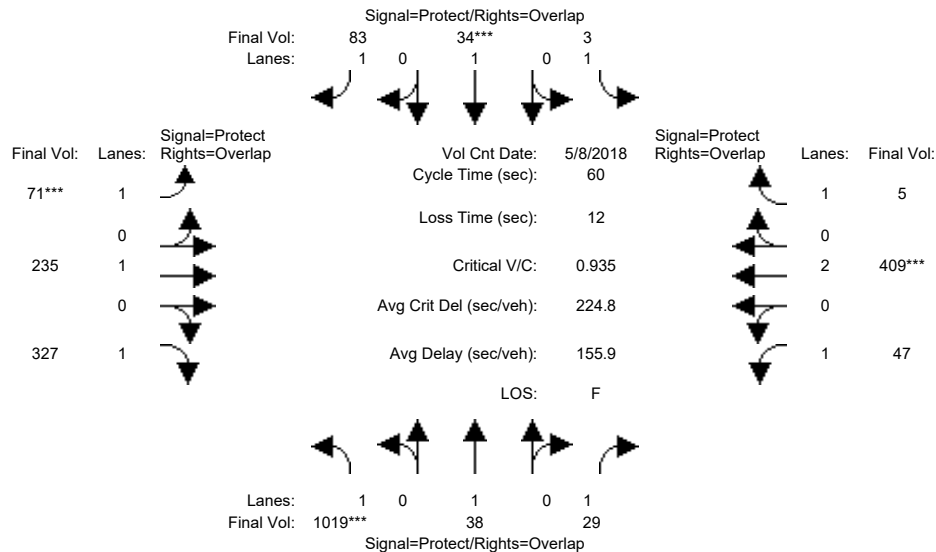


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	988	7	29	0	14	48	16	232	307	47	404	0
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:	988	7	29	0	14	48	16	232	307	47	404	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.56	0.00	0.02	0.00	0.01	0.03	0.01	0.12	0.18	0.03	0.11	0.00
Crit Moves:	***				***			***		***		
Green Time:	21.0	31.0	38.0	0.0	10.0	17.0	7.0	10.0	31.0	7.0	10.0	0.0
Volume/Cap:	1.61	0.01	0.03	0.00	0.04	0.10	0.08	0.73	0.34	0.23	0.64	0.00
Delay/Veh:	302.9	7.0	4.1	0.0	21.0	15.9	23.8	32.3	8.7	24.6	25.5	0.0
User DelAdj:	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:	302.9	7.0	4.1	0.0	21.0	15.9	23.8	32.3	8.7	24.6	25.5	0.0
LOS by Move:	F	A	A	A	C	B	C	C	A	C	C	A
HCM2k95thQ:	108	0	0	0	1	2	1	8	7	2	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #110: Mission View Drive and Cochrane Road



Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Added Vol:	31	31	0	3	20	35	55	3	20	0	5	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1019	38	29	3	34	83	71	235	327	47	409	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:	1019	38	29	3	34	83	71	235	327	47	409	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1019	38	29	3	34	83	71	235	327	47	409	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:	1019	38	29	3	34	83	71	235	327	47	409	5

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750

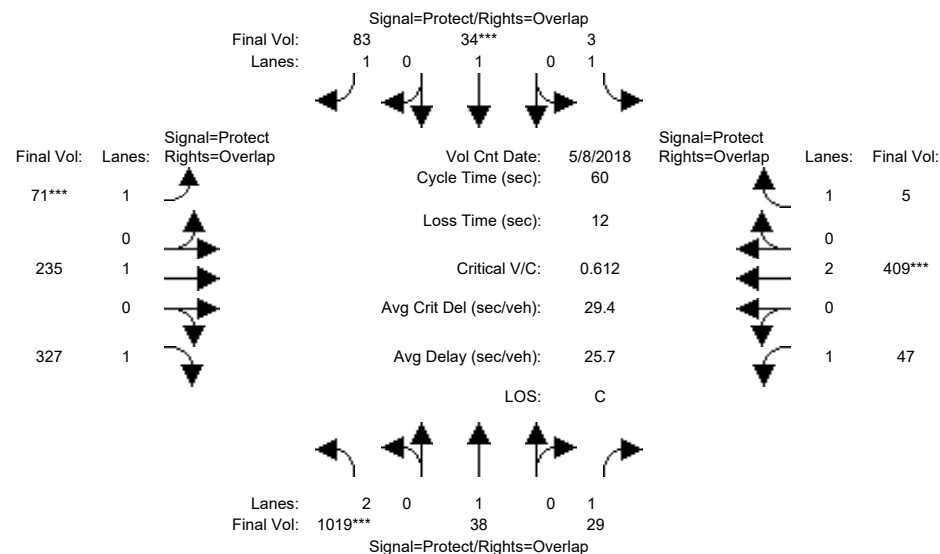
Capacity Analysis Module:												
Vol/Sat:	0.58	0.02	0.02	0.00	0.02	0.05	0.04	0.12	0.19	0.03	0.11	0.00
Crit Moves:	***				***		***				***	
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	1.66	0.07	0.04	0.01	0.11	0.17	0.35	0.74	0.36	0.23	0.65	0.01
Delay/Veh:	325.3	14.9	10.3	18.6	21.4	16.3	25.4	32.9	8.9	24.6	25.7	11.6
User DelAdj:	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:	325.3	14.9	10.3	18.6	21.4	16.3	25.4	32.9	8.9	24.6	25.7	11.6
LOS by Move:	F	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	115	1	1	0	1	3	3	9	7	2	9	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM (Miti)

Intersection #110: Mission View Drive and Cochrane Road



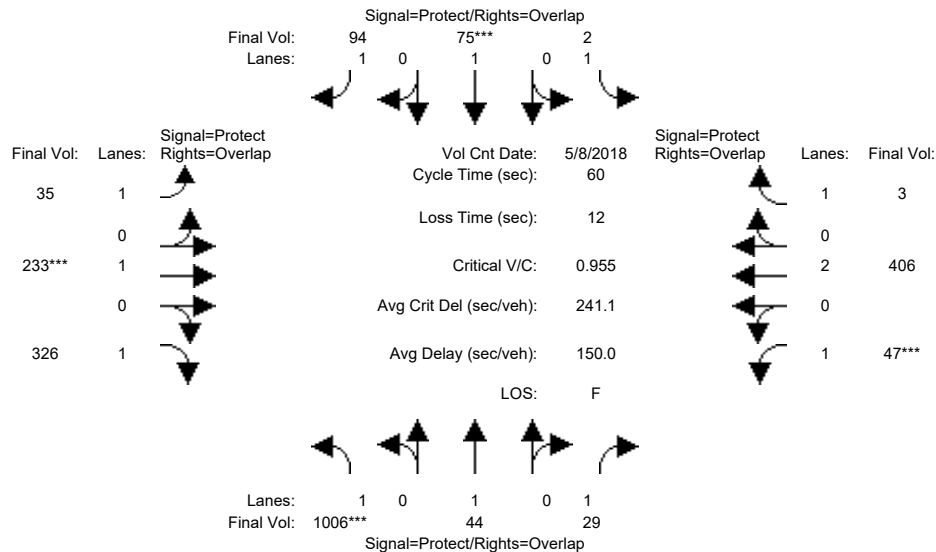
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Added Vol:	31	31	0	3	20	35	55	3	20	0	5	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1019	38	29	3	34	83	71	235	327	47	409	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:	1019	38	29	3	34	83	71	235	327	47	409	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1019	38	29	3	34	83	71	235	327	47	409	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
Final Volume:	1019	38	29	3	34	83	71	235	327	47	409	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.32	0.02	0.02	0.00	0.02	0.05	0.04	0.12	0.19	0.03	0.11	0.00
Crit Moves:	****				****		****				****	
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	0.92	0.07	0.04	0.01	0.11	0.17	0.35	0.74	0.36	0.23	0.65	0.01
Delay/Veh:	31.5	14.9	10.3	18.6	21.4	16.3	25.4	32.9	8.9	24.6	25.7	11.6
User DelAdj:	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:	31.5	14.9	10.3	18.6	21.4	16.3	25.4	32.9	8.9	24.6	25.7	11.6
LOS by Move:	C	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	28	1	1	0	1	3	3	9	7	2	9	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #110: Mission View Drive and Cochrane Road

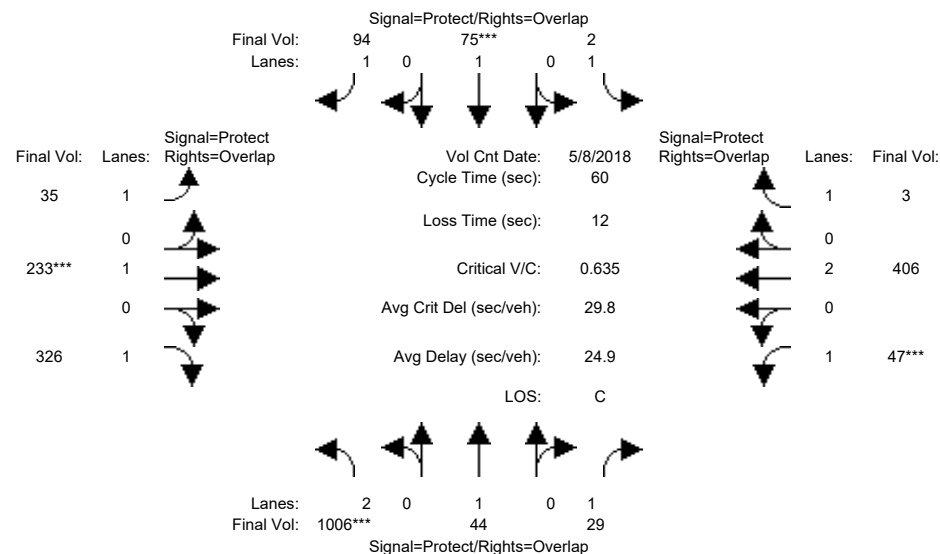


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Added Vol:	18	37	0	2	61	46	19	1	19	0	2	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1006	44	29	2	75	94	35	233	326	47	406	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:	1006	44	29	2	75	94	35	233	326	47	406	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1006	44	29	2	75	94	35	233	326	47	406	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:	1006	44	29	2	75	94	35	233	326	47	406	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.57	0.02	0.02	0.00	0.04	0.05	0.02	0.12	0.19	0.03	0.11	0.00
Crit Moves:	***			***			***			***		
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	1.64	0.08	0.04	0.01	0.24	0.19	0.17	0.74	0.36	0.23	0.64	0.00
Delay/Veh:	315.9	14.9	10.3	18.6	22.1	16.5	24.3	32.4	8.9	24.6	25.6	11.6
User DelAdj:	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:	315.9	14.9	10.3	18.6	22.1	16.5	24.3	32.4	8.9	24.6	25.6	11.6
LOS by Move:	F	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	112	1	1	0	3	3	1	8	7	2	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM (Miti)

Intersection #110: Mission View Drive and Cochrane Road



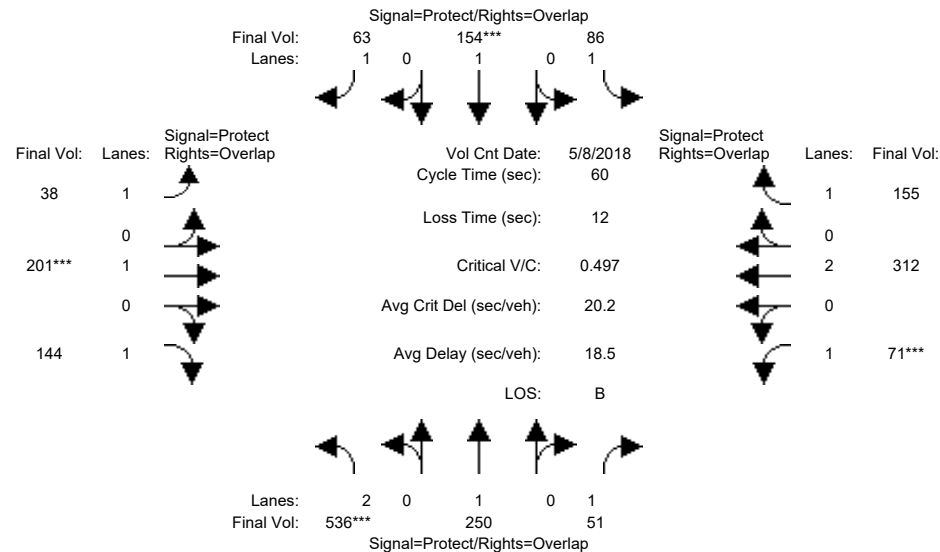
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	988	7	29	0	14	48	16	232	307	47	404	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:	988	7	29	0	14	48	16	232	307	47	404	0
Added Vol:	18	37	0	2	61	46	19	1	19	0	2	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1006	44	29	2	75	94	35	233	326	47	406	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:	1006	44	29	2	75	94	35	233	326	47	406	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1006	44	29	2	75	94	35	233	326	47	406	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:	1006	44	29	2	75	94	35	233	326	47	406	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.32	0.02	0.02	0.00	0.04	0.05	0.02	0.12	0.19	0.03	0.11	0.00
Crit Moves:	****				****		****			****		
Green Time:	21.0	18.2	25.2	12.8	10.0	17.0	7.0	10.0	31.0	7.0	10.0	22.8
Volume/Cap:	0.91	0.08	0.04	0.01	0.24	0.19	0.17	0.74	0.36	0.23	0.64	0.00
Delay/Veh:	30.0	14.9	10.3	18.6	22.1	16.5	24.3	32.4	8.9	24.6	25.6	11.6
User DelAdj:	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:	30.0	14.9	10.3	18.6	22.1	16.5	24.3	32.4	8.9	24.6	25.6	11.6
LOS by Move:	C	B	B	B	C	B	C	C	A	C	C	B
HCM2k95thQ:	27	1	1	0	3	3	1	8	7	2	9	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #110: Mission View Drive and Cochrane Road



Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	536	250	51	86	154	63	38	201	144	71	312	155
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:	536	250	51	86	154	63	38	201	144	71	312	155
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	536	250	51	86	154	63	38	201	144	71	312	155
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:	536	250	51	86	154	63	38	201	144	71	312	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	536	250	51	86	154	63	38	201	144	71	312	155
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
Final Volume:	536	250	51	86	154	63	38	201	144	71	312	155

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750

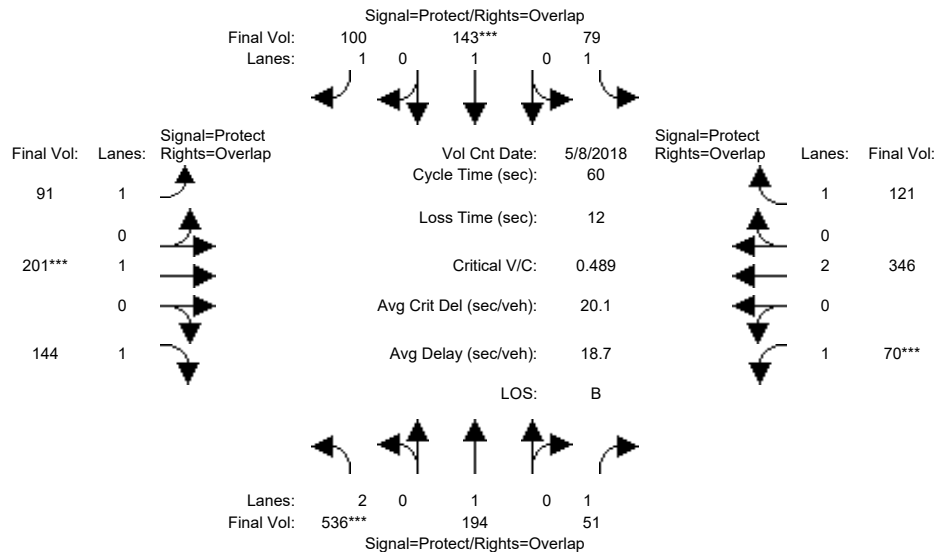
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.03	0.05	0.08	0.04	0.02	0.11	0.08	0.04	0.08	0.09
Crit Moves:	***			***			***			***		
Green Time:	19.1	17.1	24.1	12.0	10.0	17.8	7.8	11.9	31.0	7.0	11.1	23.1
Volume/Cap:	0.53	0.46	0.07	0.25	0.49	0.12	0.17	0.53	0.16	0.35	0.44	0.23
Delay/Veh:	17.3	18.3	11.1	20.6	23.8	15.5	23.6	23.1	7.7	25.4	22.1	12.6
User DelAdj:	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:	17.3	18.3	11.1	20.6	23.8	15.5	23.6	23.1	7.7	25.4	22.1	12.6
LOS by Move:	B	B	B	C	C	B	C	C	A	C	C	B
HCM2k95thQ:	11	8	1	3	6	2	1	7	3	3	6	4

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #110: Mission View Drive and Cochrane Road



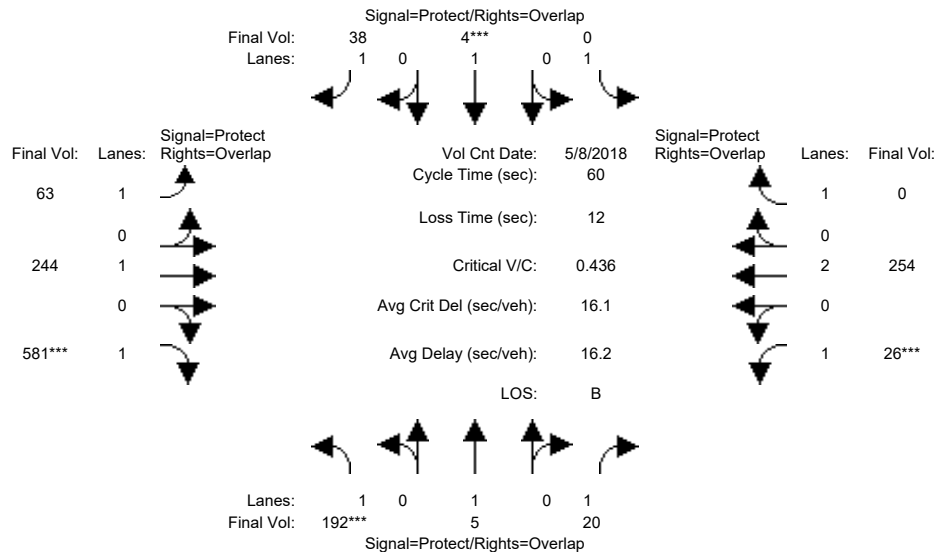
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	536	194	51	79	143	100	91	201	144	70	346	121
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:	536	194	51	79	143	100	91	201	144	70	346	121
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	536	194	51	79	143	100	91	201	144	70	346	121
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:	536	194	51	79	143	100	91	201	144	70	346	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	536	194	51	79	143	100	91	201	144	70	346	121
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
Final Volume:	536	194	51	79	143	100	91	201	144	70	346	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.17	0.10	0.03	0.05	0.08	0.06	0.05	0.11	0.08	0.04	0.09	0.07
Crit Moves:	***			***			***			***		
Green Time:	19.1	17.1	24.1	12.0	10.0	17.8	7.8	11.9	31.0	7.0	11.1	23.1
Volume/Cap:	0.53	0.36	0.07	0.23	0.45	0.19	0.40	0.53	0.16	0.34	0.49	0.18
Delay/Veh:	17.3	17.5	11.1	20.4	23.6	15.9	25.1	23.1	7.7	25.4	22.5	12.3
User DelAdj:	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:	17.3	17.5	11.1	20.4	23.6	15.9	25.1	23.1	7.7	25.4	22.5	12.3
LOS by Move:	B	B	B	C	C	B	C	C	A	C	C	B
HCM2k95thQ:	11	6	1	3	6	3	3	7	3	3	7	3

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #110: Mission View Drive and Cochrane Road



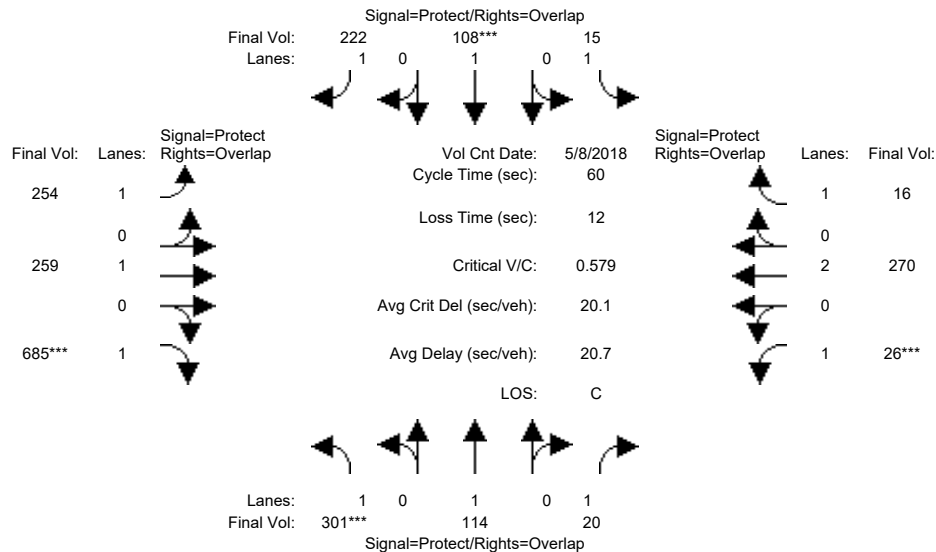
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	192	5	20	0	4	38	63	244	581	26	254	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:	192	5	20	0	4	38	63	244	581	26	254	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	5	20	0	4	38	63	244	581	26	254	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:	192	5	20	0	4	38	63	244	581	26	254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	192	5	20	0	4	38	63	244	581	26	254	0
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:	192	5	20	0	4	38	63	244	581	26	254	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.01	0.00	0.00	0.02	0.04	0.13	0.33	0.01	0.07	0.00
Crit Moves:	***				***				***	***		
Green Time:	10.5	20.5	27.5	0.0	10.0	21.3	11.3	20.5	31.0	7.0	16.2	0.0
Volume/Cap:	0.63	0.01	0.02	0.00	0.01	0.06	0.19	0.38	0.64	0.13	0.25	0.00
Delay/Veh:	27.1	13.1	8.9	0.0	20.9	12.8	20.8	15.3	12.1	24.0	17.3	0.0
User DelAdj:	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:	27.1	13.1	8.9	0.0	20.9	12.8	20.8	15.3	12.1	24.0	17.3	0.0
LOS by Move:	C	B	A	A	C	B	C	B	B	C	B	A
HCM2k95thQ:	9	0	0	0	0	1	2	7	16	1	4	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #110: Mission View Drive and Cochrane Road



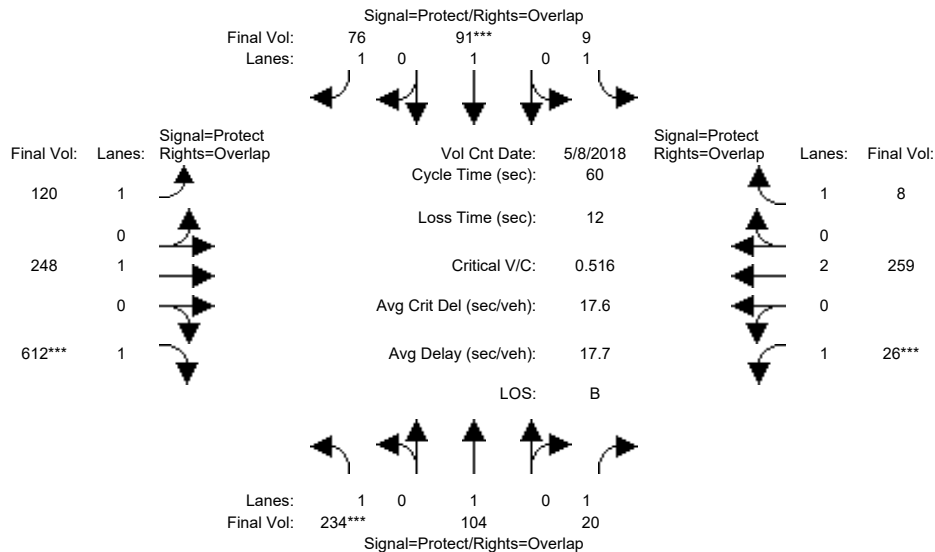
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	192	5	20	0	4	38	63	244	581	26	254	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:	192	5	20	0	4	38	63	244	581	26	254	0
Added Vol:	109	109	0	15	104	184	191	15	104	0	16	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	301	114	20	15	108	222	254	259	685	26	270	16
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:	301	114	20	15	108	222	254	259	685	26	270	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	114	20	15	108	222	254	259	685	26	270	16
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
Final Volume:	301	114	20	15	108	222	254	259	685	26	270	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.17	0.06	0.01	0.01	0.06	0.13	0.15	0.14	0.39	0.01	0.07	0.01
Crit Moves:	***				***				***	***		
Green Time:	13.6	13.9	20.9	9.7	10.0	21.3	11.3	17.4	31.0	7.0	13.0	22.8
Volume/Cap:	0.76	0.26	0.03	0.05	0.34	0.36	0.77	0.47	0.76	0.13	0.33	0.02
Delay/Veh:	29.8	19.2	12.9	21.3	22.7	14.6	33.4	18.2	15.2	24.0	20.0	11.7
User DelAdj:	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:	29.8	19.2	12.9	21.3	22.7	14.6	33.4	18.2	15.2	24.0	20.0	11.7
LOS by Move:	C	B	B	C	C	B	C	B	B	C	C	B
HCM2k95thQ:	15	4	1	1	4	7	10	7	20	1	5	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #110: Mission View Drive and Cochrane Road

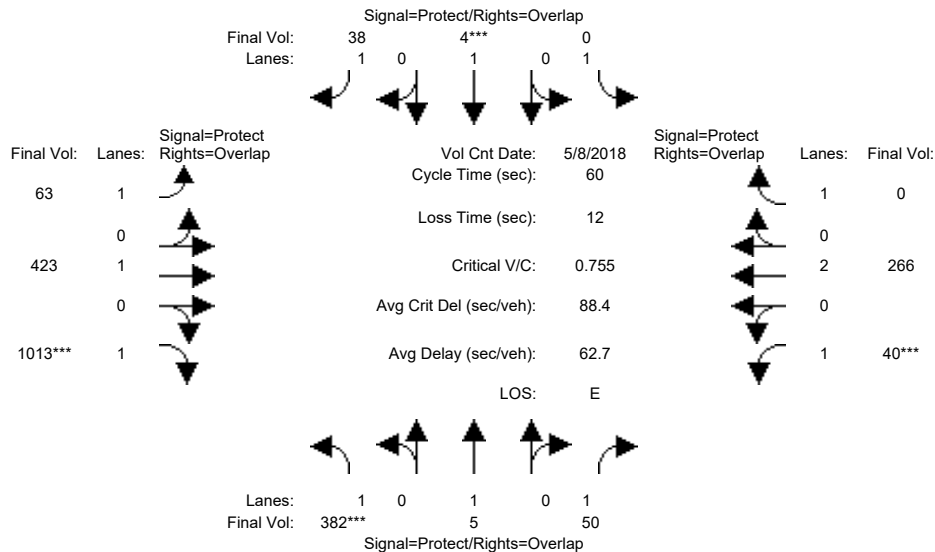


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	192	5	20	0	4	38	63	244	581	26	254	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:	192	5	20	0	4	38	63	244	581	26	254	0
Added Vol:	42	99	0	9	87	38	57	4	31	0	5	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	234	104	20	9	91	76	120	248	612	26	259	8
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:	234	104	20	9	91	76	120	248	612	26	259	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	104	20	9	91	76	120	248	612	26	259	8
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
Final Volume:	234	104	20	9	91	76	120	248	612	26	259	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.05	0.01	0.01	0.05	0.04	0.07	0.13	0.35	0.01	0.07	0.00
Crit Moves:	***				***				***	***		
Green Time:	11.9	12.9	19.9	9.0	10.0	20.8	10.8	19.1	31.0	7.0	15.4	24.4
Volume/Cap:	0.68	0.26	0.03	0.03	0.29	0.13	0.38	0.41	0.68	0.13	0.27	0.01
Delay/Veh:	27.6	19.9	13.6	21.8	22.4	13.5	22.5	16.4	12.8	24.0	18.0	10.6
User DelAdj:	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:	27.6	19.9	13.6	21.8	22.4	13.5	22.5	16.4	12.8	24.0	18.0	10.6
LOS by Move:	C	B	B	C	C	B	C	B	B	C	B	B
HCM2k95thQ:	11	4	1	0	4	2	4	7	17	1	4	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #110: Mission View Drive and Cochrane Road



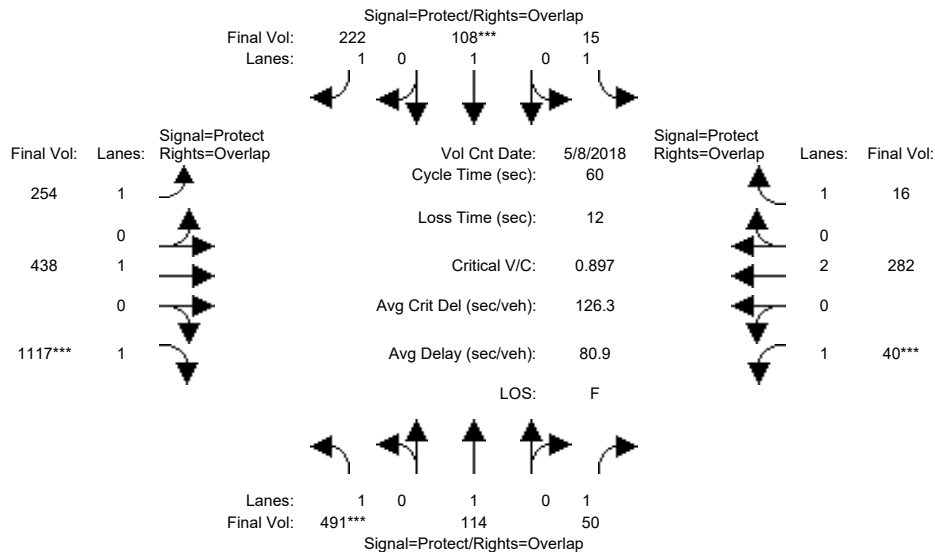
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	382	5	50	0	4	38	63	423	1013	40	266	0
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:	382	5	50	0	4	38	63	423	1013	40	266	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.03	0.00	0.00	0.02	0.04	0.22	0.58	0.02	0.07	0.00
Crit Moves:	***			***			***		***	***		
Green Time:	11.7	21.7	28.7	0.0	10.0	20.8	10.8	19.3	31.0	7.0	15.5	0.0
Volume/Cap:	1.12	0.01	0.06	0.00	0.01	0.06	0.20	0.69	1.12	0.20	0.27	0.00
Delay/Veh:	109.5	12.3	8.4	0.0	20.9	13.1	21.2	21.1	83.3	24.4	17.9	0.0
User DelAdj:	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:	109.5	12.3	8.4	0.0	20.9	13.1	21.2	21.1	83.3	24.4	17.9	0.0
LOS by Move:	F	B	A	A	C	B	C	C	F	C	B	A
HCM2k95thQ:	30	0	1	0	0	1	2	13	56	2	4	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #110: Mission View Drive and Cochrane Road

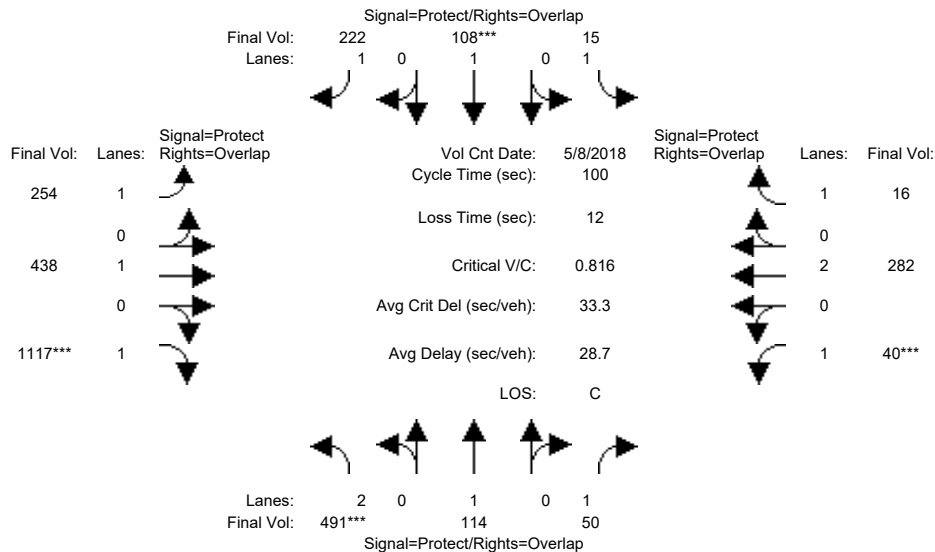


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Added Vol:	109	109	0	15	104	184	191	15	104	0	16	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	491	114	50	15	108	222	254	438	1117	40	282	16
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:	491	114	50	15	108	222	254	438	1117	40	282	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	491	114	50	15	108	222	254	438	1117	40	282	16
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
Final Volume:	491	114	50	15	108	222	254	438	1117	40	282	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.28	0.06	0.03	0.01	0.06	0.13	0.15	0.23	0.64	0.02	0.07	0.01
Crit Moves:	***				***				***	***		
Green Time:	13.6	13.9	20.9	9.7	10.0	21.3	11.3	17.4	31.0	7.0	13.0	22.8
Volume/Cap:	1.24	0.26	0.08	0.05	0.34	0.36	0.77	0.80	1.24	0.20	0.34	0.02
Delay/Veh:	149.1	19.2	13.2	21.3	22.7	14.6	33.4	27.6	130.0	24.4	20.1	11.7
User DelAdj:	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:	149.1	19.2	13.2	21.3	22.7	14.6	33.4	27.6	130.0	24.4	20.1	11.7
LOS by Move:	F	B	B	C	C	B	C	C	F	C	C	B
HCM2k95thQ:	42	4	1	1	4	7	9	13	76	2	5	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM (Miti)

Intersection #110: Mission View Drive and Cochrane Road



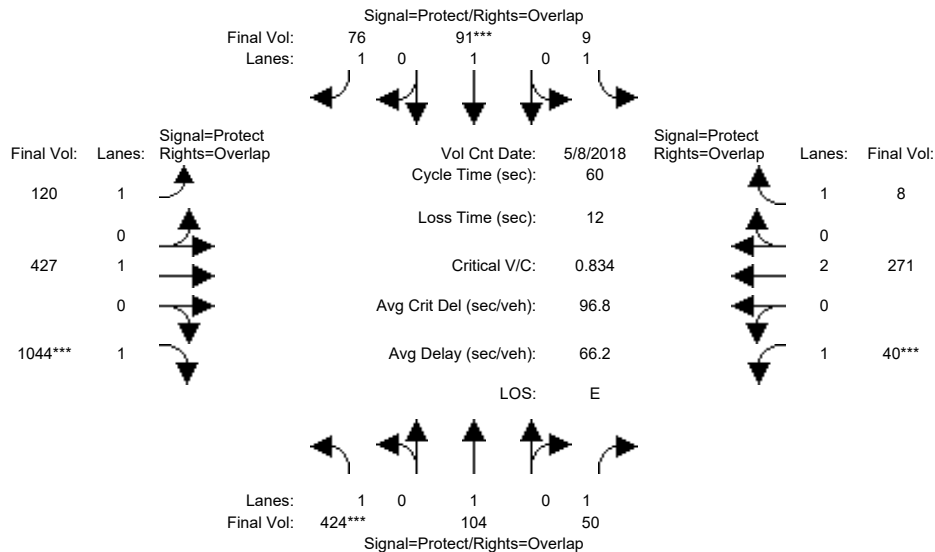
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Added Vol:	109	109	0	15	104	184	191	15	104	0	16	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	491	114	50	15	108	222	254	438	1117	40	282	16
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:	491	114	50	15	108	222	254	438	1117	40	282	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	491	114	50	15	108	222	254	438	1117	40	282	16
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
Final Volume:	491	114	50	15	108	222	254	438	1117	40	282	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.06	0.03	0.01	0.06	0.13	0.15	0.23	0.64	0.02	0.07	0.01
Crit Moves:	***				***				***	***		
Green Time:	17.3	16.1	23.1	11.3	10.0	45.9	35.9	53.7	71.0	7.0	24.7	36.0
Volume/Cap:	0.90	0.37	0.12	0.08	0.57	0.28	0.40	0.43	0.90	0.33	0.30	0.03
Delay/Veh:	58.2	38.2	30.6	39.9	47.0	16.9	24.4	14.2	20.6	45.8	30.8	20.7
User DelAdj:	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:	58.2	38.2	30.6	39.9	47.0	16.9	24.4	14.2	20.6	45.8	30.8	20.7
LOS by Move:	E	D	C	D	D	B	C	B	C	D	C	C
HCM2k95thQ:	22	7	3	1	8	9	11	14	45	3	7	1

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #110: Mission View Drive and Cochrane Road

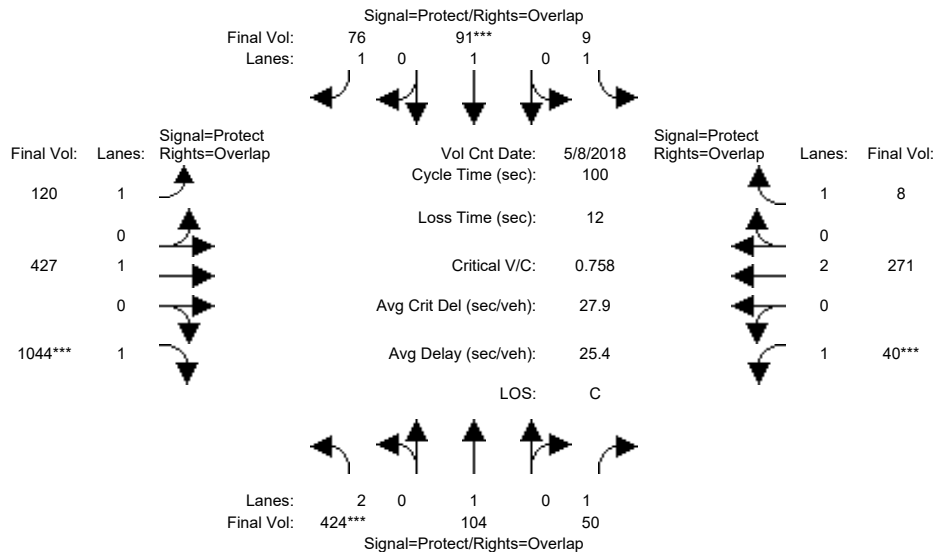


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Added Vol:	42	99	0	9	87	38	57	4	31	0	5	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	104	50	9	91	76	120	427	1044	40	271	8
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:	424	104	50	9	91	76	120	427	1044	40	271	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	424	104	50	9	91	76	120	427	1044	40	271	8
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
Final Volume:	424	104	50	9	91	76	120	427	1044	40	271	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.24	0.05	0.03	0.01	0.05	0.04	0.07	0.22	0.60	0.02	0.07	0.00
Crit Moves:	***			***			***		***	***		
Green Time:	12.6	13.3	20.3	9.3	10.0	20.5	10.5	18.4	31.0	7.0	14.9	24.2
Volume/Cap:	1.15	0.25	0.08	0.03	0.29	0.13	0.39	0.73	1.15	0.20	0.29	0.01
Delay/Veh:	119.8	19.5	13.6	21.6	22.4	13.7	22.8	23.4	96.7	24.4	18.4	10.7
User DelAdj:	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:	119.8	19.5	13.6	21.6	22.4	13.7	22.8	23.4	96.7	24.4	18.4	10.7
LOS by Move:	F	B	B	C	C	B	C	C	F	C	B	B
HCM2k95thQ:	34	4	1	0	4	2	4	13	61	2	5	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM (Miti)

Intersection #110: Mission View Drive and Cochrane Road

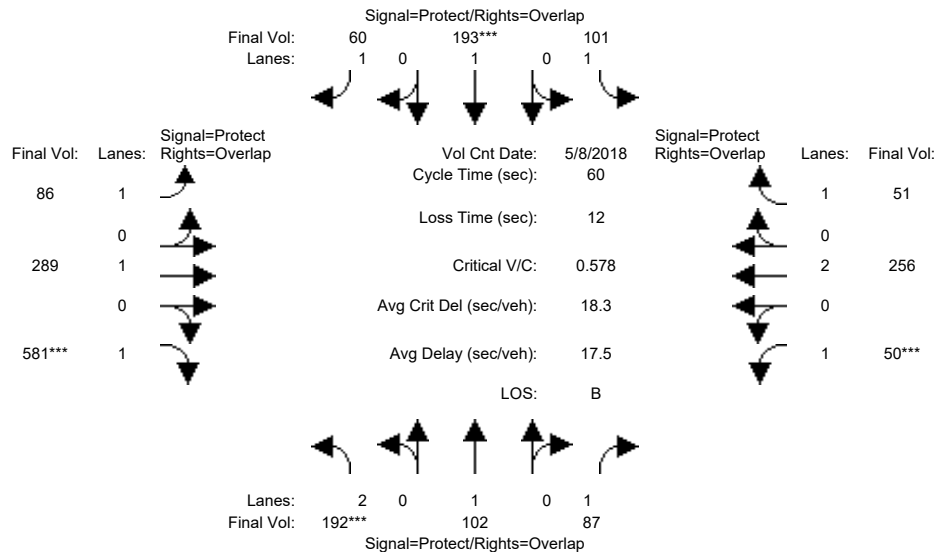


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	382	5	50	0	4	38	63	423	1013	40	266	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:	382	5	50	0	4	38	63	423	1013	40	266	0
Added Vol:	42	99	0	9	87	38	57	4	31	0	5	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	424	104	50	9	91	76	120	427	1044	40	271	8
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:	424	104	50	9	91	76	120	427	1044	40	271	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	424	104	50	9	91	76	120	427	1044	40	271	8
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
Final Volume:	424	104	50	9	91	76	120	427	1044	40	271	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.05	0.03	0.01	0.05	0.04	0.07	0.22	0.60	0.02	0.07	0.00
Crit Moves:	***				***				***	***		
Green Time:	16.0	15.3	22.3	10.7	10.0	35.5	25.5	55.0	71.0	7.0	36.5	47.2
Volume/Cap:	0.84	0.36	0.13	0.05	0.48	0.12	0.27	0.41	0.84	0.33	0.20	0.01
Delay/Veh:	52.7	38.7	31.2	40.2	44.4	21.8	30.1	13.3	15.7	45.8	21.8	14.0
User DelAdj:	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:	52.7	38.7	31.2	40.2	44.4	21.8	30.1	13.3	15.7	45.8	21.8	14.0
LOS by Move:	D	D	C	D	D	C	C	B	B	D	C	B
HCM2k95thQ:	19	6	3	1	7	3	6	13	40	3	6	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #110: Mission View Drive and Cochrane Road



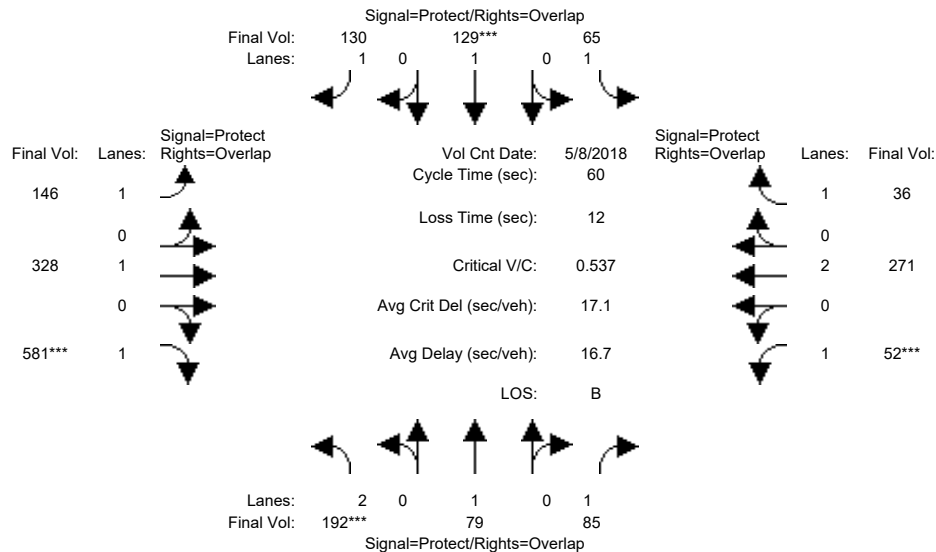
Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	192	102	87	101	193	60	86	289	581	50	256	51
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:	192	102	87	101	193	60	86	289	581	50	256	51
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	102	87	101	193	60	86	289	581	50	256	51
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:	192	102	87	101	193	60	86	289	581	50	256	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	192	102	87	101	193	60	86	289	581	50	256	51
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:	192	102	87	101	193	60	86	289	581	50	256	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.05	0.06	0.10	0.03	0.05	0.15	0.33	0.03	0.07	0.03
Crit Moves:	***				***				***	***		
Green Time:	7.0	10.5	17.5	7.4	10.9	23.3	12.4	23.1	30.1	7.0	17.7	25.1
Volume/Cap:	0.52	0.31	0.17	0.47	0.56	0.09	0.24	0.40	0.66	0.24	0.23	0.07
Delay/Veh:	26.3	22.1	16.0	26.1	24.4	11.7	20.2	13.7	13.0	24.7	16.1	10.5
User DelAdj:	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:	26.3	22.1	16.0	26.1	24.4	11.7	20.2	13.7	13.0	24.7	16.1	10.5
LOS by Move:	C	C	B	C	C	B	C	B	B	C	B	B
HCM2k95thQ:	6	4	3	5	8	2	3	7	16	2	4	1

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #110: Mission View Drive and Cochrane Road

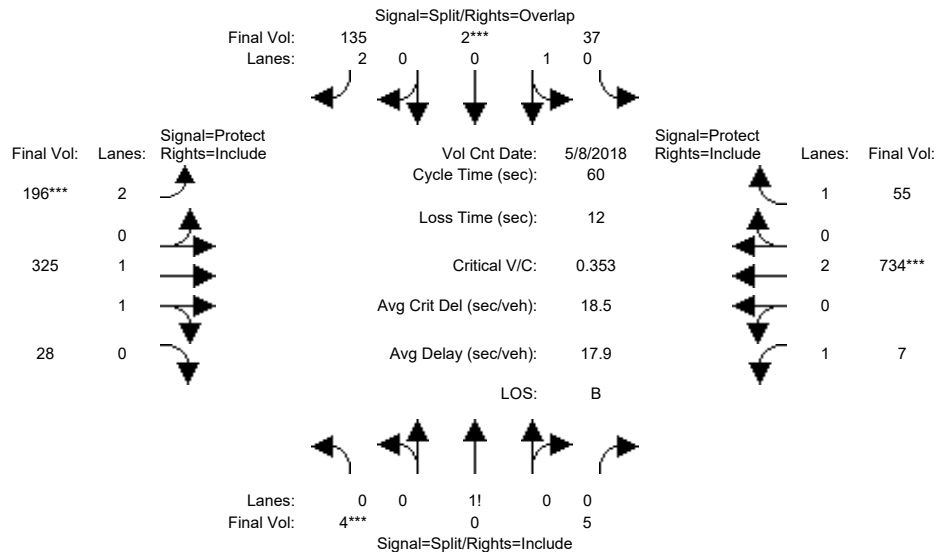


Street Name:	Mission View Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	192	79	85	65	129	130	146	328	581	52	271	36
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:	192	79	85	65	129	130	146	328	581	52	271	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	192	79	85	65	129	130	146	328	581	52	271	36
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:	192	79	85	65	129	130	146	328	581	52	271	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	192	79	85	65	129	130	146	328	581	52	271	36
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
Final Volume:	192	79	85	65	129	130	146	328	581	52	271	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	1900	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.04	0.05	0.04	0.07	0.07	0.08	0.17	0.33	0.03	0.07	0.02
Crit Moves:	***			***			***		***	***		
Green Time:	7.0	10.0	17.0	7.0	10.0	22.8	12.8	24.0	31.0	7.0	18.2	25.2
Volume/Cap:	0.52	0.25	0.17	0.32	0.41	0.20	0.39	0.43	0.64	0.25	0.23	0.05
Delay/Veh:	26.3	22.2	16.4	25.2	23.2	12.6	21.0	13.4	12.1	24.8	15.8	10.3
User DelAdj:	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:	26.3	22.2	16.4	25.2	23.2	12.6	21.0	13.4	12.1	24.8	15.8	10.3
LOS by Move:	C	C	B	C	C	B	C	B	B	C	B	B
HCM2k95thQ:	6	3	3	3	5	4	5	8	16	2	4	1
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #109: De Paul Drive and Cochrane Road

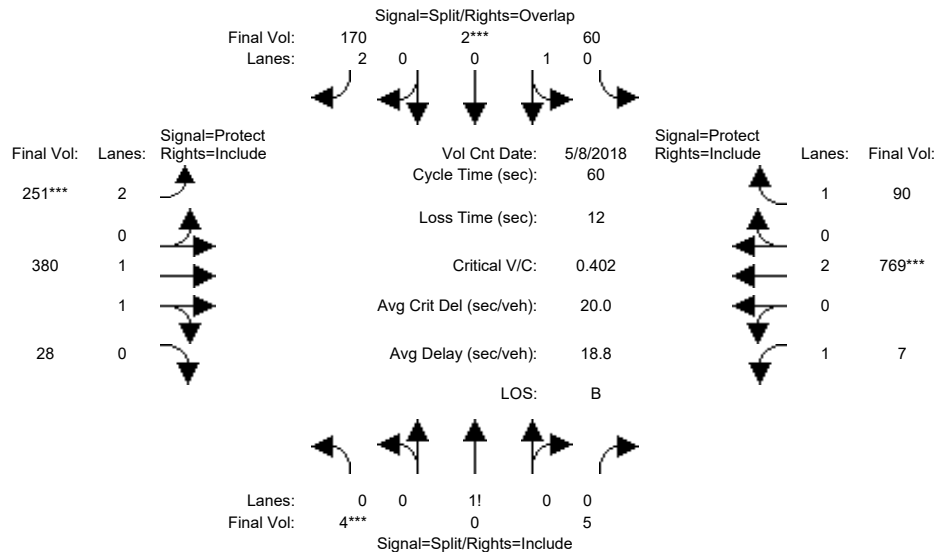


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	0	5	37	2	135	196	325	28	7	734	55
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:	4	0	5	37	2	135	196	325	28	7	734	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	5	37	2	135	196	325	28	7	734	55
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:	4	0	5	37	2	135	196	325	28	7	734	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	0	5	37	2	135	196	325	28	7	734	55
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
Final Volume:	4	0	5	37	2	135	196	325	28	7	734	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.44	0.00	0.56	0.95	0.05	2.00	2.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	778	0	972	1708	92	3150	3150	3406	293	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.02	0.02	0.04	0.06	0.10	0.10	0.00	0.19	0.03
Crit Moves:	***			***			***			***		
Green Time:	10.0	0.0	10.0	10.0	10.0	17.0	7.0	16.5	16.5	11.5	21.0	21.0
Volume/Cap:	0.03	0.00	0.03	0.13	0.13	0.15	0.53	0.35	0.35	0.02	0.55	0.09
Delay/Veh:	21.0	0.0	21.0	21.5	21.5	16.2	26.5	17.7	17.7	19.7	16.2	13.2
User DelAdj:	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:	21.0	0.0	21.0	21.5	21.5	16.2	26.5	17.7	17.7	19.7	16.2	13.2
LOS by Move:	C	A	C	C	C	B	C	B	B	B	B	B
HCM2k95thQ:	0	0	0	2	2	2	6	6	6	0	10	1
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #109: De Paul Drive and Cochrane Road

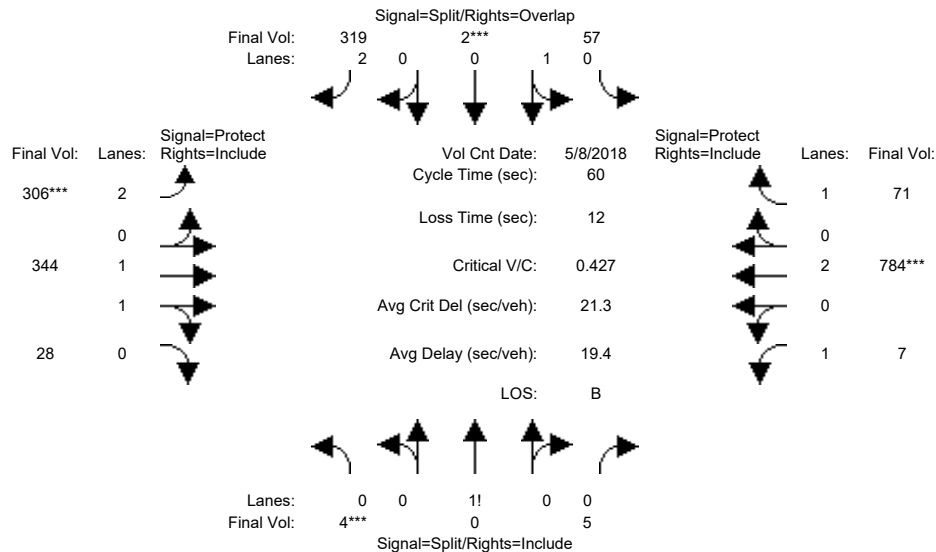


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	0	5	37	2	135	196	325	28	7	734	55
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:	4	0	5	37	2	135	196	325	28	7	734	55
Added Vol:	0	0	0	23	0	35	55	55	0	0	35	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	5	60	2	170	251	380	28	7	769	90
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:	4	0	5	60	2	170	251	380	28	7	769	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	0	5	60	2	170	251	380	28	7	769	90
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
Final Volume:	4	0	5	60	2	170	251	380	28	7	769	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.44	0.00	0.56	0.97	0.03	2.00	2.00	1.86	0.14	1.00	2.00	1.00
Final Sat.:	778	0	972	1742	58	3150	3150	3446	254	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.03	0.03	0.05	0.08	0.11	0.11	0.00	0.20	0.05
Crit Moves:	***			***			***			***		
Green Time:	10.0	0.0	10.0	10.0	10.0	17.9	7.9	16.5	16.5	11.5	20.1	20.1
Volume/Cap:	0.03	0.00	0.03	0.21	0.21	0.18	0.60	0.40	0.40	0.02	0.60	0.15
Delay/Veh:	21.0	0.0	21.0	21.9	21.9	15.7	27.1	18.0	18.0	19.7	17.5	14.1
User DelAdj:	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:	21.0	0.0	21.0	21.9	21.9	15.7	27.1	18.0	18.0	19.7	17.5	14.1
LOS by Move:	C	A	C	C	C	B	C	B	B	B	B	B
HCM2k95thQ:	0	0	0	2	2	3	7	7	7	0	11	2
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #109: De Paul Drive and Cochrane Road

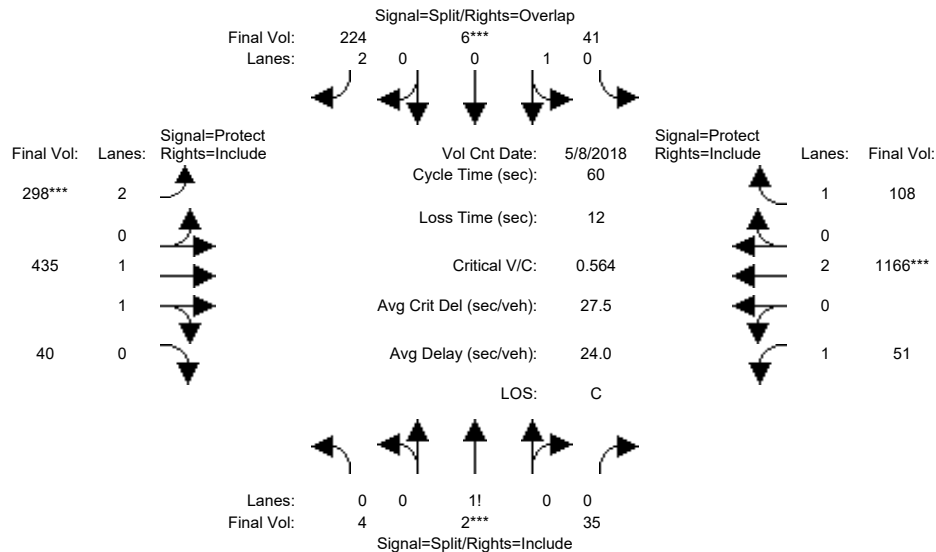


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	0	5	37	2	135	196	325	28	7	734	55
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:	4	0	5	37	2	135	196	325	28	7	734	55
Added Vol:	0	0	0	20	0	184	110	19	0	0	50	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	0	5	57	2	319	306	344	28	7	784	71
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:	4	0	5	57	2	319	306	344	28	7	784	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	0	5	57	2	319	306	344	28	7	784	71
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:	4	0	5	57	2	319	306	344	28	7	784	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.44	0.00	0.56	0.97	0.03	2.00	2.00	1.85	0.15	1.00	2.00	1.00
Final Sat.:	778	0	972	1739	61	3150	3150	3421	278	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.03	0.03	0.10	0.10	0.10	0.10	0.00	0.21	0.04
Crit Moves:	***			***			***			***		
Green Time:	10.0	0.0	10.0	10.0	10.0	19.0	9.0	16.5	16.5	11.5	19.0	19.0
Volume/Cap:	0.03	0.00	0.03	0.20	0.20	0.32	0.65	0.37	0.37	0.02	0.65	0.13
Delay/Veh:	21.0	0.0	21.0	21.9	21.9	15.8	27.3	17.8	17.8	19.7	18.9	14.7
User DelAdj:	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:	21.0	0.0	21.0	21.9	21.9	15.8	27.3	17.8	17.8	19.7	18.9	14.7
LOS by Move:	C	A	C	C	C	B	C	B	B	B	B	B
HCM2k95thQ:	0	0	0	2	2	6	9	6	6	0	12	2
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #109: De Paul Drive and Cochrane Road



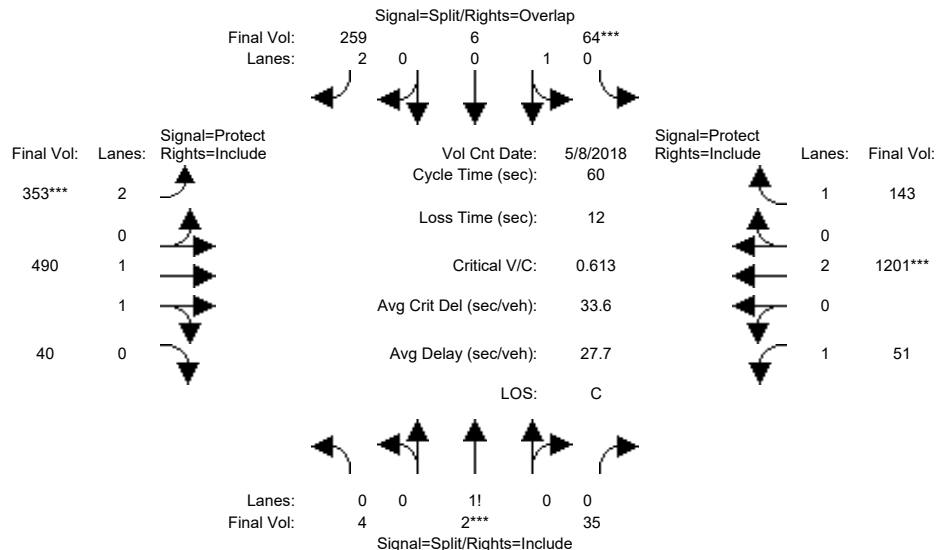
Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	2	35	41	6	224	298	435	40	51	1166	108
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:	4	2	35	41	6	224	298	435	40	51	1166	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	2	35	41	6	224	298	435	40	51	1166	108
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:	4	2	35	41	6	224	298	435	40	51	1166	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	2	35	41	6	224	298	435	40	51	1166	108
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
Final Volume:	4	2	35	41	6	224	298	435	40	51	1166	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.10	0.05	0.85	0.87	0.13	2.00	2.00	1.83	0.17	1.00	2.00	1.00
Final Sat.:	171	85	1494	1570	230	3150	3150	3388	312	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.03	0.03	0.07	0.09	0.13	0.13	0.03	0.31	0.06
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	17.0	7.0	16.5	16.5	11.5	21.0	21.0
Volume/Cap:	0.14	0.14	0.14	0.16	0.16	0.25	0.81	0.47	0.47	0.15	0.88	0.18
Delay/Veh:	21.6	21.6	21.6	21.6	21.6	16.7	38.6	18.5	18.5	20.4	25.2	13.6
User DelAdj:	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:	21.6	21.6	21.6	21.6	21.6	16.7	38.6	18.5	18.5	20.4	25.2	13.6
LOS by Move:	C	C	C	C	C	B	D	B	B	C	C	B
HCM2k95thQ:	2	2	2	2	2	4	11	8	8	2	20	3

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #109: De Paul Drive and Cochrane Road

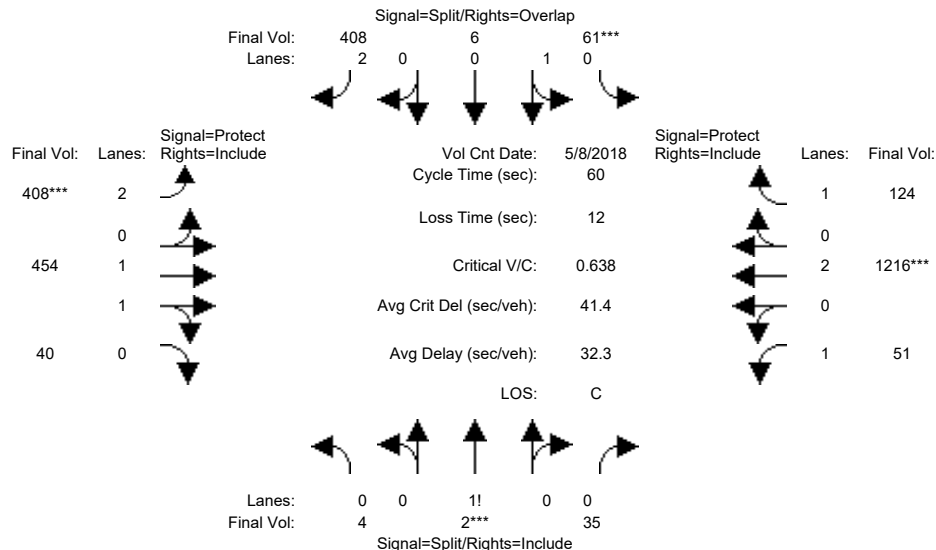


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	2	35	41	6	224	298	435	40	51	1166	108
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:	4	2	35	41	6	224	298	435	40	51	1166	108
Added Vol:	0	0	0	23	0	35	55	55	0	0	35	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	2	35	64	6	259	353	490	40	51	1201	143
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:	4	2	35	64	6	259	353	490	40	51	1201	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	2	35	64	6	259	353	490	40	51	1201	143
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
Final Volume:	4	2	35	64	6	259	353	490	40	51	1201	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.10	0.05	0.85	0.91	0.09	2.00	2.00	1.84	0.16	1.00	2.00	1.00
Final Sat.:	171	85	1494	1646	154	3150	3150	3421	279	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.04	0.04	0.08	0.11	0.14	0.14	0.03	0.32	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.0	10.0	17.3	7.3	16.5	16.5	11.5	20.7	20.7
Volume/Cap:	0.14	0.14	0.14	0.23	0.23	0.28	0.92	0.52	0.52	0.15	0.92	0.24
Delay/Veh:	21.6	21.6	21.6	22.1	22.1	16.7	52.4	18.9	18.9	20.4	29.2	14.2
User DelAdj:	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:	21.6	21.6	21.6	22.1	22.1	16.7	52.4	18.9	18.9	20.4	29.2	14.2
LOS by Move:	C	C	C	C	C	B	D	B	B	C	C	B
HCM2k95thQ:	2	2	2	3	3	5	14	10	10	2	22	4
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #109: De Paul Drive and Cochrane Road



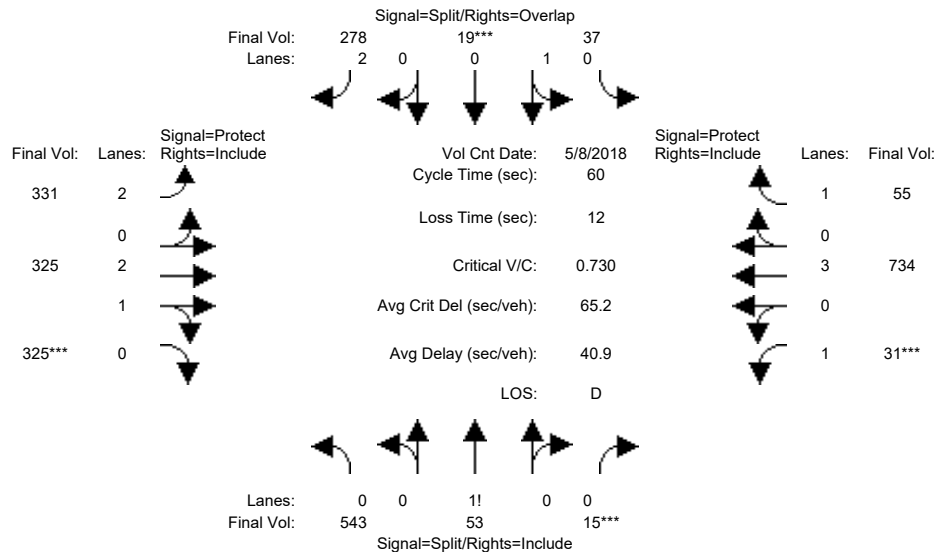
Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	4	2	35	41	6	224	298	435	40	51	1166	108
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:	4	2	35	41	6	224	298	435	40	51	1166	108
Added Vol:	0	0	0	20	0	184	110	19	0	0	50	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	2	35	61	6	408	408	454	40	51	1216	124
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:	4	2	35	61	6	408	408	454	40	51	1216	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	2	35	61	6	408	408	454	40	51	1216	124
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
Final Volume:	4	2	35	61	6	408	408	454	40	51	1216	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.98	0.95	0.92	1.00	0.92
Lanes:	0.10	0.05	0.85	0.91	0.09	2.00	2.00	1.83	0.17	1.00	2.00	1.00
Final Sat.:	171	85	1494	1639	161	3150	3150	3400	300	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.04	0.04	0.13	0.13	0.13	0.13	0.03	0.32	0.07
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.0	10.0	18.1	8.1	16.5	16.5	11.5	19.9	19.9
Volume/Cap:	0.14	0.14	0.14	0.22	0.22	0.43	0.96	0.49	0.49	0.15	0.96	0.21
Delay/Veh:	21.6	21.6	21.6	22.0	22.0	17.1	60.0	18.6	18.6	20.4	36.9	14.6
User DelAdj:	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:	21.6	21.6	21.6	22.0	22.0	17.1	60.0	18.6	18.6	20.4	36.9	14.6
LOS by Move:	C	C	C	C	C	B	E	B	B	C	D	B
HCM2k95thQ:	2	2	2	3	3	8	17	9	9	2	24	3

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #109: De Paul Drive and Cochrane Road

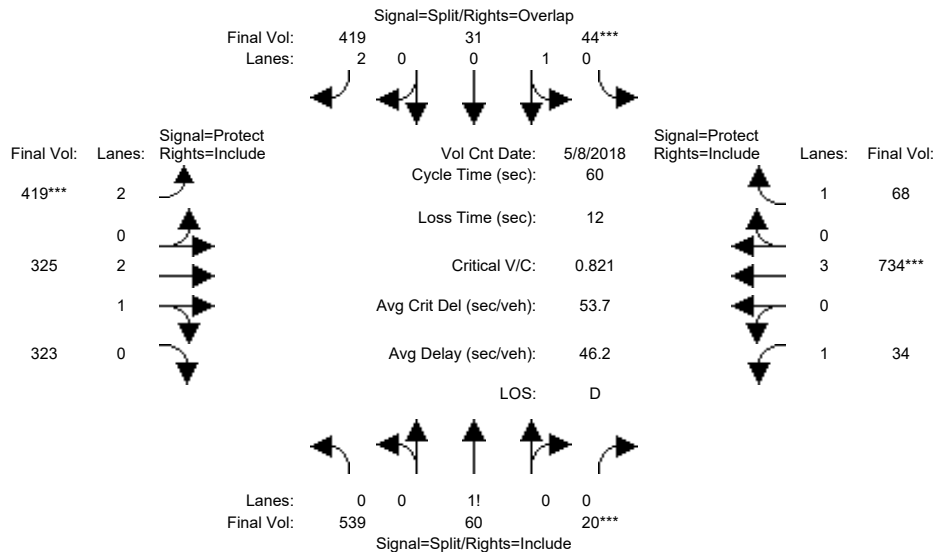


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	543	53	15	37	19	278	331	325	325	31	734	55
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:	543	53	15	37	19	278	331	325	325	31	734	55
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	543	53	15	37	19	278	331	325	325	31	734	55
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:	543	53	15	37	19	278	331	325	325	31	734	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	543	53	15	37	19	278	331	325	325	31	734	55
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:	543	53	15	37	19	278	331	325	325	31	734	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.89	0.09	0.02	0.66	0.34	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1555	152	43	1189	611	3150	3150	3800	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.03	0.03	0.09	0.11	0.09	0.19	0.02	0.13	0.03
Crit Moves:	****			****			****			****		
Green Time:	20.2	20.2	20.2	10.0	10.0	17.3	7.3	10.8	10.8	7.0	10.4	10.4
Volume/Cap:	1.04	1.04	1.04	0.19	0.19	0.31	0.86	0.48	1.04	0.15	0.74	0.18
Delay/Veh:	66.3	66.3	66.3	21.8	21.8	16.8	43.6	22.4	69.9	24.2	26.5	21.4
User DelAdj:	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:	66.3	66.3	66.3	21.8	21.8	16.8	43.6	22.4	69.9	24.2	26.5	21.4
LOS by Move:	E	E	E	C	C	B	D	C	E	C	C	C
HCM2k95thQ:	36	36	36	2	2	5	13	7	24	1	9	2
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #109: De Paul Drive and Cochrane Road



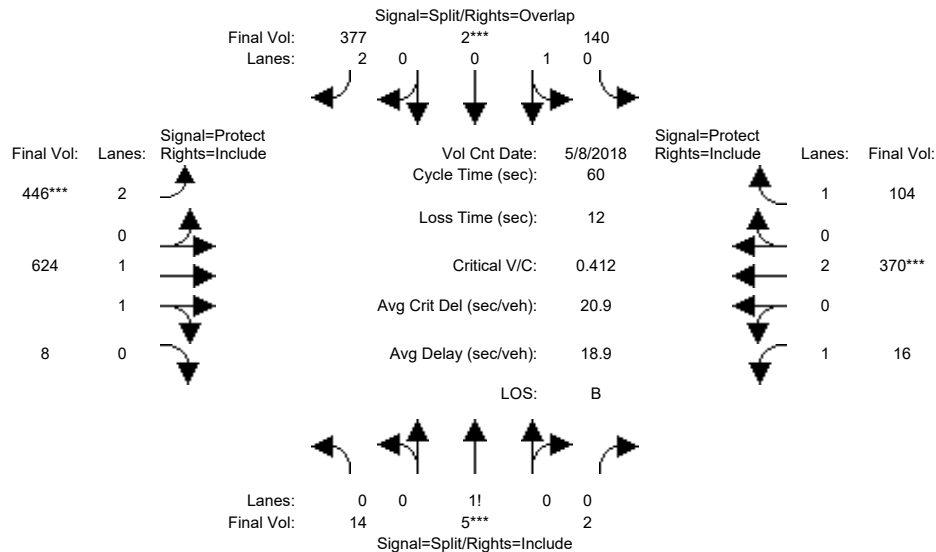
Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	539	60	20	44	31	419	419	325	323	34	734	68
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:	539	60	20	44	31	419	419	325	323	34	734	68
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	539	60	20	44	31	419	419	325	323	34	734	68
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:	539	60	20	44	31	419	419	325	323	34	734	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	539	60	20	44	31	419	419	325	323	34	734	68
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
Final Volume:	539	60	20	44	31	419	419	325	323	34	734	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.87	0.10	0.03	0.59	0.41	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1524	170	57	1056	744	3150	3150	3800	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.04	0.04	0.13	0.13	0.09	0.18	0.02	0.13	0.04
Crit Moves:	****			****			****			****		
Green Time:	20.3	20.3	20.3	10.0	10.0	17.7	7.7	10.7	10.7	7.0	10.0	10.0
Volume/Cap:	1.04	1.04	1.04	0.25	0.25	0.45	1.04	0.48	1.04	0.17	0.77	0.23
Delay/Veh:	68.4	68.4	68.4	22.2	22.2	17.6	82.7	22.5	71.4	24.3	27.9	22.1
User DelAdj:	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:	68.4	68.4	68.4	22.2	22.2	17.6	82.7	22.5	71.4	24.3	27.9	22.1
LOS by Move:	E	E	E	C	C	B	F	C	E	C	C	C
HCM2k95thQ:	37	37	37	3	3	8	19	7	24	1	9	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #109: De Paul Drive and Cochrane Road

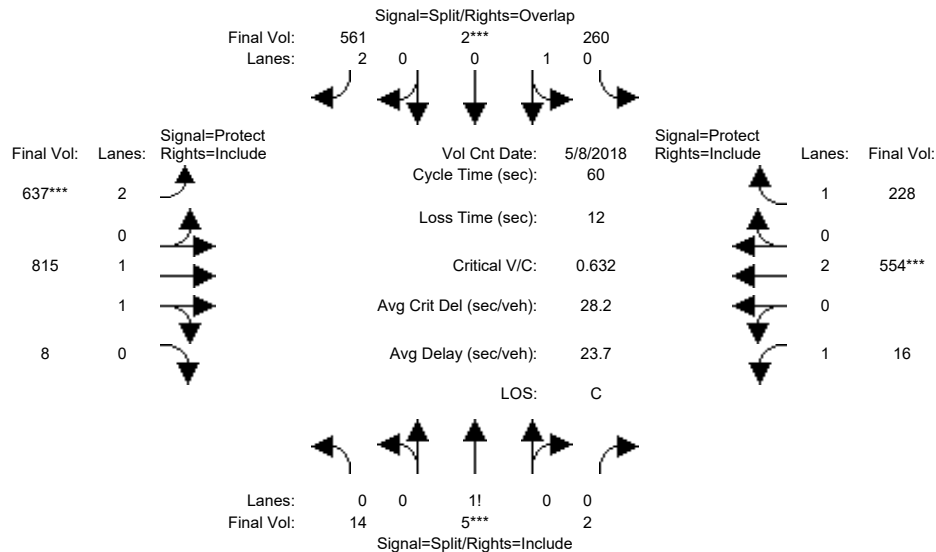


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	5	2	140	2	377	446	624	8	16	370	104
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:	14	5	2	140	2	377	446	624	8	16	370	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	5	2	140	2	377	446	624	8	16	370	104
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:	14	5	2	140	2	377	446	624	8	16	370	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	5	2	140	2	377	446	624	8	16	370	104
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:	14	5	2	140	2	377	446	624	8	16	370	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.67	0.24	0.09	0.99	0.01	2.00	2.00	1.97	0.03	1.00	2.00	1.00
Final Sat.:	1167	417	167	1775	25	3150	3150	3653	47	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.08	0.08	0.12	0.14	0.17	0.17	0.01	0.10	0.06
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	26.6	16.6	16.6	16.6	11.4	11.4	11.4
Volume/Cap:	0.07	0.07	0.07	0.47	0.47	0.27	0.51	0.62	0.62	0.05	0.51	0.31
Delay/Veh:	21.2	21.2	21.2	23.8	23.8	10.7	18.8	20.0	20.0	20.0	22.4	21.5
User DelAdj:	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:	21.2	21.2	21.2	23.8	23.8	10.7	18.8	20.0	20.0	20.0	22.4	21.5
LOS by Move:	C	C	C	C	C	B	B	C	C	B	C	C
HCM2k95thQ:	1	1	1	6	6	6	9	12	12	1	6	4
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #109: De Paul Drive and Cochrane Road

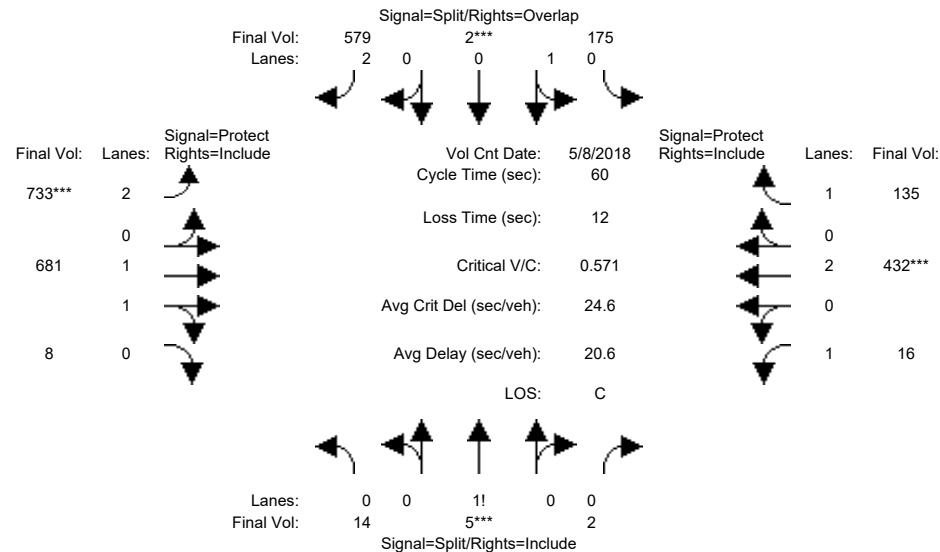


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	5	2	140	2	377	446	624	8	16	370	104
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:	14	5	2	140	2	377	446	624	8	16	370	104
Added Vol:	0	0	0	120	0	184	191	191	0	0	184	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	5	2	260	2	561	637	815	8	16	554	228
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:	14	5	2	260	2	561	637	815	8	16	554	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	5	2	260	2	561	637	815	8	16	554	228
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
Final Volume:	14	5	2	260	2	561	637	815	8	16	554	228
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.67	0.24	0.09	0.99	0.01	2.00	2.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1167	417	167	1786	14	3150	3150	3664	36	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.15	0.15	0.18	0.20	0.22	0.22	0.01	0.15	0.13
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	11.2	11.2	26.8	15.6	17.6	17.6	9.2	11.2	11.2
Volume/Cap:	0.07	0.07	0.07	0.78	0.78	0.40	0.78	0.76	0.76	0.06	0.78	0.70
Delay/Veh:	21.2	21.2	21.2	34.3	34.3	11.4	25.4	22.5	22.5	21.8	28.7	29.2
User DelAdj:	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:	21.2	21.2	21.2	34.3	34.3	11.4	25.4	22.5	22.5	21.8	28.7	29.2
LOS by Move:	C	C	C	C	C	B	C	C	C	C	C	C
HCM2k95thQ:	1	1	1	14	14	9	17	17	17	1	10	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #109: De Paul Drive and Cochrane Road

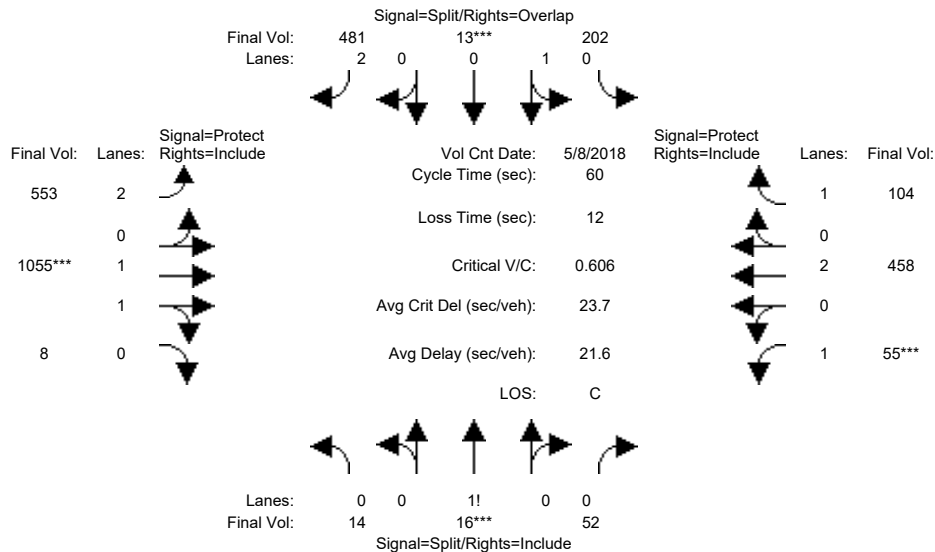


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	5	2	140	2	377	446	624	8	16	370	104
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:	14	5	2	140	2	377	446	624	8	16	370	104
Added Vol:	0	0	0	35	0	202	287	57	0	0	62	31
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	5	2	175	2	579	733	681	8	16	432	135
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:	14	5	2	175	2	579	733	681	8	16	432	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	5	2	175	2	579	733	681	8	16	432	135
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
Final Volume:	14	5	2	175	2	579	733	681	8	16	432	135
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.67	0.24	0.09	0.99	0.01	2.00	2.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1167	417	167	1780	20	3150	3150	3657	43	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.01	0.10	0.10	0.18	0.23	0.19	0.19	0.01	0.11	0.08
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	28.0	18.0	17.2	17.2	10.8	10.0	10.0
Volume/Cap:	0.07	0.07	0.07	0.59	0.59	0.39	0.78	0.65	0.65	0.05	0.68	0.46
Delay/Veh:	21.2	21.2	21.2	26.2	26.2	10.6	23.2	20.2	20.2	20.4	26.6	23.7
User DelAdj:	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:	21.2	21.2	21.2	26.2	26.2	10.6	23.2	20.2	20.2	20.4	26.6	23.7
LOS by Move:	C	C	C	C	C	B	C	C	C	C	C	C
HCM2k95thQ:	1	1	1	8	8	9	18	13	13	1	8	5
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #109: De Paul Drive and Cochrane Road

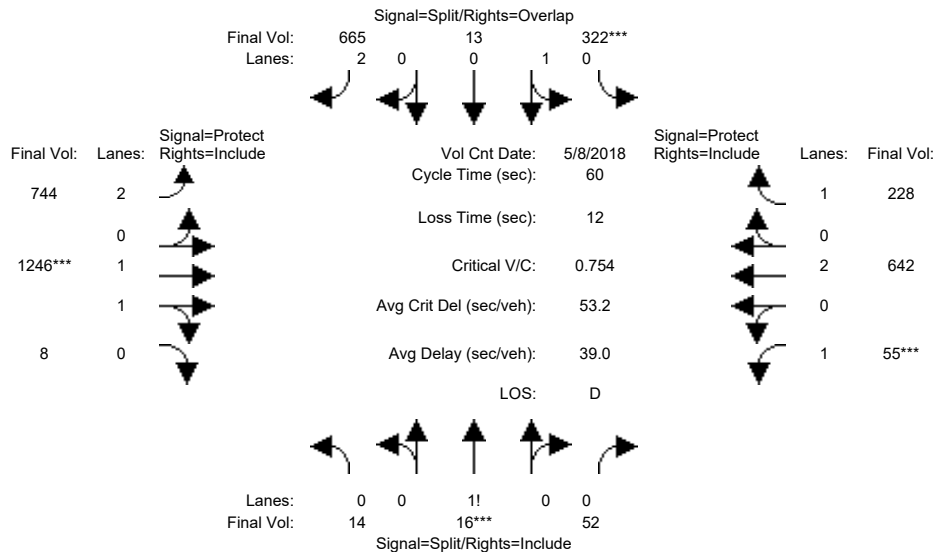


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	16	52	202	13	481	553	1055	8	55	458	104
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:	14	16	52	202	13	481	553	1055	8	55	458	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	16	52	202	13	481	553	1055	8	55	458	104
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:	14	16	52	202	13	481	553	1055	8	55	458	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	16	52	202	13	481	553	1055	8	55	458	104
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
Final Volume:	14	16	52	202	13	481	553	1055	8	55	458	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.17	0.20	0.63	0.94	0.06	2.00	2.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	299	341	1110	1691	109	3150	3150	3672	28	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.12	0.12	0.15	0.18	0.29	0.29	0.03	0.12	0.06
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	24.4	14.4	21.0	21.0	7.0	13.6	13.6
Volume/Cap:	0.28	0.28	0.28	0.72	0.72	0.38	0.73	0.82	0.82	0.27	0.53	0.26
Delay/Veh:	22.4	22.4	22.4	31.7	31.7	12.7	24.8	22.1	22.1	24.9	21.0	19.4
User DelAdj:	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:	22.4	22.4	22.4	31.7	31.7	12.7	24.8	22.1	22.1	24.9	21.0	19.4
LOS by Move:	C	C	C	C	C	B	C	C	C	C	C	B
HCM2k95thQ:	3	3	3	11	11	8	14	22	22	2	7	3
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #109: De Paul Drive and Cochrane Road

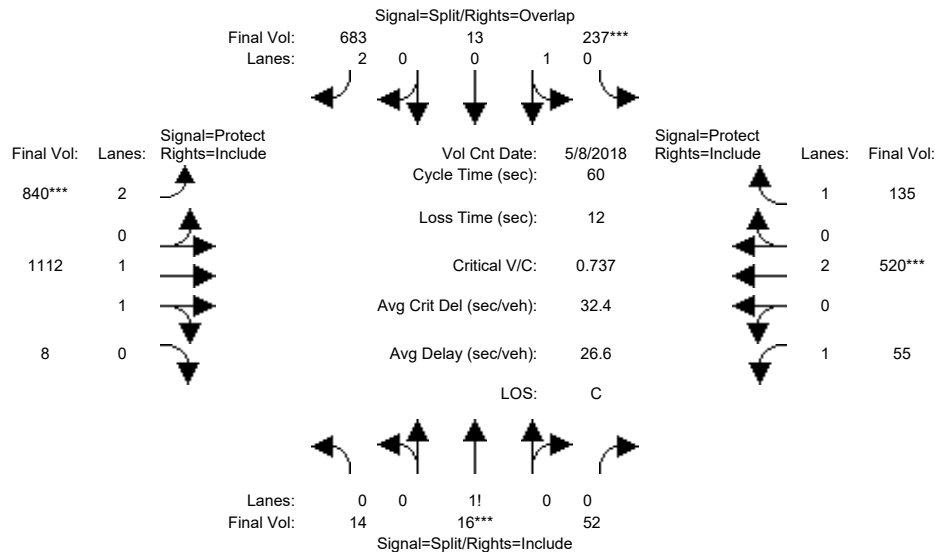


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	16	52	202	13	481	553	1055	8	55	458	104
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:	14	16	52	202	13	481	553	1055	8	55	458	104
Added Vol:	0	0	0	120	0	184	191	191	0	0	184	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	16	52	322	13	665	744	1246	8	55	642	228
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:	14	16	52	322	13	665	744	1246	8	55	642	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	16	52	322	13	665	744	1246	8	55	642	228
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
Final Volume:	14	16	52	322	13	665	744	1246	8	55	642	228
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.17	0.20	0.63	0.96	0.04	2.00	2.00	1.99	0.01	1.00	2.00	1.00
Final Sat.:	299	341	1110	1730	70	3150	3150	3676	24	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.19	0.19	0.21	0.24	0.34	0.34	0.03	0.17	0.13
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	11.0	11.0	26.7	15.7	20.0	20.0	7.0	11.3	11.3
Volume/Cap:	0.28	0.28	0.28	1.02	1.02	0.47	0.90	1.02	1.02	0.27	0.90	0.69
Delay/Veh:	22.4	22.4	22.4	78.2	78.2	11.9	34.2	49.7	49.7	24.9	38.2	29.1
User DelAdj:	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:	22.4	22.4	22.4	78.2	78.2	11.9	34.2	49.7	49.7	24.9	38.2	29.1
LOS by Move:	C	C	C	E	E	B	C	D	D	C	D	C
HCM2k95thQ:	3	3	3	23	23	11	22	34	34	2	13	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #109: De Paul Drive and Cochrane Road

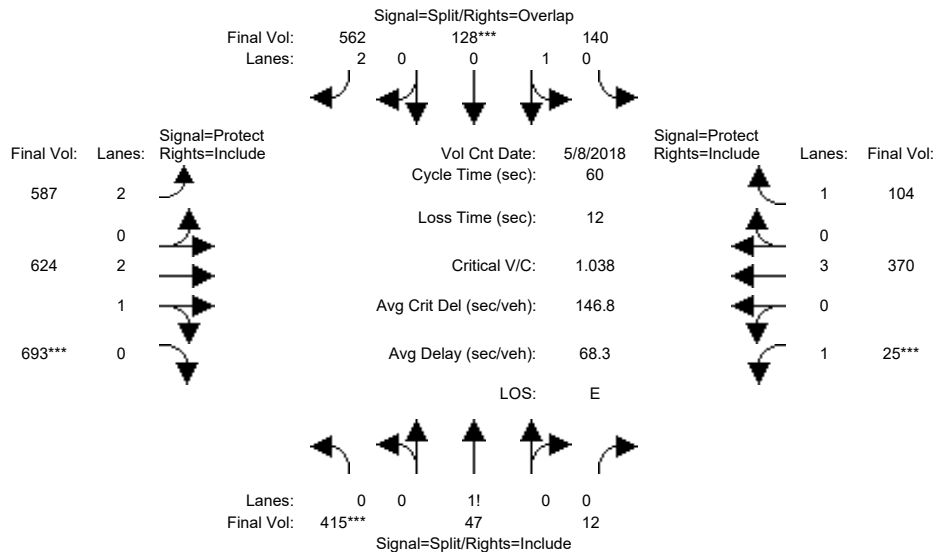


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	14	16	52	202	13	481	553	1055	8	55	458	104
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:	14	16	52	202	13	481	553	1055	8	55	458	104
Added Vol:	0	0	0	35	0	202	287	57	0	0	62	31
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	16	52	237	13	683	840	1112	8	55	520	135
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:	14	16	52	237	13	683	840	1112	8	55	520	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	16	52	237	13	683	840	1112	8	55	520	135
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
Final Volume:	14	16	52	237	13	683	840	1112	8	55	520	135
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	0.97	0.95	0.92	1.00	0.92
Lanes:	0.17	0.20	0.63	0.95	0.05	2.00	2.00	1.99	0.01	1.00	2.00	1.00
Final Sat.:	299	341	1110	1706	94	3150	3150	3674	26	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.14	0.14	0.22	0.27	0.30	0.30	0.03	0.14	0.08
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	28.0	18.0	20.2	20.2	7.8	10.0	10.0
Volume/Cap:	0.28	0.28	0.28	0.83	0.83	0.46	0.89	0.90	0.90	0.24	0.82	0.46
Delay/Veh:	22.4	22.4	22.4	42.0	42.0	11.1	30.4	27.9	27.9	24.0	32.6	23.7
User DelAdj:	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:	22.4	22.4	22.4	42.0	42.0	11.1	30.4	27.9	27.9	24.0	32.6	23.7
LOS by Move:	C	C	C	D	D	B	C	C	C	C	C	C
HCM2k95thQ:	3	3	3	14	14	11	23	26	26	2	10	5
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #109: De Paul Drive and Cochrane Road

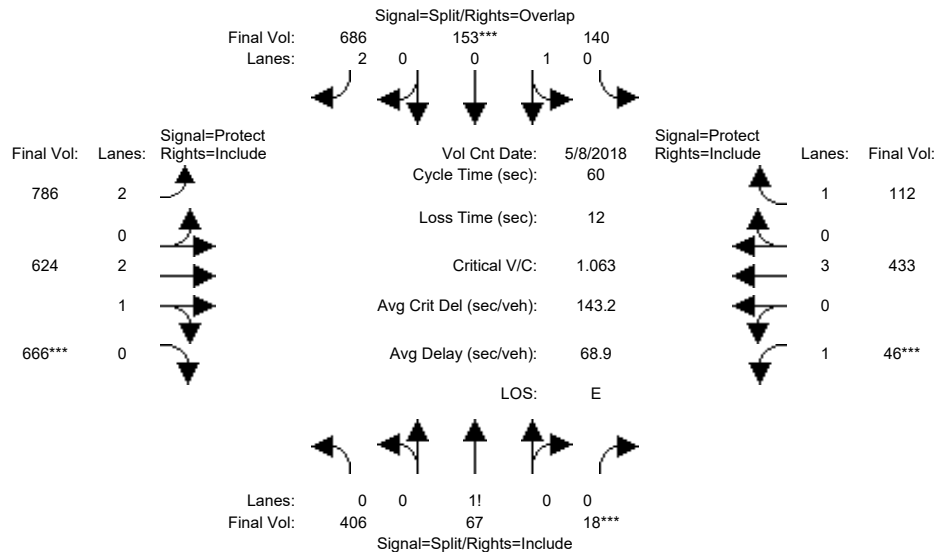


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	415	47	12	140	128	562	587	624	693	25	370	104
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:	415	47	12	140	128	562	587	624	693	25	370	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	415	47	12	140	128	562	587	624	693	25	370	104
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:	415	47	12	140	128	562	587	624	693	25	370	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	415	47	12	140	128	562	587	624	693	25	370	104
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:	415	47	12	140	128	562	587	624	693	25	370	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.88	0.10	0.02	0.52	0.48	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1532	174	44	940	860	3150	3150	3800	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.15	0.15	0.18	0.19	0.16	0.40	0.01	0.06	0.06
Crit Moves:	***			***			***		***	***		
Green Time:	12.6	12.6	12.6	10.0	10.0	23.4	13.4	18.4	18.4	7.0	12.0	12.0
Volume/Cap:	1.29	1.29	1.29	0.89	0.89	0.46	0.83	0.54	1.29	0.12	0.32	0.30
Delay/Veh:	173.5	174	173.5	51.2	51.2	13.8	30.7	17.5	159.0	24.0	20.7	20.9
User DelAdj:	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:	173.5	174	173.5	51.2	51.2	13.8	30.7	17.5	159.0	24.0	20.7	20.9
LOS by Move:	F	F	F	D	D	B	C	B	F	C	C	C
HCM2k95thQ:	44	44	44	16	16	10	17	11	59	1	4	4
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #109: De Paul Drive and Cochrane Road

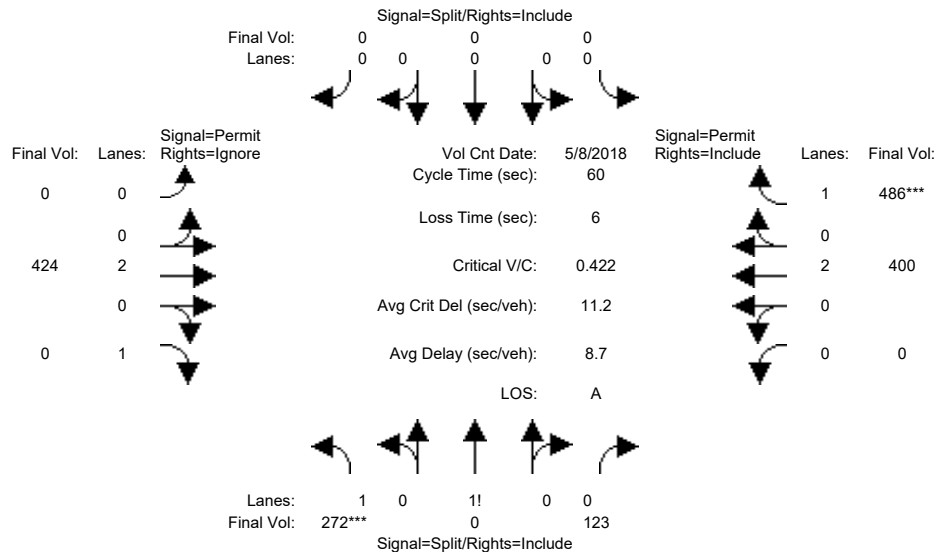


Street Name:	De Paul Drive						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	406	67	18	140	153	686	786	624	666	46	433	112
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:	406	67	18	140	153	686	786	624	666	46	433	112
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	406	67	18	140	153	686	786	624	666	46	433	112
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:	406	67	18	140	153	686	786	624	666	46	433	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	406	67	18	140	153	686	786	624	666	46	433	112
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
Final Volume:	406	67	18	140	153	686	786	624	666	46	433	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.83	0.13	0.04	0.48	0.52	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	1447	239	64	860	940	3150	3150	3800	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.16	0.16	0.22	0.25	0.16	0.38	0.03	0.08	0.06
Crit Moves:	****			****			****			****		
Green Time:	13.2	13.2	13.2	10.0	10.0	24.8	14.8	17.8	17.8	7.0	10.0	10.0
Volume/Cap:	1.28	1.28	1.28	0.98	0.98	0.53	1.01	0.55	1.28	0.23	0.46	0.38
Delay/Veh:	167.9	168	167.9	70.3	70.3	13.6	56.9	18.0	154.6	24.6	22.9	23.1
User DelAdj:	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:	167.9	168	167.9	70.3	70.3	13.6	56.9	18.0	154.6	24.6	22.9	23.1
LOS by Move:	F	F	F	E	E	B	E	B	F	C	C	C
HCM2k95thQ:	44	44	44	20	20	12	28	11	56	2	5	4
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

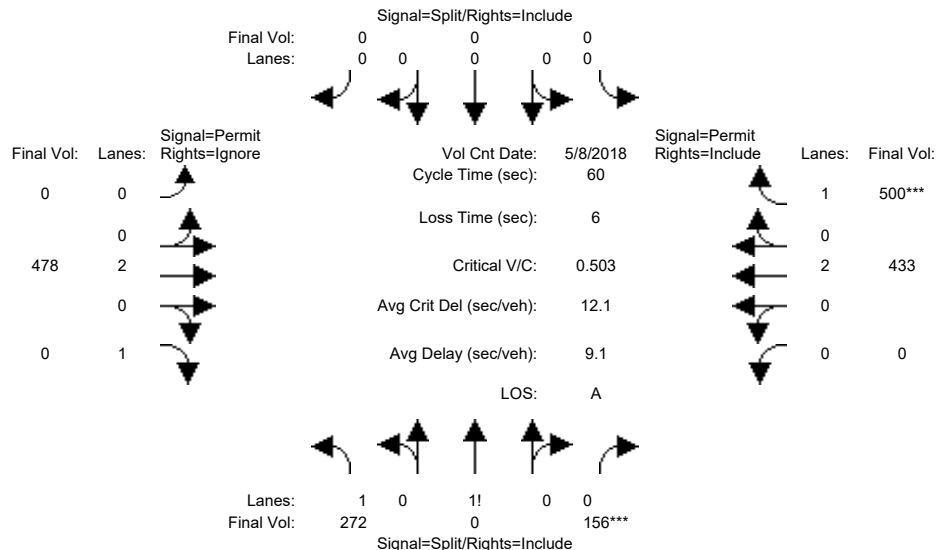


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	424	0	0	400	486
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:	272	0	123	0	0	0	0	424	0	0	400	486
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	123	0	0	0	0	424	0	0	400	486
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	123	0	0	0	0	424	0	0	400	486
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	123	0	0	0	0	424	0	0	400	486
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	123	0	0	0	0	424	0	0	400	486
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.53	0.00	0.47	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2669	0	831	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.15	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.11	0.28
Crit Moves:	****											****
Green Time:	18.8	0.0	18.8	0.0	0.0	0.0	0.0	35.2	0.0	0.0	35.2	35.2
Volume/Cap:	0.33	0.00	0.47	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.18	0.47
Delay/Veh:	15.9	0.0	17.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	5.8	7.4
User DelAdj:	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:	15.9	0.0	17.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	5.8	7.4
LOS by Move:	B	A	B	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	6	0	9	0	0	0	0	4	0	0	4	11
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

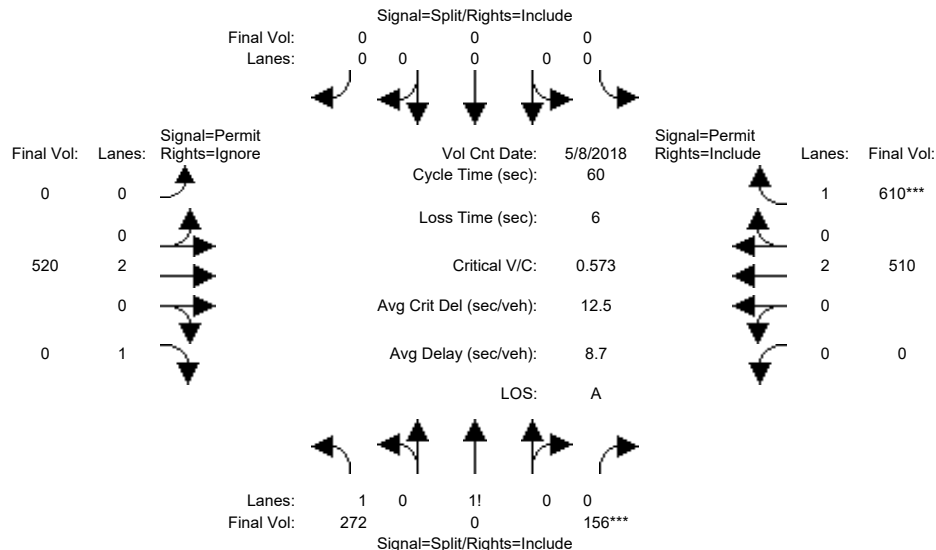


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	424	0	0	400	486
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:	272	0	123	0	0	0	0	424	0	0	400	486
Added Vol:	0	0	33	0	0	0	0	54	0	0	33	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	156	0	0	0	0	478	0	0	433	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	156	0	0	0	0	478	0	0	433	500
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	156	0	0	0	0	478	0	0	433	500
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	156	0	0	0	0	478	0	0	433	500
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.47	0.00	0.53	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2565	0	935	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.11	0.29
Crit Moves:	****											
Green Time:	19.9	0.0	19.9	0.0	0.0	0.0	0.0	34.1	0.0	0.0	34.1	34.1
Volume/Cap:	0.32	0.00	0.50	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.20	0.50
Delay/Veh:	15.1	0.0	16.6	0.0	0.0	0.0	0.0	6.5	0.0	0.0	6.4	8.2
User DelAdj:	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:	15.1	0.0	16.6	0.0	0.0	0.0	0.0	6.5	0.0	0.0	6.4	8.2
LOS by Move:	B	A	B	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	6	0	10	0	0	0	0	4	0	0	4	12
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

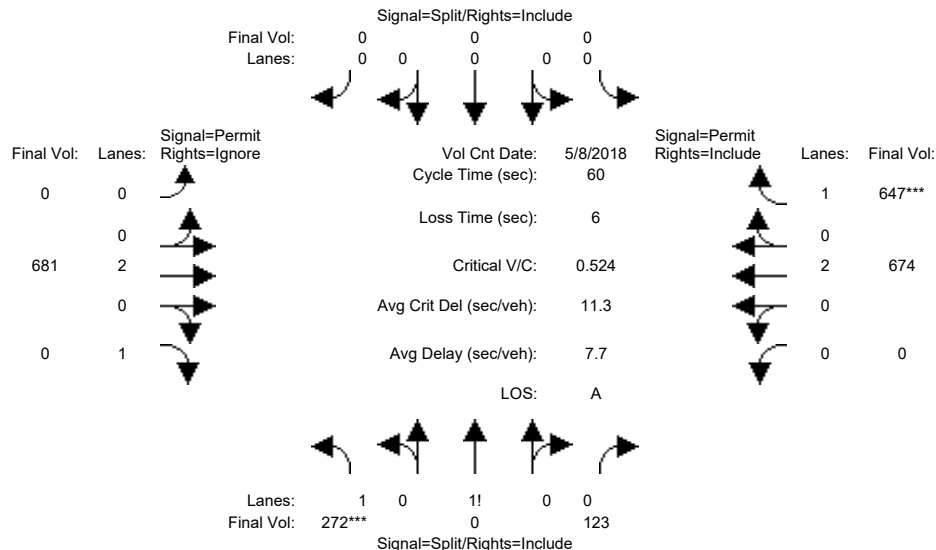


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	424	0	0	400	486
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:	272	0	123	0	0	0	0	424	0	0	400	486
Added Vol:	0	0	33	0	0	0	0	96	0	0	110	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	156	0	0	0	0	520	0	0	510	610
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	156	0	0	0	0	520	0	0	510	610
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	156	0	0	0	0	520	0	0	510	610
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	156	0	0	0	0	520	0	0	510	610
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.47	0.00	0.53	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2565	0	935	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.13	0.35
Crit Moves:	****											
Green Time:	17.5	0.0	17.5	0.0	0.0	0.0	0.0	36.5	0.0	0.0	36.5	36.5
Volume/Cap:	0.36	0.00	0.57	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.22	0.57
Delay/Veh:	17.0	0.0	19.2	0.0	0.0	0.0	0.0	5.4	0.0	0.0	5.4	7.8
User DelAdj:	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:	17.0	0.0	19.2	0.0	0.0	0.0	0.0	5.4	0.0	0.0	5.4	7.8
LOS by Move:	B	A	B	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	6	0	11	0	0	0	0	4	0	0	4	15
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

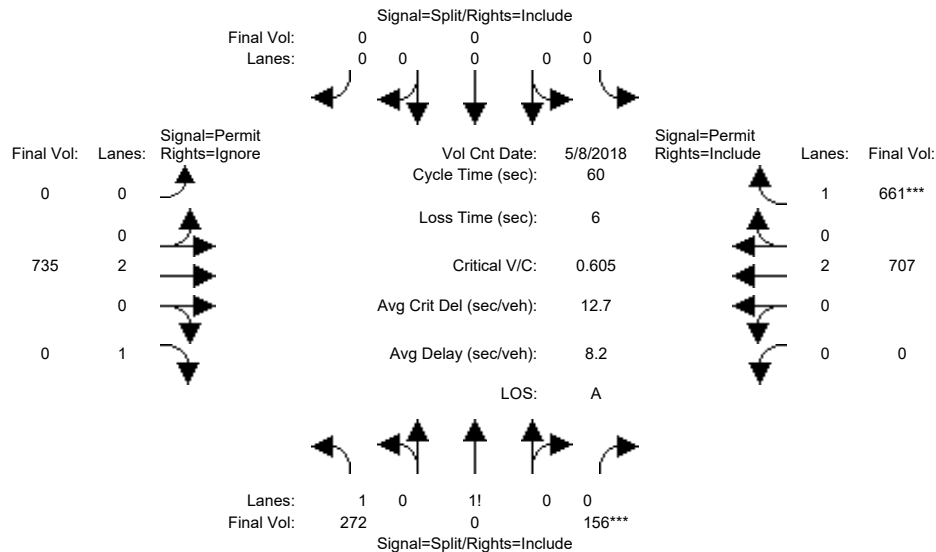


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	681	0	0	674	647
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:	272	0	123	0	0	0	0	681	0	0	674	647
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	123	0	0	0	0	681	0	0	674	647
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	123	0	0	0	0	681	0	0	674	647
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	123	0	0	0	0	681	0	0	674	647
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	123	0	0	0	0	681	0	0	674	647
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.53	0.00	0.47	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2669	0	831	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.15	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.18	0.37
Crit Moves:	****											****
Green Time:	15.4	0.0	15.4	0.0	0.0	0.0	0.0	38.6	0.0	0.0	38.6	38.6
Volume/Cap:	0.40	0.00	0.58	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.28	0.58
Delay/Veh:	18.7	0.0	20.6	0.0	0.0	0.0	0.0	4.7	0.0	0.0	4.7	6.8
User DelAdj:	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:	18.7	0.0	20.6	0.0	0.0	0.0	0.0	4.7	0.0	0.0	4.7	6.8
LOS by Move:	B	A	C	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	7	0	10	0	0	0	0	5	0	0	6	15
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road



Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	681	0	0	674	647
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:	272	0	123	0	0	0	0	681	0	0	674	647
Added Vol:	0	0	33	0	0	0	0	54	0	0	33	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	156	0	0	0	0	735	0	0	707	661
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	156	0	0	0	0	735	0	0	707	661
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	156	0	0	0	0	735	0	0	707	661
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	156	0	0	0	0	735	0	0	707	661

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.47	0.00	0.53	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2565	0	935	0	0	0	0	3800	1750	0	3800	1750

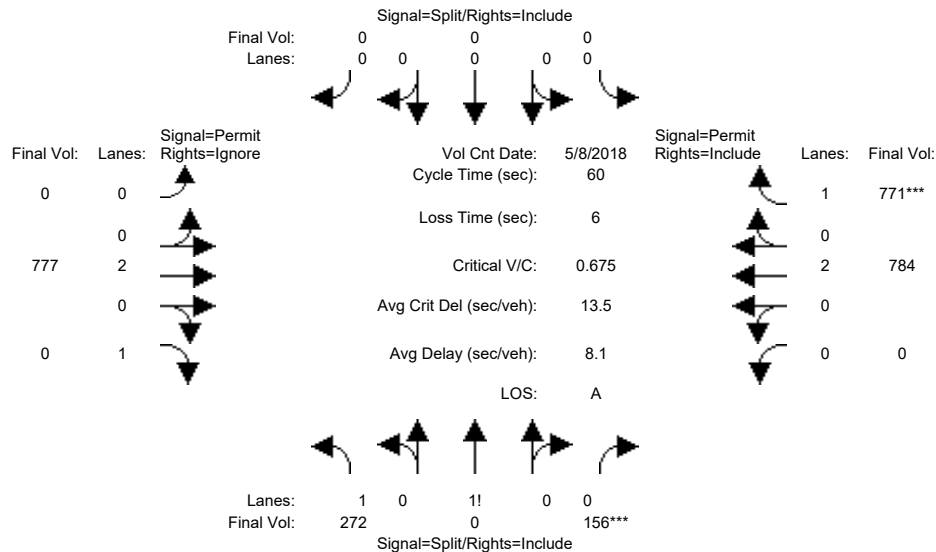
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.19	0.38
Crit Moves:	****											
Green Time:	16.5	0.0	16.5	0.0	0.0	0.0	0.0	37.5	0.0	0.0	37.5	37.5
Volume/Cap:	0.38	0.00	0.61	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.30	0.61
Delay/Veh:	17.8	0.0	20.4	0.0	0.0	0.0	0.0	5.3	0.0	0.0	5.3	7.8
User DelAdj:	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:	17.8	0.0	20.4	0.0	0.0	0.0	0.0	5.3	0.0	0.0	5.3	7.8
LOS by Move:	B	A	C	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	7	0	12	0	0	0	0	6	0	0	6	16

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

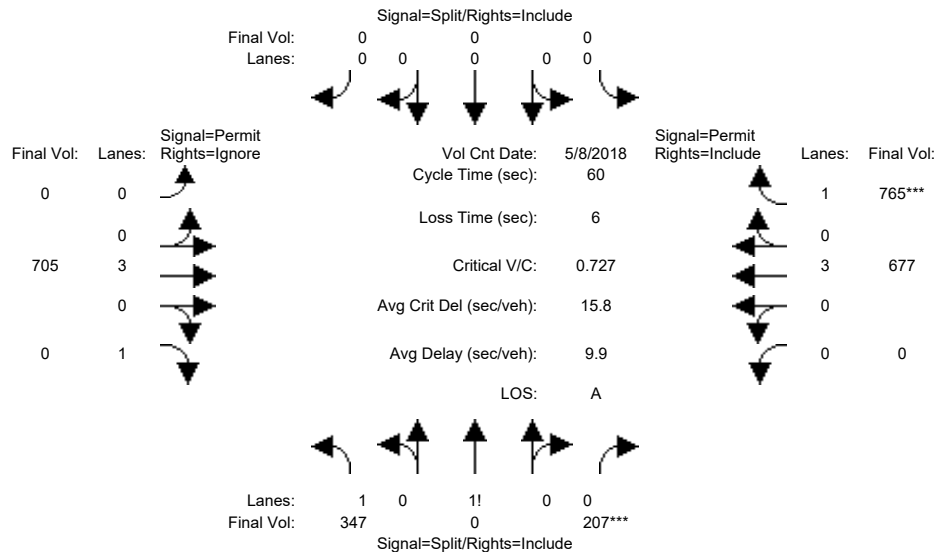


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R		L	-	T	-	R	
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	272	0	123	0	0	0	0	681	0	0	674	647
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:	272	0	123	0	0	0	0	681	0	0	674	647
Added Vol:	0	0	33	0	0	0	0	96	0	0	110	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	272	0	156	0	0	0	0	777	0	0	784	771
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	272	0	156	0	0	0	0	777	0	0	784	771
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	0	156	0	0	0	0	777	0	0	784	771
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	272	0	156	0	0	0	0	777	0	0	784	771
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.47	0.00	0.53	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2565	0	935	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.21	0.44
Crit Moves:	****											
Green Time:	14.8	0.0	14.8	0.0	0.0	0.0	0.0	39.2	0.0	0.0	39.2	39.2
Volume/Cap:	0.43	0.00	0.67	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.32	0.67
Delay/Veh:	19.3	0.0	23.3	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.6	8.1
User DelAdj:	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:	19.3	0.0	23.3	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.6	8.1
LOS by Move:	B	A	C	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	7	0	13	0	0	0	0	6	0	0	7	20
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

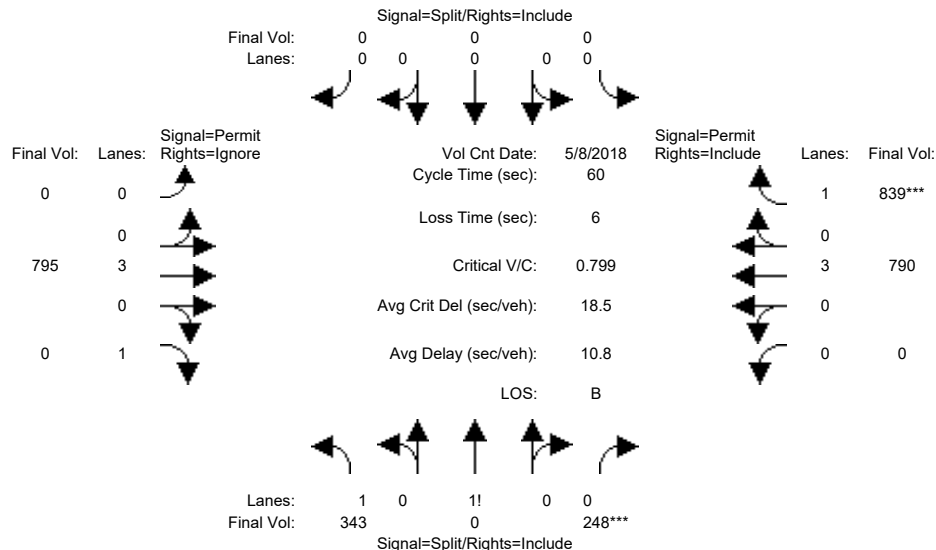


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		0		10		0	10		10		10
Y+R:	4.0		4.0		4.0		4.0	4.0		4.0		4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	347		0		207		0	705		0		765
Growth Adj:	1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	347		0		207		0	705		0		765
Added Vol:	0		0		0		0	0		0		0
PasserByVol:	0		0		0		0	0		0		0
Initial Fut:	347		0		207		0	705		0		765
User Adj:	1.00		1.00		1.00		1.00	1.00		0.00		1.00
PHF Adj:	1.00		1.00		1.00		1.00	1.00		0.00		1.00
PHF Volume:	347		0		207		0	705		0		765
Reduct Vol:	0		0		0		0	0		0		0
Reduced Vol:	347		0		207		0	705		0		765
PCE Adj:	1.00		1.00		1.00		1.00	1.00		0.00		1.00
MLF Adj:	1.00		1.00		1.00		1.00	1.00		0.00		1.00
FinalVolume:	347		0		207		0	705		0		765
Saturation Flow Module:												
Sat/Lane:	1900		1900		1900		1900	1900		1900		1900
Adjustment:	0.92		1.00		0.92		0.92	1.00		0.92		1.00
Lanes:	1.46		0.00		0.54		0.00	3.00		1.00		3.00
Final Sat.:	2548		0		952		0	5700		1750		1750
Capacity Analysis Module:												
Vol/Sat:	0.14		0.00		0.22		0.00	0.12		0.00		0.44
Crit Moves:	****											
Green Time:	17.9		0.0		17.9		0.0	36.1		0.0		36.1
Volume/Cap:	0.46		0.00		0.73		0.00	0.21		0.00		0.73
Delay/Veh:	17.3		0.0		22.4		0.0	5.5		0.0		11.1
User DelAdj:	1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	17.3		0.0		22.4		0.0	5.5		0.0		11.1
LOS by Move:	B		A		C		A	A		A		B
HCM2k95thQ:	9		0		16		0	4		0		22
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

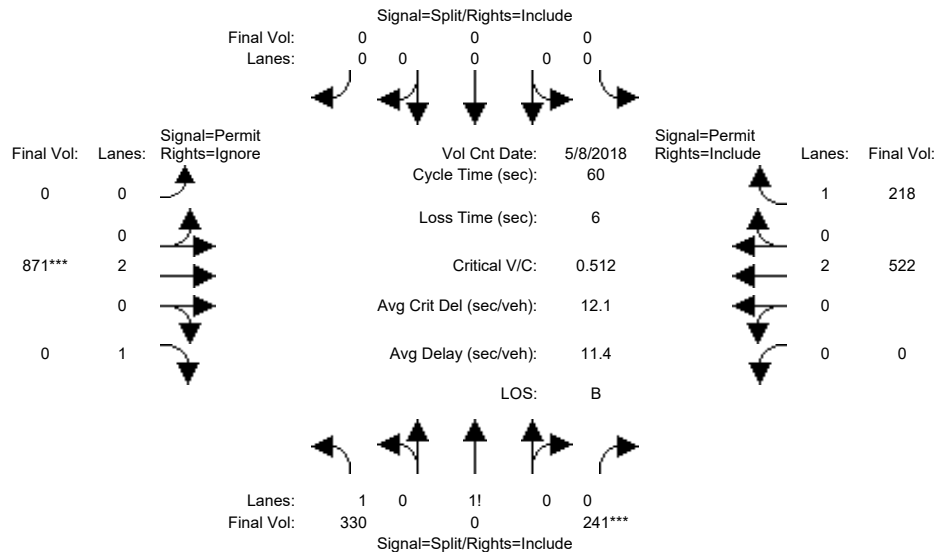


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R		L	-	T	-	R	
Min. Green:	10		0		10		0	10	10		0	10
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	343	0	248	0	0	0	0	795	0	0	790	839
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:	343	0	248	0	0	0	0	795	0	0	790	839
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	343	0	248	0	0	0	0	795	0	0	790	839
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	343	0	248	0	0	0	0	795	0	0	790	839
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	343	0	248	0	0	0	0	795	0	0	790	839
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	343	0	248	0	0	0	0	795	0	0	790	839
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.41	0.00	0.59	0.00	0.00	0.00	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	2465	0	1035	0	0	0	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.24	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.14	0.48
Crit Moves:	****											
Green Time:	18.0	0.0	18.0	0.0	0.0	0.0	0.0	36.0	0.0	0.0	36.0	36.0
Volume/Cap:	0.46	0.00	0.80	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.23	0.80
Delay/Veh:	17.3	0.0	25.5	0.0	0.0	0.0	0.0	5.6	0.0	0.0	5.6	13.6
User DelAdj:	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:	17.3	0.0	25.5	0.0	0.0	0.0	0.0	5.6	0.0	0.0	5.6	13.6
LOS by Move:	B	A	C	A	A	A	A	A	A	A	A	B
HCM2k95thQ:	9	0	19	0	0	0	0	4	0	0	5	27
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

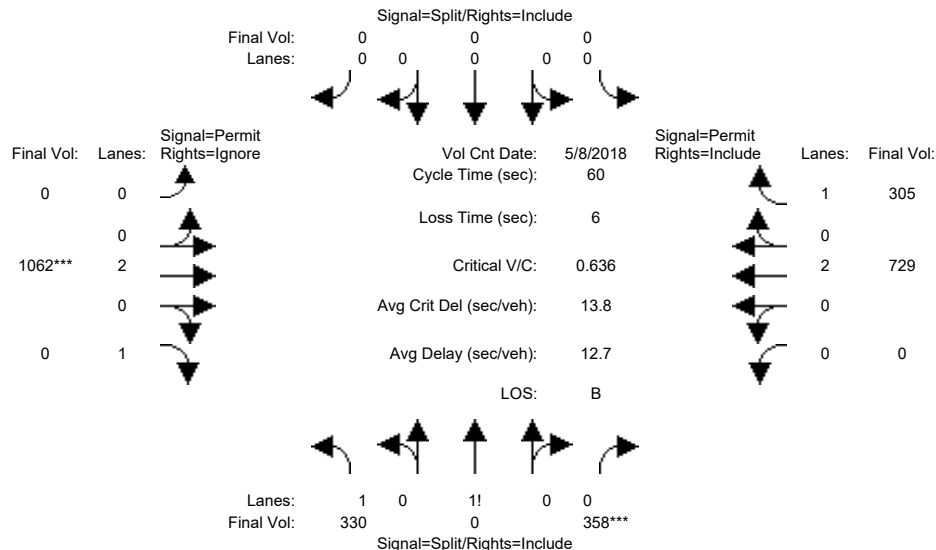


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	330	0	241	0	0	0	0	871	0	0	522	218
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:	330	0	241	0	0	0	0	871	0	0	522	218
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	0	241	0	0	0	0	871	0	0	522	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	330	0	241	0	0	0	0	871	0	0	522	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	0	241	0	0	0	0	871	0	0	522	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	330	0	241	0	0	0	0	871	0	0	522	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.41	0.00	0.59	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2461	0	1039	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.23	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.14	0.12
Crit Moves:	****											
Green Time:	27.2	0.0	27.2	0.0	0.0	0.0	0.0	26.8	0.0	0.0	26.8	26.8
Volume/Cap:	0.30	0.00	0.51	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.31	0.28
Delay/Veh:	10.5	0.0	12.1	0.0	0.0	0.0	0.0	12.2	0.0	0.0	10.7	10.7
User DelAdj:	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:	10.5	0.0	12.1	0.0	0.0	0.0	0.0	12.2	0.0	0.0	10.7	10.7
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B
HCM2k95thQ:	6	0	12	0	0	0	0	11	0	0	6	6
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

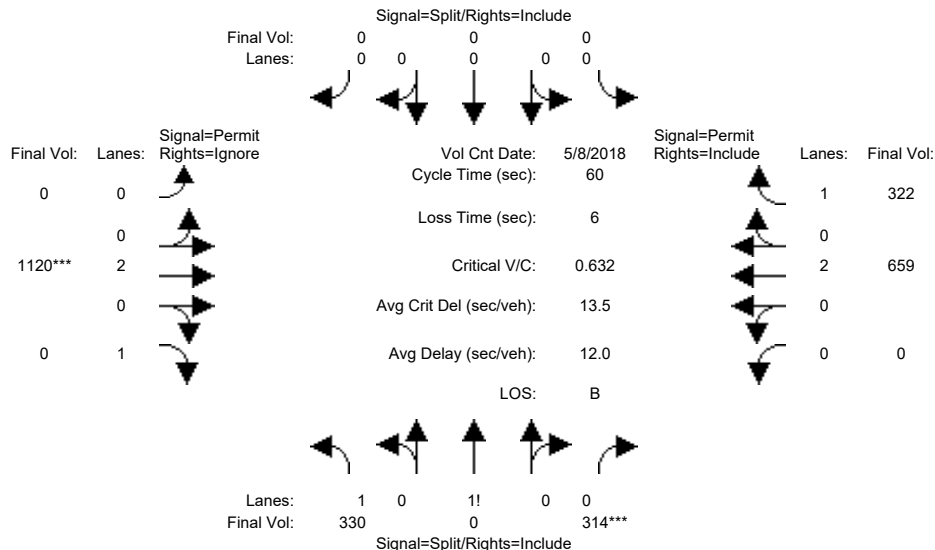


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	330	0	241	0	0	0	0	871	0	0	522	218
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:	330	0	241	0	0	0	0	871	0	0	522	218
Added Vol:	0	0	117	0	0	0	0	191	0	0	207	87
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	0	358	0	0	0	0	1062	0	0	729	305
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	330	0	358	0	0	0	0	1062	0	0	729	305
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	0	358	0	0	0	0	1062	0	0	729	305
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	330	0	358	0	0	0	0	1062	0	0	729	305
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.32	0.00	0.68	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2313	0	1221	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.29	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.19	0.17
Crit Moves:	****											
Green Time:	27.6	0.0	27.6	0.0	0.0	0.0	0.0	26.4	0.0	0.0	26.4	26.4
Volume/Cap:	0.31	0.00	0.64	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.44	0.40
Delay/Veh:	10.3	0.0	13.6	0.0	0.0	0.0	0.0	13.9	0.0	0.0	11.9	11.8
User DelAdj:	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:	10.3	0.0	13.6	0.0	0.0	0.0	0.0	13.9	0.0	0.0	11.9	11.8
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B
HCM2k95thQ:	7	0	16	0	0	0	0	14	0	0	10	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

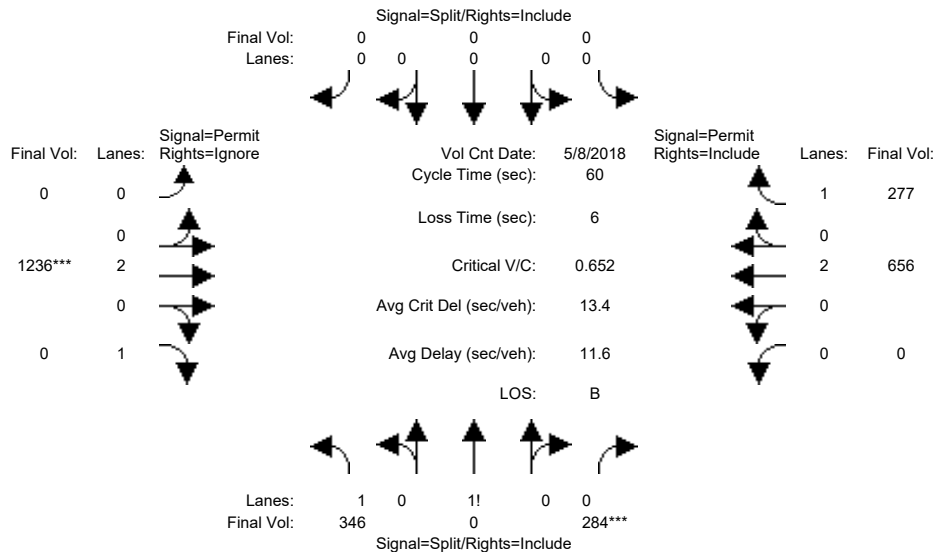


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	330	0	241	0	0	0	0	871	0	0	522	218
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:	330	0	241	0	0	0	0	871	0	0	522	218
Added Vol:	0	0	73	0	0	0	0	249	0	0	137	104
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	330	0	314	0	0	0	0	1120	0	0	659	322
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	330	0	314	0	0	0	0	1120	0	0	659	322
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	0	314	0	0	0	0	1120	0	0	659	322
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	330	0	314	0	0	0	0	1120	0	0	659	322
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.34	0.00	0.66	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2353	0	1147	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.27	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.17	0.18
Crit Moves:	****											
Green Time:	26.0	0.0	26.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	28.0	28.0
Volume/Cap:	0.32	0.00	0.63	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.37	0.39
Delay/Veh:	11.3	0.0	14.6	0.0	0.0	0.0	0.0	12.8	0.0	0.0	10.5	10.8
User DelAdj:	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:	11.3	0.0	14.6	0.0	0.0	0.0	0.0	12.8	0.0	0.0	10.5	10.8
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B
HCM2k95thQ:	7	0	16	0	0	0	0	14	0	0	8	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

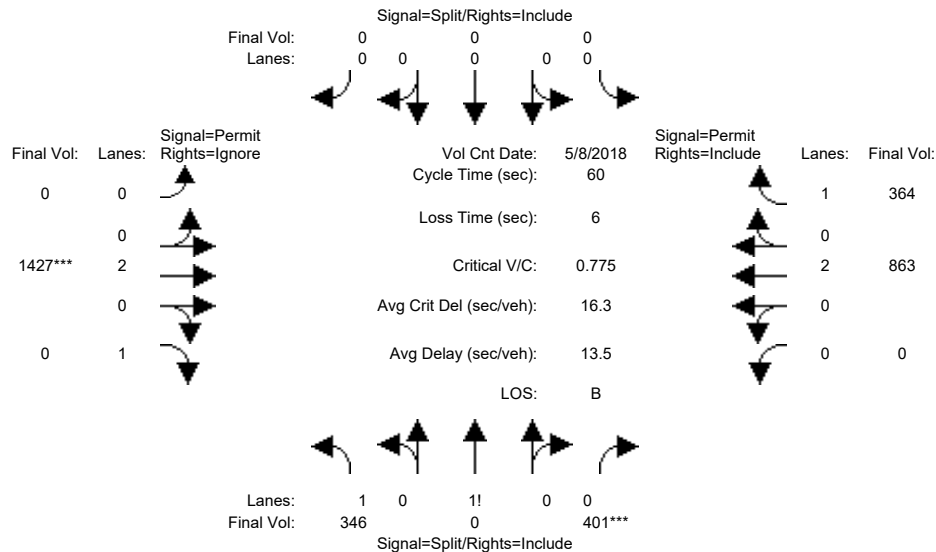


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	R		L	-	T	-	R	
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	346	0	284	0	0	0	0	1236	0	0	656	277
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:	346	0	284	0	0	0	0	1236	0	0	656	277
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	284	0	0	0	0	1236	0	0	656	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	346	0	284	0	0	0	0	1236	0	0	656	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	346	0	284	0	0	0	0	1236	0	0	656	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	346	0	284	0	0	0	0	1236	0	0	656	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.38	0.00	0.62	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2412	0	1088	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.00	0.26	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.17	0.16
Crit Moves:	****											
Green Time:	24.0	0.0	24.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	30.0	30.0
Volume/Cap:	0.36	0.00	0.65	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.35	0.32
Delay/Veh:	12.7	0.0	16.2	0.0	0.0	0.0	0.0	12.0	0.0	0.0	9.2	9.1
User DelAdj:	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:	12.7	0.0	16.2	0.0	0.0	0.0	0.0	12.0	0.0	0.0	9.2	9.1
LOS by Move:	B	A	B	A	A	A	A	B	A	A	A	A
HCM2k95thQ:	7	0	16	0	0	0	0	15	0	0	8	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

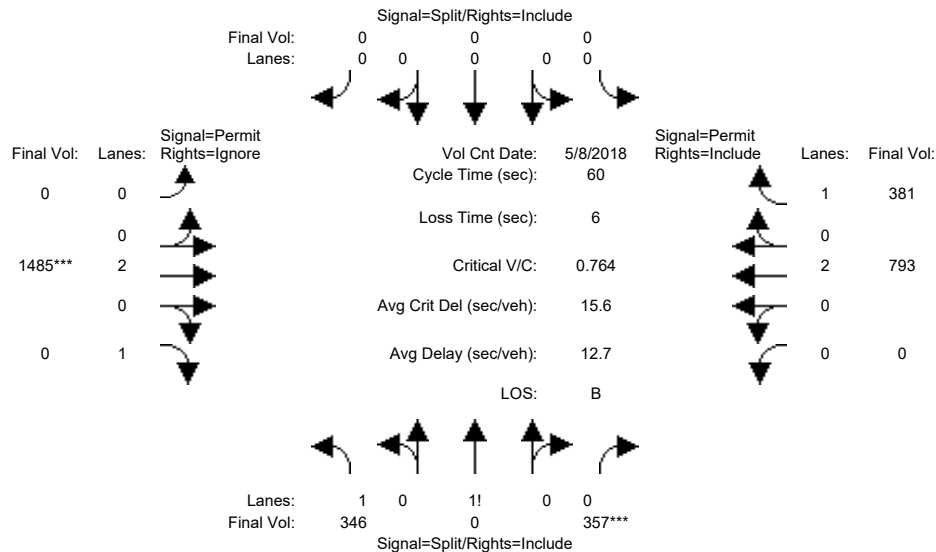


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	346	0	284	0	0	0	0	1236	0	0	656	277
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:	346	0	284	0	0	0	0	1236	0	0	656	277
Added Vol:	0	0	117	0	0	0	0	191	0	0	207	87
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	401	0	0	0	0	1427	0	0	863	364
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	346	0	401	0	0	0	0	1427	0	0	863	364
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	346	0	401	0	0	0	0	1427	0	0	863	364
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	346	0	401	0	0	0	0	1427	0	0	863	364
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.31	0.00	0.69	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2288	0	1247	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.32	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.23	0.21
Crit Moves:	****											
Green Time:	24.9	0.0	24.9	0.0	0.0	0.0	0.0	29.1	0.0	0.0	29.1	29.1
Volume/Cap:	0.36	0.00	0.77	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.47	0.43
Delay/Veh:	12.2	0.0	19.1	0.0	0.0	0.0	0.0	14.9	0.0	0.0	10.5	10.4
User DelAdj:	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:	12.2	0.0	19.1	0.0	0.0	0.0	0.0	14.9	0.0	0.0	10.5	10.4
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B
HCM2k95thQ:	8	0	21	0	0	0	0	19	0	0	11	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

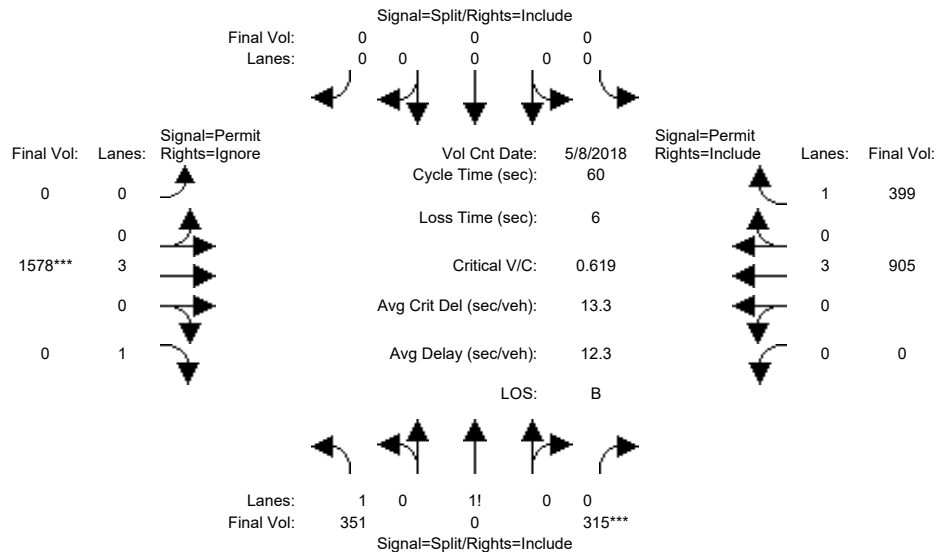


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	346	0	284	0	0	0	0	1236	0	0	656	277
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:	346	0	284	0	0	0	0	1236	0	0	656	277
Added Vol:	0	0	73	0	0	0	0	249	0	0	137	104
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	357	0	0	0	0	1485	0	0	793	381
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	346	0	357	0	0	0	0	1485	0	0	793	381
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	346	0	357	0	0	0	0	1485	0	0	793	381
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	346	0	357	0	0	0	0	1485	0	0	793	381
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.33	0.00	0.67	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	2332	0	1201	0	0	0	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.30	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.21	0.22
Crit Moves:	****											
Green Time:	23.3	0.0	23.3	0.0	0.0	0.0	0.0	30.7	0.0	0.0	30.7	30.7
Volume/Cap:	0.38	0.00	0.76	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.41	0.43
Delay/Veh:	13.3	0.0	19.8	0.0	0.0	0.0	0.0	13.6	0.0	0.0	9.2	9.5
User DelAdj:	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:	13.3	0.0	19.8	0.0	0.0	0.0	0.0	13.6	0.0	0.0	9.2	9.5
LOS by Move:	B	A	B	A	A	A	A	B	A	A	A	A
HCM2k95thQ:	8	0	20	0	0	0	0	19	0	0	9	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

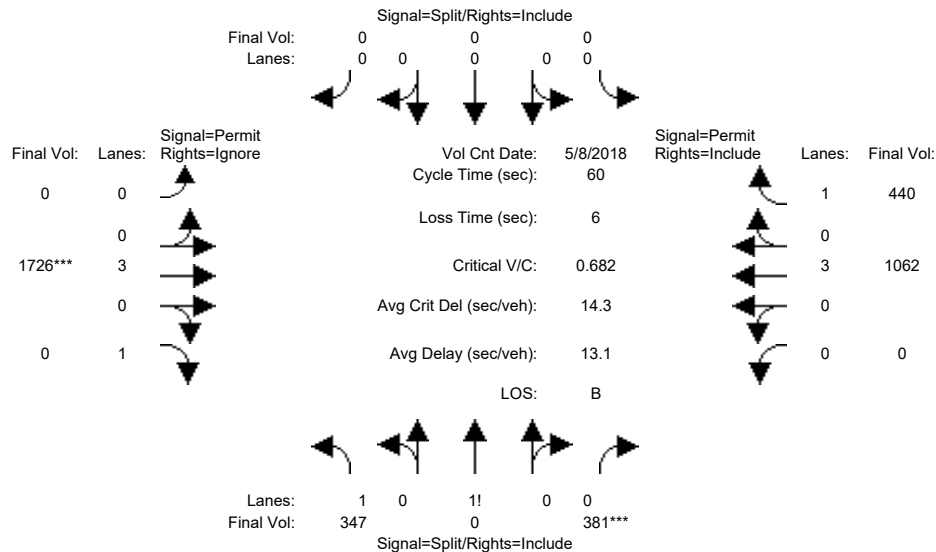


Street Name:	US 101 Northbound Ramps						Cochrane Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	10		0		10	0	0	0	0	10	10	0	10	10	
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module: >> Count Date: 8 May 2018 <<															
Base Vol:	351		0		315	0	0	0	0	1578	0	0	905	399	
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	
Initial Bse:	351		0		315	0	0	0	0	1578	0	0	905	399	
Added Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0		0		0	0	0	0	0	0	0	0	0	0	
Initial Fut:	351		0		315	0	0	0	0	1578	0	0	905	399	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	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	0.00	1.00	1.00	1.00	1.00	
PHF Volume:	351		0		315	0	0	0	0	1578	0	0	905	399	
Reduct Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	351		0		315	0	0	0	0	1578	0	0	905	399	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	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	0.00	1.00	1.00	1.00	1.00	
FinalVolume:	351		0		315	0	0	0	0	1578	0	0	905	399	
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	1.00	0.92	
Lanes:	1.36	0.00	0.64	0.00	0.00	0.00	0.00	3.00	1.00	0.00	3.00	1.00	1.00	1.00	
Final Sat.:	2376	0	1124	0	0	0	0	5700	1750	0	5700	1750	1750	1750	
Capacity Analysis Module:															
Vol/Sat:	0.15	0.00	0.28	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.16	0.23	0.23	0.23	
Crit Moves:	****														
Green Time:	27.2	0.0	27.2	0.0	0.0	0.0	0.0	26.8	0.0	0.0	26.8	26.8	26.8	26.8	
Volume/Cap:	0.33	0.00	0.62	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.36	0.51	0.51	0.51	
Delay/Veh:	10.6	0.0	13.6	0.0	0.0	0.0	0.0	13.1	0.0	0.0	11.0	12.4	12.4	12.4	
User DelAdj:	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	
AdjDel/Veh:	10.6	0.0	13.6	0.0	0.0	0.0	0.0	13.1	0.0	0.0	11.0	12.4	12.4	12.4	
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B	B	B	
HCM2k95thQ:	7	0	16	0	0	0	0	13	0	0	8	12	12	12	
Note: Queue reported is the number of cars per lane.															

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #108: US 101 Northbound Ramps and Cochrane Road

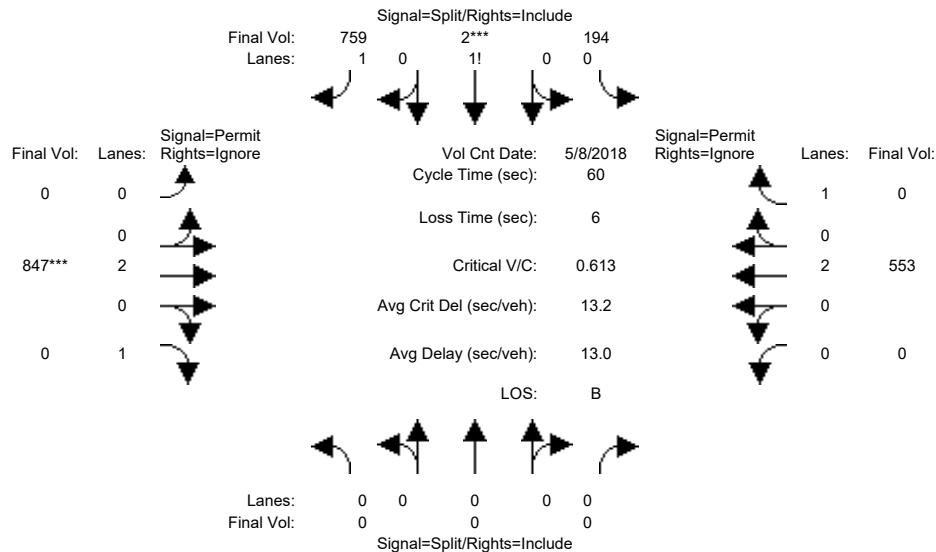


Street Name:	US 101 Northbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	347	0	381	0	0	0	0	1726	0	0	1062	440
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:	347	0	381	0	0	0	0	1726	0	0	1062	440
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	347	0	381	0	0	0	0	1726	0	0	1062	440
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	347	0	381	0	0	0	0	1726	0	0	1062	440
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	347	0	381	0	0	0	0	1726	0	0	1062	440
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	347	0	381	0	0	0	0	1726	0	0	1062	440
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.32	0.00	0.68	0.00	0.00	0.00	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	2308	0	1226	0	0	0	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.31	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.19	0.25
Crit Moves:	****											
Green Time:	27.4	0.0	27.4	0.0	0.0	0.0	0.0	26.6	0.0	0.0	26.6	26.6
Volume/Cap:	0.33	0.00	0.68	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.42	0.57
Delay/Veh:	10.5	0.0	14.7	0.0	0.0	0.0	0.0	14.1	0.0	0.0	11.5	13.4
User DelAdj:	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:	10.5	0.0	14.7	0.0	0.0	0.0	0.0	14.1	0.0	0.0	11.5	13.4
LOS by Move:	B	A	B	A	A	A	A	B	A	A	B	B
HCM2k95thQ:	7	0	18	0	0	0	0	15	0	0	9	14
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

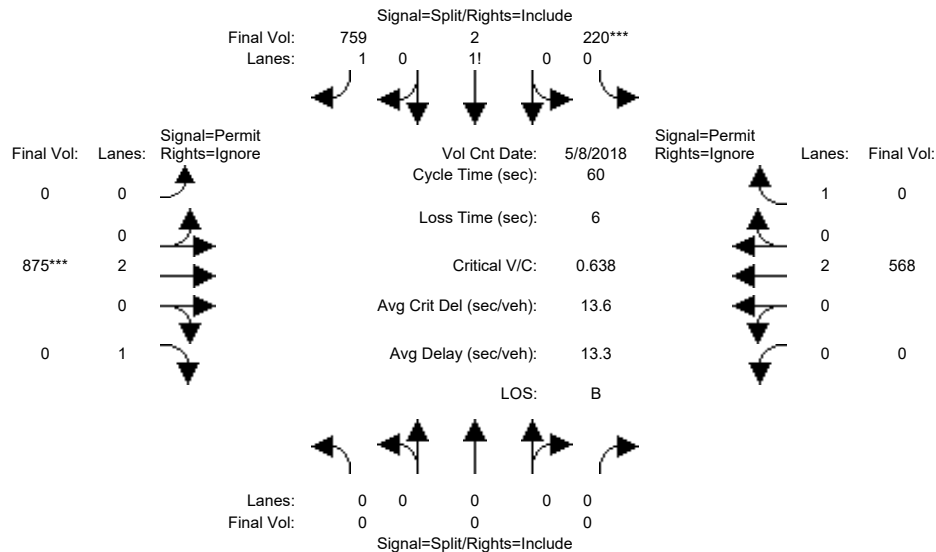


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	194	2	759	0	847	249	0	553	113
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	194	2	759	0	847	249	0	553	113
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	194	2	759	0	847	249	0	553	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	194	2	759	0	847	0	0	553	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	194	2	759	0	847	0	0	553	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	194	2	759	0	847	0	0	553	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.33	0.01	1.66	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	590	6	2904	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.33	0.26	0.00	0.22	0.00	0.00	0.15	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	32.2	32.2	32.2	0.0	21.8	0.0	0.0	21.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.61	0.61	0.49	0.00	0.61	0.00	0.00	0.40	0.00
Delay/Veh:	0.0	0.0	0.0	10.3	10.3	8.9	0.0	16.5	0.0	0.0	14.4	0.0
User DelAdj:	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:	0.0	0.0	0.0	10.3	10.3	8.9	0.0	16.5	0.0	0.0	14.4	0.0
LOS by Move:	A	A	A	B	B	A	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	16	16	12	0	12	0	0	7	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

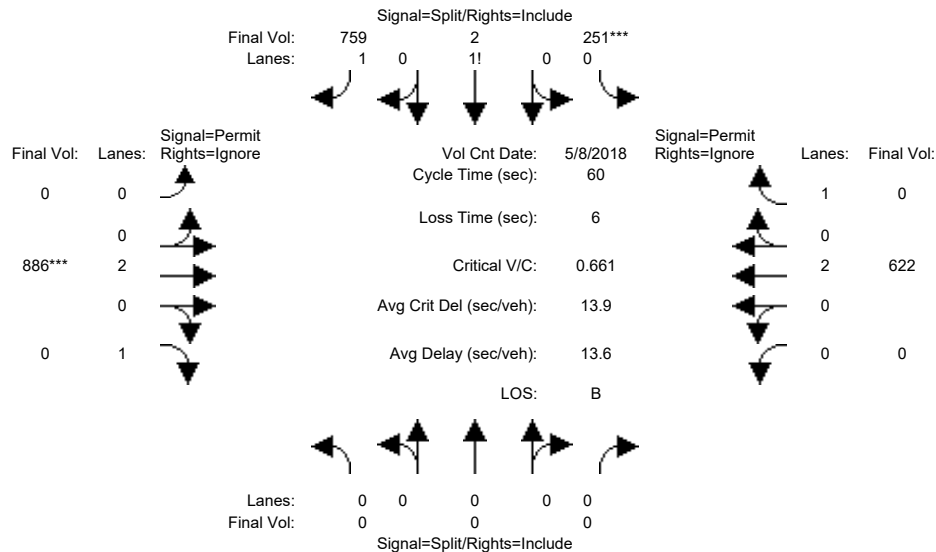


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	194	2	759	0	847	249	0	553	113
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	194	2	759	0	847	249	0	553	113
Added Vol:	0	0	0	26	0	0	0	28	0	0	15	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	220	2	759	0	875	249	0	568	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	220	2	759	0	875	0	0	568	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	220	2	759	0	875	0	0	568	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	220	2	759	0	875	0	0	568	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.36	0.01	1.63	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	640	6	2854	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.34	0.34	0.27	0.00	0.23	0.00	0.00	0.15	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	32.3	32.3	32.3	0.0	21.7	0.0	0.0	21.7	0.0
Volume/Cap:	0.00	0.00	0.00	0.64	0.64	0.49	0.00	0.64	0.00	0.00	0.41	0.00
Delay/Veh:	0.0	0.0	0.0	10.6	10.6	8.9	0.0	16.9	0.0	0.0	14.6	0.0
User DelAdj:	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:	0.0	0.0	0.0	10.6	10.6	8.9	0.0	16.9	0.0	0.0	14.6	0.0
LOS by Move:	A	A	A	B	B	A	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	17	17	12	0	13	0	0	8	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

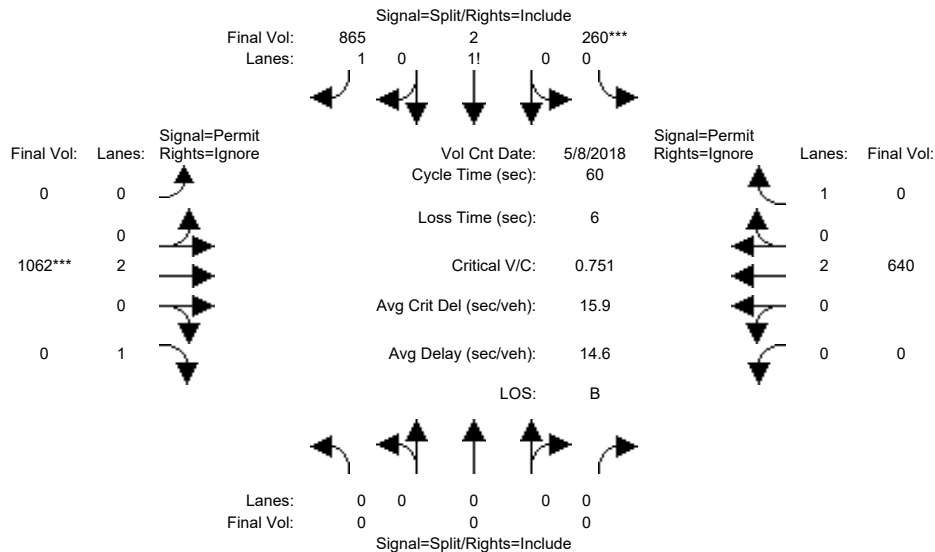


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	194	2	759	0	847	249	0	553	113
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	194	2	759	0	847	249	0	553	113
Added Vol:	0	0	0	57	0	0	0	39	0	0	69	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	251	2	759	0	886	249	0	622	154
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	251	2	759	0	886	0	0	622	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	251	2	759	0	886	0	0	622	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	251	2	759	0	886	0	0	622	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.39	0.01	1.60	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	694	6	2800	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.36	0.36	0.27	0.00	0.23	0.00	0.00	0.16	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	32.8	32.8	32.8	0.0	21.2	0.0	0.0	21.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.66	0.66	0.50	0.00	0.66	0.00	0.00	0.46	0.00
Delay/Veh:	0.0	0.0	0.0	10.7	10.7	8.6	0.0	17.6	0.0	0.0	15.3	0.0
User DelAdj:	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:	0.0	0.0	0.0	10.7	10.7	8.6	0.0	17.6	0.0	0.0	15.3	0.0
LOS by Move:	A	A	A	B	B	A	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	18	18	12	0	13	0	0	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

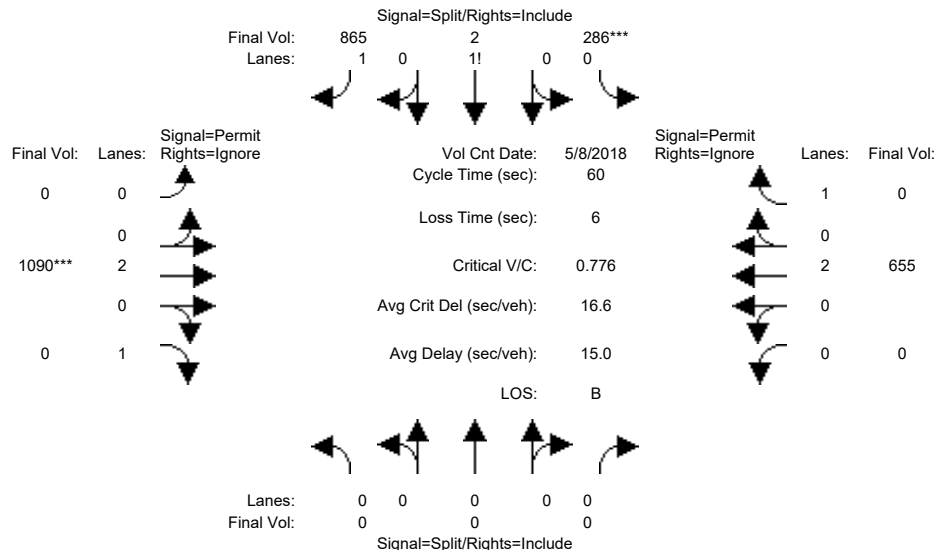


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	260	2	865	0	1062	278	0	640	152
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	260	2	865	0	1062	278	0	640	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	260	2	865	0	1062	278	0	640	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	260	2	865	0	1062	0	0	640	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	260	2	865	0	1062	0	0	640	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	260	2	865	0	1062	0	0	640	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.37	0.01	1.62	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	655	5	2840	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.40	0.40	0.30	0.00	0.28	0.00	0.00	0.17	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	31.7	31.7	31.7	0.0	22.3	0.0	0.0	22.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.75	0.75	0.58	0.00	0.75	0.00	0.00	0.45	0.00
Delay/Veh:	0.0	0.0	0.0	13.3	13.3	10.0	0.0	18.7	0.0	0.0	14.5	0.0
User DelAdj:	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:	0.0	0.0	0.0	13.3	13.3	10.0	0.0	18.7	0.0	0.0	14.5	0.0
LOS by Move:	A	A	A	B	B	B	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	23	23	15	0	16	0	0	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

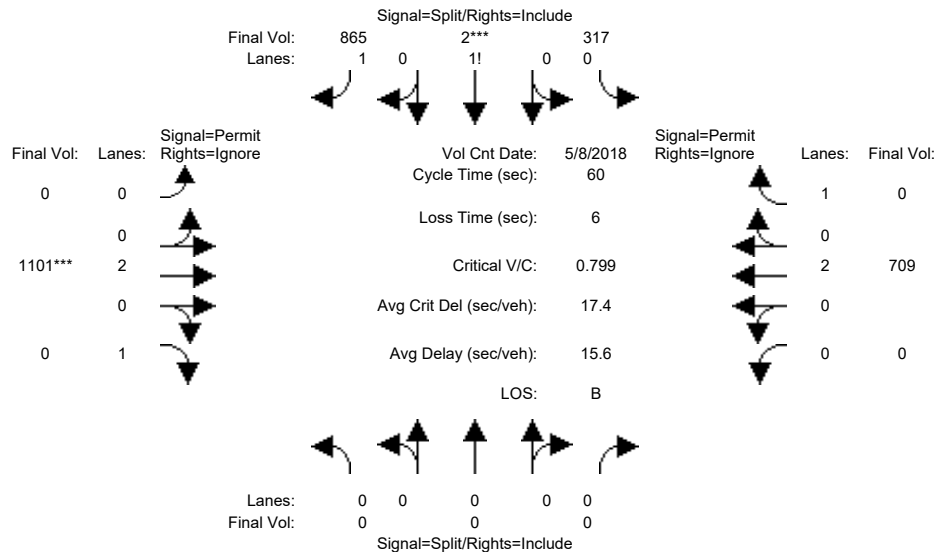


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	260	2	865	0	1062	278	0	640	152
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	260	2	865	0	1062	278	0	640	152
Added Vol:	0	0	0	26	0	0	0	28	0	0	15	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	286	2	865	0	1090	278	0	655	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	286	2	865	0	1090	0	0	655	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	286	2	865	0	1090	0	0	655	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	286	2	865	0	1090	0	0	655	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.39	0.01	1.60	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	695	5	2800	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.41	0.31	0.00	0.29	0.00	0.00	0.17	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	31.8	31.8	31.8	0.0	22.2	0.0	0.0	22.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.78	0.78	0.58	0.00	0.78	0.00	0.00	0.47	0.00
Delay/Veh:	0.0	0.0	0.0	13.9	13.9	10.0	0.0	19.5	0.0	0.0	14.7	0.0
User DelAdj:	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:	0.0	0.0	0.0	13.9	13.9	10.0	0.0	19.5	0.0	0.0	14.7	0.0
LOS by Move:	A	A	A	B	B	B	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	24	24	15	0	17	0	0	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

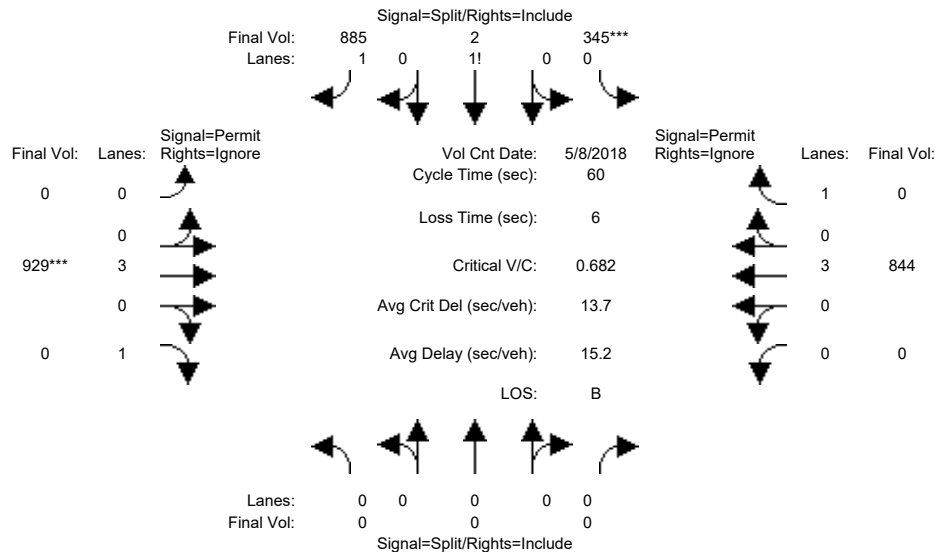


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	260	2	865	0	1062	278	0	640	152
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	260	2	865	0	1062	278	0	640	152
Added Vol:	0	0	0	57	0	0	0	39	0	0	69	41
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	317	2	865	0	1101	278	0	709	193
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	317	2	865	0	1101	0	0	709	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	317	2	865	0	1101	0	0	709	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	317	2	865	0	1101	0	0	709	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.42	0.01	1.57	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	738	5	2757	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.43	0.43	0.31	0.00	0.29	0.00	0.00	0.19	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	32.2	32.2	32.2	0.0	21.8	0.0	0.0	21.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.80	0.80	0.58	0.00	0.80	0.00	0.00	0.51	0.00
Delay/Veh:	0.0	0.0	0.0	14.4	14.4	9.8	0.0	20.6	0.0	0.0	15.3	0.0
User DelAdj:	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:	0.0	0.0	0.0	14.4	14.4	9.8	0.0	20.6	0.0	0.0	15.3	0.0
LOS by Move:	A	A	A	B	B	A	A	C	A	A	B	A
HCM2k95thQ:	0	0	0	26	26	15	0	18	0	0	10	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

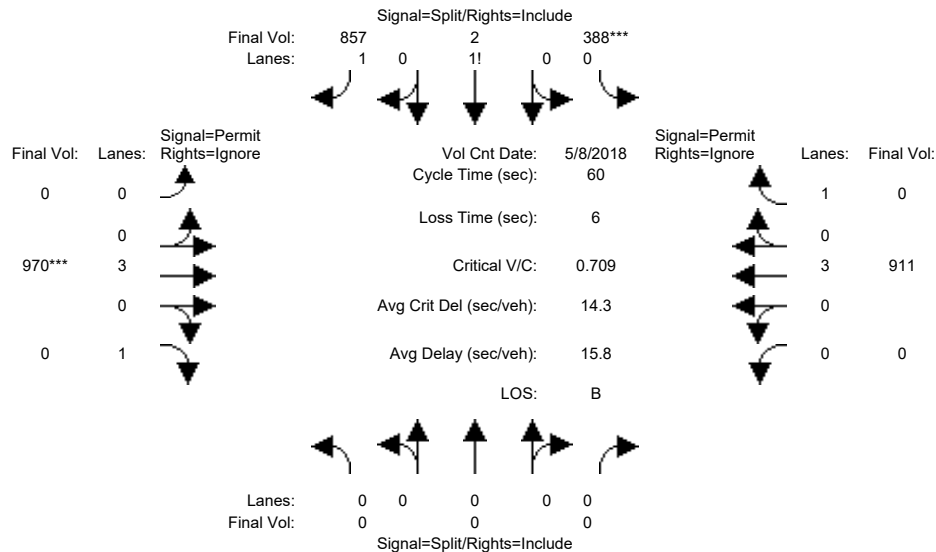


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	345	2	885	0	929	255	0	844	175
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	345	2	885	0	929	255	0	844	175
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	345	2	885	0	929	255	0	844	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	345	2	885	0	929	0	0	844	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	345	2	885	0	929	0	0	844	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	345	2	885	0	929	0	0	844	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.43	0.01	1.56	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	765	4	2731	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.45	0.45	0.32	0.00	0.16	0.00	0.00	0.15	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	39.7	39.7	39.7	0.0	14.3	0.0	0.0	14.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.68	0.68	0.49	0.00	0.68	0.00	0.00	0.62	0.00
Delay/Veh:	0.0	0.0	0.0	7.4	7.4	5.2	0.0	22.2	0.0	0.0	21.3	0.0
User DelAdj:	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:	0.0	0.0	0.0	7.4	7.4	5.2	0.0	22.2	0.0	0.0	21.3	0.0
LOS by Move:	A	A	A	A	A	A	A	C	A	A	C	A
HCM2k95thQ:	0	0	0	20	20	12	0	10	0	0	9	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

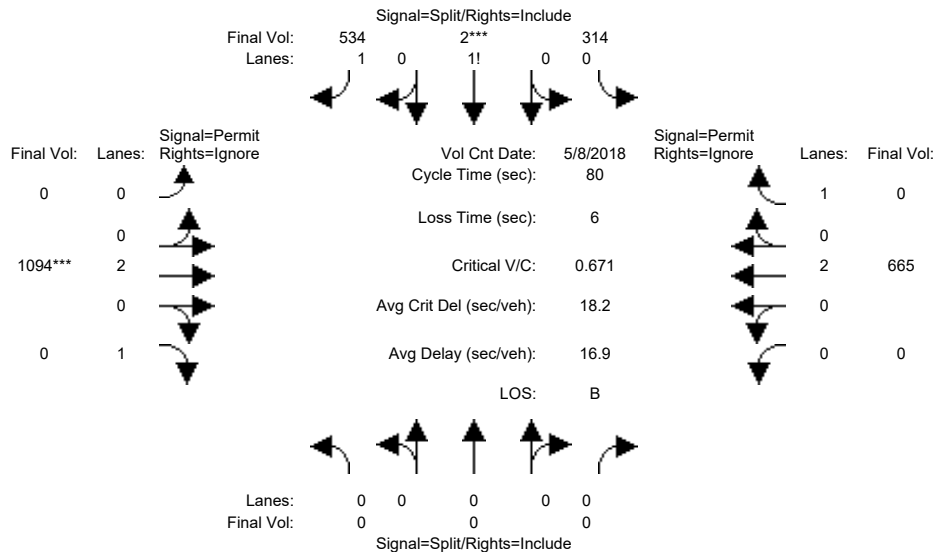


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	388	2	857	0	970	254	0	911	113
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	388	2	857	0	970	254	0	911	113
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	388	2	857	0	970	254	0	911	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	388	2	857	0	970	0	0	911	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	388	2	857	0	970	0	0	911	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	388	2	857	0	970	0	0	911	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.47	0.01	1.52	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	830	4	2666	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.47	0.47	0.32	0.00	0.17	0.00	0.00	0.16	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	39.6	39.6	39.6	0.0	14.4	0.0	0.0	14.4	0.0
Volume/Cap:	0.00	0.00	0.00	0.71	0.71	0.49	0.00	0.71	0.00	0.00	0.67	0.00
Delay/Veh:	0.0	0.0	0.0	7.9	7.9	5.3	0.0	22.6	0.0	0.0	21.9	0.0
User DelAdj:	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:	0.0	0.0	0.0	7.9	7.9	5.3	0.0	22.6	0.0	0.0	21.9	0.0
LOS by Move:	A	A	A	A	A	A	A	C	A	A	C	A
HCM2k95thQ:	0	0	0	21	21	12	0	11	0	0	10	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

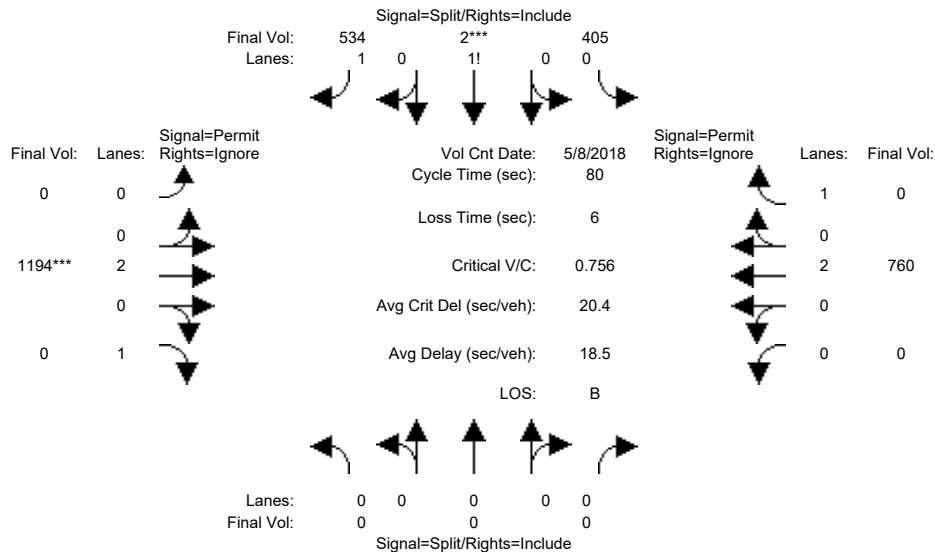


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	314	2	534	0	1094	775	0	665	165
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	314	2	534	0	1094	775	0	665	165
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	314	2	534	0	1094	775	0	665	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	314	2	534	0	1094	0	0	665	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	314	2	534	0	1094	0	0	665	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	314	2	534	0	1094	0	0	665	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.54	0.01	1.45	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	943	6	2551	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.33	0.21	0.00	0.29	0.00	0.00	0.17	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	39.7	39.7	39.7	0.0	34.3	0.0	0.0	34.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.67	0.67	0.42	0.00	0.67	0.00	0.00	0.41	0.00
Delay/Veh:	0.0	0.0	0.0	16.6	16.6	13.0	0.0	19.4	0.0	0.0	16.0	0.0
User DelAdj:	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:	0.0	0.0	0.0	16.6	16.6	13.0	0.0	19.4	0.0	0.0	16.0	0.0
LOS by Move:	A	A	A	B	B	B	A	B	A	A	B	A
HCM2k95thQ:	0	0	0	23	23	12	0	20	0	0	11	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

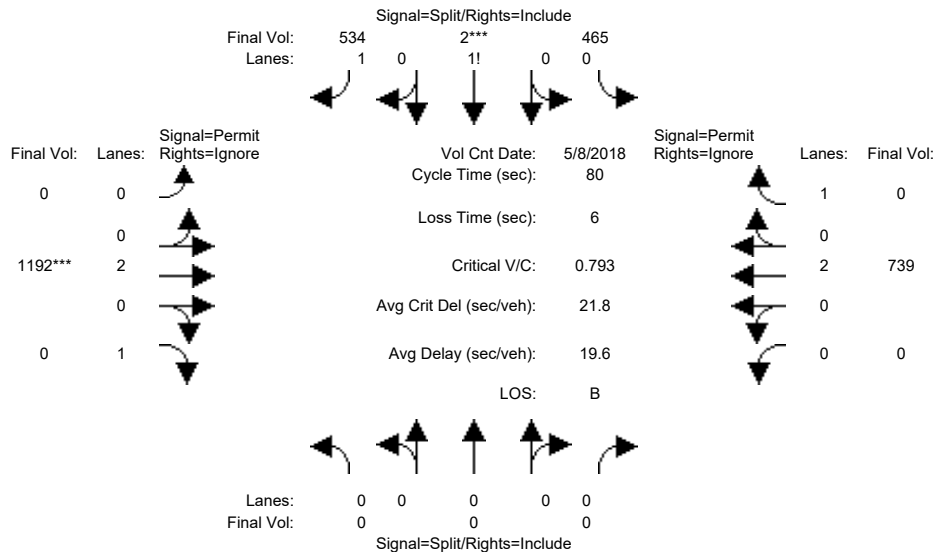


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	314	2	534	0	1094	775	0	665	165
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	314	2	534	0	1094	775	0	665	165
Added Vol:	0	0	0	91	0	0	0	100	0	0	95	112
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	405	2	534	0	1194	775	0	760	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	405	2	534	0	1194	0	0	760	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	405	2	534	0	1194	0	0	760	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	405	2	534	0	1194	0	0	760	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.60	0.01	1.39	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1052	5	2443	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.39	0.39	0.22	0.00	0.31	0.00	0.00	0.20	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	40.8	40.8	40.8	0.0	33.2	0.0	0.0	33.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.76	0.76	0.43	0.00	0.76	0.00	0.00	0.48	0.00
Delay/Veh:	0.0	0.0	0.0	18.4	18.4	12.5	0.0	22.1	0.0	0.0	17.3	0.0
User DelAdj:	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:	0.0	0.0	0.0	18.4	18.4	12.5	0.0	22.1	0.0	0.0	17.3	0.0
LOS by Move:	A	A	A	B	B	B	A	C	A	A	B	A
HCM2k95thQ:	0	0	0	28	28	13	0	23	0	0	13	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

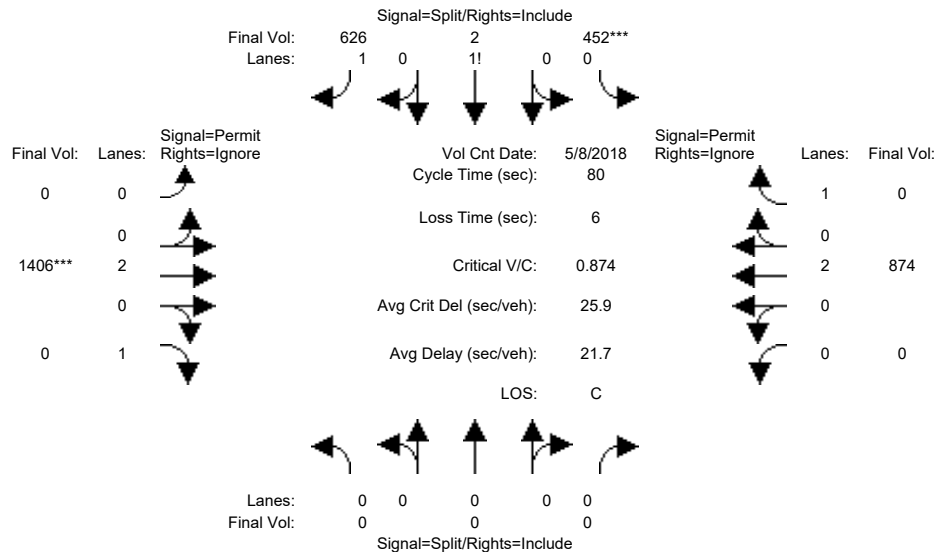


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	314	2	534	0	1094	775	0	665	165
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	314	2	534	0	1094	775	0	665	165
Added Vol:	0	0	0	151	0	0	0	98	0	0	74	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	465	2	534	0	1192	775	0	739	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	465	2	534	0	1192	0	0	739	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	465	2	534	0	1192	0	0	739	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	465	2	534	0	1192	0	0	739	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.63	0.01	1.36	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1109	5	2387	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.42	0.42	0.22	0.00	0.31	0.00	0.00	0.19	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	42.3	42.3	42.3	0.0	31.7	0.0	0.0	31.7	0.0
Volume/Cap:	0.00	0.00	0.00	0.79	0.79	0.42	0.00	0.79	0.00	0.00	0.49	0.00
Delay/Veh:	0.0	0.0	0.0	18.8	18.8	11.5	0.0	24.2	0.0	0.0	18.4	0.0
User DelAdj:	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:	0.0	0.0	0.0	18.8	18.8	11.5	0.0	24.2	0.0	0.0	18.4	0.0
LOS by Move:	A	A	A	B	B	B	A	C	A	A	B	A
HCM2k95thQ:	0	0	0	31	31	12	0	24	0	0	13	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

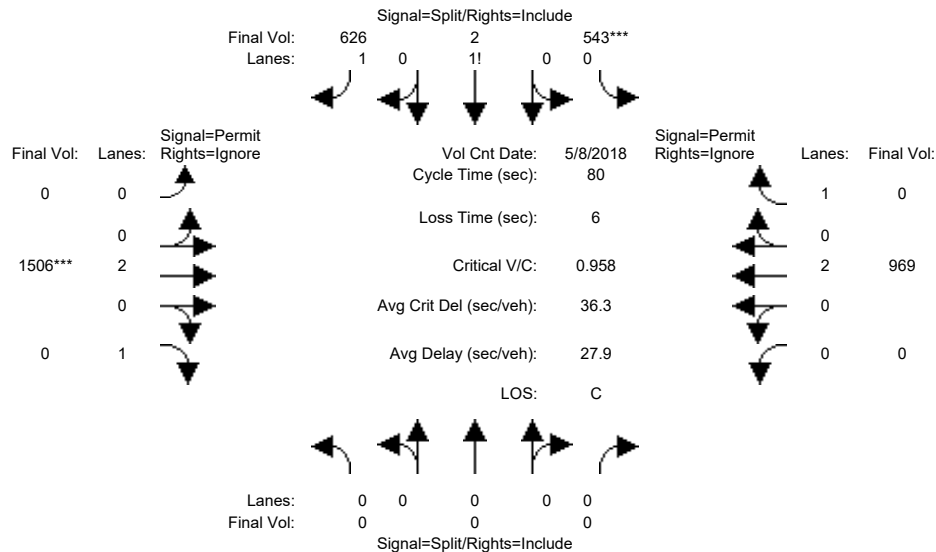


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	452	2	626	0	1406	775	0	874	165
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	452	2	626	0	1406	775	0	874	165
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	452	2	626	0	1406	775	0	874	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	452	2	626	0	1406	0	0	874	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	452	2	626	0	1406	0	0	874	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	0	0	0	452	2	626	0	1406	0	0	874	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.59	0.01	1.40	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1031	5	2464	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.44	0.44	0.25	0.00	0.37	0.00	0.00	0.23	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	40.1	40.1	40.1	0.0	33.9	0.0	0.0	33.9	0.0
Volume/Cap:	0.00	0.00	0.00	0.87	0.87	0.51	0.00	0.87	0.00	0.00	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	24.8	24.8	13.5	0.0	26.7	0.0	0.0	17.7	0.0
User DelAdj:	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:	0.0	0.0	0.0	24.8	24.8	13.5	0.0	26.7	0.0	0.0	17.7	0.0
LOS by Move:	A	A	A	C	C	B	A	C	A	A	B	A
HCM2k95thQ:	0	0	0	36	36	15	0	29	0	0	15	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

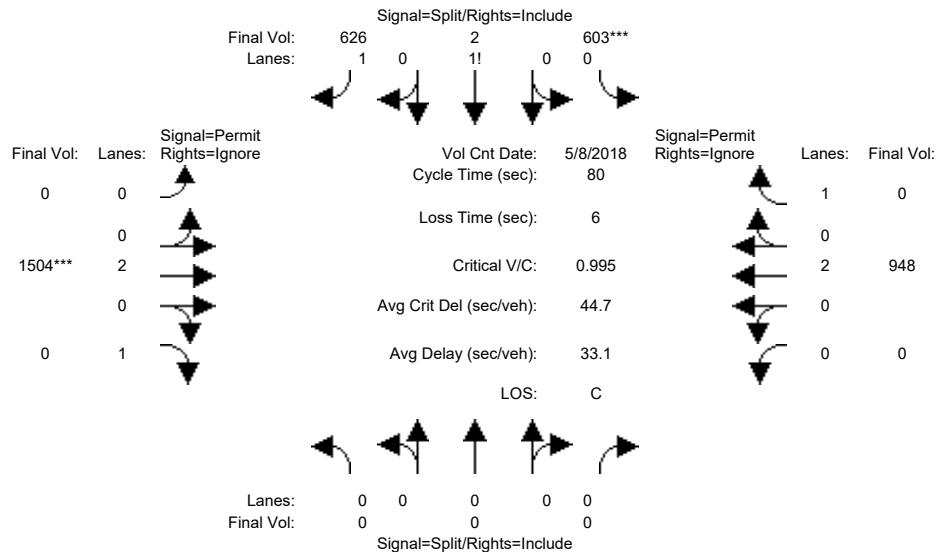


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	452	2	626	0	1406	775	0	874	165
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	452	2	626	0	1406	775	0	874	165
Added Vol:	0	0	0	91	0	0	0	100	0	0	95	112
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	543	2	626	0	1506	775	0	969	277
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	543	2	626	0	1506	0	0	969	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	543	2	626	0	1506	0	0	969	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	543	2	626	0	1506	0	0	969	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.63	0.01	1.36	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1108	4	2388	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.49	0.49	0.26	0.00	0.40	0.00	0.00	0.26	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	40.9	40.9	40.9	0.0	33.1	0.0	0.0	33.1	0.0
Volume/Cap:	0.00	0.00	0.00	0.96	0.96	0.51	0.00	0.96	0.00	0.00	0.62	0.00
Delay/Veh:	0.0	0.0	0.0	35.5	35.5	13.1	0.0	36.9	0.0	0.0	19.2	0.0
User DelAdj:	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:	0.0	0.0	0.0	35.5	35.5	13.1	0.0	36.9	0.0	0.0	19.2	0.0
LOS by Move:	A	A	A	D	D	B	A	D	A	A	B	A
HCM2k95thQ:	0	0	0	46	46	16	0	35	0	0	17	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

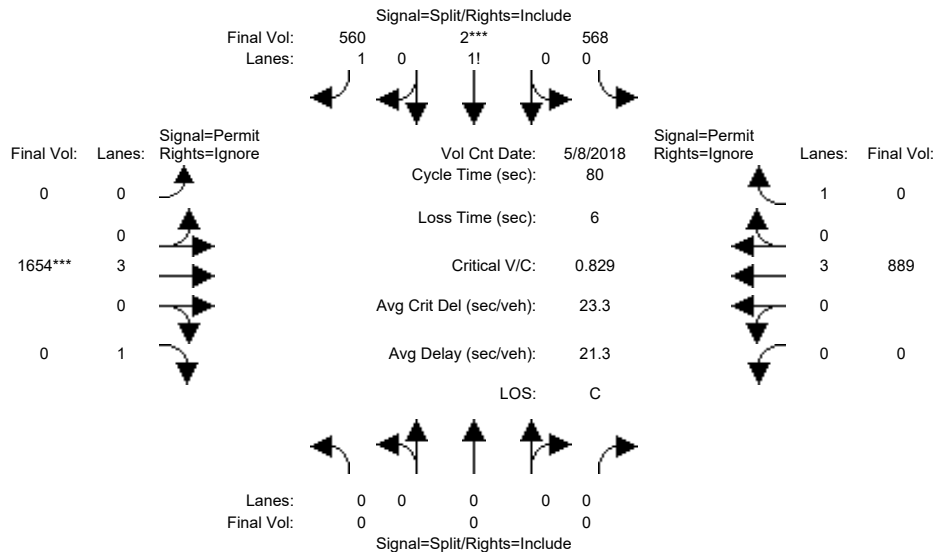


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	452	2	626	0	1406	775	0	874	165
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	452	2	626	0	1406	775	0	874	165
Added Vol:	0	0	0	151	0	0	0	98	0	0	74	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	603	2	626	0	1504	775	0	948	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	603	2	626	0	1504	0	0	948	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	603	2	626	0	1504	0	0	948	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	603	2	626	0	1504	0	0	948	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.65	0.01	1.34	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1150	4	2347	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.52	0.52	0.27	0.00	0.40	0.00	0.00	0.25	0.00
Crit Moves:				****			****					
Green Time:	0.0	0.0	0.0	42.2	42.2	42.2	0.0	31.8	0.0	0.0	31.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.99	0.99	0.51	0.00	0.99	0.00	0.00	0.63	0.00
Delay/Veh:	0.0	0.0	0.0	43.1	43.1	12.4	0.0	45.9	0.0	0.0	20.2	0.0
User DelAdj:	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:	0.0	0.0	0.0	43.1	43.1	12.4	0.0	45.9	0.0	0.0	20.2	0.0
LOS by Move:	A	A	A	D	D	B	A	D	A	A	C	A
HCM2k95thQ:	0	0	0	52	52	16	0	38	0	0	17	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

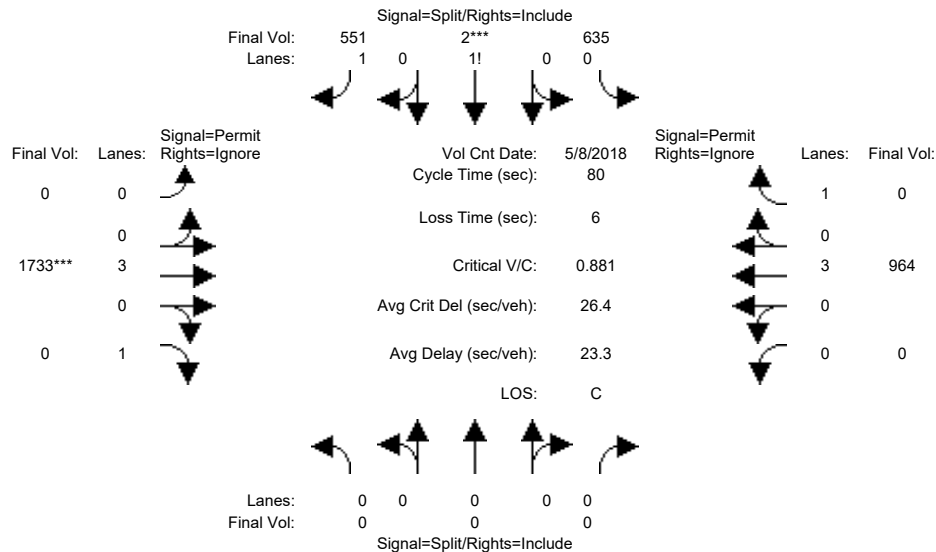


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	568	2	560	0	1654	863	0	889	345
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	568	2	560	0	1654	863	0	889	345
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	568	2	560	0	1654	863	0	889	345
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	568	2	560	0	1654	0	0	889	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	568	2	560	0	1654	0	0	889	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	568	2	560	0	1654	0	0	889	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.66	0.01	1.33	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	1192	4	2337	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.48	0.48	0.24	0.00	0.29	0.00	0.00	0.16	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	46.0	46.0	46.0	0.0	28.0	0.0	0.0	28.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.83	0.83	0.42	0.00	0.83	0.00	0.00	0.45	0.00
Delay/Veh:	0.0	0.0	0.0	18.2	18.2	9.6	0.0	26.9	0.0	0.0	20.2	0.0
User DelAdj:	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:	0.0	0.0	0.0	18.2	18.2	9.6	0.0	26.9	0.0	0.0	20.2	0.0
LOS by Move:	A	A	A	B	B	A	A	C	A	A	C	A
HCM2k95thQ:	0	0	0	35	35	12	0	23	0	0	11	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #107: US 101 Southbound Ramps and Cochrane Road

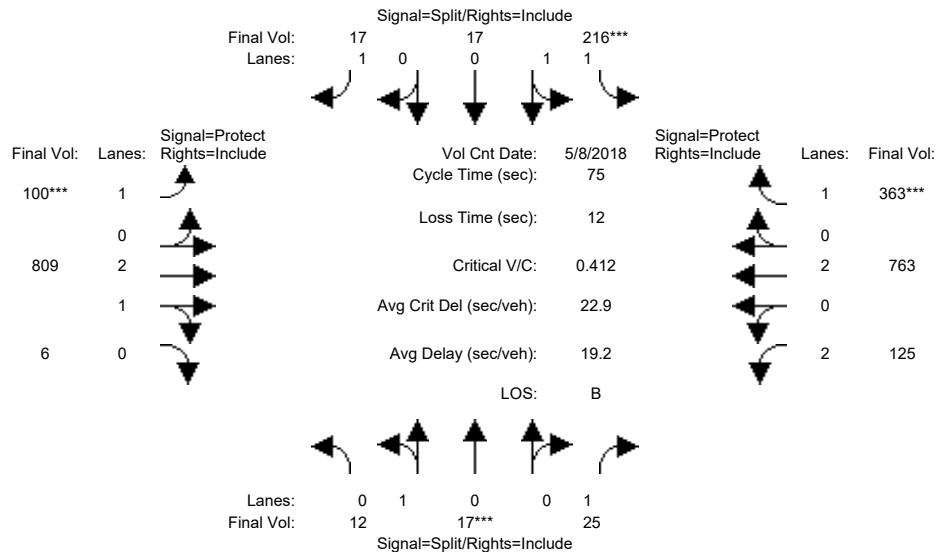


Street Name:	US 101 Southbound Ramps						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	0	0	0	635	2	551	0	1733	853	0	964	165
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	635	2	551	0	1733	853	0	964	165
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	635	2	551	0	1733	853	0	964	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	0	635	2	551	0	1733	0	0	964	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	635	2	551	0	1733	0	0	964	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	0	635	2	551	0	1733	0	0	964	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	0.69	0.01	1.30	0.00	3.00	1.00	0.00	3.00	1.00
Final Sat.:	0	0	0	1242	4	2289	0	5700	1750	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.51	0.51	0.24	0.00	0.30	0.00	0.00	0.17	0.00
Crit Moves:	****											
Green Time:	0.0	0.0	0.0	46.4	46.4	46.4	0.0	27.6	0.0	0.0	27.6	0.0
Volume/Cap:	0.00	0.00	0.00	0.88	0.88	0.42	0.00	0.88	0.00	0.00	0.49	0.00
Delay/Veh:	0.0	0.0	0.0	21.5	21.5	9.4	0.0	29.7	0.0	0.0	20.9	0.0
User DelAdj:	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:	0.0	0.0	0.0	21.5	21.5	9.4	0.0	29.7	0.0	0.0	20.9	0.0
LOS by Move:	A	A	A	C	C	A	A	C	A	A	C	A
HCM2k95thQ:	0	0	0	40	40	12	0	25	0	0	12	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



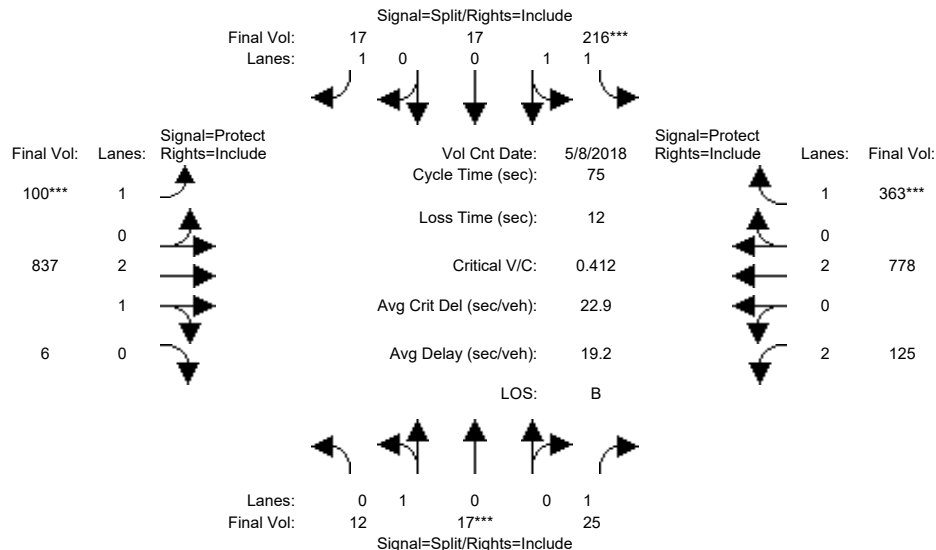
Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	12	17	25	216	17	17	100	809	6	125	763	363
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	17	25	216	17	17	100	809	6	125	763	363
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	216	17	17	100	809	6	125	763	363
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:	12	17	25	216	17	17	100	809	6	125	763	363
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	216	17	17	100	809	6	125	763	363
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
Final Volume:	12	17	25	216	17	17	100	809	6	125	763	363
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.86	0.14	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3291	259	1750	1750	5559	41	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.06	0.15	0.15	0.04	0.20	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.5	10.5	10.5	9.2	25.9	25.9	16.6	33.3	33.3
Volume/Cap:	0.12	0.12	0.11	0.47	0.47	0.07	0.47	0.42	0.42	0.18	0.45	0.47
Delay/Veh:	28.9	28.9	28.8	30.3	30.3	28.1	32.3	19.0	19.0	23.8	14.7	15.1
User DelAdj:	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:	28.9	28.9	28.8	30.3	30.3	28.1	32.3	19.0	19.0	23.8	14.7	15.1
LOS by Move:	C	C	C	C	C	C	C	B	B	C	B	B
HCM2k95thQ:	1	1	1	6	6	1	5	9	9	3	11	12

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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

Volume Module:	>> Count Date: 8 May 2018 <<											
Base Vol:	12	17	25	216	17	17	100	809	6	125	763	363
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	17	25	216	17	17	100	809	6	125	763	363
Added Vol:	0	0	0	0	0	0	0	28	0	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	216	17	17	100	837	6	125	778	363
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:	12	17	25	216	17	17	100	837	6	125	778	363
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	216	17	17	100	837	6	125	778	363
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
Final Volume:	12	17	25	216	17	17	100	837	6	125	778	363

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.86	0.14	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3291	259	1750	1750	5560	40	3150	3800	1750

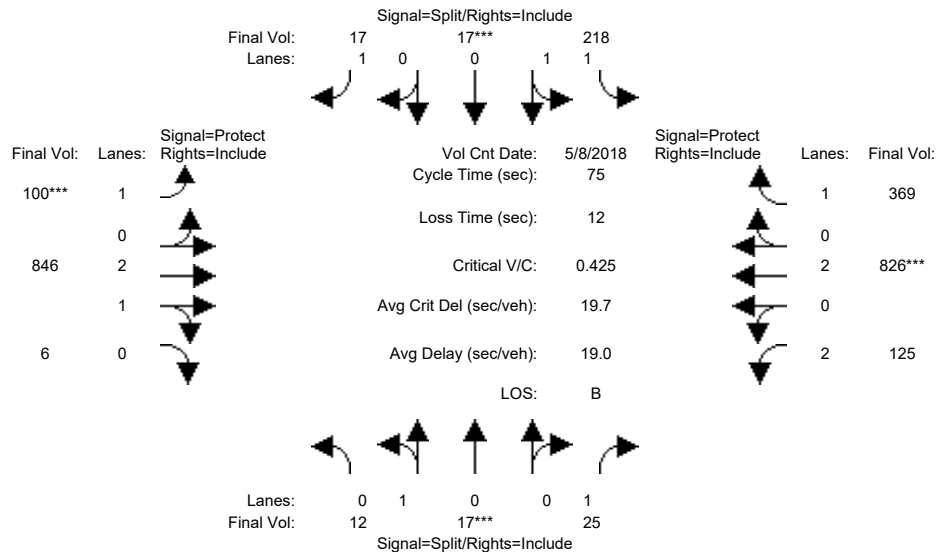
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.06	0.15	0.15	0.04	0.20	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.5	10.5	10.5	9.2	26.2	26.2	16.3	33.3	33.3
Volume/Cap:	0.12	0.12	0.11	0.47	0.47	0.07	0.47	0.43	0.43	0.18	0.46	0.47
Delay/Veh:	28.9	28.9	28.8	30.3	30.3	28.1	32.3	18.8	18.8	24.1	14.8	15.1
User DelAdj:	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:	28.9	28.9	28.8	30.3	30.3	28.1	32.3	18.8	18.8	24.1	14.8	15.1
LOS by Move:	C	C	C	C	C	C	C	B	B	C	B	B
HCM2k95thQ:	1	1	1	6	6	1	5	10	10	3	12	12

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

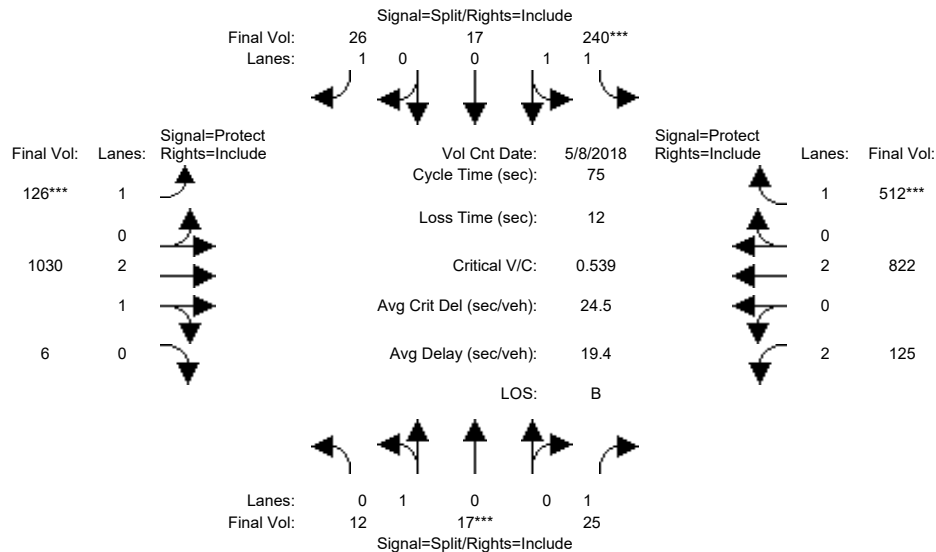


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	12	17	25	216	17	17	100	809	6	125	763	363
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	17	25	216	17	17	100	809	6	125	763	363
Added Vol:	0	0	0	2	0	0	0	37	0	0	63	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	218	17	17	100	846	6	125	826	369
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:	12	17	25	218	17	17	100	846	6	125	826	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	218	17	17	100	846	6	125	826	369
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
Final Volume:	12	17	25	218	17	17	100	846	6	125	826	369
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.86	0.14	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3293	257	1750	1750	5561	39	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.06	0.15	0.15	0.04	0.22	0.21
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.3	10.3	10.3	8.9	26.5	26.5	16.2	33.8	33.8
Volume/Cap:	0.12	0.12	0.11	0.48	0.48	0.07	0.48	0.43	0.43	0.18	0.48	0.47
Delay/Veh:	28.9	28.9	28.8	30.6	30.6	28.3	32.7	18.7	18.7	24.1	14.7	14.8
User DelAdj:	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:	28.9	28.9	28.8	30.6	30.6	28.3	32.7	18.7	18.7	24.1	14.7	14.8
LOS by Move:	C	C	C	C	C	C	C	B	B	C	B	B
HCM2k95thQ:	1	1	1	7	7	1	5	10	10	3	12	12
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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

Volume Module:	>> Count Date: 8 May 2018 <<											
Base Vol:	12	17	25	240	17	26	126	1030	6	125	822	512
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	17	25	240	17	26	126	1030	6	125	822	512
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	240	17	26	126	1030	6	125	822	512
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:	12	17	25	240	17	26	126	1030	6	125	822	512
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	240	17	26	126	1030	6	125	822	512
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
Final Volume:	12	17	25	240	17	26	126	1030	6	125	822	512

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.87	0.13	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3315	235	1750	1750	5568	32	3150	3800	1750

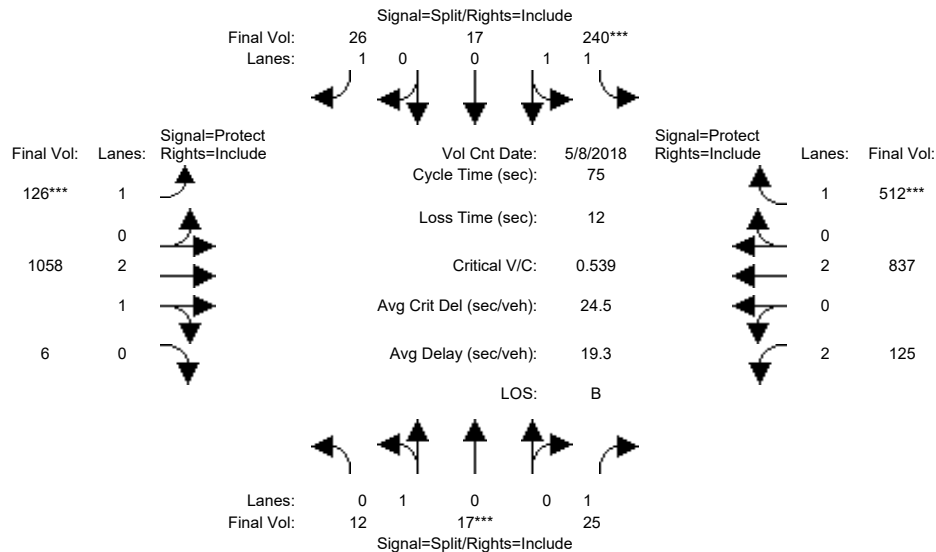
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.07	0.19	0.19	0.04	0.22	0.29
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	8.5	28.6	28.6	14.4	34.5	34.5
Volume/Cap:	0.12	0.12	0.11	0.54	0.54	0.11	0.64	0.49	0.49	0.21	0.47	0.64
Delay/Veh:	28.9	28.9	28.8	31.7	31.7	28.8	38.4	17.8	17.8	25.6	14.1	17.1
User DelAdj:	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:	28.9	28.9	28.8	31.7	31.7	28.8	38.4	17.8	17.8	25.6	14.1	17.1
LOS by Move:	C	C	C	C	C	C	D	B	B	C	B	B
HCM2k95thQ:	1	1	1	8	8	1	6	11	11	3	12	18

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	12	17	25	240	17	26	126	1030	6	125	822	512
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	17	25	240	17	26	126	1030	6	125	822	512
Added Vol:	0	0	0	0	0	0	0	28	0	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	240	17	26	126	1058	6	125	837	512
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:	12	17	25	240	17	26	126	1058	6	125	837	512
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	240	17	26	126	1058	6	125	837	512
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
Final Volume:	12	17	25	240	17	26	126	1058	6	125	837	512

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.87	0.13	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3315	235	1750	1750	5568	32	3150	3800	1750

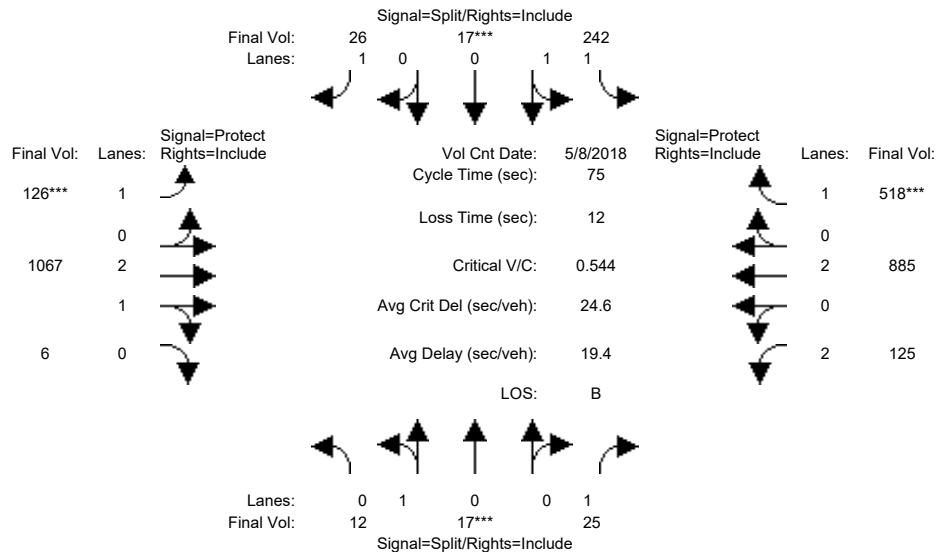
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.07	0.19	0.19	0.04	0.22	0.29
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	8.5	28.8	28.8	14.2	34.5	34.5
Volume/Cap:	0.12	0.12	0.11	0.54	0.54	0.11	0.64	0.49	0.49	0.21	0.48	0.64
Delay/Veh:	28.9	28.9	28.8	31.7	31.7	28.8	38.4	17.7	17.7	25.9	14.2	17.1
User DelAdj:	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:	28.9	28.9	28.8	31.7	31.7	28.8	38.4	17.7	17.7	25.9	14.2	17.1
LOS by Move:	C	C	C	C	C	C	D	B	B	C	B	B
HCM2k95thQ:	1	1	1	8	8	1	6	12	12	3	12	18

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

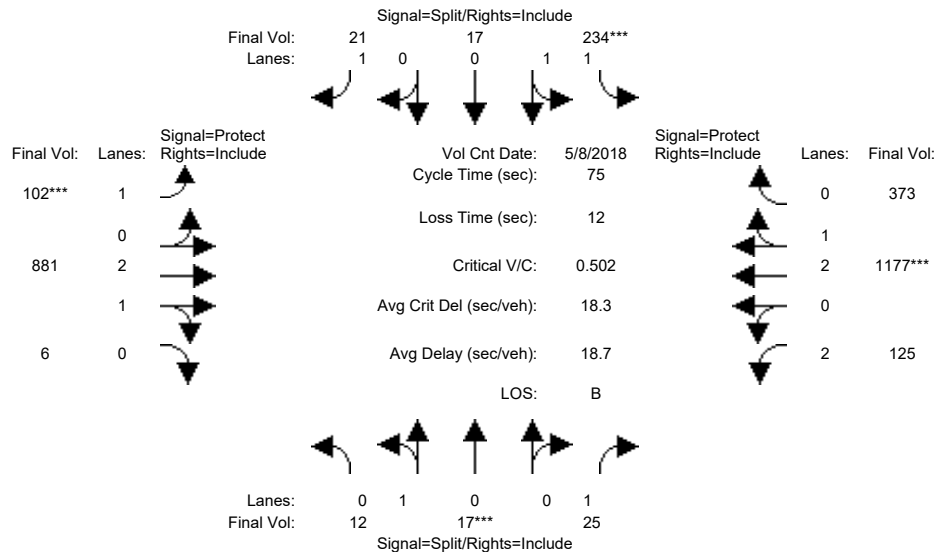


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	12	17	25	240	17	26	126	1030	6	125	822	512
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	17	25	240	17	26	126	1030	6	125	822	512
Added Vol:	0	0	0	2	0	0	0	37	0	0	63	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	242	17	26	126	1067	6	125	885	518
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:	12	17	25	242	17	26	126	1067	6	125	885	518
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	242	17	26	126	1067	6	125	885	518
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
Final Volume:	12	17	25	242	17	26	126	1067	6	125	885	518
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.41	0.59	1.00	1.87	0.13	1.00	1.00	2.98	0.02	2.00	2.00	1.00
Final Sat.:	745	1055	1750	3317	233	1750	1750	5569	31	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.07	0.19	0.19	0.04	0.23	0.30
Crit Moves:	****			****			****					****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	8.4	28.9	28.9	14.1	34.6	34.6
Volume/Cap:	0.12	0.12	0.11	0.55	0.55	0.11	0.64	0.50	0.50	0.21	0.51	0.64
Delay/Veh:	28.9	28.9	28.8	31.7	31.7	28.8	38.9	17.7	17.7	25.9	14.4	17.2
User DelAdj:	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:	28.9	28.9	28.8	31.7	31.7	28.8	38.9	17.7	17.7	25.9	14.4	17.2
LOS by Move:	C	C	C	C	C	C	D	B	B	C	B	B
HCM2k95thQ:	1	1	1	8	8	1	6	12	12	3	13	18
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



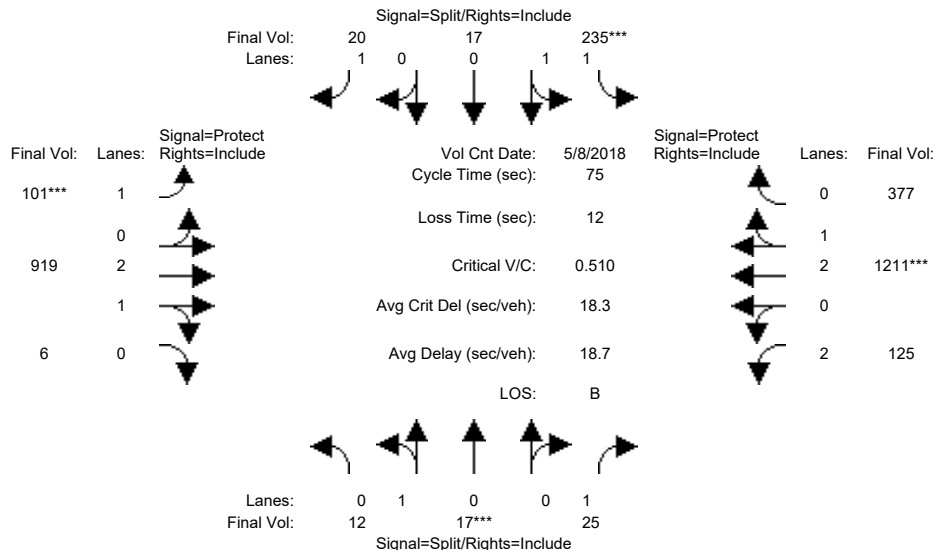
Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	12	17	25	234	17	21	102	881	6	125	1177	373
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	17	25	234	17	21	102	881	6	125	1177	373
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	234	17	21	102	881	6	125	1177	373
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:	12	17	25	234	17	21	102	881	6	125	1177	373
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	234	17	21	102	881	6	125	1177	373
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:	12	17	25	234	17	21	102	881	6	125	1177	373
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	0.99	0.95
Lanes:	0.41	0.59	1.00	1.87	0.13	1.00	1.00	2.98	0.02	2.00	2.25	0.75
Final Sat.:	745	1055	1750	3310	240	1750	1750	5562	38	3150	4251	1347
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.06	0.16	0.16	0.04	0.28	0.28
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	7.5	27.1	27.1	15.9	35.5	35.5
Volume/Cap:	0.12	0.12	0.11	0.53	0.53	0.09	0.58	0.44	0.44	0.19	0.58	0.58
Delay/Veh:	28.9	28.9	28.8	31.5	31.5	28.7	37.3	18.4	18.4	24.3	14.7	14.7
User DelAdj:	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:	28.9	28.9	28.8	31.5	31.5	28.7	37.3	18.4	18.4	24.3	14.7	14.7
LOS by Move:	C	C	C	C	C	C	D	B	B	C	B	B
HCM2k95thQ:	1	1	1	7	7	1	5	10	10	3	16	16

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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

Volume Module:	>> Count Date: 8 May 2018 <<											
Base Vol:	12	17	25	235	17	20	101	919	6	125	1211	377
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	17	25	235	17	20	101	919	6	125	1211	377
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	17	25	235	17	20	101	919	6	125	1211	377
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:	12	17	25	235	17	20	101	919	6	125	1211	377
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	17	25	235	17	20	101	919	6	125	1211	377
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
Final Volume:	12	17	25	235	17	20	101	919	6	125	1211	377

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	0.99	0.95
Lanes:	0.41	0.59	1.00	1.87	0.13	1.00	1.00	2.98	0.02	2.00	2.26	0.74
Final Sat.:	745	1055	1750	3310	239	1750	1750	5564	36	3150	4269	1329

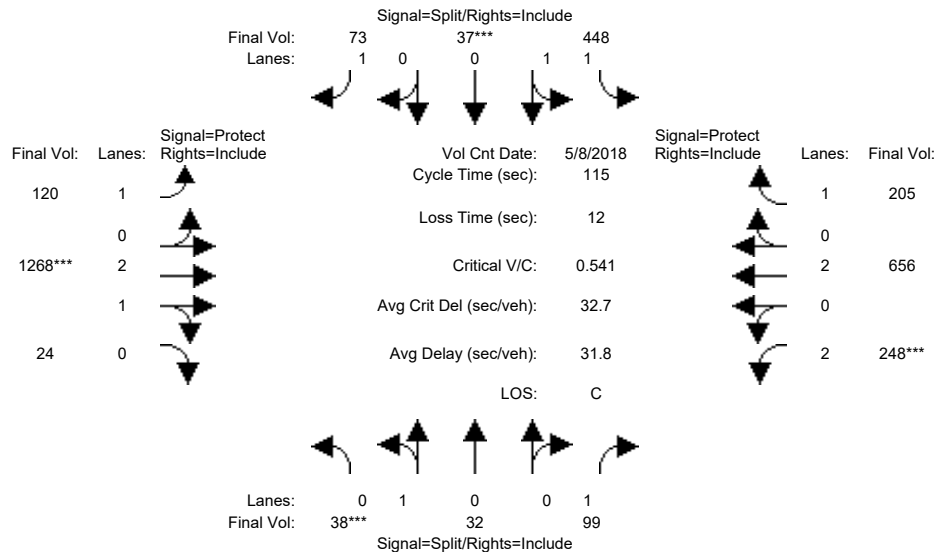
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.07	0.07	0.01	0.06	0.17	0.17	0.04	0.28	0.28
Crit Moves:	****			****			****			****		
Green Time:	10.0	10.0	10.0	10.0	10.0	10.0	7.3	27.5	27.5	15.5	35.7	35.7
Volume/Cap:	0.12	0.12	0.11	0.53	0.53	0.09	0.60	0.45	0.45	0.19	0.60	0.60
Delay/Veh:	28.9	28.9	28.8	31.5	31.5	28.7	38.1	18.2	18.2	24.7	14.7	14.7
User DelAdj:	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:	28.9	28.9	28.8	31.5	31.5	28.7	38.1	18.2	18.2	24.7	14.7	14.7
LOS by Move:	C	C	C	C	C	C	D	B	B	C	B	B
HCM2k95thQ:	1	1	1	7	7	1	5	10	10	3	16	16

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

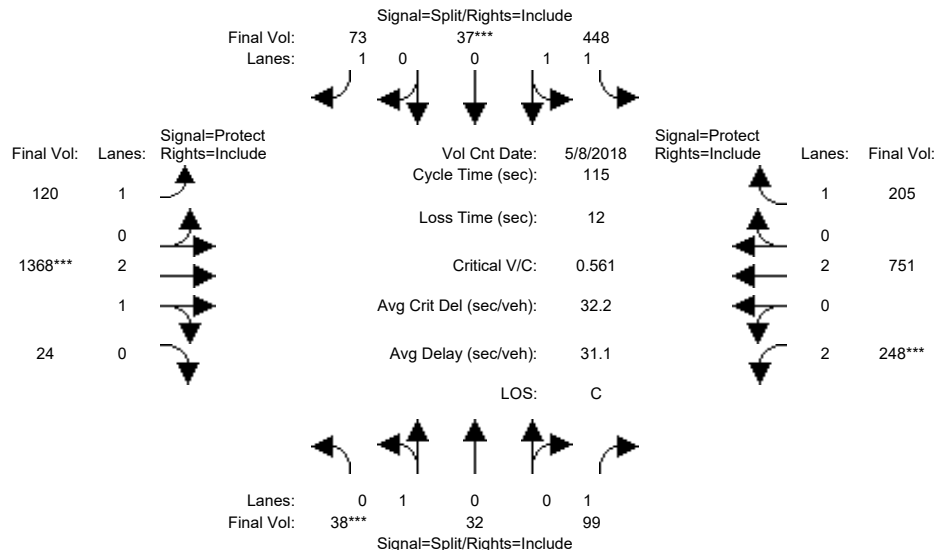


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	448	37	73	120	1268	24	248	656	205
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:	38	32	99	448	37	73	120	1268	24	248	656	205
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	448	37	73	120	1268	24	248	656	205
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:	38	32	99	448	37	73	120	1268	24	248	656	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	448	37	73	120	1268	24	248	656	205
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
Final Volume:	38	32	99	448	37	73	120	1268	24	248	656	205
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.85	0.15	1.00	1.00	2.94	0.06	2.00	2.00	1.00
Final Sat.:	977	823	1750	3279	271	1750	1750	5496	104	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.14	0.14	0.04	0.07	0.23	0.23	0.08	0.17	0.12
Crit Moves:	***			***			***			***		
Green Time:	12.0	12.0	12.0	27.9	27.9	27.9	17.9	47.1	47.1	16.1	45.2	45.2
Volume/Cap:	0.37	0.37	0.54	0.56	0.56	0.17	0.44	0.56	0.56	0.56	0.44	0.30
Delay/Veh:	49.2	49.2	52.2	39.1	39.1	34.6	45.1	26.4	26.4	47.9	25.8	24.3
User DelAdj:	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:	49.2	49.2	52.2	39.1	39.1	34.6	45.1	26.4	26.4	47.9	25.8	24.3
LOS by Move:	D	D	D	D	D	C	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	16	16	4	8	21	21	10	15	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

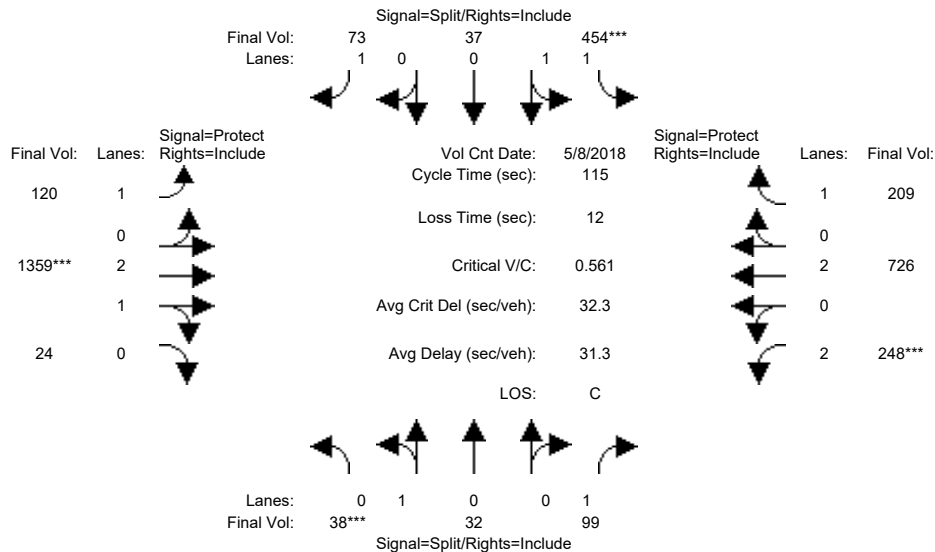


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	448	37	73	120	1268	24	248	656	205
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:	38	32	99	448	37	73	120	1268	24	248	656	205
Added Vol:	0	0	0	0	0	0	0	100	0	0	95	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	448	37	73	120	1368	24	248	751	205
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:	38	32	99	448	37	73	120	1368	24	248	751	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	448	37	73	120	1368	24	248	751	205
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
Final Volume:	38	32	99	448	37	73	120	1368	24	248	751	205
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.85	0.15	1.00	1.00	2.95	0.05	2.00	2.00	1.00
Final Sat.:	977	823	1750	3279	271	1750	1750	5503	97	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.14	0.14	0.04	0.07	0.25	0.25	0.08	0.20	0.12
Crit Moves:	***			***			***			***		
Green Time:	11.6	11.6	11.6	26.9	26.9	26.9	16.6	49.0	49.0	15.5	47.9	47.9
Volume/Cap:	0.39	0.39	0.56	0.58	0.58	0.18	0.47	0.58	0.58	0.58	0.47	0.28
Delay/Veh:	49.7	49.7	53.4	40.1	40.1	35.4	46.6	25.6	25.6	48.8	24.6	22.4
User DelAdj:	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:	49.7	49.7	53.4	40.1	40.1	35.4	46.6	25.6	25.6	48.8	24.6	22.4
LOS by Move:	D	D	D	D	D	D	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	16	16	5	8	22	22	10	17	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

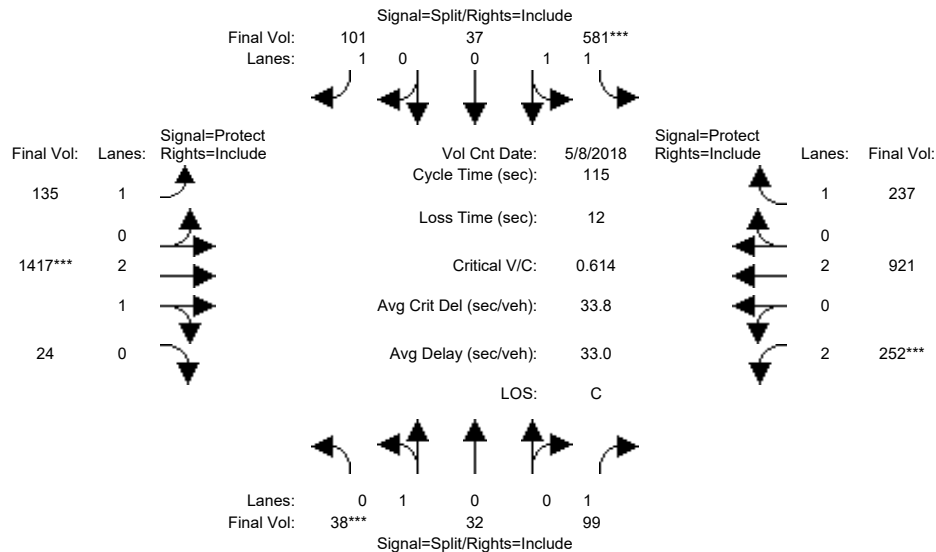


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	448	37	73	120	1268	24	248	656	205
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:	38	32	99	448	37	73	120	1268	24	248	656	205
Added Vol:	0	0	0	6	0	0	0	91	0	0	70	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	454	37	73	120	1359	24	248	726	209
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:	38	32	99	454	37	73	120	1359	24	248	726	209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	454	37	73	120	1359	24	248	726	209
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
Final Volume:	38	32	99	454	37	73	120	1359	24	248	726	209
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.85	0.15	1.00	1.00	2.95	0.05	2.00	2.00	1.00
Final Sat.:	977	823	1750	3282	268	1750	1750	5503	97	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.14	0.14	0.04	0.07	0.25	0.25	0.08	0.19	0.12
Crit Moves:	***			***			***			***		
Green Time:	11.6	11.6	11.6	27.2	27.2	27.2	16.9	48.7	48.7	15.5	47.2	47.2
Volume/Cap:	0.39	0.39	0.56	0.58	0.58	0.18	0.47	0.58	0.58	0.58	0.47	0.29
Delay/Veh:	49.7	49.7	53.4	39.9	39.9	35.1	46.2	25.8	25.8	48.8	24.9	22.9
User DelAdj:	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:	49.7	49.7	53.4	39.9	39.9	35.1	46.2	25.8	25.8	48.8	24.9	22.9
LOS by Move:	D	D	D	D	D	D	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	16	16	5	8	22	22	10	17	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	581	37	101	135	1417	24	252	921	237
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:	38	32	99	581	37	101	135	1417	24	252	921	237
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	581	37	101	135	1417	24	252	921	237
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:	38	32	99	581	37	101	135	1417	24	252	921	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	581	37	101	135	1417	24	252	921	237
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
Final Volume:	38	32	99	581	37	101	135	1417	24	252	921	237

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.88	0.12	1.00	1.00	2.95	0.05	2.00	2.00	1.00
Final Sat.:	977	823	1750	3337	213	1750	1750	5507	93	3150	3800	1750

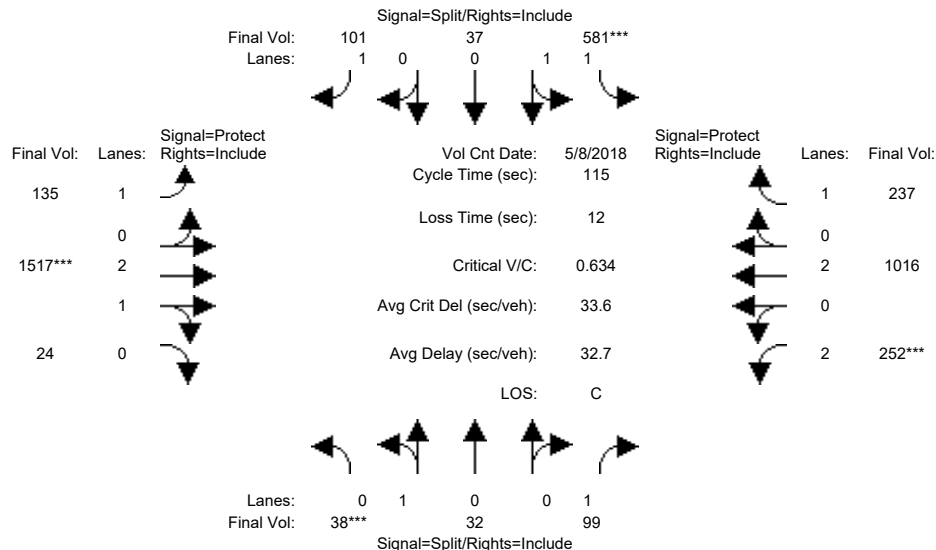
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.17	0.17	0.06	0.08	0.26	0.26	0.08	0.24	0.14
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	10.6	10.6	10.6	31.5	31.5	31.5	14.7	46.5	46.5	14.5	46.2	46.2
Volume/Cap:	0.42	0.42	0.61	0.64	0.64	0.21	0.60	0.64	0.64	0.64	0.60	0.34
Delay/Veh:	51.1	51.1	57.1	38.2	38.2	32.4	52.0	28.1	28.1	51.2	27.8	24.1
User DelAdj:	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:	51.1	51.1	57.1	38.2	38.2	32.4	52.0	28.1	28.1	51.2	27.8	24.1
LOS by Move:	D	D	E	D	D	C	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	20	20	6	9	24	24	10	22	12

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road



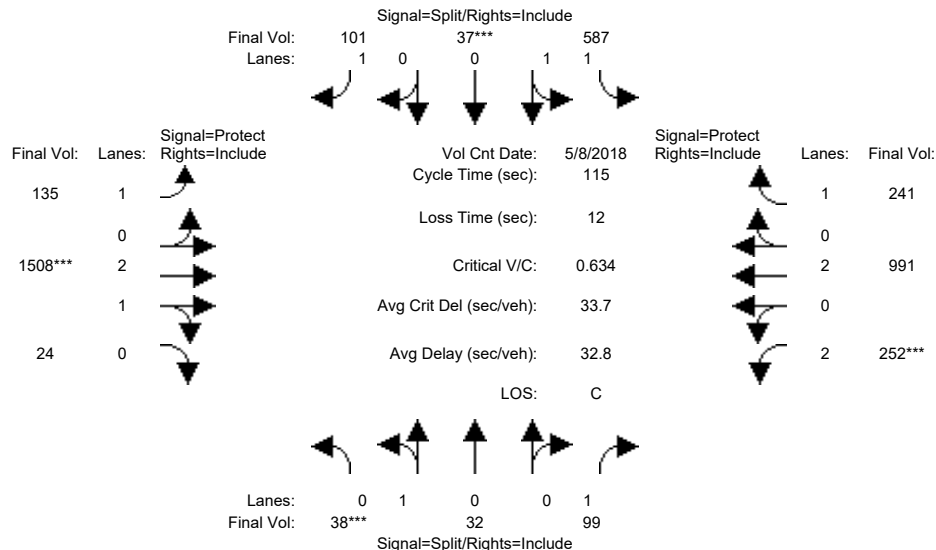
Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	581	37	101	135	1417	24	252	921	237
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:	38	32	99	581	37	101	135	1417	24	252	921	237
Added Vol:	0	0	0	0	0	0	0	100	0	0	95	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	581	37	101	135	1517	24	252	1016	237
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:	38	32	99	581	37	101	135	1517	24	252	1016	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	581	37	101	135	1517	24	252	1016	237
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
Final Volume:	38	32	99	581	37	101	135	1517	24	252	1016	237
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.88	0.12	1.00	1.00	2.95	0.05	2.00	2.00	1.00
Final Sat.:	977	823	1750	3337	213	1750	1750	5513	87	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.17	0.17	0.06	0.08	0.28	0.28	0.08	0.27	0.14
Crit Moves:	***			***			***			***		
Green Time:	10.3	10.3	10.3	30.5	30.5	30.5	13.9	48.2	48.2	14.0	48.3	48.3
Volume/Cap:	0.44	0.44	0.63	0.66	0.66	0.22	0.64	0.66	0.66	0.66	0.64	0.32
Delay/Veh:	51.5	51.5	58.8	39.3	39.3	33.2	54.4	27.4	27.4	52.3	27.3	22.6
User DelAdj:	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:	51.5	51.5	58.8	39.3	39.3	33.2	54.4	27.4	27.4	52.3	27.3	22.6
LOS by Move:	D	D	E	D	D	C	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	20	20	6	9	25	25	10	24	11

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

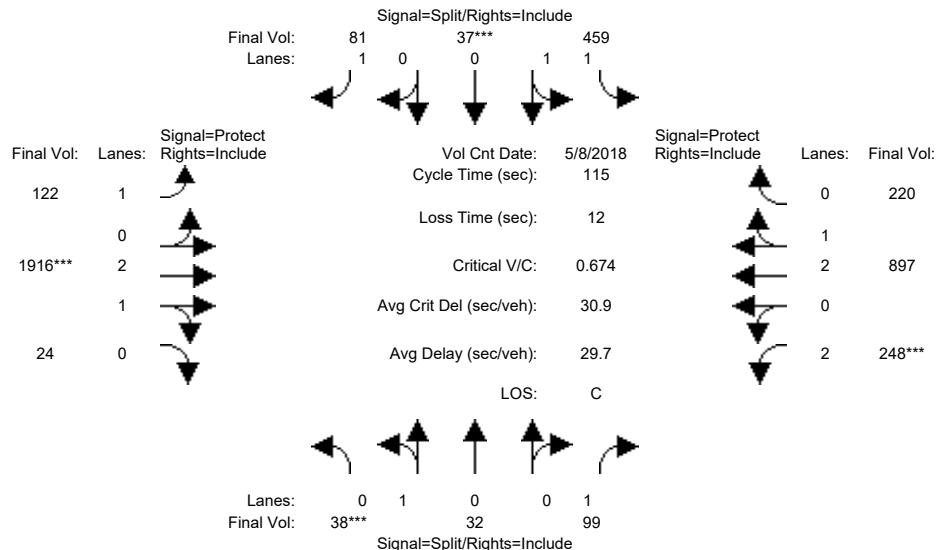


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	581	37	101	135	1417	24	252	921	237
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:	38	32	99	581	37	101	135	1417	24	252	921	237
Added Vol:	0	0	0	6	0	0	0	91	0	0	70	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	587	37	101	135	1508	24	252	991	241
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:	38	32	99	587	37	101	135	1508	24	252	991	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	587	37	101	135	1508	24	252	991	241
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
Final Volume:	38	32	99	587	37	101	135	1508	24	252	991	241
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	0.54	0.46	1.00	1.88	0.12	1.00	1.00	2.95	0.05	2.00	2.00	1.00
Final Sat.:	977	823	1750	3339	210	1750	1750	5512	88	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.18	0.18	0.06	0.08	0.27	0.27	0.08	0.26	0.14
Crit Moves:	***			***			***			***		
Green Time:	10.3	10.3	10.3	30.8	30.8	30.8	14.1	47.9	47.9	14.0	47.8	47.8
Volume/Cap:	0.44	0.44	0.63	0.66	0.66	0.22	0.63	0.66	0.66	0.66	0.63	0.33
Delay/Veh:	51.5	51.5	58.9	39.1	39.1	32.9	53.7	27.6	27.6	52.3	27.4	23.0
User DelAdj:	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:	51.5	51.5	58.9	39.1	39.1	32.9	53.7	27.6	27.6	52.3	27.4	23.0
LOS by Move:	D	D	E	D	D	C	D	C	C	D	C	C
HCM2k95thQ:	6	6	9	20	20	6	9	25	25	10	24	11
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

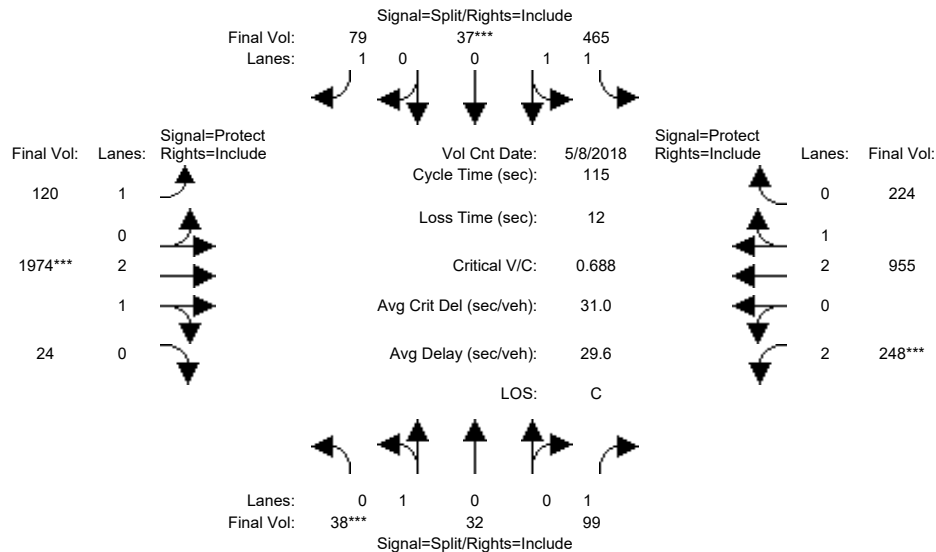


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	459	37	81	122	1916	24	248	897	220
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:	38	32	99	459	37	81	122	1916	24	248	897	220
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	459	37	81	122	1916	24	248	897	220
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:	38	32	99	459	37	81	122	1916	24	248	897	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	459	37	81	122	1916	24	248	897	220
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
Final Volume:	38	32	99	459	37	81	122	1916	24	248	897	220
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	0.99	0.95
Lanes:	0.54	0.46	1.00	1.85	0.15	1.00	1.00	2.96	0.04	2.00	2.39	0.61
Final Sat.:	977	823	1750	3285	265	1750	1750	5531	69	3150	4496	1103
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.14	0.14	0.05	0.07	0.35	0.35	0.08	0.20	0.20
Crit Moves:	***			***			***			***		
Green Time:	10.0	10.0	10.0	23.0	23.0	23.0	18.1	57.0	57.0	13.0	51.9	51.9
Volume/Cap:	0.45	0.45	0.65	0.70	0.70	0.23	0.44	0.70	0.70	0.70	0.44	0.44
Delay/Veh:	51.9	51.9	60.4	45.9	45.9	38.9	45.0	23.2	23.2	55.2	21.8	21.8
User DelAdj:	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:	51.9	51.9	60.4	45.9	45.9	38.9	45.0	23.2	23.2	55.2	21.8	21.8
LOS by Move:	D	D	E	D	D	D	D	C	C	E	C	C
HCM2k95thQ:	6	6	10	18	18	5	8	30	30	10	16	16
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #106: Madrone Parkway/Cochrane Plaza and Cochrane Road

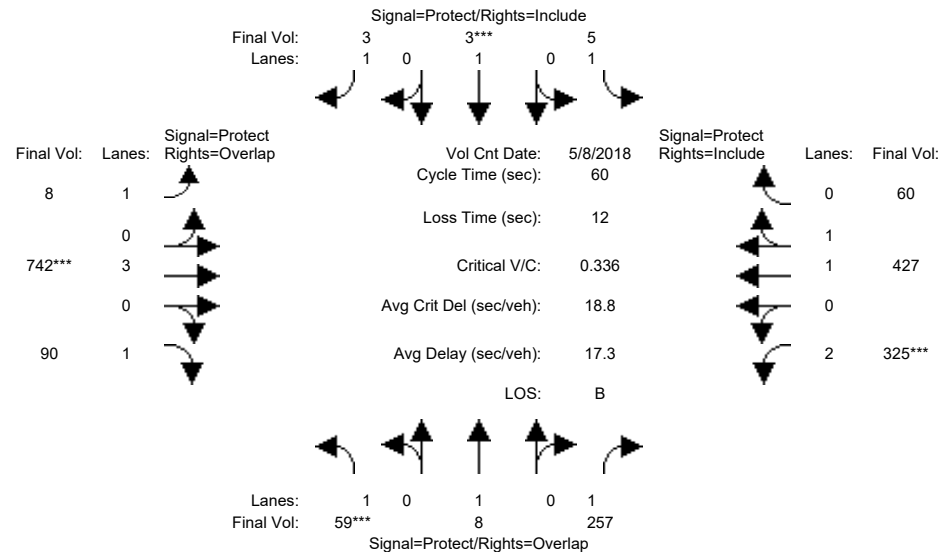


Street Name:	Madrone Parkway/Cochrane Plaza						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	32	99	465	37	79	120	1974	24	248	955	224
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:	38	32	99	465	37	79	120	1974	24	248	955	224
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	32	99	465	37	79	120	1974	24	248	955	224
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:	38	32	99	465	37	79	120	1974	24	248	955	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	32	99	465	37	79	120	1974	24	248	955	224
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
Final Volume:	38	32	99	465	37	79	120	1974	24	248	955	224
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.93	0.95	0.92	0.92	0.98	0.95	0.83	0.99	0.95
Lanes:	0.54	0.46	1.00	1.85	0.15	1.00	1.00	2.96	0.04	2.00	2.41	0.59
Final Sat.:	977	823	1750	3288	262	1750	1750	5533	67	3150	4535	1064
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.06	0.14	0.14	0.05	0.07	0.36	0.36	0.08	0.21	0.21
Crit Moves:	***			***			***			***		
Green Time:	10.0	10.0	10.0	22.8	22.8	22.8	17.2	57.5	57.5	12.7	53.0	53.0
Volume/Cap:	0.45	0.45	0.65	0.71	0.71	0.23	0.46	0.71	0.71	0.71	0.46	0.46
Delay/Veh:	51.9	51.9	60.4	46.5	46.5	39.0	45.9	23.2	23.2	56.2	21.3	21.3
User DelAdj:	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:	51.9	51.9	60.4	46.5	46.5	39.0	45.9	23.2	23.2	56.2	21.3	21.3
LOS by Move:	D	D	E	D	D	D	D	C	C	E	C	C
HCM2k95thQ:	6	6	10	19	19	5	8	31	31	10	17	17
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #105: Sutter Boulevard and Cochrane Road

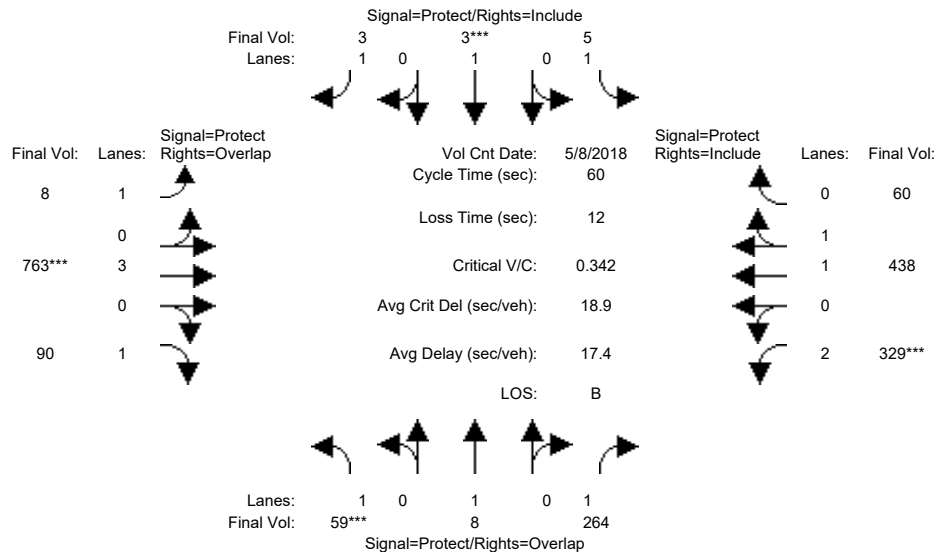


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	59	8	257	5	3	3	8	742	90	325	427	60
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:	59	8	257	5	3	3	8	742	90	325	427	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	8	257	5	3	3	8	742	90	325	427	60
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:	59	8	257	5	3	3	8	742	90	325	427	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	8	257	5	3	3	8	742	90	325	427	60
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:	59	8	257	5	3	3	8	742	90	325	427	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.75	0.25
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3244	456
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.15	0.00	0.00	0.00	0.00	0.13	0.05	0.10	0.13	0.13
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	23.7	7.0	10.0	10.0	12.8	17.3	24.3	13.7	18.2	18.2
Volume/Cap:	0.29	0.03	0.37	0.02	0.01	0.01	0.02	0.45	0.13	0.45	0.43	0.43
Delay/Veh:	25.0	21.0	13.2	23.5	20.9	20.9	18.7	17.7	11.3	20.4	17.0	17.0
User DelAdj:	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:	25.0	21.0	13.2	23.5	20.9	20.9	18.7	17.7	11.3	20.4	17.0	17.0
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	3	0	8	0	0	0	0	7	2	6	7	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #105: Sutter Boulevard and Cochrane Road



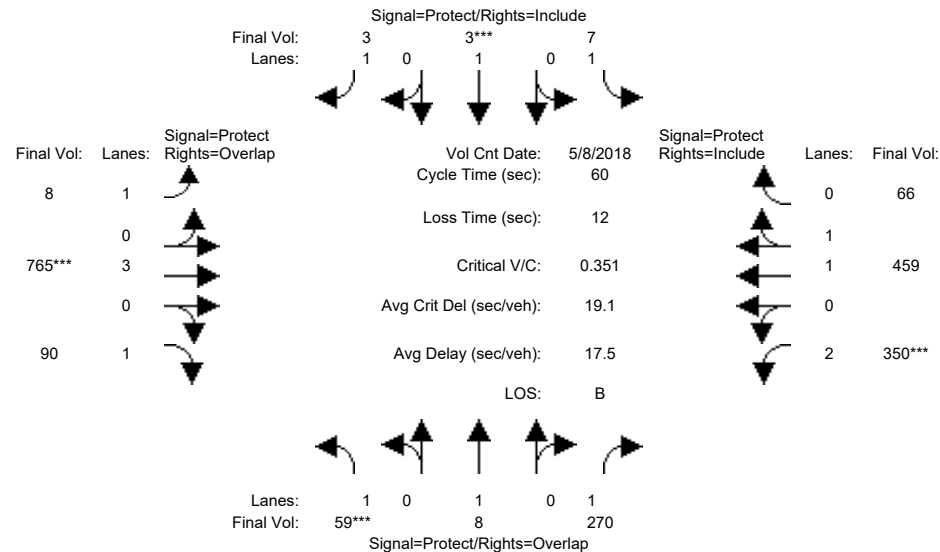
Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	59	8	257	5	3	3	8	742	90	325	427	60
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:	59	8	257	5	3	3	8	742	90	325	427	60
Added Vol:	0	0	7	0	0	0	0	21	0	4	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	8	264	5	3	3	8	763	90	329	438	60
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:	59	8	264	5	3	3	8	763	90	329	438	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	8	264	5	3	3	8	763	90	329	438	60
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
Final Volume:	59	8	264	5	3	3	8	763	90	329	438	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.75	0.25
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3254	446
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.15	0.00	0.00	0.00	0.00	0.13	0.05	0.10	0.13	0.13
Crit Moves:	****			****			****			****		
Green Time:	7.0	10.0	23.6	7.0	10.0	10.0	12.8	17.4	24.4	13.6	18.2	18.2
Volume/Cap:	0.29	0.03	0.38	0.02	0.01	0.01	0.02	0.46	0.13	0.46	0.44	0.44
Delay/Veh:	25.0	21.0	13.4	23.5	20.9	20.9	18.7	17.7	11.2	20.5	17.1	17.1
User DelAdj:	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:	25.0	21.0	13.4	23.5	20.9	20.9	18.7	17.7	11.2	20.5	17.1	17.1
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	3	0	8	0	0	0	0	7	2	6	7	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #105: Sutter Boulevard and Cochrane Road

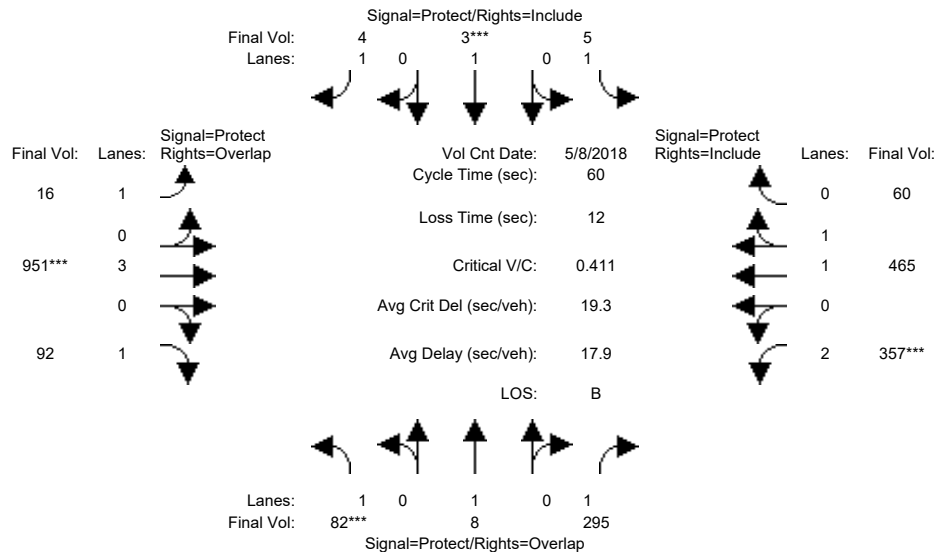


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	59	8	257	5	3	3	8	742	90	325	427	60
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:	59	8	257	5	3	3	8	742	90	325	427	60
Added Vol:	0	0	13	2	0	0	0	23	0	25	32	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	8	270	7	3	3	8	765	90	350	459	66
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:	59	8	270	7	3	3	8	765	90	350	459	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	8	270	7	3	3	8	765	90	350	459	66
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
Final Volume:	59	8	270	7	3	3	8	765	90	350	459	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.74	0.26
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3235	465
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.15	0.00	0.00	0.00	0.00	0.13	0.05	0.11	0.14	0.14
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	24.0	7.0	10.0	10.0	12.8	17.0	24.0	14.0	18.2	18.2
Volume/Cap:	0.29	0.03	0.39	0.03	0.01	0.01	0.02	0.47	0.13	0.47	0.47	0.47
Delay/Veh:	25.0	21.0	13.1	23.6	20.9	20.9	18.7	18.1	11.5	20.3	17.2	17.2
User DelAdj:	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:	25.0	21.0	13.1	23.6	20.9	20.9	18.7	18.1	11.5	20.3	17.2	17.2
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	3	0	8	0	0	0	0	8	2	7	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #105: Sutter Boulevard and Cochrane Road

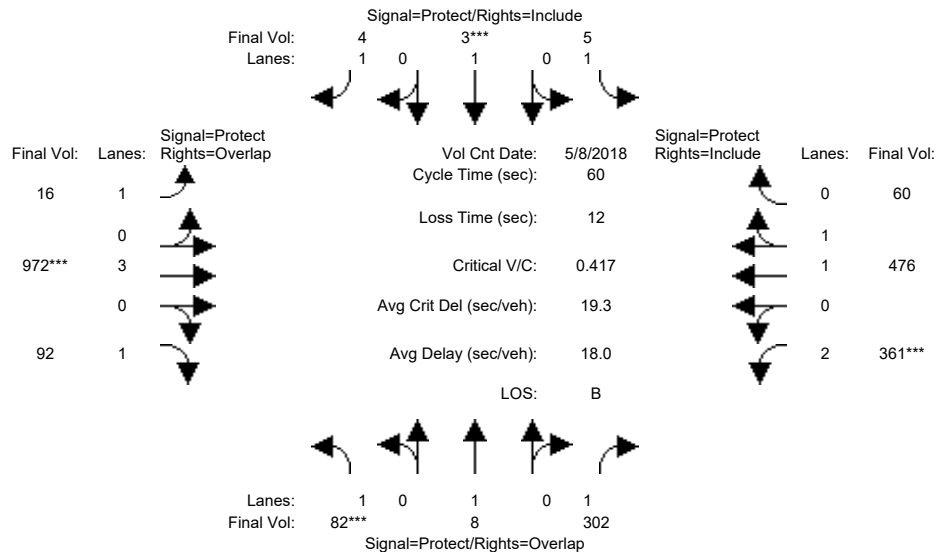


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	82	8	295	5	3	4	16	951	92	357	465	60
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:	82	8	295	5	3	4	16	951	92	357	465	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	8	295	5	3	4	16	951	92	357	465	60
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:	82	8	295	5	3	4	16	951	92	357	465	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	8	295	5	3	4	16	951	92	357	465	60
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:	82	8	295	5	3	4	16	951	92	357	465	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.77	0.23
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3277	423
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.17	0.00	0.00	0.00	0.01	0.17	0.05	0.11	0.14	0.14
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	22.5	7.0	10.0	10.0	12.8	18.5	25.5	12.5	18.2	18.2
Volume/Cap:	0.40	0.03	0.45	0.02	0.01	0.01	0.04	0.54	0.12	0.54	0.47	0.47
Delay/Veh:	25.9	21.0	14.6	23.5	20.9	20.9	18.8	17.6	10.6	22.1	17.2	17.2
User DelAdj:	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:	25.9	21.0	14.6	23.5	20.9	20.9	18.8	17.6	10.6	22.1	17.2	17.2
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	4	0	9	0	0	0	1	9	2	7	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #105: Sutter Boulevard and Cochrane Road

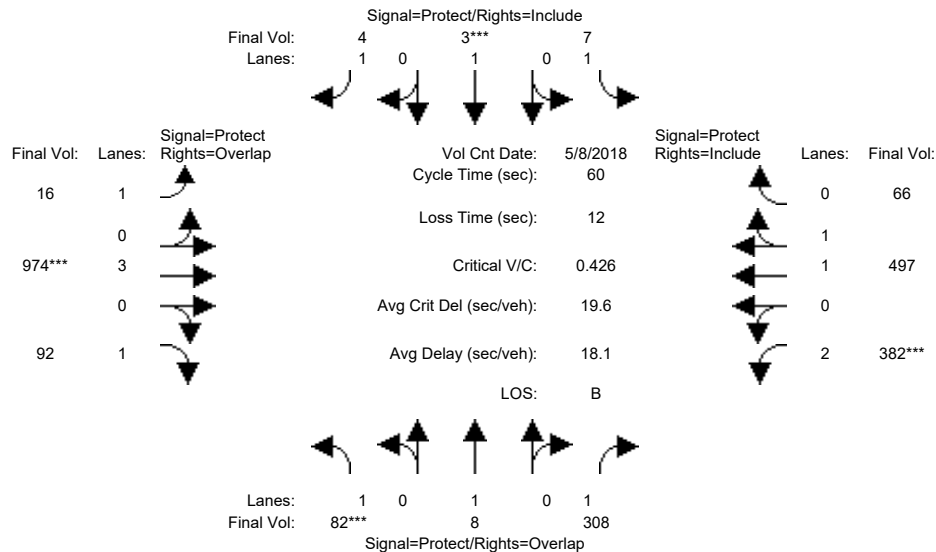


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	82	8	295	5	3	4	16	951	92	357	465	60
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:	82	8	295	5	3	4	16	951	92	357	465	60
Added Vol:	0	0	7	0	0	0	0	21	0	4	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	8	302	5	3	4	16	972	92	361	476	60
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:	82	8	302	5	3	4	16	972	92	361	476	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	8	302	5	3	4	16	972	92	361	476	60
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
Final Volume:	82	8	302	5	3	4	16	972	92	361	476	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.77	0.23
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3286	414
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.17	0.00	0.00	0.00	0.01	0.17	0.05	0.11	0.14	0.14
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	22.5	7.0	10.0	10.0	12.8	18.5	25.5	12.5	18.2	18.2
Volume/Cap:	0.40	0.03	0.46	0.02	0.01	0.01	0.04	0.55	0.12	0.55	0.48	0.48
Delay/Veh:	25.9	21.0	14.7	23.5	20.9	20.9	18.8	17.6	10.5	22.3	17.3	17.3
User DelAdj:	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:	25.9	21.0	14.7	23.5	20.9	20.9	18.8	17.6	10.5	22.3	17.3	17.3
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	4	0	10	0	0	0	1	10	2	7	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #105: Sutter Boulevard and Cochrane Road

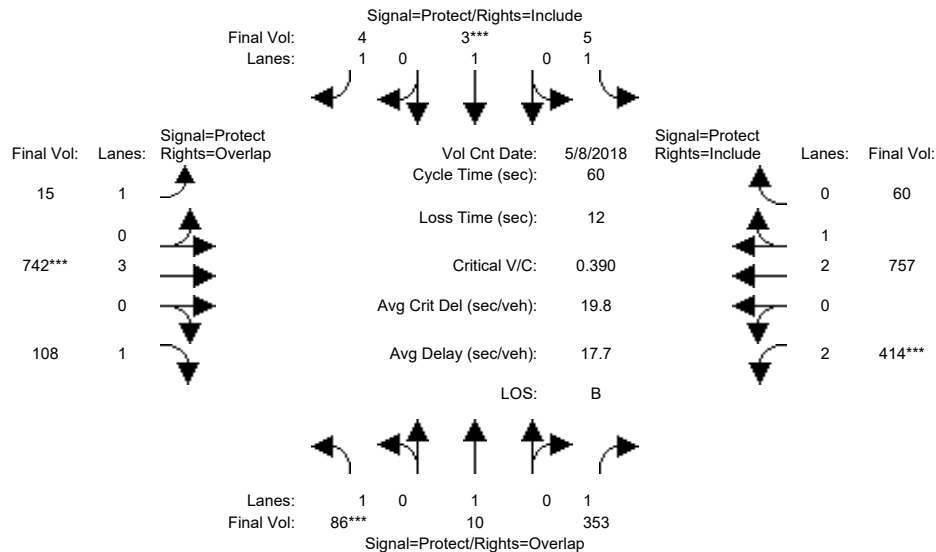


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	82	8	295	5	3	4	16	951	92	357	465	60
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:	82	8	295	5	3	4	16	951	92	357	465	60
Added Vol:	0	0	13	2	0	0	0	23	0	25	32	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	8	308	7	3	4	16	974	92	382	497	66
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:	82	8	308	7	3	4	16	974	92	382	497	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	8	308	7	3	4	16	974	92	382	497	66
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
Final Volume:	82	8	308	7	3	4	16	974	92	382	497	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.76	0.24
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3266	434
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.18	0.00	0.00	0.00	0.01	0.17	0.05	0.12	0.15	0.15
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	22.9	7.0	10.0	10.0	12.8	18.1	25.1	12.9	18.2	18.2
Volume/Cap:	0.40	0.03	0.46	0.03	0.01	0.01	0.04	0.57	0.13	0.57	0.50	0.50
Delay/Veh:	25.9	21.0	14.5	23.6	20.9	20.9	18.8	18.1	10.8	22.2	17.5	17.5
User DelAdj:	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:	25.9	21.0	14.5	23.6	20.9	20.9	18.8	18.1	10.8	22.2	17.5	17.5
LOS by Move:	C	C	B	C	C	C	B	B	B	C	B	B
HCM2k95thQ:	4	0	10	0	0	0	1	10	2	8	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #105: Sutter Boulevard and Cochrane Road

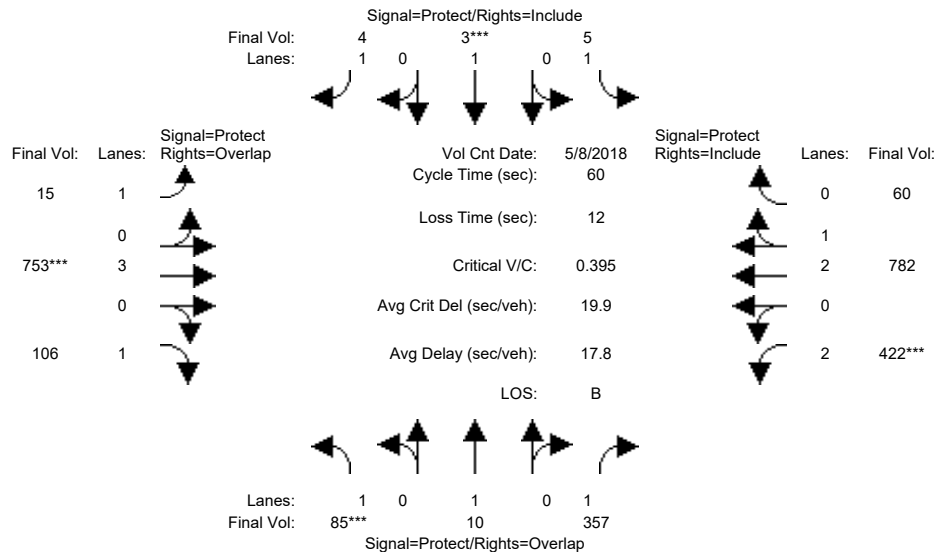


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	86	10	353	5	3	4	15	742	108	414	757	60
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:	86	10	353	5	3	4	15	742	108	414	757	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	10	353	5	3	4	15	742	108	414	757	60
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:	86	10	353	5	3	4	15	742	108	414	757	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	10	353	5	3	4	15	742	108	414	757	60
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:	86	10	353	5	3	4	15	742	108	414	757	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.77	0.23
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	5188	411
Capacity Analysis Module:												
Vol/Sat:	0.05	0.01	0.20	0.00	0.00	0.00	0.01	0.13	0.06	0.13	0.15	0.15
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	25.6	7.0	10.0	10.0	12.8	15.4	22.4	15.6	18.2	18.2
Volume/Cap:	0.42	0.03	0.47	0.02	0.01	0.01	0.04	0.51	0.17	0.51	0.48	0.48
Delay/Veh:	26.0	21.0	12.8	23.5	20.9	20.9	18.8	19.3	12.7	19.5	17.2	17.2
User DelAdj:	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:	26.0	21.0	12.8	23.5	20.9	20.9	18.8	19.3	12.7	19.5	17.2	17.2
LOS by Move:	C	C	B	C	C	C	B	B	B	B	B	B
HCM2k95thQ:	4	0	11	0	0	0	0	8	3	8	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #105: Sutter Boulevard and Cochrane Road



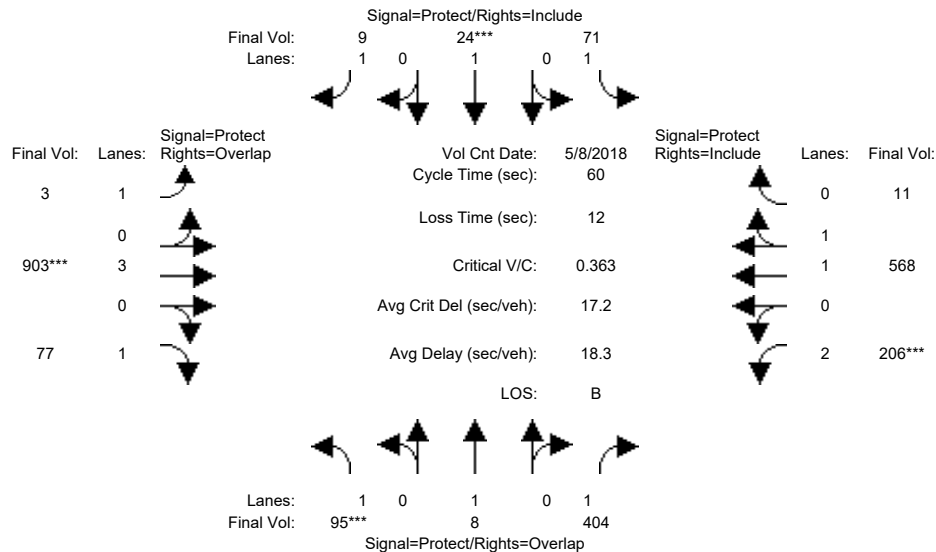
Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	85	10	357	5	3	4	15	753	106	422	782	60
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:	85	10	357	5	3	4	15	753	106	422	782	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	10	357	5	3	4	15	753	106	422	782	60
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:	85	10	357	5	3	4	15	753	106	422	782	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	10	357	5	3	4	15	753	106	422	782	60
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
Final Volume:	85	10	357	5	3	4	15	753	106	422	782	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.78	0.22
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	5200	399
Capacity Analysis Module:												
Vol/Sat:	0.05	0.01	0.20	0.00	0.00	0.00	0.01	0.13	0.06	0.13	0.15	0.15
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	25.6	7.0	10.0	10.0	12.8	15.4	22.4	15.6	18.2	18.2
Volume/Cap:	0.42	0.03	0.48	0.02	0.01	0.01	0.04	0.51	0.16	0.51	0.49	0.49
Delay/Veh:	26.0	21.0	12.9	23.5	20.9	20.9	18.8	19.4	12.7	19.5	17.3	17.3
User DelAdj:	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:	26.0	21.0	12.9	23.5	20.9	20.9	18.8	19.4	12.7	19.5	17.3	17.3
LOS by Move:	C	C	B	C	C	C	B	B	B	B	B	B
HCM2k95thQ:	4	0	11	0	0	0	0	8	3	8	8	8

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #105: Sutter Boulevard and Cochrane Road

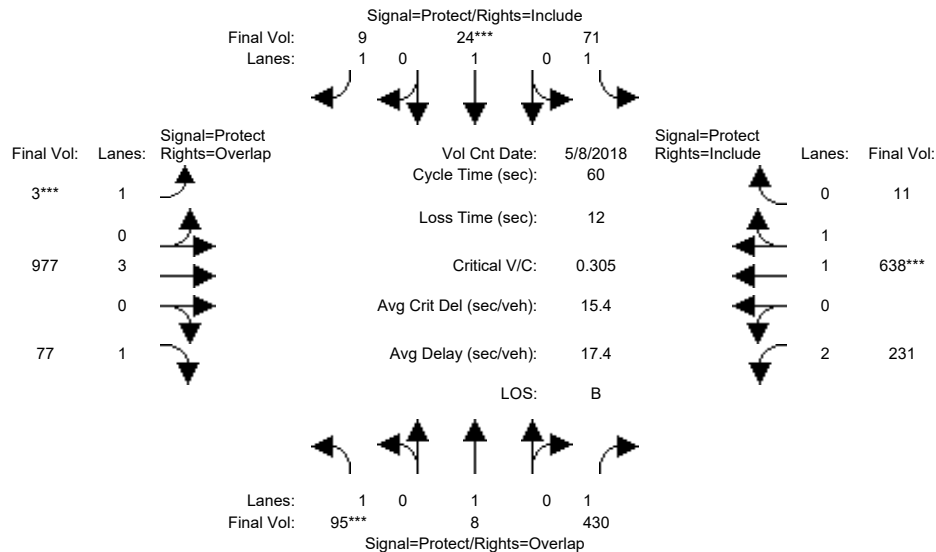


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	95	8	404	71	24	9	3	903	77	206	568	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:	95	8	404	71	24	9	3	903	77	206	568	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	8	404	71	24	9	3	903	77	206	568	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:	95	8	404	71	24	9	3	903	77	206	568	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	8	404	71	24	9	3	903	77	206	568	11
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:	95	8	404	71	24	9	3	903	77	206	568	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.96	0.04
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3630	70
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.23	0.04	0.01	0.01	0.00	0.16	0.04	0.07	0.16	0.16
Crit Moves:	***			***			***			***		
Green Time:	7.4	10.2	19.2	7.2	10.0	10.0	12.6	21.6	29.1	8.9	18.0	18.0
Volume/Cap:	0.44	0.02	0.72	0.34	0.08	0.03	0.01	0.44	0.09	0.44	0.52	0.52
Delay/Veh:	25.8	20.7	22.7	25.2	21.2	21.0	18.8	14.7	8.4	23.9	17.9	17.9
User DelAdj:	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:	25.8	20.7	22.7	25.2	21.2	21.0	18.8	14.7	8.4	23.9	17.9	17.9
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
HCM2k95thQ:	5	0	16	3	1	0	0	8	2	4	9	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #105: Sutter Boulevard and Cochrane Road

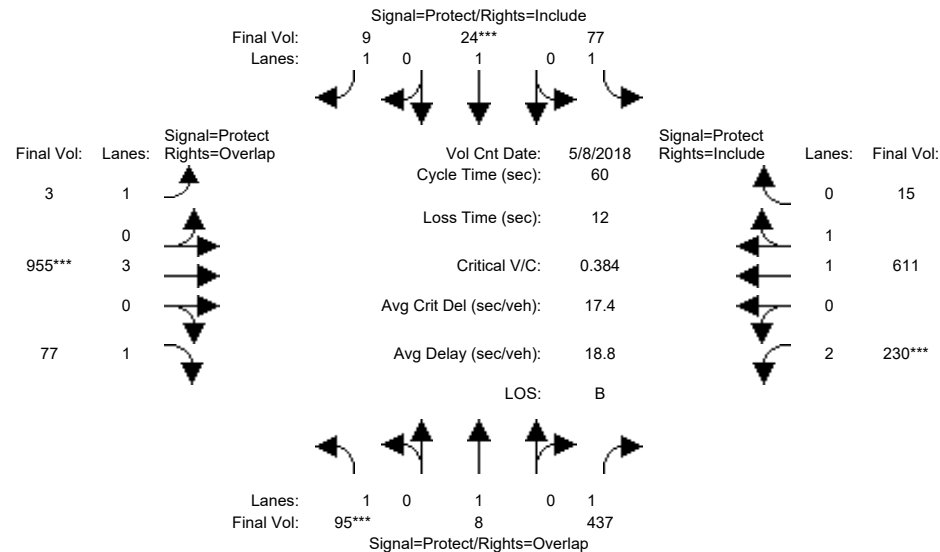


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	95	8	404	71	24	9	3	903	77	206	568	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:	95	8	404	71	24	9	3	903	77	206	568	11
Added Vol:	0	0	26	0	0	0	0	74	0	25	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	8	430	71	24	9	3	977	77	231	638	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:	95	8	430	71	24	9	3	977	77	231	638	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	8	430	71	24	9	3	977	77	231	638	11
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
Final Volume:	95	8	430	71	24	9	3	977	77	231	638	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.97	0.03
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3637	63
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.25	0.04	0.01	0.01	0.00	0.17	0.04	0.07	0.18	0.18
Crit Moves:	***				***		***				***	
Green Time:	7.3	10.3	22.7	7.0	10.0	10.0	7.0	18.3	25.6	12.4	23.7	23.7
Volume/Cap:	0.44	0.02	0.65	0.35	0.08	0.03	0.01	0.56	0.10	0.35	0.44	0.44
Delay/Veh:	25.9	20.7	17.6	25.4	21.2	21.0	23.5	18.0	10.4	20.7	13.6	13.6
User DelAdj:	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:	25.9	20.7	17.6	25.4	21.2	21.0	23.5	18.0	10.4	20.7	13.6	13.6
LOS by Move:	C	C	B	C	C	C	C	B	B	C	B	B
HCM2k95thQ:	5	0	15	3	1	0	0	10	2	4	9	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #105: Sutter Boulevard and Cochrane Road

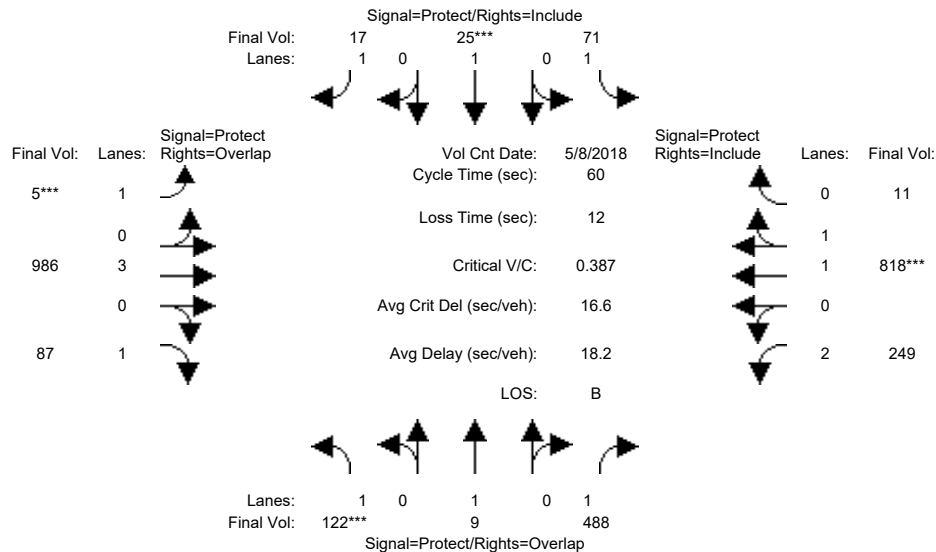


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	95	8	404	71	24	9	3	903	77	206	568	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:	95	8	404	71	24	9	3	903	77	206	568	11
Added Vol:	0	0	33	6	0	0	0	52	0	24	43	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	8	437	77	24	9	3	955	77	230	611	15
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:	95	8	437	77	24	9	3	955	77	230	611	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	8	437	77	24	9	3	955	77	230	611	15
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:	95	8	437	77	24	9	3	955	77	230	611	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.95	0.05
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3611	89
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.25	0.04	0.01	0.01	0.00	0.17	0.04	0.07	0.17	0.17
Crit Moves:	***			***			***			***		
Green Time:	7.0	10.0	19.4	7.0	10.0	10.0	12.7	21.6	28.6	9.4	18.3	18.3
Volume/Cap:	0.47	0.03	0.77	0.38	0.08	0.03	0.01	0.47	0.09	0.47	0.55	0.55
Delay/Veh:	26.4	21.0	24.8	25.7	21.2	21.0	18.7	14.9	8.6	23.7	18.0	18.0
User DelAdj:	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:	26.4	21.0	24.8	25.7	21.2	21.0	18.7	14.9	8.6	23.7	18.0	18.0
LOS by Move:	C	C	C	C	C	C	B	B	A	C	B	B
HCM2k95thQ:	5	0	18	4	1	0	0	9	2	5	10	10
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #105: Sutter Boulevard and Cochrane Road

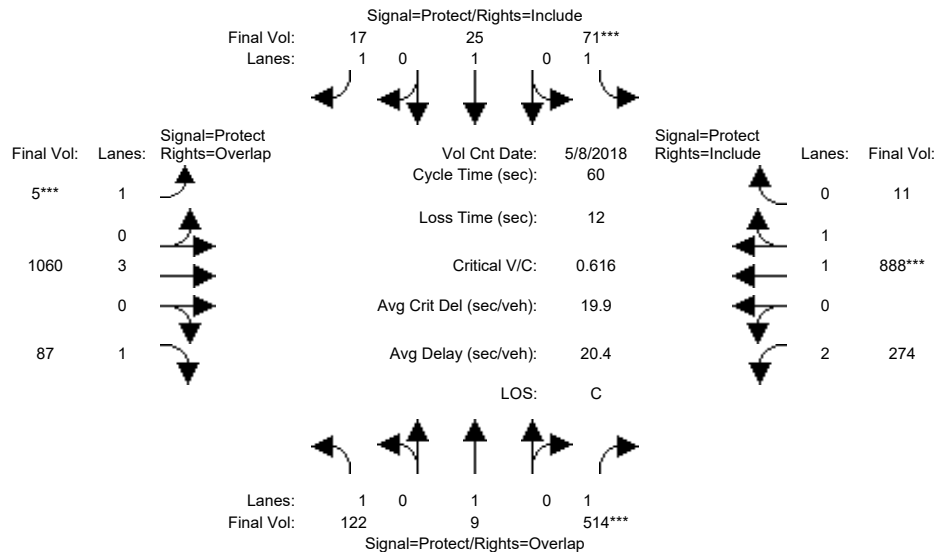


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	122	9	488	71	25	17	5	986	87	249	818	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:	122	9	488	71	25	17	5	986	87	249	818	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	9	488	71	25	17	5	986	87	249	818	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:	122	9	488	71	25	17	5	986	87	249	818	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	9	488	71	25	17	5	986	87	249	818	11
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:	122	9	488	71	25	17	5	986	87	249	818	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.97	0.03
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3651	49
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.28	0.04	0.01	0.01	0.00	0.17	0.05	0.08	0.22	0.22
Crit Moves:	***			***			***			***		
Green Time:	7.4	10.4	22.7	7.0	10.0	10.0	7.0	18.3	25.7	12.3	23.6	23.6
Volume/Cap:	0.57	0.03	0.74	0.35	0.08	0.06	0.02	0.57	0.12	0.38	0.57	0.57
Delay/Veh:	28.4	20.7	20.4	25.4	21.2	21.1	23.5	18.0	10.4	20.9	14.7	14.7
User DelAdj:	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:	28.4	20.7	20.4	25.4	21.2	21.1	23.5	18.0	10.4	20.9	14.7	14.7
LOS by Move:	C	C	C	C	C	C	C	B	B	C	B	B
HCM2k95thQ:	7	0	19	3	1	1	0	10	2	5	12	12
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #105: Sutter Boulevard and Cochrane Road

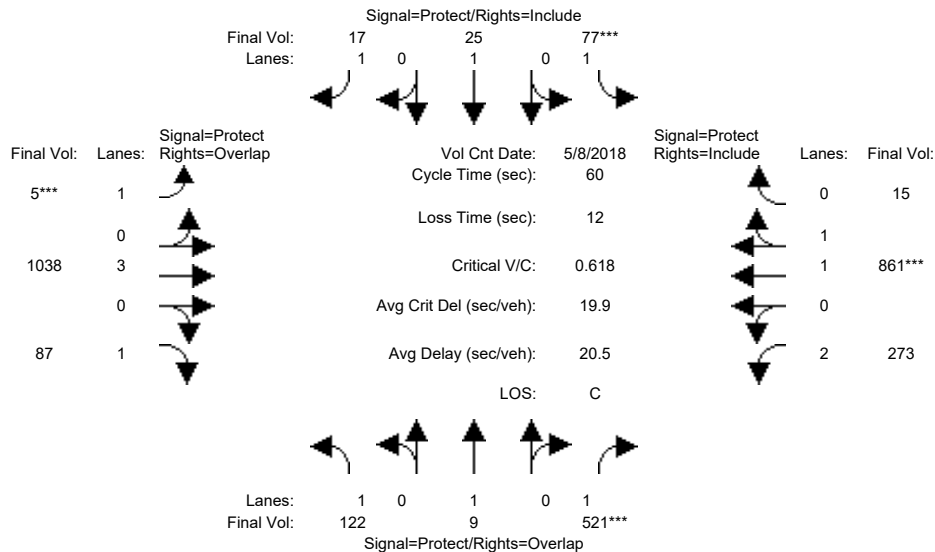


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	122	9	488	71	25	17	5	986	87	249	818	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:	122	9	488	71	25	17	5	986	87	249	818	11
Added Vol:	0	0	26	0	0	0	0	74	0	25	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	9	514	71	25	17	5	1060	87	274	888	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:	122	9	514	71	25	17	5	1060	87	274	888	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	9	514	71	25	17	5	1060	87	274	888	11
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
Final Volume:	122	9	514	71	25	17	5	1060	87	274	888	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.97	0.03
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3655	45
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.29	0.04	0.01	0.01	0.00	0.19	0.05	0.09	0.24	0.24
Crit Moves:	****			****			****			****		
Green Time:	8.8	14.3	24.6	7.0	12.5	12.5	7.0	16.4	25.2	10.3	19.7	19.7
Volume/Cap:	0.48	0.02	0.72	0.35	0.06	0.05	0.02	0.68	0.12	0.51	0.74	0.74
Delay/Veh:	24.9	17.5	18.2	25.4	19.1	19.0	23.5	20.7	10.7	23.4	20.4	20.4
User DelAdj:	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:	24.9	17.5	18.2	25.4	19.1	19.0	23.5	20.7	10.7	23.4	20.4	20.4
LOS by Move:	C	B	B	C	B	B	C	C	B	C	C	C
HCM2k95thQ:	6	0	19	3	1	1	0	12	2	5	14	14
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #105: Sutter Boulevard and Cochrane Road

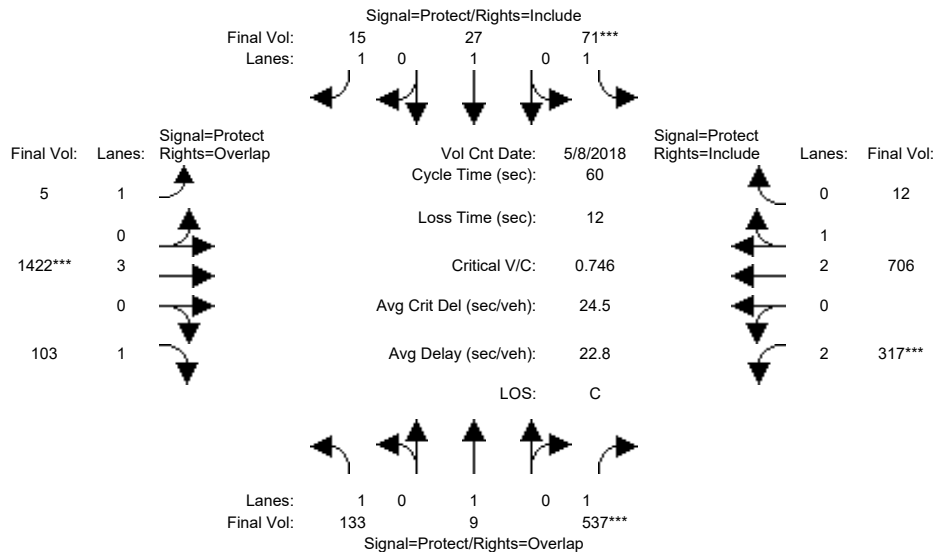


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	122	9	488	71	25	17	5	986	87	249	818	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:	122	9	488	71	25	17	5	986	87	249	818	11
Added Vol:	0	0	33	6	0	0	0	52	0	24	43	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	9	521	77	25	17	5	1038	87	273	861	15
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:	122	9	521	77	25	17	5	1038	87	273	861	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	9	521	77	25	17	5	1038	87	273	861	15
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:	122	9	521	77	25	17	5	1038	87	273	861	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.97	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.96	0.04
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	3637	63
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.30	0.04	0.01	0.01	0.00	0.18	0.05	0.09	0.24	0.24
Crit Moves:	****			****			****			****		
Green Time:	8.9	14.7	25.0	7.0	12.8	12.8	7.0	16.0	25.0	10.3	19.3	19.3
Volume/Cap:	0.47	0.02	0.71	0.38	0.06	0.05	0.02	0.68	0.12	0.51	0.74	0.74
Delay/Veh:	24.7	17.2	17.9	25.7	18.9	18.8	23.5	21.0	10.8	23.4	20.6	20.6
User DelAdj:	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:	24.7	17.2	17.9	25.7	18.9	18.8	23.5	21.0	10.8	23.4	20.6	20.6
LOS by Move:	C	B	B	C	B	B	C	C	B	C	C	C
HCM2k95thQ:	6	0	19	4	1	1	0	11	2	5	14	14
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #105: Sutter Boulevard and Cochrane Road

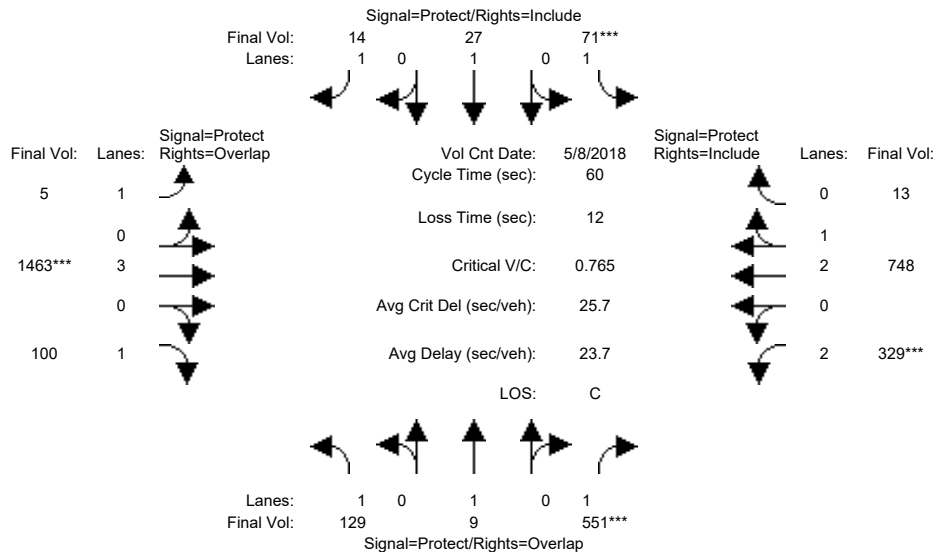


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	133	9	537	71	27	15	5	1422	103	317	706	12
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:	133	9	537	71	27	15	5	1422	103	317	706	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	9	537	71	27	15	5	1422	103	317	706	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:	133	9	537	71	27	15	5	1422	103	317	706	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	9	537	71	27	15	5	1422	103	317	706	12
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
Final Volume:	133	9	537	71	27	15	5	1422	103	317	706	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.95	0.05
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	5506	94
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.31	0.04	0.01	0.01	0.00	0.25	0.06	0.10	0.13	0.13
Crit Moves:	****			****			****			****		
Green Time:	8.8	14.4	22.1	7.0	12.6	12.6	10.9	18.9	27.8	7.6	15.6	15.6
Volume/Cap:	0.52	0.02	0.83	0.35	0.07	0.04	0.02	0.79	0.13	0.79	0.49	0.49
Delay/Veh:	25.4	17.4	26.5	25.4	19.1	18.9	20.1	21.2	9.3	35.6	19.1	19.1
User DelAdj:	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:	25.4	17.4	26.5	25.4	19.1	18.9	20.1	21.2	9.3	35.6	19.1	19.1
LOS by Move:	C	B	C	C	B	B	C	C	A	D	B	B
HCM2k95thQ:	6	0	23	3	1	1	0	16	2	8	7	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #105: Sutter Boulevard and Cochrane Road

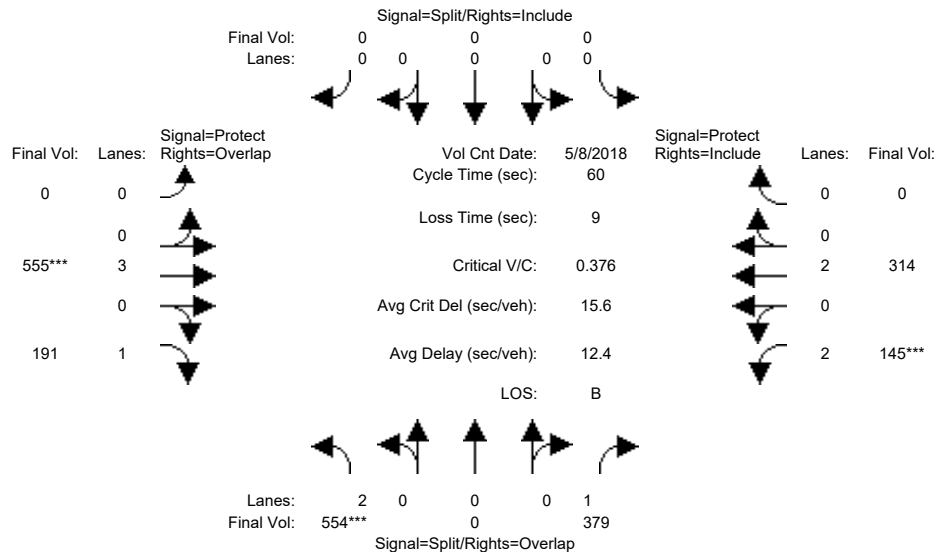


Street Name:	Sutter Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	129	9	551	71	27	14	5	1463	100	329	748	13
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	9	551	71	27	14	5	1463	100	329	748	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	9	551	71	27	14	5	1463	100	329	748	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:	129	9	551	71	27	14	5	1463	100	329	748	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	9	551	71	27	14	5	1463	100	329	748	13
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
Final Volume:	129	9	551	71	27	14	5	1463	100	329	748	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.95	0.05
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	5700	1750	3150	5504	96
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.31	0.04	0.01	0.01	0.00	0.26	0.06	0.10	0.14	0.14
Crit Moves:	****			****			****			****		
Green Time:	8.9	14.5	22.2	7.0	12.7	12.7	10.9	18.8	27.7	7.7	15.6	15.6
Volume/Cap:	0.50	0.02	0.85	0.35	0.07	0.04	0.02	0.82	0.12	0.82	0.52	0.52
Delay/Veh:	25.0	17.3	27.9	25.4	19.0	18.9	20.2	22.1	9.3	37.9	19.4	19.4
User DelAdj:	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:	25.0	17.3	27.9	25.4	19.0	18.9	20.2	22.1	9.3	37.9	19.4	19.4
LOS by Move:	C	B	C	C	B	B	C	C	A	D	B	B
HCM2k95thQ:	6	0	24	3	1	1	0	17	2	8	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #103: Butterfield Boulevard and Cochrane Road

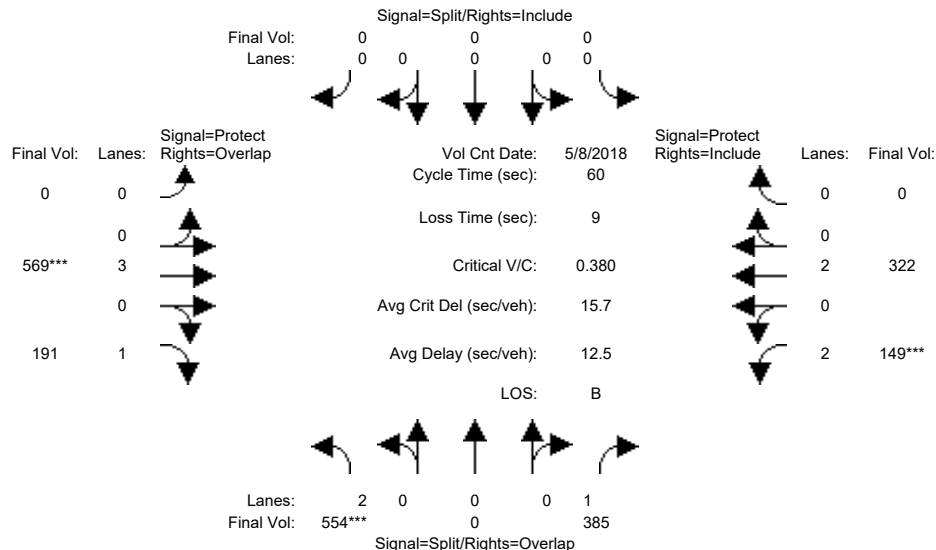


Street Name:	Butterfield Boulevard						Cochrane Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	10		0		10	0	0	0	0	10	10	7	10	0	
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module: >> Count Date: 8 May 2018 <<															
Base Vol:	554		0		379	0	0	0	0	555	191	145	314	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	
Initial Bse:	554		0		379	0	0	0	0	555	191	145	314	0	
Added Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0		0		0	0	0	0	0	0	0	0	0	0	
Initial Fut:	554		0		379	0	0	0	0	555	191	145	314	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	
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	
PHF Volume:	554		0		379	0	0	0	0	555	191	145	314	0	
Reduct Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	554		0		379	0	0	0	0	555	191	145	314	0	
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	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	1.00	1.00	
FinalVolume:	554		0		379	0	0	0	0	555	191	145	314	0	
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.92	1.00	0.92	0.83	1.00	0.92		
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00			
Final Sat.:	3150		0		1750	0	0	0	0	5700	1750	3150	3800	0	
Capacity Analysis Module:															
Vol/Sat:	0.18	0.00	0.22	0.00	0.00	0.00	0.00	0.10	0.11	0.05	0.08	0.00			
Crit Moves:	****							****		****					
Green Time:	28.1	0.0	35.4	0.0	0.0	0.0	0.0	15.6	43.6	7.4	22.9	0.0			
Volume/Cap:	0.38	0.00	0.37	0.00	0.00	0.00	0.00	0.38	0.15	0.38	0.22	0.00			
Delay/Veh:	10.5	0.0	6.6	0.0	0.0	0.0	0.0	18.4	2.6	24.8	12.6	0.0			
User DelAdj:	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:	10.5	0.0	6.6	0.0	0.0	0.0	0.0	18.4	2.6	24.8	12.6	0.0			
LOS by Move:	B	A	A	A	A	A	A	B	A	C	B	A			
HCM2k95thQ:	8	0	8	0	0	0	0	5	2	3	4	0			
Note: Queue reported is the number of cars per lane.															

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #103: Butterfield Boulevard and Cochrane Road

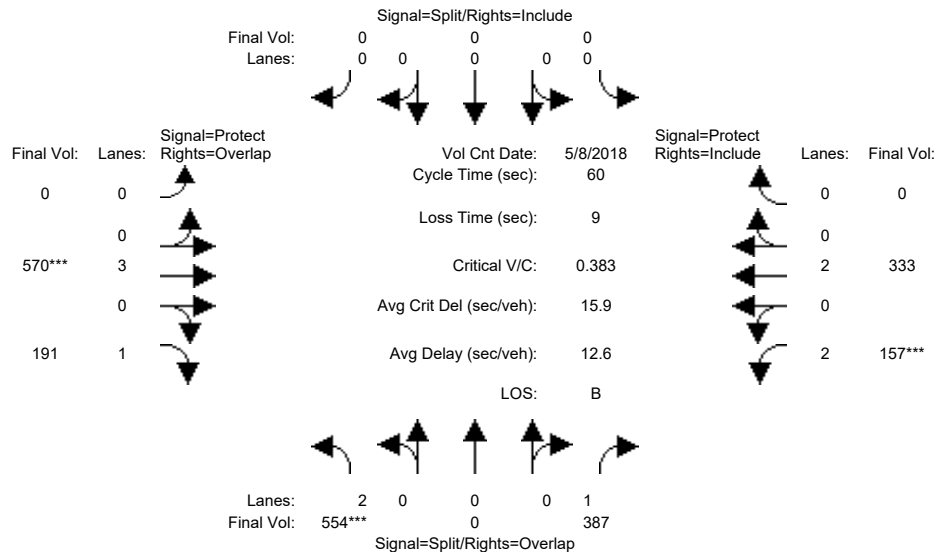


Street Name:	Butterfield Boulevard						Cochrane Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	10		0		10	0	0	0	0	10	10	7	10	0	
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module: >> Count Date: 8 May 2018 <<															
Base Vol:	554		0		379	0	0	0	0	555	191	145	314	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	
Initial Bse:	554		0		379	0	0	0	0	555	191	145	314	0	
Added Vol:	0		0		6	0	0	0	0	14	0	4	8	0	
PasserByVol:	0		0		0	0	0	0	0	0	0	0	0	0	
Initial Fut:	554		0		385	0	0	0	0	569	191	149	322	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	
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	
PHF Volume:	554		0		385	0	0	0	0	569	191	149	322	0	
Reduct Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	554		0		385	0	0	0	0	569	191	149	322	0	
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	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	1.00	1.00	
FinalVolume:	554		0		385	0	0	0	0	569	191	149	322	0	
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.92	1.00	0.92	0.83	1.00	0.92		
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00		
Final Sat.:	3150		0		1750	0	0	0	0	5700	1750	3150	3800	0	
Capacity Analysis Module:															
Vol/Sat:	0.18	0.00	0.22	0.00	0.00	0.00	0.00	0.10	0.11	0.05	0.08	0.00			
Crit Moves:	****							****		****					
Green Time:	27.8	0.0	35.2	0.0	0.0	0.0	0.0	15.8	43.5	7.5	23.2	0.0			
Volume/Cap:	0.38	0.00	0.37	0.00	0.00	0.00	0.00	0.38	0.15	0.38	0.22	0.00			
Delay/Veh:	10.7	0.0	6.8	0.0	0.0	0.0	0.0	18.3	2.6	24.8	12.4	0.0			
User DelAdj:	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:	10.7	0.0	6.8	0.0	0.0	0.0	0.0	18.3	2.6	24.8	12.4	0.0			
LOS by Move:	B	A	A	A	A	A	A	B	A	C	B	A			
HCM2k95thQ:	8	0	8	0	0	0	0	6	2	3	4	0			
Note: Queue reported is the number of cars per lane.															

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #103: Butterfield Boulevard and Cochrane Road

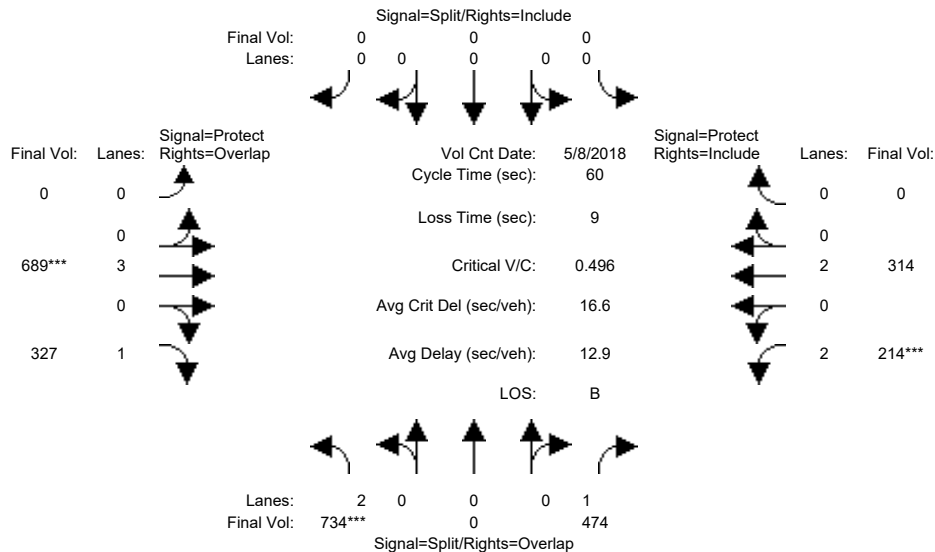


Street Name:	Butterfield Boulevard						Cochrane Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	10		0		10	0	0	0	0	10	10	7	10	0	
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module: >> Count Date: 8 May 2018 <<															
Base Vol:	554		0		379	0	0	0	0	555	191	145	314	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	
Initial Bse:	554		0		379	0	0	0	0	555	191	145	314	0	
Added Vol:	0		0		8	0	0	0	0	15	0	12	19	0	
PasserByVol:	0		0		0	0	0	0	0	0	0	0	0	0	
Initial Fut:	554		0		387	0	0	0	0	570	191	157	333	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	
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	
PHF Volume:	554		0		387	0	0	0	0	570	191	157	333	0	
Reduct Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	554		0		387	0	0	0	0	570	191	157	333	0	
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	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	1.00	1.00	
FinalVolume:	554		0		387	0	0	0	0	570	191	157	333	0	
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.92	1.00	0.92	0.83	1.00	0.92		
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00			
Final Sat.:	3150		0		1750	0	0	0	0	5700	1750	3150	3800	0	
Capacity Analysis Module:															
Vol/Sat:	0.18	0.00	0.22	0.00	0.00	0.00	0.00	0.10	0.11	0.05	0.09	0.00			
Crit Moves:	****							****		****					
Green Time:	27.5	0.0	35.3	0.0	0.0	0.0	0.0	15.7	43.2	7.8	23.5	0.0			
Volume/Cap:	0.38	0.00	0.38	0.00	0.00	0.00	0.00	0.38	0.15	0.38	0.22	0.00			
Delay/Veh:	10.8	0.0	6.7	0.0	0.0	0.0	0.0	18.4	2.7	24.5	12.3	0.0			
User DelAdj:	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:	10.8	0.0	6.7	0.0	0.0	0.0	0.0	18.4	2.7	24.5	12.3	0.0			
LOS by Move:	B	A	A	A	A	A	A	B	A	C	B	A			
HCM2k95thQ:	8	0	8	0	0	0	0	6	2	3	4	0			
Note: Queue reported is the number of cars per lane.															

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #103: Butterfield Boulevard and Cochrane Road

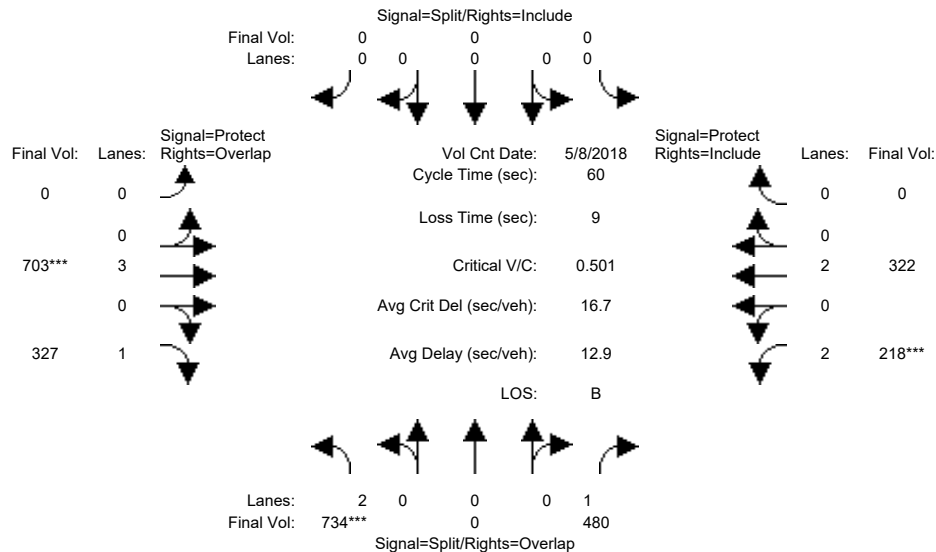


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	734	0	474	0	0	0	0	689	327	214	314	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:	734	0	474	0	0	0	0	689	327	214	314	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	734	0	474	0	0	0	0	689	327	214	314	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:	734	0	474	0	0	0	0	689	327	214	314	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	734	0	474	0	0	0	0	689	327	214	314	0
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
Final Volume:	734	0	474	0	0	0	0	689	327	214	314	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.00	0.27	0.00	0.00	0.00	0.00	0.12	0.19	0.07	0.08	0.00
Crit Moves:	****							****		****		
Green Time:	28.2	0.0	36.4	0.0	0.0	0.0	0.0	14.6	42.8	8.2	22.8	0.0
Volume/Cap:	0.50	0.00	0.45	0.00	0.00	0.00	0.00	0.50	0.26	0.50	0.22	0.00
Delay/Veh:	11.3	0.0	6.7	0.0	0.0	0.0	0.0	19.8	3.1	24.9	12.6	0.0
User DelAdj:	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:	11.3	0.0	6.7	0.0	0.0	0.0	0.0	19.8	3.1	24.9	12.6	0.0
LOS by Move:	B	A	A	A	A	A	A	B	A	C	B	A
HCM2k95thQ:	11	0	10	0	0	0	0	7	5	4	4	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #103: Butterfield Boulevard and Cochrane Road



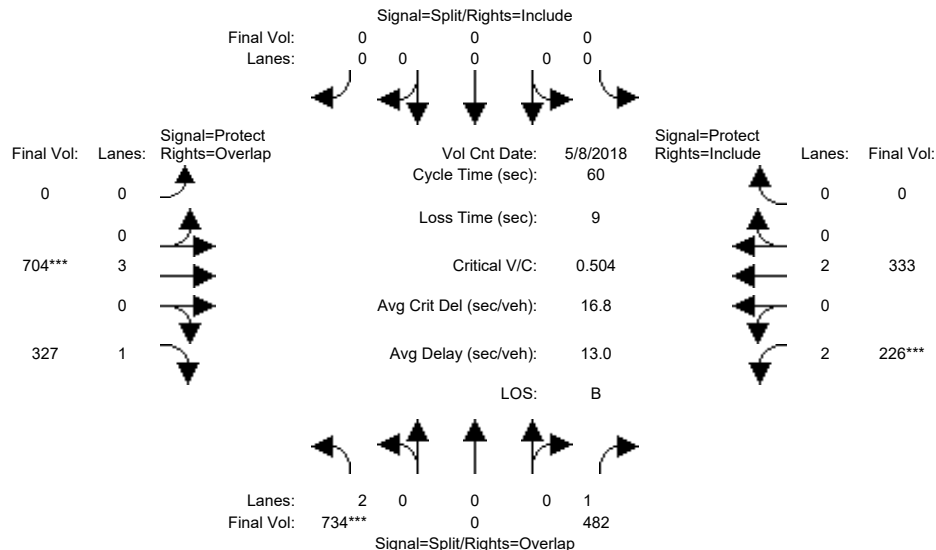
Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	734	0	474	0	0	0	0	689	327	214	314	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:	734	0	474	0	0	0	0	689	327	214	314	0
Added Vol:	0	0	6	0	0	0	0	14	0	4	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	734	0	480	0	0	0	0	703	327	218	322	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:	734	0	480	0	0	0	0	703	327	218	322	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	734	0	480	0	0	0	0	703	327	218	322	0
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:	734	0	480	0	0	0	0	703	327	218	322	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.23	0.00	0.27	0.00	0.00	0.00	0.00	0.12	0.19	0.07	0.08	0.00
Crit Moves:	****							****		****		
Green Time:	27.9	0.0	36.2	0.0	0.0	0.0	0.0	14.8	42.7	8.3	23.1	0.0
Volume/Cap:	0.50	0.00	0.45	0.00	0.00	0.00	0.00	0.50	0.26	0.50	0.22	0.00
Delay/Veh:	11.4	0.0	6.8	0.0	0.0	0.0	0.0	19.7	3.2	24.8	12.5	0.0
User DelAdj:	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:	11.4	0.0	6.8	0.0	0.0	0.0	0.0	19.7	3.2	24.8	12.5	0.0
LOS by Move:	B	A	A	A	A	A	A	B	A	C	B	A
HCM2k95thQ:	11	0	10	0	0	0	0	7	5	5	4	0

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #103: Butterfield Boulevard and Cochrane Road

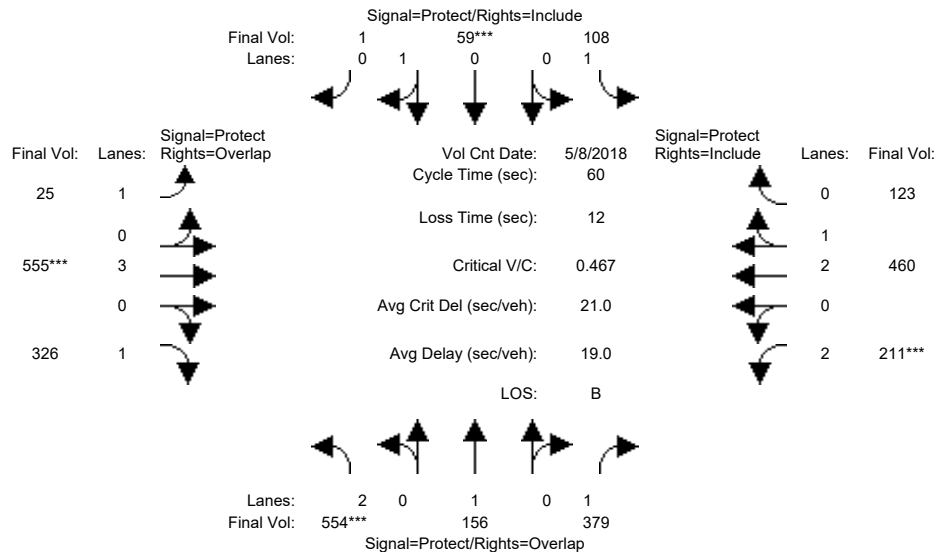


Street Name:	Butterfield Boulevard						Cochrane Road														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R						
----- ----- ----- -----																					
Min. Green:	10		0		10		0		0		10		10		0						
Y+R:	4.0		4.0		4.0		4.0		4.0		4.0		4.0		4.0						
----- ----- ----- -----																					
Volume Module: >> Count Date: 8 May 2018 <<																					
Base Vol:	734		0		474		0		0		689		327		214		314		0		
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		
Initial Bse:	734		0		474		0		0		689		327		214		314		0		
Added Vol:	0		0		8		0		0		15		0		12		19		0		
PasserByVol:	0		0		0		0		0		0		0		0		0		0		
Initial Fut:	734		0		482		0		0		704		327		226		333		0		
User Adj:	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		
PHF Volume:	734		0		482		0		0		704		327		226		333		0		
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		
Reduced Vol:	734		0		482		0		0		704		327		226		333		0		
PCE Adj:	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		
FinalVolume:	734		0		482		0		0		704		327		226		333		0		
----- ----- ----- -----																					
Saturation Flow Module:																					
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		
Adjustment:	0.83		1.00		0.92		0.92		1.00		0.92		0.92		0.83		1.00		0.92		
Lanes:	2.00		0.00		1.00		0.00		0.00		0.00		3.00		1.00		2.00		2.00		0.00
Final Sat.:	3150		0		1750		0		0		0		5700		1750		3150		3800		0
----- ----- ----- -----																					
Capacity Analysis Module:																					
Vol/Sat:	0.23		0.00		0.28		0.00		0.00		0.00		0.12		0.19		0.07		0.09		0.00
Crit Moves:	****										****				****						
Green Time:	27.7		0.0		36.3		0.0		0.0		0.0		14.7		42.5		8.5		23.3		0.0
Volume/Cap:	0.50		0.00		0.46		0.00		0.00		0.00		0.50		0.26		0.50		0.23		0.00
Delay/Veh:	11.6		0.0		6.8		0.0		0.0		0.0		19.8		3.3		24.7		12.4		0.0
User DelAdj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00
AdjDel/Veh:	11.6		0.0		6.8		0.0		0.0		0.0		19.8		3.3		24.7		12.4		0.0
LOS by Move:	B		A		A		A		A		B		A		C		B		A		
HCM2k95thQ:	11		0		10		0		0		0		7		5		5		4		0
Note: Queue reported is the number of cars per lane.																					

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #103: Butterfield Boulevard and Cochrane Road



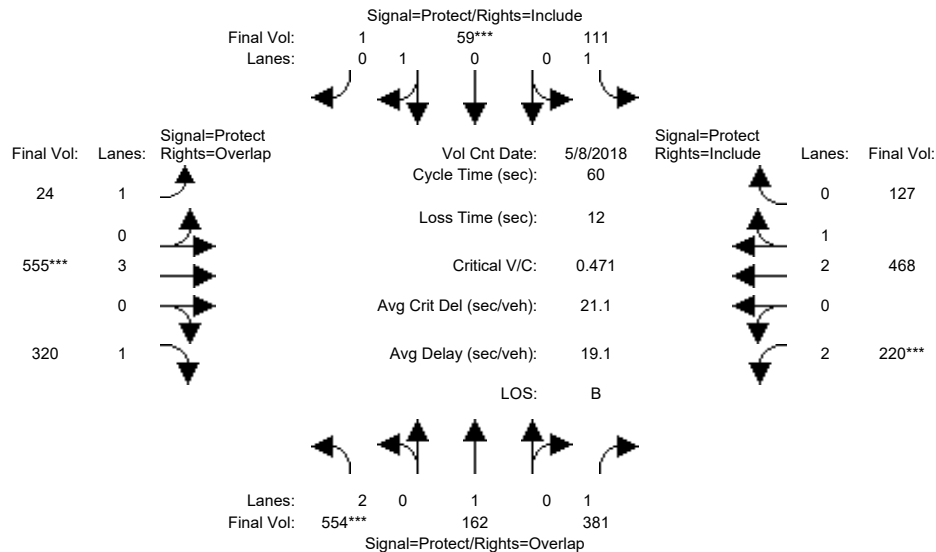
Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	554	156	379	108	59	1	25	555	326	211	460	123
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:	554	156	379	108	59	1	25	555	326	211	460	123
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	554	156	379	108	59	1	25	555	326	211	460	123
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:	554	156	379	108	59	1	25	555	326	211	460	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	554	156	379	108	59	1	25	555	326	211	460	123
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
Final Volume:	554	156	379	108	59	1	25	555	326	211	460	123
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.95	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	0.98	0.02	1.00	3.00	1.00	2.00	2.34	0.66
Final Sat.:	3150	1900	1750	1750	1770	30	1750	5700	1750	3150	4417	1181
Capacity Analysis Module:												
Vol/Sat:	0.18	0.08	0.22	0.06	0.03	0.03	0.01	0.10	0.19	0.07	0.10	0.10
Crit Moves:	***			***			***			***		
Green Time:	19.6	17.4	24.9	12.2	10.0	10.0	7.6	10.9	30.5	7.5	10.8	10.8
Volume/Cap:	0.54	0.28	0.52	0.30	0.20	0.20	0.11	0.54	0.37	0.54	0.58	0.58
Delay/Veh:	17.0	16.7	13.8	20.8	21.9	21.9	23.5	22.8	9.2	26.1	23.4	23.4
User DelAdj:	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:	17.0	16.7	13.8	20.8	21.9	21.9	23.5	22.8	9.2	26.1	23.4	23.4
LOS by Move:	B	B	B	C	C	C	C	C	A	C	C	C
HCM2k95thQ:	10	4	11	4	2	2	1	6	8	5	7	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #103: Butterfield Boulevard and Cochrane Road

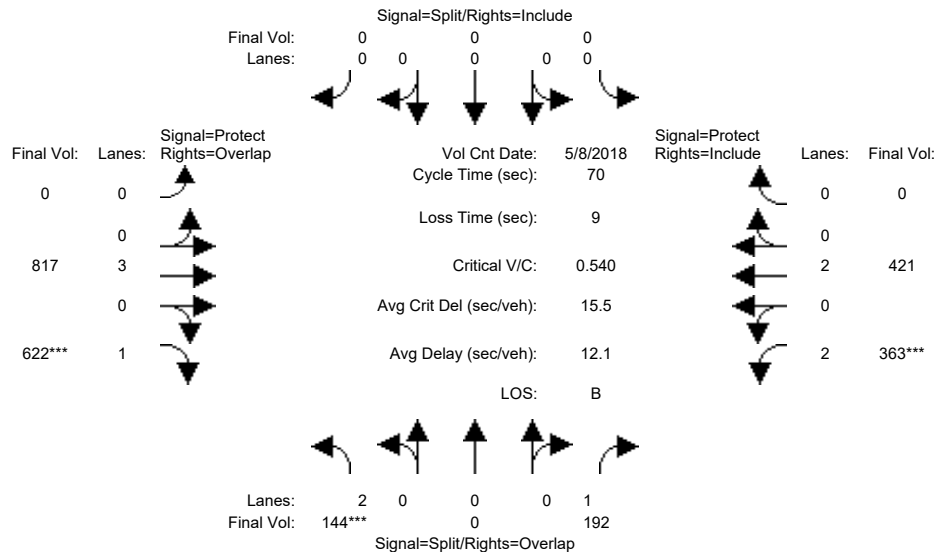


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	554	162	381	111	59	1	24	555	320	220	468	127
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:	554	162	381	111	59	1	24	555	320	220	468	127
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	554	162	381	111	59	1	24	555	320	220	468	127
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:	554	162	381	111	59	1	24	555	320	220	468	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	554	162	381	111	59	1	24	555	320	220	468	127
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
Final Volume:	554	162	381	111	59	1	24	555	320	220	468	127
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.95	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	0.98	0.02	1.00	3.00	1.00	2.00	2.34	0.66
Final Sat.:	3150	1900	1750	1750	1770	30	1750	5700	1750	3150	4403	1195
Capacity Analysis Module:												
Vol/Sat:	0.18	0.09	0.22	0.06	0.03	0.03	0.01	0.10	0.18	0.07	0.11	0.11
Crit Moves:	***			***			***			***		
Green Time:	19.5	17.3	25.1	12.1	10.0	10.0	7.6	10.8	30.3	7.7	10.9	10.9
Volume/Cap:	0.54	0.30	0.52	0.31	0.20	0.20	0.11	0.54	0.36	0.54	0.59	0.59
Delay/Veh:	17.2	16.9	13.7	20.9	21.9	21.9	23.4	23.0	9.3	26.0	23.4	23.4
User DelAdj:	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:	17.2	16.9	13.7	20.9	21.9	21.9	23.4	23.0	9.3	26.0	23.4	23.4
LOS by Move:	B	B	B	C	C	C	C	C	A	C	C	C
HCM2k95thQ:	10	4	11	4	2	2	1	6	8	5	7	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #103: Butterfield Boulevard and Cochrane Road

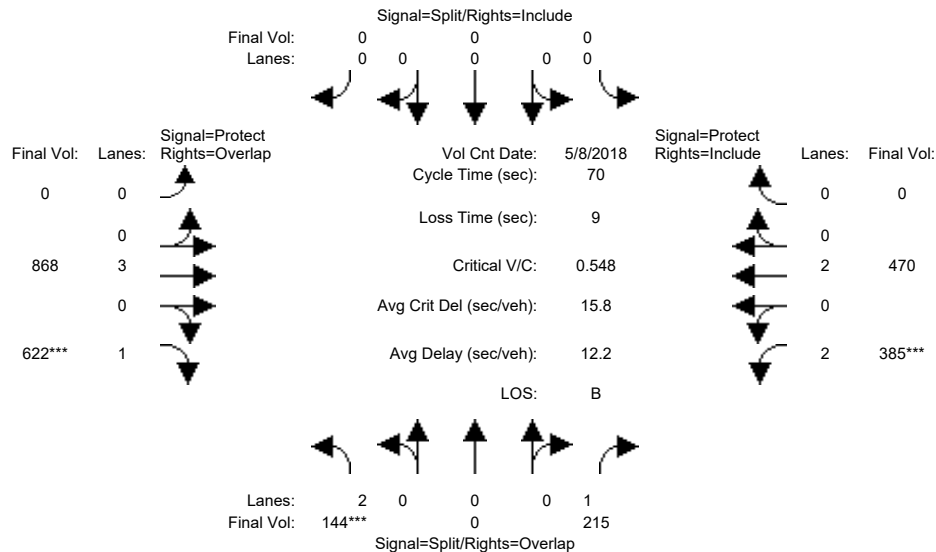


Street Name:	Butterfield Boulevard						Cochrane Road								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	10		0		10	0	0	0	0	10	10	7	10	0	
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module: >> Count Date: 8 May 2018 <<															
Base Vol:	144		0		192	0	0	0	0	817	622	363	421	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	
Initial Bse:	144		0		192	0	0	0	0	817	622	363	421	0	
Added Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0		0		0	0	0	0	0	0	0	0	0	0	
Initial Fut:	144		0		192	0	0	0	0	817	622	363	421	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	
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	
PHF Volume:	144		0		192	0	0	0	0	817	622	363	421	0	
Reduct Vol:	0		0		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	144		0		192	0	0	0	0	817	622	363	421	0	
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	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	1.00	1.00	
FinalVolume:	144		0		192	0	0	0	0	817	622	363	421	0	
Saturation Flow Module:															
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.92	1.00	0.92	0.83	1.00	0.92		
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00			
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0			
Capacity Analysis Module:															
Vol/Sat:	0.05	0.00	0.11	0.00	0.00	0.00	0.00	0.14	0.36	0.12	0.11	0.00			
Crit Moves:	****								****	****					
Green Time:	10.0	0.0	27.9	0.0	0.0	0.0	0.0	33.1	43.1	17.9	51.0	0.0			
Volume/Cap:	0.32	0.00	0.27	0.00	0.00	0.00	0.00	0.30	0.58	0.45	0.15	0.00			
Delay/Veh:	27.4	0.0	14.4	0.0	0.0	0.0	0.0	11.4	8.8	22.3	2.9	0.0			
User DelAdj:	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:	27.4	0.0	14.4	0.0	0.0	0.0	0.0	11.4	8.8	22.3	2.9	0.0			
LOS by Move:	C	A	B	A	A	A	A	B	A	C	A	A			
HCM2k95thQ:	3	0	6	0	0	0	0	7	16	8	3	0			
Note: Queue reported is the number of cars per lane.															

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #103: Butterfield Boulevard and Cochrane Road

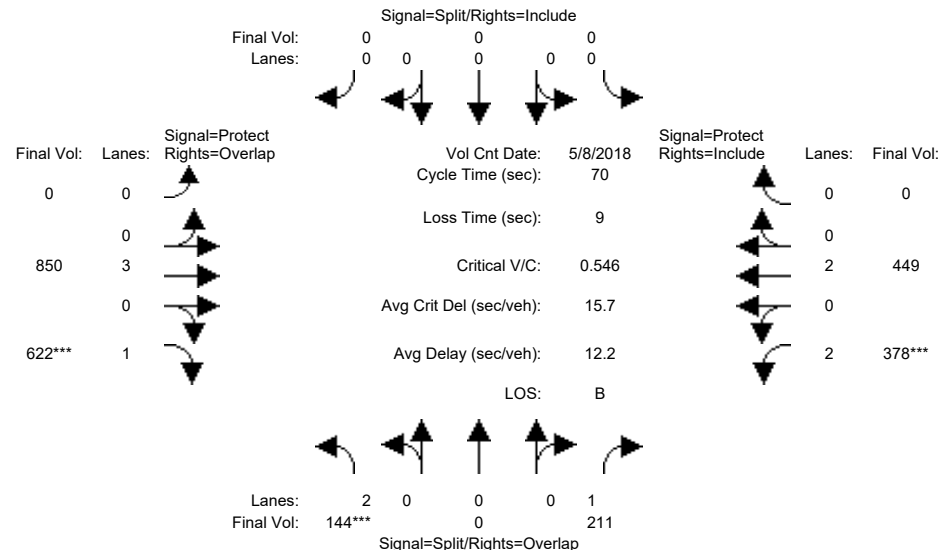


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	144	0	192	0	0	0	0	817	622	363	421	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:	144	0	192	0	0	0	0	817	622	363	421	0
Added Vol:	0	0	23	0	0	0	0	51	0	22	49	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	0	215	0	0	0	0	868	622	385	470	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:	144	0	215	0	0	0	0	868	622	385	470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	0	215	0	0	0	0	868	622	385	470	0
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:	144	0	215	0	0	0	0	868	622	385	470	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.12	0.00	0.00	0.00	0.00	0.15	0.36	0.12	0.12	0.00
Crit Moves:	****								****	****		
Green Time:	10.0	0.0	28.6	0.0	0.0	0.0	0.0	32.4	42.4	18.6	51.0	0.0
Volume/Cap:	0.32	0.00	0.30	0.00	0.00	0.00	0.00	0.33	0.59	0.46	0.17	0.00
Delay/Veh:	27.4	0.0	14.2	0.0	0.0	0.0	0.0	12.0	9.3	21.9	3.0	0.0
User DelAdj:	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:	27.4	0.0	14.2	0.0	0.0	0.0	0.0	12.0	9.3	21.9	3.0	0.0
LOS by Move:	C	A	B	A	A	A	A	B	A	C	A	A
HCM2k95thQ:	3	0	7	0	0	0	0	7	16	8	3	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #103: Butterfield Boulevard and Cochrane Road

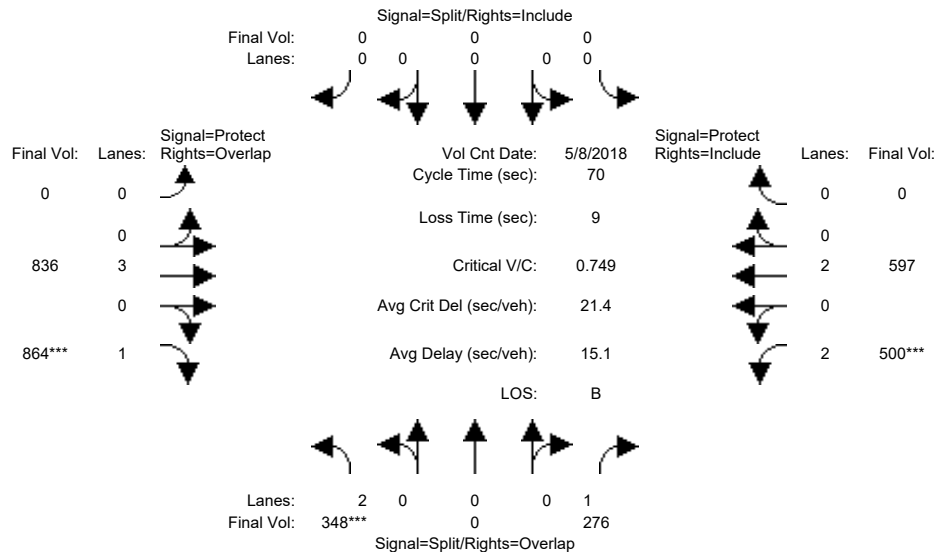


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	144	0	192	0	0	0	0	817	622	363	421	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:	144	0	192	0	0	0	0	817	622	363	421	0
Added Vol:	0	0	19	0	0	0	0	33	0	15	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	0	211	0	0	0	0	850	622	378	449	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:	144	0	211	0	0	0	0	850	622	378	449	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	0	211	0	0	0	0	850	622	378	449	0
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:	144	0	211	0	0	0	0	850	622	378	449	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.12	0.00	0.00	0.00	0.00	0.15	0.36	0.12	0.12	0.00
Crit Moves:	****								****	****		
Green Time:	10.0	0.0	28.4	0.0	0.0	0.0	0.0	32.6	42.6	18.4	51.0	0.0
Volume/Cap:	0.32	0.00	0.30	0.00	0.00	0.00	0.00	0.32	0.58	0.46	0.16	0.00
Delay/Veh:	27.4	0.0	14.3	0.0	0.0	0.0	0.0	11.8	9.2	22.0	3.0	0.0
User DelAdj:	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:	27.4	0.0	14.3	0.0	0.0	0.0	0.0	11.8	9.2	22.0	3.0	0.0
LOS by Move:	C	A	B	A	A	A	A	B	A	C	A	A
HCM2k95thQ:	3	0	6	0	0	0	0	7	16	8	3	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #103: Butterfield Boulevard and Cochrane Road

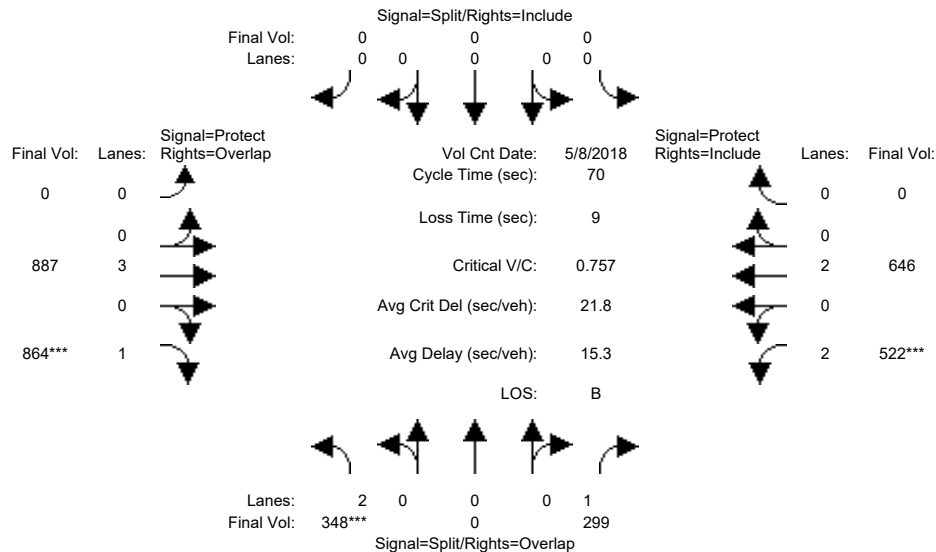


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	348	0	276	0	0	0	0	836	864	500	597	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:	348	0	276	0	0	0	0	836	864	500	597	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	348	0	276	0	0	0	0	836	864	500	597	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:	348	0	276	0	0	0	0	836	864	500	597	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	0	276	0	0	0	0	836	864	500	597	0
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:	348	0	276	0	0	0	0	836	864	500	597	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.16	0.00	0.00	0.00	0.00	0.15	0.49	0.16	0.16	0.00
Crit Moves:	***								***	***		
Green Time:	10.3	0.0	26.1	0.0	0.0	0.0	0.0	34.9	45.2	15.8	50.7	0.0
Volume/Cap:	0.75	0.00	0.42	0.00	0.00	0.00	0.00	0.29	0.76	0.70	0.22	0.00
Delay/Veh:	35.2	0.0	16.8	0.0	0.0	0.0	0.0	10.4	11.8	28.2	3.2	0.0
User DelAdj:	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:	35.2	0.0	16.8	0.0	0.0	0.0	0.0	10.4	11.8	28.2	3.2	0.0
LOS by Move:	D	A	B	A	A	A	A	B	B	C	A	A
HCM2k95thQ:	9	0	9	0	0	0	0	7	25	12	4	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #103: Butterfield Boulevard and Cochrane Road

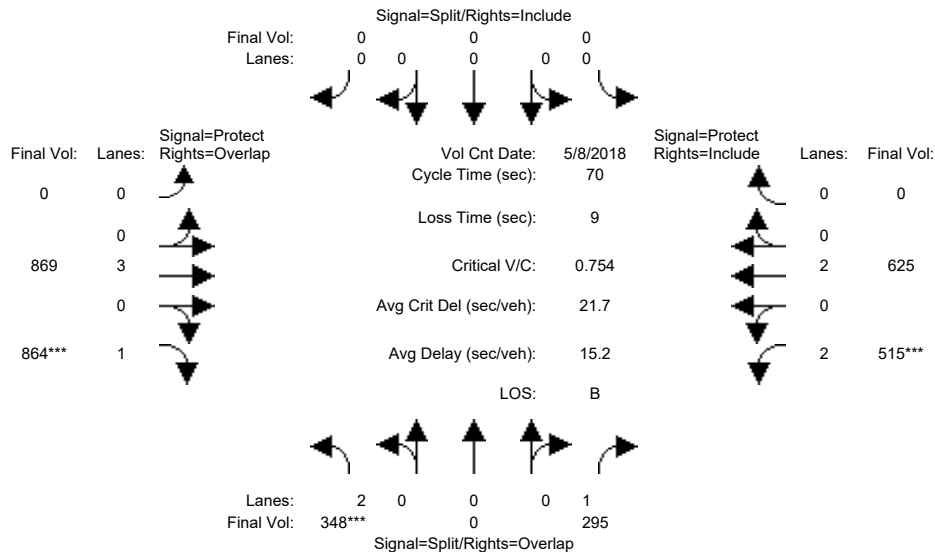


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	348	0	276	0	0	0	0	836	864	500	597	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:	348	0	276	0	0	0	0	836	864	500	597	0
Added Vol:	0	0	23	0	0	0	0	51	0	22	49	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	348	0	299	0	0	0	0	887	864	522	646	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:	348	0	299	0	0	0	0	887	864	522	646	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	0	299	0	0	0	0	887	864	522	646	0
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:	348	0	299	0	0	0	0	887	864	522	646	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.16	0.49	0.17	0.17	0.00
Crit Moves:	***								***	***		
Green Time:	10.2	0.0	26.5	0.0	0.0	0.0	0.0	34.5	44.7	16.3	50.8	0.0
Volume/Cap:	0.76	0.00	0.45	0.00	0.00	0.00	0.00	0.32	0.77	0.71	0.23	0.00
Delay/Veh:	35.8	0.0	16.8	0.0	0.0	0.0	0.0	10.7	12.4	28.0	3.2	0.0
User DelAdj:	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:	35.8	0.0	16.8	0.0	0.0	0.0	0.0	10.7	12.4	28.0	3.2	0.0
LOS by Move:	D	A	B	A	A	A	A	B	B	C	A	A
HCM2k95thQ:	9	0	10	0	0	0	0	7	25	12	4	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #103: Butterfield Boulevard and Cochrane Road

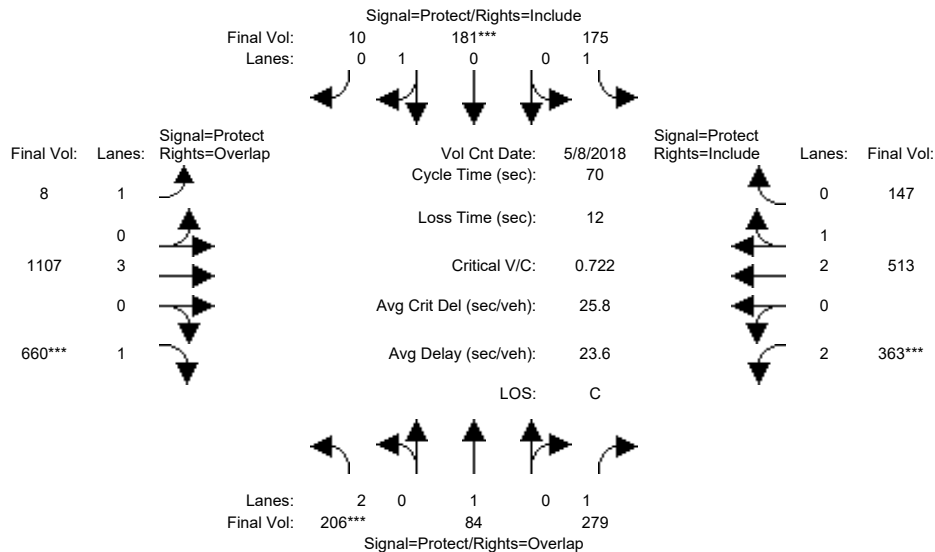


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	348	0	276	0	0	0	0	836	864	500	597	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:	348	0	276	0	0	0	0	836	864	500	597	0
Added Vol:	0	0	19	0	0	0	0	33	0	15	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	348	0	295	0	0	0	0	869	864	515	625	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:	348	0	295	0	0	0	0	869	864	515	625	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	348	0	295	0	0	0	0	869	864	515	625	0
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:	348	0	295	0	0	0	0	869	864	515	625	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	3150	0	1750	0	0	0	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.17	0.00	0.00	0.00	0.00	0.15	0.49	0.16	0.16	0.00
Crit Moves:	***								***	***		
Green Time:	10.3	0.0	26.4	0.0	0.0	0.0	0.0	34.6	44.9	16.1	50.7	0.0
Volume/Cap:	0.75	0.00	0.45	0.00	0.00	0.00	0.00	0.31	0.77	0.71	0.23	0.00
Delay/Veh:	35.6	0.0	16.8	0.0	0.0	0.0	0.0	10.6	12.2	28.0	3.2	0.0
User DelAdj:	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:	35.6	0.0	16.8	0.0	0.0	0.0	0.0	10.6	12.2	28.0	3.2	0.0
LOS by Move:	D	A	B	A	A	A	A	B	B	C	A	A
HCM2k95thQ:	9	0	10	0	0	0	0	7	25	12	4	0
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #103: Butterfield Boulevard and Cochrane Road

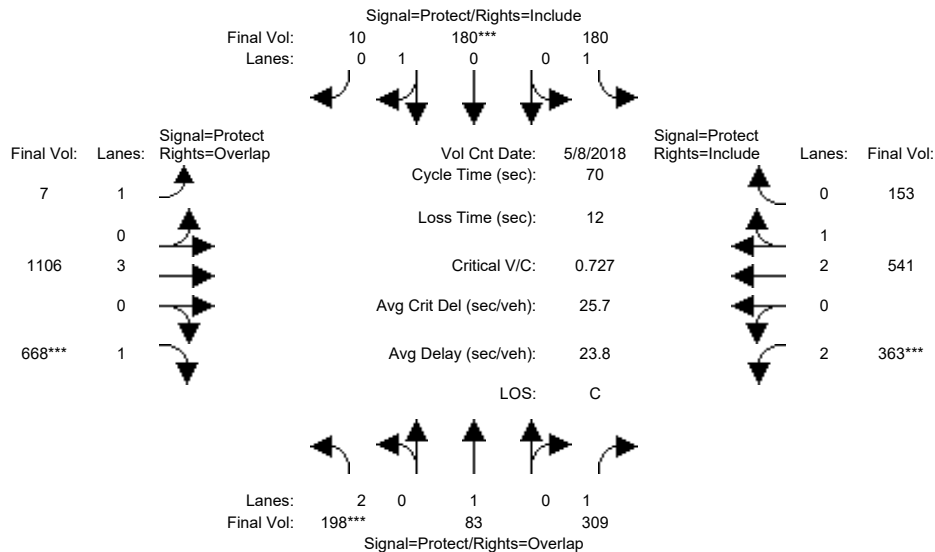


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	206	84	279	175	181	10	8	1107	660	363	513	147
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:	206	84	279	175	181	10	8	1107	660	363	513	147
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	206	84	279	175	181	10	8	1107	660	363	513	147
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:	206	84	279	175	181	10	8	1107	660	363	513	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	84	279	175	181	10	8	1107	660	363	513	147
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
Final Volume:	206	84	279	175	181	10	8	1107	660	363	513	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.95	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	0.95	0.05	1.00	3.00	1.00	2.00	2.31	0.69
Final Sat.:	3150	1900	1750	1750	1706	94	1750	5700	1750	3150	4351	1247
Capacity Analysis Module:												
Vol/Sat:	0.07	0.04	0.16	0.10	0.11	0.11	0.00	0.19	0.38	0.12	0.12	0.12
Crit Moves:	***			***					***	***		
Green Time:	7.0	10.5	22.3	7.4	10.9	10.9	16.5	28.4	35.4	11.8	23.6	23.6
Volume/Cap:	0.65	0.29	0.50	0.95	0.68	0.68	0.02	0.48	0.75	0.68	0.35	0.35
Delay/Veh:	35.2	27.0	20.1	83.5	34.8	34.8	20.5	15.5	17.3	31.0	17.5	17.5
User DelAdj:	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:	35.2	27.0	20.1	83.5	34.8	34.8	20.5	15.5	17.3	31.0	17.5	17.5
LOS by Move:	D	C	C	F	C	C	C	B	B	C	B	B
HCM2k95thQ:	5	3	10	15	11	11	0	11	22	9	7	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #103: Butterfield Boulevard and Cochrane Road

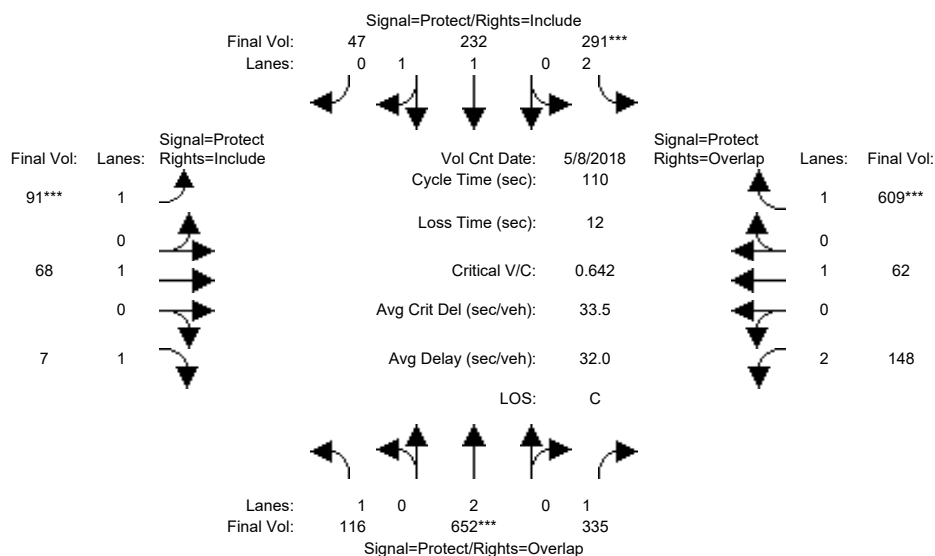


Street Name:	Butterfield Boulevard						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	198	83	309	180	180	10	7	1106	668	363	541	153
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:	198	83	309	180	180	10	7	1106	668	363	541	153
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	198	83	309	180	180	10	7	1106	668	363	541	153
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:	198	83	309	180	180	10	7	1106	668	363	541	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	83	309	180	180	10	7	1106	668	363	541	153
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
Final Volume:	198	83	309	180	180	10	7	1106	668	363	541	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.95	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	0.95	0.05	1.00	3.00	1.00	2.00	2.31	0.69
Final Sat.:	3150	1900	1750	1750	1705	95	1750	5700	1750	3150	4364	1234
Capacity Analysis Module:												
Vol/Sat:	0.06	0.04	0.18	0.10	0.11	0.11	0.00	0.19	0.38	0.12	0.12	0.12
Crit Moves:	***			***					***	***		
Green Time:	7.0	10.3	22.0	7.4	10.7	10.7	16.6	28.6	35.6	11.7	23.7	23.7
Volume/Cap:	0.63	0.30	0.56	0.97	0.69	0.69	0.02	0.48	0.75	0.69	0.37	0.37
Delay/Veh:	34.3	27.2	21.3	88.6	35.3	35.3	20.5	15.4	17.3	31.3	17.6	17.6
User DelAdj:	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:	34.3	27.2	21.3	88.6	35.3	35.3	20.5	15.4	17.3	31.3	17.6	17.6
LOS by Move:	C	C	C	F	D	D	C	B	B	C	B	B
HCM2k95thQ:	5	3	11	16	11	11	0	11	23	9	7	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #101: Monterey Road and Cochrane Road



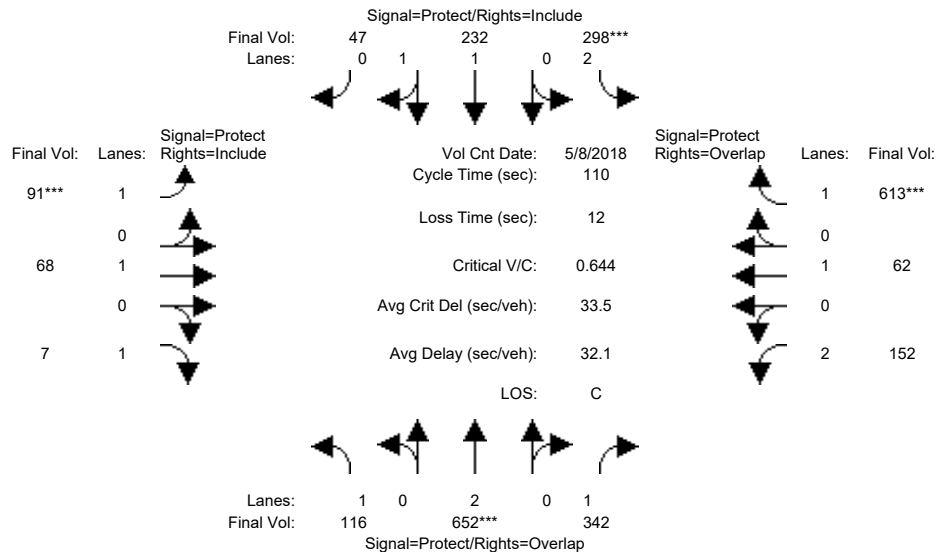
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	652	335	291	232	47	91	68	7	148	62	609
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:	116	652	335	291	232	47	91	68	7	148	62	609
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	652	335	291	232	47	91	68	7	148	62	609
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:	116	652	335	291	232	47	91	68	7	148	62	609
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	652	335	291	232	47	91	68	7	148	62	609
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:	116	652	335	291	232	47	91	68	7	148	62	609
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.65	0.35	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3076	623	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.19	0.09	0.08	0.08	0.05	0.04	0.00	0.05	0.03	0.35
Crit Moves:	****			****			****					****
Green Time:	19.1	29.4	51.1	15.8	26.2	26.2	8.9	31.0	31.0	21.7	43.8	59.7
Volume/Cap:	0.38	0.64	0.41	0.64	0.32	0.32	0.64	0.13	0.01	0.24	0.08	0.64
Delay/Veh:	41.0	37.0	19.8	47.5	34.8	34.8	58.6	29.5	28.5	37.4	20.6	19.2
User DelAdj:	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:	41.0	37.0	19.8	47.5	34.8	34.8	58.6	29.5	28.5	37.4	20.6	19.2
LOS by Move:	D	D	B	D	C	C	E	C	C	D	C	B
HCM2k95thQ:	8	19	15	11	8	8	9	3	0	5	3	27

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #101: Monterey Road and Cochrane Road



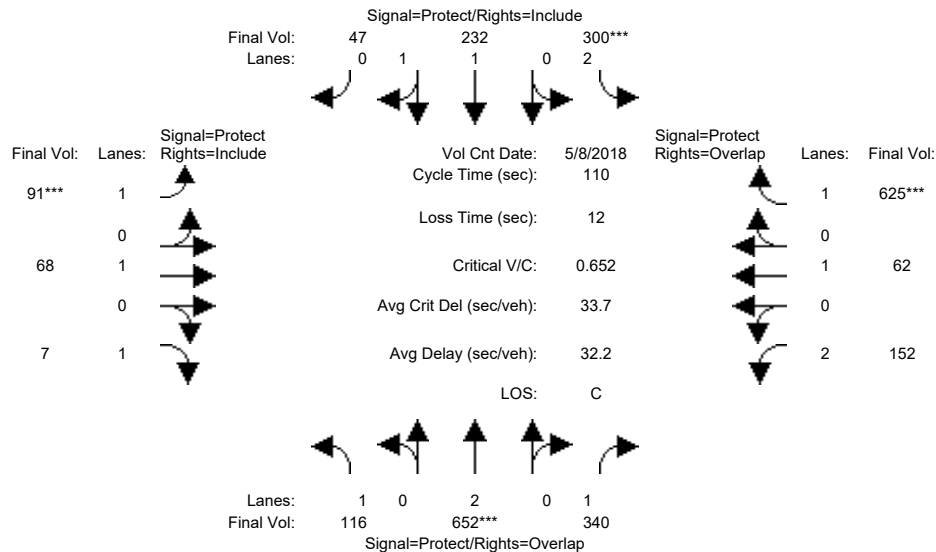
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	652	335	291	232	47	91	68	7	148	62	609
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:	116	652	335	291	232	47	91	68	7	148	62	609
Added Vol:	0	0	7	7	0	0	0	0	0	4	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	652	342	298	232	47	91	68	7	152	62	613
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:	116	652	342	298	232	47	91	68	7	152	62	613
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	652	342	298	232	47	91	68	7	152	62	613
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
Final Volume:	116	652	342	298	232	47	91	68	7	152	62	613
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.65	0.35	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3076	623	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.20	0.09	0.08	0.08	0.05	0.04	0.00	0.05	0.03	0.35
Crit Moves:	****			****			****			****		
Green Time:	19.2	29.3	50.9	16.2	26.3	26.3	8.9	30.9	30.9	21.6	43.7	59.8
Volume/Cap:	0.38	0.64	0.42	0.64	0.32	0.32	0.64	0.13	0.01	0.25	0.08	0.64
Delay/Veh:	41.0	37.2	20.1	47.3	34.7	34.7	58.8	29.6	28.6	37.5	20.7	19.1
User DelAdj:	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:	41.0	37.2	20.1	47.3	34.7	34.7	58.8	29.6	28.6	37.5	20.7	19.1
LOS by Move:	D	D	C	D	C	C	E	C	C	D	C	B
HCM2k95thQ:	8	19	16	11	8	8	9	3	0	5	3	27

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #101: Monterey Road and Cochrane Road



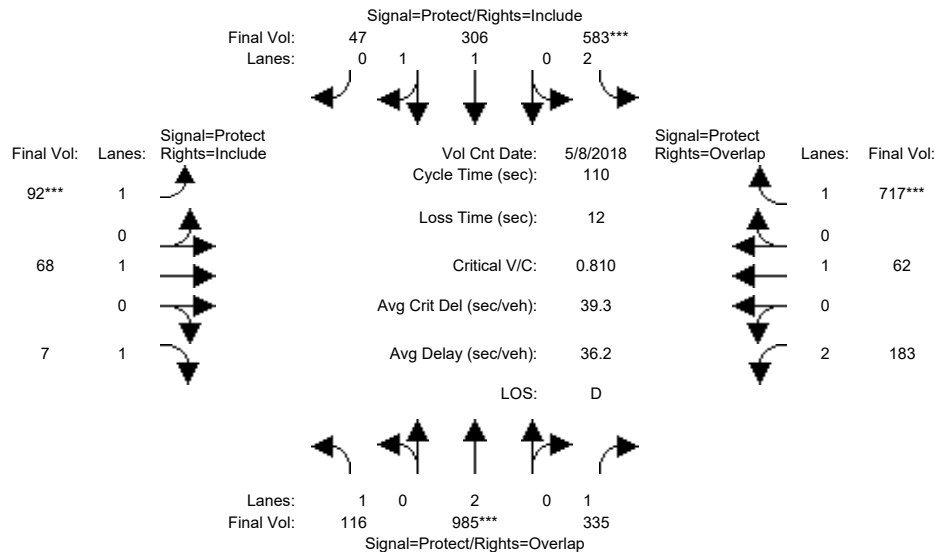
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	652	335	291	232	47	91	68	7	148	62	609
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:	116	652	335	291	232	47	91	68	7	148	62	609
Added Vol:	0	0	5	9	0	0	0	0	0	4	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	652	340	300	232	47	91	68	7	152	62	625
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:	116	652	340	300	232	47	91	68	7	152	62	625
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	652	340	300	232	47	91	68	7	152	62	625
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
Final Volume:	116	652	340	300	232	47	91	68	7	152	62	625
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.65	0.35	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3076	623	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.19	0.10	0.08	0.08	0.05	0.04	0.00	0.05	0.03	0.36
Crit Moves:	****			****			****			****		
Green Time:	19.0	29.0	50.8	16.1	26.0	26.0	8.8	31.2	31.2	21.8	44.2	60.3
Volume/Cap:	0.38	0.65	0.42	0.65	0.32	0.32	0.65	0.13	0.01	0.24	0.08	0.65
Delay/Veh:	41.1	37.6	20.1	47.6	34.9	34.9	59.6	29.4	28.4	37.3	20.4	19.1
User DelAdj:	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:	41.1	37.6	20.1	47.6	34.9	34.9	59.6	29.4	28.4	37.3	20.4	19.1
LOS by Move:	D	D	C	D	C	C	E	C	C	D	C	B
HCM2k95thQ:	8	19	16	11	8	8	9	3	0	5	3	28

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #101: Monterey Road and Cochrane Road

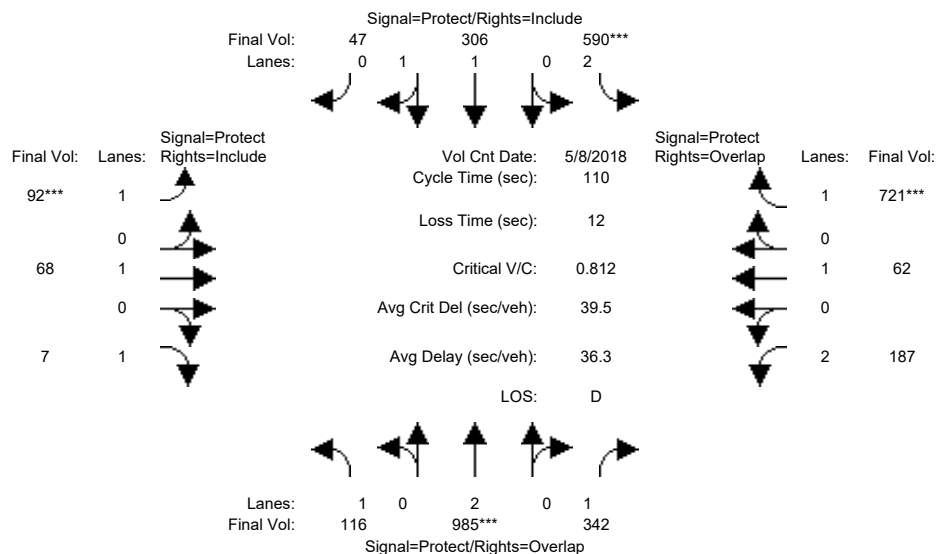


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	985	335	583	306	47	92	68	7	183	62	717
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:	116	985	335	583	306	47	92	68	7	183	62	717
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	985	335	583	306	47	92	68	7	183	62	717
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:	116	985	335	583	306	47	92	68	7	183	62	717
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	985	335	583	306	47	92	68	7	183	62	717
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
Final Volume:	116	985	335	583	306	47	92	68	7	183	62	717
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.73	0.27	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3207	493	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.19	0.19	0.10	0.10	0.05	0.04	0.00	0.06	0.03	0.41
Crit Moves:	****			****			****			****		
Green Time:	24.7	35.2	50.7	25.1	35.6	35.6	7.1	22.1	22.1	15.5	30.5	55.7
Volume/Cap:	0.29	0.81	0.42	0.81	0.29	0.29	0.81	0.18	0.02	0.41	0.12	0.81
Delay/Veh:	35.8	38.5	20.1	47.0	27.9	27.9	84.4	36.6	35.2	43.7	29.8	28.4
User DelAdj:	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:	35.8	38.5	20.1	47.0	27.9	27.9	84.4	36.6	35.2	43.7	29.8	28.4
LOS by Move:	D	D	C	D	C	C	F	D	D	D	C	C
HCM2k95thQ:	7	30	15	21	9	9	10	4	0	7	3	38
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #101: Monterey Road and Cochrane Road



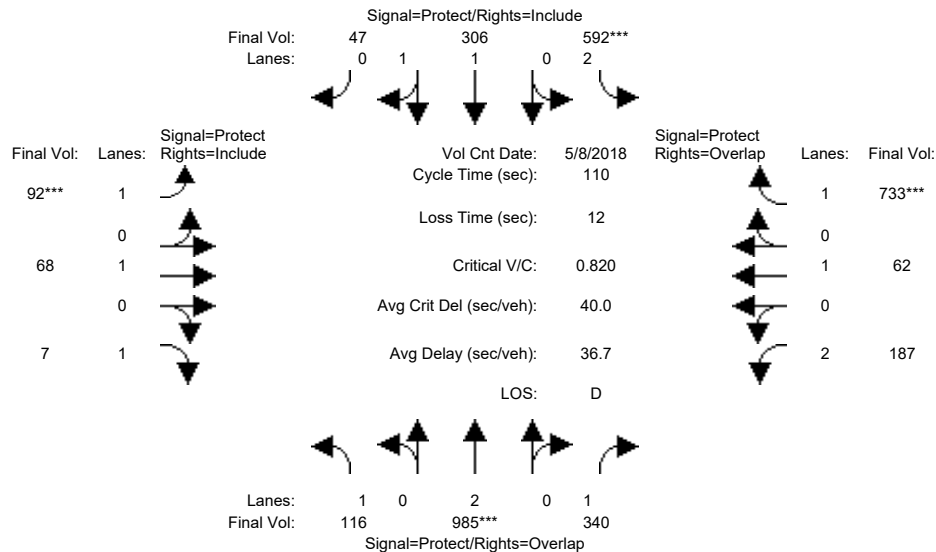
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	985	335	583	306	47	92	68	7	183	62	717
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:	116	985	335	583	306	47	92	68	7	183	62	717
Added Vol:	0	0	7	7	0	0	0	0	0	4	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	985	342	590	306	47	92	68	7	187	62	721
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:	116	985	342	590	306	47	92	68	7	187	62	721
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	985	342	590	306	47	92	68	7	187	62	721
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:	116	985	342	590	306	47	92	68	7	187	62	721
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.73	0.27	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3207	493	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.20	0.19	0.10	0.10	0.05	0.04	0.00	0.06	0.03	0.41
Crit Moves:	****			****			****					****
Green Time:	24.8	35.1	50.6	25.4	35.7	35.7	7.1	22.1	22.1	15.5	30.4	55.8
Volume/Cap:	0.29	0.81	0.43	0.81	0.29	0.29	0.81	0.18	0.02	0.42	0.12	0.81
Delay/Veh:	35.8	38.7	20.3	47.0	27.9	27.9	85.0	36.7	35.3	43.8	29.9	28.5
User DelAdj:	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:	35.8	38.7	20.3	47.0	27.9	27.9	85.0	36.7	35.3	43.8	29.9	28.5
LOS by Move:	D	D	C	D	C	C	F	D	D	D	C	C
HCM2k95thQ:	7	30	16	22	9	9	10	4	0	7	3	38

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #101: Monterey Road and Cochrane Road

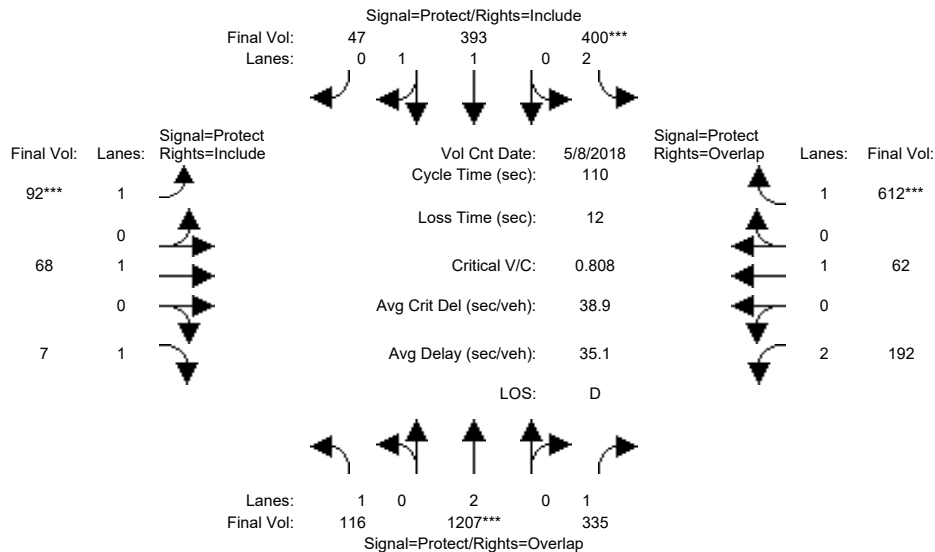


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	985	335	583	306	47	92	68	7	183	62	717
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:	116	985	335	583	306	47	92	68	7	183	62	717
Added Vol:	0	0	5	9	0	0	0	0	0	4	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	985	340	592	306	47	92	68	7	187	62	733
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:	116	985	340	592	306	47	92	68	7	187	62	733
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	985	340	592	306	47	92	68	7	187	62	733
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
Final Volume:	116	985	340	592	306	47	92	68	7	187	62	733
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.73	0.27	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3207	493	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.19	0.19	0.10	0.10	0.05	0.04	0.00	0.06	0.03	0.42
Crit Moves:	****			****			****			****		
Green Time:	24.6	34.8	50.4	25.2	35.4	35.4	7.1	22.4	22.4	15.7	31.0	56.2
Volume/Cap:	0.30	0.82	0.42	0.82	0.30	0.30	0.82	0.18	0.02	0.42	0.12	0.82
Delay/Veh:	35.9	39.3	20.4	47.7	28.1	28.1	86.9	36.4	35.1	43.6	29.4	28.7
User DelAdj:	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:	35.9	39.3	20.4	47.7	28.1	28.1	86.9	36.4	35.1	43.6	29.4	28.7
LOS by Move:	D	D	C	D	C	C	F	D	D	D	C	C
HCM2k95thQ:	7	30	16	22	9	9	11	4	0	7	3	39
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #101: Monterey Road and Cochrane Road

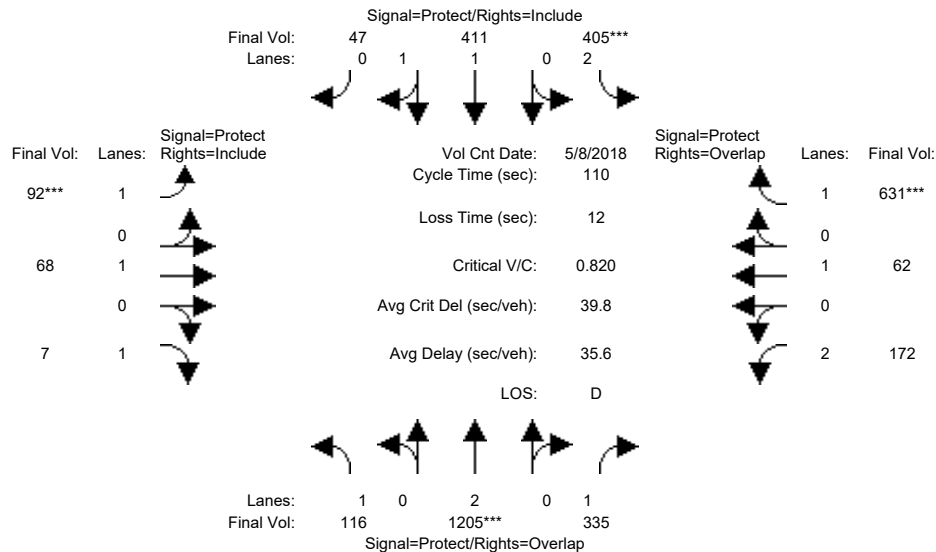


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	1207	335	400	393	47	92	68	7	192	62	612
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:	116	1207	335	400	393	47	92	68	7	192	62	612
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	1207	335	400	393	47	92	68	7	192	62	612
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:	116	1207	335	400	393	47	92	68	7	192	62	612
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1207	335	400	393	47	92	68	7	192	62	612
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
Final Volume:	116	1207	335	400	393	47	92	68	7	192	62	612
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.78	0.22	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3304	395	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.32	0.19	0.13	0.12	0.12	0.05	0.04	0.00	0.06	0.03	0.35
Crit Moves:	****			****			****			****		
Green Time:	21.7	43.2	58.7	17.3	38.9	38.9	7.2	22.0	22.0	15.4	30.3	47.6
Volume/Cap:	0.34	0.81	0.36	0.81	0.34	0.34	0.81	0.18	0.02	0.43	0.12	0.81
Delay/Veh:	38.6	33.1	15.0	54.3	26.3	26.3	84.0	36.7	35.3	44.0	29.9	33.7
User DelAdj:	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:	38.6	33.1	15.0	54.3	26.3	26.3	84.0	36.7	35.3	44.0	29.9	33.7
LOS by Move:	D	C	B	D	C	C	F	D	D	D	C	C
HCM2k95thQ:	8	34	13	16	10	10	10	4	0	7	3	34
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #101: Monterey Road and Cochrane Road



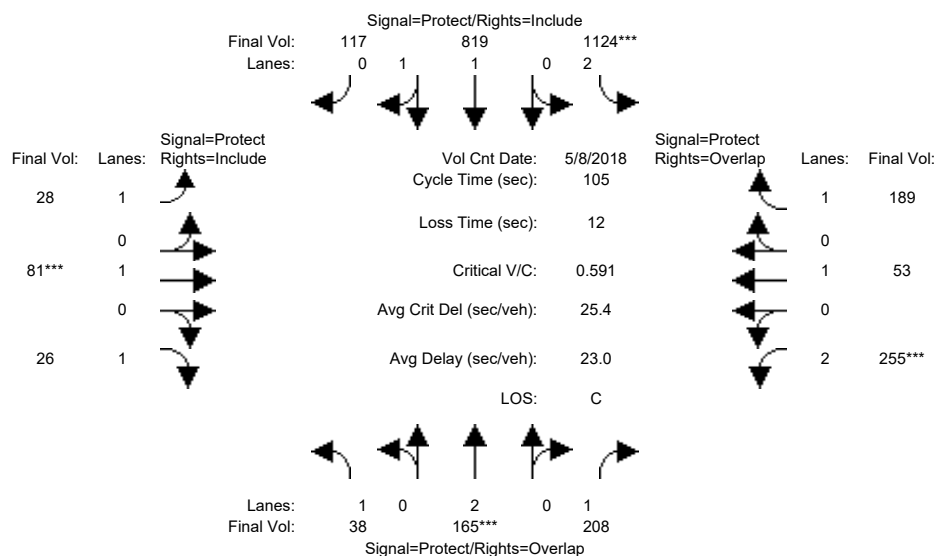
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	116	1205	335	405	411	47	92	68	7	172	62	631
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:	116	1205	335	405	411	47	92	68	7	172	62	631
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	1205	335	405	411	47	92	68	7	172	62	631
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:	116	1205	335	405	411	47	92	68	7	172	62	631
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1205	335	405	411	47	92	68	7	172	62	631
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
Final Volume:	116	1205	335	405	411	47	92	68	7	172	62	631
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.79	0.21	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3320	380	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.32	0.19	0.13	0.12	0.12	0.05	0.04	0.00	0.05	0.03	0.36
Crit Moves:	****			****			****			****		
Green Time:	20.9	42.6	58.3	17.3	39.0	39.0	7.1	22.5	22.5	15.7	31.1	48.4
Volume/Cap:	0.35	0.82	0.36	0.82	0.35	0.35	0.82	0.18	0.02	0.38	0.12	0.82
Delay/Veh:	39.3	34.1	15.3	55.3	26.3	26.3	86.8	36.3	35.0	43.3	29.3	33.9
User DelAdj:	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:	39.3	34.1	15.3	55.3	26.3	26.3	86.8	36.3	35.0	43.3	29.3	33.9
LOS by Move:	D	C	B	E	C	C	F	D	C	D	C	C
HCM2k95thQ:	8	34	13	16	11	11	11	4	0	6	3	35

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #101: Monterey Road and Cochrane Road



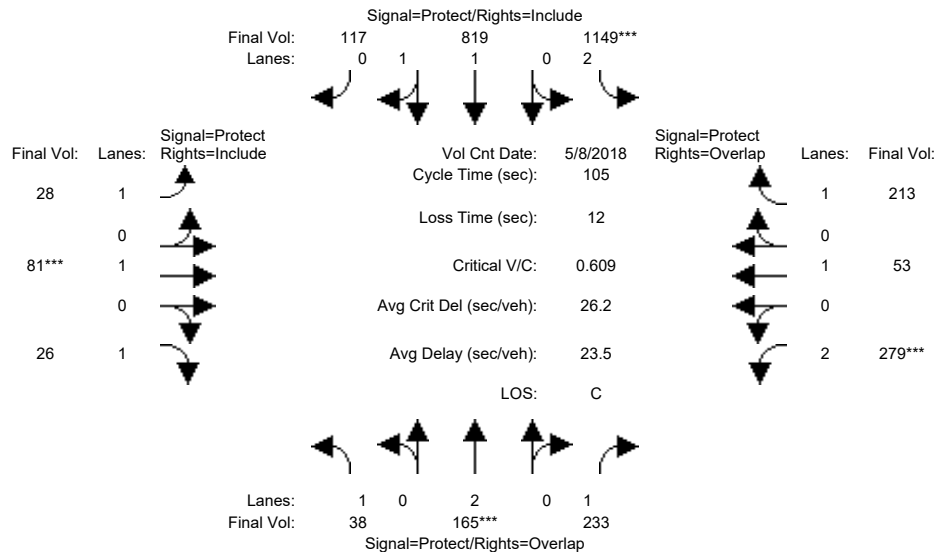
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	165	208	1124	819	117	28	81	26	255	53	189
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:	38	165	208	1124	819	117	28	81	26	255	53	189
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	165	208	1124	819	117	28	81	26	255	53	189
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:	38	165	208	1124	819	117	28	81	26	255	53	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	165	208	1124	819	117	28	81	26	255	53	189
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
Final Volume:	38	165	208	1124	819	117	28	81	26	255	53	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.74	0.26	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3237	462	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.12	0.36	0.25	0.25	0.02	0.04	0.01	0.08	0.03	0.11
Crit Moves:	****			****			****			****		
Green Time:	14.5	10.0	23.5	59.5	55.0	55.0	9.7	10.0	10.0	13.5	13.8	73.3
Volume/Cap:	0.16	0.46	0.53	0.63	0.48	0.48	0.17	0.45	0.16	0.63	0.21	0.15
Delay/Veh:	40.2	45.8	37.3	16.1	16.1	16.1	44.5	46.7	44.1	46.6	41.1	5.4
User DelAdj:	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:	40.2	45.8	37.3	16.1	16.1	16.1	44.5	46.7	44.1	46.6	41.1	5.4
LOS by Move:	D	D	D	B	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	6	13	25	17	17	2	6	2	9	3	4

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #101: Monterey Road and Cochrane Road



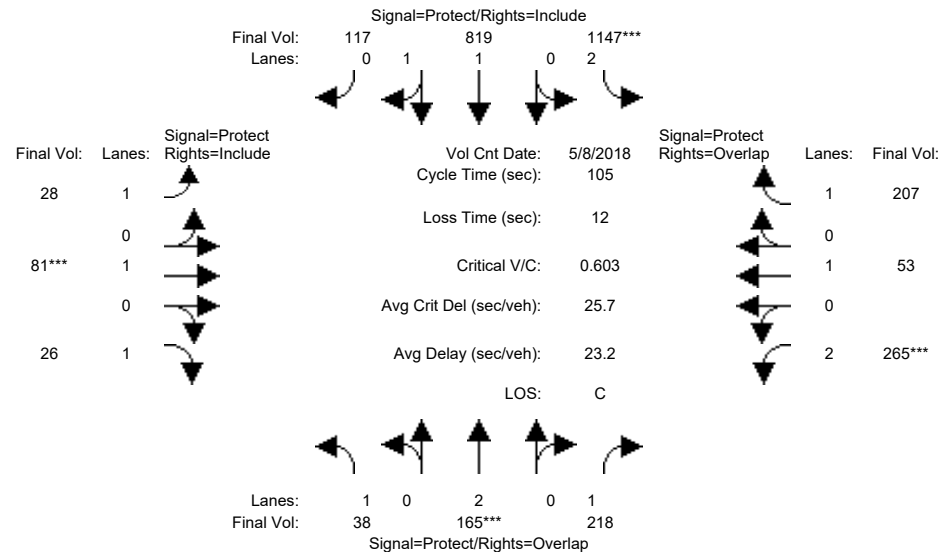
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	165	208	1124	819	117	28	81	26	255	53	189
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:	38	165	208	1124	819	117	28	81	26	255	53	189
Added Vol:	0	0	25	25	0	0	0	0	0	24	0	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	165	233	1149	819	117	28	81	26	279	53	213
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:	38	165	233	1149	819	117	28	81	26	279	53	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	165	233	1149	819	117	28	81	26	279	53	213
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
Final Volume:	38	165	233	1149	819	117	28	81	26	279	53	213
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.74	0.26	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3237	462	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.13	0.36	0.25	0.25	0.02	0.04	0.01	0.09	0.03	0.12
Crit Moves:	****			****			****			****		
Green Time:	14.3	10.0	24.3	58.7	54.4	54.4	10.0	10.0	10.0	14.3	14.3	73.0
Volume/Cap:	0.16	0.46	0.58	0.65	0.49	0.49	0.17	0.45	0.16	0.65	0.21	0.18
Delay/Veh:	40.3	45.8	37.9	16.9	16.5	16.5	44.2	46.7	44.1	46.6	40.7	5.6
User DelAdj:	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:	40.3	45.8	37.9	16.9	16.5	16.5	44.2	46.7	44.1	46.6	40.7	5.6
LOS by Move:	D	D	D	B	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	6	15	26	17	17	2	6	2	10	3	5

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #101: Monterey Road and Cochrane Road



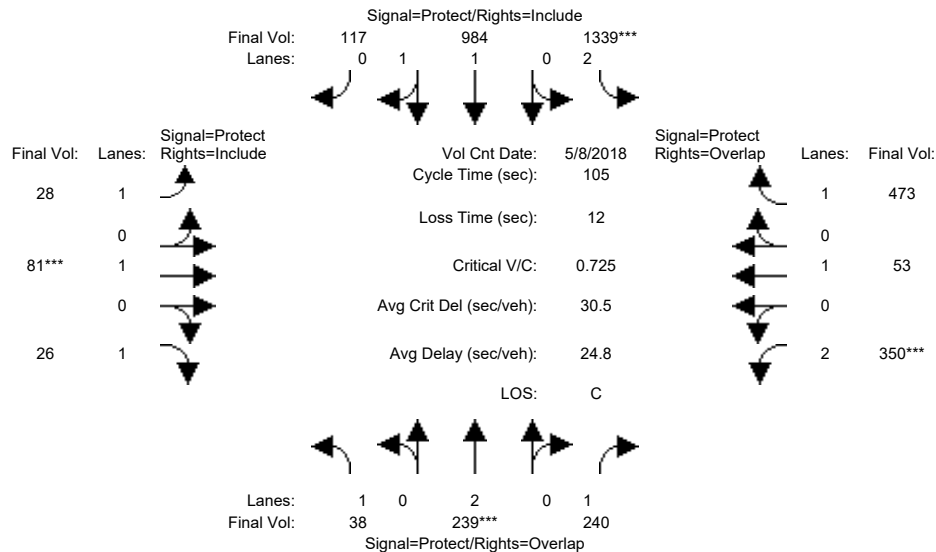
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	165	208	1124	819	117	28	81	26	255	53	189
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:	38	165	208	1124	819	117	28	81	26	255	53	189
Added Vol:	0	0	10	23	0	0	0	0	0	10	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	165	218	1147	819	117	28	81	26	265	53	207
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:	38	165	218	1147	819	117	28	81	26	265	53	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	165	218	1147	819	117	28	81	26	265	53	207
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
Final Volume:	38	165	218	1147	819	117	28	81	26	265	53	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.74	0.26	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3237	462	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.12	0.36	0.25	0.25	0.02	0.04	0.01	0.08	0.03	0.12
Crit Moves:	****			****			****			****		
Green Time:	14.5	10.0	23.7	59.3	54.8	54.8	9.8	10.0	10.0	13.7	13.9	73.2
Volume/Cap:	0.16	0.46	0.55	0.64	0.48	0.48	0.17	0.45	0.16	0.64	0.21	0.17
Delay/Veh:	40.2	45.8	37.6	16.5	16.2	16.2	44.4	46.7	44.1	46.9	41.0	5.5
User DelAdj:	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:	40.2	45.8	37.6	16.5	16.2	16.2	44.4	46.7	44.1	46.9	41.0	5.5
LOS by Move:	D	D	D	B	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	6	14	26	17	17	2	6	2	10	3	5

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #101: Monterey Road and Cochrane Road

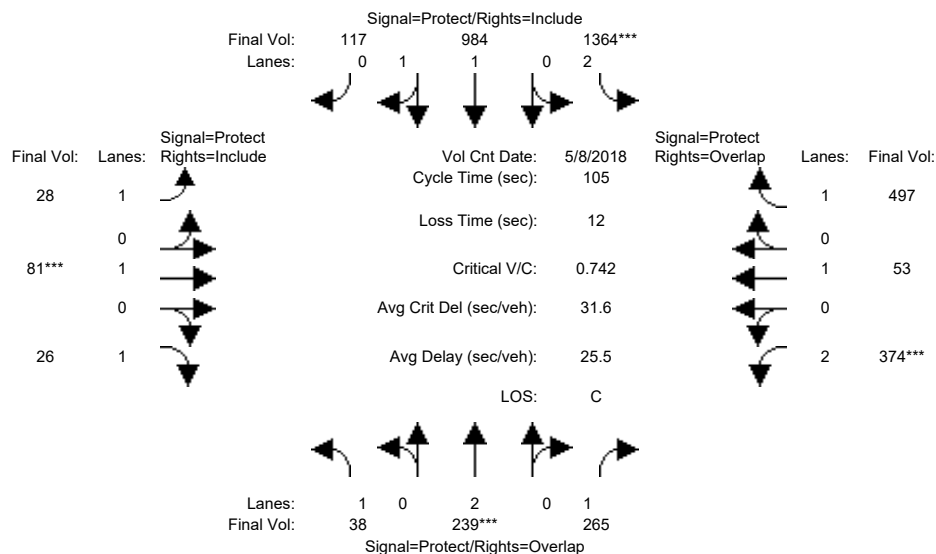


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	239	240	1339	984	117	28	81	26	350	53	473
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:	38	239	240	1339	984	117	28	81	26	350	53	473
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	239	240	1339	984	117	28	81	26	350	53	473
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:	38	239	240	1339	984	117	28	81	26	350	53	473
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	239	240	1339	984	117	28	81	26	350	53	473
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
Final Volume:	38	239	240	1339	984	117	28	81	26	350	53	473
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.78	0.22	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3307	393	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.14	0.43	0.30	0.30	0.02	0.04	0.01	0.11	0.03	0.27
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	12.4	10.0	25.1	57.9	55.5	55.5	10.3	10.0	10.0	15.1	14.8	72.7
Volume/Cap:	0.18	0.66	0.57	0.77	0.56	0.56	0.16	0.45	0.16	0.77	0.20	0.39
Delay/Veh:	42.1	50.3	37.1	20.6	17.0	17.0	43.8	46.7	44.1	51.2	40.2	7.0
User DelAdj:	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:	42.1	50.3	37.1	20.6	17.0	17.0	43.8	46.7	44.1	51.2	40.2	7.0
LOS by Move:	D	D	D	C	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	10	15	32	21	21	2	6	2	13	3	13
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #101: Monterey Road and Cochrane Road



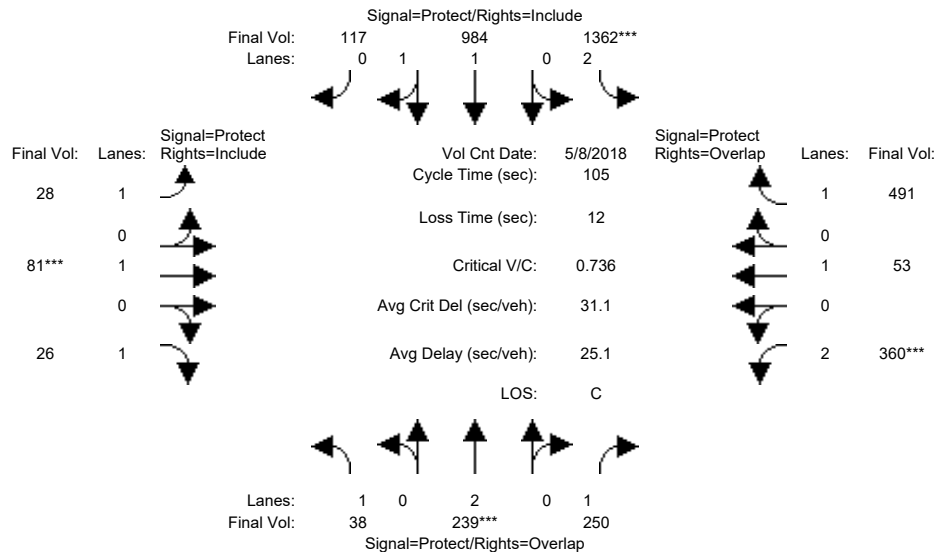
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	239	240	1339	984	117	28	81	26	350	53	473
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:	38	239	240	1339	984	117	28	81	26	350	53	473
Added Vol:	0	0	25	25	0	0	0	0	0	24	0	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	239	265	1364	984	117	28	81	26	374	53	497
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:	38	239	265	1364	984	117	28	81	26	374	53	497
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	239	265	1364	984	117	28	81	26	374	53	497
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
Final Volume:	38	239	265	1364	984	117	28	81	26	374	53	497
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.78	0.22	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3307	393	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.15	0.43	0.30	0.30	0.02	0.04	0.01	0.12	0.03	0.28
Crit Moves:	****			****			****			****		
Green Time:	12.3	10.0	25.7	57.3	55.0	55.0	10.6	10.0	10.0	15.7	15.1	72.4
Volume/Cap:	0.19	0.66	0.62	0.79	0.57	0.57	0.16	0.45	0.16	0.79	0.19	0.41
Delay/Veh:	42.3	50.3	38.0	21.7	17.4	17.4	43.6	46.7	44.1	52.1	39.9	7.3
User DelAdj:	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:	42.3	50.3	38.0	21.7	17.4	17.4	43.6	46.7	44.1	52.1	39.9	7.3
LOS by Move:	D	D	D	C	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	10	17	34	21	21	2	6	2	14	3	14

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #101: Monterey Road and Cochrane Road

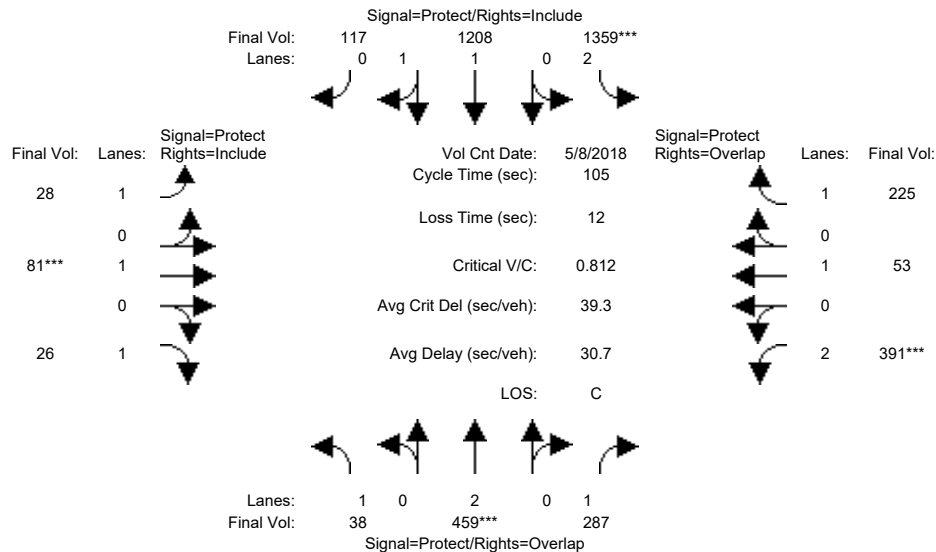


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	239	240	1339	984	117	28	81	26	350	53	473
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:	38	239	240	1339	984	117	28	81	26	350	53	473
Added Vol:	0	0	10	23	0	0	0	0	0	10	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	239	250	1362	984	117	28	81	26	360	53	491
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:	38	239	250	1362	984	117	28	81	26	360	53	491
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	239	250	1362	984	117	28	81	26	360	53	491
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
Final Volume:	38	239	250	1362	984	117	28	81	26	360	53	491
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.78	0.22	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3307	393	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.14	0.43	0.30	0.30	0.02	0.04	0.01	0.11	0.03	0.28
Crit Moves:	****			****			****			****		
Green Time:	12.4	10.0	25.3	57.7	55.3	55.3	10.4	10.0	10.0	15.3	14.9	72.6
Volume/Cap:	0.18	0.66	0.59	0.79	0.56	0.56	0.16	0.45	0.16	0.79	0.20	0.41
Delay/Veh:	42.2	50.3	37.6	21.2	17.1	17.1	43.7	46.7	44.1	52.1	40.2	7.2
User DelAdj:	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:	42.2	50.3	37.6	21.2	17.1	17.1	43.7	46.7	44.1	52.1	40.2	7.2
LOS by Move:	D	D	D	C	B	B	D	D	D	D	D	A
HCM2k95thQ:	3	10	16	33	21	21	2	6	2	13	3	14
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #101: Monterey Road and Cochrane Road

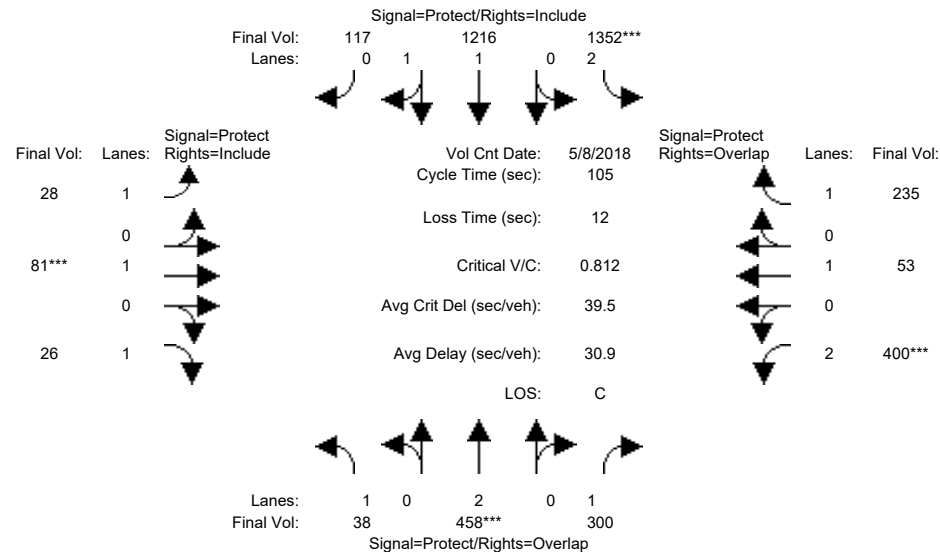


Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	459	287	1359	1208	117	28	81	26	391	53	225
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:	38	459	287	1359	1208	117	28	81	26	391	53	225
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	459	287	1359	1208	117	28	81	26	391	53	225
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:	38	459	287	1359	1208	117	28	81	26	391	53	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	459	287	1359	1208	117	28	81	26	391	53	225
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
Final Volume:	38	459	287	1359	1208	117	28	81	26	391	53	225
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.82	0.18	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3373	327	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.16	0.43	0.36	0.36	0.02	0.04	0.01	0.12	0.03	0.13
Crit Moves:	****			****			****			****		
Green Time:	10.6	14.8	30.1	52.9	57.1	57.1	10.4	10.0	10.0	15.2	14.8	67.8
Volume/Cap:	0.21	0.86	0.57	0.86	0.66	0.66	0.16	0.45	0.16	0.86	0.20	0.20
Delay/Veh:	44.0	56.8	33.6	27.5	17.8	17.8	43.8	46.7	44.1	58.5	40.2	7.7
User DelAdj:	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:	44.0	56.8	33.6	27.5	17.8	17.8	43.8	46.7	44.1	58.5	40.2	7.7
LOS by Move:	D	E	C	C	B	B	D	D	D	E	D	A
HCM2k95thQ:	3	18	17	36	25	25	2	6	2	15	3	6
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #101: Monterey Road and Cochrane Road



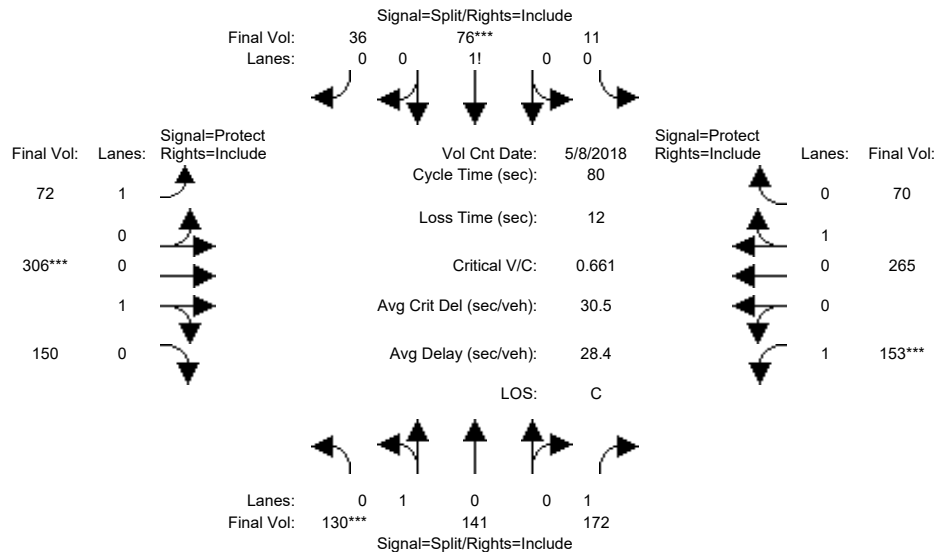
Street Name:	Monterey Road						Cochrane Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	38	458	300	1352	1216	117	28	81	26	400	53	235
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:	38	458	300	1352	1216	117	28	81	26	400	53	235
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	458	300	1352	1216	117	28	81	26	400	53	235
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:	38	458	300	1352	1216	117	28	81	26	400	53	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	458	300	1352	1216	117	28	81	26	400	53	235
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
Final Volume:	38	458	300	1352	1216	117	28	81	26	400	53	235
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.82	0.18	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1750	3800	1750	3150	3375	325	1750	1900	1750	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.17	0.43	0.36	0.36	0.02	0.04	0.01	0.13	0.03	0.13
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.5	14.8	30.4	52.6	56.9	56.9	10.5	10.0	10.0	15.6	15.0	67.7
Volume/Cap:	0.22	0.86	0.59	0.86	0.66	0.66	0.16	0.45	0.16	0.86	0.19	0.21
Delay/Veh:	44.1	56.9	33.9	27.7	18.1	18.1	43.6	46.7	44.1	58.0	40.0	7.8
User DelAdj:	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:	44.1	56.9	33.9	27.7	18.1	18.1	43.6	46.7	44.1	58.0	40.0	7.8
LOS by Move:	D	E	C	C	B	B	D	D	D	E	D	A
HCM2k95thQ:	3	18	18	36	26	26	2	6	2	16	3	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #120: Condit Road and Main Avenue



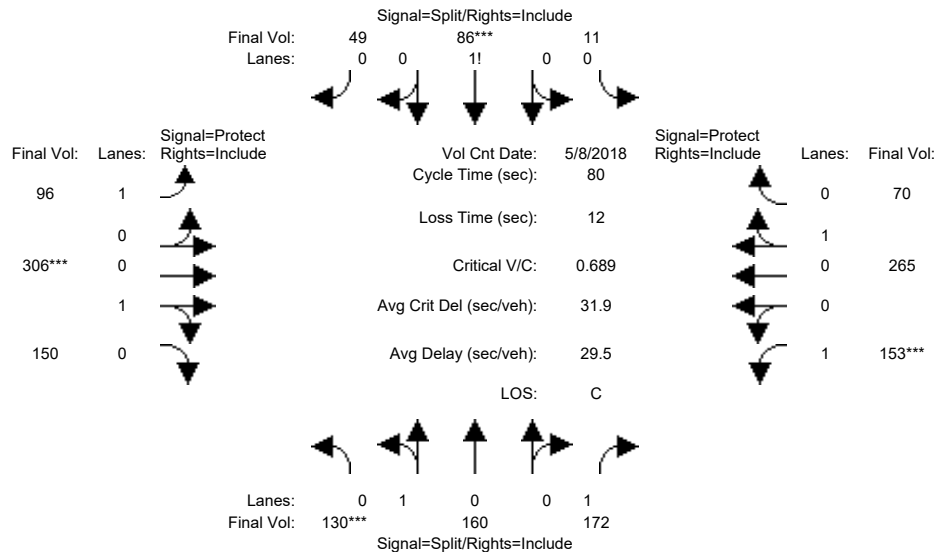
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	130	141	172	11	76	36	72	306	150	153	265	70
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:	130	141	172	11	76	36	72	306	150	153	265	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	141	172	11	76	36	72	306	150	153	265	70
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	141	172	11	76	36	72	306	150	153	265	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	141	172	11	76	36	72	306	150	153	265	70
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
Final Volume:	130	141	172	11	76	36	72	306	150	153	265	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.48	0.52	1.00	0.09	0.62	0.29	1.00	0.67	0.33	1.00	0.79	0.21
Final Sat.:	863	937	1750	157	1081	512	1750	1208	592	1750	1424	376
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.10	0.07	0.07	0.07	0.04	0.25	0.25	0.09	0.19	0.19
Crit Moves:	***				***			***			***	
Green Time:	17.8	17.8	17.8	10.0	10.0	10.0	12.9	29.9	29.9	10.3	27.4	27.4
Volume/Cap:	0.68	0.68	0.44	0.56	0.56	0.56	0.26	0.68	0.68	0.68	0.54	0.54
Delay/Veh:	33.1	33.1	27.6	36.3	36.3	36.3	29.9	23.8	23.8	41.3	22.3	22.3
User DelAdj:	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:	33.1	33.1	27.6	36.3	36.3	36.3	29.9	23.8	23.8	41.3	22.3	22.3
LOS by Move:	C	C	C	D	D	D	C	C	C	D	C	C
HCM2k95thQ:	15	15	9	8	8	8	4	20	20	10	14	14

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #120: Condit Road and Main Avenue



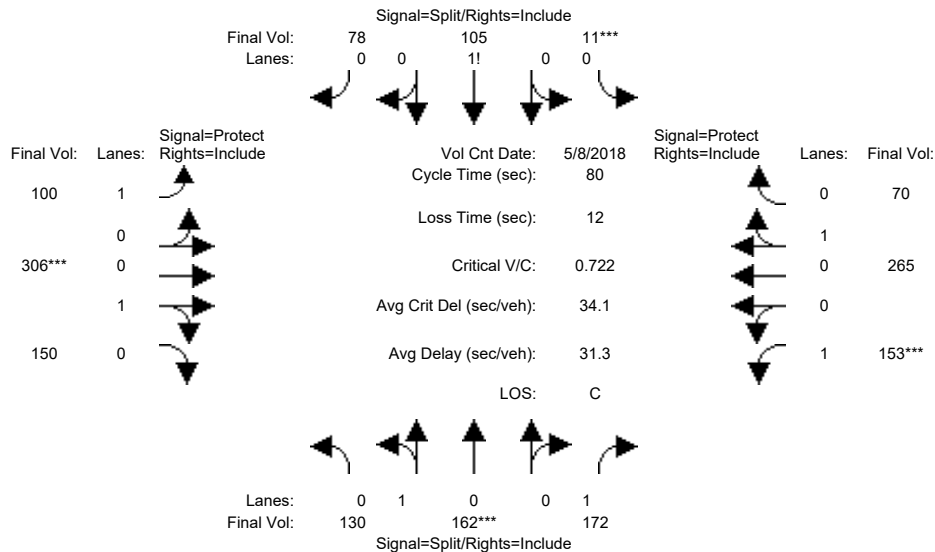
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	130	141	172	11	76	36	72	306	150	153	265	70
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:	130	141	172	11	76	36	72	306	150	153	265	70
Added Vol:	0	19	0	0	10	13	24	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	160	172	11	86	49	96	306	150	153	265	70
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	160	172	11	86	49	96	306	150	153	265	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	160	172	11	86	49	96	306	150	153	265	70
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
Final Volume:	130	160	172	11	86	49	96	306	150	153	265	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.45	0.55	1.00	0.07	0.59	0.34	1.00	0.67	0.33	1.00	0.79	0.21
Final Sat.:	807	993	1750	132	1031	587	1750	1208	592	1750	1424	376
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.10	0.08	0.08	0.08	0.05	0.25	0.25	0.09	0.19	0.19
Crit Moves:	***			***			***			***		
Green Time:	18.6	18.6	18.6	10.0	10.0	10.0	12.6	29.3	29.3	10.1	26.8	26.8
Volume/Cap:	0.69	0.69	0.42	0.67	0.67	0.67	0.35	0.69	0.69	0.69	0.56	0.56
Delay/Veh:	33.0	33.0	26.8	41.1	41.1	41.1	30.8	24.7	24.7	42.5	22.9	22.9
User DelAdj:	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:	33.0	33.0	26.8	41.1	41.1	41.1	30.8	24.7	24.7	42.5	22.9	22.9
LOS by Move:	C	C	C	D	D	D	C	C	C	D	C	C
HCM2k95thQ:	15	15	8	10	10	10	5	20	20	11	14	14

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #120: Condit Road and Main Avenue

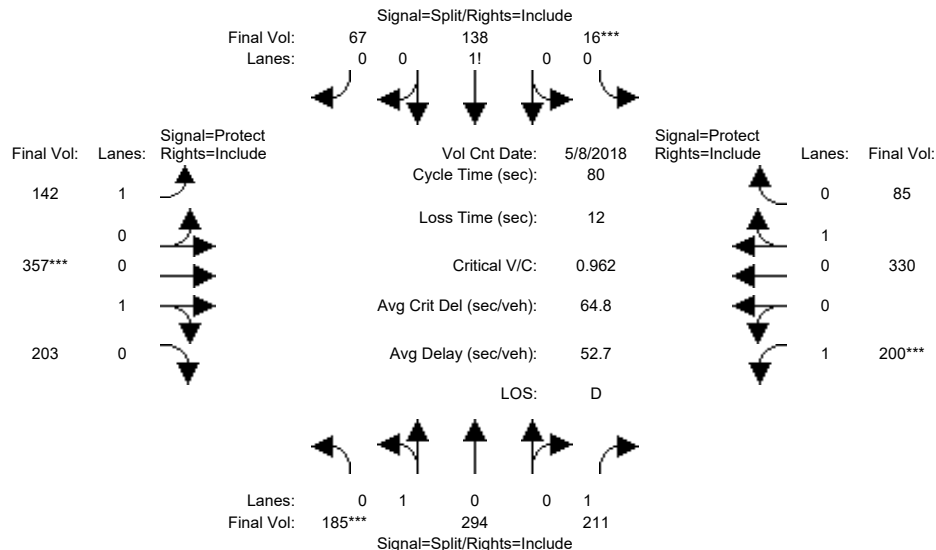


Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	130	141	172	11	76	36	72	306	150	153	265	70
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:	130	141	172	11	76	36	72	306	150	153	265	70
Added Vol:	0	21	0	0	29	42	28	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	162	172	11	105	78	100	306	150	153	265	70
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	162	172	11	105	78	100	306	150	153	265	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	162	172	11	105	78	100	306	150	153	265	70
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	162	172	11	105	78	100	306	150	153	265	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.45	0.55	1.00	0.06	0.54	0.40	1.00	0.67	0.33	1.00	0.79	0.21
Final Sat.:	801	999	1750	99	947	704	1750	1208	592	1750	1424	376
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.10	0.11	0.11	0.11	0.06	0.25	0.25	0.09	0.19	0.19
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	18.0	18.0	18.0	12.3	12.3	12.3	12.1	28.1	28.1	9.7	25.7	25.7
Volume/Cap:	0.72	0.72	0.44	0.72	0.72	0.72	0.38	0.72	0.72	0.72	0.58	0.58
Delay/Veh:	35.0	35.0	27.5	41.5	41.5	41.5	31.5	26.7	26.7	45.4	24.1	24.1
User DelAdj:	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:	35.0	35.0	27.5	41.5	41.5	41.5	31.5	26.7	26.7	45.4	24.1	24.1
LOS by Move:	C	C	C	D	D	D	C	C	C	D	C	C
HCM2k95thQ:	16	16	9	13	13	13	6	21	21	11	15	15
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #120: Condit Road and Main Avenue



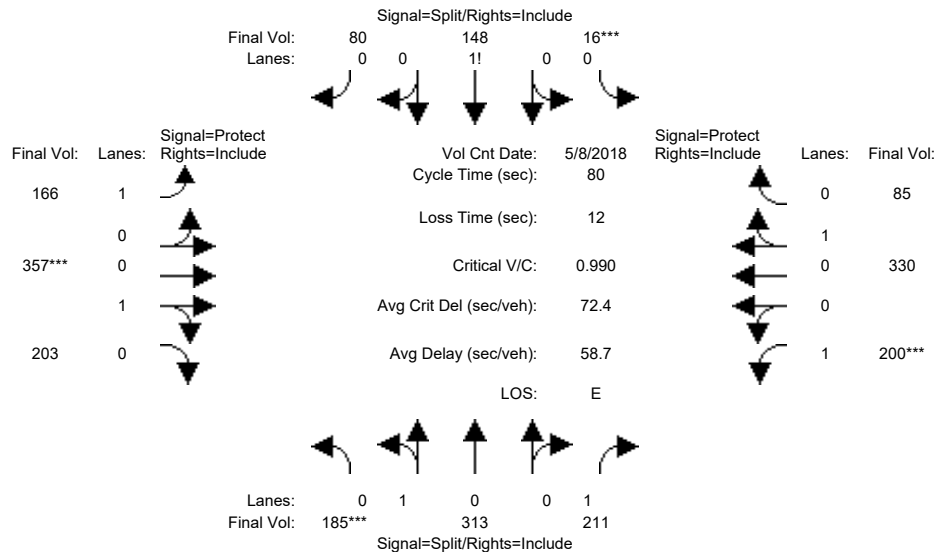
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.39	0.61	1.00	0.07	0.63	0.30	1.00	0.64	0.36	1.00	0.80	0.20
Final Sat.:	695	1105	1750	127	1093	531	1750	1147	652	1750	1431	369
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.12	0.13	0.13	0.13	0.08	0.31	0.31	0.11	0.23	0.23
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	22.1	22.1	22.1	10.5	10.5	10.5	9.7	25.9	25.9	9.5	25.6	25.6
Volume/Cap:	0.96	0.96	0.44	0.96	0.96	0.96	0.67	0.96	0.96	0.96	0.72	0.72
Delay/Veh:	59.3	59.3	24.4	83.1	83.1	83.1	41.4	54.5	54.5	86.5	28.4	28.4
User DelAdj:	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:	59.3	59.3	24.4	83.1	83.1	83.1	41.4	54.5	54.5	86.5	28.4	28.4
LOS by Move:	E	E	C	F	F	F	D	D	D	F	C	C
HCM2k95thQ:	31	31	10	19	19	19	10	34	34	18	20	20

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #120: Condit Road and Main Avenue



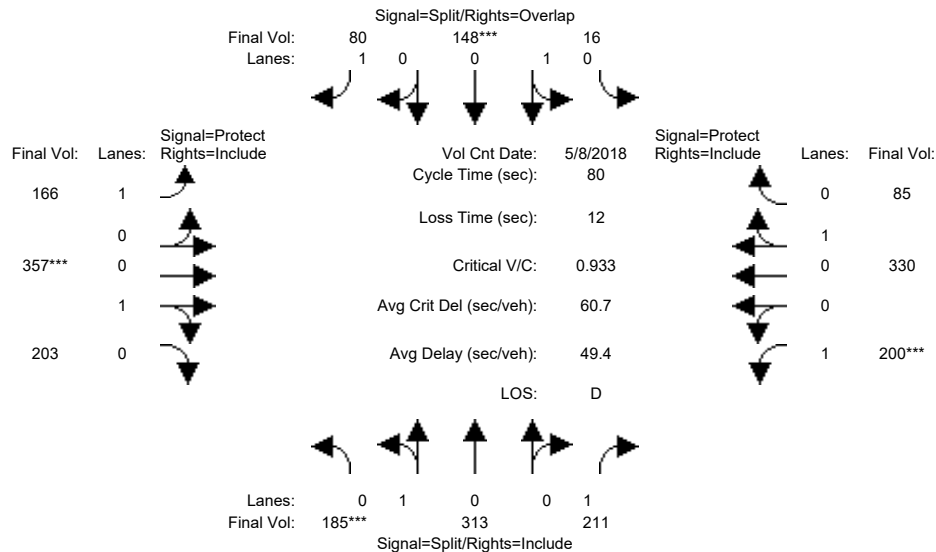
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Added Vol:	0	19	0	0	10	13	24	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	313	211	16	148	80	166	357	203	200	330	85
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:	185	313	211	16	148	80	166	357	203	200	330	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	313	211	16	148	80	166	357	203	200	330	85
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
Final Volume:	185	313	211	16	148	80	166	357	203	200	330	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.37	0.63	1.00	0.06	0.61	0.33	1.00	0.64	0.36	1.00	0.80	0.20
Final Sat.:	669	1131	1750	115	1061	574	1750	1147	652	1750	1431	369
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.12	0.14	0.14	0.14	0.09	0.31	0.31	0.11	0.23	0.23
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	22.4	22.4	22.4	11.3	11.3	11.3	10.0	25.1	25.1	9.2	24.4	24.4
Volume/Cap:	0.99	0.99	0.43	0.99	0.99	0.99	0.76	0.99	0.99	0.99	0.76	0.76
Delay/Veh:	66.1	66.1	24.2	88.7	88.7	88.7	47.9	62.5	62.5	95.6	31.2	31.2
User DelAdj:	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:	66.1	66.1	24.2	88.7	88.7	88.7	47.9	62.5	62.5	95.6	31.2	31.2
LOS by Move:	E	E	C	F	F	F	D	E	E	F	C	C
HCM2k95thQ:	33	33	10	21	21	21	12	36	36	18	21	21

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM (Miti)

Intersection #120: Condit Road and Main Avenue



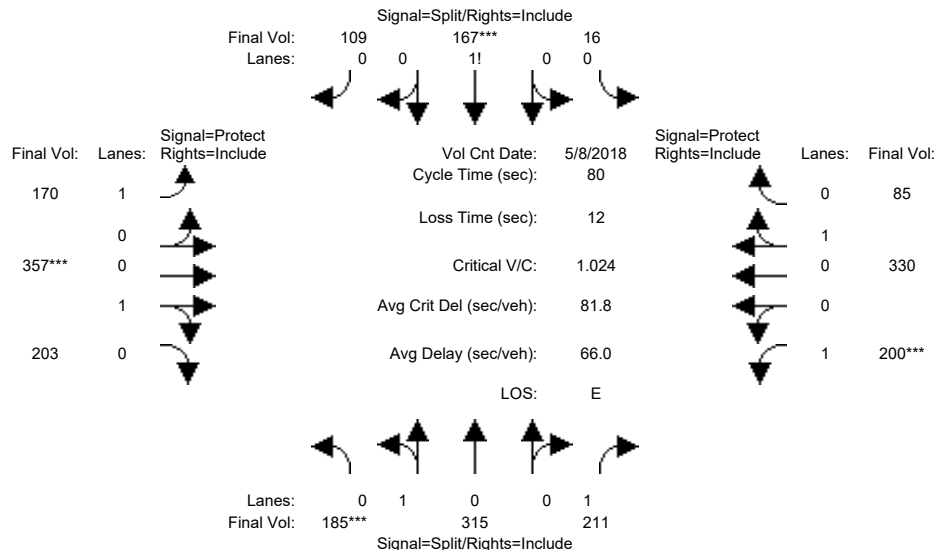
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Added Vol:	0	19	0	0	10	13	24	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	313	211	16	148	80	166	357	203	200	330	85
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:	185	313	211	16	148	80	166	357	203	200	330	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	313	211	16	148	80	166	357	203	200	330	85
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:	185	313	211	16	148	80	166	357	203	200	330	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.37	0.63	1.00	0.10	0.90	1.00	1.00	0.64	0.36	1.00	0.80	0.20
Final Sat.:	669	1131	1750	176	1624	1750	1750	1147	652	1750	1431	369
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.12	0.09	0.09	0.05	0.09	0.31	0.31	0.11	0.23	0.23
Crit Moves:	***			***			***			***		
Green Time:	22.9	22.9	22.9	10.0	10.0	20.2	10.2	25.7	25.7	9.4	24.9	24.9
Volume/Cap:	0.97	0.97	0.42	0.73	0.73	0.18	0.74	0.97	0.97	0.97	0.74	0.74
Delay/Veh:	59.8	59.8	23.8	45.1	45.1	23.6	46.0	56.2	56.2	88.5	29.9	29.9
User DelAdj:	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:	59.8	59.8	23.8	45.1	45.1	23.6	46.0	56.2	56.2	88.5	29.9	29.9
LOS by Move:	E	E	C	D	D	C	D	E	E	F	C	C
HCM2k95thQ:	32	32	10	11	11	4	12	35	35	18	20	20

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #120: Condit Road and Main Avenue

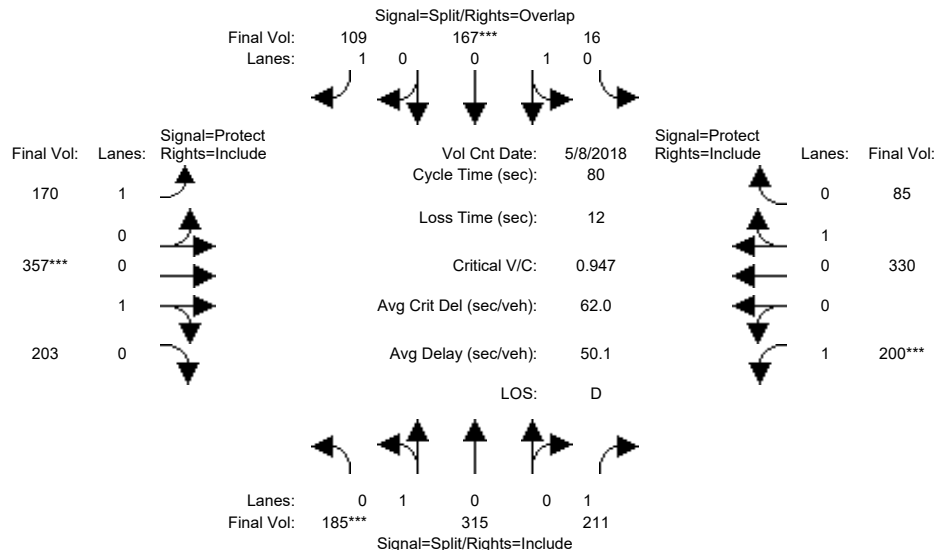


Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Added Vol:	0	21	0	0	29	42	28	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	315	211	16	167	109	170	357	203	200	330	85
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:	185	315	211	16	167	109	170	357	203	200	330	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	315	211	16	167	109	170	357	203	200	330	85
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
Final Volume:	185	315	211	16	167	109	170	357	203	200	330	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.37	0.63	1.00	0.05	0.58	0.37	1.00	0.64	0.36	1.00	0.80	0.20
Final Sat.:	666	1134	1750	96	1001	653	1750	1147	652	1750	1431	369
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.12	0.17	0.17	0.17	0.10	0.31	0.31	0.11	0.23	0.23
Crit Moves:	***			***			***			***		
Green Time:	21.7	21.7	21.7	13.0	13.0	13.0	9.9	24.3	24.3	8.9	23.4	23.4
Volume/Cap:	1.02	1.02	0.44	1.02	1.02	1.02	0.79	1.02	1.02	1.02	0.79	0.79
Delay/Veh:	76.0	76.0	24.8	93.0	93.0	93.0	51.5	72.4	72.4	106.2	33.9	33.9
User DelAdj:	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:	76.0	76.0	24.8	93.0	93.0	93.0	51.5	72.4	72.4	106.2	33.9	33.9
LOS by Move:	E	E	C	F	F	F	D	E	E	F	C	C
HCM2k95thQ:	35	35	10	25	25	25	13	38	38	19	22	22
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM (Miti)

Intersection #120: Condit Road and Main Avenue



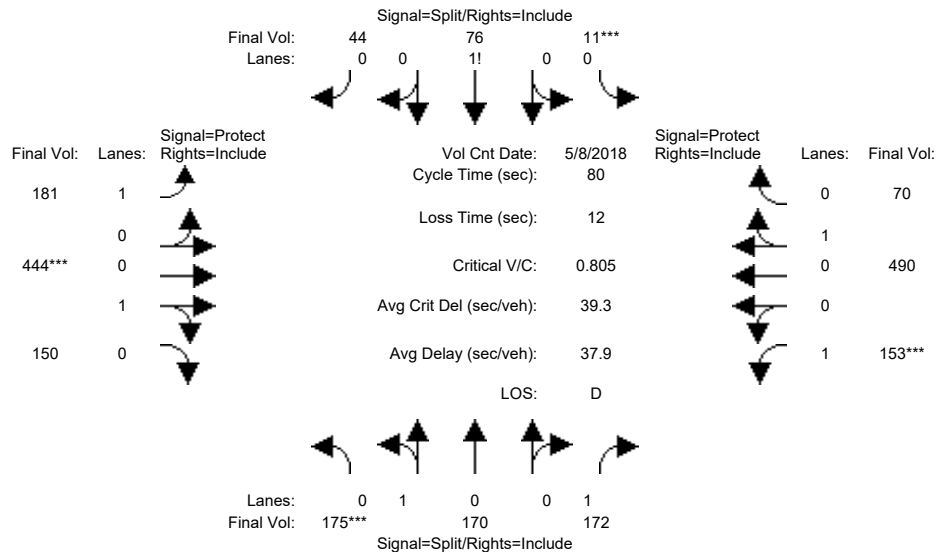
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	185	294	211	16	138	67	142	357	203	200	330	85
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:	185	294	211	16	138	67	142	357	203	200	330	85
Added Vol:	0	21	0	0	29	42	28	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	185	315	211	16	167	109	170	357	203	200	330	85
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:	185	315	211	16	167	109	170	357	203	200	330	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	315	211	16	167	109	170	357	203	200	330	85
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:	185	315	211	16	167	109	170	357	203	200	330	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.37	0.63	1.00	0.09	0.91	1.00	1.00	0.64	0.36	1.00	0.80	0.20
Final Sat.:	666	1134	1750	157	1643	1750	1750	1147	652	1750	1431	369
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.12	0.10	0.10	0.06	0.10	0.31	0.31	0.11	0.23	0.23
Crit Moves:	***			***			***			***		
Green Time:	22.9	22.9	22.9	10.0	10.0	20.4	10.4	25.7	25.7	9.4	24.7	24.7
Volume/Cap:	0.97	0.97	0.42	0.81	0.81	0.24	0.75	0.97	0.97	0.97	0.75	0.75
Delay/Veh:	60.1	60.1	23.7	53.9	53.9	24.0	46.3	56.6	56.6	89.0	30.4	30.4
User DelAdj:	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:	60.1	60.1	23.7	53.9	53.9	24.0	46.3	56.6	56.6	89.0	30.4	30.4
LOS by Move:	E	E	C	D	D	C	D	E	E	F	C	C
HCM2k95thQ:	32	32	9	13	13	5	12	35	35	18	21	21

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #120: Condit Road and Main Avenue



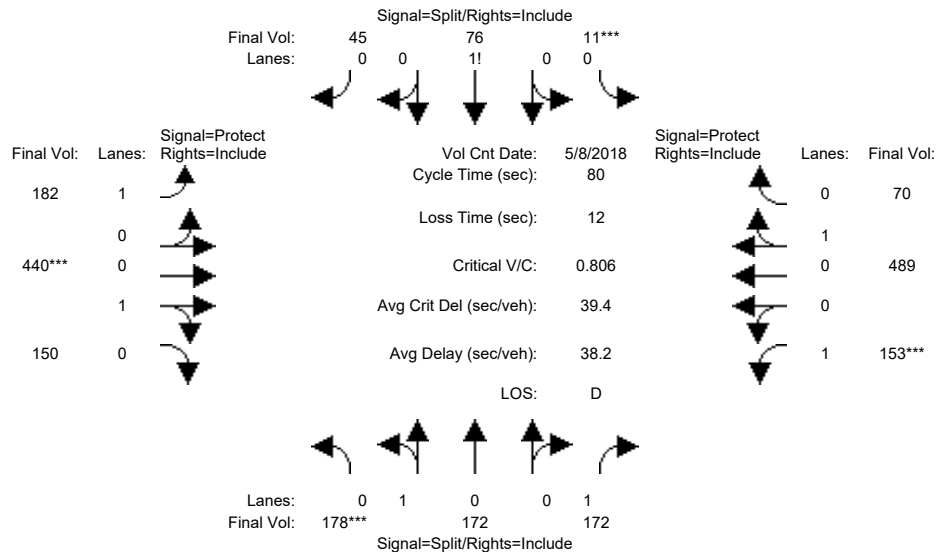
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	175	170	172	11	76	44	181	444	150	153	490	70
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:	175	170	172	11	76	44	181	444	150	153	490	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	175	170	172	11	76	44	181	444	150	153	490	70
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:	175	170	172	11	76	44	181	444	150	153	490	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	170	172	11	76	44	181	444	150	153	490	70
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:	175	170	172	11	76	44	181	444	150	153	490	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.51	0.49	1.00	0.08	0.58	0.34	1.00	0.75	0.25	1.00	0.87	0.13
Final Sat.:	913	887	1750	147	1015	588	1750	1345	455	1750	1575	225
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.10	0.07	0.07	0.07	0.10	0.33	0.33	0.09	0.31	0.31
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	18.3	18.3	18.3	10.0	10.0	10.0	9.9	31.4	31.4	8.3	29.8	29.8
Volume/Cap:	0.84	0.84	0.43	0.60	0.60	0.60	0.83	0.84	0.84	0.84	0.83	0.83
Delay/Veh:	43.8	43.8	27.2	37.6	37.6	37.6	57.6	30.9	30.9	63.0	31.7	31.7
User DelAdj:	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:	43.8	43.8	27.2	37.6	37.6	37.6	57.6	30.9	30.9	63.0	31.7	31.7
LOS by Move:	D	D	C	D	D	D	E	C	C	E	C	C
HCM2k95thQ:	21	21	8	9	9	9	14	29	29	13	28	28

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #120: Condit Road and Main Avenue



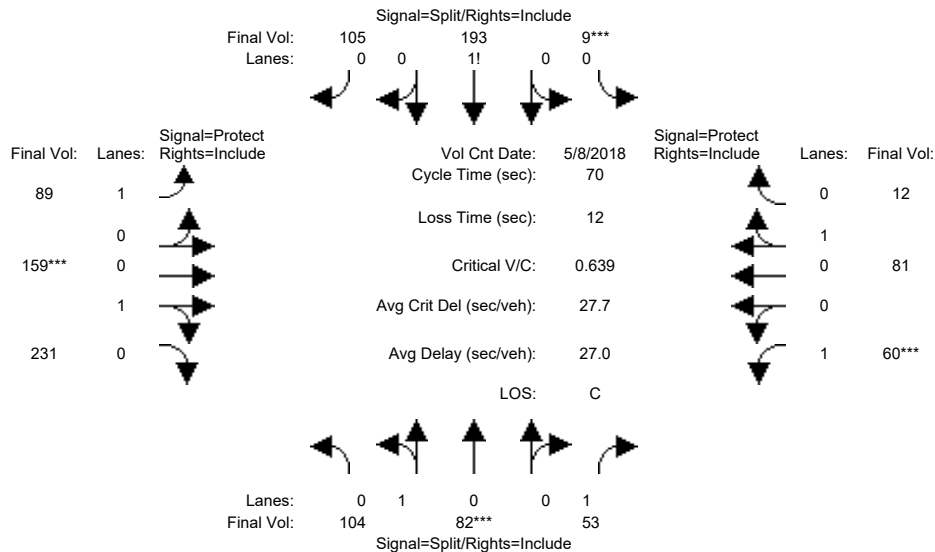
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	178	172	172	11	76	45	182	440	150	153	489	70
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:	178	172	172	11	76	45	182	440	150	153	489	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	172	172	11	76	45	182	440	150	153	489	70
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:	178	172	172	11	76	45	182	440	150	153	489	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	172	172	11	76	45	182	440	150	153	489	70
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
Final Volume:	178	172	172	11	76	45	182	440	150	153	489	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.51	0.49	1.00	0.08	0.58	0.34	1.00	0.75	0.25	1.00	0.87	0.13
Final Sat.:	915	885	1750	146	1008	597	1750	1342	458	1750	1575	225
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.10	0.08	0.08	0.08	0.10	0.33	0.33	0.09	0.31	0.31
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	18.5	18.5	18.5	10.0	10.0	10.0	9.9	31.2	31.2	8.3	29.6	29.6
Volume/Cap:	0.84	0.84	0.43	0.60	0.60	0.60	0.84	0.84	0.84	0.84	0.84	0.84
Delay/Veh:	43.6	43.6	26.9	37.8	37.8	37.8	58.5	31.1	31.1	63.2	32.4	32.4
User DelAdj:	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:	43.6	43.6	26.9	37.8	37.8	37.8	58.5	31.1	31.1	63.2	32.4	32.4
LOS by Move:	D	D	C	D	D	D	E	C	C	E	C	C
HCM2k95thQ:	21	21	8	9	9	9	14	29	29	13	28	28

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #120: Condit Road and Main Avenue

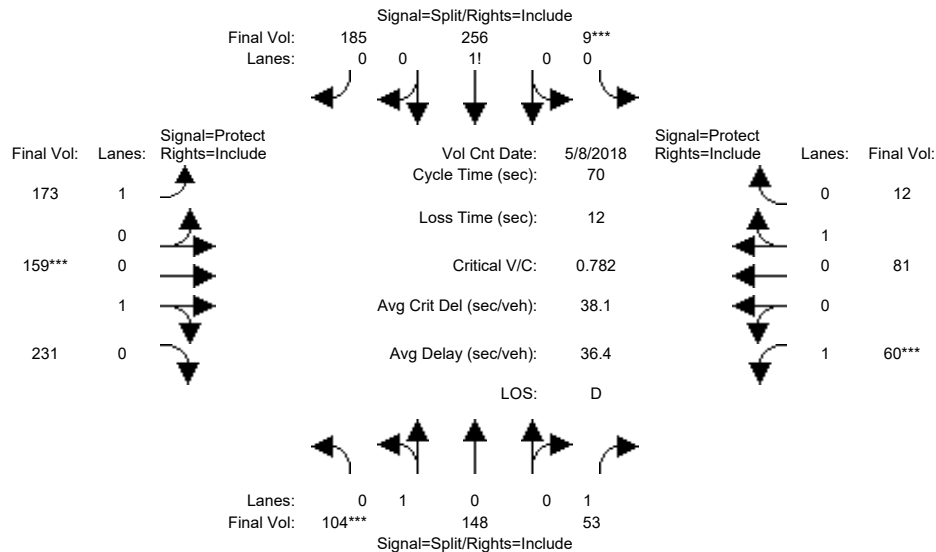


Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	104	82	53	9	193	105	89	159	231	60	81	12
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:	104	82	53	9	193	105	89	159	231	60	81	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	82	53	9	193	105	89	159	231	60	81	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:	104	82	53	9	193	105	89	159	231	60	81	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	82	53	9	193	105	89	159	231	60	81	12
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
Final Volume:	104	82	53	9	193	105	89	159	231	60	81	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.56	0.44	1.00	0.03	0.63	0.34	1.00	0.41	0.59	1.00	0.87	0.13
Final Sat.:	1006	794	1750	51	1100	599	1750	734	1066	1750	1568	232
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.03	0.18	0.18	0.18	0.05	0.22	0.22	0.03	0.05	0.05
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	10.6	10.6	10.6	18.1	18.1	18.1	12.1	22.3	22.3	7.0	17.2	17.2
Volume/Cap:	0.68	0.68	0.20	0.68	0.68	0.68	0.30	0.68	0.68	0.34	0.21	0.21
Delay/Veh:	34.9	34.9	26.3	27.6	27.6	27.6	25.8	24.1	24.1	30.5	21.2	21.2
User DelAdj:	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:	34.9	34.9	26.3	27.6	27.6	27.6	25.8	24.1	24.1	30.5	21.2	21.2
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2k95thQ:	11	11	3	15	15	15	4	17	17	3	4	4
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #120: Condit Road and Main Avenue



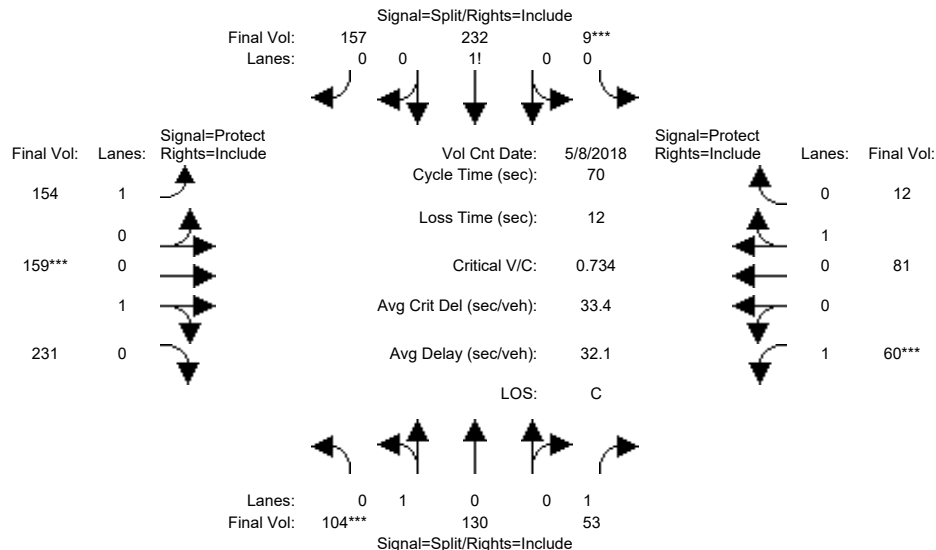
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	104	82	53	9	193	105	89	159	231	60	81	12
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:	104	82	53	9	193	105	89	159	231	60	81	12
Added Vol:	0	66	0	0	63	80	84	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	148	53	9	256	185	173	159	231	60	81	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:	104	148	53	9	256	185	173	159	231	60	81	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	148	53	9	256	185	173	159	231	60	81	12
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
Final Volume:	104	148	53	9	256	185	173	159	231	60	81	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.41	0.59	1.00	0.02	0.57	0.41	1.00	0.41	0.59	1.00	0.87	0.13
Final Sat.:	743	1057	1750	35	996	719	1750	734	1066	1750	1568	232
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.03	0.26	0.26	0.26	0.10	0.22	0.22	0.03	0.05	0.05
Crit Moves:	***			***			***			***		
Green Time:	11.6	11.6	11.6	21.4	21.4	21.4	10.3	18.0	18.0	7.0	14.7	14.7
Volume/Cap:	0.84	0.84	0.18	0.84	0.84	0.84	0.67	0.84	0.84	0.34	0.25	0.25
Delay/Veh:	47.3	47.3	25.4	34.3	34.3	34.3	35.0	37.8	37.8	30.5	23.4	23.4
User DelAdj:	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:	47.3	47.3	25.4	34.3	34.3	34.3	35.0	37.8	37.8	30.5	23.4	23.4
LOS by Move:	D	D	C	C	C	C	D	D	D	C	C	C
HCM2k95thQ:	16	16	2	23	23	23	10	21	21	3	4	4

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #120: Condit Road and Main Avenue



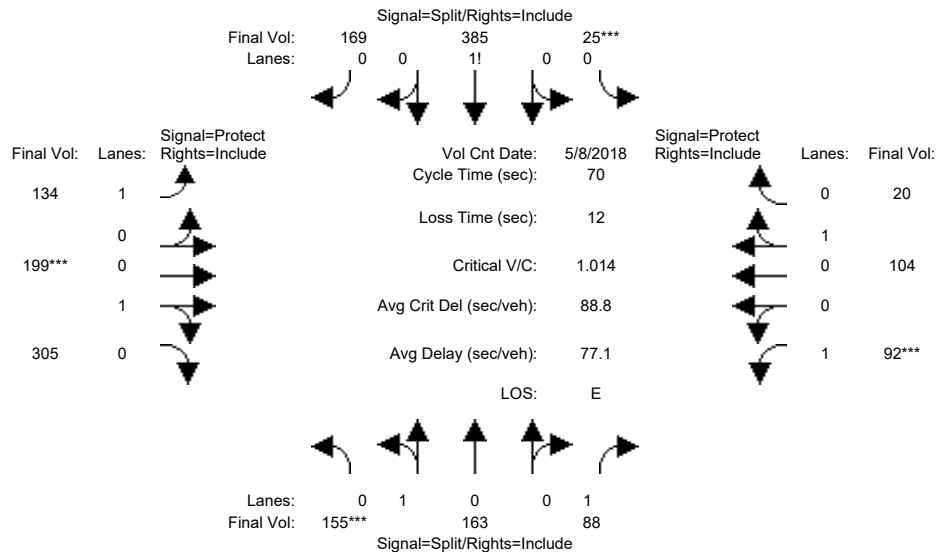
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	104	82	53	9	193	105	89	159	231	60	81	12
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:	104	82	53	9	193	105	89	159	231	60	81	12
Added Vol:	0	48	0	0	39	52	65	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	104	130	53	9	232	157	154	159	231	60	81	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:	104	130	53	9	232	157	154	159	231	60	81	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	130	53	9	232	157	154	159	231	60	81	12
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
Final Volume:	104	130	53	9	232	157	154	159	231	60	81	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.44	0.56	1.00	0.02	0.59	0.39	1.00	0.41	0.59	1.00	0.87	0.13
Final Sat.:	800	1000	1750	40	1020	690	1750	734	1066	1750	1568	232
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.23	0.23	0.23	0.09	0.22	0.22	0.03	0.05	0.05
Crit Moves:	***	***	***	***	***	***	***	***	***	***	***	***
Green Time:	11.5	11.5	11.5	20.2	20.2	20.2	10.8	19.2	19.2	7.0	15.4	15.4
Volume/Cap:	0.79	0.79	0.18	0.79	0.79	0.79	0.57	0.79	0.79	0.34	0.23	0.23
Delay/Veh:	41.2	41.2	25.5	31.0	31.0	31.0	30.3	31.7	31.7	30.5	22.7	22.7
User DelAdj:	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:	41.2	41.2	25.5	31.0	31.0	31.0	30.3	31.7	31.7	30.5	22.7	22.7
LOS by Move:	D	D	C	C	C	C	C	C	C	C	C	C
HCM2k95thQ:	14	14	2	20	20	20	8	19	19	3	4	4

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #120: Condit Road and Main Avenue



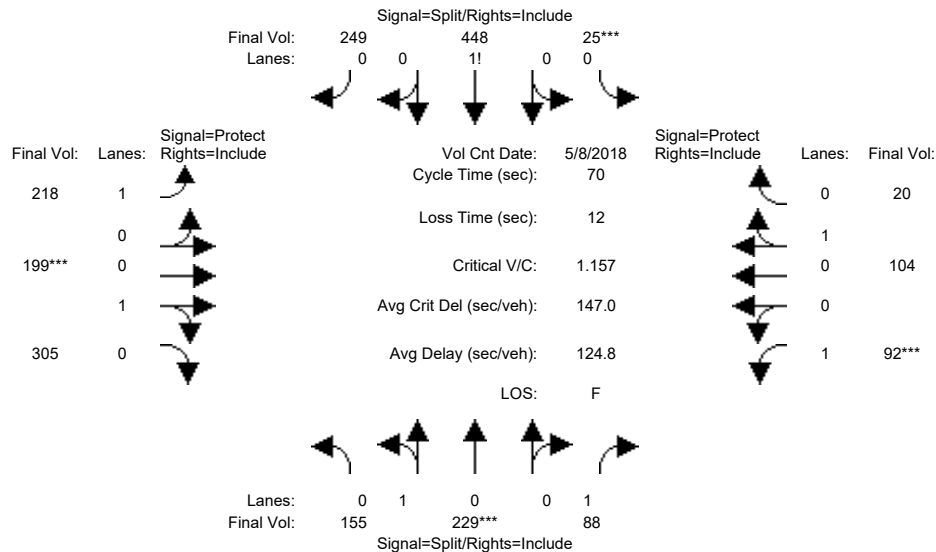
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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:	155	163	88	25	385	169	134	199	305	92	104	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	163	88	25	385	169	134	199	305	92	104	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:	155	163	88	25	385	169	134	199	305	92	104	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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
Final Volume:	155	163	88	25	385	169	134	199	305	92	104	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.49	0.51	1.00	0.04	0.67	0.29	1.00	0.39	0.61	1.00	0.84	0.16
Final Sat.:	877	923	1750	76	1164	511	1750	711	1089	1750	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.05	0.33	0.33	0.33	0.08	0.28	0.28	0.05	0.07	0.07
Crit Moves:	***			***			***			***		
Green Time:	11.4	11.4	11.4	21.4	21.4	21.4	10.3	18.1	18.1	7.0	14.8	14.8
Volume/Cap:	1.08	1.08	0.31	1.08	1.08	1.08	0.52	1.08	1.08	0.53	0.33	0.33
Delay/Veh:	105.0	105	26.4	86.8	86.8	86.8	29.4	91.1	91.1	32.9	23.9	23.9
User DelAdj:	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:	105.0	105	26.4	86.8	86.8	86.8	29.4	91.1	91.1	32.9	23.9	23.9
LOS by Move:	F	F	C	F	F	F	C	F	F	C	C	C
HCM2k95thQ:	26	26	4	41	41	41	7	36	36	6	5	5

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #120: Condit Road and Main Avenue



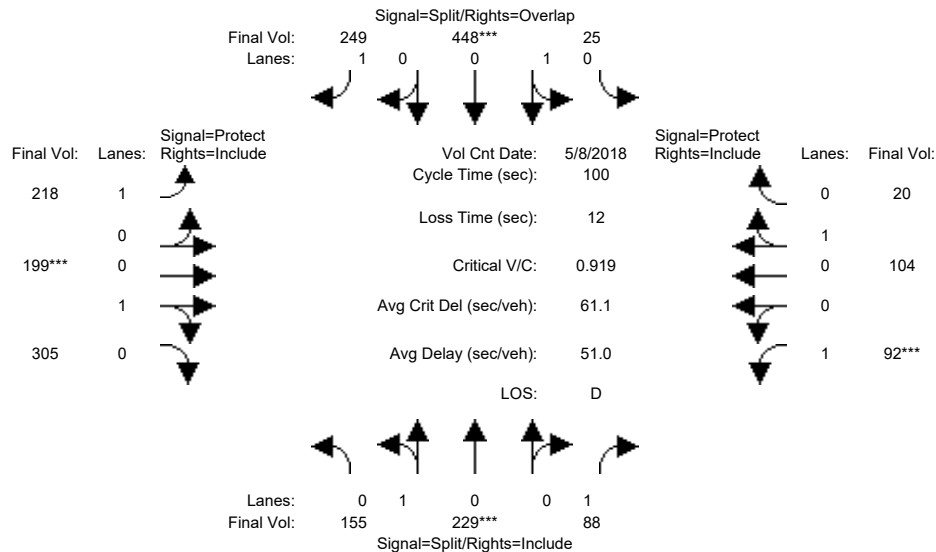
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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:	155	163	88	25	385	169	134	199	305	92	104	20
Added Vol:	0	66	0	0	63	80	84	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	229	88	25	448	249	218	199	305	92	104	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:	155	229	88	25	448	249	218	199	305	92	104	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	229	88	25	448	249	218	199	305	92	104	20
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
Final Volume:	155	229	88	25	448	249	218	199	305	92	104	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.40	0.60	1.00	0.03	0.63	0.34	1.00	0.39	0.61	1.00	0.84	0.16
Final Sat.:	727	1073	1750	61	1086	604	1750	711	1089	1750	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.05	0.41	0.41	0.41	0.12	0.28	0.28	0.05	0.07	0.07
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	12.0	12.0	12.0	23.2	23.2	23.2	10.6	15.8	15.8	7.0	12.2	12.2
Volume/Cap:	1.24	1.24	0.29	1.24	1.24	1.24	0.82	1.24	1.24	0.53	0.40	0.40
Delay/Veh:	162.9	163	25.8	147.0	147	147.0	47.1	156	155.9	32.9	26.5	26.5
User DelAdj:	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:	162.9	163	25.8	147.0	147	147.0	47.1	156	155.9	32.9	26.5	26.5
LOS by Move:	F	F	C	F	F	F	D	F	F	C	C	C
HCM2k95thQ:	36	36	4	61	61	61	14	45	45	6	6	6

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM (Miti)

Intersection #120: Condit Road and Main Avenue

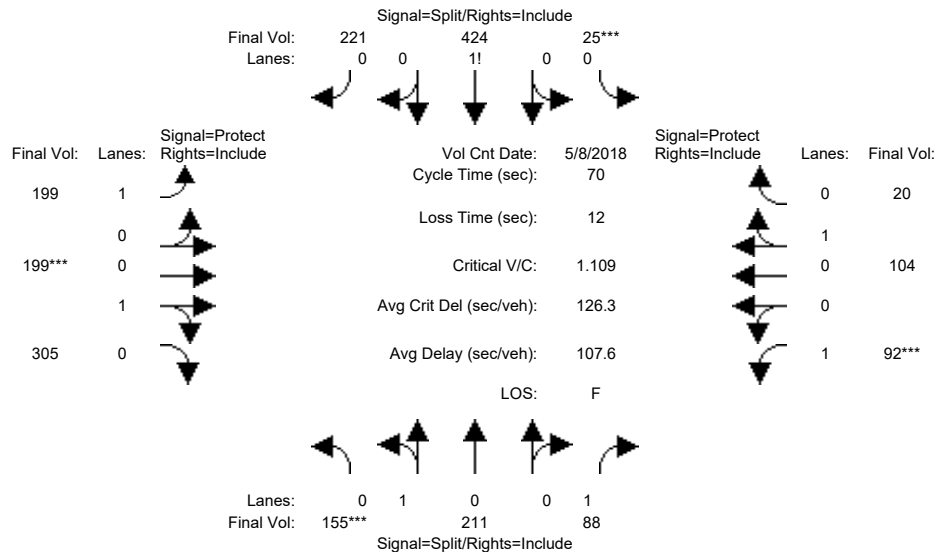


Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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:	155	163	88	25	385	169	134	199	305	92	104	20
Added Vol:	0	66	0	0	63	80	84	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	229	88	25	448	249	218	199	305	92	104	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:	155	229	88	25	448	249	218	199	305	92	104	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	229	88	25	448	249	218	199	305	92	104	20
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
Final Volume:	155	229	88	25	448	249	218	199	305	92	104	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.40	0.60	1.00	0.05	0.95	1.00	1.00	0.39	0.61	1.00	0.84	0.16
Final Sat.:	727	1073	1750	95	1705	1750	1750	711	1089	1750	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.05	0.26	0.26	0.14	0.12	0.28	0.28	0.05	0.07	0.07
Crit Moves:	****			****			****			****		
Green Time:	22.9	22.9	22.9	28.2	28.2	48.7	20.5	30.0	30.0	7.0	16.5	16.5
Volume/Cap:	0.93	0.93	0.22	0.93	0.93	0.29	0.61	0.93	0.93	0.75	0.42	0.42
Delay/Veh:	66.1	66.1	31.6	59.5	59.5	15.5	39.1	57.5	57.5	68.2	38.4	38.4
User DelAdj:	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:	66.1	66.1	31.6	59.5	59.5	15.5	39.1	57.5	57.5	68.2	38.4	38.4
LOS by Move:	E	E	C	E	E	B	D	E	E	E	D	D
HCM2k95thQ:	29	29	5	33	33	10	14	35	35	9	8	8
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #120: Condit Road and Main Avenue



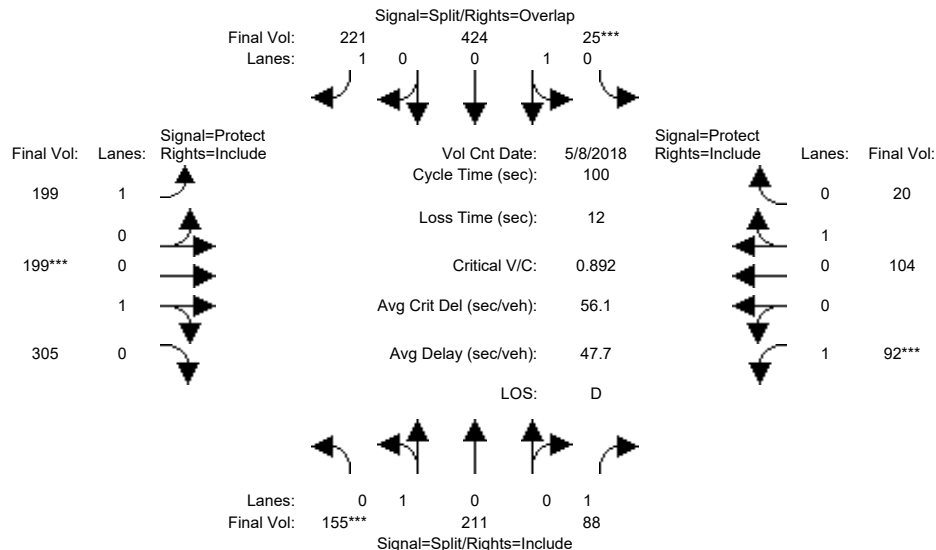
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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:	155	163	88	25	385	169	134	199	305	92	104	20
Added Vol:	0	48	0	0	39	52	65	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	211	88	25	424	221	199	199	305	92	104	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:	155	211	88	25	424	221	199	199	305	92	104	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	211	88	25	424	221	199	199	305	92	104	20
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
Final Volume:	155	211	88	25	424	221	199	199	305	92	104	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.42	0.58	1.00	0.04	0.63	0.33	1.00	0.39	0.61	1.00	0.84	0.16
Final Sat.:	762	1038	1750	65	1107	577	1750	711	1089	1750	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.05	0.38	0.38	0.38	0.11	0.28	0.28	0.05	0.07	0.07
Crit Moves:	***			***			***			***		
Green Time:	12.0	12.0	12.0	22.5	22.5	22.5	10.4	16.5	16.5	7.0	13.1	13.1
Volume/Cap:	1.19	1.19	0.29	1.19	1.19	1.19	0.76	1.19	1.19	0.53	0.37	0.37
Delay/Veh:	141.8	142	25.9	125.5	126	125.5	41.3	133	133.1	32.9	25.5	25.5
User DelAdj:	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:	141.8	142	25.9	125.5	126	125.5	41.3	133	133.1	32.9	25.5	25.5
LOS by Move:	F	F	C	F	F	F	D	F	F	C	C	C
HCM2k95thQ:	33	33	4	53	53	53	13	42	42	6	6	6

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM (Miti)

Intersection #120: Condit Road and Main Avenue



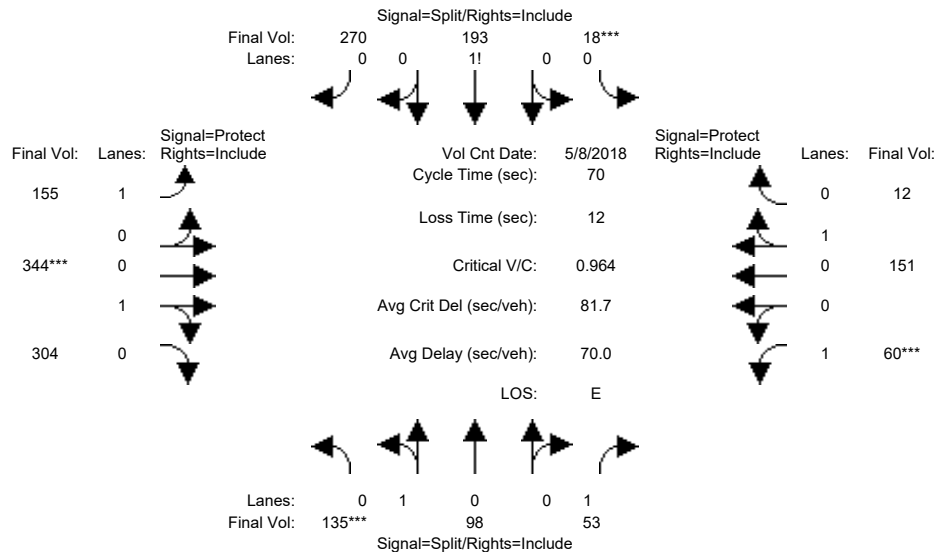
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	155	163	88	25	385	169	134	199	305	92	104	20
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:	155	163	88	25	385	169	134	199	305	92	104	20
Added Vol:	0	48	0	0	39	52	65	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	211	88	25	424	221	199	199	305	92	104	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:	155	211	88	25	424	221	199	199	305	92	104	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	211	88	25	424	221	199	199	305	92	104	20
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
Final Volume:	155	211	88	25	424	221	199	199	305	92	104	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.42	0.58	1.00	0.06	0.94	1.00	1.00	0.39	0.61	1.00	0.84	0.16
Final Sat.:	762	1038	1750	100	1700	1750	1750	711	1089	1750	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.05	0.25	0.25	0.13	0.11	0.28	0.28	0.05	0.07	0.07
Crit Moves:	***			***			***			***		
Green Time:	22.5	22.5	22.5	27.6	27.6	47.8	20.2	31.0	31.0	7.0	17.8	17.8
Volume/Cap:	0.90	0.90	0.22	0.90	0.90	0.26	0.56	0.90	0.90	0.75	0.39	0.39
Delay/Veh:	60.9	60.9	31.9	54.9	54.9	15.8	38.0	51.3	51.3	68.2	37.1	37.1
User DelAdj:	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:	60.9	60.9	31.9	54.9	54.9	15.8	38.0	51.3	51.3	68.2	37.1	37.1
LOS by Move:	E	E	C	D	D	B	D	D	D	E	D	D
HCM2k95thQ:	27	27	5	31	31	9	13	33	33	9	8	8

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #120: Condit Road and Main Avenue



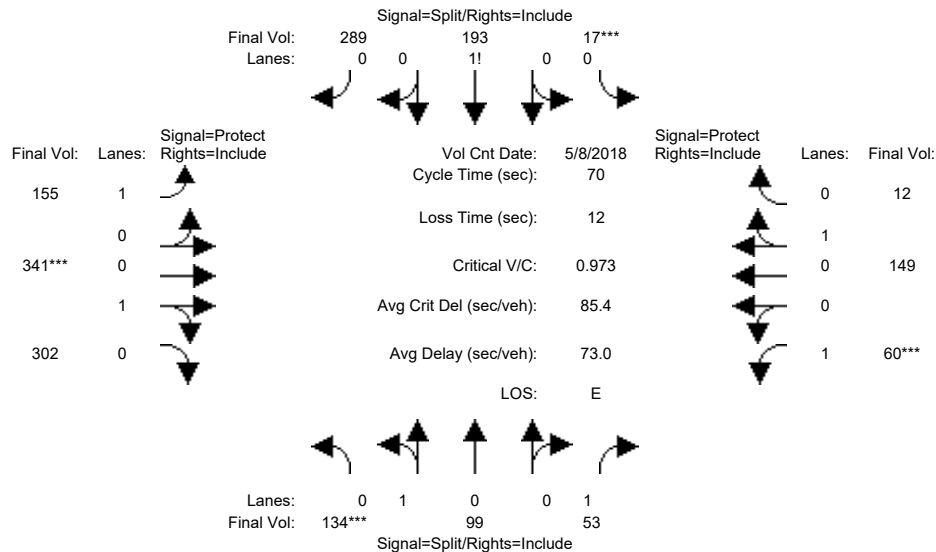
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	135	98	53	18	193	270	155	344	304	60	151	12
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:	135	98	53	18	193	270	155	344	304	60	151	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	98	53	18	193	270	155	344	304	60	151	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:	135	98	53	18	193	270	155	344	304	60	151	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	98	53	18	193	270	155	344	304	60	151	12
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
Final Volume:	135	98	53	18	193	270	155	344	304	60	151	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.58	0.42	1.00	0.04	0.40	0.56	1.00	0.53	0.47	1.00	0.93	0.07
Final Sat.:	1043	757	1750	65	702	982	1750	956	844	1750	1667	133
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.27	0.27	0.27	0.09	0.36	0.36	0.03	0.09	0.09
Crit Moves:	***			***			***			***		
Green Time:	10.0	10.0	10.0	17.8	17.8	17.8	12.5	23.2	23.2	7.0	17.8	17.8
Volume/Cap:	0.91	0.91	0.21	1.08	1.08	1.08	0.50	1.08	1.08	0.34	0.36	0.36
Delay/Veh:	62.0	62.0	26.9	93.3	93.3	93.3	27.2	85.0	85.0	30.5	21.9	21.9
User DelAdj:	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:	62.0	62.0	26.9	93.3	93.3	93.3	27.2	85.0	85.0	30.5	21.9	21.9
LOS by Move:	E	E	C	F	F	F	C	F	F	C	C	C
HCM2k95thQ:	17	17	3	36	36	36	8	43	43	3	7	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #120: Condit Road and Main Avenue



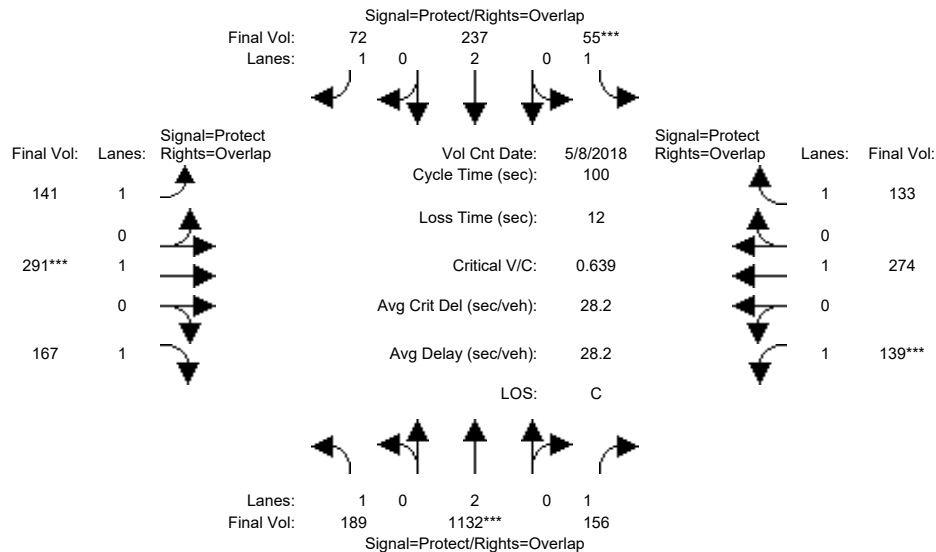
Street Name:	Condit Road						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	134	99	53	17	193	289	155	341	302	60	149	12
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:	134	99	53	17	193	289	155	341	302	60	149	12
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	99	53	17	193	289	155	341	302	60	149	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:	134	99	53	17	193	289	155	341	302	60	149	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	99	53	17	193	289	155	341	302	60	149	12
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
Final Volume:	134	99	53	17	193	289	155	341	302	60	149	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.58	0.42	1.00	0.03	0.39	0.58	1.00	0.53	0.47	1.00	0.93	0.07
Final Sat.:	1035	765	1750	60	677	1014	1750	955	845	1750	1666	134
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.03	0.29	0.29	0.29	0.09	0.36	0.36	0.03	0.09	0.09
Crit Moves:	***			***			***			***		
Green Time:	10.0	10.0	10.0	18.2	18.2	18.2	12.3	22.8	22.8	7.0	17.5	17.5
Volume/Cap:	0.91	0.91	0.21	1.10	1.10	1.10	0.51	1.10	1.10	0.34	0.36	0.36
Delay/Veh:	62.0	62.0	26.9	96.9	96.9	96.9	27.5	90.0	90.0	30.5	22.1	22.1
User DelAdj:	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:	62.0	62.0	26.9	96.9	96.9	96.9	27.5	90.0	90.0	30.5	22.1	22.1
LOS by Move:	E	E	C	F	F	F	C	F	F	C	C	C
HCM2k95thQ:	17	17	3	37	37	37	8	44	44	3	7	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #119: Butterfield Boulevard and Main Avenue

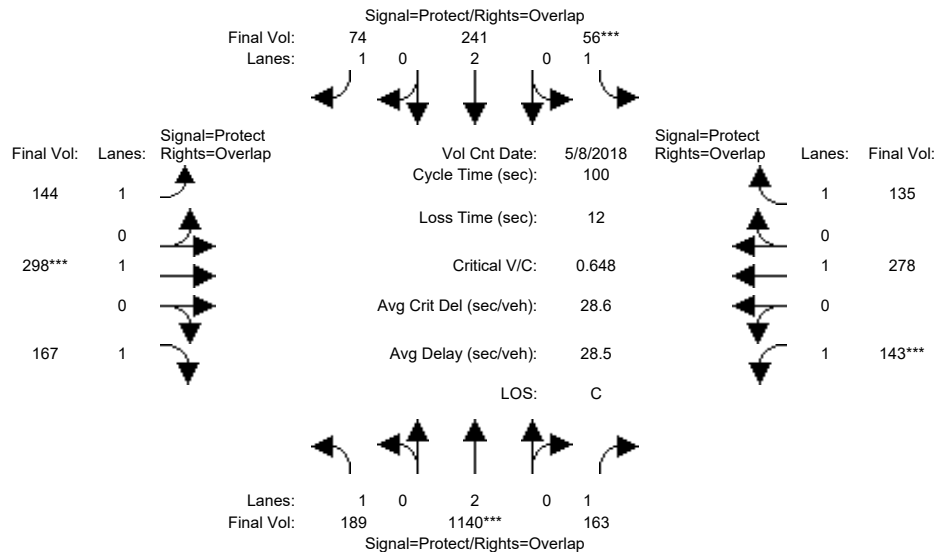


Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	189	1132	156	55	237	72	141	291	167	139	274	133
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:	189	1132	156	55	237	72	141	291	167	139	274	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	1132	156	55	237	72	141	291	167	139	274	133
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:	189	1132	156	55	237	72	141	291	167	139	274	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	1132	156	55	237	72	141	291	167	139	274	133
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
Final Volume:	189	1132	156	55	237	72	141	291	167	139	274	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.09	0.03	0.06	0.04	0.08	0.15	0.10	0.08	0.14	0.08
Crit Moves:	****			****			****			****		
Green Time:	27.3	45.5	57.6	7.0	25.2	38.0	12.7	23.4	50.6	12.1	22.8	29.8
Volume/Cap:	0.40	0.65	0.15	0.45	0.25	0.11	0.63	0.65	0.19	0.65	0.63	0.26
Delay/Veh:	30.2	22.1	9.9	47.3	29.9	20.1	47.2	38.2	13.6	49.1	37.9	26.9
User DelAdj:	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:	30.2	22.1	9.9	47.3	29.9	20.1	47.2	38.2	13.6	49.1	37.9	26.9
LOS by Move:	C	C	A	D	C	C	D	D	B	D	D	C
HCM2k95thQ:	9	23	5	4	6	3	9	15	6	11	16	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj AM

Intersection #119: Butterfield Boulevard and Main Avenue

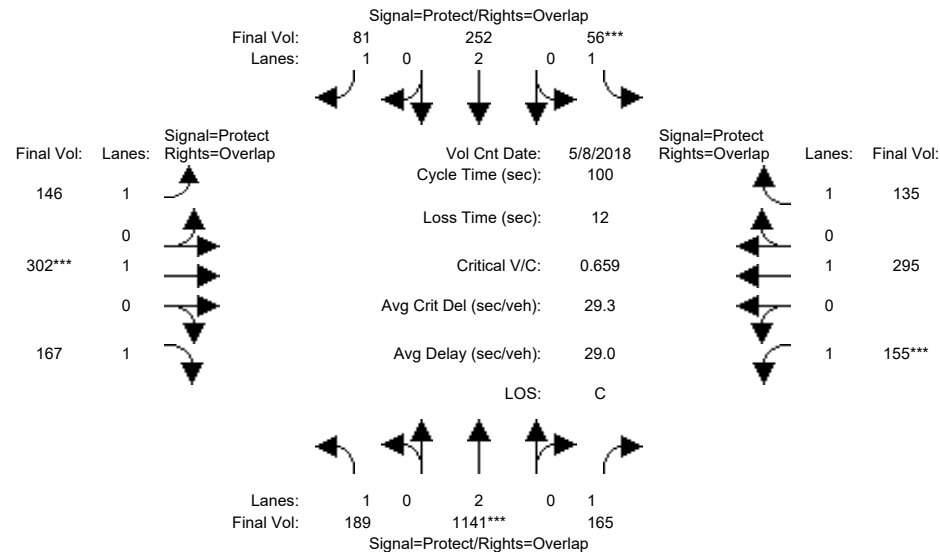


Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	189	1132	156	55	237	72	141	291	167	139	274	133
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:	189	1132	156	55	237	72	141	291	167	139	274	133
Added Vol:	0	8	7	1	4	2	3	7	0	4	4	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	1140	163	56	241	74	144	298	167	143	278	135
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:	189	1140	163	56	241	74	144	298	167	143	278	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	1140	163	56	241	74	144	298	167	143	278	135
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
Final Volume:	189	1140	163	56	241	74	144	298	167	143	278	135
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.09	0.03	0.06	0.04	0.08	0.16	0.10	0.08	0.15	0.08
Crit Moves:	****			****			****			****		
Green Time:	27.1	45.1	57.4	7.0	25.1	38.0	12.9	23.6	50.7	12.3	23.0	30.0
Volume/Cap:	0.40	0.66	0.16	0.46	0.25	0.11	0.64	0.66	0.19	0.66	0.64	0.26
Delay/Veh:	30.4	22.5	10.1	47.4	30.1	20.2	47.2	38.4	13.6	49.5	37.9	26.8
User DelAdj:	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:	30.4	22.5	10.1	47.4	30.1	20.2	47.2	38.4	13.6	49.5	37.9	26.8
LOS by Move:	C	C	B	D	C	C	D	D	B	D	D	C
HCM2k95thQ:	9	23	5	4	6	3	9	15	6	11	16	7
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj AM

Intersection #119: Butterfield Boulevard and Main Avenue



Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	189	1132	156	55	237	72	141	291	167	139	274	133
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:	189	1132	156	55	237	72	141	291	167	139	274	133
Added Vol:	0	9	9	1	15	9	5	11	0	16	21	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	1141	165	56	252	81	146	302	167	155	295	135
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:	189	1141	165	56	252	81	146	302	167	155	295	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	1141	165	56	252	81	146	302	167	155	295	135
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
Final Volume:	189	1141	165	56	252	81	146	302	167	155	295	135

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750

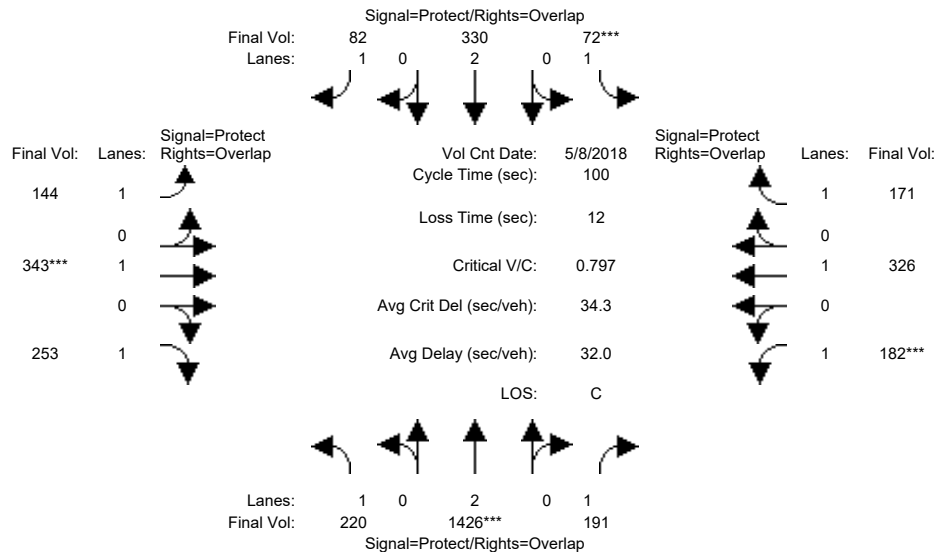
Capacity Analysis Module:												
Vol/Sat:	0.11	0.30	0.09	0.03	0.07	0.05	0.08	0.16	0.10	0.09	0.16	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	26.7	44.4	57.5	7.0	24.7	37.5	12.8	23.5	50.2	13.1	23.8	30.8
Volume/Cap:	0.40	0.68	0.16	0.46	0.27	0.12	0.65	0.68	0.19	0.68	0.65	0.25
Delay/Veh:	30.7	23.2	10.1	47.4	30.5	20.6	48.2	38.9	13.8	49.2	37.7	26.2
User DelAdj:	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:	30.7	23.2	10.1	47.4	30.5	20.6	48.2	38.9	13.8	49.2	37.7	26.2
LOS by Move:	C	C	B	D	C	C	D	D	B	D	D	C
HCM2k95thQ:	9	24	5	4	6	3	9	16	6	12	17	7

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project AM

Intersection #119: Butterfield Boulevard and Main Avenue

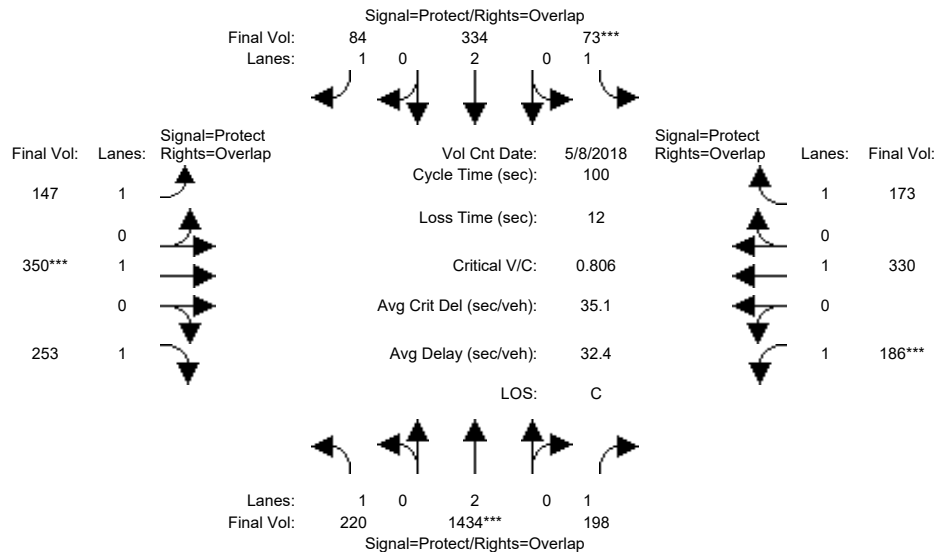


Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	220	1426	191	72	330	82	144	343	253	182	326	171
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:	220	1426	191	72	330	82	144	343	253	182	326	171
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	220	1426	191	72	330	82	144	343	253	182	326	171
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:	220	1426	191	72	330	82	144	343	253	182	326	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1426	191	72	330	82	144	343	253	182	326	171
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
Final Volume:	220	1426	191	72	330	82	144	343	253	182	326	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.38	0.11	0.04	0.09	0.05	0.08	0.18	0.14	0.10	0.17	0.10
Crit Moves:	****			****			****			****		
Green Time:	29.6	46.1	58.8	7.0	23.5	34.8	11.3	22.2	51.7	12.8	23.6	30.6
Volume/Cap:	0.43	0.81	0.19	0.59	0.37	0.13	0.73	0.81	0.28	0.81	0.73	0.32
Delay/Veh:	28.9	26.3	9.6	52.4	32.3	22.4	55.5	48.6	13.8	62.5	41.1	27.0
User DelAdj:	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:	28.9	26.3	9.6	52.4	32.3	22.4	55.5	48.6	13.8	62.5	41.1	27.0
LOS by Move:	C	C	A	D	C	C	E	D	B	E	D	C
HCM2k95thQ:	10	30	5	5	8	4	9	18	9	15	20	9
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj AM

Intersection #119: Butterfield Boulevard and Main Avenue



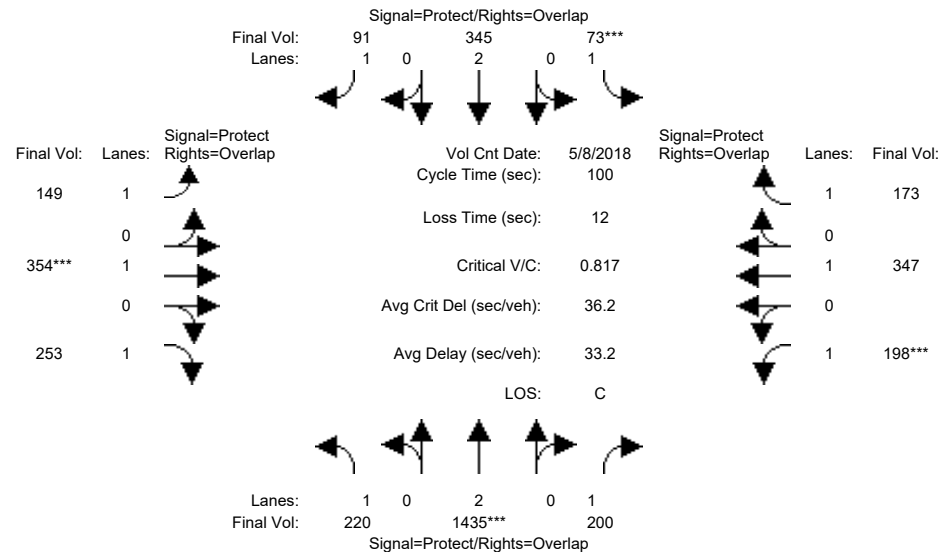
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	220	1426	191	72	330	82	144	343	253	182	326	171
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:	220	1426	191	72	330	82	144	343	253	182	326	171
Added Vol:	0	8	7	1	4	2	3	7	0	4	4	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	220	1434	198	73	334	84	147	350	253	186	330	173
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:	220	1434	198	73	334	84	147	350	253	186	330	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1434	198	73	334	84	147	350	253	186	330	173
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
Final Volume:	220	1434	198	73	334	84	147	350	253	186	330	173
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.38	0.11	0.04	0.09	0.05	0.08	0.18	0.14	0.11	0.17	0.10
Crit Moves:	****			****			****			****		
Green Time:	29.4	45.8	58.7	7.0	23.4	34.9	11.5	22.3	51.7	12.9	23.7	30.7
Volume/Cap:	0.43	0.82	0.19	0.60	0.38	0.14	0.73	0.82	0.28	0.82	0.73	0.32
Delay/Veh:	29.1	27.0	9.7	52.9	32.5	22.4	55.6	49.4	13.8	63.7	41.2	27.0
User DelAdj:	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:	29.1	27.0	9.7	52.9	32.5	22.4	55.6	49.4	13.8	63.7	41.2	27.0
LOS by Move:	C	C	A	D	C	C	E	D	B	E	D	C
HCM2k95thQ:	10	30	6	5	8	4	9	19	9	16	20	9

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj AM

Intersection #119: Butterfield Boulevard and Main Avenue



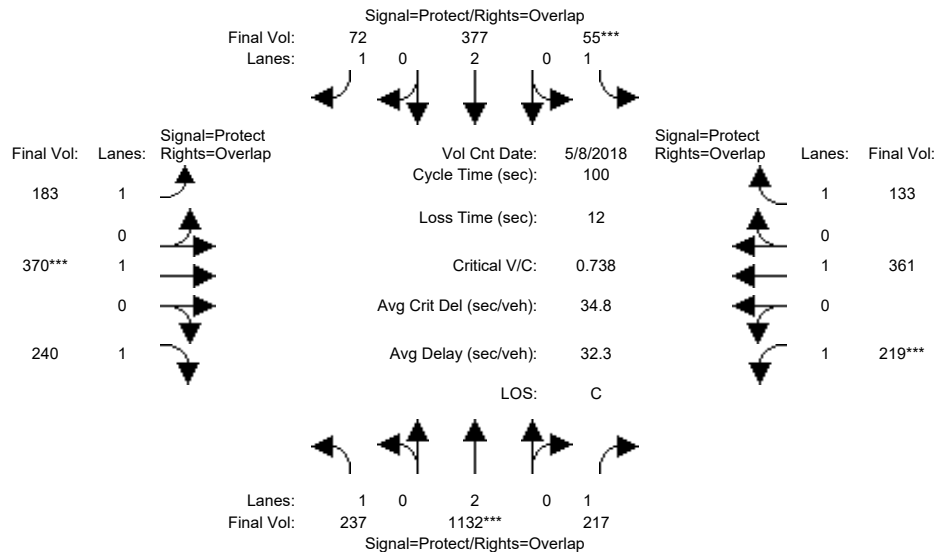
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	220	1426	191	72	330	82	144	343	253	182	326	171
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:	220	1426	191	72	330	82	144	343	253	182	326	171
Added Vol:	0	9	9	1	15	9	5	11	0	16	21	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	220	1435	200	73	345	91	149	354	253	198	347	173
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:	220	1435	200	73	345	91	149	354	253	198	347	173
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1435	200	73	345	91	149	354	253	198	347	173
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
Final Volume:	220	1435	200	73	345	91	149	354	253	198	347	173
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.38	0.11	0.04	0.09	0.05	0.09	0.19	0.14	0.11	0.18	0.10
Crit Moves:	****			****			****			****		
Green Time:	29.1	45.2	58.7	7.0	23.1	34.5	11.4	22.3	51.3	13.5	24.4	31.4
Volume/Cap:	0.43	0.84	0.19	0.60	0.39	0.15	0.75	0.84	0.28	0.84	0.75	0.31
Delay/Veh:	29.4	27.9	9.7	52.9	32.8	22.7	57.3	50.6	14.0	64.1	41.5	26.4
User DelAdj:	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:	29.4	27.9	9.7	52.9	32.8	22.7	57.3	50.6	14.0	64.1	41.5	26.4
LOS by Move:	C	C	A	D	C	C	E	D	B	E	D	C
HCM2k95thQ:	11	31	6	5	9	4	9	19	9	17	21	9

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project AM

Intersection #119: Butterfield Boulevard and Main Avenue



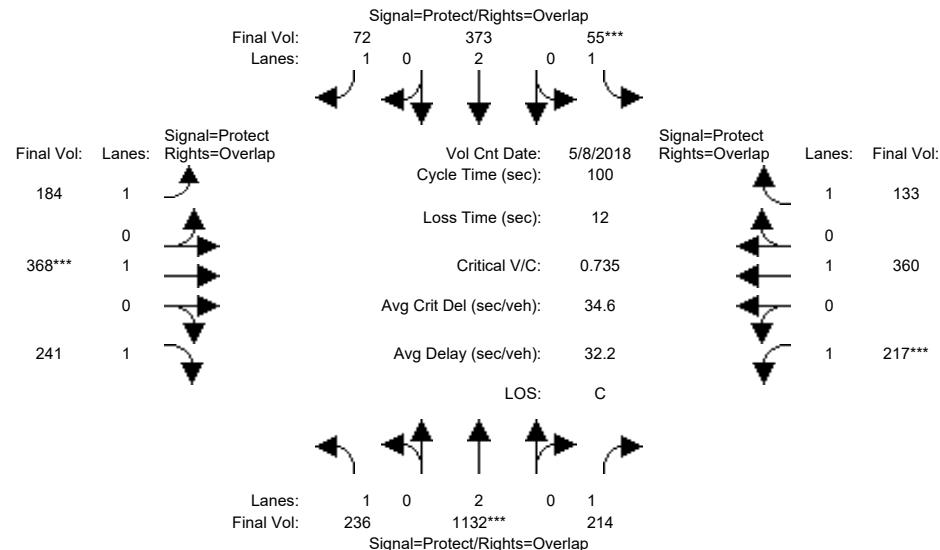
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	237	1132	217	55	377	72	183	370	240	219	361	133
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:	237	1132	217	55	377	72	183	370	240	219	361	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	1132	217	55	377	72	183	370	240	219	361	133
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:	237	1132	217	55	377	72	183	370	240	219	361	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	1132	217	55	377	72	183	370	240	219	361	133
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
Final Volume:	237	1132	217	55	377	72	183	370	240	219	361	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.30	0.12	0.03	0.10	0.04	0.10	0.19	0.14	0.13	0.19	0.08
Crit Moves:	****			****			****			****		
Green Time:	26.5	39.1	55.5	7.0	19.6	34.5	14.9	25.5	52.0	16.4	27.1	34.1
Volume/Cap:	0.51	0.76	0.22	0.45	0.51	0.12	0.70	0.76	0.26	0.76	0.70	0.22
Delay/Veh:	32.2	28.8	11.4	47.3	36.5	22.5	48.8	41.5	13.5	51.4	37.2	23.7
User DelAdj:	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:	32.2	28.8	11.4	47.3	36.5	22.5	48.8	41.5	13.5	51.4	37.2	23.7
LOS by Move:	C	C	B	D	D	C	D	D	B	D	D	C
HCM2k95thQ:	12	25	7	4	10	3	10	18	8	16	20	6

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj AM

Intersection #119: Butterfield Boulevard and Main Avenue



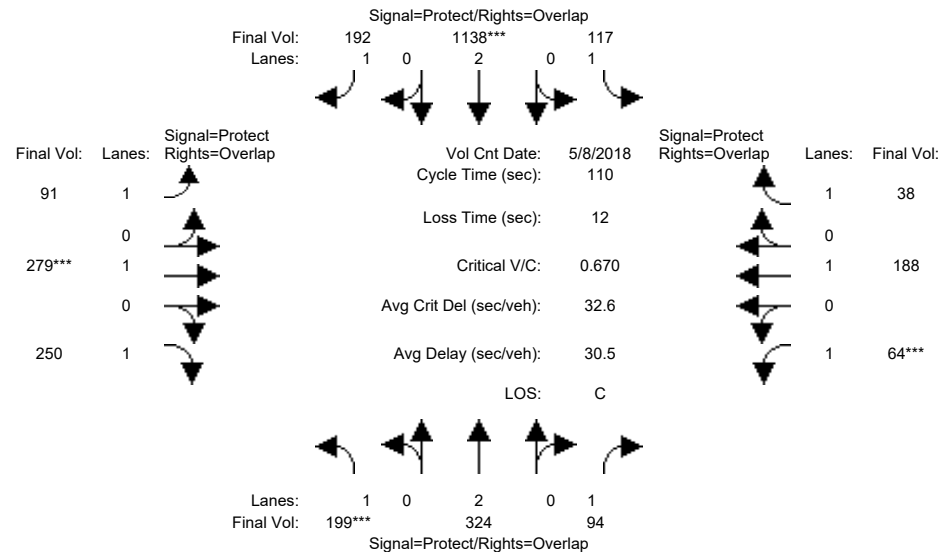
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	236	1132	214	55	373	72	184	368	241	217	360	133
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:	236	1132	214	55	373	72	184	368	241	217	360	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1132	214	55	373	72	184	368	241	217	360	133
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:	236	1132	214	55	373	72	184	368	241	217	360	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	236	1132	214	55	373	72	184	368	241	217	360	133
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
Final Volume:	236	1132	214	55	373	72	184	368	241	217	360	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.30	0.12	0.03	0.10	0.04	0.11	0.19	0.14	0.12	0.19	0.08
Crit Moves:	****			****			****			****		
Green Time:	26.5	39.2	55.5	7.0	19.7	34.6	14.9	25.5	52.0	16.3	26.9	33.9
Volume/Cap:	0.51	0.76	0.22	0.45	0.50	0.12	0.70	0.76	0.26	0.76	0.70	0.22
Delay/Veh:	32.1	28.7	11.4	47.3	36.3	22.4	48.9	41.3	13.5	51.2	37.4	23.8
User DelAdj:	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:	32.1	28.7	11.4	47.3	36.3	22.4	48.9	41.3	13.5	51.2	37.4	23.8
LOS by Move:	C	C	B	D	D	C	D	D	B	D	D	C
HCM2k95thQ:	12	25	7	4	10	3	10	18	8	16	20	6

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #119: Butterfield Boulevard and Main Avenue



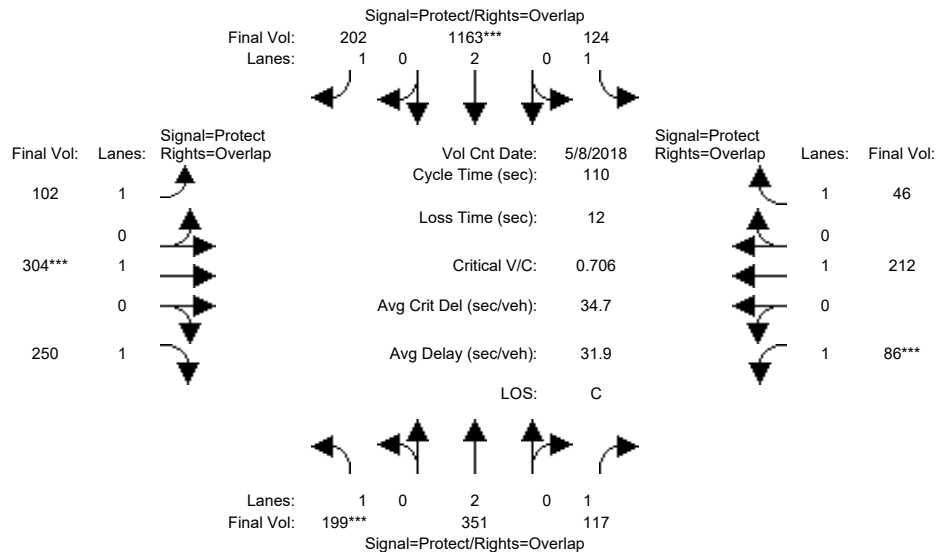
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	199	324	94	117	1138	192	91	279	250	64	188	38
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:	199	324	94	117	1138	192	91	279	250	64	188	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	199	324	94	117	1138	192	91	279	250	64	188	38
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:	199	324	94	117	1138	192	91	279	250	64	188	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	324	94	117	1138	192	91	279	250	64	188	38
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
Final Volume:	199	324	94	117	1138	192	91	279	250	64	188	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.09	0.05	0.07	0.30	0.11	0.05	0.15	0.14	0.04	0.10	0.02
Crit Moves:	***				***			***			***	
Green Time:	18.5	38.7	45.7	28.5	48.7	60.7	12.1	23.9	42.3	7.0	18.8	47.2
Volume/Cap:	0.68	0.24	0.13	0.26	0.68	0.20	0.47	0.68	0.37	0.57	0.58	0.05
Delay/Veh:	49.2	25.4	19.9	32.7	25.5	12.5	47.8	44.0	24.6	57.2	44.6	18.3
User DelAdj:	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:	49.2	25.4	19.9	32.7	25.5	12.5	47.8	44.0	24.6	57.2	44.6	18.3
LOS by Move:	D	C	B	C	C	B	D	D	C	E	D	B
HCM2k95thQ:	13	7	4	6	26	7	6	16	12	6	13	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Approved Proj PM

Intersection #119: Butterfield Boulevard and Main Avenue



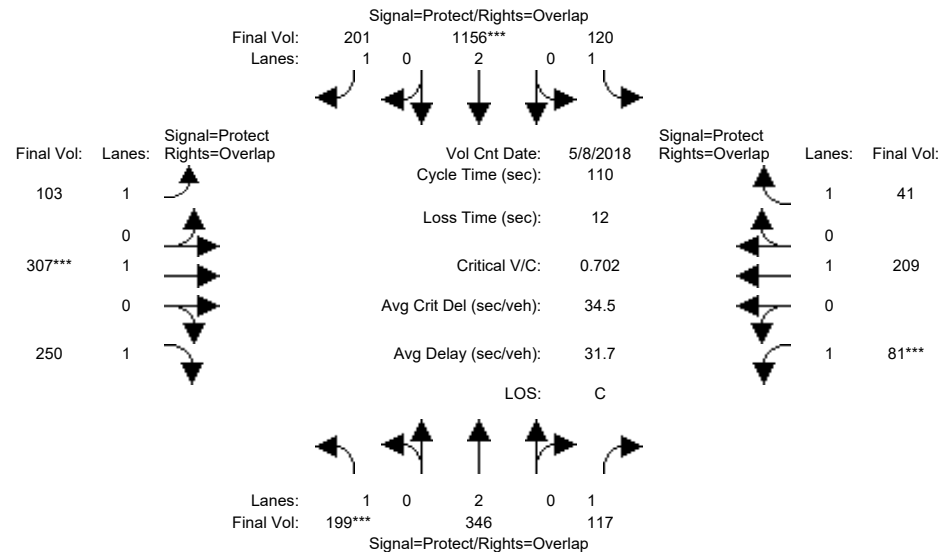
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	199	324	94	117	1138	192	91	279	250	64	188	38
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:	199	324	94	117	1138	192	91	279	250	64	188	38
Added Vol:	0	27	23	7	25	10	11	25	0	22	24	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	199	351	117	124	1163	202	102	304	250	86	212	46
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:	199	351	117	124	1163	202	102	304	250	86	212	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	351	117	124	1163	202	102	304	250	86	212	46
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
Final Volume:	199	351	117	124	1163	202	102	304	250	86	212	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.09	0.07	0.07	0.31	0.12	0.06	0.16	0.14	0.05	0.11	0.03
Crit Moves:	***				***		***			***		
Green Time:	17.7	37.0	44.7	28.4	47.7	59.5	11.8	24.9	42.7	7.7	20.8	49.1
Volume/Cap:	0.71	0.27	0.16	0.27	0.71	0.21	0.54	0.71	0.37	0.71	0.59	0.06
Delay/Veh:	51.6	26.8	20.9	32.9	26.9	13.2	49.7	44.4	24.4	67.3	43.4	17.3
User DelAdj:	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:	51.6	26.8	20.9	32.9	26.9	13.2	49.7	44.4	24.4	67.3	43.4	17.3
LOS by Move:	D	C	C	C	C	B	D	D	C	E	D	B
HCM2k95thQ:	13	8	5	7	28	7	7	17	12	9	14	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Proposed Proj PM

Intersection #119: Butterfield Boulevard and Main Avenue

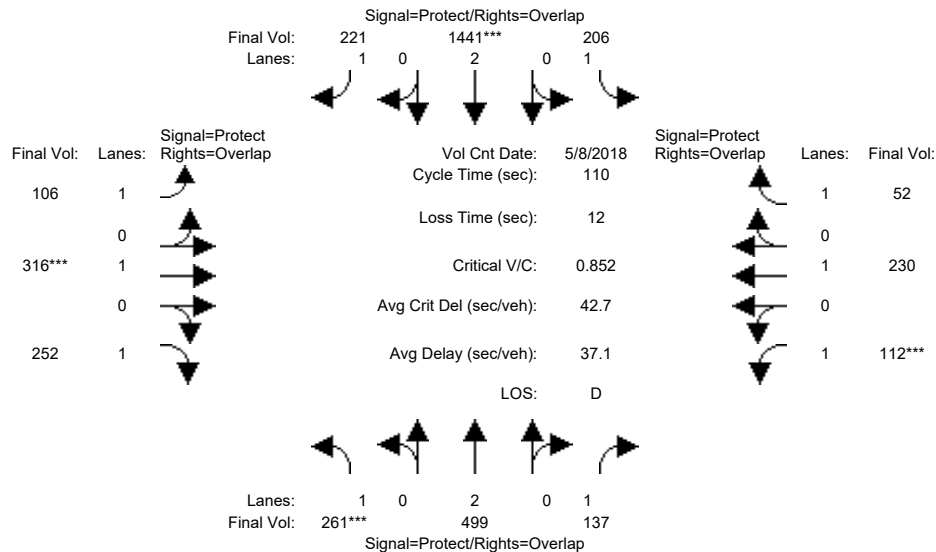


Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	199	324	94	117	1138	192	91	279	250	64	188	38
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:	199	324	94	117	1138	192	91	279	250	64	188	38
Added Vol:	0	22	23	3	18	9	12	28	0	17	21	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	199	346	117	120	1156	201	103	307	250	81	209	41
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:	199	346	117	120	1156	201	103	307	250	81	209	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	346	117	120	1156	201	103	307	250	81	209	41
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
Final Volume:	199	346	117	120	1156	201	103	307	250	81	209	41
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.09	0.07	0.07	0.30	0.11	0.06	0.16	0.14	0.05	0.11	0.02
Crit Moves:	***				***		***			***		
Green Time:	17.8	37.3	44.6	28.1	47.6	59.6	11.9	25.3	43.1	7.2	20.6	48.7
Volume/Cap:	0.70	0.27	0.16	0.27	0.70	0.21	0.54	0.70	0.36	0.70	0.59	0.05
Delay/Veh:	51.3	26.5	21.0	33.0	26.8	13.2	49.6	44.0	24.1	68.0	43.3	17.5
User DelAdj:	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:	51.3	26.5	21.0	33.0	26.8	13.2	49.6	44.0	24.1	68.0	43.3	17.5
LOS by Move:	D	C	C	C	C	B	D	D	C	E	D	B
HCM2k95thQ:	13	8	5	7	27	7	7	17	12	9	14	2
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 No Project PM

Intersection #119: Butterfield Boulevard and Main Avenue



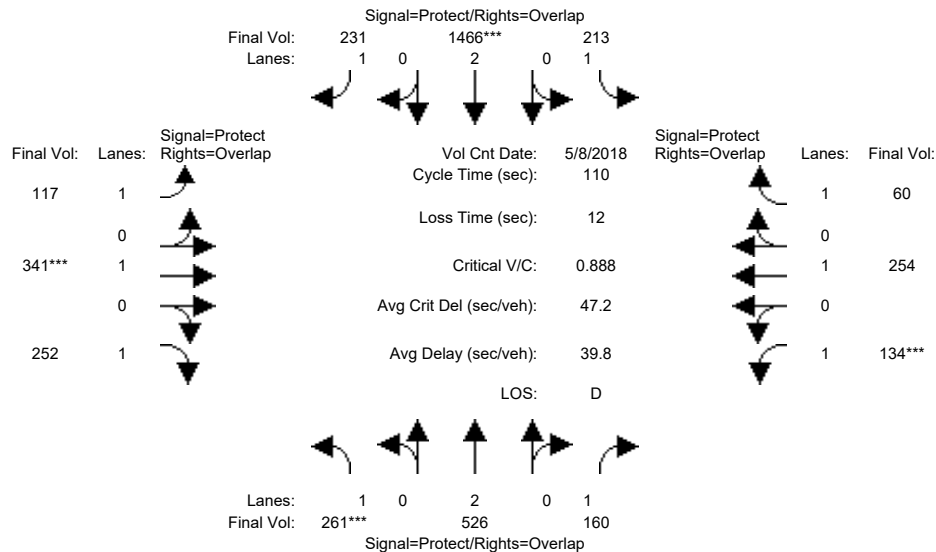
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	261	499	137	206	1441	221	106	316	252	112	230	52
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:	261	499	137	206	1441	221	106	316	252	112	230	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	499	137	206	1441	221	106	316	252	112	230	52
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:	261	499	137	206	1441	221	106	316	252	112	230	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	499	137	206	1441	221	106	316	252	112	230	52
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
Final Volume:	261	499	137	206	1441	221	106	316	252	112	230	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.13	0.08	0.12	0.38	0.13	0.06	0.17	0.14	0.06	0.12	0.03
Crit Moves:	***			***			***			***		
Green Time:	19.3	36.0	44.3	32.3	49.0	59.2	10.3	21.5	40.7	8.3	19.5	51.8
Volume/Cap:	0.85	0.40	0.19	0.40	0.85	0.23	0.65	0.85	0.39	0.85	0.68	0.06
Delay/Veh:	63.8	28.9	21.5	31.7	31.6	13.5	57.1	59.6	25.9	88.4	48.0	15.9
User DelAdj:	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:	63.8	28.9	21.5	31.7	31.6	13.5	57.1	59.6	25.9	88.4	48.0	15.9
LOS by Move:	E	C	C	C	C	B	E	E	C	F	D	B
HCM2k95thQ:	18	12	6	11	37	8	7	19	12	12	16	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Approved Proj PM

Intersection #119: Butterfield Boulevard and Main Avenue



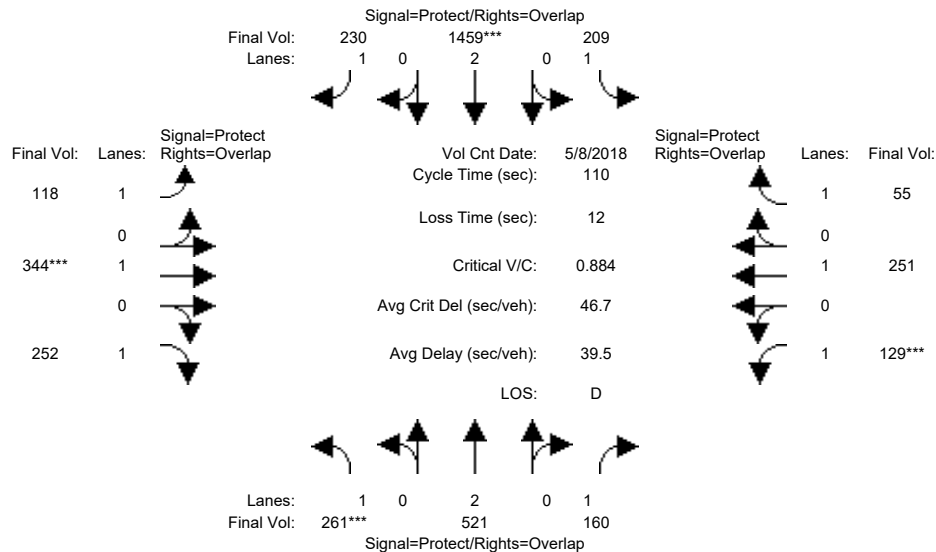
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	261	499	137	206	1441	221	106	316	252	112	230	52
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:	261	499	137	206	1441	221	106	316	252	112	230	52
Added Vol:	0	27	23	7	25	10	11	25	0	22	24	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	526	160	213	1466	231	117	341	252	134	254	60
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:	261	526	160	213	1466	231	117	341	252	134	254	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	526	160	213	1466	231	117	341	252	134	254	60
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:	261	526	160	213	1466	231	117	341	252	134	254	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.14	0.09	0.12	0.39	0.13	0.07	0.18	0.14	0.08	0.13	0.03
Crit Moves:	***				***			***			***	
Green Time:	18.5	35.3	44.8	31.0	47.8	58.4	10.6	22.2	40.7	9.5	21.1	52.2
Volume/Cap:	0.89	0.43	0.22	0.43	0.89	0.25	0.70	0.89	0.39	0.89	0.70	0.07
Delay/Veh:	70.9	29.7	21.5	32.9	34.9	14.1	60.1	64.0	25.9	91.9	47.2	15.8
User DelAdj:	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:	70.9	29.7	21.5	32.9	34.9	14.1	60.1	64.0	25.9	91.9	47.2	15.8
LOS by Move:	E	C	C	C	C	B	E	E	C	F	D	B
HCM2k95thQ:	19	13	7	12	39	8	8	21	12	15	17	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2030 + Proposed Proj PM

Intersection #119: Butterfield Boulevard and Main Avenue

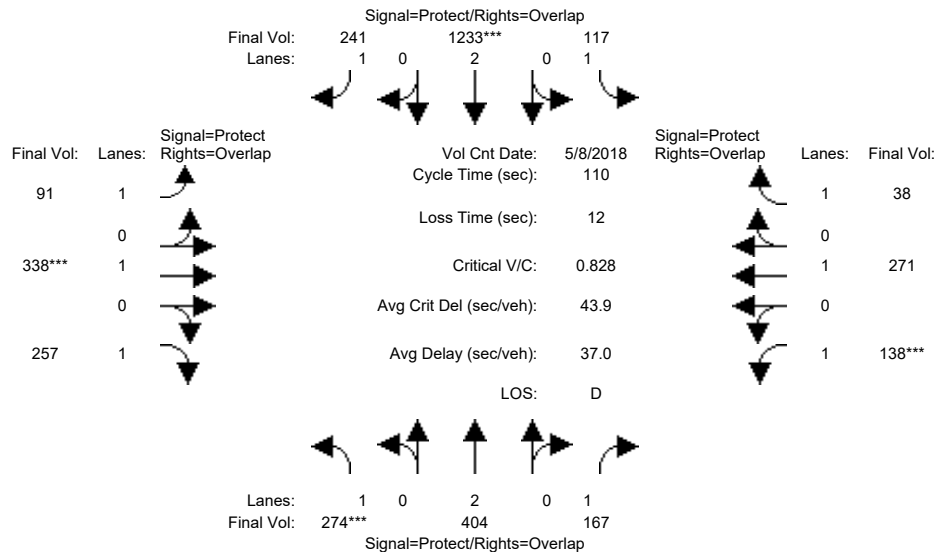


Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	261	499	137	206	1441	221	106	316	252	112	230	52
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:	261	499	137	206	1441	221	106	316	252	112	230	52
Added Vol:	0	22	23	3	18	9	12	28	0	17	21	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	521	160	209	1459	230	118	344	252	129	251	55
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:	261	521	160	209	1459	230	118	344	252	129	251	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	521	160	209	1459	230	118	344	252	129	251	55
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
Final Volume:	261	521	160	209	1459	230	118	344	252	129	251	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.14	0.09	0.12	0.38	0.13	0.07	0.18	0.14	0.07	0.13	0.03
Crit Moves:	***			***			***			***		
Green Time:	18.6	35.4	44.6	30.9	47.8	58.5	10.7	22.5	41.1	9.2	21.0	51.9
Volume/Cap:	0.88	0.43	0.23	0.43	0.88	0.25	0.69	0.88	0.39	0.88	0.69	0.07
Delay/Veh:	70.2	29.5	21.6	32.9	34.7	14.0	59.7	63.1	25.6	92.3	47.2	15.9
User DelAdj:	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:	70.2	29.5	21.6	32.9	34.7	14.0	59.7	63.1	25.6	92.3	47.2	15.9
LOS by Move:	E	C	C	C	C	B	E	E	C	F	D	B
HCM2k95thQ:	19	13	7	11	39	8	8	21	12	14	17	2
Note: Queue reported is the number of cars per lane.												

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP No Project PM

Intersection #119: Butterfield Boulevard and Main Avenue



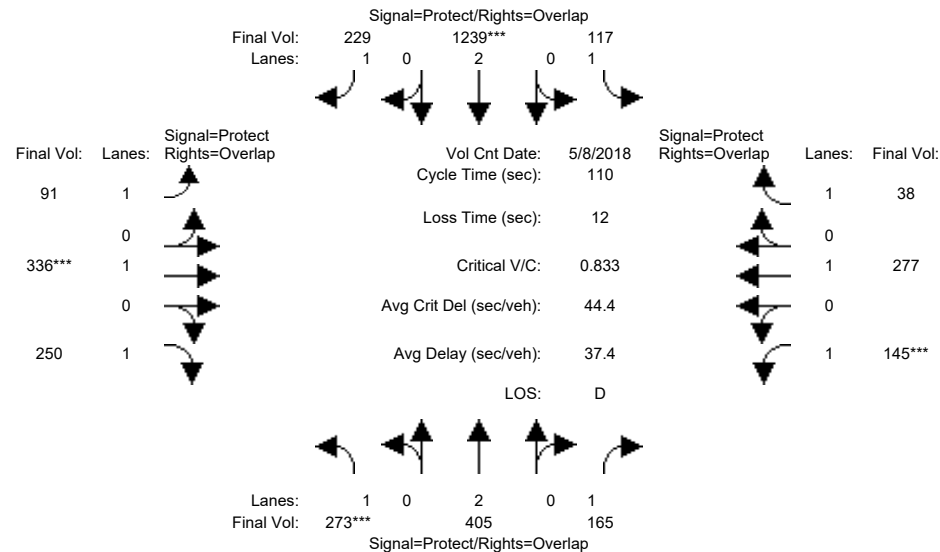
Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	274	404	167	117	1233	241	91	338	257	138	271	38
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:	274	404	167	117	1233	241	91	338	257	138	271	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	274	404	167	117	1233	241	91	338	257	138	271	38
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:	274	404	167	117	1233	241	91	338	257	138	271	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	404	167	117	1233	241	91	338	257	138	271	38
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
Final Volume:	274	404	167	117	1233	241	91	338	257	138	271	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.11	0.10	0.07	0.32	0.14	0.05	0.18	0.15	0.08	0.14	0.02
Crit Moves:	***				***			***			***	
Green Time:	20.8	39.2	49.7	24.7	43.1	53.6	10.5	23.6	44.4	10.5	23.6	48.3
Volume/Cap:	0.83	0.30	0.21	0.30	0.83	0.28	0.54	0.83	0.36	0.83	0.67	0.05
Delay/Veh:	58.7	25.6	18.4	35.9	34.1	16.9	51.1	54.4	23.2	76.6	43.7	17.7
User DelAdj:	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:	58.7	25.6	18.4	35.9	34.1	16.9	51.1	54.4	23.2	76.6	43.7	17.7
LOS by Move:	E	C	B	D	C	B	D	D	C	E	D	B
HCM2k95thQ:	19	9	7	7	33	10	6	20	12	14	17	2

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

City of Morgan Hill
Cochrane Commons Mixed-Use Development

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Year 2035 GP + Proposed Proj PM

Intersection #119: Butterfield Boulevard and Main Avenue



Street Name:	Butterfield Boulevard						Main Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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

Volume Module: >> Count Date: 8 May 2018 <<												
Base Vol:	273	405	165	117	1239	229	91	336	250	145	277	38
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:	273	405	165	117	1239	229	91	336	250	145	277	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	273	405	165	117	1239	229	91	336	250	145	277	38
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:	273	405	165	117	1239	229	91	336	250	145	277	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	405	165	117	1239	229	91	336	250	145	277	38
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
Final Volume:	273	405	165	117	1239	229	91	336	250	145	277	38

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	1900	1750	1750	1900	1750

Capacity Analysis Module:												
Vol/Sat:	0.16	0.11	0.09	0.07	0.33	0.13	0.05	0.18	0.14	0.08	0.15	0.02
Crit Moves:	***				***			***		***		
Green Time:	20.6	39.1	50.1	24.6	43.1	53.5	10.4	23.4	44.0	10.9	23.9	48.4
Volume/Cap:	0.83	0.30	0.21	0.30	0.83	0.27	0.55	0.83	0.36	0.83	0.67	0.05
Delay/Veh:	59.4	25.7	18.1	36.0	34.4	16.9	51.4	55.2	23.4	76.2	43.7	17.6
User DelAdj:	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:	59.4	25.7	18.1	36.0	34.4	16.9	51.4	55.2	23.4	76.2	43.7	17.6
LOS by Move:	E	C	B	D	C	B	D	E	C	E	D	B
HCM2k95thQ:	19	9	7	7	33	9	6	20	12	14	18	2

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

PLANNING COMMISSION STAFF REPORT

MEETING DATE: October 11, 2022

PREPARED BY:

Jennifer Carman, Development Services Director

APPROVED BY: Jennifer Carmen

ZA2022-0004/AAE2022-0004/EA2022-0010: MONTEREY - GRANADA HOTEL: A REQUEST A ZONING AMENDMENT TO REZONE THE PROPERTY TO ADD THE PLANNED DEVELOPMENT COMBINING DISTRICT AND A DESIGN PERMIT AMENDMENT TO ALLOW FOR AN ADDITIONAL LEVEL (5TH FLOOR) FOR THE APPROVED GRANADA HOTEL. THE PROPERTY, LOCATED AT 17490 MONTEREY ROAD, IDENTIFIED BY ASSESSOR PARCEL NUMBER 726-14-074, IS LOCATED ON THE SOUTHEAST CORNER OF MONTEREY ROAD AND FIRST STREET (LEAL VINEYARDS INC., APPLICANT/OWNER).

RECOMMENDATION(S)

1. Open / Close Public Hearing; and
2. Adopt a Resolution recommending City Council approval of a Zoning Amendment to add the Planned Development Combining District to the property; and
3. Adopt a Resolution recommending City Council approval of a Design Permit Amendment for minor facade modifications, including a partial fifth floor to the hotel.

LOCATION MAP/PROJECT INFORMATION:



- | | | |
|----|---------------|--|
| 1. | Location: | 17490 Monterey Road (APN: 726-14-074) |
| 2. | Site Area: | 1.9-Acres |
| 3. | General Plan: | Mixed Use |
| 4. | Zoning: | Commercial Business District / Mixed Use with Ground Floor Overlay |

BACKGROUND:

In 2014, the City of Morgan Hill, as Successor Agency to the former Morgan Hill Redevelopment Agency began the process of disposing of former Redevelopment assets, including the former Downtown Mall located at 17490 Monterey Road (APN: 726-14-074). The process included an extensive Request for Qualifications/Proposals (RFQ/P) process consistent with the Long Range Property Management Plan and with the guidance of a community-based group comprised of the Morgan Hill Economic Development Corporation, as well as representatives of the Morgan Hill Chamber of Commerce and the Morgan Hill Downtown Association. The RFQ/P process ultimately resulted in the Purchase, Sale and Grant Agreement by the Morgan Hill Oversight Board to Leal Vineyards Inc. on September 3, 2015, for a two-phased project: Phase 1, the rehabilitation of the Granada Theatre for use as an entertainment, special event and assembly venue with food and beverage service, and for Phase 2, for a Market Hall/Restaurant, Boutique hotel.

In April of 2016, the Planning Commission reviewed and approved a Design Permit and a Conditional Use Permit for a new Downtown hotel. The approvals included a new 67,940 square foot, four-story building with restaurants, bars, retail, banquet hall(s), and hotel lobby with guest rooms, services including valet parking, and amenities. The Conditional Use Permit allows for an outdoor green event space, conference/meeting rooms, banquet rooms, and ancillary prep kitchens with one main kitchen to serve the hotel. The hotel also included a pool with outdoor living / lounge area on the third floor where guests can enjoy meeting breakout areas, wine and cheese, and movies. The approved project was received by the City Council on May 18, 2016.

The Granada Theatre was restored in 2016 and has been functioning as an entertainment venue. The boutique hotel began construction in 2017. All underground and utility work and the first two floors of the structure were completed in 2019. Like many other projects, the Granada Hotel's construction halted during the COVID-19 pandemic. With the City's business recovery emergency order, building permits have been extended for all projects during the COVID-19 pandemic and the City allowed for outdoor operations with the Al Fresco Program. Under the guidance of the Al Fresco Program, the City allowed the Granada Theatre to pivot their operations to an outdoor dining venue functioning under the concrete structure of the Granada Hotel and along Monterey Road in a parklet. The structure was evaluated for this temporary use and it was determined that it maintained a reasonable level of safety, public health and general welfare. The Al Fresco Program ends in December 2022, and outdoor activations are required to obtain necessary City permits to continue operations.

The lodging industry has been one of the hardest industries hit by the pandemic. The County of Santa Clara Assessor's Office anticipates that the lodging industry in Santa Clara County will stabilize by 2024. Today, hotels continue to operate at lower than normal occupancy levels and financing continues to be challenging for hotel projects, especially boutique hotels. The Economic Development Division has researched financing options to assist the Downtown boutique hotel and most hotel investors seek a minimum of 90 rooms to consider the facility operationally functional. The owner/developer has secured a short-term bridge loan that will allow the construction of the hotel to resume and is seeking to add the Planned Development (PD) Combining District to the property, along with the adoption of a Planned Development (PD) Master Plan to obtain an exception to the height limitation in the Downtown Specific Plan (DTSP) and an amendment to the Design Permit in order to add additional rooms.

PROJECT DESCRIPTION:

The proposed project includes a request for a Zoning Amendment to rezone the property to add the PD Combining District and a Design Permit Amendment (Attachment 3). The PD Combining District will allow enhanced flexibility in building design, and allow for the project to add a partial 5th floor. Having a partial 5th floor will allow for an increase in guestrooms. Eleven guest rooms will be

added, the fitness center will be converted into two additional guestrooms, and minor facade modifications will be made. The proposed PD Master Plan, that accompanies the rezone request would allow a building height of up to 70 feet with exceptions for required rooftop equipment, elevator shafts, or stairwells for a height of up to 85 feet. Project development plans have been provided (Attachment 4).

Site Description

The project site is located on the southeast corner of Monterey Road and First Street within the DTSP area. Building permits were issued for the approved hotel in June of 2017, and construction of the concrete frame for the 1st and 2nd levels of the building was completed.

Surrounding Uses

	General Plan Land Use	Zoning	Existing Use
North	Mixed Use	Commercial Business District with Ground Floor Overlay	Noah's Bar & Bistro, Maurizio's Italian Cuisine, and The Flower Cottage
South	Mixed Use	Commercial Business District with Ground Floor Overlay	Granada Theater and GVA Cafe
East	Mixed Use	Commercial Business District	Residential
West	Mixed Use	Commercial Business District with Ground Floor Overlay	Commercial Offices

PROJECT ANALYSIS AND FINDINGS:

The proposed project was analyzed with respect to conformance with: 1) Morgan Hill 2035 General Plan; 2) DTSP/Zoning Ordinance; and 3) California Environmental Quality Act:

1. General Plan Land Use Consistency

The proposal includes an amendment to an approved Design Permit for a hotel and a rezone of the property to add the PD Combining District, to allow for the addition of a partial 5th floor. The proposed PD Master Plan for the hotel is consistent with, but not limited to General Plan Policies CNF-14.1, CNF-14.2, CNF-14.3, and CNF-14.7. In addition, the proposal is consistent with the Economic Development Element in that the hotel use supports the implementation of the DTSP by providing a new use that includes specialty retail, event space, and other services on the first floor along Monterey Road. The project would support Downtown tourism by adding guest rooms for short-term stays. The General Plan does not specify maximums for the floor area ratio or density on the project site.

2. Downtown Specific Plan and Zoning Ordinance Consistency

The project site is located within the DTSP with Ground Floor Overlay Combining District. The DTSP identifies development standards and architectural design guidelines. The Ground Floor Overlay identifies commercial frontage requirements along Monterey Road. With the approval of the proposed amendment to the approved Design Permit for the hotel and the addition of the PD Combining District, the project would be consistent with the DTSP.

a. Planned Development Combining District

The purpose of a PD Combining District is to allow for a high-quality development that deviates from standards and regulations applicable to the base zoning district to promote creativity in building design, flexibility in permitted land uses, and innovation in development concepts. The PD Master Plan allows enhanced flexibility to take advantage of unique site characteristics to develop projects that will provide public benefits for residents, employees, and visitors. Generally, PD Master Plan's require a preliminary review prior to submittal of a final PD Master Plan. However, for this application, the preliminary review is not required because the Planning Commission has already held a Public Hearing for the review of the site as a hotel and approved the project. In addition, the DTSP identifies utilizing a PD Master Plan for exceptions to standards versus a traditional minor exception. This rezone to the PD Combining District is simply a request for an exception to the height standards. The PD Master Plan identifies additional height for the hotel use if the project meets specific performance standards. If the performance standards are not met, then the maximum height for a hotel will be limited to 4-stories or 55 feet. These standards are outlined in the PD Resolution (Attachment 1) and summarized in Table 1 below. The PD Master Plan also defines the hotel and ancillary uses as permitted uses, consistent with the approved Use Permit. Where the PD Master Plan is silent on uses identified, the PD Master Plan defers to the DTSP permitted Uses Table for the Commercial Business District and Ground Floor Overlay District.

Table 1 - Proposed PD Standards

	Existing Standards	PD and Amendment Request
Maximum Building Coverage	No Maximum	No Change
Floor Area Ratio	2.0 or 2025 for sites over 22,000 square feet	No Change
Maximum Building Height	4-stories or 55-feet	No Change
Maximum Building Height for a Hotel	N/A	5-stories or 70-feet*
Maximum Building Height Exceptions	N/A	add 15-feet to maximum height for required rooftop equipment, elevator shafts, or stairwells
Setbacks:		
Front	0-feet minimum 10-foot maximum	No Change
Side	0-feet minimum	No Change
Rear	0-feet minimum	No Change
Ground Floor height (Floor-to-ceiling clear)	14-feet	No Change
Parking	Defer to the Downtown parking requirements as amended	No Change
Hotel Parking	No onsite parking required,	No Change

	Drop-off valet parking for guests/events required on-site or off-site based on demand	
--	---	--

* Maximum building height for hotel reduced to 4-stories or 55-feet in height if performance standards are not met.

Findings

The Municipal Code requires the Planning Commission to review and recommend approval, approval with modification, or denial of the Zoning Map Amendment to establish a PD Combining District based on findings specified in Section 18.114.050. The Planning Commission must also make a recommendation to the City Council regarding the PD Master Plan based on findings specified in Section 18.30.050 H. Below is the list of all the required findings to take into consideration for the recommendation.

1. The proposed amendment is consistent with the General Plan and any applicable specific plan as provided by Government Code Section 65860.

The PD Combining District, along with the PD Master Plan will yield a project that is consistent with the DTSP and General Plan City and Neighborhood Form Policies CNF-14.1, CNF-14.2, CNF-14.3, and CNF-14.7 and the Economic Development Element. The hotel development supports the implementation of the DTSP by providing a new use that includes specialty retail, event space, and other services on the first floor along Monterey Road, and supports tourism downtown by adding rooms for short-term stays for visitors. The General Plan does not specify maximums for the floor area ratio or density on the project site. The proposed development for a hotel meets the floor area ratio as identified within the Downtown Specific Plan.

2. The proposed amendment will not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

The PD Combining District, along with the PD Master Plan will yield a project that supports tourism by providing the convenience to stay and enjoy events within the Downtown. A hotel will provide public interest and enhance general welfare by including ancillary uses that support Downtown as a focal point of the City. The project will be built to comply with standard Building Code requirements and therefore will not be detrimental to the public health, safety, and welfare of the community. The completion of the hotel construction will improve the current unfinished condition of the half-built structure. Completing the building will aesthetically enhance the area and provide economic benefit to the City through the generation of Transient Occupancy Tax and Sale Tax revenues that will support City services.

3. The affected site is physically suitable in terms of design, location, shape, size, and other characteristics to ensure that the permitted land uses and development will comply with the zoning code and general plan and contribute to the health, safety and welfare of the property, surrounding properties, and the community at large.

The property is an approximate 1.09-acre site that proposes the development of a project that meets the design requirements and guidelines identified within the DTSP. The PD Combining District, along with the PD Master Plan allows for an increase in height by one story for a total of five stories for hotel use. Consistent with the DTSP, upper floor levels will be set back from the first and second floors, which reduces the massing of the building and maintains the characteristics within the Downtown. As mentioned in Section 1 and 2 above, the hotel development will contribute to the Downtown and the community at large and will not be detrimental to the health, safety, and welfare of the property and surrounding properties.

4. The proposed development is consistent with the general plan, zoning code and any applicable specific plan or area plan adopted by the City Council.

The DTSP allows for deviations from standards with the adoption of a PD Combining District, along with a PD Master Plan. The proposed PD Master Plan supports the approved hotel use as permitted and deviates from the height standard by adding one additional level for hotels. The hotel development will be consistent with the policies established by the General Plan and DTSP in that a Hotel supports tourism downtown, provides new services and amenities, and meets the Design Guidelines within the DTSP.

5. The proposed development is superior to the development that could occur under the standards applicable in the existing zoning districts.

The adoption of a PD Combining District, along with the PD Master Plan will allow for a use and design that supports the viability of a hotel downtown. A hotel with ancillary services and amenities within downtown supports the DTSP and General Plan by promoting Downtown as a focal point and supports tourism that supports the economic growth of Downtown.

6. The proposed project will provide a Substantial Public Benefit. The public benefit provided shall be of sufficient value as determined by the planning commission to justify deviation from the standards of the zoning district that currently applies to the property.

The project will incorporate a valet station for drop-off / pick-up in a location convenient for all downtown visitors in addition to the hotel guests. This will provide upfront access for all visitors/consumers downtown. In addition, the developer will have a mural displayed on the rear of the building. The artwork for the mural will be approved by the Arts Commission.

7. The site for the proposed development is adequate in size and shape to accommodate proposed land uses.

The PD Combining District can be applied to properties one acre or larger. The site is a 1.09-acre site and can accommodate a five-story hotel that meets the floor area ratio identified within the Downtown Specific Plan. In addition, the size of the site meets the minimum size requirements for a PD Combining District.

8. Adequate transportation facilities, infrastructure, and public services exist or will be provided to serve the proposed development.

The site is located within the downtown, fronting Monterey Road and 1st Street with valet services for guests accessed from 2nd Street. There are wet and dry utilities and infrastructure in the surrounding area that support the development of this site.

9. The proposed development will not have a substantial adverse effect on surrounding property and will be compatible with the existing and planned land use character of the surrounding area.

The increased height for a hotel will be compatible with existing and planned uses of the surrounding area in that the partial 5th floor will be pushed back and central to the block, which reduces massing and provides relief for future development of adjacent properties on the block.

b. Design Permit Amendment

The purpose of a Design Permit is to ensure the project yields high-quality design consistent with the General Plan and any other applicable specific plan or area plan adopted by the City Council. In

this case, it includes the DTSP Design Guidelines, the Design Review Criteria in Section 18.108.040 H. of the Municipal Code, and the design standards contained in the Design Review Handbook. The project was previously analyzed and found consistent with all applicable design standards on April 26, 2016, which at that time, the Planning Commission approved Design Permit Number SR-16-01. In June of 2017, minor modifications to the facade materials and colors were made and approved during the building permit process. The current request is for an amendment to the approved permit requesting a partial 5th floor. Having a partial 5th floor will allow for an increase in guestrooms. Eleven guest rooms will be added, the fitness center will be converted into two additional guestrooms, and minor facade modifications will be made to the building to enhance activation and entries along Monterey Road. The circulation and building footprint remains unchanged. The facade continues to utilize a greyish-brown brick veneer as the base with a lighter smooth trowel stucco body on the upper floors. The upper levels are pushed back to reduce massing and introduce wood tiles and glass as architectural details. If the rezone is approved as conditioned, the proposed modifications would be consistent with the General Plan, DTSP, Design Review Criteria in Section 18.108.040 H., and the design standards contained in the Design Review Handbook.

Findings

The Municipal Code Findings for a Design Permit are listed below and should be taken into consideration by the Planning Commission when reviewing and recommending approval, approval with modification, or denial to the City Council.

1. The proposed project is consistent with the general plan and any applicable specific plan, area plan, or other design policies and regulations adopted by the City Council.

The partial fifth floor is pushed far back from Monterey Road and 2nd Street, central to the main building and mid-block. This reduces the massing of the structure and visibility of the fifth floor from the public right-of-way. The project is in conformance with General Plan Policies specifically, but not limited to CNF-14.1, CNF-14.2, CNF-14.3, and CNF-14.7 and the Economic Development Element. The hotel development supports the implementation of the DTSP by providing a new use that includes specialty retail, event space, and other services on the first floor along Monterey Road, and supports tourism downtown by adding rooms for short-term stays for visitors.

2. The proposed project complies with all applicable provisions of the zoning code and municipal code.

The amendment as proposed is consistent with the intent of the zoning code, which is consistent with the DTSP requirements in that it meets the Design Guidelines by utilizing quality design and materials, introduces glass, wood tile, and metal for architectural detailing, and creatively utilizes reveals to create interest and private space for balconies.

3. The proposed project substantially complies with all applicable design standards and guidelines contained in the Design Review Handbook.

The Design Guidelines within Chapter 5 of the DTSP supersede the regulations within the Design Review Handbook. However, the amendment as proposed substantially complies with the applicable design standards and guidelines outlined in the design review handbook in that the building utilizes alternate colors and materials to identify the base of the building from the top of the building, includes deep reveals for architectural interest and privacy for balconies, and maintains architectural details on all facades of the building.

4. The proposed project has been reviewed in compliance with the California Environmental Quality Act (CEQA).

Refer to the CEQA Section of this report.

5. The proposed development will not be detrimental to public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity.

The redevelopment of the project site is part of the vision for both the General Plan and DTSP. The project will not be detrimental to public health as analyzed in the DTSP MEIR. The project and circulation were designed to City standards and therefore will not be detrimental to public safety or welfare. The project will comply with SWPPP and Building Code requirements, and therefore it will not be materially injurious to the properties or improvements in the vicinity.

6. The proposed project complies with all applicable design review criteria in Subsection H of Section 18.108.040.

While the proposed amendment meets the intent of the design review criteria, the Design Guidelines within Chapter 5 of the DTSP supersede the regulations within the Municipal Code.

CONCLUSION:

The project as proposed is found to be consistent with the General Plan, the DTSP and within the scope of the MEIR and the General Plan FEIR. Allowance for the additional hotel rooms will make the hotel more economically viable, more operationally functional and will assist in securing the financing necessary to resume hotel construction. The project coincides directly with the Morgan Hill City Council's strategic priorities for economic development and fiscal sustainability. The project will increase the City's tax base and will yield additional economic opportunities for Morgan Hill. The City will generate additional Property Tax, Sales tax and Transient Occupancy Tax revenues that will support City services.

Ensuring the completion of a boutique hotel will cement the City's profile as a tourist destination for meetings, conferences, festivals, weddings, and community events. As summarized within the analysis section of the staff report, staff recommends approval of the Zoning Amendment to rezone the property to add the PD Combining District and the Design Permit Amendment.

CEQA (California Environmental Quality Act):

An Addendum to the DTSP MEIR has been prepared pursuant to Title 14, Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards (Attachment 5). The City of Morgan Hill, Development Services Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that pursuant to CEQA Guidelines Section 15179, no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, and there is no new available information, which was not known and could not have been known at the time that the MEIR was certified. The project, as identified in the Addendum, would not have a significant effect on the environment beyond that which was evaluated in the Downtown Specific Plan Master Environmental Impact Report (MEIR). The document demonstrates that neither a subsequent EIR, nor a supplement to the MEIR is required given that the proposed modifications to the approved project would not trigger the applicable criteria set forth in the CEQA Guidelines Section 15162. The Addendum to the Downtown Specific Plan MEIR has been prepared pursuant to Title 14 Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards.

COMMUNITY ENGAGEMENT:

The proposed project was publicly noticed by mailing to property owners within 600-feet of the project and a 1/4 page ad in the newspaper for the minimum 10-day period.

No public comments were received prior to the publication of this staff report.

ATTACHMENTS:

1. Planned Development Resolution
2. Design Permit Resolution
3. Zoning Map Amendment Exhibit
4. Design Permit Plans
5. Granada Hotel Expansion Project Addendum

RESOLUTION NO. 22-____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL RECOMMENDING APPROVAL OF A ZONING MAP AMENDMENT FOR A MIXED-USE DOWNTOWN PLANNED DEVELOPMENT COMBINING DISTRICT ON A 1.09-ACRE SITE LOCATED EAST OF MONTEREY ROAD BETWEEN 1ST STREET AND 2ND STREET (ZA2022-0004: MONTEREY – LEAL GRANADA HOTEL) APN: 726-14-074

WHEREAS, in April of 2016, Planning Commission approved a Conditional Use Permit and Design Permit for a project known as the Granada Hotel, which included a new 67,940 square foot four-story hotel with restaurants, bars, retail, banquet halls, and ancillary hotel serves and amenities including valet parking; and

WHEREAS, the approved hotel project received issuance of building permits in June of 2017, and exercised the Conditional Use Permit and Design Permit approvals. A permit or approval is considered exercised when a building permit is issued and construction has commenced. Project construction has commenced with the base of the hotel and building permits have been kept active to date; and

WHEREAS, Leal Vineyards, Inc. proposes to establish a Planned Development Combining District on the 1.09-acre site located east of Monterey Road between 1st Street and 2nd Street, identified by Assessor Parcel Number 726-14-074. The Planned Development Combining District to allow for the development of a fifth story to the approved hotel with ancillary uses and customer services as defined for a Hotel use within this Planned Development known as the Granada Hotel Expansion; and

WHEREAS, said development requires the approval of a Zoning Map Amendment and the establishment of a Planned Development Master Plan that identifies uses and standards for the Granada Hotel Expansion; and

WHEREAS, Section 18.114.040 of the Morgan Hill Municipal Code requires that the Planning Commission make a recommendation to the City Council regarding the Zoning Map Amendment to establish a Planned Development Combining District based on findings specified in Section 18.114.050; and

WHEREAS, Section 18.30.050.H.5. of the Morgan Hill Municipal Code requires that the Planning Commission make a recommendation to the City Council regarding the Planned Development Master Plan based on findings specified in Section 18.30.050.H.7; and

WHEREAS, the Planning Commission has reviewed and considered the Initial Study and Addendum prepared for the Project; and

WHEREAS, the Addendum prepared for the project is incorporated, by this reference into the Resolution as if fully set forth herein; and

WHEREAS, the City of Morgan Hill, Development Services Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that pursuant to CEQA Guidelines Section 15179, no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, and there is no new available information, which was not known and could not have been known at the time that the MEIR was certified. The project, as identified in the Addendum, would not have a significant effect on the environment beyond that which was evaluated in the Downtown Specific Plan Master Environmental Impact Report (MEIR). The document demonstrates that neither a subsequent EIR, nor a supplement to the MEIR is required given that the proposed modifications to the approved project would not trigger the applicable criteria set forth in the CEQA Guidelines Section 15162. The Addendum to the Downtown Specific Plan MEIR has been prepared pursuant to Title 14 Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards; and

WHEREAS, the proposed project is consistent with the development assumptions in the Downtown Specific Plan. The proposed project would not result in any new or more significant cumulative impacts than the previously approved project (disclosed in the Specific Plan MEIR). Mitigation measures adopted for the previously approved project where feasible and will be implemented by the proposed project; and

WHEREAS, such request was considered by the Planning Commission at its regular meeting of October 11, 2022; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings, and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The proposed amendment is consistent with the General Plan and any applicable specific plan as provided by Government Code Section 65860.

The planned development will yield a project that is consistent with the Downtown Specific Plan and General Plan City and Neighborhood Form Policies CNF-14.1, CNF-14.2, CNF-14.3, and CNF-14.7 and the Economic Development Element in that the Hotel supports the implementation of the Downtown Specific plan by providing a new use that includes specialty retail, event space, and other services on the first floor along Monterey street, and supports tourism downtown by adding short-term stay for visitors. The General Plan does not specify maximums for the floor area ratio or density on the project site. The proposed

development for a hotel meets the floor area ratio as identified within the Downtown Specific Plan.

SECTION 2. The proposed amendment will not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

The planned development will yield a project that supports tourism by providing the convenience to stay and enjoy events within the Downtown. A hotel use will provide public interest and enhance general welfare by including ancillary uses that support Downtown as a focal point of the City. Projects will be built to comply with standard building code requirements and therefore will not be detrimental to public health, safety, and welfare.

SECTION 3. The affected site is physically suitable in terms of design, location, shape, size, and other characteristics to ensure that the permitted land uses and development will comply with the zoning code and general plan and contribute to the health, safety and welfare of the property, surrounding properties, and the community at large.

The property is an approximate 1.09-acre site that propose the development of a project that meet the design requirements and guidelines identified within the Downtown Specific Plan. This Planned Development allow for an increase in height up to five stories for a hotel use. Consistent with the Downtown Specific Plan, upper floor levels will be set back from the first and second floors which reduces the massing of the building and maintain the characteristics within the Downtown. As mentioned in Sections 1 and 2 above, the planned development will yield a project that contributes to the Downtown and the community at large and will not be detrimental to the health, safety, and welfare of the property and surrounding properties.

SECTION 4. The proposed development is consistent with the general plan, zoning code and any applicable specific plan or area plan adopted by the City council.

The Downtown Specific Plan allows for Planned Developments for properties to deviate from standards. The proposed Planned Development supports the approved hotel use as permitted and deviates from the height standard by adding one additional level for hotels. The Planned Development will yield a project consistent with the policies established by the General Plan and Downtown Specific Plan in that a Hotel supports tourism downtown, provides new services and amenities, and meets the Design Guidelines within the Specific Plan.

SECTION 5. The proposed development is superior to the development that could occur under the standards applicable in the existing zoning districts.

The Planned Development will allow for a use and design that supports the viability of a hotel downtown, improving the operational functionality of the hotel. A hotel with ancillary services and amenities within downtown supports the Downtown Specific Plan and General Plan by promoting Downtown as a focal point and supports tourism that supports the economic growth of Downtown.

- SECTION 6.** The proposed project will provide a Substantial Public Benefit. The public benefit provided shall be of sufficient value as determined by the Planning Commission to justify deviation from the standards of the zoning district that currently applies to the property.

The project will incorporate a valet station for drop-off/pick-up in a location convenient for all downtown visitors in addition to the hotel guests. This will provide upfront access for all visitors/consumers downtown. In addition, the property owner/designee will have a mural displayed on the rear of the building. The artwork for the mural will be approved by the Arts Commission.

- SECTION 7.** The site for the proposed development is adequate in size and shape to accommodate proposed land uses.

The site is a 1.09-acre site and shape of the site can accommodate a five-story hotel that meets the floor area ratio identified within the Downtown Specific Plan.

- SECTION 8.** Adequate transportation facilities, infrastructure, and public services exist or will be provided to serve the proposed development.

The site is located within the downtown fronting on Monterey road and 1st Street with valet services for guest accessed from 2nd Street. There are wet and dry utilities and infrastructure in the surrounding area that support the development of this site.

- SECTION 9.** The proposed development will not have a substantial adverse effect on surrounding property and will be compatible with the existing and planned land use character of the surrounding area.

The Planned Development will yield a project consistent with the Downtown Specific Plan and General Plan goals and policies. The increased height for a hotel will be compatible with existing and planned uses of the surrounding area in that the 5th level will be push back and central to the block which reduces massing and provides relief for future development of adjacent properties on the block.

- SECTION 10.** The Planning Commission recommends approval of Zoning Amendment application ZA2022-0004: Monterey – Leal Granada Hotel (Granada Hotel

Expansion) for a Planned Development as described in the attached Exhibit "A" and Exhibit "B" to this Resolution.

PASSED AND ADOPTED THIS 11TH DAY OF OCTOBER 2022, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

JENNA LUNA, Deputy City Clerk

APPROVED:

JOSEPH MUELLER, Chair

EXHIBIT A

PLANNED DEVELOPMENT STANDARDS AND USES

This Planned Development (PD) pertains to the 1.09-acre lot located mid-block east of Monterey Road, between 1st Street and 2nd Street. To proceed with the development of a Hotel that exceeds 4-stories, or 55-feet in height, the Performance Standards set forth in Section A of this Exhibit shall be met. A one-time, 2-year administrative time extension to each performance standard outlined in Section A of this Exhibit may be granted by the Development Services Director if:

- 1) The property owner/designee proceeded in good faith and has exercised due diligence in efforts to achieve each performance standard in a timely manner; and
- 2) The property owner/designee provides proof to demonstrate that the performance standard milestone(s) could not be achieved due to circumstances outside of their control.

If additional time is needed for any performance standard listed in Section A of this Exhibit after a 2-year time extension was approved, additional time extensions may be reviewed and approved by the City Manager. If the Performance Standards cannot be achieved within the timeline or approved extended timelines, the underlying Downtown Specific Plan height standard of maximum 4-stories or 55 feet in height shall be reinstated.

SECTION A: PERFORMANCE STANDARDS

- 1a. The property owner/designee shall enter into a Memorandum of Understanding (MOU) agreement to memorialize the understanding of listed penalties that may be invoked in these performance standards are not achieved. The MOU will be reviewed and approved by the City Attorney and City Manager.
- 2a. Property owner/designee is required to submit building permit application(s) and construction document(s) for the modifications and addition of the 5th floor by April 30, 2023.
- 3a. Property owner/designee shall secure building permit(s) for fifth level by September 30, 2023.
- 4a. Construction to resume no later than August 31, 2023.
- 5a. Property owner/designee to complete exterior facade before interior improvements, 24 months after construction resumes.
- 6a. Parklets for the Granada Theater may continue operation only during non-construction hours. Parklet may resume to normal hours once construction of the exterior of the hotel has been completed and temporary fencing removed.

- 7a. Non-essential hotel amenities (restaurant, bar, meeting rooms, etc.) should not be completed prior to the completion of hotel rooms.
- 8a. Hotel rooms to be operational by December 31, 2025.
- 9a. As part of the substantial public benefit, the property owner/designee will incorporate a valet station for drop-off/pick-up in a location convenient for all downtown visitors in addition to the hotel guests. This will provide upfront access for all visitors/consumers downtown. In addition, the property owner/designee will have a mural displayed on the rear of the building. The artwork for the mural will be approved by the Library, Culture, and Arts Commission.

Penalties

- 10a. If the property owner/designee doesn't resume construction by August 31, 2023, the City may revoke the maximum building height for a hotel as described in Table B.1.
- 11.a MOU to identify agreed-upon liquidated damages for every day after December 31, 2025, or as amended by time extensions.

SECTION B. DEVELOPMENT STANDARDS AND USES

The Standards set herein supersede the Downtown Specific Plan and any Combining District or Overlay District. Where this Planned Development is silent on standards, the underlying mixed-use Commercial Business District (CBD) as amended shall apply.

Development Standards Table B.1

	Standard
Maximum Building Coverage	No Maximum
Floor Area Ratio	2.0 or 2.25 for sites over 22,000 square feet
Maximum Building Height	4 stories or 55-feet
Maximum Building Height for a Hotel	5 stories or 70 feet*
Maximum Building Height Exceptions	Add 15-feet to maximum height for required rooftop equipment, elevator shafts, or stairwells
Setbacks:	
Front	0-feet minimum 10-feet maximum
Side	0-feet minimum
Rear	0 feet minimum
Ground Floor "Floor-to-ceiling clear" height	14-feet for
Ground Floor building depth: retail depth minimums as specified within the Downtown Specific Plan	60-feet
Parking	Refer to the Downtown Specific Plan Parking Requirements as amended
Hotel Parking	No onsite parking required, drop-off and valet parking for guests is required on or off-site biased on demand

* Maximum Building Height reduced to 4 stories or 55-feet in height if Section A Performance Standards are not met.

The following uses listed in Table B.2 are allowed within this PD by right. This PD defers to the Permitted Uses Table for the mixed-use Commercial Business District (CBD) and Ground Floor Overlay District within the Downtown Specific Plan as amended, where this PD table is silent. The Ground Floor Overlay district applies to the first floor within 60-feet from property line adjacent to Monterey Road and 80-feet at 1st and 2nd Street.

P = Permitted Use

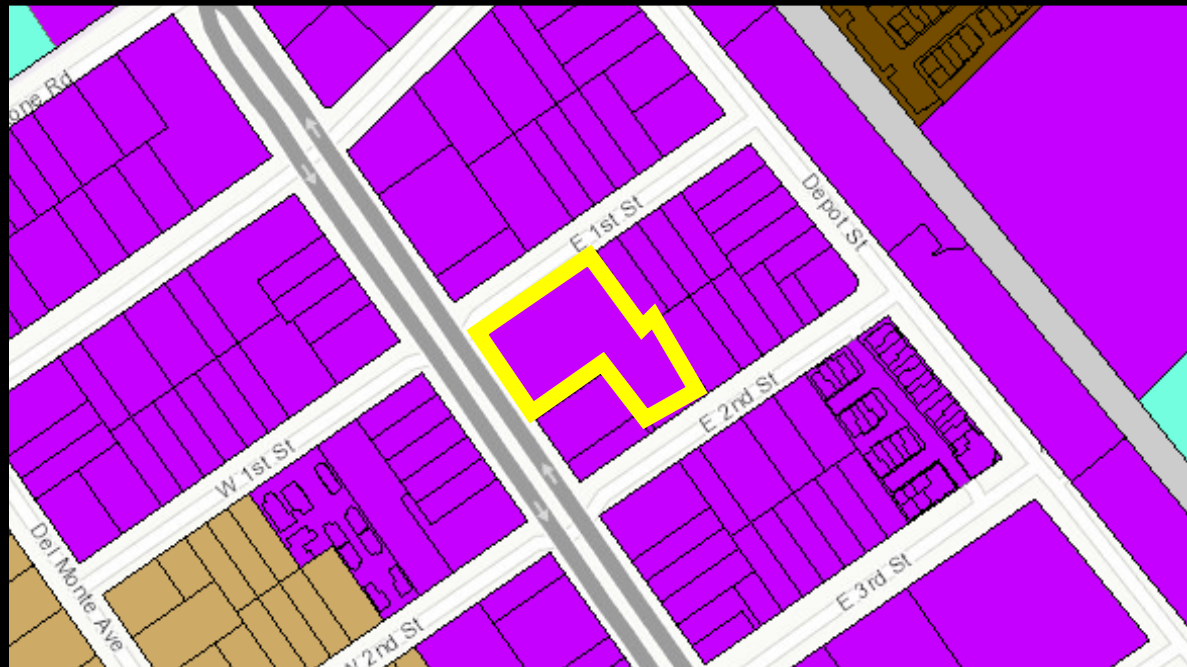
Permitted Uses and Conditionally Permitted Uses Table B.2

Commercial /Service /Retail Uses	
Commercial Recreation (3,000 sq.ft. or less)	P
Commercial Service	P
Food Service, takeout	P
Hotel*	P
Bar (ancillary to a hotel or restaurant)	P
Convenience Market / Specialty Food Market (ancillary to a hotel)	P
Restaurant (beer & wine or full bar)	P
Retail Store	P
Personal Services	P

*Hotel as defined in this PD includes hotel lobby, restaurants with option for full service bar, bars, and retail stores. It also allows conference rooms, banquet hall rooms, and service areas including prep kitchens that support those uses.

Exhibit B

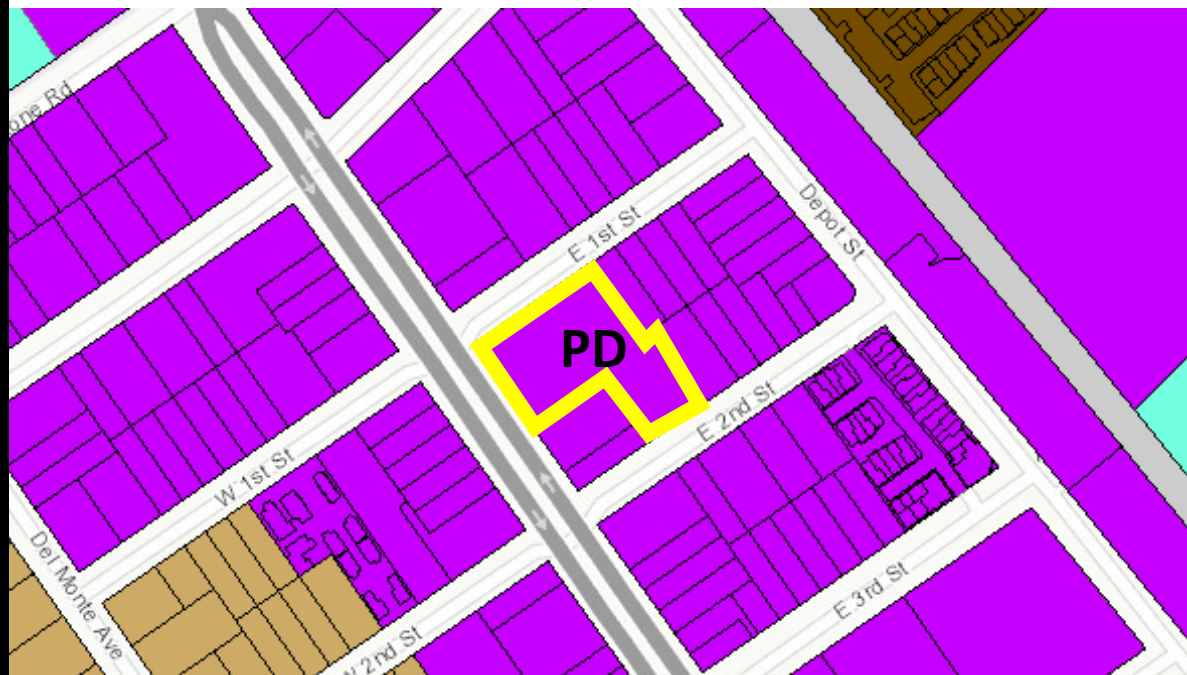
Zoning Map Amendment



Existing Zoning Designation – Commercial Business District (Mixed Use Downtown) with Ground Floor Overlay District.

Site Area 1.9 Acres

APN: 726-14-074



Proposed Zoning Designation – Commercial Business District (Mixed Use Downtown) with Ground Floor Overlay District and Planned Development

Site Area 1.9 Acres

APN: 726-14-074

RESOLUTION NO. 22-____

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MORGAN HILL RECOMMENDING APPROVAL OF A DESIGN PERMIT AMENDMENT (AAE2022-0004 AMENDING SR-16-01) TO EXPAND THE APPROVED GRANADA HOTEL BY ADDING A PARTIAL FIFTH-LEVEL WITH MINOR BUILDING FAÇADE MODIFICATIONS AND SITE IMPROVEMENTS ON THE 1.09 ACRE SITE LOCATED EAST OF MONTEREY ROAD BETWEEN 1ST STREET AND 2ND STREET AS IDENTIFIED BY ASSESSOR'S PARCEL NUMBER 726-14-074.

WHEREAS, a Design Permit (SR-16-01) was reviewed for compliance with the Downtown Specific Plan design guidelines by Planning Commission at its regular meeting of April 26, 2016, at which time the Planning Commission approved application SR-16-01: Monterey—Leal; and

WHEREAS, an amendment request was submitted by Leal Vineyards, Inc. to amend the approved Design Permit to allow for a partial fifth level that will accommodate 11 additional guestrooms, convert the fitness amenity to add an additional two additional guestrooms on the third level and minor façade modifications and enhanced entrances along Monterey Street and 1st Street; and

WHEREAS, the Planning Commission has reviewed and considered the Initial Study and Addendum prepared for the Project; and

WHEREAS, the Addendum prepared or the project is incorporated, by this reference into the Resolution as if fully set forth herein; and

WHEREAS, the City of Morgan Hill, Development Services Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that pursuant to CEQA Guidelines Section 15179, no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, and there is no new available information, which was not known and could not have been known at the time that the MEIR was certified. The project, as identified in the Addendum, would not have a significant effect on the environment beyond that which was evaluated in the Downtown Specific Plan Master Environmental Impact Report (MEIR). The document demonstrates that neither a subsequent EIR, nor a supplement to the MEIR is required given that the proposed modifications to the approved project would not trigger the applicable criteria set forth in the CEQA Guidelines Section 15162. The Addendum to the Downtown Specific Plan MEIR has been prepared pursuant to Title 14 Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards; and

WHEREAS, the proposed project is consistent with the development assumptions in the Downtown Specific Plan. The proposed project would not result in any new or more significant cumulative impacts than the previously approved project (disclosed in the Specific Plan MEIR). Mitigation measures adopted for the previously approved project where feasible and will be implemented by the proposed project; and

WHEREAS, testimony received at a duly-noticed public hearing, along with exhibits and drawings and other materials have been considered in the review process.

NOW, THEREFORE, THE MORGAN HILL PLANNING COMMISSION DOES RESOLVE AS FOLLOWS:

SECTION 1. The proposed project is consistent with the general plan and any applicable specific plan, area plan, or other design policies and regulations adopted by the City Council.

The partial fifth floor is pushed far back from Monterey Road and 2nd Street, central to the main building and mid-block. This reduces the massing of the structure and visibility of the fifth floor from the public right-of-way. The project is in conformance with General Plan Policies specifically, but not limited to CNF-14.1, CNF-14.2, CNF-14.3, and CNF-14.7 and the Economic Development Element. The hotel development supports the implementation of the DTSP by providing a new use that includes specialty retail, event space, and other services on the first floor along Monterey Road, and supports tourism downtown by adding rooms for short-term stays for visitors.

SECTION 2. The proposed project complies with all applicable provisions of the zoning code and municipal code.

The amendment as proposed is consistent with the intent of the zoning code which is consistent with the DTSP requirements in that it meets the Design Guidelines by utilizing quality design and materials, introduces glass, wood tile, and metal for architectural detailing, and creatively utilizes reveals to create interest and private space for balconies.

SECTION 3. The proposed project substantially complies with all applicable design standards and guidelines contained in the Design Review Handbook.

The Design Guidelines within Chapter 5 of the DTSP supersede the regulations within the Design Review Handbook. However, the amendment as proposed substantially complies with the applicable design standards and guidelines outlined in the design review handbook in that the building utilizes alternate colors and materials to identify the base of the building from the top of the building, includes deep reveals for architectural interest

and privacy for balconies, and maintains architectural details on all facades of the building.

SECTION 4. The proposed project has been reviewed in compliance with the California Environmental Quality Act (CEQA).

the City of Morgan Hill, Development Services Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that pursuant to CEQA Guidelines Section 15179, no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, and there is no new available information, which was not known and could not have been known at the time that the MEIR was certified. The project, as identified in the Addendum, would not have a significant effect on the environment beyond that which was evaluated in the Downtown Specific Plan Master Environmental Impact Report (MEIR). The document demonstrates that neither a subsequent EIR, nor a supplement to the MEIR is required given that the proposed modifications to the approved project would not trigger the applicable criteria set forth in the CEQA Guidelines Section 15162. The Addendum to the Downtown Specific Plan MEIR has been prepared pursuant to Title 14 Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards.

SECTION 5. The proposed development will not be detrimental to the public health, safety, or welfare or materially injurious to the properties or improvements in the vicinity.

The redevelopment of the project site is part of the vision for both the General Plan and DTSP. The project will be detrimental to the public health as analyzed in the DTSP MEIR. The project and circulation were designed to city standards and therefore will not be detrimental to public safety or welfare. The project will comply with SWIPP and Building Code requirements, and therefore it will not be materially injurious to the properties or improvements in the vicinity.

SECTION 6. The proposed project complies with all applicable design review criteria in Subsection H of Section 18.108.040.

While the proposed amendment meets the intent of the design review criteria, the Design Guidelines within Chapter 5 of the DTSP supersede the regulations within the municipal code.

SECTION 7. Pursuant to the authority set forth under Chapter 5, Design Guidelines of the Downtown Specific Plan and adopted by Ordinance No. 1956, New Series, the Planning Commission hereby finds the project to be in

substantial conformance with those Design Guidelines and approves of the Design Permit for the hotel project.

SECTION 8. The approved project shall be subject to the conditions as identified in the set of standard conditions attached hereto, as Exhibit "A", and by this reference incorporated herein.

PASSED AND ADOPTED THIS 11TH DAY OF OCTOBER 2022, AT A REGULAR MEETING OF THE PLANNING COMMISSION BY THE FOLLOWING VOTE:

AYES: COMMISSIONERS:

NOES: COMMISSIONERS:

ABSTAIN: COMMISSIONERS:

ABSENT: COMMISSIONERS:

ATTEST:

APPROVED:

JENNA LUNA, Deputy City Clerk

JOSEPH MUELLER, Chair

Date: _____

EXHIBIT "A"

STANDARD CONDITIONS

APPLICATION: AAE2022-0004: Monterey – Granada Hotel Expansion

THE FOLLOWING ARE STANDARD CONDITIONS OF APPROVAL THAT MUST BE MET PRIOR TO THE ISSUANCE OF BUILDING PERMITS AND/OR SITE DEVELOPMENT PERMITS EXCEPT AS MAY BE SPECIFIED IN THE CONDITIONS. THE APPROVAL REQUIREMENTS INCLUDE THESE REQUIREMENTS AND ANY SPECIAL CONDITIONS THAT ARE APPLIED THROUGH THE DEVELOPMENT APPROVAL PROCESS. APPLICANTS ARE REQUIRED TO SIGN THE RESOLUTION FORM INDICATING THEY UNDERSTAND AND AGREE TO IMPLEMENT THESE STANDARD CONDITIONS AND ANY SPECIAL CONDITIONS APPLIED TO THEIR PERMIT APPROVAL.

I. TIME LIMITS

The Design Review approval granted under this Resolution shall remain in effect for two years of approval date. Failure to obtain building permits within this term shall result in termination of approval unless an extension of time is granted with a showing of just cause prior to expiration date.

II. SITE DEVELOPMENT

- A. ENCROACHMENT PERMITS: The owner of designee shall seek encroachment permits through the Department of Engineering Department for the work performed within the City's right-of-way.

III. OTHER CONDITIONS

- A. This Design Review approval is limited to the plan set on file for AAE2022-0004: Monterey – Granada Hotel Expansion with the Community Development Department. The approved site and building plans must be in substantial conformance with these plans as determined by the Community Development Director.
- B. The project shall incorporate a valet station for drop-off /pick-up in a location convenient for all downtown visitors in addition to the hotel guests. The location of the station shall be approved by the Development Services Director.
- C. The project shall incorporate a mural to be displayed on the rear façade of the building. The artwork shall be reviewed and approved by the City Library, Culture, and Arts Commission.
- D. DEFENSE AND INDEMNITY: As part of, and in connection, with this application to the City of Morgan Hill, Applicant agrees to defend, indemnify, and hold harmless the City of Morgan Hill, its officers, agents, employees, officials and

representatives (Indemnitees) from and against any and all claims, actions, or proceedings arising from any suit for damages or for equitable or injunctive relief which is filed against City to attack, set aside, void or annul its approval of this application or any related decision, or the adoption of any environmental documents which relates to said approval. The City shall promptly notify the Applicant of any such claim, action or proceeding and the City shall cooperate fully in the defense thereof. In the event that Applicant is required to defend Indemnitees in connection with the proceeding, Indemnitees shall retain the right to approve (a) the counsel to so defend Indemnitees; (b) all significant decisions concerning the manner in which the defense is conducted; and (c) any and all settlements, which approval shall not be unreasonably withheld. This indemnification shall include, but is not limited to, (a) all pre-tender litigation costs incurred on behalf of the City, including City's attorney's fees and all other litigation costs and expenses, including expert witnesses, required to defend against any lawsuit brought as a result of City's approval or approvals; (b) reasonable internal City administrative costs, including but not limited to staff time and expense spent on the litigation, after tender is accepted; and (c) all damages, costs, expenses, attorney fees or expert witness fees that may be awarded to the prevailing party arising out of or in connection with the approval of the application or related decision. City may, in its sole discretion, participate in the defense of such action; but such participation shall not relieve Applicant of its obligations under this condition. The undersigned hereby represents that they are the Applicant or are fully empowered by the Applicant as their agent to agree to provide the indemnification, defense and hold harmless obligations, and the signature below represents the unconditional agreement by Applicant to be bound by such conditions.

- E. MITIGATION FEE ACT: Notice is hereby given that, pursuant to the Mitigation Fee Act, the City of Morgan Hill charges certain fees (as such term is defined in Government Code Section 66000) in connection with approval of your development project for the purpose of defraying all or a portion of the cost of public facilities related to your development project (Mitigation Fee Act Fees). These fees do not include fees for processing applications for governmental regulatory actions or approvals, fees collected under development agreements, or as a part of your application for development allocations under the City's Residential Development Control System. The Mitigation Fee Act Fees applying to your project are listed in the schedule of fees provide. Notice is also hereby given that you have the opportunity to protest the imposition of the Mitigation Fee Act Fees within 90 days of the approval of the approval or conditional approval of your development project and that the 90-day approval period in which you may protest has begun.
- F. Signed copies of Resolution: Submit two (2) signed copies of Resolution _____ to the Planning Division prior to issuance of building permits.

BUILDING DIVISION

- A. The owner or designee shall follow all applicable building codes.
- B. The fifth-floor addition and conversion 1. The fifth-floor addition and conversion of other previously submitted spaces to sleeping rooms will require a separate Building Permit application, documents, and plans. The existing Permit cannot be revised as this is a change in the previously permitted scope of work.
- C. This new proposed scope of work will need to be designed to comply with the current edition (2019) of the California Codes of Regulations as amended by the Morgan Hill Municipal Code Title 15 or the edition that is effect at time of Building Permit Application submittal. (2022 edition after January 1, 2023).
- D. The structural elements of the existing structure that will support the lateral or gravity loads of the addition will need to be analyzed for compliance with the current (2019) California Building Code or the edition that is effect at time of Building Permit Application submittal (2022 edition after January 1, 2023) as required by the California Existing Building Code. A Structural Analysis will need to be submitted at time of Building Permit application

FIRE DEPARTMENT

- A. The owner or designee shall follow all applicable fire safety codes.

ENGINEERING DEPARTMENTENGINEERING DEPARTMENT

- A.
- B. Project Water:
 - a. All project water shall be served from First Street.
 - b. Domestic water service with City standard backflow device and water meter with location to be determined by Engineering Department.
 - c. Irrigation service with City standard backflow device and water meter with location to be determined by Engineering Department.
 - d. Fire service with City standard backflow device with location to be determined by Engineering Department.
 - e. Fire Department Connection (FDC) location shall be approved by the Fire Department.
 - f. Existing Granada water service shall be maintained.
 - g. All retention/detention facilities shall be privately maintained by the owner.
- C. Obtain an encroachment permit from the Engineering Department t prior to commencement of any work in the City's right-of-way or in connection with the City's utility system.

GENERAL

- A. The applicant shall cause the construction of all public and private improvements in accordance with the latest City Standard Drawings and Specifications. (MHMC 12.02.090 A; 17.32.010 A)
- H. IMPACT FEE INCREASE-The City of Morgan Hill, pursuant to City Code Chapter 3.56 has established impact fees to finance the cost of improvements required by new development. City Code Chapter 3.56.050 provides for automatic annual (July 1st) adjustment of those fees in existence utilizing the Engineering News Record Index for the preceding twelve months. The City Engineering Department maintains historical records on the Engineering News Record Index. These records are available for inspection during normal business hours. (MHMC 3.56.010; 3.56.030; 3.56.050)

STORM DRAIN SYSTEM

- A. As required by the State Water Resources Control Board (SWRCB) Order No. 2009-0009-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) ONLINE at: <http://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp> and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with the General Permit. The SWPPP Manual shall follow the CASQA SWPPP template/format at <https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx> and shall be approved by Engineering Department Engineering. A Waste Discharger Identification (WDID) number will be issued to the construction site after the SWRCB receives and verifies the submitted ONLINE NOI information. The WIDI number and approved SWPPP Manual shall be provided to Engineering Department and the Building Department prior to any approval of grading activities (SWRCB NPDES General Permit CA000002).
- B. NPDES GENERAL PERMIT SITE SWPPP INSPECTIONS AND COMPLIANCE:
1. ALL project onsite and offsite construction activity shall have the site inspected by a qualified third party SWPPP Inspector (QSD or QSP).
 2. SWPPP Inspections shall occur weekly during the rainy season (September 15th thru May 1st).
 3. SWPPP Inspections shall occur bi-weekly during the non-rainy season.
 4. 48 hours prior to and following a forecasted rain event, SWPPP Inspections shall occur in addition to those of items 2 or 3 above.
 5. Per each of the inspection conditions 2, 3, or 4, the NPDES SWPPP Inspector shall certify in writing to the Building and Engineering Department if the site is in compliance or non-compliance with the NPDES General Permit for Stormwater, site SWPPP Manual, and Water Pollution

Control Drawings (per the CMH-SWPPP Inspection Check List to be provided by Engineering Department). QSD/QSP SWPPP Inspectors shall forward onsite and offsite information/certification to the Building (on-site private property issues) and Engineering Department (public right-of-way issues) inspectors respectively.

6. Prior to rain events, BMPs not in compliance will need to be corrected immediately.
7. Illicit discharges per the NPDES General Permit, non-compliance of tracking control, and inlet protection within the public right of way shall be address immediately.
8. Other non-compliance issues need to be addressed within a 24 hour period.
9. Non-compliance issues which have been corrected shall be verified by NPDES SWPPP Inspector by a follow up inspection.

C. Current Federal Emergency Management Agency Flood Insurance Maps show the site is located in:

1. In all other zones (AE, AH, A99, V, VE), the lowest floor shall be elevated at least one foot above the base flood elevation. (MHMC 18.42.160 C; CMH Design Standards and Standard Details for Construction)

IV. OTHER CONDITIONS

- A. The applicant shall cause the design and construction required to underground all electric, gas, Cable TV, and communication lines within the development. Such design and construction shall be to the satisfaction of the affected utilities and the Director of Engineering Department. (MHMC 17.32.020 E.1)
- B. Landscaping and irrigation systems serving common areas that are required to be installed in the public right-of-way on the perimeter of this tract area shall be continuously maintained by the Homeowner's Association/Owner.

WATER QUALITY

A. State Water Resources Control Board Post Construction Requirements (PCRs): Project shall comply with the California Regional Water Quality Control Board Central Coast Region Resolution No. R3-2013-0032 as documented by the **Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements** (developed from Resolution No. R-2013-0032 Attachment 1 and 2 at: http://www.waterboards.ca.gov/centralcoast/water_issues/programs/stormwater/docs/lid/lid_hydromod_charette_index.shtml). A copy of the guidance manual can be obtained through the Department of Engineering Department internet site.

- a. Project shall provide Stormwater Control Plan Checklist and applicable calculations per the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements.
- b. Project shall meet the applicable requirements of the Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements:
 - i. Performance Requirement 1: Site Design and Runoff Reduction

- ii. Performance Requirement 2: Water Quality Treatment
 - iii. Performance Requirement 3: Runoff Retention
 - iv. Performance Requirement 4: Peak Management
 - c. **Submit/re-submit site review plans (SR) to include requirements of item “a” and “b” above.**
- B. Design Standards Applicable to All Categories.

- a. **Peak Storm Water Runoff Discharge Rates** - Post-development peak storm water runoff discharge rates shall not exceed the estimated pre development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion. Note: the project may be required to **retain** stormwater runoff as part of resolution R3-2013-0032 prior to releasing discharge rates at pre development flows.
- b. **Minimize Storm Water Pollutants of Concern** - Storm water runoff from a site has the potential to contribute oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the storm water conveyance system. The development must be designed so as to minimize, to the maximum extent practicable, the introduction of pollutants of concern that may result in significant impacts, generated from site runoff of directly connected impervious areas (DCIA), to the storm water conveyance system as approved by the building official. Pollutants of concern consist of any pollutants that exhibit one or more of the following characteristics: current loadings or historic deposits of the pollutant are impacting the beneficial uses of a receiving water, elevated levels of the pollutant are found in sediments of a receiving water and/or have the potential to bio-accumulate in organisms therein, or the detectable inputs of the pollutant are at concentrations or loads considered potentially toxic to humans and/or flora and fauna.

In meeting this specific requirement, “minimization of the pollutants of concern” will require the incorporation of a BMP or combination of BMPs best suited to maximize the reduction of pollutant loadings in that runoff to the Maximum Extent Practicable. Those BMPs best suited for that purpose are those listed in:

- i. [California Stormwater Quality Association \(CASQA\) Handbook: BMPs for New Development and Redevelopment](#)
- ii. [Bay Area Stormwater Management Agencies Association \(BASMAA\) Design Guidance Manual for Stormwater Quality Protection: Start at the Source 1999](#)

Other available sources of BMPs

- iii. [California Storm Water Best Management Practices Handbooks](#)

iv. [Caltrans Storm Water Quality Handbook: Planning and Design Staff Guide](#)

- c. **Provide Storm Drain System Stenciling and Signage** - Storm drain stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets. The stencil contains a brief statement that prohibits the dumping of improper materials into the storm water conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. All storm drain inlets and catch basins within the project area must be stenciled with prohibitive language (such as: "NO DUMPING – DRAINS TO CREEK") and/or graphical icons to discourage illegal dumping. Signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, must be posted at public access points along channels and creeks within the project area. Legibility of stencils and signs must be maintained.
- d. **Properly Design Outdoor Material Storage Areas** - Outdoor material storage areas refer to storage areas or storage facilities solely for the storage of materials. Improper storage of materials outdoors may provide an opportunity for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the storm water conveyance system. Where proposed project plans include outdoor areas for storage of materials that may contribute pollutants to the storm water conveyance system, the following Structural or Treatment BMPs are required:
- i. Materials with the potential to contaminate storm water must be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the storm water conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.
 - ii. The storage area must be paved and sufficiently impervious to contain leaks and spills.
 - iii. The storage area must have a roof or awning to minimize collection of storm water within the secondary containment area.
- e. **Properly Design Trash Storage Areas** - A trash storage area refers to an area where a trash receptacle or receptacles (dumpsters) are located for use as a repository for solid wastes. Loose trash and debris can be easily transported by the forces of water or wind into nearby storm drain inlets, channels, and/or creeks. All trash container areas must meet the following Structural or Treatment Control BMP requirements (individual single-family residences are exempt from these requirements):
- i. Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s).
 - ii. Trash container areas must be screened or walled to prevent off-site transport of trash.
 - iii. Shall have covered roof.

- iv. Shall have a sanitary connection with approved guard cover Engineering Department.
- f. **Design Standards for Structural or Treatment Control BMPs** - The post-construction treatment control BMPs shall incorporate, at a minimum, either a volumetric or flow based treatment control design standard, or both, as identified below to mitigate (infiltrate, filter or treat) storm water runoff:
 - i. Volumetric Treatment Control BMP
 - 1. The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
 - 2. The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (2003); or
 - 3. The volume of runoff produced from a historical-record based reference 24-hour rainfall criterion for “treatment” that achieves approximately the same reduction in pollutant loads achieved by the 85th percentile 24-hour runoff event.
 - ii. Flow Based Treatment Control BMP
 - 1. The flow of runoff produced from a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the area; or
 - 2. The flow of runoff produced from a rain event that will result in treatment of the same portion of runoff as treated using volumetric standards above.
- g. **Stormwater Runoff Management Plan (SWRMP) required** - The stormwater runoff management plan shall include sufficient information to evaluate the environmental characteristics of affected areas, the potential impacts of the proposed development on water resources, and the effectiveness and acceptability of measures (post construction BMPs) proposed for managing stormwater runoff.
 - i. The stormwater runoff management plan shall be prepared under the direction of a professional civil engineer registered in the State of California. The responsible professional civil engineer shall stamp and sign the approved stormwater runoff management plan.
 - ii. The chief engineer or designee may require a developer to provide a signed certification from the civil engineer responsible for preparing the stormwater runoff management plan that all stormwater best management practices have been designed to meet the requirements of this chapter.

- iii. Each certifying civil engineer shall establish to the city's satisfaction that such person has been trained on the design of stormwater quality best management practices not more than three years prior to the certification signature date.
- iv. Qualifying training shall be conducted by an organization with stormwater quality management expertise, such as a university, the Bay Area Stormwater Management Agencies Association, the American Society of Civil Engineers, the American Engineering Department Association, or the California Water Environment Association.

h. Stormwater BMP operation, maintenance, and replacement responsibility

- i. All on-site stormwater management facilities shall be operated and maintained in good condition and promptly repaired/replaced by the property owner(s), an owners' or homeowners' association or other legal entity approved by the city.
- ii. Any repairs or restoration/replacement and maintenance shall be in accordance with city-approved plans.
- iii. The property owner(s) shall develop a maintenance schedule for the life of any stormwater management facility and shall describe the maintenance to be completed, the time period for completion, and who shall perform the maintenance. This maintenance schedule shall be included with the approved stormwater runoff management plan.

i. Stormwater BMP operation and Maintenance Agreement (SWBOMA)

required - Improper maintenance is one of the most common reasons why water quality controls will not function as designed or which may cause the system to fail entirely. It is important to consider who will be responsible for maintenance of a permanent BMP, and what equipment is required to perform the maintenance properly.

- i. Prior to the issuance of any building permit requiring stormwater management BMPs, the owner(s) of the site shall enter into a formal written stormwater BMP operation and maintenance agreement with the city. The city shall record this agreement, against the property or properties involved, with the County of Santa Clara and it shall be binding on all subsequent owners of land served by the storm water management treatment BMPs (City standard STORMWATER BMP OPERATION AND MAINTENANCE AGREEMENT to be provided by Engineering Department Engineering).
- ii. The stormwater BMP operation and maintenance agreement shall require that the BMPs not be modified and BMP maintenance activities not alter the designed function of the facility from its original design unless approved by the city prior to the commencement of the proposed modification or maintenance activity.
- iii. The stormwater BMP operation and maintenance agreement shall provide that in the event that maintenance or repair is neglected, or the stormwater management facility becomes a danger to public health or

safety, the city shall have the authority to perform maintenance and/or repair work and to recover the costs from the owner.

j. **Stormwater BMP inspection responsibility**

- i. The property owner(s) shall be responsible for having all stormwater management facilities inspected for condition and function by a **Registered Civil Engineer (RCE)**.
- ii. Unless otherwise required by the chief engineer or designee, stormwater facility inspections shall be done at least twice per year (April 15th and September 15th) by the RCE. Written records shall be kept of all inspections and shall include, at minimum, the following information:
 1. Site address;
 2. Date and time of inspection;
 3. Name of the person conducting the inspection;
 4. List of stormwater facilities inspected;
 5. Condition of each stormwater facility inspected;
 6. Description of any needed maintenance or repairs; and
 7. As applicable, the need for site reinspection.
- iii. Upon completion of each inspection, an inspection report shall be submitted to Engineering Department Engineering.

k. **Records of maintenance and inspection activities** - On or before April 15th and September 15th of each year, the party responsible for the operation and maintenance of on-site stormwater management facilities under the BMP operation and maintenance agreement shall provide the chief engineer or designee with records of all inspections, maintenance, and repairs.

l. **Annual Certification of SWRMP** – On or before September 30th of each year a Registered Civil Engineer (RCE) shall provide written certification that the developments stormwater quality design standards are properly maintained and functioning as required by the SWRMP.

C. Provisions (if) Applicable to Individual Priority Project Categories

a. **Restaurants**

- i. Properly Design Equipment/Accessory Wash Areas - The activity of outdoor equipment/accessory washing/steam cleaning has the potential to contribute metals, oil and grease, solvents, phosphates, and suspended solids to the storm water conveyance system. Include in the project plans an area for the washing/steam cleaning of equipment and accessories. This area must be:
 1. Self-contained, equipped with a grease trap, and properly connected to a sanitary sewer.
 2. If the wash area is to be located outdoors, it must be covered, paved, have secondary containment, and be

connected to the sanitary sewer or other appropriately permitted disposal facility.

- b. **Properly Design Loading/Unloading Dock Areas** - Loading/unloading dock areas have the potential for material spills to be quickly transported to the storm water conveyance system. To minimize this potential, the following design criteria are required:

- i. Cover loading dock areas or design drainage to minimize run-on and runoff of storm water.
- ii. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

c. **Parking Lots**

- i. Properly Design Parking Area - Parking lots contain pollutants such as heavy metals, oil and grease, and polycyclic aromatic hydrocarbons that are deposited on parking lot surfaces by motor-vehicles. These pollutants are directly transported to surface waters. To minimize the offsite transport of pollutants, the following design criteria are required:
 1. Reduce impervious land coverage of parking areas.
 2. Infiltrate or treat runoff.
- ii. Properly Design To Limit Oil Contamination and Perform Maintenance - Parking lots may accumulate oil, grease, and water insoluble hydrocarbons from vehicle drippings and engine system leaks:
 1. Treat to remove oil and petroleum hydrocarbons at parking lots that are heavily used (e.g. fast food outlets, lots with 25 or more parking spaces, sports event parking lots, shopping malls, grocery stores, discount warehouse stores).
 2. Ensure adequate operation and maintenance of treatment systems particularly sludge and oil removal, and system fouling and plugging prevention control.

PRETREATMENT

- A. Owner or designee shall apply for Industrial Wastewater Discharge Permit with the City of Gilroy Pretreatment.

General:

1. All nonresidential wastewater is subject to compliance with SCRWA Ordinance 13-1. Industrial Wastewater falls into 4 local permitting categories. An industrial waste discharge permit is required from the South County Regional Wastewater Authority, Chemical Control Program (Pretreatment) prior to any industrial wastewater discharge.. Industrial waste water (non-domestic) to the Sanitary Sewer System. The permit shall be maintained and renewed as required.

Construction Requirements:

1. All new industrial buildings shall have a sewer test manhole installed on the property (see City Specifications) and in an area that can be readily accessed by an inspector, (minimum of one for each building). For tenants with industrial waste treatment systems a separate sewer test manhole shall be required.
2. Kitchens/Cooking facilities: All cooking and food preparation facilities shall be provided with a grease trap or clarifier, sized for the anticipated flows. No garbage disposals are allowed. See Chemical Control Grease Interceptor Policy Documents for sizing and type. Separate Plan review and permit required. Submit plans and obtain permit from Chemical Control.
3. Trash enclosures shall be covered by a non-combustible roof. Plans show roofed trash enclosures. If trash enclosures will be cleaned by periodic washings, then the trash enclosure may be equipped with features to allow washing (e.g. spilled liquids & food wastes, restaurant floor mats). Such features include: 1) sloped concrete floor, 2) Vandal- Proof floor drain, 3) solids/grease trap connected to plumbing to sanitary sewer, 4) a secured water source, and 5) lockable doors to the trash enclosure. No storm drain inlets adjacent to trash enclosure. Contact Jonathan Crick at 408-846-0436 if additional information is required.
4. The swimming pool filtration system shall drain wastewater to the sanitary sewer system through an approved connection. Depending on the pool filtration system installed, a solids trap may be required.

Use and Operations:

5. Vehicle Washing or other washing operations that may generate oily residues shall be drained to an oil water separator. Rainwater is prohibited from entering the separator.

CHEMICAL CONTROL PROGRAM
POLICIES AND PROCEDURES
Grease Interceptors for commercial cooking

Policy:

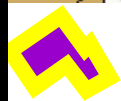
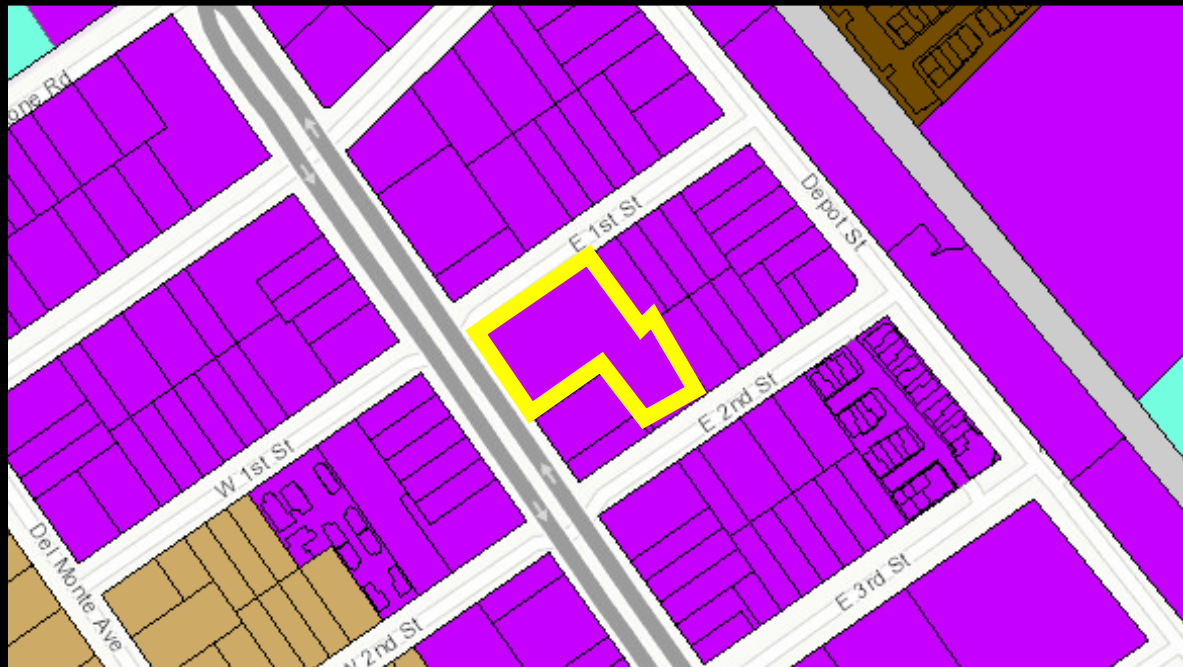
Pursuant to SCRWA Ordinance 13-01 restaurants and other establishments that handle, prepare or serve food have the potential to discharge grease and solids to the Sanitary Sewage System. All such operations shall have a Grease Interceptor installed to serve that business. No garbage disposals or food grinders are allowed. Food waste is to be caught in sink screens and placed into the trash. Installation of the interceptor shall meet the Uniform Plumbing Code and meet standards approved by the Chemical Control Program. Tallow tanks are to be maintained clean and orderly and shall be located in covered trash enclosure or a UL listed tank inside of the facility. Under no circumstance can equipment be cleaned outdoors unless an approved waste water collection and disposal method is used.

Grease interceptors may be of two kinds, one installed inside the food service area commonly called a grease trap, or a large unit installed outside, underground, that is commonly called a clarifier. The UPC Section 1014.0 provides standards for the installation of grease traps and interceptors. Small under counter units are suitable for small food preparation, handling or serving establishments (seating under 50). The size of unit is determined by the number of fixtures (drains) connected to it. For large restaurants or fast food facilities, an underground, outdoor unit is required. In this case all kitchen drains including floor sinks and mop sinks are plumbed to the grease interceptor. Food prep sinks and domestic sewage shall not be plumbed into the interceptor. In any facility required to have an interceptor, the dishwasher shall be plumbed to the interceptor as a fixture, but the wash temperature cannot exceed 140 degrees.

ENVIRONMENTAL SERVICES

- A. Project Shall comply with the Morgan Hill Municipal Code (MHMC) 18.148 – Water Conservation and MHMC 18.64 Landscaping

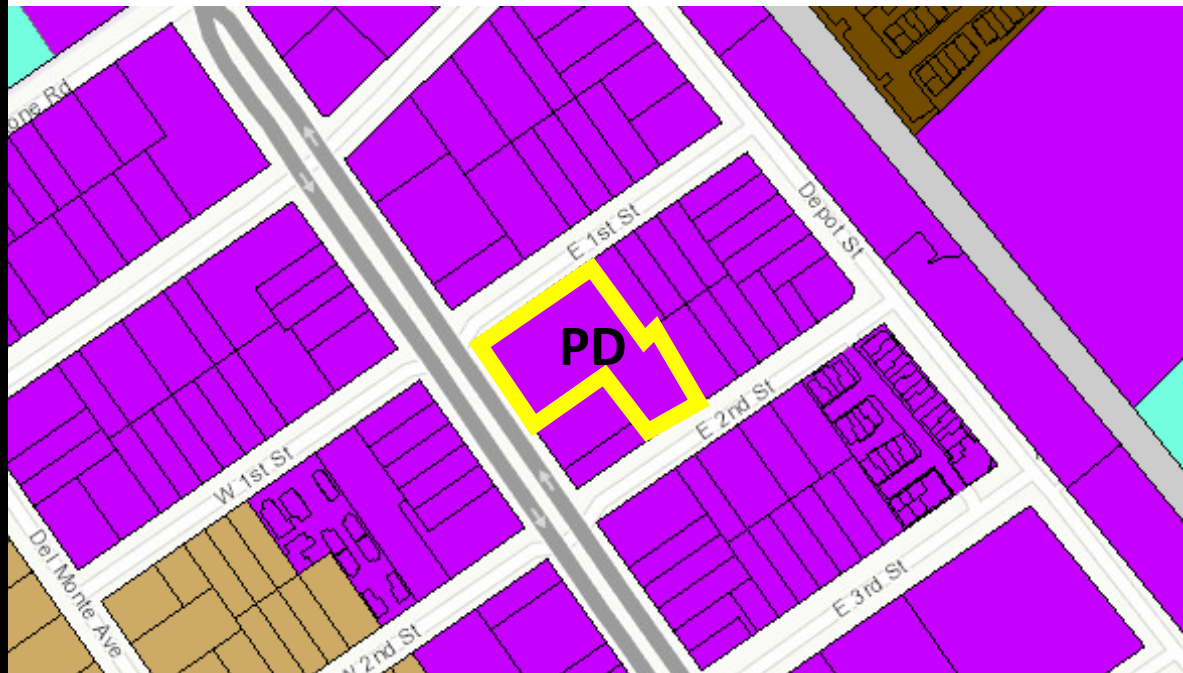
Exhibit for
Zoning Map Amendment



Existing Zoning Designation – Commercial Business District (Mixed Use Downtown) with Ground Floor Overlay District.

Site Area 1.9 Acres

APN: 726-14-074



Proposed Zoning Designation – Commercial Business District (Mixed Use Downtown) with Ground Floor Overlay District and Planned Development

Site Area 1.9 Acres

APN: 726-14-074



ARCHITECTURE CONTENT

A0-0	TITLE SHEET
A0-1	VICINITY MAP
A0-2	AERIAL VIEW
A0-3	SITE CONTEXT
A0-4	PROJECT DATA
A1-0	SITE PLAN
A2-0	BUILDING ELEVATIONS
A3-0	BUILDING PLANS
A4-0	BUILDING SECTIONS
A5-0	GUEST ROOMS
A6-0	CONCEPTUAL PERSPECTIVES
A7-0	TRASH & REC. ENCLOSURE
A8-0	MATERIAL BOARD
A9-0	CONCEPT. SITE LIGHTING PLAN

LANDSCAPE CONTENT

L1.0	SITE LANDSCAPE/MATERIAL PLAN
L1.1	LANDSCAPE/MATERIALS PLAN LEVELS 2 & 3
L2.0	SITE PLANTING PLAN
L2.1	PLANTING PLAN - LEVEL 2& 3

CIVIL CONTENT

C1	SITE PLAN
C2	CONCEPTUAL GRADING PLAN
C3	CONCEPTUAL UTILITY PLAN



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TITLE SHEET

A0-0



CALLOUT LEGEND

01 PROJECT SITE



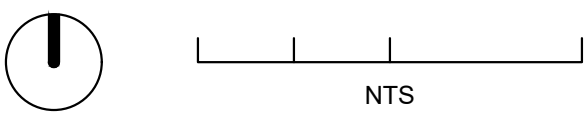
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VICINITY MAP

A0-1



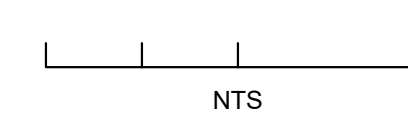
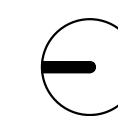
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SITE AERIAL VIEW

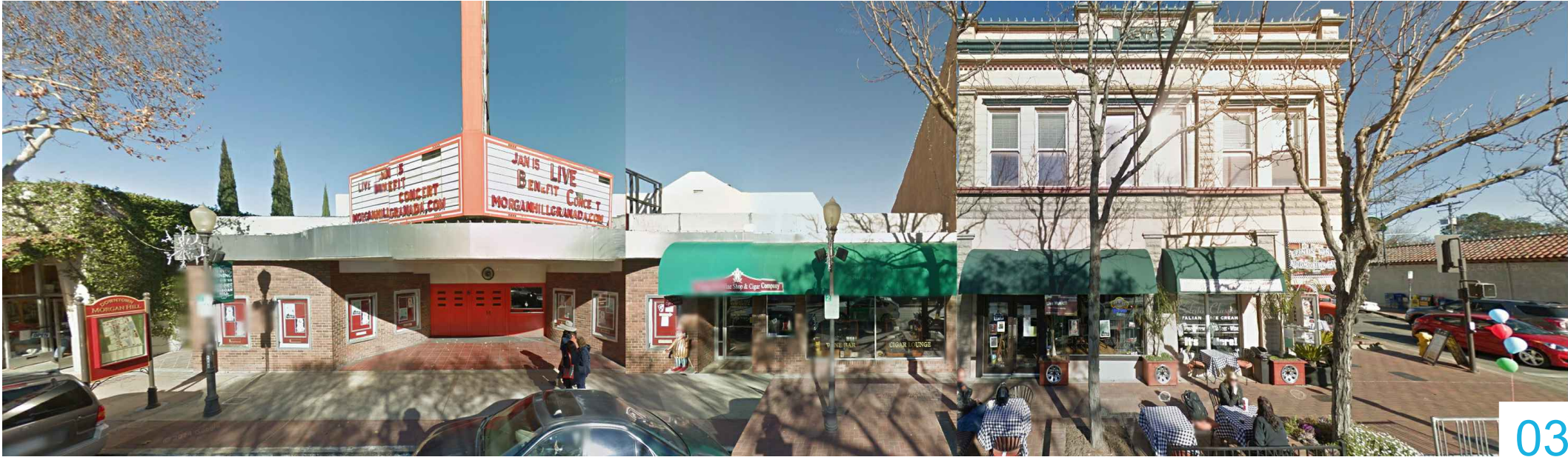
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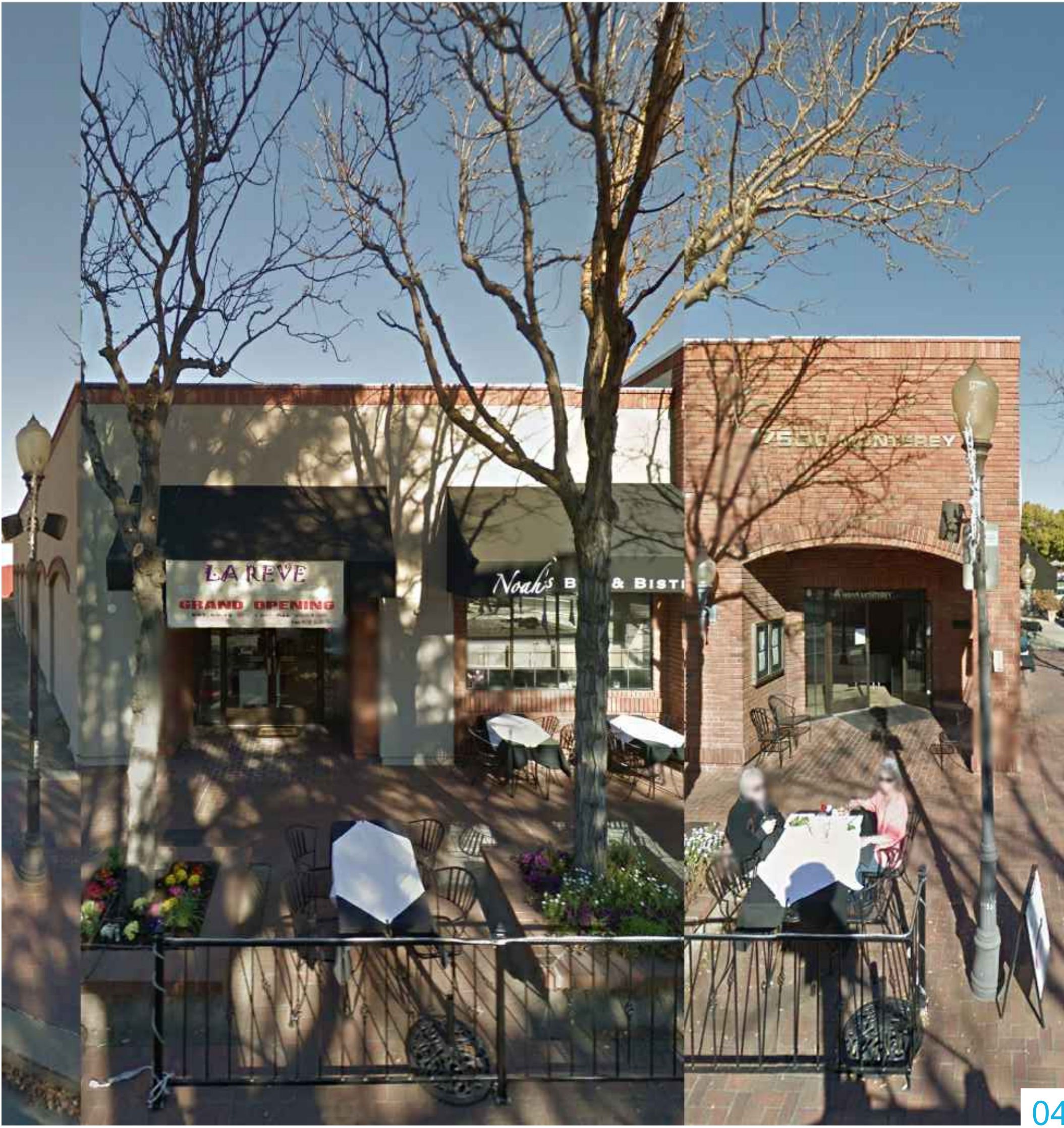
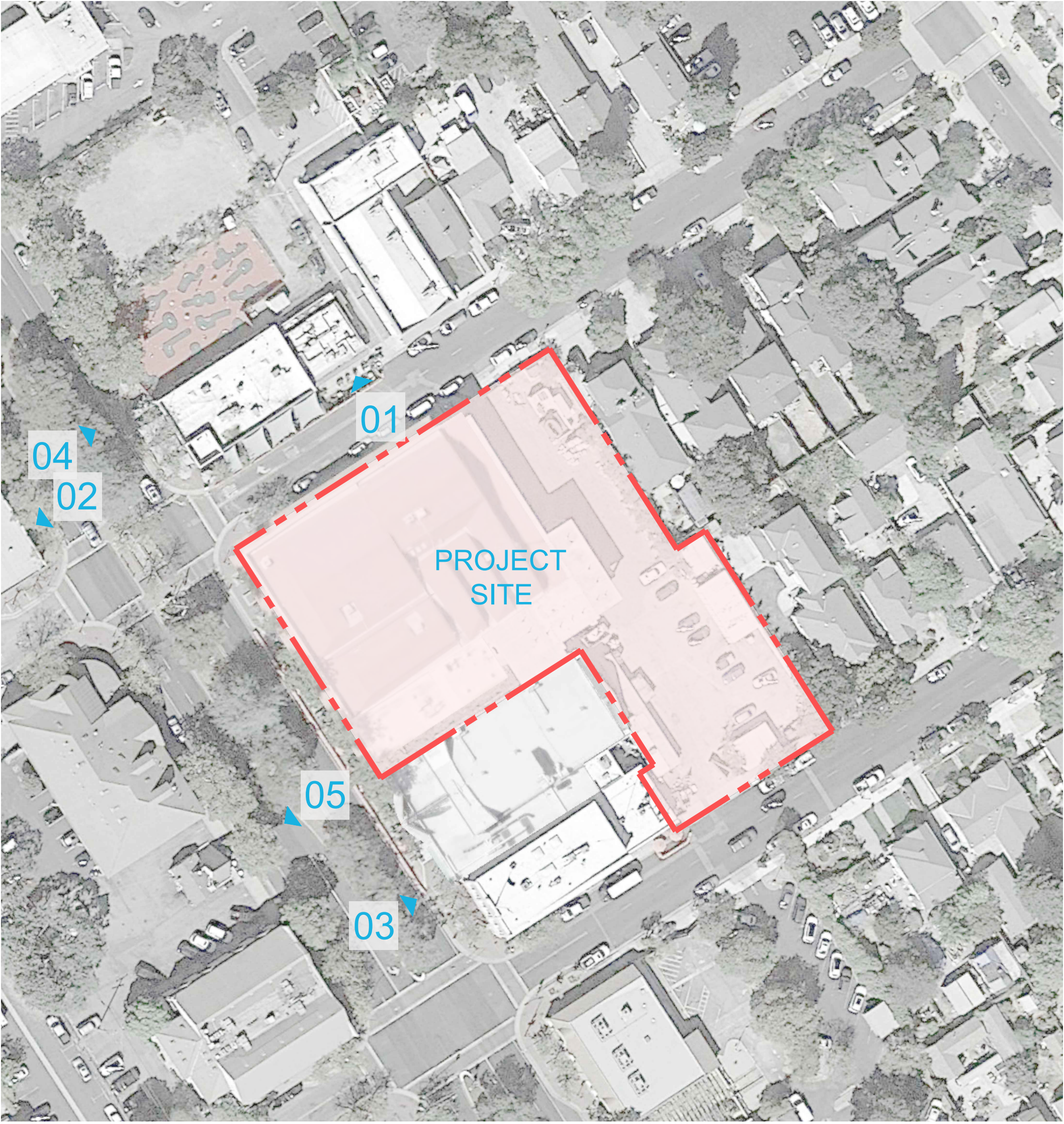
01



02



03



04



05

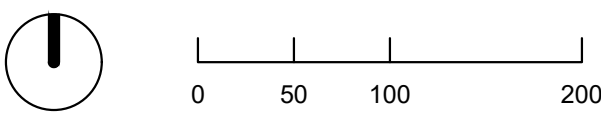


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SITE CONTEXT

A0-3

Zoning CBD - Central Business District - Downtown Commercial

Site Information	
	Area S.F.
Site Area	(1.09 AC) 47,582

Lot Coverage:	
	Area S.F.
Total Building Footprint	20,677
% Coverage	43%

F.A.R. - Permitted (2.25)			
Floor Area Ratio	Site Area	Total Floor Area	F.A.R.
Project Site	47,582	75,660	1.59
Density:	No Minimum. No Specified Max.		

Parking Required	
* Total Required per Resolution No. 6640	0 Spaces
Parking Provided	
Parking Stalls	15 Spaces

Zoning Compliance			
Project Setbacks	Requirement	Conforming?	Remarks
Front Façade Setback	0'-10'	Y	
Side Yard Setback	0'	Y	
Rear Setback	0'	Y	
Parking Setbacks			
Street Setback	15'	Y	Distance from PL to first stall only
Side Yard Setback	5'	Y	
Rear Setback	5'	Y	

Building S.F. / Floor	Gross S.F.
First Floor	20,677
Second Floor	18,135
Third Floor	15,127
Fourth Floor	14,526
Fifth Floor	7,195
Total Gross Building Area	75,660

Floor Area Breakdown	Gross S.F.
BOH Functions	10,275
Market	3,860
Flower Shop	350
Restaurant	2,400
Bar	3,615
Banquet Hall	8,830
Common Areas	6,030
Hotel Rooms	27,900
Circulation (Corridors)	8,490
Circulation (Elevators / Stairs)	1,800
Service (Mech., Elec.)	2,110
Total	75,660
Other	
Outdoor Patio	2,700
Paseo / Courtyard & event Space	4,000
Pool Deck	4,600
Third Floor Outdoor Lounge Deck	3,330
Parking Area	11,000

GUESTROOM MATRIX						
TYPE		Approved Keys		Proposed Additional Keys		Total Proposed Keys
King		41	68.3%	8	11.0%	49 67.1%
King Deluxe		4	6.7%	1	1.4%	5 6.8%
King Suite		4	6.7%	0	0.0%	4 5.5%
Double Queen		7	11.7%	3	4.1%	10 13.7%
ACC.	King	1	1.7%	1	1.4%	2 2.7%
	King Deluxe	1	1.7%	0	0.0%	1 1.4%
	King Suite	1	1.7%	0	0.0%	1 1.4%
	Double Queen	1	1.7%	0	0.0%	1 1.4%
Total		60	100%	13		73 100%

Proposed Addendum to Resolution No. 16-28 and Application UP-16-01

- Add partial 5th level with additional 11 guestrooms
- Add to 2 guestrooms on the 3rd level in-lieu of fitness amenity
- Minor façade modification at the corner of Monterey and 1st
- Minor modification to building activation and entries along Monterey

Updated Building Description
4 & 5-story Mixed-Use Hotel with 73 guestrooms, pool, banquet hall, and ground floor retail spaces.
[4-story along Monterey and 1st and 5-story at interior courtyard]



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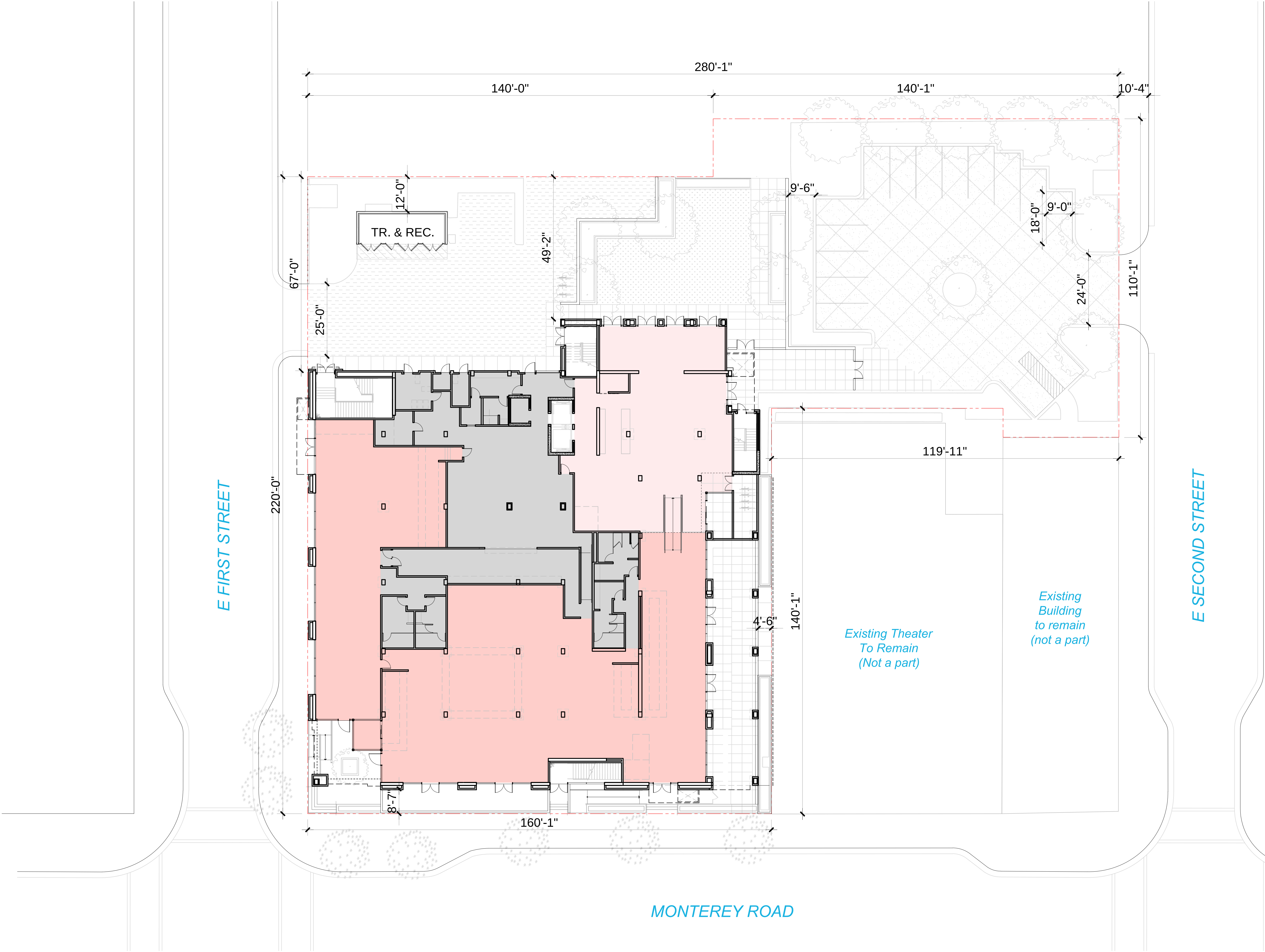
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PROJECT DATA

A0-4



PROJECT SUMMARY

17490 MONTEREY ROAD
MORGAN HILL, CA 95037

ZONING: CBD-GF
CENTRAL BUSINESS DISTRICT - DOWNTOWN COMMERCIAL

AREA: 1.09 ACRES (47,582 SF)
LOT COVERAGE: 43%
F.A.R.: 1.59
GUEST ROOMS: 73 KEYS

KEY MATRIX

TYPE	EXIST. KEYS	+ ADD. KEYS	= NEW TOTAL
KING:	41 (68.3%)	+ 8	= 49 (67%)
KING DELUXE:	4 (6.66%)	+ 1	= 5 (68%)
KING SUITE:	4 (6.66%)	+ 0	= 4 (5.4%)
DOUBLE QUEEN:	7 (11.7%)	+ 3	= 10 (13%)
ADA KING:	1 (1.7%)	+ 1	= 2 (2.7%)
ADA KING DELUXE:	1 (1.7%)	+ 0	= 1 (1.3%)
ADA KING SUITE:	1 (1.7%)	+ 0	= 1 (1.3%)
ADA DOUBLE QUEEN:	1 (1.7%)	+ 0	= 1 (1.3%)
TOTAL:	60 (100%)	+ 13	= 73 KEYS

PARKING
REQUIRED: 0 SPACES
PROVIDED: 15 SPACES

GENERAL NOTES

- 01 SEE CIVIL DRAWINGS FOR ADDITIONAL CIVIL INFORMATION
- 02 SEE LANDSCAPE DRAWINGS FOR ADDITIONAL LANDSCAPE INFORMATION

COLOR LEGEND

- 01 RESTAURANT AND BAR
- 02 HOTEL AREAS
- 03 BOH



CALLOUT LEGEND

- 01 STUCCO BODY 01
- 02 STUCCO BODY 02
- 03 BRICK VENEER
- 04 WOOD-LOOK PORCELAIN TILE
- 05 ALUMINUM BALCONY DOOR
- 06 ALUMINUM WINDOW
- 07 STOREFRONT
- 08 METAL FINISH
- 09 METAL FINISH CANOPY
- 10 GLASS GUARDRAIL
- 11 CABLE GUARDRAIL
- 12 FIXED WOOD SCREEN
- 13 WOOD-LOOK LOUVERS

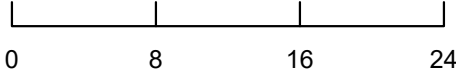


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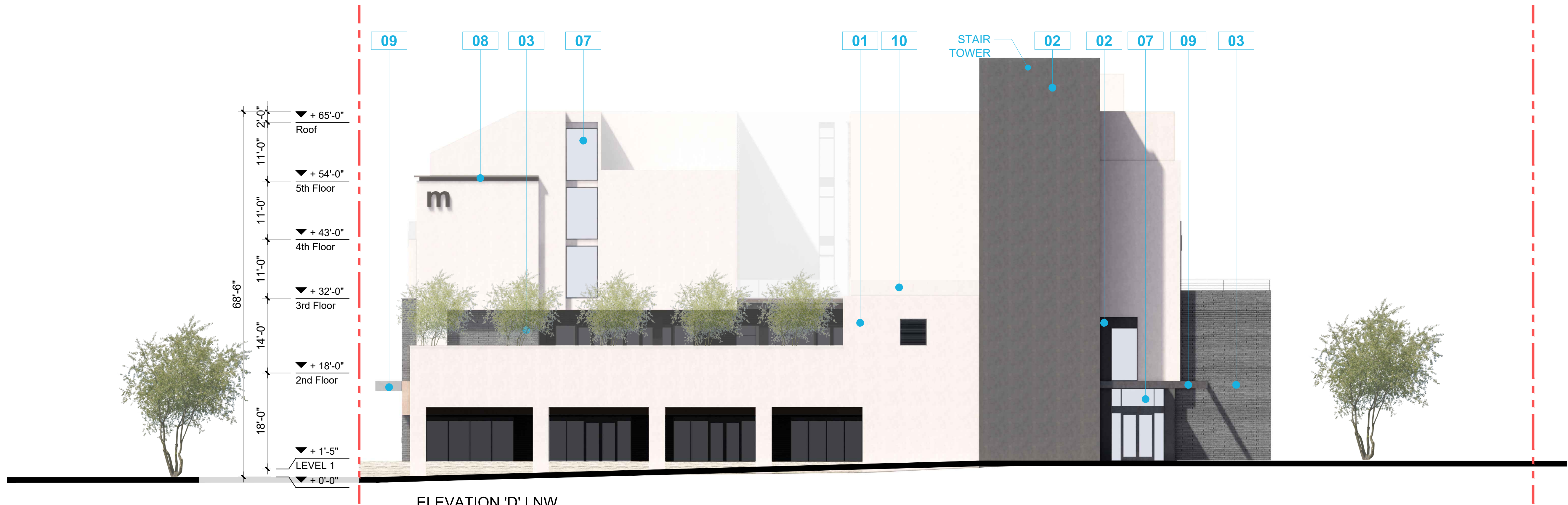


BUILDING ELEVATIONS
SW & NW

A2-0



ELEVATION 'C' | SW



ELEVATION 'D' | NW

CALLOUT LEGEND

- 01 STUCCO BODY 01
- 02 STUCCO BODY 02
- 03 BRICK VENEER
- 04 WOOD-LOOK PORCELAIN TILE
- 05 ALUMINUM BALCONY DOOR
- 06 ALUMINUM WINDOW
- 07 STOREFRONT
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- 12 FIXED WOOD SCREEN
- 13 WOOD-LOOK LOUVERS

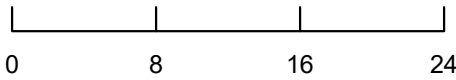


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BUILDING ELEVATIONS
SE & NE

A2-1



CALLOUT LEGEND

- 01 MARKET HALL
- 02 HOTEL BAR
- 03 MARKET HALL PATIO
- 04 HOTEL BAR PATIO
- 05 HOTEL LOBBY
- 06 LARGE FLEX SPACE
- 07 SMALL FLEX SPACE
- 08 FLORAL
- 09 BAR
- 10 SUSHI BAR
- 11 KITCHEN
- 12 SERVICE/EXPO

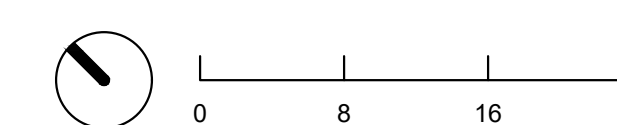


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300 Maranatha Drive
Hollister, CA

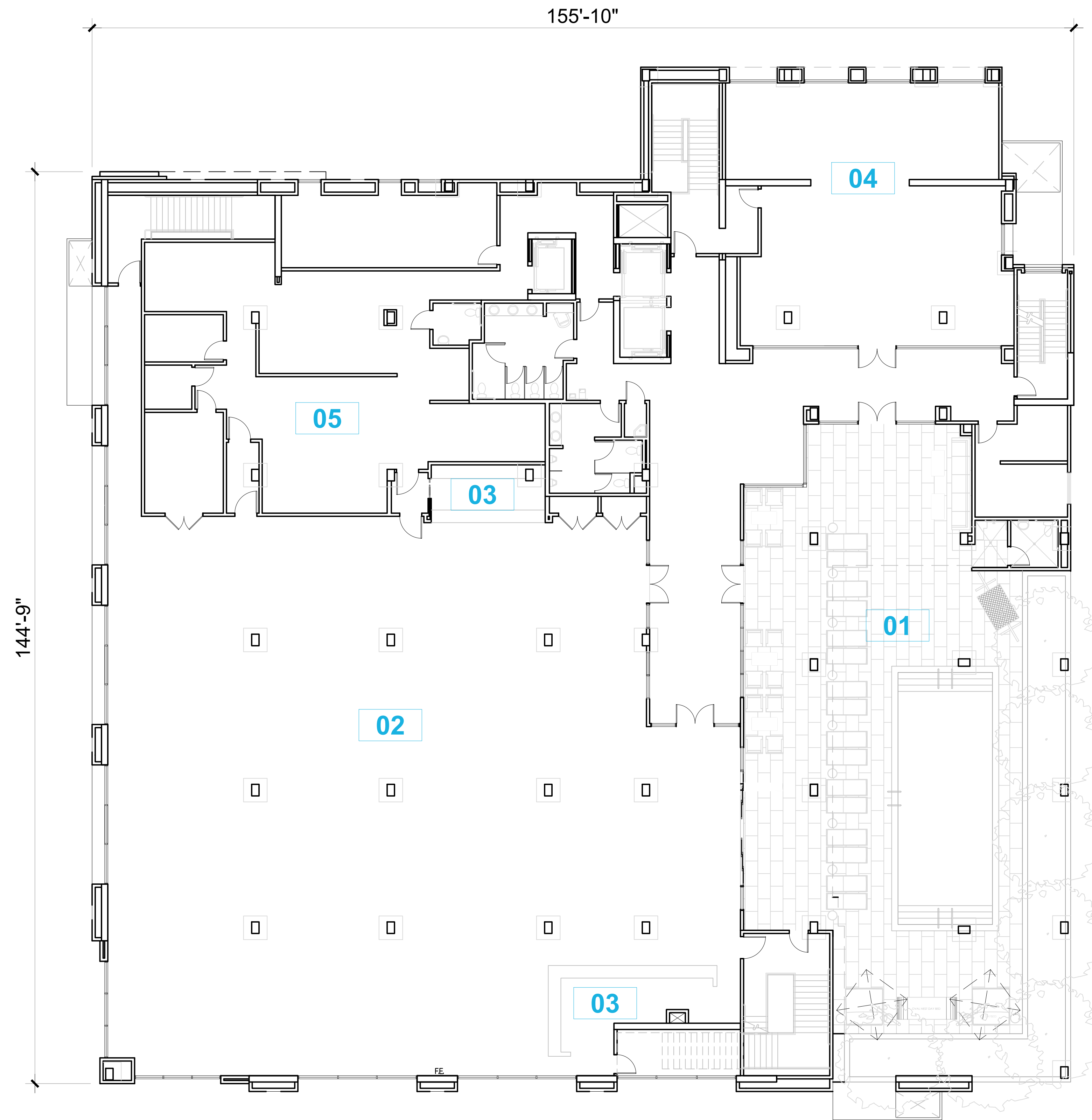
hotel mohi
MORGAN HILL, CA # 2015-0688

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JULY 29, 2022



BUILDING PLANS
LEVEL 1

A3-1



CALLOUT LEGEND

- 01 AMENITY POOL DECK
- 02 BANQUET HALL
- 03 BAR
- 04 FLEX SPACE
- 05 KITCHEN / BOH

BUILDING PLANS LEVEL 2

A3-2



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CALLOUT LEGEND

01 LOUNGE COURTYARD

BUILDING PLANS
LEVEL 3

A3-3

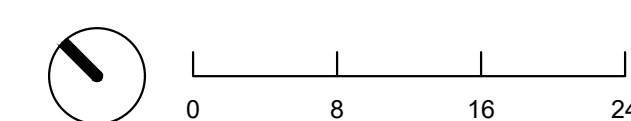


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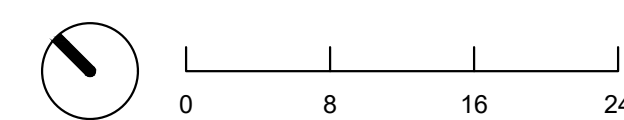
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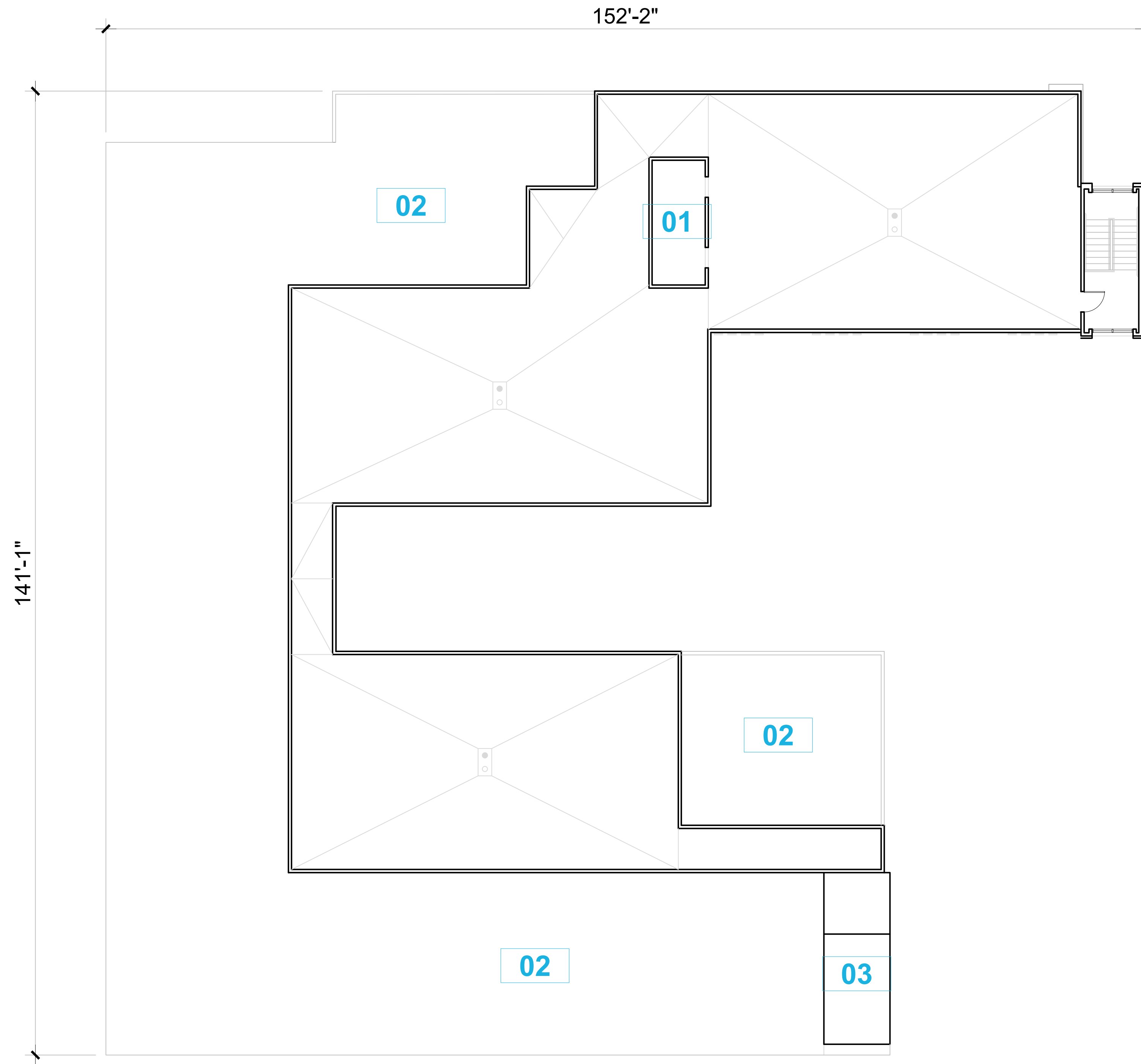
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BUILDING PLANS
LEVEL 4

A3-4





CALLOUT LEGEND

- 01 ELEVATOR OVERRUN
- 02 ROOF BELOW
- 03 STAIR OVERRUN

BUILDING PLANS
ROOF

A3-6



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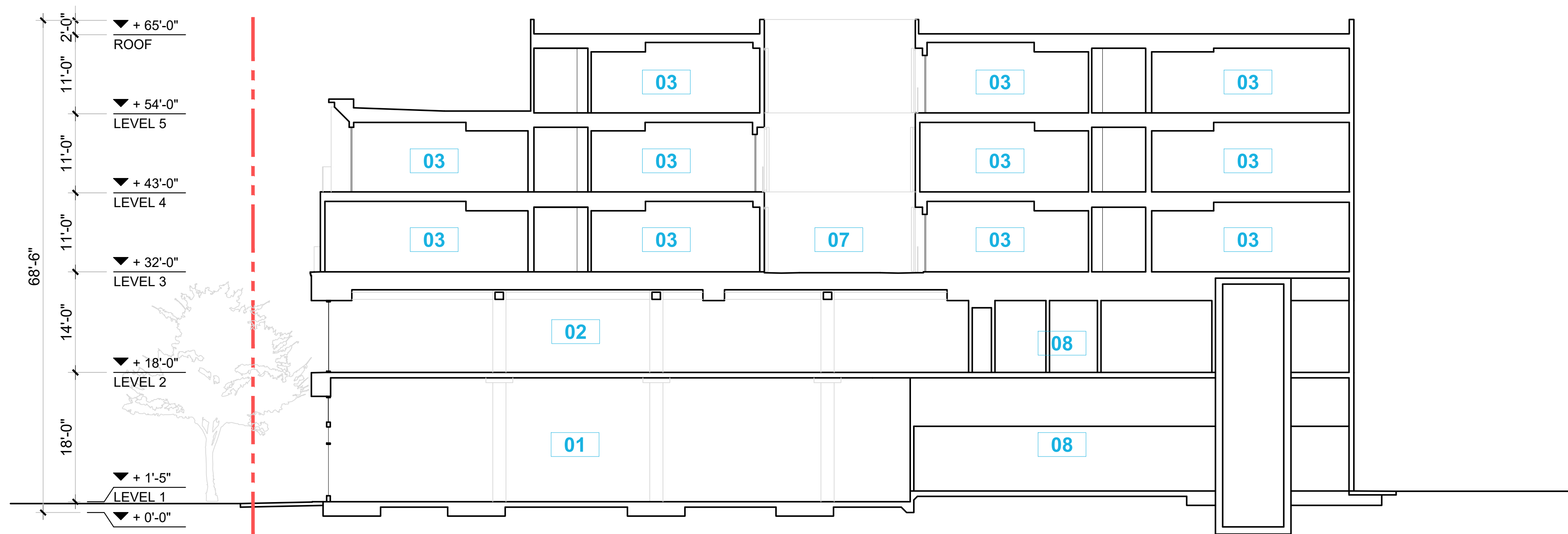


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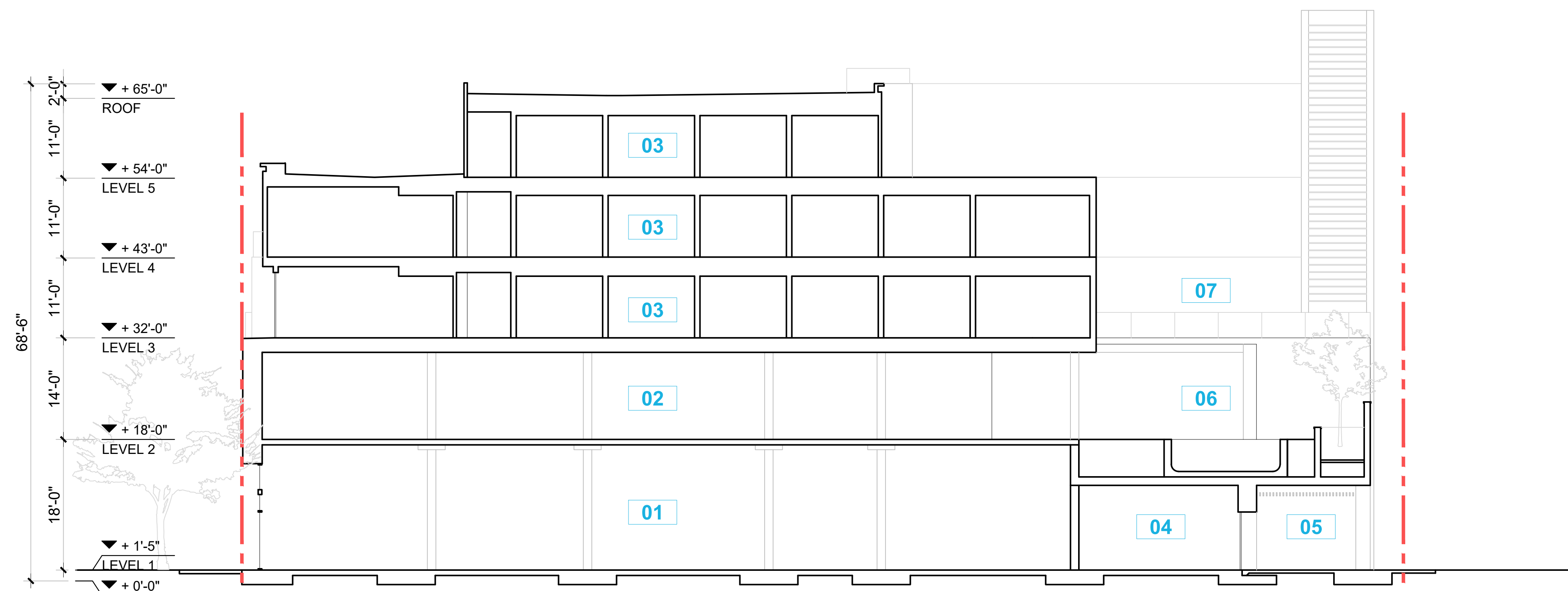
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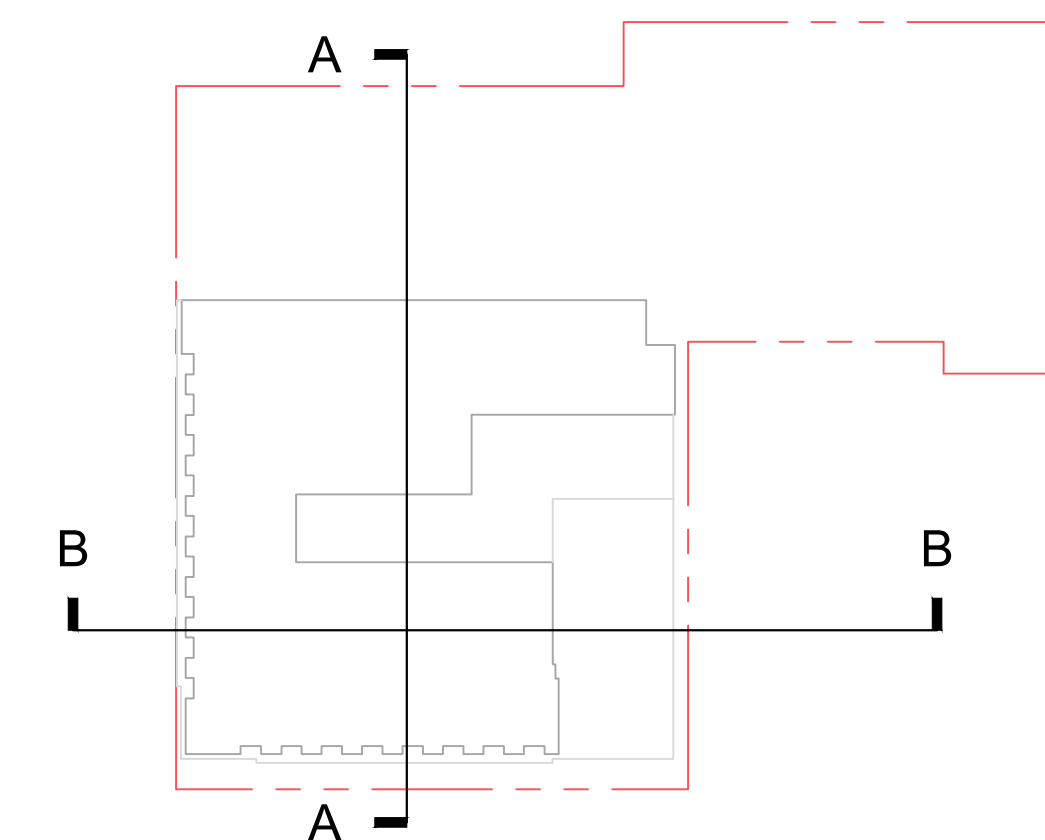




SECTION 'A-A'



SECTION 'B-B'



CALLOUT LEGEND

- 01 MARKET HALL
- 02 BANQUET HALL
- 03 GUEST ROOMS
- 04 HOTEL BAR
- 05 HOTEL BAR PATIO
- 06 AMENITY POOL DECK
- 07 LOUNGE COURTYARD
- 08 BOH



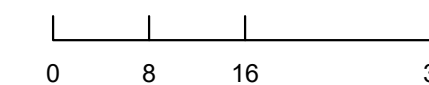
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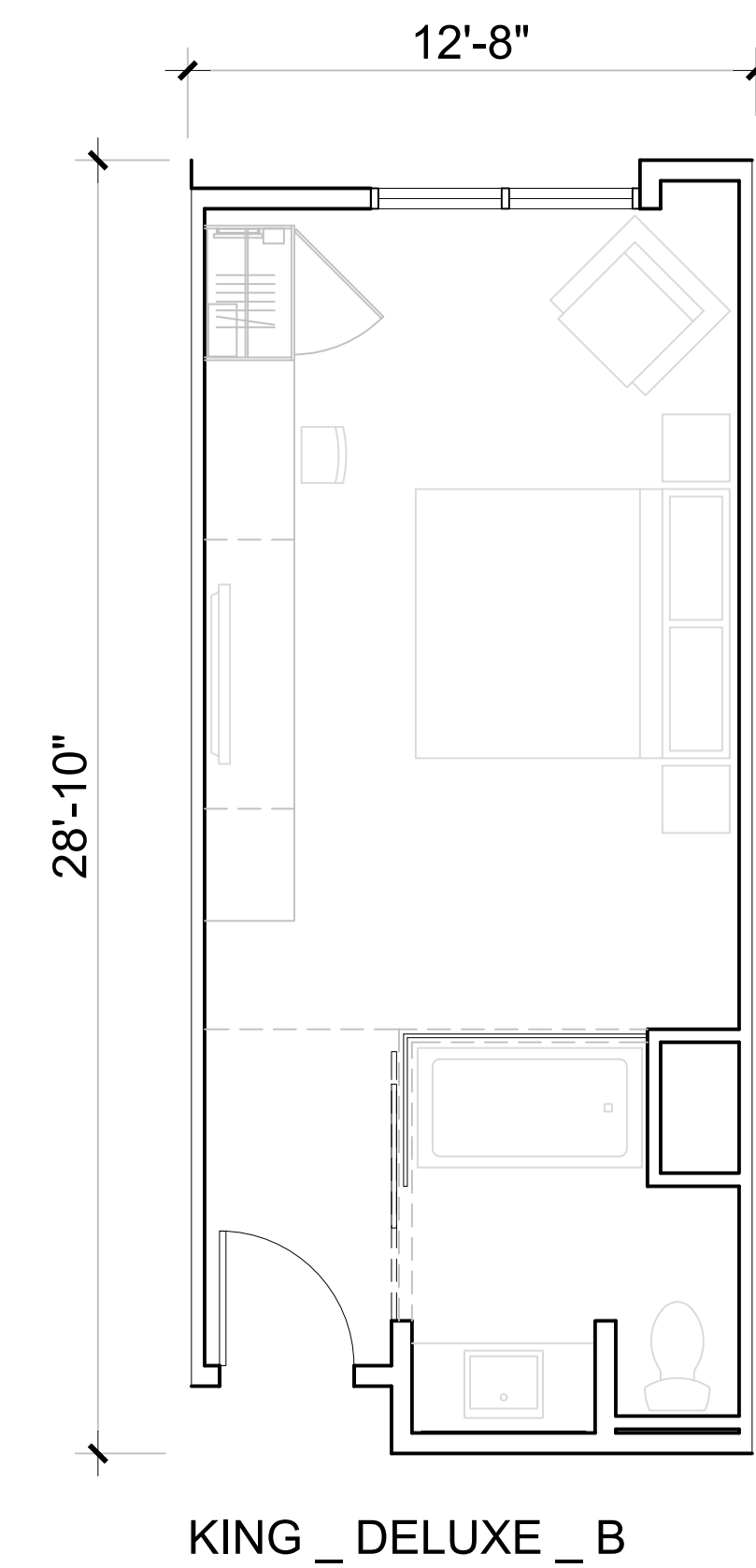
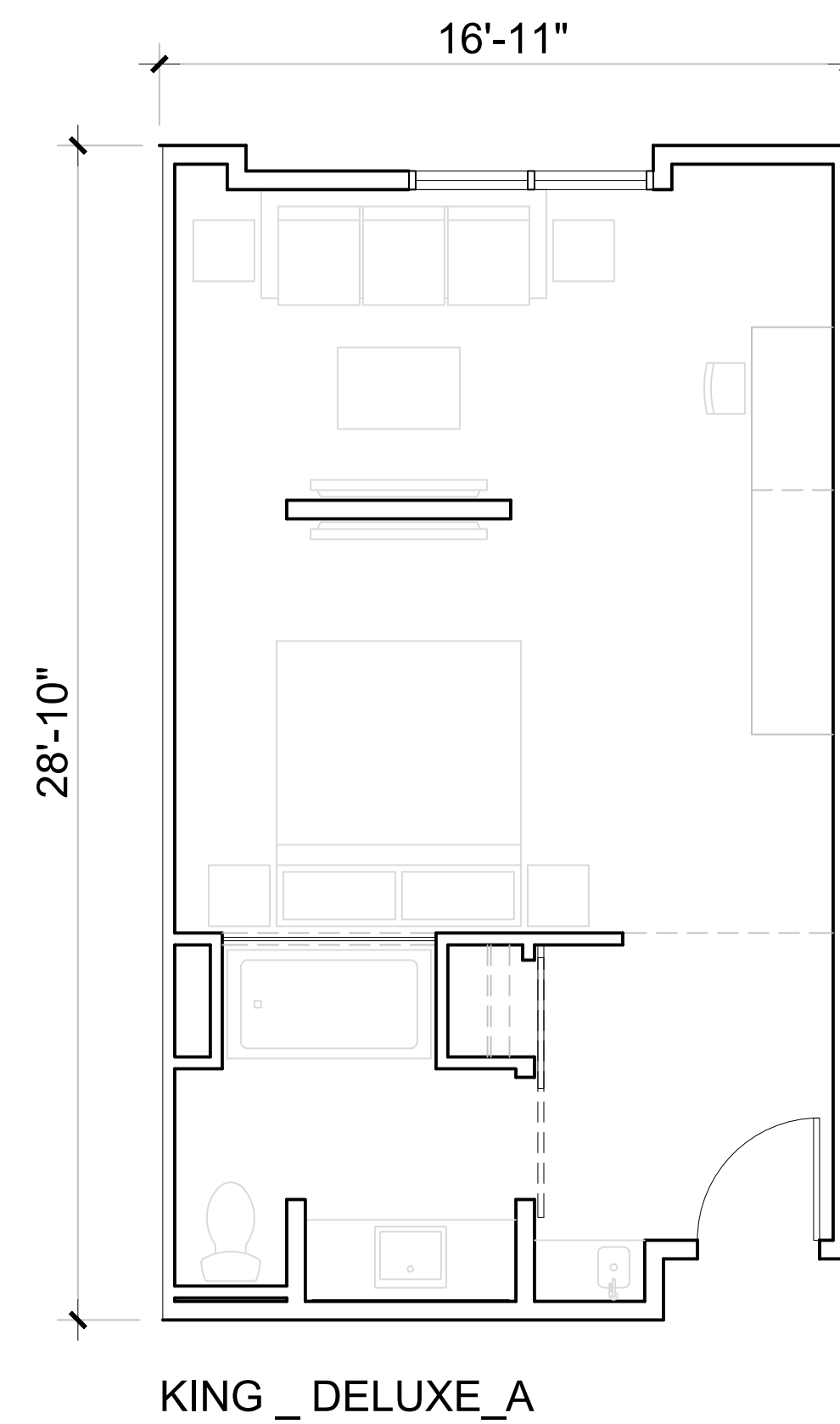
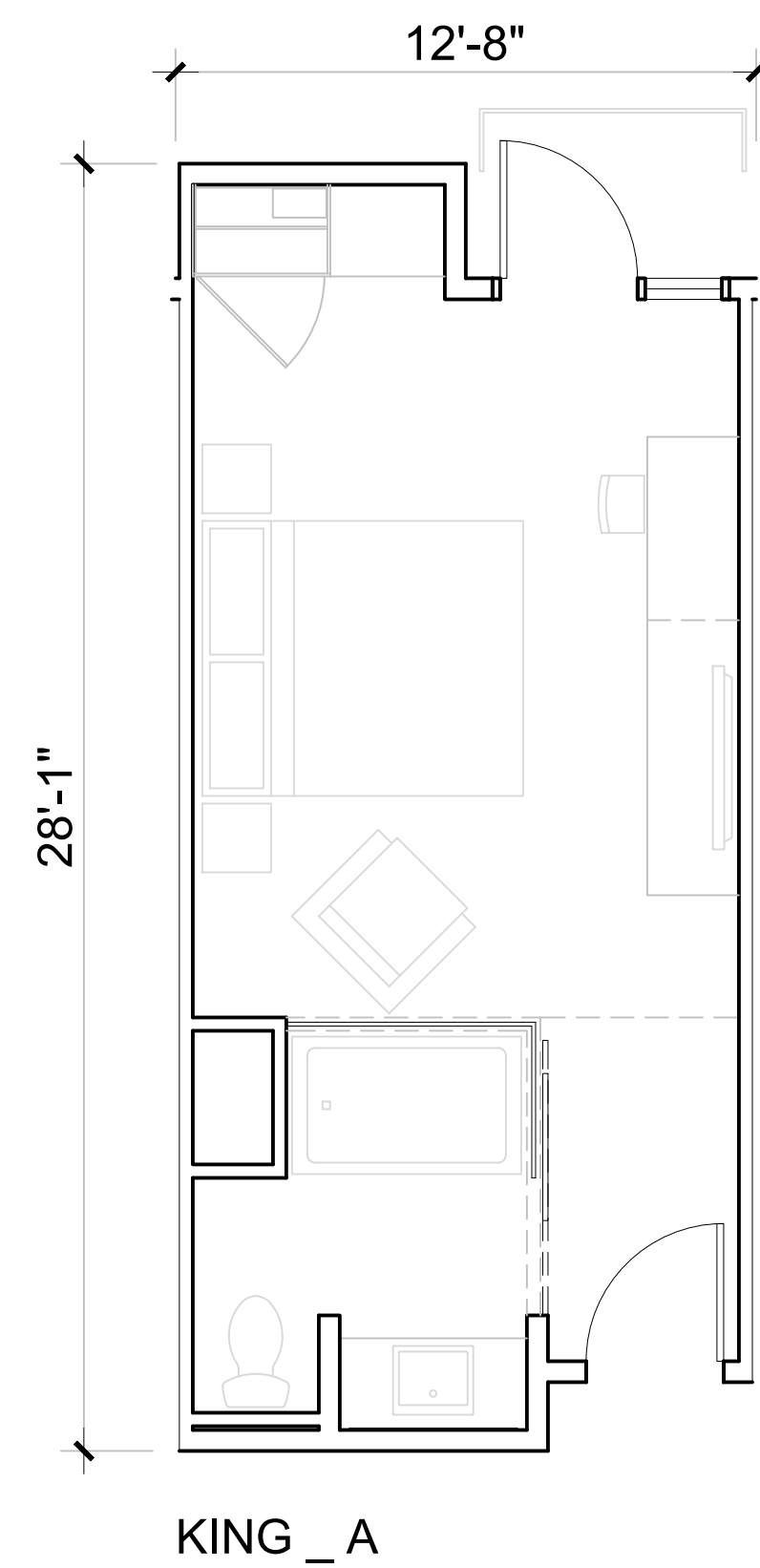
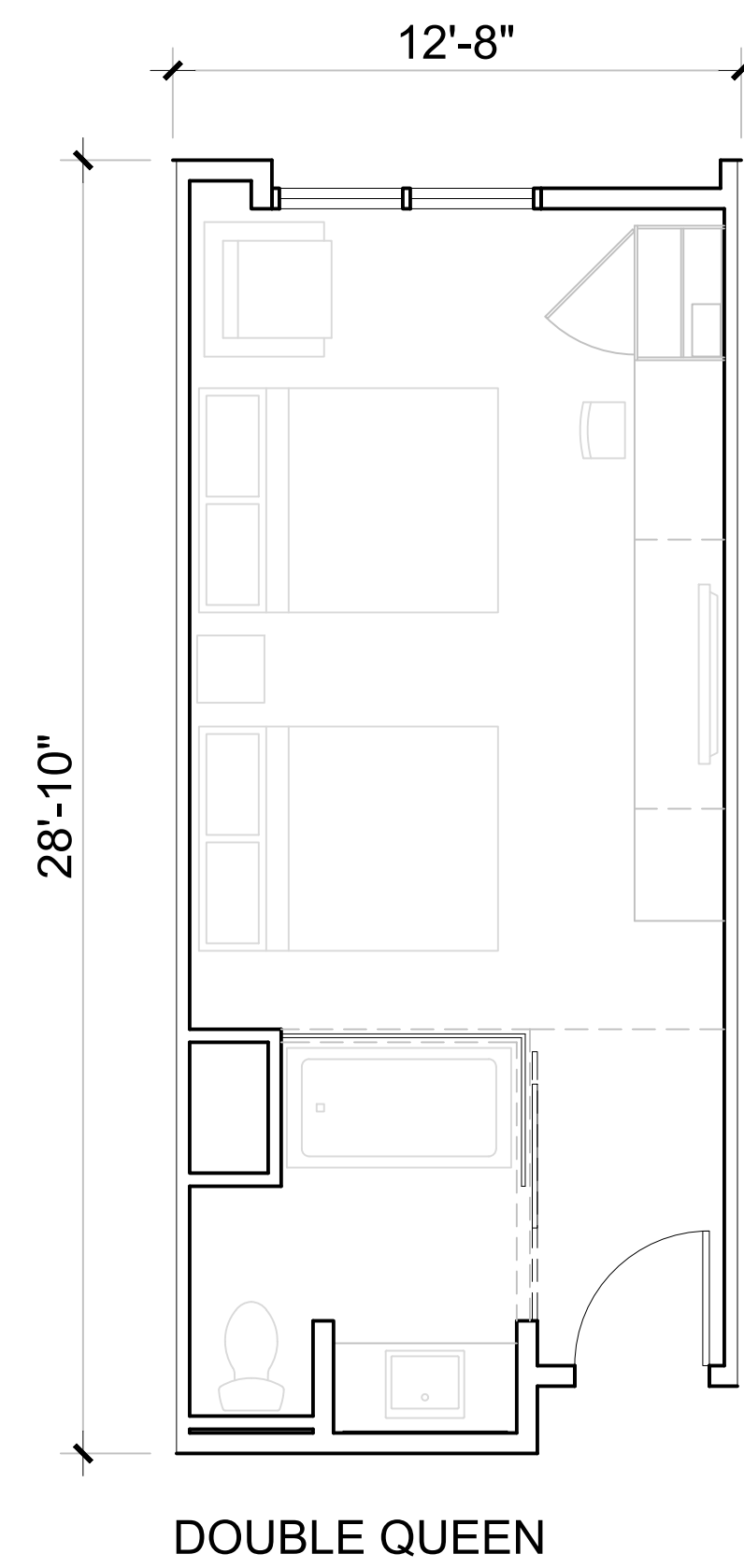
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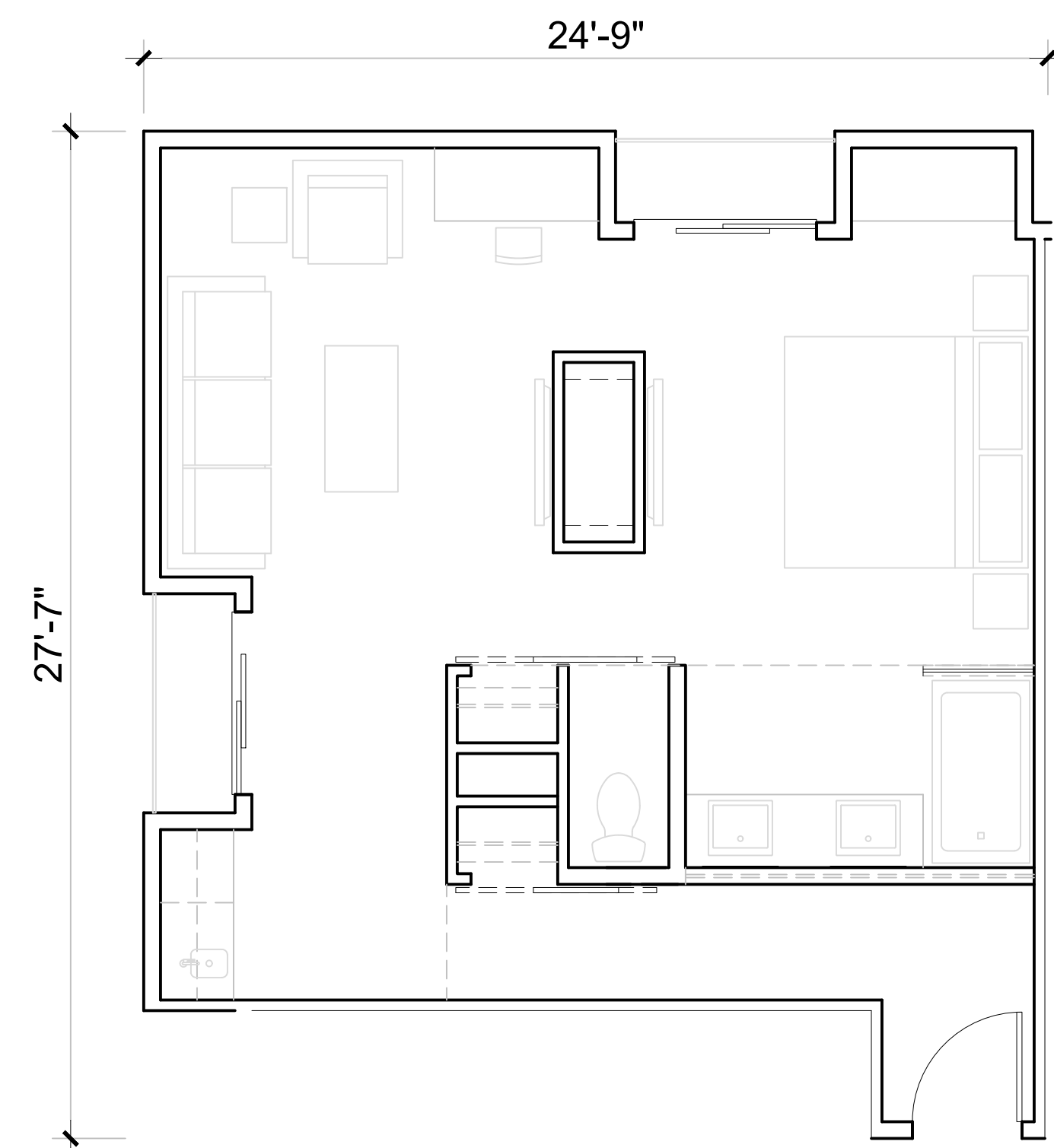
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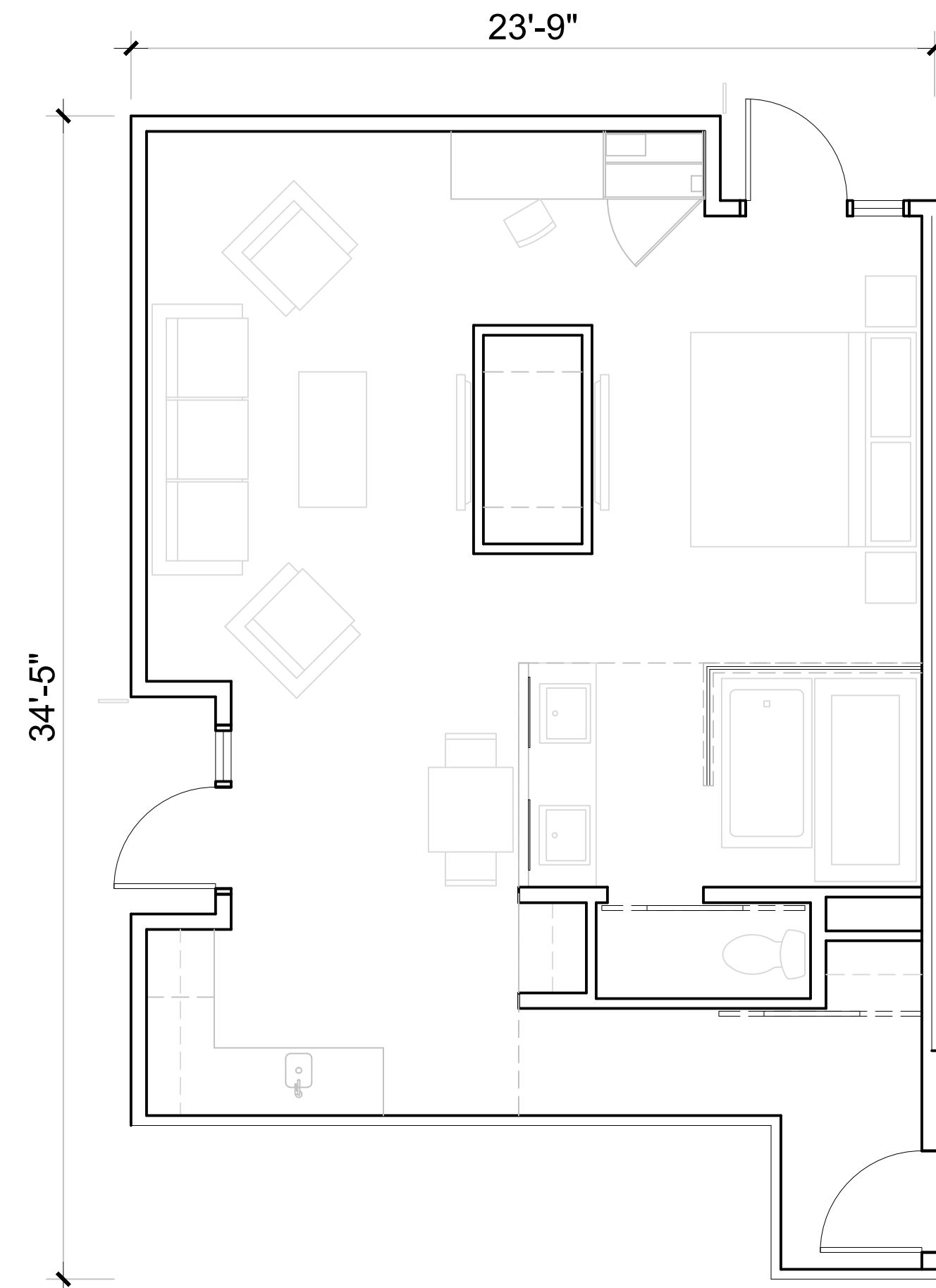
BUILDING SECTIONS

A4-0

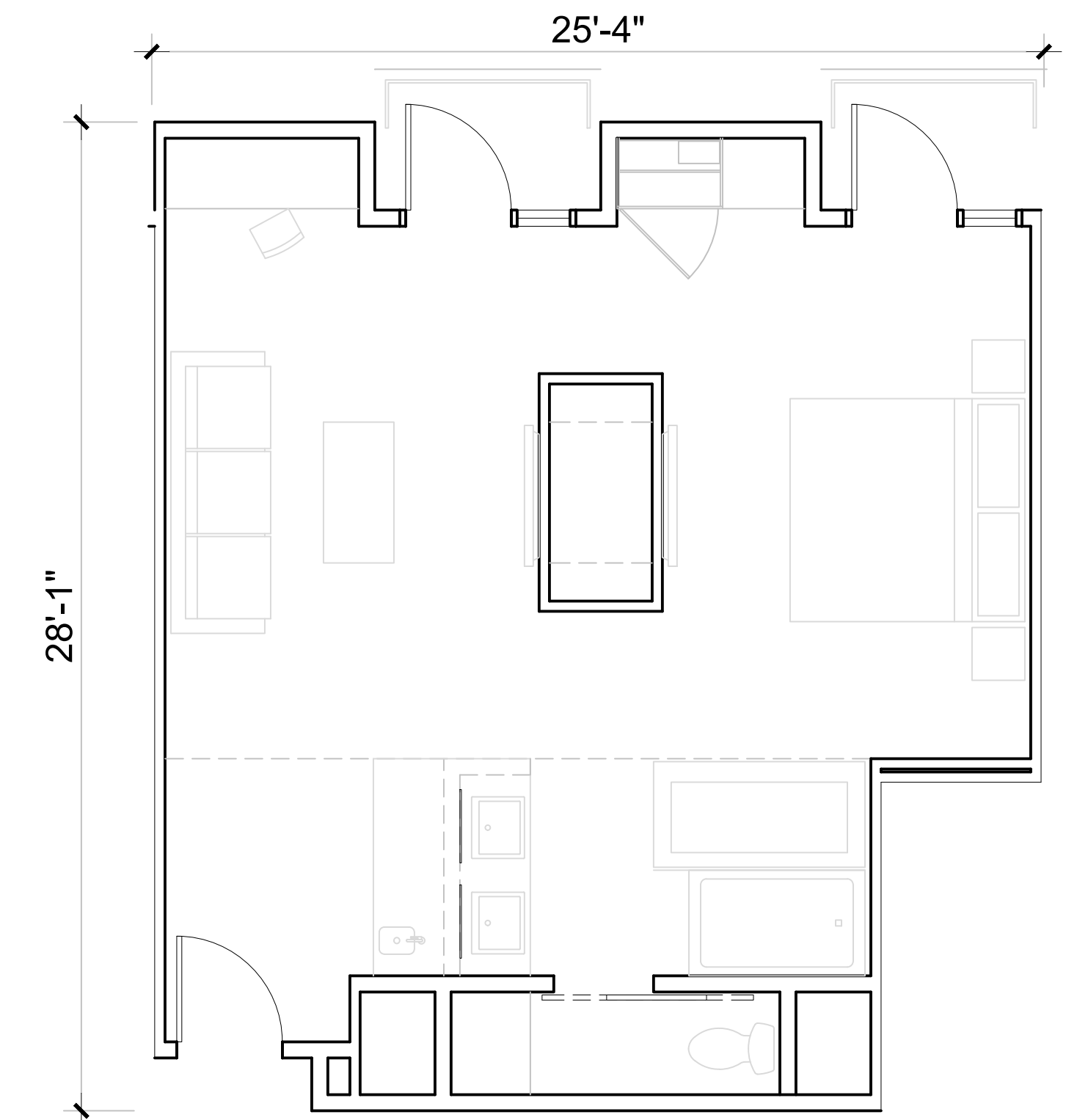




KING SUITE _ A



KING SUITE _ B



KING SUITE _ C



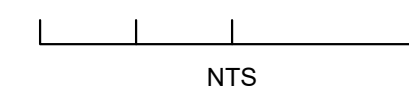
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CONCEPTUAL PERSPECTIVES

A6-0





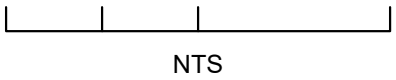
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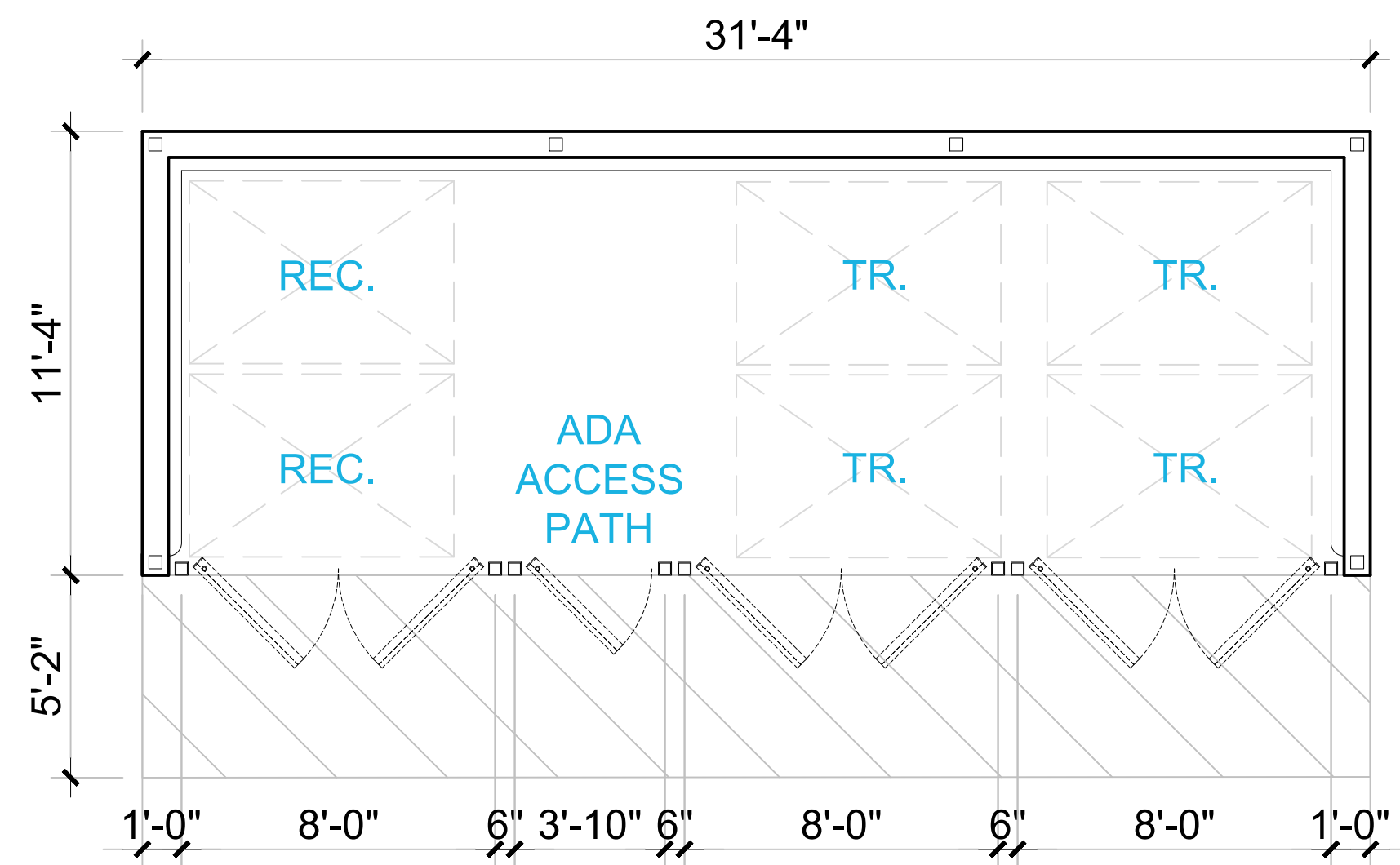
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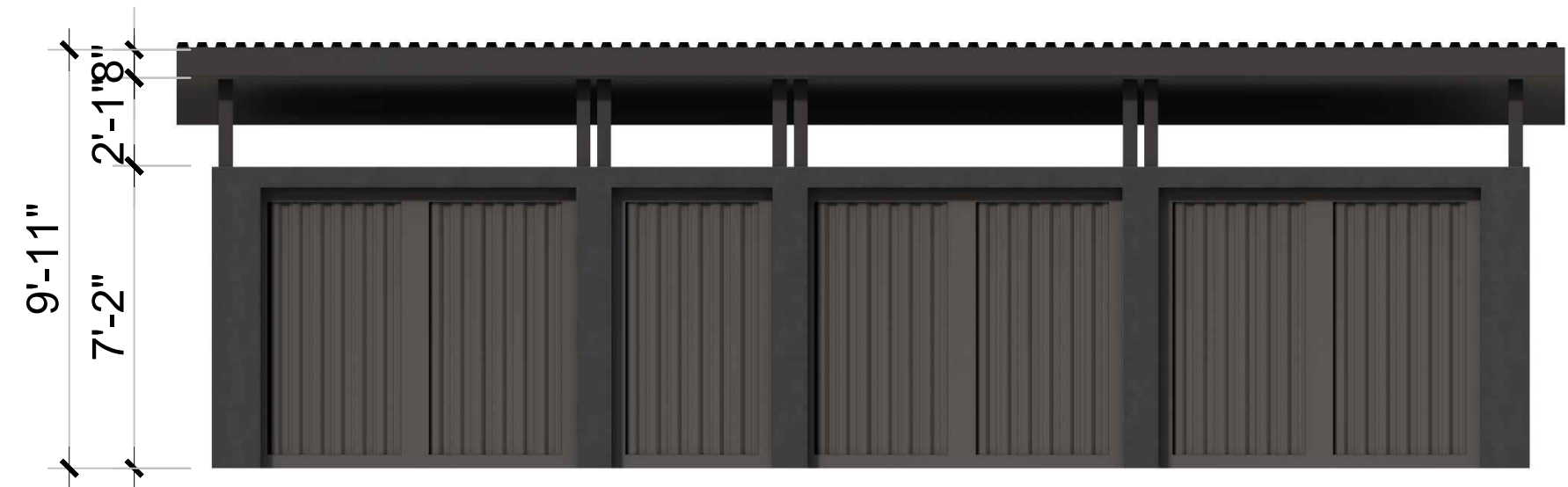


CONCEPTUAL PERSPECTIVES

A6-2



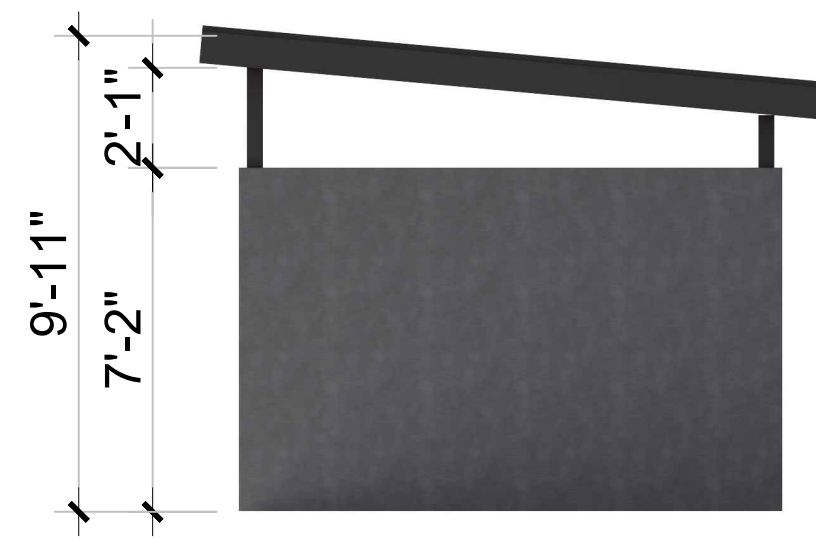
TRASH AND ENCLOSURE PLAN



FRONT VIEW



BACK VIEW



SIDE VIEW



SIDE VIEW



TRASH AND RECYCLING ENCLOSURE PERSPECTIVE



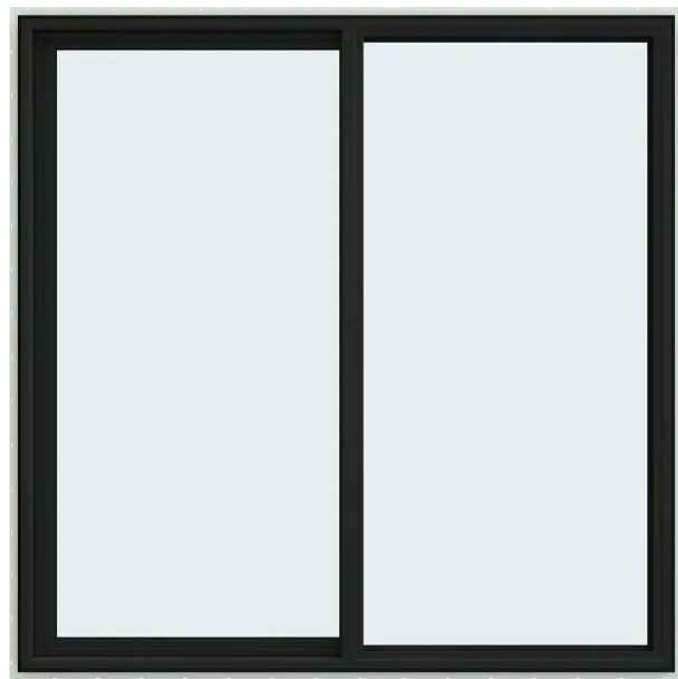
01 - SMOOTH TROWEL STUCCO BODY 01 _ WHITE



03 - BRICK VENEER



13 - WOOD-LOOK LOUVERS



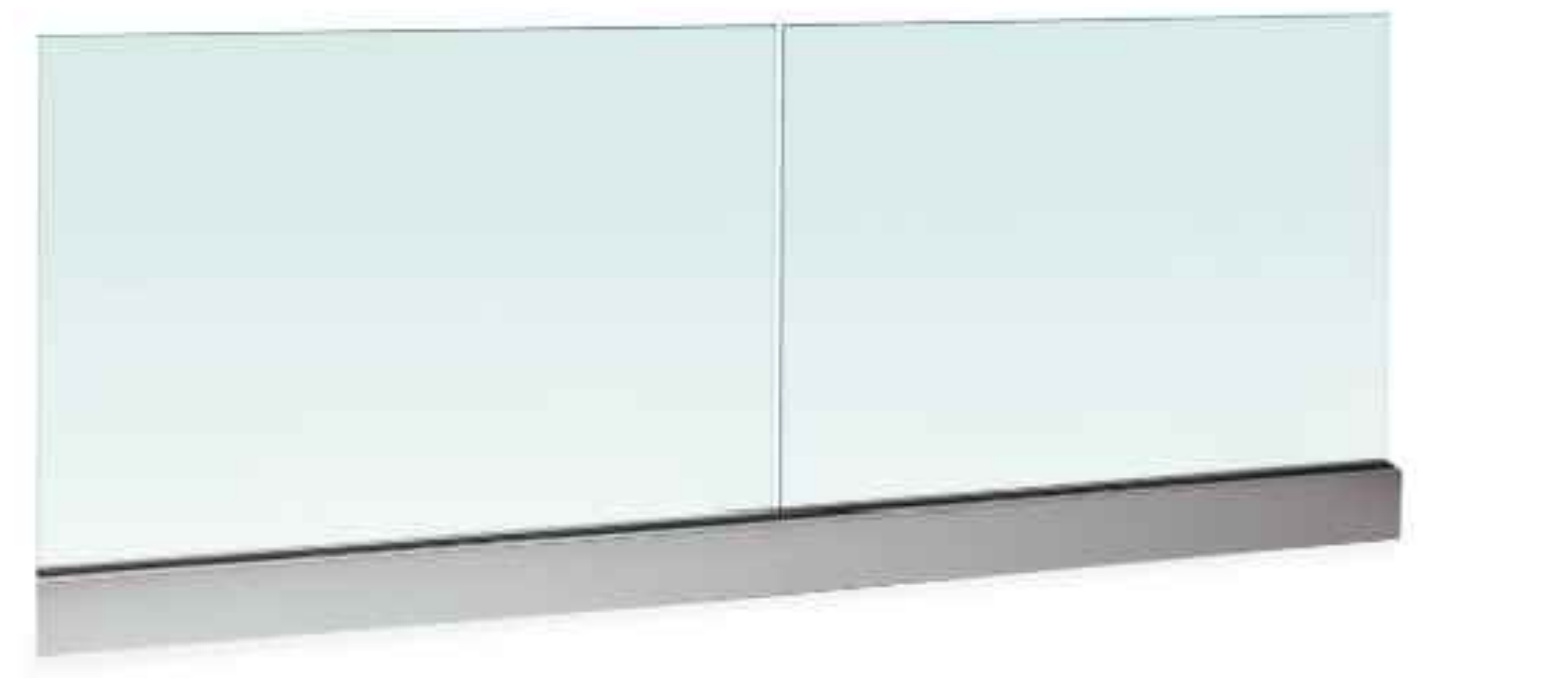
06 - BLACK ALUMINUM WINDOW



02 - SMOOTH TROWEL STUCCO BODY 02 _ DARK GRAY



04 - WOOD-LOOK PORCELAIN TILE



10 - GLASS GUARDRAIL



07 - BLACK STOREFRONT



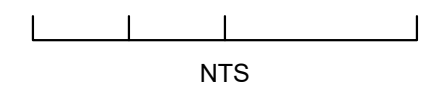
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DESIGN REVIEW PACKAGE
JULY 29, 2022



COLOR AND MATERIALS

A8-0

E FIRST STREET

E SECOND STREET

MONTEREY ROAD

Existing Theater
To Remain
(Not a part)

Existing Building
to remain
(not a part)

LIGHTING SYMBOL LEGEND

- WALL LUMINAIRE
- SHIELDED BOLLARD
- LED RECESSED CEILING LUMINAIRE



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DESIGN REVIEW PACKAGE
JULY 26, 2022



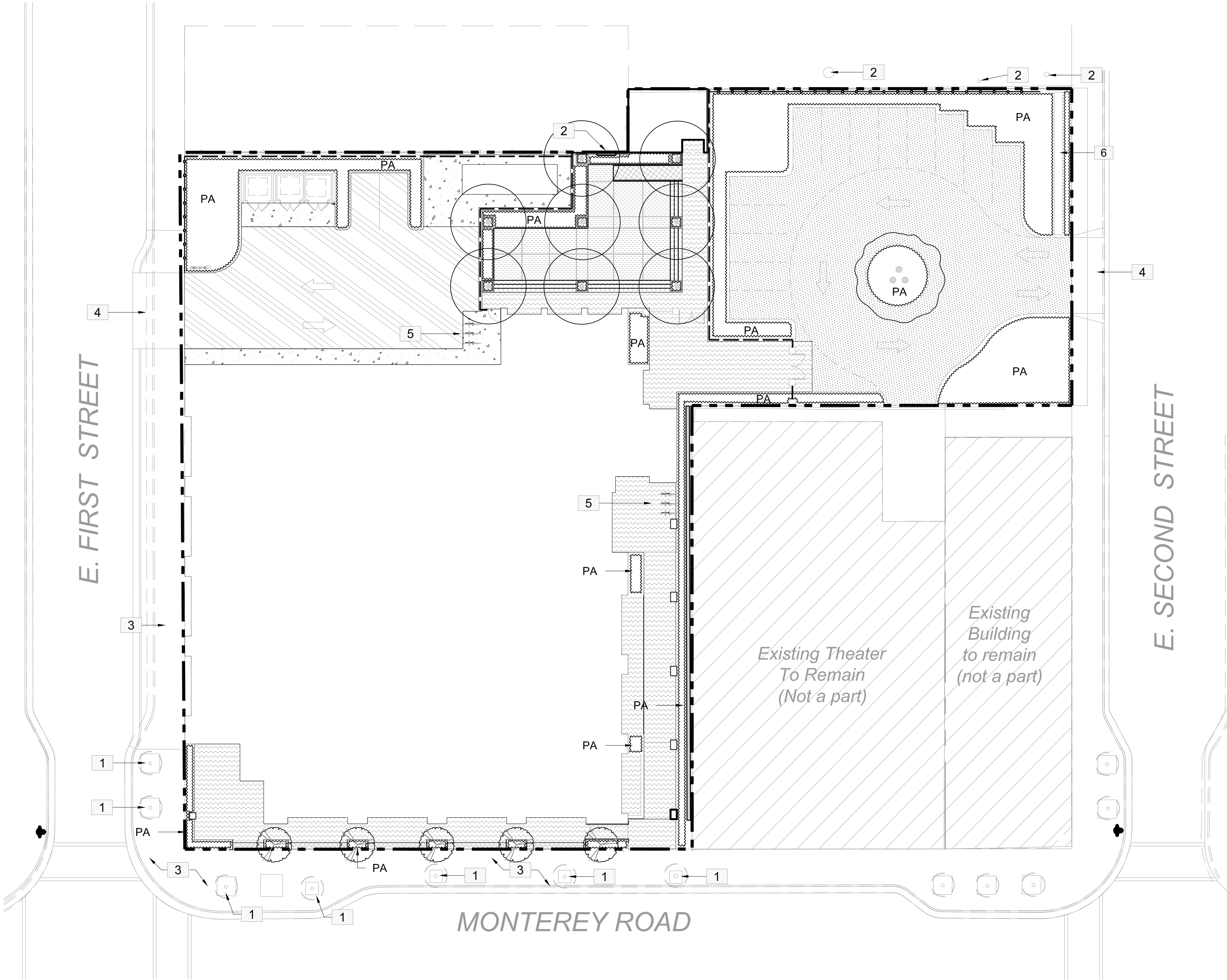
0 4 8 16

SITE LIGHTING PLAN

A9-0

REFERENCE NOTES

SYMBOL	DESCRIPTION
1	PROTECT (E) STREE TREE
2	PROTECT (E) OFFSITE TREE
3	PROTECT (E) SIDEWALK OR REPLACE IN KIND
4	(N) DRV APRON, SEE CIVIL DWGS
5	BIKE RACK, SEE LEGEND
6	ENTRY SIGNAGE, SEE ARCHITECTS DRAWINGS

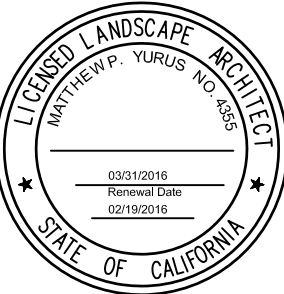


MATERIALS LEGEND

SYMBOL	DESCRIPTION
	CONCRETE PAVING, NATURAL COLOR
	ASPHALTIC CONCRETE
PA	PLANTING AREA, SEE PLANTING PLAN
	PRECAST CONCRETE STEPS AND RISERS.
	GRAVEL DRIVEWAY / DROP OFF AREA: 1" CALIFORNIA GOLD GRAVEL ON 4" COMPACTED BASEROCK
	EXTERIOR DECORATIVE PAVING AT ENTRY: CONTRASTING GRANITE PAVERS, 50% LIGHT GREY, 50% CHARCOAL GREY. HERRINGBONE PATTERN. ALTERNATE: CAST IN PLACE CONC.PAVING, NATURAL COLOR, ACID ETCH FINISH. ACCENT: BANDS OF GRANITE PAVING, DARK GREY COLOR.
	CAST IN PLACE CONC.PAVING, NATURAL COLOR, ACID ETCH FINISH W/ DECORATIVE GRAVEL ACCENT BANDS

SYMBOL	DESCRIPTION
	8' HIGH, CONC. BLOCK WALL W/ BLACK GRANITE SPLIT FACE FASCIA W/ INTEGRAL FERNS PLANTING AND RE-CIRCULATING WATER FEATURE.
	8' HIGH, CONC. BLOCK WALL W. SMOOTH TROWEL SKIIM COAT FINISH, TO MATCH ARCHITECTURAL CONC. FINISH.
	WOOD FENCE, 8' TALL, REDWOOD. HORIZONTAL BOARD LAYOUT.
	4' x 4' x 24" CORTEN PLANTER, PRE RUSTED FINISH
	INVERTED "U" BIKE RACK, BLACK POWDER COAT FINISH.
	HANDRAILS: 3/4" x 2" POWDERCOATED GALVANIZED STEEL. MATCH BLD. EXTERIOR METALWORK

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CONSULTANTS:

PROJECT TITLE:

HOTEL

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REVISIONS:

DATE:

SHEET TITLE:

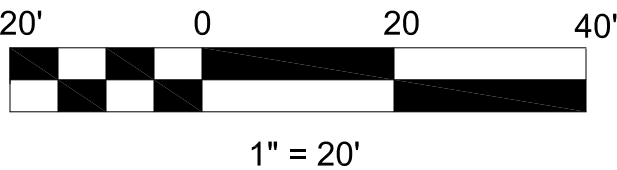
L1.0
SITE LANDSCAPE/MATERIALS PLAN

SCALE: 1" = 20' DATE: 2016.02.18

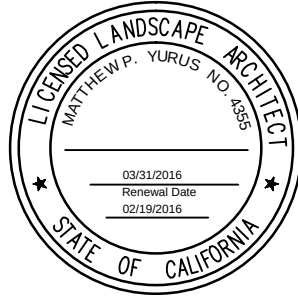
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REVISIONS:

DATE:

SHEET TITLE:

L1.1
LANDSCAPE/MATERIALS PLAN -
LEVELS 2 & 3

SCALE: 1" = 10' DATE: 2016.02.18

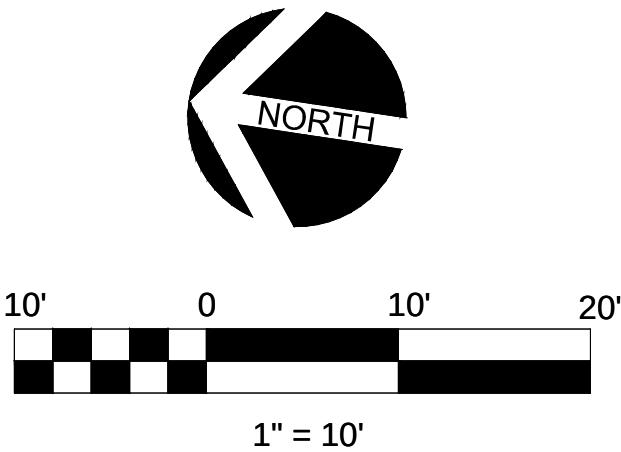
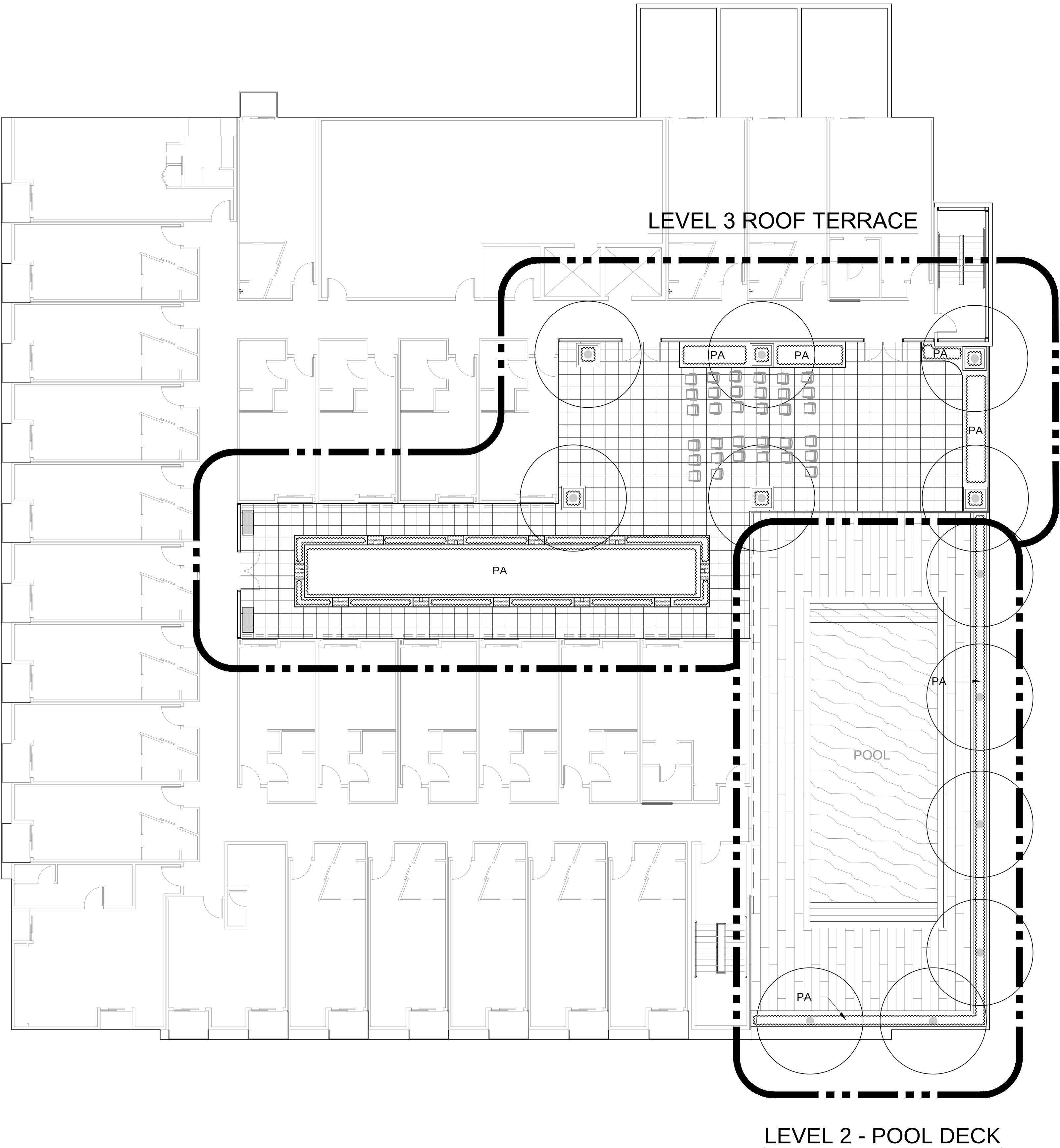
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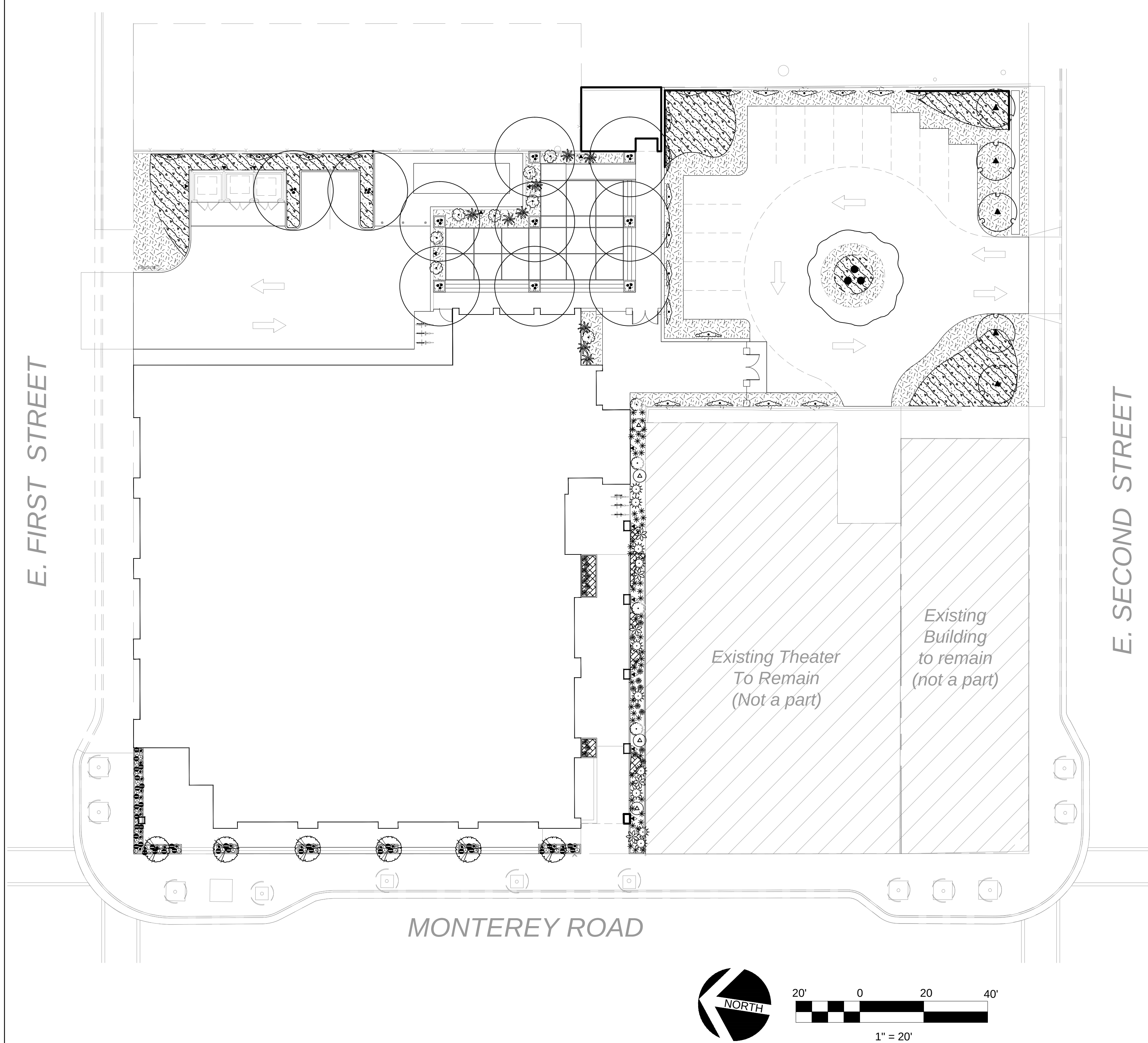
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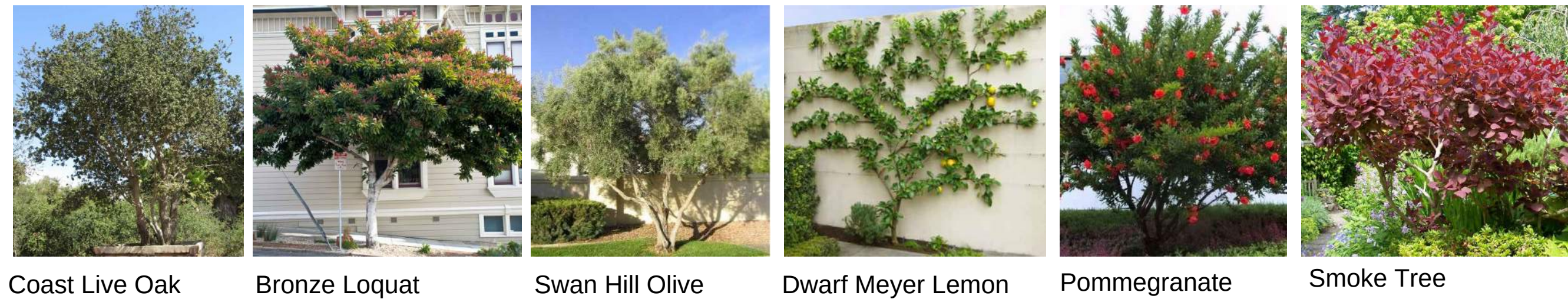
2ND AND 3RD FLOOR LANDSCAPE MATERIALS LEGEND

SYMBOL	DESCRIPTION
PA	PLANTING AREA, SEE PLANTING PLAN
	24" x 24" HANOVER PRECAST PEDESTAL PAVER, CHARCOAL COLOR, TUDOR FINISH
	POOL DECK PAVING, SEE ARCHITECTURE DRAWINGS
	4' x 4' x 24" CORTEN PLANTER
	CORTEN STEEL PLANTERS: 24" x 48" x 24" ALTERNATE: TOURNASOL FRP COMPOSITE PLANTER, 24"x 48" x 24" COLOR: PITCH.
	RAISED PLANTER W/ INTEGRATED RE-CIRCULATING WATER FEATURE.





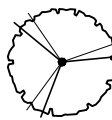
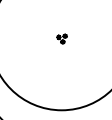
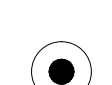
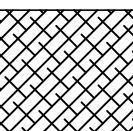
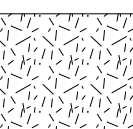
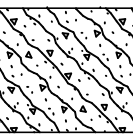
TREES



SHADE AREA PLANTINGS



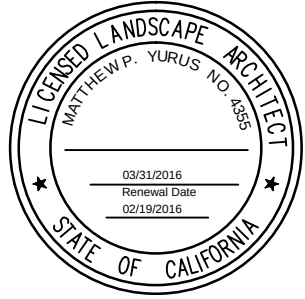
PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	QTY	Very Low	Low	Medium	High	
	Cercis occidentalis / Western Redbud Multi-trunk	15 gal	6	X				
	Cotinus coggygia / Smoke Tree	15 gal	8		X	X		
	Olea europaea `Swan Hill` TM / Swan Hill Olive	36"box	10	X				
	Punica granatum `California Sunset` / California Sunset Pomegranate Multi-trunk	15 gal	5			X	X	
	Quercus agrifolia / Coast Live Oak Multi-Trunk	36"box	1	X				
SHRUBS	BOTANICAL NAME / COMMON NAME	SIZE	QTY	Very Low	Low	Medium	High	
	Acer circinatum / Vine Maple	5 gal	4			X		
	Agave vilmoriniana / Octopus Agave	15 gal	9		X			
	Aspidistra elatior / Cast Iron Plant	1 gal	21			X	X	
	Bulbine frutescens / Stalked Bulbine	1 gal	28		X			
	Citrus x limon `Dwarf Meyer` / Meyer Lemon	15 gal	24			X		
	Dicksonia antarctica / Tasmanian Tree Fern	5 gal	5			X	X	
	Kniphofia citrina `Christmas Cheer` / Poker Plant	1 gal	27			X	X	
	Parthenocissus tricuspidata / Japanese Creeper	5 gal	13			X		
	Polystichum munitum / Western Sword Fern	1 gal	53			X		
	Ribes sanguineum glutinosum `Inverness White` / Flowering Currant	5 gal	4		X			
	Senecio mandraliscae `Blue Chalk Sticks` / Senecio	1 gal	40		X			
	Woodwardia fimbriata / Giant Chain Fern	5 gal	10			X		
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	Very Low	Low	Medium	High
	Ophiopogon japonicus / Mondo Grass	1 gal	10" o.c.	222				X
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY	Very Low	Low	Medium	High
	Carex praegracilis / Slender Sedge	flat	12" o.c.	2,969 sf			X	
	CULINARY GARDEN MIX	2,071 sf						
	Borago officinalis / Borage	1 gal					X	
	Cynara scolymus `Green Globe` / Green Globe Artichoke	1 gal					X	
	Laurus nobilis / Sweet Bay	1 gal				X		
	Lavandula angustifolia / English Lavender	1 gal				X		
	Mentha x piperita `Chocolate` / Chocolate Mint	1 gal					X	
	Origanum vulgare / Oregano	1 gal				X		
	Rosmarinus officinalis / Rosemary	1 gal				X		
	Salvia officinalis `Variegata` / Garden Sage	1 gal				X		
	Thymus vulgaris / Common Thyme	1 gal				X		

PART SUN-FULL SUN PLANTINGS



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PROJECT TITLE:

HOTEL

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REVISIONS:

DATE:

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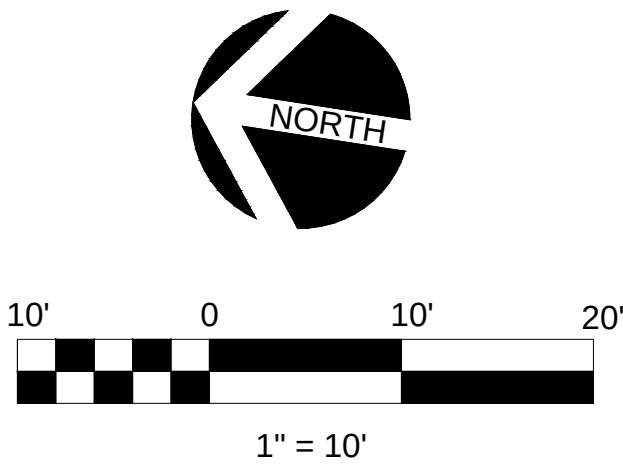
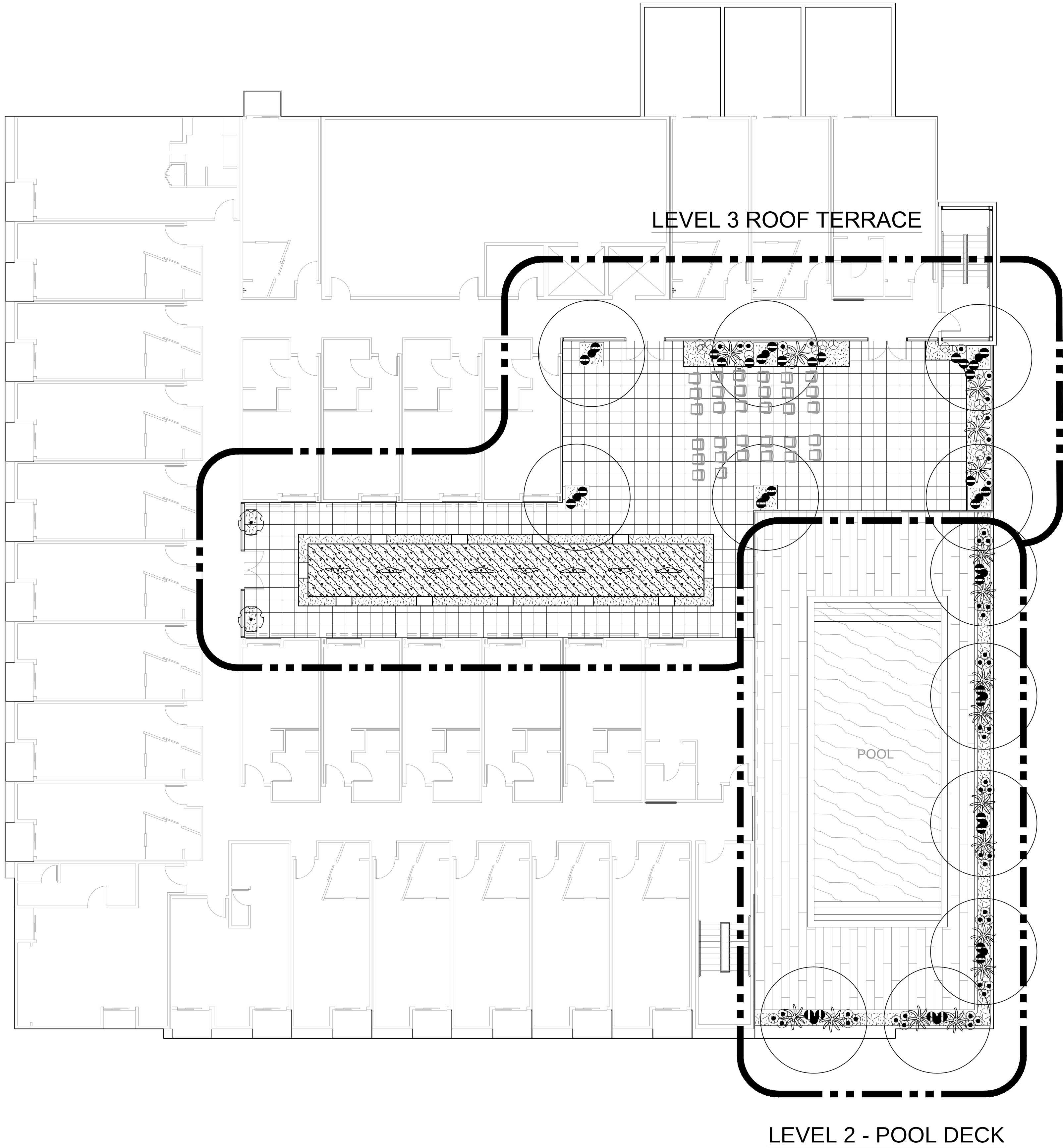
L2.0
SITE PLANTING PLAN

SCALE: 1" = 20' DATE: 2016.02.18

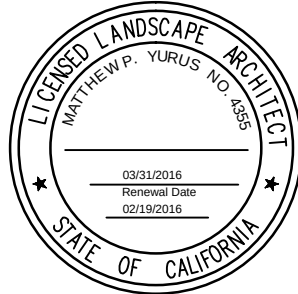
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L2.1

PLANTING PLAN - LEVEL 2 & 3

SCALE: 1" = 10' DATE: 2016.02.18

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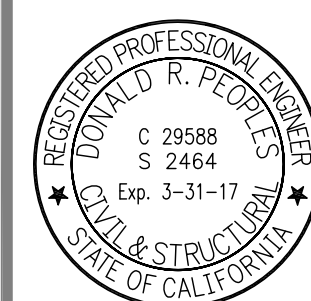
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2. THE DATE OF THE FIELD SURVEY WAS OCTOBER AND NOVEMBER, 2015.
3. PROPERTY LINES SHOWN ARE OF RECORD DATA ONLY.

 FEMA BENCHMARK (US COAST AND GEODETIC SURVEY) D 1080
 ELEVATION 353.70 ADJUSTED NAVD 88

PRELIMINARY TITLE REPORT PREPARED BY CHICAGO TITLE COMPANY DATED
SEPTEMBER 1, 2015, ESCROW NO. FWPS-4475150054-CM

UTILITIES SHOWN ON THIS SURVEY ARE BASED ON FIELD AND RECORD DATA. NO WARRANTIES ARE EXPRESSED OR IMPLIED CONCERNING THE EXISTENCE, SIZE, DEPTH, CONDITION, CAPACITY, OR LOCATION OR ANY UTILITY EXISTING ON THE SITE, WHETHER PRIVATE, MUNICIPAL, OR PUBLIC OWNED.

THIS BOUNDARY IS BASED ON RECORD DATA AND DOES NOT CONSTITUTE A BOUNDARY SURVEY.
IF TRUE LOCATION OF BOUNDARY IS PERTINENT, A BOUNDARY SURVEY AND SUBSEQUENT FILING
OF A RECORD OF SURVEY MUST BE PERFORMED.

[illegible]

DESIGNED BY:	V.S.
DRAWN BY:	R.S.C.
CHECKED BY:	V.S.
SCALE:	

CIATES
ENGINEERS

San Jose, CA 95035
408-957-9221

PEOPLES ASSO
STRUCTURAL ENG

1996 Tarob Court • Milpitas
408-957-9220 Fax

SITE PLAN
"HOTEL"
UNDS OF LEAL
MONTEREY ROAD

LAN

SHEET NUMBER

C1

OF - SHEET

DRAWING NO.

15031-C1



PEOPLES ASSOCIATES
STRUCTURAL ENGINEERS
1996 Tarab Court • Milpitas, CA 95035
408-957-9220 Fax 408-957-9221

CONCEPTUAL GRADING PLAN
"HOTEL"
LANDS OF LEAL
MONTEREY ROAD
MORGAN HILL, CALIFORNIA

SHEET NUMBER
C2
OF - SHEETS
DRAWING NO.
15031-C2

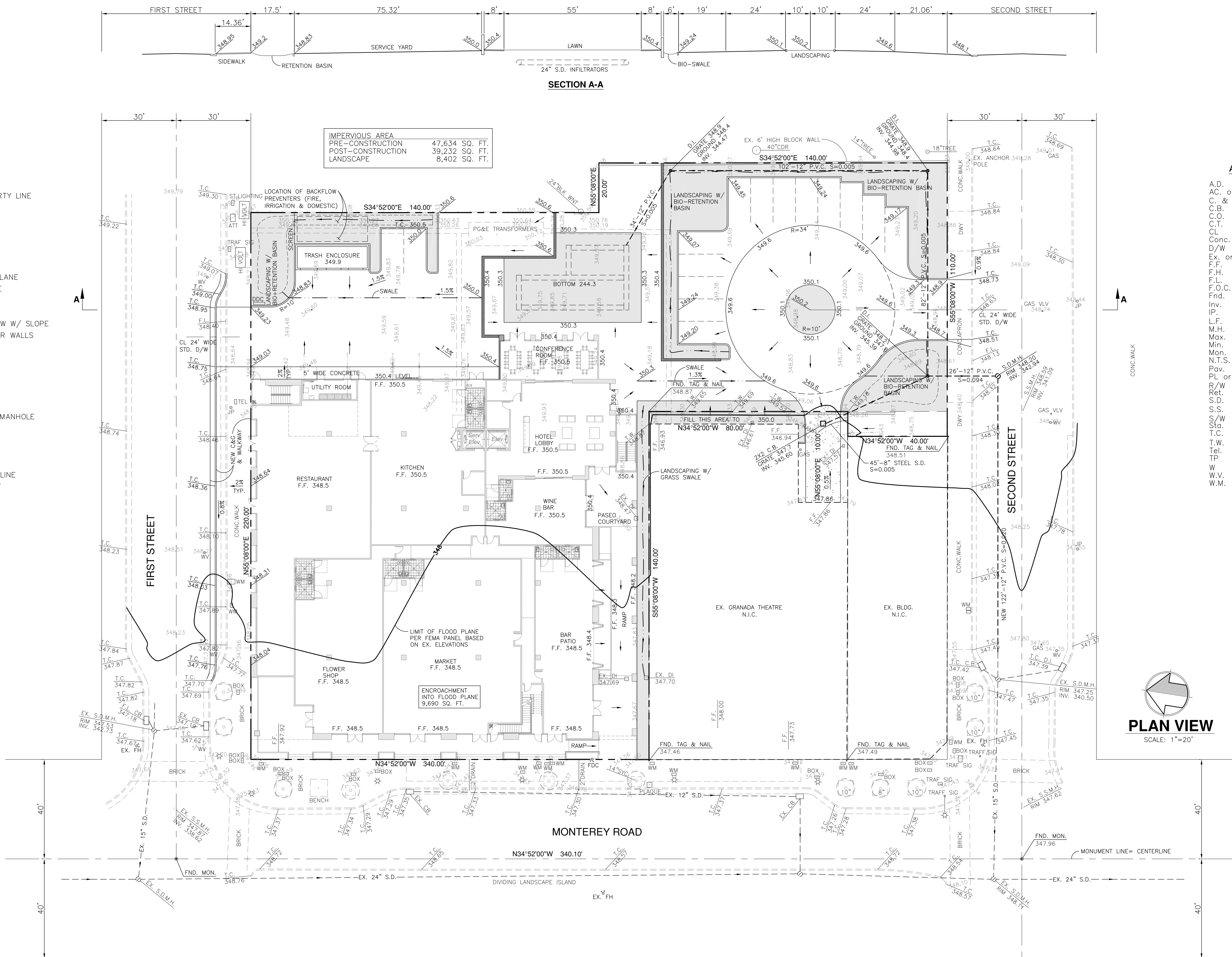
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DRAWN BY: R.S.C.
CHECKED BY: V.S.
APPROVED BY: V.S.
DATE: 12-8-15
SCALE: AS SHOWN
REGISTRATION EXPIRES: MARCH 31, 2017

REV	DATE	DESCRIPTION
0	12/15	RELEASED TO CLIENT & CITY

BY: V.S.

ABBREVIATIONS:

A.D.	Area Drain
A.C. or A.C.	Asphalt Concrete
C. & G.	Curb and Gutter
C.B.	Catch Basin
C.O.	Clean Out
C.T.	Common Trench
CL	Centerline
Conc.	Concrete
D/W	Driveway
Ex. or Exist.	Existing
F.F.	Finish Floor
F.H.	Fire Hydrant
F.L.	Flow Line
F.O.C.	Face of Curb
Fnd.	Found
Inv.	Invert
IP.	Iron Pipe
L.F.	Linear Feet
M.H.	Manhole
Max.	Maximum
Min.	Minimum
Mon.	Monument
N.T.S.	Not To Scale
Pav.	Pavement
PL or Prop.	Property Line
R/W	Right-of-Way
Ret.	Retaining
S.D.	Storm Drain
S.S.	Sanitary Sewer
S/W	Sidewalk
Sta.	Station
T.C.	Top of Curb
T.W.	Top of Wall
TP	Telephone
TP	Top of Pavement
W	Water
W.V.	Water Valve
W.M.	Water Meter



SECTION A-A

PLAN VIEW

SCALE: 1"=20'

LEGEND:

PL	PROPERTY LINE
R/W	ADJACENT PROPERTY LINE
CL	RIGHT OF WAY
CL	CENTERLINE
	EASEMENT
	CURB & GUTTER
	NEW HOTEL
	EX. BLDG.
	LIMIT OF FLOOD PLANE
	SWALE/BIO-SWALE
	EX. GRADE
	DESIGN GRADE
	DIRECTION OF FLOW W/ SLOPE
	SEPARATION DECOR WALLS
	LANDSCAPE AREA
	DRAIN INLET
	CATCH BASIN
	STORM DRAIN
	EX. STORM MANHOLE
	SANITARY SEWER
	EX. SANITARY SEWER MANHOLE
	WATER LINE
	GAS LINE
	ELECTRICAL LINE
	TELEPHONE LINE
	FIRE PROTECTION LINE
	EX. FIRE HYDRANT
	EX. STREET LIGHT
	EX. STREET TREE

IMPERVIOUS AREA	
PRE-CONSTRUCTION	47,634 SQ. FT.
POST-CONSTRUCTION	39,232 SQ. FT.
LANDSCAPE	8,402 SQ. FT.



PEOPLES ASSOCIATES
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CONCEPTUAL UTILITY PLAN
HOTEL "LANDS OF LEAL"
MONTEREY ROAD
MORGAN HILL, CALIFORNIA

SHEET NUMBER
C3
OF - SHEETS
DRAWING NO.
15031-C3

DESIGNED BY: V.S.
DRAWN BY: R.S.C.
CHECKED BY: V.S.
SCALE: AS SHOWN
DATE: 12-8-15
REGISTRATION EXPIRES: MARCH 31, 2017

REV	DATE	REVISION DESCRIPTION
0	12/15	RELEASED TO CLIENT & CITY

APPROVED BY: V.S.
DATE: 12-8-15

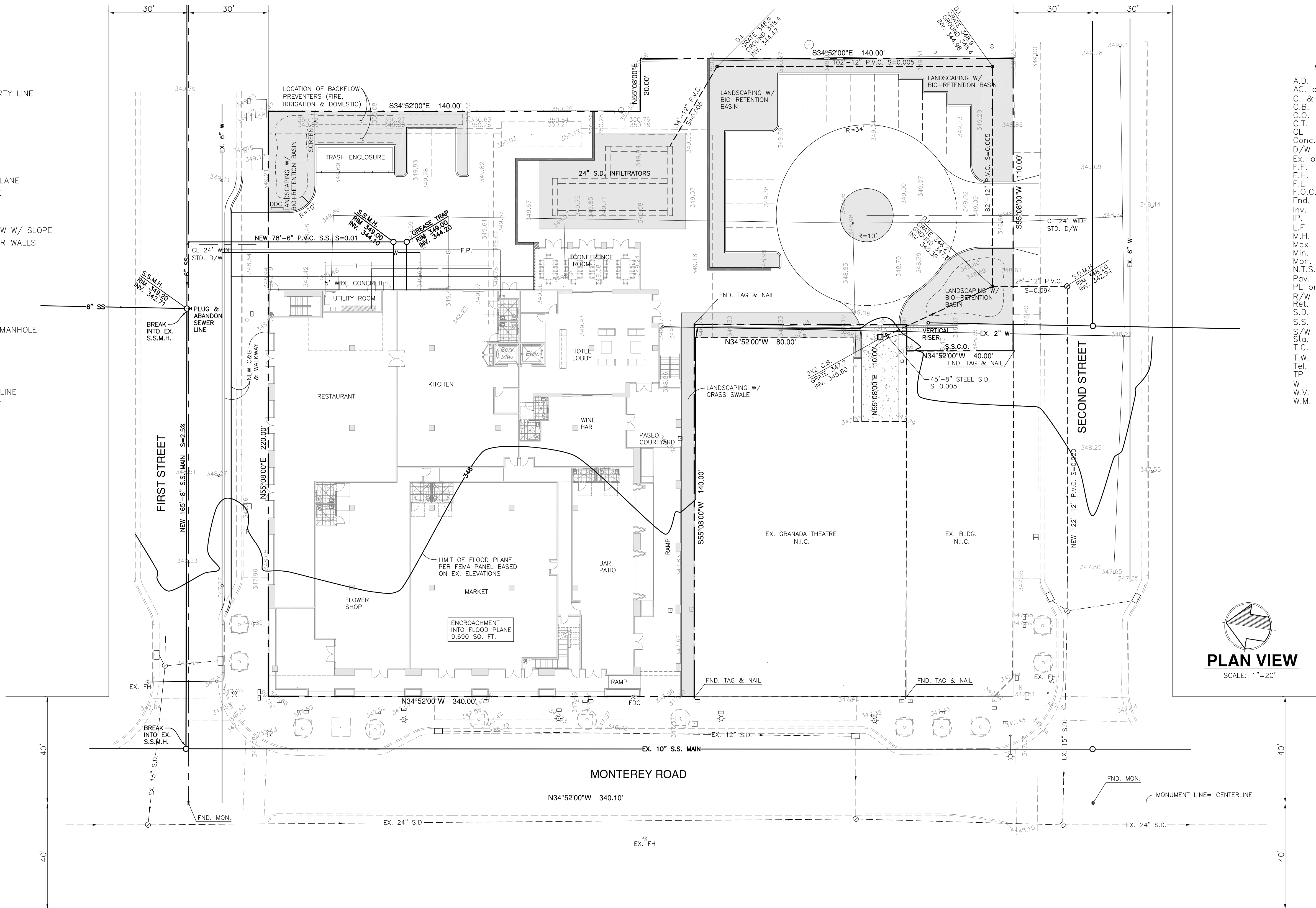
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ABBREVIATIONS:

A.D.	Area Drain
AC. or A.C.	Asphalt Concrete
C. & G.	Curb and Gutter
C.B.	Catch Basin
C.O.	Clean Out
C.T.	Common Trench
CL	Centerline
Conc.	Concrete
D/W	Driveway
Ex. or Exist.	Existing
F.F.	Finish Floor
F.H.	Fire Hydrant
F.L.	Flow Line
F.O.C.	Face of Curb
Fnd.	Found
Inv.	Invert
IP.	Iron Pipe
L.F.	Linear Feet
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LEGEND:

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	SANITARY SEWER MANHOLE
	WATER LINE
	GAS LINE
	ELECTRICAL LINE
	TELEPHONE LINE
	FIRE PROTECTION LINE
	EX. FIRE HYDRANT
	EX. STREET LIGHT
	EX. STREET TREE



City of Morgan Hill
Development Services Department



Granada Hotel Expansion Project
Addendum

September 2022

Prepared By



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OFFICE 916.372.6100 • FAX 916.419.6108

ADDENDUM TO AN ADOPTED ENVIRONMENTAL IMPACT REPORT

The City of Morgan Hill, California, a municipal corporation, does hereby prepare, make, declare, and publish the Addendum to a certified Environmental Impact Report (EIR) for the following described project:

Project Name and Number: Granada Hotel Expansion Project (ZA2022-0004/AAE2022-0004/EA2022-0010)

Original Project: Monterey-Leal Hotel Project (UP-16-01/SR-16-01/EA-16-01)

The City of Morgan Hill, Development Services Department, has reviewed the proposed project and on the basis of the whole record before it, has determined that pursuant to CEQA Guidelines Section 15179, no substantial changes have occurred with respect to the circumstances under which the MEIR was certified, and there is no new available information, which was not known and could not have been known at the time that the MEIR was certified. The project, as identified in this Addendum, would not have a significant effect on the environment beyond that which was evaluated in the Downtown Specific Plan Master Environmental Impact Report (MEIR). This document demonstrates that neither a subsequent EIR, nor a supplement to the MEIR is required given that the proposed modifications to the approved project would not trigger the applicable criteria set forth in the CEQA Guidelines Section 15162.

This Addendum to the Downtown Specific Plan MEIR has been prepared pursuant to Title 14, Section 15164 of the California Code of Regulations and City of Morgan Hill environmental standards.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Morgan Hill, Development Services Department, 17575 Peak Avenue, Morgan Hill, California, 95037.

Development Service Director, City of Morgan Hill,
California, a municipal corporation

By: _____

Date: _____

**Granada Hotel Expansion Project (ZA2022-0004/AAE2022-0004)
Addendum to the Downtown Specific Plan MEIR**

File Number/Project Name: Granada Hotel Expansion Project (ZA2022-0004/AAE2022-0004/EA2022-0010)

Project Location and Surrounding Land Uses: The approximately 1.09-acre project site, identified by Assessor's Parcel Number 726-14-074, is located at 17490 Monterey Road in downtown Morgan Hill, California. The project site is generally bound by 1st Street to the north, and Monterey Road to the west. Surrounding land uses include single-family and multi-family residences to the east, the Granada Theater to the south, and commercial uses to the west and north (see Figure 1 and Figure 2). The project site is currently undergoing construction of the approved four-story, 67,940-square foot (sf) Monterey-Leal Hotel. In addition, a portion of the site is temporarily being used as an expanded outdoor dining area for the adjacent Granada Theater.

Existing Plan Designations and Zoning: The project site is located within the City of Morgan Hill Downtown Specific Plan area. The City of Morgan Hill General Plan designates the site as Mixed Use. The site is located within the Downtown Specific Plan Commercial Business District with Ground Floor Overlay. The underlying zoning is Downtown Mixed Use (MU-D).

Project Background: In November 2009, the City adopted the Morgan Hill Downtown Specific Plan which amended the Morgan Hill General Plan and the City's Zoning Ordinance for the downtown area and modified the relevant plans, policies, and design guidelines, which guide and regulate development in the area. The Downtown Specific Plan, consistent with Government Code Section 65451, included proposed changes to existing and planned land uses, circulation, parking, urban design guidelines, signage guidelines, infrastructure, and an implementation plan. A MEIR was prepared to evaluate the potential environmental effects of buildout of the Downtown Specific Plan. The MEIR includes descriptions of the physical setting of the Downtown Specific Plan area, identifies environmental impacts resulting from buildout of the Downtown Specific Plan, and identifies mitigation measures for the environmental impacts examined in the MEIR.

The City of Morgan Hill prepared an Initial Study (IS) in 2016 (hereafter referred to as the "2016 IS", see Attachment 1 to this Addendum) for the Monterey-Leal Hotel Project, which consisted of the demolition of the previously on-site buildings and parking lot, and the subsequent construction of an approximately 54.5-foot high, four-story, 67,940 square foot commercial building (see Figure 3). The building would include restaurant, retail, and hotel lobby areas on the first floor, and three floors of hotel area (60 guest rooms and hotel amenities). The Monterey-Leal Hotel Project was located within the planning area of, and consistent with, the Downtown Specific Plan. The 2016 IS was prepared in an effort to determine whether substantial changes had occurred with respect to circumstances under which the Downtown Specific Plan MEIR was certified, or whether new information which was not known at the time the MEIR was certified. The 2016 IS was determined to be consistent with the conclusions of the Downtown Specific Plan MEIR, and the Monterey-Leal Hotel Project was approved.

Project Description: The proposed project is an expansion of the Monterey-Leal Hotel Project, and would add a partial fifth floor to the hotel building, which would accommodate 11 additional guestrooms (see Figure 4, Figure 5, and Figure 6). The partial fifth floor would be located on the northern and southeastern portions of the approved hotel building, while the height of the remainder of the hotel would remain as previously approved. In addition, up to two guestrooms would be added to the third floor in-lieu of a fitness activity area, for a net total of 13 additional hotel rooms.

Figure 1 Regional Vicinity Map

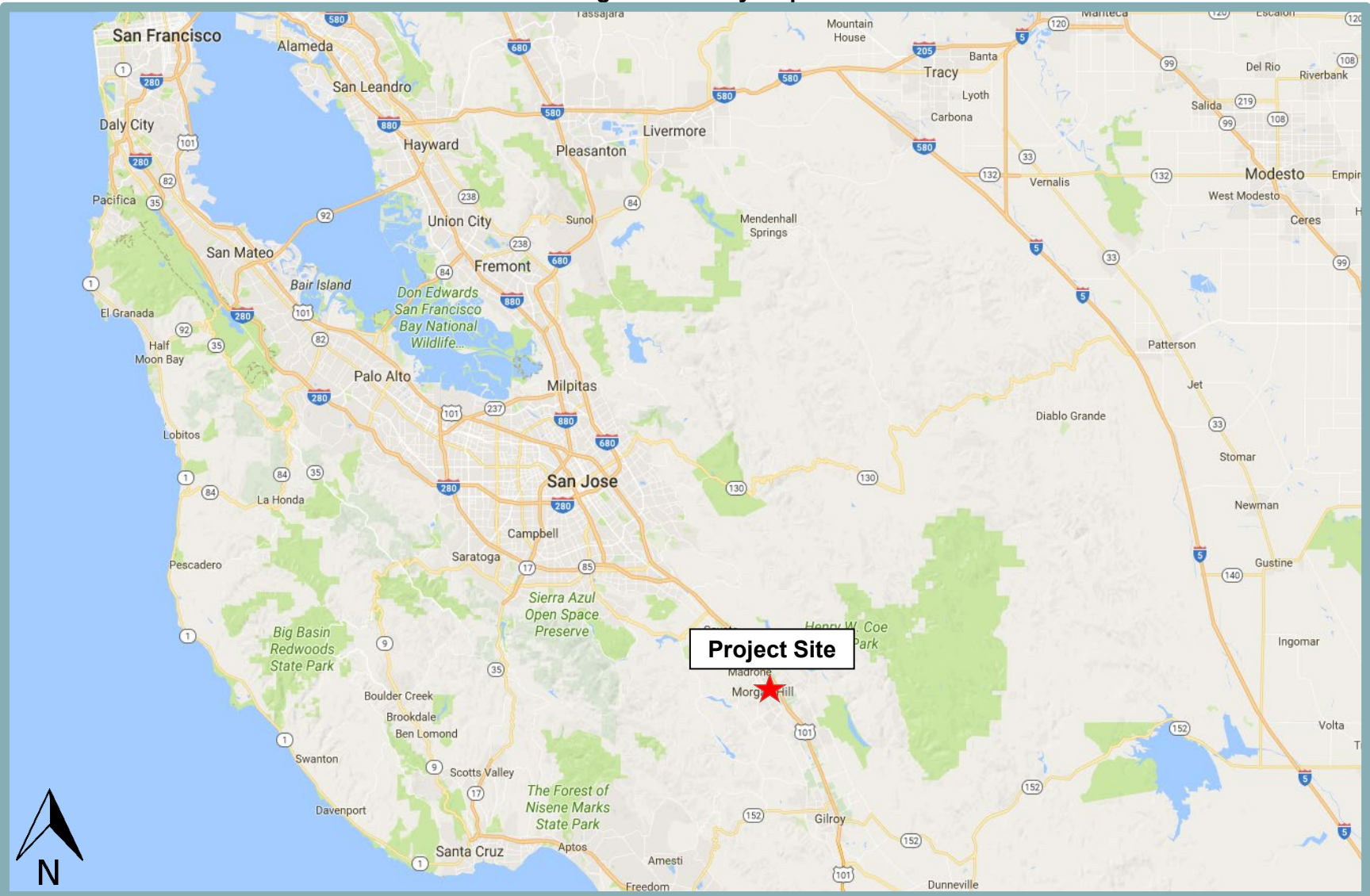


Figure 2
Project Boundaries Map



**Note: Project site boundaries are approximate.*

Figure 3
Approved Monterey-Leal Hotel Project Elevations



Figure 4
Proposed Building Elevations (Southwest and Northwest)



Figure 5
Proposed Building Elevations (Southeast and Northeast)



Figure 6
Proposed Fifth Floor Plan



The proposed project would also include a minor modification to the façade at the corner of Monterey and 1st Street, as well as a minor modification to the building activation and entry points on Monterey Road. The maximum allowable height of buildings in the Downtown Specific Plan is four stories or 55 feet. The proposed project would require approval of a Planned Development to increase the height requirement currently allowed by the Downtown Specific Plan to accommodate the proposed partial fifth floor with a 68.5-foot building height, not including rooftop equipment and other appurtenances. The Planned Development will allow up to 70 feet in height for the building and 85 feet for rooftop equipment, elevator shafts, or stairwells.

Project Approvals

The proposed project would require the following entitlements from the City of Morgan Hill:

- Planned Development
- Design Permit Amendment

Rationale for Preparation of the Addendum

In determining whether an addendum is the appropriate document to analyze the modifications to the project and its approval, State CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration) states:

- (a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.
- (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.
- (d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

New significant effects or other grounds require preparation of a subsequent EIR in support of further agency action on a project pursuant to Public Resources Code Section 21166 and State CEQA Guidelines Sections 15162 and 15163. Under the guidelines, a subsequent or supplemental EIR or Mitigated Negative Declaration shall be prepared if any of the following criteria are met:

- (a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Use of a Prior Environmental Document:

The California Supreme Court has held that a lead agency has the responsibility of initially deciding whether an original environmental document retains “some relevance” to the ongoing decision-making process. If it does, the lead agency moves on to determine whether the original document is adequate for CEQA purposes. The City of Morgan Hill has determined that the MEIR adopted for the Downtown Specific Plan is relevant and has prepared an addendum to that document to evaluate the proposed project.

The project site is located within Block 3 of the Downtown Specific Plan, as specified in Figure 3 of the MEIR. The MEIR states that, although buildings within the Specific Plan would be required to be four stories high or smaller, taller buildings could be constructed under a Planned Development rezoning, which could possibly be proposed on key large sites, such as Block 3. Block 3 is considered a key large site in the Downtown Specific Plan and, thus, could be developed with buildings of greater height than what would otherwise be allowed, pursuant to approval of a Planned Development rezone.¹

¹ City of Morgan Hill. *Morgan Hill Downtown Specific Plan Draft Master Environmental Impact Report* [pg. 195]. July 2009.

Based on the above, in accordance with Sections 15162 through 15164 of the CEQA Guidelines, the proposed hotel expansion would not require major revisions of the Downtown Specific Plan MEIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The analysis that follows concludes that none of the conditions identified in CEQA Guidelines Sections 15162 and 15163 apply to the proposed project. Thus, preparation of an addendum would provide the appropriate level of environmental review.

In cases where an approved project has already undergone environmental review, and the environmental document has been certified by the lead agency, the lead agency can restrict its review to the incremental effects of the modified project, rather than having to reconsider the overall impacts of the project. In other words, if the project under review constitutes a modification of a previously approved project previously subjected to environmental review, then the “baseline” for purposes of CEQA is adjusted such that the originally approved project is assumed to exist.² Thus, the environmental baseline for this analysis consists of the approved Monterey-Leal Hotel Project.

Discussion

The following sections provide discussions of any potential impacts associated with the proposed project beyond those previously identified in the Downtown Specific Plan MEIR.

Aesthetics

The Downtown Specific Plan includes detailed design guidelines to ensure the development of a cohesive urban core area. The guidelines are intended to complement the existing “Main Street” commercial buildings and small-town architecture seen throughout the Downtown Core. The guidelines would maintain the pedestrian scale of the area and encourage the use of appropriate building materials to complement current development in the area.

The final site design and architectural elements of buildings within the Downtown Specific Plan boundaries are required to be reviewed by the City’s Development Services Department, and/or Planning Commission and City Council upon referral or appeal, for consistency with the design guidelines and the existing and planned visual character of the Downtown area. Conformance with the recommendations and requirements of the Design Permit would ensure that future development would not detract from the visual character and quality of the Specific Plan project area. Proposed lighting would also be reviewed to ensure that new buildings would not introduce new substantial light sources that would adversely affect nighttime views or spillover onto adjacent properties. Proposed windows in buildings would also be reviewed to confirm they would not be a substantial new source of daytime glare. Given the above, the Downtown Specific Plan MEIR determined that buildout of the Specific Plan would not substantially degrade the existing visual character of the Specific Plan project area.

The Downtown Specific Plan MEIR requires that new buildings within the Specific Plan should range from two to four stories in height, with the possibility of buildings taller than four stories under a Planned Development or a Specific Plan zoning amendment. Because the proposed

² See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), p. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), p. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.

project involves the construction of a fifth floor on top of a previously approved development, the project would require the approval of a Planned Development to allow the proposed increase in height.

The proposed fifth floor addition is only a partial floor. As shown in Figure 5, the fifth floor would be most visible from the northeast and southeast sides of the building. Public views of the hotel are most easily available from the project's frontages along 1st Street and Monterey Road, the northwestern and southwestern borders of the project site. As such, views from such public areas would already be dominated by the approved hotel building, and the addition of 14 feet in height, located on the opposite side of the building from the most available public viewpoints, would not substantially change the overall view characteristics from what is already anticipated. In addition, the architecture of the building would complement the downtown area, as the approved hotel building would use wood, brick veneer, stucco, and colors that are used in other buildings and suggested in the Downtown Specific Plan guidelines.

Although the Downtown Specific Plan MEIR identifies Nob Hill and El Toro Mountain as valued local landmarks, the MEIR also acknowledges that such views are not only already interrupted by existing development, but are not easily visible from Block 3, in which the proposed project is located.³ Therefore, the proposed project would not cause a new or more severe environmental impact to aesthetic resources beyond the scope of what was analyzed in the Downtown Specific Plan MEIR.

Air Quality

The City of Morgan Hill is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The SFBAAB area is currently designated as a nonattainment area for State and federal ozone, State and federal fine particulate matter 2.5 microns in diameter (PM_{2.5}), and State respirable particulate matter 10 microns in diameter (PM₁₀) ambient air quality standards (AAQS). The SFBAAB is designated attainment or unclassified for all other AAQS. It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (USEPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the USEPA, and the USEPA approves the proposed redesignation. The USEPA has not yet approved a request for redesignation of the SFBAAB; therefore, the SFBAAB remains in nonattainment for 24-hour PM_{2.5}.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS, including control strategies to reduce air pollutant emissions through regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, by exceeding the BAAQMD's emission thresholds for construction or operational emissions, a project

³ City of Morgan Hill. *Morgan Hill Downtown Specific Plan Draft Master Environmental Impact Report* [pg. 195]. July 2009.

would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Under Impact AQ-2, the Downtown Specific Plan MEIR determined that buildout of the Specific Plan would result in air quality emissions that would exceed the BAAQMD's thresholds of significance even with the implementation of the mitigation measures required therein. As a result, the impact was determined to be significant and unavoidable.

The 2016 IS prepared for the previously approved project noted that the Monterey-Leal Hotel Project is within the development projections outlined in the Downtown Specific Plan and evaluated in the associated MEIR. Therefore, with implementation of the mitigation measures set forth in the Downtown Specific Plan MEIR, the Monterey-Leal Hotel Project would result in less-than-significant impacts related to air quality.

In order to determine the change in criteria pollutant emissions that would occur with implementation of the proposed project, construction-related and operational emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0 software for both the previously approved project and the currently proposed project.

Table 1 presents the maximum unmitigated construction emissions associated with the approved project in comparison to the maximum unmitigated construction emissions associated with the proposed project.

Table 1				
Maximum Unmitigated Construction Emissions (lbs/day)				
	ROG	NO_x	PM₁₀[*]	PM_{2.5}[*]
Approved Project	5.37	14.76	0.68	0.64
Proposed Project	5.78	14.76	0.68	0.64
<i>Net Increase</i>	<i>+0.41</i>	<i>+0.00</i>	<i>+0.00</i>	<i>+0.00</i>
Threshold of Significance	54	54	82	54
Exceeds Threshold?	NO	NO	NO	NO
Note: * Denotes emissions from exhaust only. BAAQMD has not yet adopted PM thresholds for fugitive emissions. <i>Source: CalEEMod, August 2022 (see Attachment 2).</i>				

As presented in Table 1, the net increase in construction-related emissions would be well below the applicable thresholds of significance for all criteria pollutants. Therefore, the proposed project would not result in any new or more severe significant impacts related to construction criteria pollutant emissions from what was previously analyzed in the 2009 MEIR.

Table 2 presents the maximum unmitigated operational emissions associated with the approved project in comparison to the maximum unmitigated operational emissions associated with the proposed project.

Table 2 Maximum Unmitigated Operational Emissions								
	ROG		NO _x		PM ₁₀ *		PM _{2.5} *	
	lbs/day	tons/yr	lbs/day	tons/yr	lbs/day	tons/yr	lbs/day	tons/yr
Approved Project	2.93	0.50	1.98	0.34	0.07	0.01	0.07	0.01
Proposed Project	3.38	0.58	2.33	0.40	0.08	0.02	0.08	0.02
<i>Net Increase</i>	<i>+0.45</i>	<i>+0.08</i>	<i>+0.35</i>	<i>+0.06</i>	<i>+0.01</i>	<i>+0.01</i>	<i>+0.01</i>	<i>+0.01</i>
Threshold of Significance	54	10	54	10	82	15	54	10
Exceeds Threshold?	NO	NO	NO	NO	NO	NO	NO	NO
Note: * Denotes emissions from exhaust only. BAAQMD has not yet adopted PM thresholds for fugitive emissions. Source: CalEEMod, August 2022 (see Attachment 2).								

As presented in Table 2, the net increase in operational emissions would be well below the applicable thresholds of significance for all criteria pollutants. Therefore, the proposed project would not result in any new or more severe significant impacts related to operational criteria pollutant emissions from what was previously analyzed in the 2009 EIR.

Based on the information presented above, the proposed project would not result in any new impacts or substantially more severe impacts related to air quality relative to what was analyzed in the 2009 MEIR.

Noise

According to the 2015 Supreme Court Case, *California Building Industry Association v. Bay Area Air Quality Management District* (Case No. S213478), “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents.” As such, because the CEQA Guidelines do not require analysis of effects of the environment on the project, including impacts of noise on future residents, or in the case of the proposed project, hotel visitors, the potential effects related to noise exposure at the proposed hotel are not considered a CEQA impact.

A major concern for noise generation in urban environments is the “urban canyon effect.” The urban canyon effect occurs when a narrow street is enclosed by tall buildings, thus increasing noise propagation. Essentially, sound within an urban canyon is reflected upon itself, creating a sound pressure level (SPL) that is uncomfortable for humans. SPL becomes most severe when the ratio between building height and street width is unbalanced in favor of building height.⁴ The hotel expansion is proposed to be 68.5 feet at the highest roof point, and is bordered by Monterey Road to the west, which is approximately 65 feet wide, and 1st street to the north, which is approximately 30 feet wide. As such, the building height to street width ratio would be approximately 1:1 for Monterey Road, and approximately 2:1 for 1st Street. Although the ratio between the proposed height and 1st Street may seem substantial, the buildings opposite the project site on 1st Street are only one floor, and buildings range from one to two floors in height across Monterey Road. In addition, as noted in the aesthetics discussion above, the project building façade along both streets would only be four stories high, with the fifth floor set back from the streets, within the eastern portion of the site. Therefore, the proposed project is unlikely to create an uncomfortable noise environment through the urban canyon effect.

⁴ Acta Acustica. *Effect of Height-to-Width Ratio on the Sound Propagation in Urban Streets*. February 2015.

Based on intersection turning movement data contained in the Downtown Specific Plan traffic study, additional traffic resulting from the Downtown Specific Plan would not significantly increase noise levels in and around the Specific Plan project area.⁵ Traffic noise levels along the major routes are anticipated to increase by an average of one to two decibels (dBA) overall as a result of projected development by 2030, including projected Downtown Specific Plan development based on the traffic impact analysis assumptions. The contribution of projected Downtown Specific Plan development to these overall noise increases were found to be less than one decibel, according to the Downtown Specific Plan MEIR.

Based upon the Institute of Transportation Engineers Trip Generation Manual, 11th Edition, the additional 13 hotel rooms that would result from buildout of the proposed project would generate approximately 104 new total daily trips, with a rate of 7.99 trips generated per room.⁶ It is reasonable to assume that such a small increase would not result in a significant traffic noise increase beyond what was previously anticipated in the Downtown Specific Plan MEIR.

With regard to construction noise, the Downtown Specific Plan MEIR determined that impacts related to construction and operational noise and vibration from buildout of the Downtown Specific Plan on nearby receptors would be less than significant, with the incorporation of Mitigation Measures SM NV-2 and MM NV-5.1. SM NV-2 requires that construction activities be limited to the hours between 7:00 AM and 8:00 PM, Monday through Friday, between the hours of 9:00 AM and 6:00 PM on Saturdays, and prohibited on Sundays and federal holidays. MM NV-5.1 requires the use of mufflers and acoustically shielded construction equipment.

The proposed project is an expansion upon the previously approved project, and would therefore result in similar construction and operational noise and vibration levels as what has already been anticipated for and occurred upon the site, but for a shorter duration. Thus, with the implementation of Mitigation Measures SM NV-2 and MM NV-5.1, impacts related to construction noise would be less than significant, and new or more severe significant impacts would not occur.

Transportation and Circulation

The 2016 Downtown Specific Plan MEIR analyzed traffic impacts with regard to level of service (LOS). The law has changed with respect to how transportation-related impacts may be addressed under CEQA. Traditionally, lead agencies used LOS to assess the significance of such impacts, with greater levels of congestion considered to be more significant than lesser levels. Enacted as part of Senate Bill 743 (2013), PRC Section 21099, subdivision (b)(1), directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

Pursuant to SB 743, the Natural Resources Agency promulgated CEQA Guidelines Section 15064.3 in late 2018. It became effective in early 2019. Subdivision (a) of that section provides that "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of

⁵ City of Morgan Hill. *Morgan Hill Downtown Specific Plan Draft Master Environmental Impact Report* [pg. 123]. July 2009.

⁶ Institute of Transportation Engineers. *Trip Generation Manual, 11th Edition*. September 2021.

automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." As a result, the foregoing analysis is focused on vehicle miles traveled (VMT).

Pursuant to Section 15064.3(b)(3), a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. The City of Morgan Hill is undertaking a process of updating its General Plan policies to incorporate VMT methodologies and significance thresholds to be consistent with SB 743 but has not yet released draft thresholds. In the absence of an adopted or draft City policy with numeric thresholds, the VMT assessment relies on The Technical Advisory on Evaluating Transportation Impacts in CEQA published by the OPR.⁷ The OPR recommendations include the screening thresholds criteria listed below:

- Office or residential projects not exceeding a level of 15 percent below existing VMT per capita may indicate a less-than-significant impact on VMT;
- Projects (including office, residential, retail, and mixed-use developments) proposed within half a mile of an existing major transit stop or within a quarter of an existing stop along a high-quality transit corridor may be presumed to have a less-than-significant impact;
- 100 percent affordable residential development in infill locations may be presumed to have a less-than-significant impact on VMT;
- Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant impact; and
- Local-serving retail developments (considered to be less than 50,000 sf in size) may be assumed to cause a less-than-significant impact on VMT.

As mentioned above in the Noise discussion of this document, based on the CalEEMod modeling conducted for this analysis, the proposed addition of 13 hotel rooms is anticipated to generate approximately 104 new daily trips. Therefore, based on OPR's VMT screening thresholds criteria, the proposed project may be assumed to cause a less-than-significant impact related to VMT. Accordingly, and the proposed project would not cause a new or severely increased impact beyond what was analyzed in the Downtown Specific Plan MEIR with regards to transportation.

In addition, the OPR Technical Advisory does not specifically address hotel or visitor-based uses, indicating that lead agencies may develop their own thresholds for such land use types and allowing assessment on a case-by-case basis. The proposed hotel rooms require consideration of the project's intended visitor base and where customers would otherwise have stayed if the project were not constructed. Unless a hotel project also includes construction of a major new attraction or convention component, a hotel alone is unlikely to draw new visitors to the City. Rather, the hotel would just redistribute where visitors stay. While larger resort hotels have the potential to generate interregional trips specifically for the purpose of visiting the hotel, hotels such as the proposed project typically do not. Similarly, because the proposed expansion would consist of a fifth floor of less than 50,000-sf, the OPR Technical Advisory generally considers the proposed project to be a local-serving commercial use, rather than regional-serving.

⁷ State of California Governor's Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.

The shift in travel patterns and VMT is similar to how OPR considers retail uses, in which many types of retail projects may generally be presumed to have a less-than-significant VMT impact because the total amount of shopping that occurs in a given geographic area tends to remain unchanged, and adding new retail uses to the urban fabric often reduces the distances (i.e., the “miles” in VMT) that people need to drive on shopping trips. For example, the City of San Jose has chosen to apply the same methodology for retail to hotel uses, where small- to mid-sized hotels and other lodging uses can be expected to alter local travel patterns rather than generate new VMT, and, thus, can generally be presumed to have a less-than-significant transportation-related VMT impact. The proposed expansion would consist of adding a fifth floor to an approved hotel use and would involve an addition of less than 50,000-sf, which, based on OPR’s VMT screening thresholds for local-serving retail developments, may be assumed to cause a less-than-significant impact on VMT.

Remaining Environmental Resource Areas

The Downtown Specific Plan MEIR previously considered development of the project site with mixed uses, pursuant to the project site’s land use designations. The 2016 IS found that the then-proposed four-story, 67,940-sf commercial building was within the scope of development for the site in the Downtown Specific Plan MEIR. Because the proposed project would consist of a vertical alteration to the approved project, but not to the building footprint or project area, the area of disturbance would remain the same as what was anticipated in the Downtown Specific Plan MEIR. Therefore, impacts related to geology and soils and biological resources would be the same as what was previously analyzed.

Impacts to cultural and tribal cultural resources are anticipated to remain the same because the area of ground disturbance is identical to the original project. If cultural resources were to be found during project ground-disturbing activities, a potentially significant impact could occur. Implementation of Downtown Specific Plan MEIR Mitigation Measures SM CULT-2 and SM CULT-3 would reduce all such impacts to a less-than-significant level. Both measures would apply to the proposed project. Therefore, impacts related to cultural and tribal cultural resources from implementation of the proposed project would be identical to the impacts resulting from implementation of the original project.

Development of the proposed project would involve the creation of impervious surfaces. However, as noted previously, the proposed project is an expansion of an approved project, and the Downtown Specific Plan MEIR analyzed impacts associated with the addition of impervious surfaces throughout the Downtown Specific Plan area. Although the proposed project would add a fifth floor to the hotel, the overall roof area would not be substantially altered. The Downtown Specific Plan MEIR determined that through implementation of Mitigation Measures SM HYDRO-1 through SM HYDRO-8, impacts to hydrology and water quality would be less-than-significant. The proposed project also remains subject to the stormwater requirements set forth by the City and State. As such, impacts to stormwater runoff and water quality would be within the scope of what was previously analyzed in the Downtown Specific Plan MEIR.

Some environmental impact areas are a function of population, including public services, utilities and service systems, recreation, and population and housing. For example, if fewer individuals occupy a project site, the project is expected to exert less demand on utilities such as water and sewer. Although the proposed project would involve the development of 13 new hotel rooms, such an increase in population would not be considered significant in the context of the City or the Downtown Specific Plan area. In addition, occupants of such rooms would not be permanent

residents. Thus, impacts to the aforementioned areas would be within the scope of what was previously analyzed in the Downtown Specific Plan MEIR.

Conclusion

As established in the discussions above regarding the potential effects of the proposed project, the proposed project would not result in any new significant information of substantial importance, new significant impacts, an increase in the severity of previously identified significant impacts, or new mitigation measures, from what was analyzed in the Downtown Specific Plan MEIR. As such, the proposed project would not result in any conditions identified in CEQA Guidelines Section 15162, and a subsequent EIR is not required.

Based on the above analysis, this Addendum to the previously certified MEIR for the Downtown Specific Plan project has been prepared.

ATTACHMENT 1
2016 INITIAL STUDY

Monterey – Leal Hotel Initial Study
April 2016

Prepared by M-Group
For City of Morgan Hill

PROJECT DESCRIPTION AND BACKGROUND

Table 1:
Project Summary

Project Title:	Monterey-Leal: Site Review SR-16-01/Use Permit UP-16-01 & Environmental Assessment EA-16-01
Lead agency name and address:	City of Morgan Hill Community Development Department, 17575 Peak Avenue, Morgan Hill CA 95037
Contact person and phone number:	Andrew Crabtree (408) 778-6480
Project Location:	17420 – 17430 Monterey Road; southeast corner of Monterey Road and East First Street/ (APN: 726-14-030, -029, -031, -026 & -025
Project sponsor's name and address:	Frank Leal of Leal Vineyards 300 Marantha Drive Hollister, CA 95023
General plan description:	Mixed-Use
Zoning:	CBD GF (Central Business District Ground Floor)
Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.)	The project site includes five parcels (1.09 acres) at the southeast corner of Monterey Road and First Street within the Downtown. The site includes two single-story commercial buildings (9,750 & 3,795 square feet). To the rear of the building is a public parking lot with 65 parking spaces spanning between First and Second Streets. The project includes the demolition of the existing building and parking lot. In their place, the project includes the construction of a four-story 67,940 square foot commercial building with restaurant, retail and hotel lobby areas on the first floor and three floors of hotel (60 guestrooms and hotel amenities) area.

Monterey-Leal Hotel Project

	Vehicular access to the site for customers will be from Second Street where patrons would pull up into a circular driveway where hotel staff would valet their vehicle off-site. Utility access is from First Street where the solid waste/recycling and deliveries will be made.
Surrounding land uses and setting; briefly describe the project's surroundings:	The project is located within the City's Downtown. The surrounding properties have similar General Plan land use designations and Zoning classifications. Monterey Road within the Downtown includes one to two-story commercial buildings.
Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements):	None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 15 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☒	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources	☒	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☐	Transportation/Traffic	☐	Utilities/Service Systems	☐	Mandatory Findings of Significance

Monterey-Leal Hotel Project

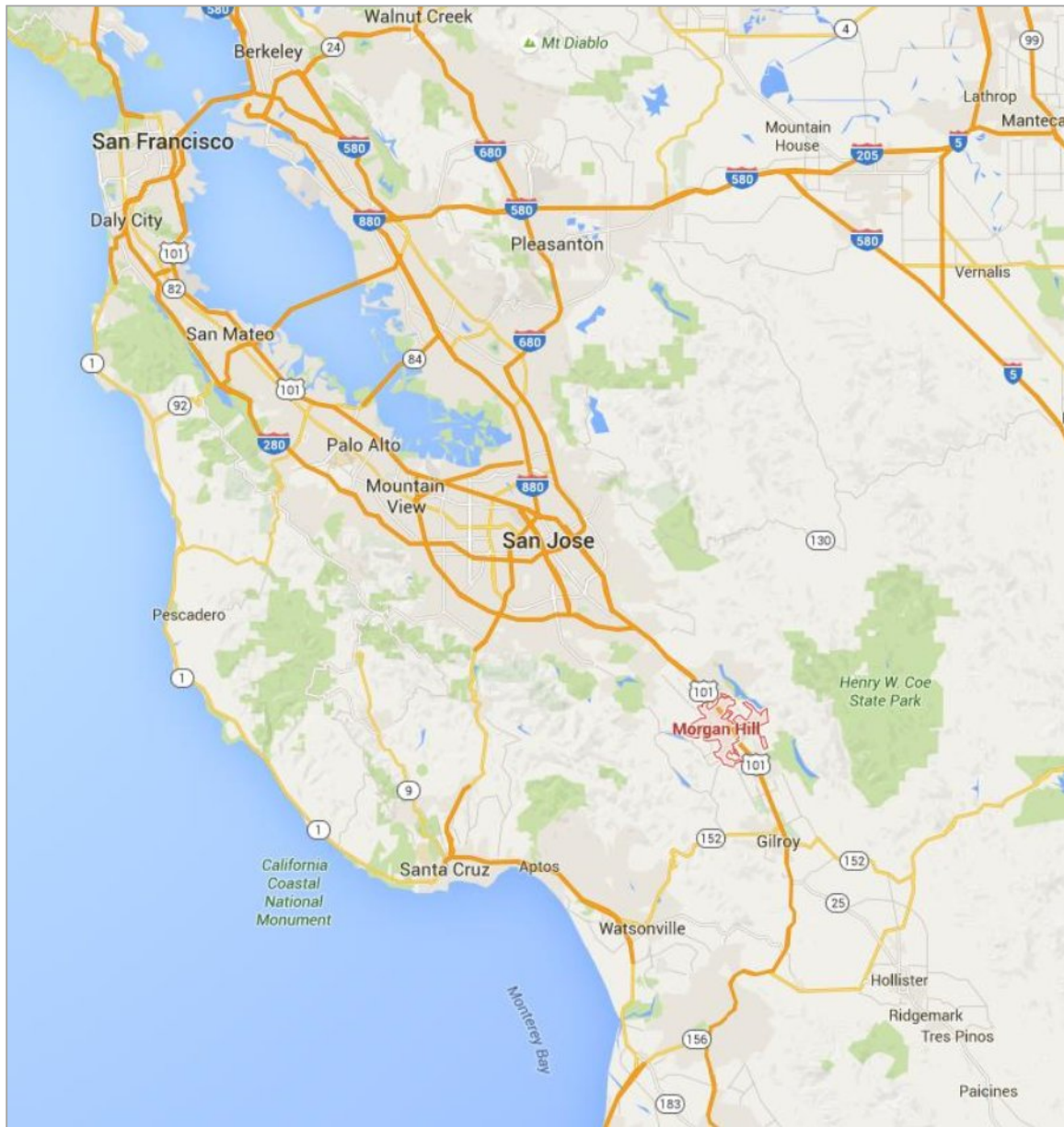
DETERMINATION:

On the basis of this initial evaluation:

☒	No substantial changes have occurred with respect to the circumstances under which the MEIR was certified, or that there is no new available information, which was not known and could have been known at the time the MEIR was certified.
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Monterey-Leal Hotel Project

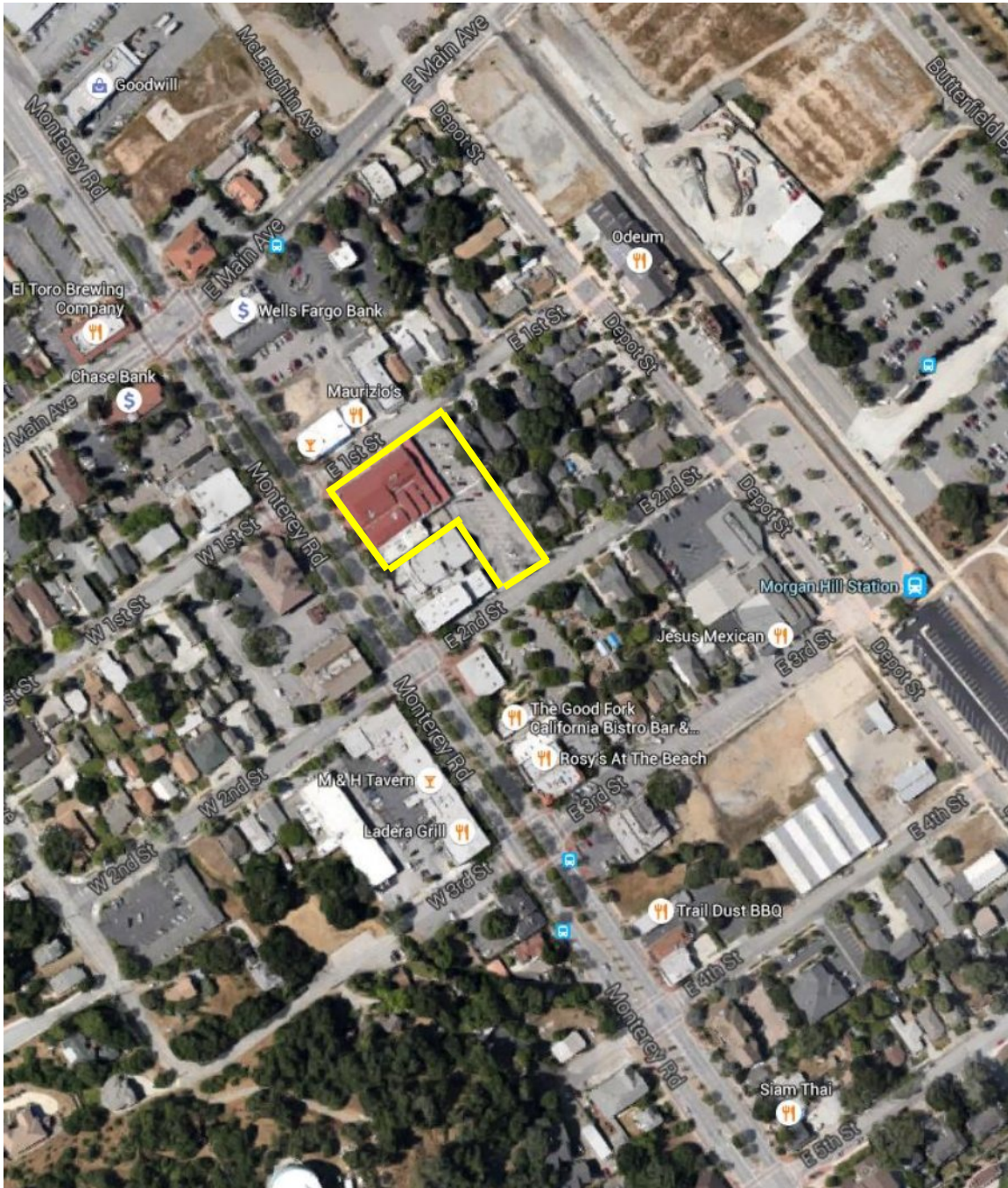
Figure 1:
Regional Map



Source: Google

Monterey-Leal Hotel Project

Figure 2:
Local Vicinity



Source: Google

Monterey-Leal Hotel Project

Figure 3:
Proposed Site Plan



Source: Granada Hotel & Mixed Use KTG 2016

Monterey-Leal Hotel Project

Figure 4:
Proposed Elevations

Source: Granada Hotel & Mixed Use KTGy 2016



Monterey-Leal Hotel Project

Project Description

Location and Existing Setting

The Monterey-Leal Hotel project (project) is located within the City of Morgan Hill (City) in Santa Clara County. The project site is located within the City's Downtown (Figure 2: Local Vicinity) on Monterey Road, approximately 830 feet from the Morgan Hill Caltrain Station. The approximate 1.09 acre site is bordered by Second Street and commercial buildings to the south; Monterey Road to the west; First Street to the north and residential buildings to the east. It is currently designated Mixed Use under the City's General Plan, and zoned as Central Business District—Ground Floor (CBD GF).

Access to the site is currently provided from Monterey Road via two curb cuts (First and Second Streets). The site is comprised of five parcels (APN: 726-14-030, -029, -031, -026 & -025). The site includes two single-story commercial buildings (9,750 & 3,795 square feet). To the rear of the building is a public parking lot with 65 parking spaces spanning between First and Second Streets. The site contains limited biological habitat with no vegetation on-site. The site is well served by existing utilities and public services and is relatively at grade with Monterey Road. Other commercial and residential development are located within Downtown. A new multi-story public parking garage will open in the near future within the vicinity of the site.

Monterey – Leal Hotel Project

The proposed project would demolish the existing on-site structures and surface parking areas and construct a 67,940 square foot, four-story building and ancillary services parking area, hotel customer drop-off areas and landscaped areas. The first floor includes areas for restaurant, bars, retail, the hotel lobby, and service areas to support those spaces. The second floor includes the hotel amenity areas, banquet hall area and service areas to support those spaces. The third floor includes guestrooms and outdoor amenity area and the fourth floor includes guestrooms.

The outdoor green event space, ground level small conference and second floor meeting/banquet rooms will be used for meeting and social events for guests. The pool and outdoor living/ lounge area on third level will be available for guest use only and will be used for meeting break outs, wine and cheese hour and movie projections for guests only. There will be a small prep kitchen to service the meeting spaces, pool decks and outdoor living room/lounge while the main kitchen will service the hotel, restaurant, flower shop, market, wine bar and bar. Room service option will be available.

Table 2:
Project Components

Proposed Component Type	Square Feet
Site Area	47,582
First Floor	20,610
Second Floor	17,825
Third Floor	15,030
Fourth Floor	14,475
<i>Total Gross Floor Area</i>	<i>67,940</i>
Outdoor Amenity/Paseo/Roof Garden Areas	12,596

Monterey-Leal Hotel Project

Proposed Component Type	Square Feet
Private balconies	1,800
<i>Total open space areas</i>	<i>14,396</i>

Source: Granada Hotel & Mixed Use Plans, KTGy 2016

Commercial and hotel trash storage will be combined and receptacles will be located within the service yard at the north side of the property. Pick up will be done as needed with a minimum of three times per week. Monday, Wednesday and Friday between 7-8am.

Access and Parking

The project would eliminate one driveway cut and no on-site parking would be provided. There will be a fair amount of deliveries due to the onsite food and beverage operations on site. Deliveries to the hotel, restaurant and Hotel Kitchen will be routed through the service yard along the northwest side of the property off of First Street. Deliveries to the flower shop, market and bar will be routed to yellow zones along Monterey Boulevard in front of building then transferred to commercial spaces. The vehicular access from Second Street is for hotel customers to drop off and have their vehicle valet parked off-site. The site would include multiple entries for pedestrians from the sidewalk along Monterey Road and Second Street.

Site Preparation

The project consists of removal of the existing building and structures, grading and other earthwork to achieve desired elevations.

Project Construction Access

No construction access plan was submitted at this time, however, the project could take access from Monterey Road, First or Second Streets. The applicant would be required to submit a traffic control plan to the City.

Construction haul routes

Leaving the site: North on Monterey to First or Second Streets (East) to Depot (North) to East Main Street (East) to Butterfield Boulevard (South) to East Dunne (East) to Highway 101]

Coming to the site: Highway 101 to East Dunne (West) to Monterey (North) to the site. Based on the grading and demolition plans there would be limited hauling.

Staging

During constructional staging activities will be onsite as much as the site restrictions allows. Contractor will make use to the first level concrete podium construction with staging both above and below the elevated slab. Should off-site staging be required, contractor to plan to work a deal with any empty site immediately adjacent to the site. The application would be required to apply for any applicable encroachment permits, and submit any traffic control plans that may be necessary.

Schedule

Construction would occur entirely in one phase and be completed between 18 months.

Monterey-Leal Hotel Project

Construction Equipment

No construction equipment schedule was submitted at this time, however, typical construction equipment include back-hoe, grader, excavator, dozer, skid steer loader amongst others. Given the small site, it is not expected that larger equipment would be necessary.

Landscaping

There are no on-site trees or vegetation. The project proposes to plant a coast live oak tree in the roundabout where customer vehicles would enter the property. Other plantings include Smoke Tree, Olive, western red-bud, and pomegranate trees. Other various groundcover and flowering shrubs to accent the site are proposed (refer to the project plans).

City's Standard Conditions of Approval

Appropriate City Standard Conditions of Approval are incorporated into projects as conditions of approval regardless of a project's environmental determination. As applicable, the Standard Conditions of Approval are adopted as requirements for an individual project when it is approved by the City and are designed to substantially mitigate environmental effects.

In reviewing project applications, the City determines which Standard Conditions of Approval are applied, based upon zoning district, type of permit/approval required for the project, and specific project characteristics.

The Standard Conditions of Approval incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Morgan Hill Municipal Code which include ordinances governing tree removals, grading, building, and construction, California Building Code, and Uniform Fire Code, et al.), which have been found to substantially mitigate environmental effects.

Standard and Mitigation Measures

As indicated within the Master EIR, measures that are required by law or are City standard conditions of approval are categorized at "Standard Measures." "Mitigation Measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guideline 15370).

Where applicable standard and mitigation measures are applied to the project.

Project Entitlements

The project would require the following entitlements:

- Site and Architectural Review for project design.
- Conditional Use Permit for the hotel use
- Lot Merger to combine the lots into one.
- Encroachment Permit

Monterey-Leal Hotel Project

Intended Use of Downtown Specific Plan Master EIR

The CEQA Guidelines identify a Master EIR as an alternative to preparing a project EIR, staged EIR, or program EIR for certain projects which will form the basis for later decision making. The Downtown Specific Plan Master EIR (Master EIR) is intended to identify the impacts of the Downtown Specific Plan in order to streamline the later environmental review of projects and approvals required to implement the plan. The Master EIR includes all available information with regard to the kind, size, intensity, and location of subsequent projects envisioned under the Downtown Specific Plan, per CEQA Guidelines Section 15176(b). The Master EIR was certified in November 2009, and subsequent projects consistent with the Downtown Specific Plan (including later site-specific approvals) may rely on the analysis contained in the Master EIR, per CEQA Guidelines Section 15176(d).

At the time subsequent development projects are proposed within the Downtown Specific Plan project area only limited environmental review will be required. Neither a new environmental document, such as an EIR, nor the preparation of EIR findings per CEQA Guidelines Section 15091 shall be required of a subsequent project when the Lead Agency (City of Morgan Hill) determines the following, pursuant to CEQA Guidelines Section 15177(b):

- The subsequent project was described in the Master EIR and, through the preparation of an Initial Study, is not found to cause any additional significant effect on the environment which was not previously examined in the Master EIR.
- On the basis of written findings, no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives may be required and the project is within the scope of the Master EIR.

Since the Master EIR was certified more than five years ago, an additional finding is required by the Lead Agency:

- Finds that no substantial changes have occurred with respect to the circumstances under which the Master EIR was certified or that no new information, which was not known and could not have been known at the time that the Master EIR was certified as complete, has become available.

The checklist of this document will analyze whether the project includes potentially significant impacts and is inconsistent with the MEIR, thus requiring a subsequent environmental document; requires mitigation, which were identified as part of the Master EIR; has a less than significant impact; or no impact.

Downtown Specific Plan Master EIR Assumptions

Development Projections

The purpose of the development projections is to identify the likely development that might reasonably be assumed to occur by the 2015 and 2030 timeframes in order to provide CEQA clearance for future projects developed consistent with the Specific Plan. The Master EIR, including the water supply assessment and parking analysis for the Master EIR, analyzed the impacts of the implementation of the Downtown Specific Plan based on the identified likely development projections for the Specific Plan project area (Blocks 1-20) shown in Table 2

Monterey-Leal Hotel Project

(Originally 2.1-2 of the Master EIR). The traffic impact analysis was based on an amount of development closer to buildout assumptions for the Specific Plan and assumes a higher redevelopment rate for the planned uses. Both the water supply assessment and the traffic impact assumptions represent conservative analyses of development impacts under the Specific Plan. The Specific Plan provides that the City will monitor actual levels of development over time, in order to ensure that the EIR analysis and mitigation measures, as adopted, remain valid for subsequent projects. It also provides for an update of the analysis, as may be required.

Projections through 2015

As shown in Table 2.1-2, the City's development projections for 2015 include approximately 21,221 square feet of new retail space, 850 residential units, and 30,157 square feet of office space within the Downtown Specific Plan project area. The projected retail development assumes replacement of approximately 38,900 square feet of existing retail space.

For the purposes of the Master EIR, development projections through 2015 would result in an increase of 21,221 square feet of retail space, 850 residential units, and 30,157 square feet of office space.

Projections 2015 to 2030

The development projections from 2015 to 2030 include approximately 72,269 square feet of additional retail space, 55,434 square feet of new office space and 342 additional new residential units within the Specific Plan project area.

Projections through 2030

The proposed Specific Plan project, including Blocks 19 and 20 and the intensification of the CC-R district, would result in a net increase of 93,490 square feet of retail space, 1,192 residential units, and 85,591 square feet of office space.

Table 2:
Development Projections

Land Use	Existing Development ¹	Development by 2015		Development by 2030	
		Net New	Total	Net New	Total
Retail	213,365 s.f.	21,221 s.f. ²	234,586 s.f.	93,490 s.f.	306,855 s.f.
Residential	201 DU	850 DU	1,051 DU	1,192 DU	1,393 DU
Office/Service	122,248 s.f.	30,157 s.f.	152,405 s.f.	85,591 s.f.	207,839 s.f.

Notes: DU = dwelling units, s.f. = square feet

¹Blocks 1-20 excluding public facilities (including schools, Community and Cultural Center, churches, social halls) and industrial.

²38,900 s.f. of retail development to be replaced on Blocks 2-4.

Actual development

To date within the Downtown Specific Plan area, approved there would be approximately 12,180 square feet of net additional commercial or office square footage. That number totaled with this project the amount of commercial square footage would be 66,872 and therefore to date,

Monterey-Leal Hotel Project

development has been within the projections described in the Master EIR. The Master EIR anticipated the extension of Butterfield Boulevard to Monterey Road, which is now complete.

Monterey-Leal Hotel Project

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

I. AESTHETICS: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Have a substantial adverse effect on a scenic vista	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

As proposed, the project includes a four-story commercial building that would include retail space on the first floor, on the second floor includes amenities for hotel guests and banquet facilities, and guestrooms for a hotel are located on the upper floors. The project continues the traditional rhythm of development and include a height that is appropriate for hospitality uses. The first floor includes a restaurant with outdoor patio space. A paseo from Monterey Road leads to the lobby of the hotel.

The second floor includes an outdoor amenity area with a swimming pool. Landscaping is integrated on the ground and in areas that are open to the sky within the building. In the roundabout area, an oak tree will be planted.

The architecture of the building would complement the downtown since the building uses wood, brick veneer, stucco and colors that are used in other buildings and suggested in the Downtown Specific Plan guidelines. While the building is taller than the surrounding buildings, as required by the Downtown Specific Plan design guidelines, the upper floor is stepped back. Elevations are articulated and provide the appropriate proportions for commercial on the first floor.

Monterey-Leal Hotel Project

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

The project site is completely developed and includes no agricultural resources and is not subject to any Williamson Act contract. The project site settings have not changed since the certification of the Downtown Specific Plan Master EIR and therefore there is no impact to agricultural resources.

Monterey-Leal Hotel Project

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

The project is within the development projections outlined in the Downtown Specific Plan and its Master EIR. As identified within the Master EIR, future projects would need to implement standard measures to ensure temporary construction activities do not have a significant impact.

SM AQ-1: In accordance with the City of Morgan Hill Standard Conditions of approval, a management plan detailing strategies for control of dust during construction of the project shall be included on all site development and grading plans. The intent of this condition is to minimize construction related disturbance of residents of the nearby or adjacent properties. [MHMC 18.48.005]

MM AQ-5.1: The Bay Area Air Quality Management District (BAAQMD) has prepared a list of feasible demolition and construction dust control measures required to reduce construction impacts to a less than significant level. The following construction practices shall be incorporated into dust mitigation plans implemented during demolition and construction phases of proposed development in the Specific Plan project area to reduce dust and exhaust emissions:

- Water active demolition areas to control dust generation during demolition of structures and break up of pavement.
- Cover all trucks hauling demolition debris from the site.
- Use dust proof chutes to load debris into trucks whenever feasible.
- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand, or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard.

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- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.).
- Limit traffic speeds on unpaved roads to 15 miles per hour.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

AM AQ-5.1: The following additional measures recommended by the BAAQMD to reduce engine exhaust emissions:

- Use alternative fueled construction equipment, when feasible.
- Minimize idling time (five minutes maximum).
- Maintain properly tuned equipment.
- Limit the hours of operation of heavy equipment and/or the amount of equipment in use.

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IV. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

The project site does not contain habitat for burrowing owls, and there is no on-site vegetation, however, there are mature trees off site that may be impacted construction of the project. The implementation of Master EIR standard measures would reduce any potential significant impact to a less than significant level.

Standard Measures: In accordance with City of Morgan Hill Municipal Code, standard significant tree removal ordinance procedures and the proposed Specific Plan design guidelines, development in the project area would be subject to the following standard measures at the time of development.

SM BIO-4: Prior to site development, the applicant shall retain the services of a certified arborist to assess all trees that may be impacted by the proposed project. The arborist will conduct a tree assessment and submit a report to the City detailing all trees subject to the *Chapter 12.32 Restrictions On Removal Of Significant Trees*. The report will include:

- Tree species and common name.

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- Size (dbh) and approximate height of tree(s).
- Current health of the tree including at a minimum: bark, foliage, structure/integrity, and roots.
- Evaluation of current health and potential impacts to future health. Recommendations for protection or removal of tree (if removal of tree is recommended, provide justification.
- Proposed mitigation and protection measures.

SM BIO-5: Native trees shall be planted to replace native trees removed unless practical reasons preclude this option, as determined by the Community Development Director. [MHMC 12.32.080(A)]

SM BIO-6: Prior to the removal of any tree or community of trees on any city or private property in the Specific Plan project area a tree removal permit would be required from the Community Development Director which would include a description of the tree replacement program and identify any additional conditions imposed by the City. Alternatively, the City's ordinance section 12.32.070(B) allows the Community Development Director to grant a tree cutting permit where utilization of the property is of greater public value than the environmental degradation caused by the action. Tree removal may also occur without a permit if the removal will take place in accordance with an approved landscape plan. [MHMC 12.32.030, 12.32.040, 12.32.060]

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V. CULTURAL RESOURCES: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The project includes some grading and excavation to support the construction of the project. The project will implement standard measures that would reduce potential impacts to cultural resources to a less than significant impact.

Standard Measures: In accordance with the City of Morgan Hill Municipal Code Chapter 18.75, proposals for the development or redevelopment of a site identified as archaeologically sensitive by the City's adopted archaeological sensitivity map shall be subject to the following review process and standard conditions of project approval:

SM CULT-2: If the project is not located within or adjacent to a known archaeological site, but is located within the mapped archaeologically sensitive area as adopted by the City, then the project applicant has the option to either have an archaeological survey be completed for the site to determine what, if any, conditions of approval will be required as mitigation measures; or agree to comply with the following standard conditions of approval, which shall be conclusively deemed to reduce potentially significant impacts on archaeological resources to a less than significant level (no archaeological resources report is required as part of any CEQA review of the project as long as the applicant accepts these conditions and incorporates them into the project):

- An archaeologist shall be present on-site to monitor all ground-disturbing activities. Where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met, as described below:

- Work at the location of the find will halt immediately within thirty feet of the find. If an archaeologist is not present at the time of the discovery, the applicant shall contact an archaeologist for evaluation of the find to determine whether it qualifies as a unique archaeological resource as defined by this chapter;
- If the find is determined not to be a Unique Archaeological Resource, construction can continue. The archaeologist will prepare a brief informal memo/letter that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find;

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- If the find appears significant and to qualify as a unique archaeological resource, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures in a formal memo/letter; and
- If the resource cannot be avoided, the archaeologist shall develop within forty-eight hours an action plan to avoid or minimize impacts. The field crew shall not proceed until the action plan is approved by the community development director. The action plan shall be in conformance with California Public Resources Code 21083.2.

SM CULT-3: All development projects located within an archaeological sensitivity area and/or containing known archaeological resources on-site shall also be subject to the following measures as standard conditions of project approval:

- This project may adversely impact undocumented human remains or unintentionally discover significant historic or archaeological materials. The following policies and procedures for treatment and disposition of inadvertently discovered human remains or archaeological materials shall apply. If human remains are discovered, it is probable they are the remains of Native Americans.
- If human remains are encountered they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
- Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
- Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
- In the event that known or suspected Native American remains are encountered or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped. Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits. Ground-disturbing project activities may continue in other areas that are outside the exclusion zone as defined below.
- An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols, or if on-site at the time of discovery, by the Monitoring Archaeologist (typically 25-50ft for single burial or archaeological find).
- The exclusion zone shall be secured (e.g., 24 hour surveillance) as directed by the City or County if considered prudent to avoid further disturbances.
- The Contractor Foreman or authorized representative, or party who made the discovery and initiated these protocols shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - The City of Morgan Hill Community Development Director

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- The Contractor's Point(s) of Contact
- The Coroner of the County of Santa Clara (if human remains found)
- The Native American Heritage Commission (NAHC) in Sacramento
- The Amah Mutsun Tribal Band
- The Coroner has two working days to examine the remains after being notified of the discovery. If the remains are Native American the Coroner has 24 hours to notify the NAHC.
- The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
- Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's community development director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.
- If the MLD recommendation is rejected by the City of Morgan Hill the parties will attempt to mediate the disagreement with the NAHC. If mediation fails then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

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VI. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐

The project will implement the standard measures implied in the Master EIR. With the implementation of these measures, the project would have a less than significant impact.

Standard Measures: In accordance with the City of Morgan Hill standards, development in the Specific Plan project area shall implement the following measures to reduce and/or avoid soil hazards and substantial erosion impacts:

SM GEO-1: Prior to issuance of site development permits, the applicant shall provide two copies of a soils (geotechnical) engineering report prepared by a registered civil (geotechnical) engineer to the City of Morgan Hill Building Division for review and approval. The report shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading criteria for corrective measures, and opinion on adequacy for the intended use of sites to be developed by the proposed grading as affected by soils engineering factors, including the stability of slopes, per Uniform Building Code (UBC) Appendix Chapter 70.

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The report shall also include soil classification and foundation investigation as required by UBC Chapter 29 (UBC Appendix Chapter 33).

SM GEO-2: The project shall implement standard grading and best management practices, including but not limited to, street sweeping, fiber rolls, inlet protection, stockpile covering or watering, covering of trucks, and/or replanting of vegetation, to prevent substantial erosion and siltation during development of the site.

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VII. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The project is within the development projections identified within the Downtown Specific Plan and the Master EIR. Therefore, the impact would continue to be a less than significant.

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VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

The existing building on-site was constructed in 1950 and therefore may contain lead-based paint, and asbestos containing materials (ACMs). Implementation of standard measures identified in the Master EIR would reduce the potential impact to less than significant.

Standard Measures: Development in the Specific Plan area is required to conform to the following regulatory programs to reduce impacts due to the presence of ACMs and/or lead-based paint to a less than significant level:

SM HM-1: As appropriate, a lead survey of painted surfaces and soil around buildings on parcels proposed for redevelopment shall be performed prior to demolition. Requirements outlined by Cal/OSHA Lead in Construction Standard, Title 8, CCR 1532.1 would be followed during demolition activities, including employee training, employee air monitoring and dust control. Any debris or

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soil containing lead-based paint or coatings would be disposed of at landfills that meet acceptance criteria for the waste being disposed.

SM HM-2: All potentially friable ACMs shall be removed in accordance with the NESHAP guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities shall be undertaken in accordance with OSHA standards contained in Title 8 of the CCR, Section 1529, to protect workers from exposure to asbestos. Specific measures could include air monitoring during demolition and the use of vacuum extraction for asbestos-containing materials.

SM HM-3: A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.

SM HM-4: Materials containing more than one (1) percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one (1) percent asbestos shall be completed in accordance with BAAQMD requirements.

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IX. HYDROLOGY AND WATER QUALITY: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☒	☐

The project is subject to the City's water quality regulations. The project includes a storm water management plan to address storm water runoff. The project is within the development projections identified in the Downtown Specific Plan and Master EIR. The implementation of the applicable standard measures will ensure that any potential impacts are reduced to a level of less than significant.

Drainage

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Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the City's storm drainage system.

SM HYDRO-1: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvement and Improvement Agreements, a complete storm drainage study of the proposed development must be submitted showing amount of runoff, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the Director of Public Works. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted.

SM HYDRO-2: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvement and Improvement Agreements, the applicant of development proposed under the Specific Plan shall cause the design and construction to be undertaken for a storm drainage collection system shown on the tentative map or site development plan. All storm drain improvements shall be constructed to the satisfaction of the Director of Public Works.

SM HYDRO-3: In accordance with Morgan Hill Municipal Code Chapter 17.32, Improvements and Improvement Agreements, proposed collection system in the project area shall be designed to be capable of handling runoff without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity; whereas, on-site retention facilities shall be designed to a 100-year storm capacity. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works. Items of construction shall include, but not be limited to installation of storm line extensions and surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals.

SM HYDRO-4: Future development will be required to pay the City of Morgan Hill Storm Drainage Impact fee in accordance with Chapter 3.56 of the Morgan Hill Municipal Code. The fees established by this chapter are based on the costs required for new facilities and other capital acquisition costs to serve new development.

Flooding

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to reduce and/or avoid flooding impacts:

SM HYDRO-5: Development in the project area shall comply with Morgan Hill Municipal Code Chapter 18.42, the Flood Damage Prevention Ordinance, which requires new residential construction to elevate habitable spaces one foot above anticipated flood levels, non-residential construction to be flood proofed, and subgrade floors to withstand hydrostatic flood forces.

SM HYDRO-6: Development proposed in the project area would prepare and submit a Storm Drainage Study to the Director of Public Works for review and approval. The study would include calculations to determine detention and operations and demonstrate how the runoff rate from the proposed development would be less than or equal to existing conditions, or how off-site facilities would be used.

Water Quality

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Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measure to avoid construction phase and post-construction water quality impacts:

SM HYDRO-7: Prior to final map approval or issuance of a grading permit the applicant shall complete the following to the satisfaction of the Director of Public Works.

- Storm drain calculations to determine detention pond sizing and operations.
- Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.
- Water Pollution Control Drawings (WPCD) for Sediment and Erosion Control.

SM HYDRO-8: As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one (1) acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification (WDID) number to the construction site will be issued after the SWRCB receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Public Works Department review. SWPPP shall be made a part of the improvement plans.

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X. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

The project is consistent with the Downtown Specific Plan development standards. Future operators of the restaurants may want to provide a full range of alcoholic beverage service. That request would require the approval of a Conditional Use Permit from the City's Planning Commission.

The project proposes commercial uses within the Downtown area, which is consistent with the Specific Plan. The project would continue to be consistent with the Design Guidelines of the Downtown Specific Plan, including constructing service areas away from public view.

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XI. MINERAL RESOURCES: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

The site setting has not changed since the certification of the Master EIR and therefore there would be no impact.

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XII. NOISE: Would the project result in:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The project proposes commercial development with no residential uses on-site, while there are adjacent uses that are residential. There may be temporary noise impacts associated with construction activities. As identified in the Master EIR, construction projects with a duration of less than a year typically do not have significant impacts, however, projects with construction exceeding one year may have significant impacts unless mitigation is implemented. The project is a project with a longer construction duration that fits the description identified in the Master EIR. The implementation of standard measures and construction mitigation measures would ensure that impacts are less than significant.

Standard Measures: The following standard measure will reduce potential construction related noise impacts to nearby sensitive receptors:

SM NV-2: Construction activities shall be limited to the hours between 7:00 a.m. and 8:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. and 6:00 p.m. on Saturdays. No construction activities should occur on Sundays or federal holidays (Consistent with Section 8.28.040 of the Morgan Hill Municipal Code).

Construction Noise *Mitigation Measures*

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MM NV-5.1: The following mitigation measures shall be implemented, as conditions of approval, in addition to construction hour limitations in the Morgan Hill Municipal Code, to reduce potential construction related noise impacts to nearby sensitive receptors:

- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise generating equipment (e.g. rock crushers, compressors) as far as possible from adjacent residential receivers.
- Acoustically shield stationary equipment located near residential receivers with temporary noise barriers or recycled demolition materials.
- Utilize “quiet” air compressors and other stationery noise sources where technology exists.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a “disturbance coordinator” who would be responsible for responding to any complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., bad muffler, etc.) and would require that reasonable measures be implemented to correct the problem.

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XIII. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

The Master EIR identified that by 2030, the Specific Plan area would include an additional 1,192 residential units and 1,577 additional employees.

The project proposes the construction of a four-story commercial and hotel building totaling 67,940 square feet, which is a net of 58,190 square feet. Approximately 8,481 square feet is for restaurant area, 6,197 square feet is for the commercial area and 36,427 square feet is for the hotel area. Circulation and common areas were excluded. Based on square footage and the US Green Building Council for employees per square foot¹, the proposed restaurant uses would employ 63 people, the commercial areas would employ 11 people and the hotel would employ 32 people. No residential units are proposed. The total for this project (106 employees) and other approved projects (100 employees) are within the employment projections and therefore the project would have less than significant impact.

¹ USGBC. Building Area per Employee by Business Type.

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwi88t6Pu7vJAhVBzWMKHTchCFEQFggdMAA&url=http%3A%2F%2Fwww.usgbc.org%2FDocs%2FArchive%2FGeneral%2FDocs4111.pdf&usq=AFQjCNHi969PWIS_W0NeeCtN39LBjtcoqA Accessed: December 1, 2015

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XIV. PUBLIC SERVICES:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☒	☐
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☒	☐

The project is within the Development Projections identified in the Downtown Specific Plan and the Master EIR.

Implementation of standard measures identified in the Master EIR will ensure that the project has a less than significant impact.

Fire Protection

Standard Measures: In accordance with City of Morgan Hill standard conditions, development in the Specific Plan project area shall implement the following measures:

SM PS-1: Development and roadway modifications proposed under the Specific Plan will be subject to SCCFD review to ensure building compliance with the Uniform Fire Code and roadway widths/configurations allow for fire truck access to buildings and adequate response times to the project area.

Schools

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the Morgan Hill Unified School District.

SM PS-2: State Law (Government Code Section 65996) specifies an acceptable method of offsetting a project's effect on the adequacy of school facilities is payment of a school impact fee prior to issuance of a building permit. The school impact fees implementation of measures specified in Government Code 65996 would be used to offset project-related increases in student

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enrollment. Residential development proposed under the Specific Plan would be required to comply with the school impact fee requirements of the Morgan Hill Unified School District.

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XV. RECREATION:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

The project includes the construction and operation of commercial buildings. No residential development is included with the project. Therefore, there would be no impacts to recreation.

Monterey-Leal Hotel Project

XVI. TRANSPORTATION/TRAFFIC: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

The project is within the Downtown Specific Plan and Master EIR development projections. The Master EIR identified Significant and unavoidable impacts for transportation. The City of Morgan Hill continues to monitor traffic conditions at Main Avenue and Depot Street (MM TRANS-5.1/MM TRANS-5a.1), Main Avenue and Hale Avenue (MM TRANS-6a.1) and Main Avenue and Butterfield Boulevard (MM TRANS-8a.1) as specified in the Master EIR.

The Specific Plan does not require parking commercial uses. While parking spaces will be eliminated on-site, the project proposes valet parking for customers and having employees park away from the site. The project also proposes that employees travel by bicycle. The City recently completed a Downtown Parking study that identified available parking, future demand and peak parking periods throughout the week. Within the vicinity there is available parking on street and off-street. The City's public parking garage will open soon providing 271 stalls for the downtown area. The project indicates receiver sites for the valet parking program.

In addition, the project is within a quarter-mile of the Morgan Hill Caltrain Station. In accordance with CEQA Section 21099 (adopted subsequent to the certification of the Master EIR), projects within a transit area will not have significant impacts to aesthetics and parking.

Monterey-Leal Hotel Project

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

The project is within the development projections outlined in the Downtown Specific Plan and Master EIR. The implementation of standard measures will ensure that the project would have less than significant impacts.

Storm Drainage System

Specific Plan area shall implement the following measures to avoid impacts to the City's storm drainage system.

Standard Measures: In accordance with City of Morgan Hill standards, development in the Specific Plan area shall implement the following measures to avoid impacts to the City's storm drainage system.

SM UTIL-3: In accordance with Morgan Hill Municipal Code Chapter 17.32, a complete storm drainage study of the proposed development must be submitted showing amount of runoff, and existing and proposed drainage structure capacities. This study shall be subject to review and approval by the Director of Public Works. All needed improvements will be made by the applicant. No overloading of the existing system will be permitted.

Monterey-Leal Hotel Project

SM UTIL-4: In accordance with Morgan Hill Municipal Code Chapter 17.32, the applicant for development proposed under the Specific Plan shall cause the design and construction to be undertaken for a storm drainage collection system shown on the tentative map or site development plan. All storm drain improvements shall be constructed to the satisfaction of the Director of Public Works.

SM UTIL-5: In accordance with Morgan Hill Municipal Code Chapter 17.32, proposed collection system systems in the project area shall be designed to be capable of handling a 10-year storm without local flooding. On-site detention facilities shall be designed to a 25-year storm capacity; whereas, on-site retention facilities shall be designed to a 100-year storm capacity. Off-site detention and retention facilities may also be proposed, and are subject to the approval of the Director of Public Works. Items of construction shall include, but not be limited to Installation of storm line extensions and surface and subsurface storm drain facilities, manholes with manhole frames and covers, catch basins and laterals.

Monterey-Leal Hotel Project

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact and Inconsistent with MEIR	Less Than Significant with Mitigation identified in the MEIR	Less Than Significant Impact Consistent with MEIR	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

The project proposed development is within the development projections identified in the Downtown Specific Plan and Master EIR. The project site is completely developed. The project is within an area that includes existing infrastructure. The City of Morgan Hill will continue to implement the City's Capital Improvement Program, Water Master Plan and Sanitary Sewer Master Plan.

Furthermore, the project is subject to standard measures and mitigation measures contained herein that would reduce impacts to less than significant.

ATTACHMENT 2

AIR QUALITY AND GREENHOUSE GAS MODELING RESULTS

Granada Hotel - Approved Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Granada Hotel - Approved Project
Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	60.00	Room	1.09	67,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Lot acreage and square footage updated to match site plan.
- Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.
- Demolition -
- Off-road Equipment -
- Off-road Equipment -
- Off-road Equipment -
- Trips and VMT -
- Off-road Equipment -
- Off-road Equipment -
- Off-road Equipment -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	87,120.00	67,940.00
tblLandUse	LotAcreage	2.00	1.09

2.0 Emissions Summary

Granada Hotel - Approved Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3771	1.1642	1.2788	2.4600e-003	0.0550	0.0511	0.1061	0.0184	0.0491	0.0675	0.0000	209.8500	209.8500	0.0326	2.9800e-003	211.5530
2024	0.1785	0.3974	0.4733	9.2000e-004	0.0109	0.0160	0.0269	2.9400e-003	0.0156	0.0185	0.0000	77.6041	77.6041	0.0101	1.1400e-003	78.1944
Maximum	0.3771	1.1642	1.2788	2.4600e-003	0.0550	0.0511	0.1061	0.0184	0.0491	0.0675	0.0000	209.8500	209.8500	0.0326	2.9800e-003	211.5530

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3771	1.1642	1.2788	2.4600e-003	0.0550	0.0511	0.1061	0.0184	0.0491	0.0675	0.0000	209.8498	209.8498	0.0326	2.9800e-003	211.5528
2024	0.1785	0.3974	0.4733	9.2000e-004	0.0109	0.0160	0.0269	2.9400e-003	0.0156	0.0185	0.0000	77.6040	77.6040	0.0101	1.1400e-003	78.1943
Maximum	0.3771	1.1642	1.2788	2.4600e-003	0.0550	0.0511	0.1061	0.0184	0.0491	0.0675	0.0000	209.8498	209.8498	0.0326	2.9800e-003	211.5528

Granada Hotel - Approved Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.5060	0.5060
2	8-1-2023	10-31-2023	0.6216	0.6216
3	11-1-2023	1-31-2024	0.6130	0.6130
4	2-1-2024	4-30-2024	0.3737	0.3737
		Highest	0.6216	0.6216

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	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003
Energy	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	205.7142	205.7142	0.0106	3.8300e-003	207.1202
Mobile	0.1841	0.1943	1.6104	3.1500e-003	0.3358	2.3900e-003	0.3382	0.0897	2.2300e-003	0.0919	0.0000	295.9026	295.9026	0.0213	0.0151	300.9271
Waste						0.0000	0.0000		0.0000	0.0000	6.6683	0.0000	6.6683	0.3941	0.0000	16.5203
Water						0.0000	0.0000		0.0000	0.0000	0.4829	0.8168	1.2996	0.0497	1.1900e-003	2.8965
Total	0.5010	0.3406	1.7338	4.0300e-003	0.3358	0.0135	0.3493	0.0897	0.0133	0.1030	7.1511	502.4346	509.5857	0.4757	0.0201	527.4653

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003
Energy	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	205.7142	205.7142	0.0106	3.8300e-003	207.1202
Mobile	0.1841	0.1943	1.6104	3.1500e-003	0.3358	2.3900e-003	0.3382	0.0897	2.2300e-003	0.0919	0.0000	295.9026	295.9026	0.0213	0.0151	300.9271
Waste						0.0000	0.0000		0.0000	0.0000	6.6683	0.0000	6.6683	0.3941	0.0000	16.5203
Water						0.0000	0.0000		0.0000	0.0000	0.4829	0.8168	1.2996	0.0497	1.1900e-003	2.8965
Total	0.5010	0.3406	1.7338	4.0300e-003	0.3358	0.0135	0.3493	0.0897	0.0133	0.1030	7.1511	502.4346	509.5857	0.4757	0.0201	527.4653

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	6/6/2023	6/19/2023	5	10
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,910; Non-Residential Outdoor: 33,970; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Cranes	0		231	0.29
Paving	Forklifts	0		89	0.20
Paving	Generator Sets	0		84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Welders	0		46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6200e-003	0.0000	6.6200e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	6.6200e-003	6.7700e-003	0.0134	1.0000e-003	6.3300e-003	7.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

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	6.0000e-005	4.1400e-003	9.7000e-004	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	1.8202	1.8202	6.0000e-005	2.9000e-004	1.9077
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.8800e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8051	0.8051	2.0000e-005	2.0000e-005	0.8123
Total	3.9000e-004	4.3700e-003	3.8500e-003	3.0000e-005	1.5500e-003	4.0000e-005	1.5800e-003	4.1000e-004	3.0000e-005	4.5000e-004	0.0000	2.6253	2.6253	8.0000e-005	3.1000e-004	2.7199

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6200e-003	0.0000	6.6200e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	6.6200e-003	6.7700e-003	0.0134	1.0000e-003	6.3300e-003	7.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

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	6.0000e-005	4.1400e-003	9.7000e-004	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	1.8202	1.8202	6.0000e-005	2.9000e-004	1.9077
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.8800e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8051	0.8051	2.0000e-005	2.0000e-005	0.8123
Total	3.9000e-004	4.3700e-003	3.8500e-003	3.0000e-005	1.5500e-003	4.0000e-005	1.5800e-003	4.1000e-004	3.0000e-005	4.5000e-004	0.0000	2.6253	2.6253	8.0000e-005	3.1000e-004	2.7199

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500
Total	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500
Total	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0142	1.2100e-003	0.0154	6.8500e-003	1.1100e-003	7.9600e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250
Total	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0142	1.2100e-003	0.0154	6.8500e-003	1.1100e-003	7.9600e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250
Total	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0389	0.0552	8.0000e-005		1.9200e-003	1.9200e-003		1.7700e-003	1.7700e-003	0.0000	7.2541	7.2541	2.3100e-003	0.0000	7.3119
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9800e-003	0.0389	0.0552	8.0000e-005		1.9200e-003	1.9200e-003		1.7700e-003	1.7700e-003	0.0000	7.2541	7.2541	2.3100e-003	0.0000	7.3119

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	3.8000e-004	2.6000e-004	3.3300e-003	1.0000e-005	2.2100e-003	1.0000e-005	2.2200e-003	5.7000e-004	1.0000e-005	5.7000e-004	0.0000	0.9290	0.9290	3.0000e-005	3.0000e-005	0.9372
Total	3.8000e-004	2.6000e-004	3.3300e-003	1.0000e-005	2.2100e-003	1.0000e-005	2.2200e-003	5.7000e-004	1.0000e-005	5.7000e-004	0.0000	0.9290	0.9290	3.0000e-005	3.0000e-005	0.9372

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.9800e-003	0.0389	0.0552	8.0000e-005		1.9200e-003	1.9200e-003		1.7700e-003	1.7700e-003	0.0000	7.2541	7.2541	2.3100e-003	0.0000	7.3118
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.9800e-003	0.0389	0.0552	8.0000e-005		1.9200e-003	1.9200e-003		1.7700e-003	1.7700e-003	0.0000	7.2541	7.2541	2.3100e-003	0.0000	7.3118

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	3.8000e-004	2.6000e-004	3.3300e-003	1.0000e-005	2.2100e-003	1.0000e-005	2.2200e-003	5.7000e-004	1.0000e-005	5.7000e-004	0.0000	0.9290	0.9290	3.0000e-005	3.0000e-005	0.9372
Total	3.8000e-004	2.6000e-004	3.3300e-003	1.0000e-005	2.2100e-003	1.0000e-005	2.2200e-003	5.7000e-004	1.0000e-005	5.7000e-004	0.0000	0.9290	0.9290	3.0000e-005	3.0000e-005	0.9372

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3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2114	126.2114	0.0214	0.0000	126.7472
Total	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2114	126.2114	0.0214	0.0000	126.7472

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	8.1000e-004	0.0340	0.0106	1.6000e-004	5.0200e-003	2.0000e-004	5.2100e-003	1.4500e-003	1.9000e-004	1.6400e-003	0.0000	15.0909	15.0909	3.1000e-004	2.2300e-003	15.7638
Worker	5.1600e-003	3.5300e-003	0.0447	1.3000e-004	0.0159	8.0000e-005	0.0160	4.2400e-003	8.0000e-005	4.3100e-003	0.0000	12.4820	12.4820	3.6000e-004	3.4000e-004	12.5930
Total	5.9700e-003	0.0375	0.0553	2.9000e-004	0.0210	2.8000e-004	0.0212	5.6900e-003	2.7000e-004	5.9500e-003	0.0000	27.5729	27.5729	6.7000e-004	2.5700e-003	28.3568

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3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2112	126.2112	0.0214	0.0000	126.7470
Total	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2112	126.2112	0.0214	0.0000	126.7470

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	8.1000e-004	0.0340	0.0106	1.6000e-004	5.0200e-003	2.0000e-004	5.2100e-003	1.4500e-003	1.9000e-004	1.6400e-003	0.0000	15.0909	15.0909	3.1000e-004	2.2300e-003	15.7638
Worker	5.1600e-003	3.5300e-003	0.0447	1.3000e-004	0.0159	8.0000e-005	0.0160	4.2400e-003	8.0000e-005	4.3100e-003	0.0000	12.4820	12.4820	3.6000e-004	3.4000e-004	12.5930
Total	5.9700e-003	0.0375	0.0553	2.9000e-004	0.0210	2.8000e-004	0.0212	5.6900e-003	2.7000e-004	5.9500e-003	0.0000	27.5729	27.5729	6.7000e-004	2.5700e-003	28.3568

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6221
Total	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6221

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	3.5000e-004	0.0149	4.5700e-003	7.0000e-005	2.2000e-003	9.0000e-005	2.2900e-003	6.4000e-004	8.0000e-005	7.2000e-004	0.0000	6.5194	6.5194	1.3000e-004	9.6000e-004	6.8101
Worker	2.1200e-003	1.3800e-003	0.0183	6.0000e-005	6.9900e-003	3.0000e-005	7.0200e-003	1.8600e-003	3.0000e-005	1.8900e-003	0.0000	5.3426	5.3426	1.4000e-004	1.4000e-004	5.3879
Total	2.4700e-003	0.0163	0.0229	1.3000e-004	9.1900e-003	1.2000e-004	9.3100e-003	2.5000e-003	1.1000e-004	2.6100e-003	0.0000	11.8620	11.8620	2.7000e-004	1.1000e-003	12.1980

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3.6 Building Construction - 2024

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	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6220
Total	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6220

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	3.5000e-004	0.0149	4.5700e-003	7.0000e-005	2.2000e-003	9.0000e-005	2.2900e-003	6.4000e-004	8.0000e-005	7.2000e-004	0.0000	6.5194	6.5194	1.3000e-004	9.6000e-004	6.8101
Worker	2.1200e-003	1.3800e-003	0.0183	6.0000e-005	6.9900e-003	3.0000e-005	7.0200e-003	1.8600e-003	3.0000e-005	1.8900e-003	0.0000	5.3426	5.3426	1.4000e-004	1.4000e-004	5.3879
Total	2.4700e-003	0.0163	0.0229	1.3000e-004	9.1900e-003	1.2000e-004	9.3100e-003	2.5000e-003	1.1000e-004	2.6100e-003	0.0000	11.8620	11.8620	2.7000e-004	1.1000e-003	12.1980

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3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931
Total	0.2409	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180
Total	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2285					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931
Total	0.2409	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180
Total	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4200e-003	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0641	9.0641	5.1000e-004	0.0000	9.0768
Total	0.1322	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0641	9.0641	5.1000e-004	0.0000	9.0768

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	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975
Total	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

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	0.1258					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4200e-003	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0640	9.0640	5.1000e-004	0.0000	9.0768
Total	0.1322	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0640	9.0640	5.1000e-004	0.0000	9.0768

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	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975
Total	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1841	0.1943	1.6104	3.1500e-003	0.3358	2.3900e-003	0.3382	0.0897	2.2300e-003	0.0919	0.0000	295.9026	295.9026	0.0213	0.0151	300.9271
Unmitigated	0.1841	0.1943	1.6104	3.1500e-003	0.3358	2.3900e-003	0.3382	0.0897	2.2300e-003	0.0919	0.0000	295.9026	295.9026	0.0213	0.0151	300.9271

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	501.60	491.40	357.00	910,990	910,990
Total	501.60	491.40	357.00	910,990	910,990

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.5169	46.5169	7.5300e-003	9.1000e-004	46.9769
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	46.5169	46.5169	7.5300e-003	9.1000e-004	46.9769
NaturalGas Mitigated	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434
NaturalGas Unmitigated	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.98325e+006	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434
Total		0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434

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					
Hotel	2.98325e+006	0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434
Total		0.0161	0.1462	0.1228	8.8000e-004		0.0111	0.0111		0.0111	0.0111	0.0000	159.1973	159.1973	3.0500e-003	2.9200e-003	160.1434

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	502756	46.5169	7.5300e-003	9.1000e-004	46.9769
Total		46.5169	7.5300e-003	9.1000e-004	46.9769

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	502756	46.5169	7.5300e-003	9.1000e-004	46.9769
Total		46.5169	7.5300e-003	9.1000e-004	46.9769

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003
Unmitigated	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2653					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003
Total	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2653					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003
Total	0.3008	0.0000	5.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0700e-003	1.0700e-003	0.0000	0.0000	1.1400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.2996	0.0497	1.1900e-003	2.8965
Unmitigated	1.2996	0.0497	1.1900e-003	2.8965

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.52201 / 0.169112	1.2996	0.0497	1.1900e-003	2.8965
Total		1.2996	0.0497	1.1900e-003	2.8965

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.52201 / 0.169112	1.2996	0.0497	1.1900e-003	2.8965
Total		1.2996	0.0497	1.1900e-003	2.8965

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.6683	0.3941	0.0000	16.5203
Unmitigated	6.6683	0.3941	0.0000	16.5203

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	32.85	6.6683	0.3941	0.0000	16.5203
Total		6.6683	0.3941	0.0000	16.5203

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	32.85	6.6683	0.3941	0.0000	16.5203
Total		6.6683	0.3941	0.0000	16.5203

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Granada Hotel - Approved Project****Bay Area AQMD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	60.00	Room	1.09	67,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage and square footage updated to match site plan.

Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.

Demolition -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	87,120.00	67,940.00
tblLandUse	LotAcreage	2.00	1.09

2.0 Emissions Summary

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2023	5.3642	14.7372	15.4095	0.0298	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,777.5386	2,777.5386	0.6473	0.0414	2,799.0823
2024	5.2435	12.8032	15.2546	0.0296	0.3620	0.5157	0.8778	0.0977	0.4997	0.5974	0.0000	2,767.6122	2,767.6122	0.3599	0.0405	2,788.6639
Maximum	5.3642	14.7372	15.4095	0.0298	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,777.5386	2,777.5386	0.6473	0.0414	2,799.0823

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					
2023	5.3642	14.7372	15.4095	0.0298	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,777.5386	2,777.5386	0.6473	0.0414	2,799.0823
2024	5.2435	12.8032	15.2546	0.0296	0.3620	0.5157	0.8778	0.0977	0.4997	0.5974	0.0000	2,767.6122	2,767.6122	0.3599	0.0405	2,788.6639
Maximum	5.3642	14.7372	15.4095	0.0298	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,777.5386	2,777.5386	0.6473	0.0414	2,799.0823

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Energy	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Mobile	1.1904	1.0267	9.1147	0.0191	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,975.2367	1,975.2367	0.1249	0.0905	2,005.3158
Total	2.9271	1.8280	9.7939	0.0239	2.0059	0.0747	2.0805	0.5342	0.0737	0.6080		2,936.8116	2,936.8116	0.1433	0.1081	2,972.6056

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	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Energy	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Mobile	1.1904	1.0267	9.1147	0.0191	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,975.2367	1,975.2367	0.1249	0.0905	2,005.3158
Total	2.9271	1.8280	9.7939	0.0239	2.0059	0.0747	2.0805	0.5342	0.0737	0.6080		2,936.8116	2,936.8116	0.1433	0.1081	2,972.6056

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	
4	Paving	Paving	6/6/2023	6/19/2023	5	10	
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200	
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,910; Non-Residential Outdoor: 33,970; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Cranes	0		231	0.29
Paving	Forklifts	0		89	0.20
Paving	Generator Sets	0		84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Welders	0		46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330		2,324.3959	2,324.3959	0.5893		2,339.1278

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****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	6.5300e-003	0.3986	0.0968	1.8400e-003	0.0534	3.3400e-003	0.0567	0.0146	3.2000e-003	0.0178		200.5655	200.5655	6.6100e-003	0.0318	210.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0417	0.4188	0.4076	2.7700e-003	0.1601	3.8700e-003	0.1640	0.0430	3.6900e-003	0.0466		295.3154	295.3154	9.0000e-003	0.0340	305.6811

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					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****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	6.5300e-003	0.3986	0.0968	1.8400e-003	0.0534	3.3400e-003	0.0567	0.0146	3.2000e-003	0.0178		200.5655	200.5655	6.6100e-003	0.0318	210.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0417	0.4188	0.4076	2.7700e-003	0.1601	3.8700e-003	0.1640	0.0430	3.6900e-003	0.0466		295.3154	295.3154	9.0000e-003	0.0340	305.6811

3.3 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.0573	1,666.0573	0.5388		1,679.5282

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566
Total	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566

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					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566
Total	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.6147	1,995.6147	0.6454		2,011.7503

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457
Total	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457
Total	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457

3.5 Paving - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544		1,599.2645	1,599.2645	0.5089		1,611.9874
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544		1,599.2645	1,599.2645	0.5089		1,611.9874

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0812	0.0466	0.7172	2.1400e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		218.6535	218.6535	5.5100e-003	5.1900e-003	220.3372
Total	0.0812	0.0466	0.7172	2.1400e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		218.6535	218.6535	5.5100e-003	5.1900e-003	220.3372

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	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544	0.0000	1,599.2645	1,599.2645	0.5089		1,611.9874
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544	0.0000	1,599.2645	1,599.2645	0.5089		1,611.9874

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0812	0.0466	0.7172	2.1400e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		218.6535	218.6535	5.5100e-003	5.1900e-003	220.3372
Total	0.0812	0.0466	0.7172	2.1400e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		218.6535	218.6535	5.5100e-003	5.1900e-003	220.3372

3.6 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2023****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	0.0000
Vendor	0.0120	0.4718	0.1507	2.2300e-003	0.0745	2.8600e-003	0.0774	0.0215	2.7300e-003	0.0242		239.2071	239.2071	4.9000e-003	0.0354	249.8675
Worker	0.0784	0.0451	0.6933	2.0700e-003	0.2382	1.1800e-003	0.2394	0.0632	1.0900e-003	0.0643		211.3650	211.3650	5.3300e-003	5.0100e-003	212.9926
Total	0.0904	0.5169	0.8439	4.3000e-003	0.3127	4.0400e-003	0.3168	0.0846	3.8200e-003	0.0885		450.5722	450.5722	0.0102	0.0404	462.8601

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0120	0.4718	0.1507	2.2300e-003	0.0745	2.8600e-003	0.0774	0.0215	2.7300e-003	0.0242		239.2071	239.2071	4.9000e-003	0.0354	249.8675
Worker	0.0784	0.0451	0.6933	2.0700e-003	0.2382	1.1800e-003	0.2394	0.0632	1.0900e-003	0.0643		211.3650	211.3650	5.3300e-003	5.0100e-003	212.9926
Total	0.0904	0.5169	0.8439	4.3000e-003	0.3127	4.0400e-003	0.3168	0.0846	3.8200e-003	0.0885		450.5722	450.5722	0.0102	0.0404	462.8601

3.6 Building Construction - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2024****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	0.0000
Vendor	0.0116	0.4720	0.1475	2.1900e-003	0.0745	2.8800e-003	0.0774	0.0215	2.7600e-003	0.0242		235.4763	235.4763	4.8700e-003	0.0348	245.9704
Worker	0.0733	0.0402	0.6461	2.0000e-003	0.2382	1.1300e-003	0.2394	0.0632	1.0400e-003	0.0642		206.1207	206.1207	4.8200e-003	4.6700e-003	207.6342
Total	0.0849	0.5123	0.7936	4.1900e-003	0.3127	4.0100e-003	0.3167	0.0846	3.8000e-003	0.0884		441.5971	441.5971	9.6900e-003	0.0395	453.6046

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4720	0.1475	2.1900e-003	0.0745	2.8800e-003	0.0774	0.0215	2.7600e-003	0.0242		235.4763	235.4763	4.8700e-003	0.0348	245.9704
Worker	0.0733	0.0402	0.6461	2.0000e-003	0.2382	1.1300e-003	0.2394	0.0632	1.0400e-003	0.0642		206.1207	206.1207	4.8200e-003	4.6700e-003	207.6342
Total	0.0849	0.5123	0.7936	4.1900e-003	0.3127	4.0100e-003	0.3167	0.0846	3.8000e-003	0.0884		441.5971	441.5971	9.6900e-003	0.0395	453.6046

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	3.7343	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674
Total	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674

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	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	3.7343	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674
Total	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	3.7234	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588
Total	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588

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	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	3.7234	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588
Total	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1904	1.0267	9.1147	0.0191	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,975.2367	1,975.2367	0.1249	0.0905	2,005.3158
Unmitigated	1.1904	1.0267	9.1147	0.0191	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,975.2367	1,975.2367	0.1249	0.0905	2,005.3158

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	501.60	491.40	357.00	910,990	910,990
Total	501.60	491.40	357.00	910,990	910,990

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
NaturalGas Unmitigated	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

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					
Hotel	8173.28	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Total		0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	8.17328	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Total		0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

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	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Unmitigated	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.1941					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4539					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Total	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1941					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4539					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Total	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

7.0 Water Detail**7.1 Mitigation Measures Water**

Granada Hotel - Approved Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Granada Hotel - Approved Project****Bay Area AQMD Air District, Winter****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	60.00	Room	1.09	67,940.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage and square footage updated to match site plan.

Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.

Demolition -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	87,120.00	67,940.00
tblLandUse	LotAcreage	2.00	1.09

2.0 Emissions Summary

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2023	5.3662	14.7649	15.3793	0.0296	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,759.799 1	2,759.799 1	0.6475	0.0424	2,781.663 3
2024	5.2457	12.8420	15.2294	0.0295	0.3620	0.5158	0.8778	0.0977	0.4997	0.5974	0.0000	2,750.361 1	2,750.361 1	0.3607	0.0414	2,771.711 4
Maximum	5.3662	14.7649	15.3793	0.0296	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,759.799 1	2,759.799 1	0.6475	0.0424	2,781.663 3

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					
2023	5.3662	14.7649	15.3793	0.0296	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,759.799 1	2,759.799 1	0.6475	0.0424	2,781.663 3
2024	5.2457	12.8420	15.2294	0.0295	0.3620	0.5158	0.8778	0.0977	0.4997	0.5974	0.0000	2,750.361 1	2,750.361 1	0.3607	0.0414	2,771.711 4
Maximum	5.3662	14.7649	15.3793	0.0296	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,759.799 1	2,759.799 1	0.6475	0.0424	2,781.663 3

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Energy	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Mobile	1.0577	1.1828	9.9294	0.0180	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,866.3108	1,866.3108	0.1436	0.0995	1,899.5390
Total	2.7944	1.9842	10.6086	0.0229	2.0059	0.0747	2.0805	0.5342	0.0737	0.6080		2,827.8857	2,827.8857	0.1621	0.1171	2,866.8289

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	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Energy	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Mobile	1.0577	1.1828	9.9294	0.0180	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,866.3108	1,866.3108	0.1436	0.0995	1,899.5390
Total	2.7944	1.9842	10.6086	0.0229	2.0059	0.0747	2.0805	0.5342	0.0737	0.6080		2,827.8857	2,827.8857	0.1621	0.1171	2,866.8289

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	
4	Paving	Paving	6/6/2023	6/19/2023	5	10	
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200	
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 101,910; Non-Residential Outdoor: 33,970; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Cranes	0		231	0.29
Paving	Forklifts	0		89	0.20
Paving	Generator Sets	0		84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Welders	0		46	0.45
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330		2,324.3959	2,324.3959	0.5893		2,339.1278

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	6.1300e-003	0.4216	0.0981	1.8400e-003	0.0534	3.3500e-003	0.0567	0.0146	3.2000e-003	0.0178		200.7544	200.7544	6.5900e-003	0.0318	210.3994
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0422	0.4465	0.3957	2.7000e-003	0.1601	3.8800e-003	0.1640	0.0430	3.6900e-003	0.0466		288.7882	288.7882	9.3100e-003	0.0344	299.2722

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					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

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	6.1300e-003	0.4216	0.0981	1.8400e-003	0.0534	3.3500e-003	0.0567	0.0146	3.2000e-003	0.0178		200.7544	200.7544	6.5900e-003	0.0318	210.3994
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0422	0.4465	0.3957	2.7000e-003	0.1601	3.8800e-003	0.1640	0.0430	3.6900e-003	0.0466		288.7882	288.7882	9.3100e-003	0.0344	299.2722

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.0573	1,666.0573	0.5388		1,679.5282

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909
Total	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909

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					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709	0.0000	1,666.0573	1,666.0573	0.5388		1,679.5282

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909
Total	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.6147	1,995.6147	0.6454		2,011.7503

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637
Total	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637

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					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.6147	1,995.6147	0.6454		2,011.7503

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637
Total	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544		1,599.2645	1,599.2645	0.5089		1,611.9874
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544		1,599.2645	1,599.2645	0.5089		1,611.9874

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0832	0.0575	0.6869	1.9800e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		203.1549	203.1549	6.2700e-003	5.9700e-003	205.0910
Total	0.0832	0.0575	0.6869	1.9800e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		203.1549	203.1549	6.2700e-003	5.9700e-003	205.0910

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	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544	0.0000	1,599.2645	1,599.2645	0.5089		1,611.9874
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7960	7.7714	11.0337	0.0167		0.3842	0.3842		0.3544	0.3544	0.0000	1,599.2645	1,599.2645	0.5089		1,611.9874

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0832	0.0575	0.6869	1.9800e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		203.1549	203.1549	6.2700e-003	5.9700e-003	205.0910
Total	0.0832	0.0575	0.6869	1.9800e-003	0.4606	1.2200e-003	0.4619	0.1179	1.1300e-003	0.1191		203.1549	203.1549	6.2700e-003	5.9700e-003	205.0910

3.6 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.6 Building Construction - 2023****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	0.0000
Vendor	0.0116	0.4993	0.1558	2.2300e-003	0.0745	2.8700e-003	0.0774	0.0215	2.7400e-003	0.0242		239.5493	239.5493	4.8600e-003	0.0355	250.2357
Worker	0.0805	0.0556	0.6640	1.9200e-003	0.2382	1.1800e-003	0.2394	0.0632	1.0900e-003	0.0643		196.3831	196.3831	6.0600e-003	5.7700e-003	198.2546
Total	0.0920	0.5549	0.8198	4.1500e-003	0.3127	4.0500e-003	0.3168	0.0846	3.8300e-003	0.0885		435.9324	435.9324	0.0109	0.0412	448.4903

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	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0116	0.4993	0.1558	2.2300e-003	0.0745	2.8700e-003	0.0774	0.0215	2.7400e-003	0.0242		239.5493	239.5493	4.8600e-003	0.0355	250.2357
Worker	0.0805	0.0556	0.6640	1.9200e-003	0.2382	1.1800e-003	0.2394	0.0632	1.0900e-003	0.0643		196.3831	196.3831	6.0600e-003	5.7700e-003	198.2546
Total	0.0920	0.5549	0.8198	4.1500e-003	0.3127	4.0500e-003	0.3168	0.0846	3.8300e-003	0.0885		435.9324	435.9324	0.0109	0.0412	448.4903

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

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	0.0000
Vendor	0.0112	0.4995	0.1526	2.2000e-003	0.0745	2.8900e-003	0.0774	0.0215	2.7700e-003	0.0242		235.8211	235.8211	4.8400e-003	0.0349	246.3402
Worker	0.0755	0.0496	0.6210	1.8600e-003	0.2382	1.1300e-003	0.2394	0.0632	1.0400e-003	0.0642		191.5413	191.5413	5.5000e-003	5.3800e-003	193.2814
Total	0.0867	0.5491	0.7736	4.0600e-003	0.3127	4.0200e-003	0.3167	0.0846	3.8100e-003	0.0884		427.3624	427.3624	0.0103	0.0403	439.6216

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.9214	2,001.9214	0.3334		2,010.2563

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0112	0.4995	0.1526	2.2000e-003	0.0745	2.8900e-003	0.0774	0.0215	2.7700e-003	0.0242		235.8211	235.8211	4.8400e-003	0.0349	246.3402
Worker	0.0755	0.0496	0.6210	1.8600e-003	0.2382	1.1300e-003	0.2394	0.0632	1.0400e-003	0.0642		191.5413	191.5413	5.5000e-003	5.3800e-003	193.2814
Total	0.0867	0.5491	0.7736	4.0600e-003	0.3127	4.0200e-003	0.3167	0.0846	3.8100e-003	0.0884		427.3624	427.3624	0.0103	0.0403	439.6216

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	3.7343	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Granada Hotel - Approved Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182
Total	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182

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	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	3.7343	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182
Total	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	3.7234	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893
Total	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893

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	3.5427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	3.7234	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893
Total	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.0577	1.1828	9.9294	0.0180	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,866.3108	1,866.3108	0.1436	0.0995	1,899.5390
Unmitigated	1.0577	1.1828	9.9294	0.0180	2.0059	0.0138	2.0196	0.5342	0.0128	0.5471		1,866.3108	1,866.3108	0.1436	0.0995	1,899.5390

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	501.60	491.40	357.00	910,990	910,990
Total	501.60	491.40	357.00	910,990	910,990

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
NaturalGas Unmitigated	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

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					
Hotel	8173.28	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Total		0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	8.17328	0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759
Total		0.0881	0.8013	0.6731	4.8100e-003		0.0609	0.0609		0.0609	0.0609		961.5618	961.5618	0.0184	0.0176	967.2759

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	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Unmitigated	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.1941					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4539					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Total	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1941					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.4539					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140
Total	1.6486	6.0000e-005	6.1200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0131	0.0131	3.0000e-005		0.0140

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	73.00	Room	1.09	75,660.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage and square footage updated to match site plan.

Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.

Demolition -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	105,996.00	75,660.00
tblLandUse	LotAcreage	2.43	1.09

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4027	1.1598	1.2714	2.4700e-003	0.0554	0.0507	0.1062	0.0185	0.0488	0.0673	0.0000	210.6188	210.6188	0.0322	3.2100e-003	212.3787
2024	0.1930	0.3989	0.4757	9.3000e-004	0.0118	0.0161	0.0278	3.1900e-003	0.0156	0.0188	0.0000	78.7494	78.7494	0.0101	1.2400e-003	79.3709
Maximum	0.4027	1.1598	1.2714	2.4700e-003	0.0554	0.0507	0.1062	0.0185	0.0488	0.0673	0.0000	210.6188	210.6188	0.0322	3.2100e-003	212.3787

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4027	1.1598	1.2713	2.4700e-003	0.0554	0.0507	0.1062	0.0185	0.0488	0.0673	0.0000	210.6186	210.6186	0.0322	3.2100e-003	212.3785
2024	0.1930	0.3989	0.4757	9.3000e-004	0.0118	0.0161	0.0278	3.1900e-003	0.0156	0.0188	0.0000	78.7494	78.7494	0.0101	1.2400e-003	79.3708
Maximum	0.4027	1.1598	1.2713	2.4700e-003	0.0554	0.0507	0.1062	0.0185	0.0488	0.0673	0.0000	210.6186	210.6186	0.0322	3.2100e-003	212.3785

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	5-1-2023	7-31-2023	0.5021	0.5021
2	8-1-2023	10-31-2023	0.6367	0.6367
3	11-1-2023	1-31-2024	0.6282	0.6282
4	2-1-2024	4-30-2024	0.3846	0.3846
		Highest	0.6367	0.6367

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	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Energy	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	229.0895	229.0895	0.0118	4.2700e-003	230.6552
Mobile	0.2240	0.2364	1.9593	3.8400e-003	0.4085	2.9100e-003	0.4114	0.1091	2.7100e-003	0.1119	0.0000	360.0148	360.0148	0.0259	0.0183	366.1279
Waste						0.0000	0.0000		0.0000	0.0000	8.1136	0.0000	8.1136	0.4795	0.0000	20.1010
Water						0.0000	0.0000		0.0000	0.0000	0.5875	0.9937	1.5812	0.0605	1.4400e-003	3.5241
Total	0.5769	0.3993	2.0968	4.8200e-003	0.4085	0.0153	0.4238	0.1091	0.0151	0.1242	8.7010	590.0993	598.8003	0.5777	0.0241	620.4096

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Energy	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	229.0895	229.0895	0.0118	4.2700e-003	230.6552
Mobile	0.2240	0.2364	1.9593	3.8400e-003	0.4085	2.9100e-003	0.4114	0.1091	2.7100e-003	0.1119	0.0000	360.0148	360.0148	0.0259	0.0183	366.1279
Waste						0.0000	0.0000		0.0000	0.0000	8.1136	0.0000	8.1136	0.4795	0.0000	20.1010
Water						0.0000	0.0000		0.0000	0.0000	0.5875	0.9937	1.5812	0.0605	1.4400e-003	3.5241
Total	0.5769	0.3993	2.0968	4.8200e-003	0.4085	0.0153	0.4238	0.1091	0.0151	0.1242	8.7010	590.0993	598.8003	0.5777	0.0241	620.4096

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Paving	Paving	6/6/2023	6/19/2023	5	10
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 113,490; Non-Residential Outdoor: 37,830; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	32.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.6200e-003	0.0000	6.6200e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	6.6200e-003	6.7700e-003	0.0134	1.0000e-003	6.3300e-003	7.3300e-003	0.0000	21.0866	21.0866	5.3500e-003	0.0000	21.2202

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3.2 Demolition - 2023

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	6.0000e-005	4.1400e-003	9.7000e-004	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	1.8202	1.8202	6.0000e-005	2.9000e-004	1.9077
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.8800e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8051	0.8051	2.0000e-005	2.0000e-005	0.8123
Total	3.9000e-004	4.3700e-003	3.8500e-003	3.0000e-005	1.5500e-003	4.0000e-005	1.5800e-003	4.1000e-004	3.0000e-005	4.5000e-004	0.0000	2.6253	2.6253	8.0000e-005	3.1000e-004	2.7199

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					6.6200e-003	0.0000	6.6200e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0147	0.1432	0.1346	2.4000e-004		6.7700e-003	6.7700e-003		6.3300e-003	6.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e-004	6.6200e-003	6.7700e-003	0.0134	1.0000e-003	6.3300e-003	7.3300e-003	0.0000	21.0865	21.0865	5.3500e-003	0.0000	21.2202

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3.2 Demolition - 2023

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	6.0000e-005	4.1400e-003	9.7000e-004	2.0000e-005	5.2000e-004	3.0000e-005	5.5000e-004	1.4000e-004	3.0000e-005	1.7000e-004	0.0000	1.8202	1.8202	6.0000e-005	2.9000e-004	1.9077
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.8800e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	0.0000	2.8000e-004	0.0000	0.8051	0.8051	2.0000e-005	2.0000e-005	0.8123
Total	3.9000e-004	4.3700e-003	3.8500e-003	3.0000e-005	1.5500e-003	4.0000e-005	1.5800e-003	4.1000e-004	3.0000e-005	4.5000e-004	0.0000	2.6253	2.6253	8.0000e-005	3.1000e-004	2.7199

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

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3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500
Total	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500

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					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1300e-003	0.0124	6.6400e-003	2.0000e-005		5.1000e-004	5.1000e-004		4.7000e-004	4.7000e-004	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236
Total	1.1300e-003	0.0124	6.6400e-003	2.0000e-005	6.2700e-003	5.1000e-004	6.7800e-003	3.0000e-003	4.7000e-004	3.4700e-003	0.0000	1.5114	1.5114	4.9000e-004	0.0000	1.5236

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3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500
Total	2.0000e-005	1.0000e-005	1.8000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0495	0.0495	0.0000	0.0000	0.0500

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0142	1.2100e-003	0.0154	6.8500e-003	1.1100e-003	7.9600e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

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3.4 Grading - 2023

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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250
Total	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250

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					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6700e-003	0.0289	0.0174	4.0000e-005		1.2100e-003	1.2100e-003		1.1100e-003	1.1100e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501
Total	2.6700e-003	0.0289	0.0174	4.0000e-005	0.0142	1.2100e-003	0.0154	6.8500e-003	1.1100e-003	7.9600e-003	0.0000	3.6208	3.6208	1.1700e-003	0.0000	3.6501

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3.4 Grading - 2023

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	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250
Total	5.0000e-005	4.0000e-005	4.4000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1239	0.1239	0.0000	0.0000	0.1250

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

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3.5 Paving - 2023

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	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4025	0.4025	1.0000e-005	1.0000e-005	0.4061
Total	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4025	0.4025	1.0000e-005	1.0000e-005	0.4061

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329

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3.5 Paving - 2023

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	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4025	0.4025	1.0000e-005	1.0000e-005	0.4061
Total	1.7000e-004	1.1000e-004	1.4400e-003	0.0000	5.1000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4025	0.4025	1.0000e-005	1.0000e-005	0.4061

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2114	126.2114	0.0214	0.0000	126.7472
Total	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2114	126.2114	0.0214	0.0000	126.7472

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3.6 Building Construction - 2023

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	8.9000e-004	0.0371	0.0116	1.7000e-004	5.4700e-003	2.2000e-004	5.6900e-003	1.5800e-003	2.1000e-004	1.7900e-003	0.0000	16.4628	16.4628	3.4000e-004	2.4400e-003	17.1969
Worker	5.6900e-003	3.9000e-003	0.0493	1.5000e-004	0.0176	9.0000e-005	0.0177	4.6800e-003	8.0000e-005	4.7600e-003	0.0000	13.7732	13.7732	4.0000e-004	3.8000e-004	13.8957
Total	6.5800e-003	0.0410	0.0609	3.2000e-004	0.0230	3.1000e-004	0.0234	6.2600e-003	2.9000e-004	6.5500e-003	0.0000	30.2360	30.2360	7.4000e-004	2.8200e-003	31.0926

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	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2112	126.2112	0.0214	0.0000	126.7470
Total	0.1059	0.8139	0.8765	1.5300e-003		0.0358	0.0358		0.0345	0.0345	0.0000	126.2112	126.2112	0.0214	0.0000	126.7470

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

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	8.9000e-004	0.0371	0.0116	1.7000e-004	5.4700e-003	2.2000e-004	5.6900e-003	1.5800e-003	2.1000e-004	1.7900e-003	0.0000	16.4628	16.4628	3.4000e-004	2.4400e-003	17.1969
Worker	5.6900e-003	3.9000e-003	0.0493	1.5000e-004	0.0176	9.0000e-005	0.0177	4.6800e-003	8.0000e-005	4.7600e-003	0.0000	13.7732	13.7732	4.0000e-004	3.8000e-004	13.8957
Total	6.5800e-003	0.0410	0.0609	3.2000e-004	0.0230	3.1000e-004	0.0234	6.2600e-003	2.9000e-004	6.5500e-003	0.0000	30.2360	30.2360	7.4000e-004	2.8200e-003	31.0926

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6221
Total	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6221

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3.6 Building Construction - 2024

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	3.8000e-004	0.0163	4.9800e-003	7.0000e-005	2.4000e-003	1.0000e-004	2.5000e-003	6.9000e-004	9.0000e-005	7.9000e-004	0.0000	7.1121	7.1121	1.5000e-004	1.0500e-003	7.4292
Worker	2.3400e-003	1.5300e-003	0.0202	6.0000e-005	7.7100e-003	4.0000e-005	7.7500e-003	2.0500e-003	3.0000e-005	2.0900e-003	0.0000	5.8953	5.8953	1.6000e-004	1.5000e-004	5.9453
Total	2.7200e-003	0.0178	0.0252	1.3000e-004	0.0101	1.4000e-004	0.0103	2.7400e-003	1.2000e-004	2.8800e-003	0.0000	13.0074	13.0074	3.1000e-004	1.2000e-003	13.3745

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	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6220
Total	0.0433	0.3375	0.3818	6.7000e-004		0.0137	0.0137		0.0133	0.0133	0.0000	55.3914	55.3914	9.2200e-003	0.0000	55.6220

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3.6 Building Construction - 2024

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	3.8000e-004	0.0163	4.9800e-003	7.0000e-005	2.4000e-003	1.0000e-004	2.5000e-003	6.9000e-004	9.0000e-005	7.9000e-004	0.0000	7.1121	7.1121	1.5000e-004	1.0500e-003	7.4292
Worker	2.3400e-003	1.5300e-003	0.0202	6.0000e-005	7.7100e-003	4.0000e-005	7.7500e-003	2.0500e-003	3.0000e-005	2.0900e-003	0.0000	5.8953	5.8953	1.6000e-004	1.5000e-004	5.9453
Total	2.7200e-003	0.0178	0.0252	1.3000e-004	0.0101	1.4000e-004	0.0103	2.7400e-003	1.2000e-004	2.8800e-003	0.0000	13.0074	13.0074	3.1000e-004	1.2000e-003	13.3745

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931
Total	0.2668	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931

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3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180
Total	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180

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	0.2545					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931
Total	0.2668	0.0840	0.1168	1.9000e-004		4.5700e-003	4.5700e-003		4.5700e-003	4.5700e-003	0.0000	16.4685	16.4685	9.9000e-004	0.0000	16.4931

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3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180
Total	9.9000e-004	6.8000e-004	8.5800e-003	3.0000e-005	3.0600e-003	2.0000e-005	3.0700e-003	8.1000e-004	1.0000e-005	8.3000e-004	0.0000	2.3967	2.3967	7.0000e-005	7.0000e-005	2.4180

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1401					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4200e-003	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0641	9.0641	5.1000e-004	0.0000	9.0768
Total	0.1465	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0641	9.0641	5.1000e-004	0.0000	9.0768

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3.7 Architectural Coating - 2024

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	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975
Total	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975

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	0.1401					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4200e-003	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0640	9.0640	5.1000e-004	0.0000	9.0768
Total	0.1465	0.0433	0.0643	1.1000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	9.0640	9.0640	5.1000e-004	0.0000	9.0768

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****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	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975
Total	5.1000e-004	3.3000e-004	4.4100e-003	1.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2866	1.2866	3.0000e-005	3.0000e-005	1.2975

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2240	0.2364	1.9593	3.8400e-003	0.4085	2.9100e-003	0.4114	0.1091	2.7100e-003	0.1119	0.0000	360.0148	360.0148	0.0259	0.0183	366.1279
Unmitigated	0.2240	0.2364	1.9593	3.8400e-003	0.4085	2.9100e-003	0.4114	0.1091	2.7100e-003	0.1119	0.0000	360.0148	360.0148	0.0259	0.0183	366.1279

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	610.28	597.87	434.35	1,108,371	1,108,371
Total	610.28	597.87	434.35	1,108,371	1,108,371

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.8026	51.8026	8.3800e-003	1.0200e-003	52.3148
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	51.8026	51.8026	8.3800e-003	1.0200e-003	52.3148
NaturalGas Mitigated	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404
NaturalGas Unmitigated	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	3.32223e+006	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404
Total		0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404

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					
Hotel	3.32223e+006	0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404
Total		0.0179	0.1629	0.1368	9.8000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	177.2869	177.2869	3.4000e-003	3.2500e-003	178.3404

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	559884	51.8026	8.3800e-003	1.0200e-003	52.3148
Total		51.8026	8.3800e-003	1.0200e-003	52.3148

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	559884	51.8026	8.3800e-003	1.0200e-003	52.3148
Total		51.8026	8.3800e-003	1.0200e-003	52.3148

6.0 Area Detail**6.1 Mitigation Measures Area**

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Unmitigated	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0395					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Total	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0395					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2955					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e-005	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003
Total	0.3350	1.0000e-005	6.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e-003	1.3000e-003	0.0000	0.0000	1.3900e-003

7.0 Water Detail**7.1 Mitigation Measures Water**

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5812	0.0605	1.4400e-003	3.5241
Unmitigated	1.5812	0.0605	1.4400e-003	3.5241

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.85177 / 0.205753	1.5812	0.0605	1.4400e-003	3.5241
Total		1.5812	0.0605	1.4400e-003	3.5241

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	1.85177 / 0.205753	1.5812	0.0605	1.4400e-003	3.5241
Total		1.5812	0.0605	1.4400e-003	3.5241

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.1136	0.4795	0.0000	20.1010
Unmitigated	8.1136	0.4795	0.0000	20.1010

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	39.97	8.1136	0.4795	0.0000	20.1010
Total		8.1136	0.4795	0.0000	20.1010

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	39.97	8.1136	0.4795	0.0000	20.1010
Total		8.1136	0.4795	0.0000	20.1010

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Granada Hotel - Proposed Project - Bay Area AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Granada Hotel - Proposed Project
Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	73.00	Room	1.09	75,660.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage and square footage updated to match site plan.

Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.

Demolition -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	105,996.00	75,660.00
tblLandUse	LotAcreage	2.43	1.09

2.0 Emissions Summary

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2023	5.7760	14.7372	15.4950	0.0302	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,821.150 0	2,821.150 0	0.6473	0.0452	2,843.831 2
2024	5.6547	12.8503	15.3348	0.0300	0.3934	0.5161	0.9096	0.1062	0.5001	0.6063	0.0000	2,810.342 0	2,810.342 0	0.3609	0.0441	2,832.504 2
Maximum	5.7760	14.7372	15.4950	0.0302	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,821.150 0	2,821.150 0	0.6473	0.0452	2,843.831 2

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					
2023	5.7760	14.7372	15.4950	0.0302	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,821.150 0	2,821.150 0	0.6473	0.0452	2,843.831 2
2024	5.6547	12.8503	15.3348	0.0300	0.3934	0.5161	0.9096	0.1062	0.5001	0.6063	0.0000	2,810.342 0	2,810.342 0	0.3609	0.0441	2,832.504 2
Maximum	5.7760	14.7372	15.4950	0.0302	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,821.150 0	2,821.150 0	0.6473	0.0452	2,843.831 2

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Energy	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Mobile	1.4483	1.2491	11.0895	0.0232	2.4405	0.0167	2.4572	0.6500	0.0156	0.6656		2,403.2047	2,403.2047	0.1519	0.1101	2,439.8009
Total	3.3824	2.1415	11.8465	0.0286	2.4405	0.0846	2.5250	0.6500	0.0834	0.7334		3,474.0444	3,474.0444	0.1725	0.1297	3,517.0050

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	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Energy	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Mobile	1.4483	1.2491	11.0895	0.0232	2.4405	0.0167	2.4572	0.6500	0.0156	0.6656		2,403.2047	2,403.2047	0.1519	0.1101	2,439.8009
Total	3.3824	2.1415	11.8465	0.0286	2.4405	0.0846	2.5250	0.6500	0.0834	0.7334		3,474.0444	3,474.0444	0.1725	0.1297	3,517.0050

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	
4	Paving	Paving	6/6/2023	6/19/2023	5	10	
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200	
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 113,490; Non-Residential Outdoor: 37,830; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	32.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330		2,324.3959	2,324.3959	0.5893		2,339.1278

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	6.5300e-003	0.3986	0.0968	1.8400e-003	0.0534	3.3400e-003	0.0567	0.0146	3.2000e-003	0.0178		200.5655	200.5655	6.6100e-003	0.0318	210.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0417	0.4188	0.4076	2.7700e-003	0.1601	3.8700e-003	0.1640	0.0430	3.6900e-003	0.0466		295.3154	295.3154	9.0000e-003	0.0340	305.6811

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

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	6.5300e-003	0.3986	0.0968	1.8400e-003	0.0534	3.3400e-003	0.0567	0.0146	3.2000e-003	0.0178		200.5655	200.5655	6.6100e-003	0.0318	210.2017
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0417	0.4188	0.4076	2.7700e-003	0.1601	3.8700e-003	0.1640	0.0430	3.6900e-003	0.0466		295.3154	295.3154	9.0000e-003	0.0340	305.6811

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566
Total	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566
Total	0.0216	0.0124	0.1912	5.7000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		58.3076	58.3076	1.4700e-003	1.3800e-003	58.7566

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457
Total	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.4 Grading - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457
Total	0.0271	0.0155	0.2391	7.1000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		72.8845	72.8845	1.8400e-003	1.7300e-003	73.4457

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.5 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.688 0	1,297.688 0	0.4114		1,307.972 5

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794
Total	0.0352	0.0202	0.3108	9.3000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		94.7498	94.7498	2.3900e-003	2.2500e-003	95.4794

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

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	0.0000
Vendor	0.0131	0.5147	0.1644	2.4300e-003	0.0813	3.1200e-003	0.0844	0.0234	2.9800e-003	0.0264		260.9532	260.9532	5.3400e-003	0.0386	272.5827
Worker	0.0866	0.0497	0.7650	2.2800e-003	0.2629	1.3000e-003	0.2642	0.0697	1.2000e-003	0.0709		233.2304	233.2304	5.8800e-003	5.5300e-003	235.0263
Total	0.0996	0.5644	0.9293	4.7100e-003	0.3441	4.4200e-003	0.3486	0.0931	4.1800e-003	0.0973		494.1836	494.1836	0.0112	0.0441	507.6090

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0131	0.5147	0.1644	2.4300e-003	0.0813	3.1200e-003	0.0844	0.0234	2.9800e-003	0.0264		260.9532	260.9532	5.3400e-003	0.0386	272.5827
Worker	0.0866	0.0497	0.7650	2.2800e-003	0.2629	1.3000e-003	0.2642	0.0697	1.2000e-003	0.0709		233.2304	233.2304	5.8800e-003	5.5300e-003	235.0263
Total	0.0996	0.5644	0.9293	4.7100e-003	0.3441	4.4200e-003	0.3486	0.0931	4.1800e-003	0.0973		494.1836	494.1836	0.0112	0.0441	507.6090

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.9214	2,001.9214	0.3334		2,010.2563

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	0.0000
Vendor	0.0127	0.5149	0.1609	2.3900e-003	0.0813	3.1400e-003	0.0844	0.0234	3.0100e-003	0.0264		256.8833	256.8833	5.3100e-003	0.0380	268.3314
Worker	0.0809	0.0444	0.7130	2.2000e-003	0.2629	1.2400e-003	0.2641	0.0697	1.1400e-003	0.0709		227.4436	227.4436	5.3200e-003	5.1600e-003	229.1136
Total	0.0936	0.5593	0.8738	4.5900e-003	0.3441	4.3800e-003	0.3485	0.0931	4.1500e-003	0.0973		484.3269	484.3269	0.0106	0.0431	497.4449

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.5149	0.1609	2.3900e-003	0.0813	3.1400e-003	0.0844	0.0234	3.0100e-003	0.0264		256.8833	256.8833	5.3100e-003	0.0380	268.3314
Worker	0.0809	0.0444	0.7130	2.2000e-003	0.2629	1.2400e-003	0.2641	0.0697	1.1400e-003	0.0709		227.4436	227.4436	5.3200e-003	5.1600e-003	229.1136
Total	0.0936	0.5593	0.8738	4.5900e-003	0.3441	4.3800e-003	0.3485	0.0931	4.1500e-003	0.0973		484.3269	484.3269	0.0106	0.0431	497.4449

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	4.1369	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674
Total	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.1369	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674
Total	0.0162	9.3200e-003	0.1434	4.3000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		43.7307	43.7307	1.1000e-003	1.0400e-003	44.0674

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	4.1260	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588
Total	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2024****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	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	4.1260	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588
Total	0.0152	8.3200e-003	0.1337	4.1000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		42.6457	42.6457	1.0000e-003	9.7000e-004	42.9588

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4483	1.2491	11.0895	0.0232	2.4405	0.0167	2.4572	0.6500	0.0156	0.6656		2,403.204 7	2,403.204 7	0.1519	0.1101	2,439.800 9
Unmitigated	1.4483	1.2491	11.0895	0.0232	2.4405	0.0167	2.4572	0.6500	0.0156	0.6656		2,403.204 7	2,403.204 7	0.1519	0.1101	2,439.800 9

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	610.28	597.87	434.35	1,108,371	1,108,371
Total	610.28	597.87	434.35	1,108,371	1,108,371

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
NaturalGas Unmitigated	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

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					
Hotel	9102	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Total		0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	9.102	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Total		0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

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	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Unmitigated	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.2162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Total	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Total	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

7.0 Water Detail

7.1 Mitigation Measures Water

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Granada Hotel - Proposed Project

Bay Area AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Hotel	73.00	Room	1.09	75,660.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage and square footage updated to match site plan.

Construction Phase - Architectural coating phase adjusted to occur simulatenously with building construction phase.

Demolition -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	200.00
tblLandUse	LandUseSquareFeet	105,996.00	75,660.00
tblLandUse	LotAcreage	2.43	1.09

2.0 Emissions Summary

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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					
2023	5.7781	14.7649	15.4622	0.0300	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,801.8918	2,801.8918	0.6475	0.0462	2,824.9211
2024	5.6570	12.8926	15.3075	0.0299	0.3934	0.5161	0.9096	0.1062	0.5001	0.6063	0.0000	2,791.6140	2,791.6140	0.3617	0.0451	2,814.1006
Maximum	5.7781	14.7649	15.4622	0.0300	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,801.8918	2,801.8918	0.6475	0.0462	2,824.9211

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					
2023	5.7781	14.7649	15.4622	0.0300	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,801.8918	2,801.8918	0.6475	0.0462	2,824.9211
2024	5.6570	12.8926	15.3075	0.0299	0.3934	0.5161	0.9096	0.1062	0.5001	0.6063	0.0000	2,791.6140	2,791.6140	0.3617	0.0451	2,814.1006
Maximum	5.7781	14.7649	15.4622	0.0300	7.1647	0.6805	7.7695	3.4465	0.6365	4.0029	0.0000	2,801.8918	2,801.8918	0.6475	0.0462	2,824.9211

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Energy	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Mobile	1.2869	1.4391	12.0807	0.0220	2.4405	0.0168	2.4572	0.6500	0.0156	0.6656		2,270.6781	2,270.6781	0.1748	0.1210	2,311.1058
Total	3.2210	2.3315	12.8377	0.0273	2.4405	0.0846	2.5251	0.6500	0.0835	0.7334		3,341.5178	3,341.5178	0.1953	0.1406	3,388.3099

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	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Energy	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Mobile	1.2869	1.4391	12.0807	0.0220	2.4405	0.0168	2.4572	0.6500	0.0156	0.6656		2,270.6781	2,270.6781	0.1748	0.1210	2,311.1058
Total	3.2210	2.3315	12.8377	0.0273	2.4405	0.0846	2.5251	0.6500	0.0835	0.7334		3,341.5178	3,341.5178	0.1953	0.1406	3,388.3099

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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	5/1/2023	5/26/2023	5	20	
2	Site Preparation	Site Preparation	5/27/2023	5/30/2023	5	2	
3	Grading	Grading	5/31/2023	6/5/2023	5	4	
4	Paving	Paving	6/6/2023	6/19/2023	5	10	
5	Building Construction	Building Construction	6/20/2023	3/25/2024	5	200	
6	Architectural Coating	Architectural Coating	7/4/2023	4/8/2024	5	200	

Acres of Grading (Site Preparation Phase): 1.88**Acres of Grading (Grading Phase): 4****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 113,490; Non-Residential Outdoor: 37,830; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	61.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	32.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328		2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330		2,324.3959	2,324.3959	0.5893		2,339.1278

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	6.1300e-003	0.4216	0.0981	1.8400e-003	0.0534	3.3500e-003	0.0567	0.0146	3.2000e-003	0.0178		200.7544	200.7544	6.5900e-003	0.0318	210.3994
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0422	0.4465	0.3957	2.7000e-003	0.1601	3.8800e-003	0.1640	0.0430	3.6900e-003	0.0466		288.7882	288.7882	9.3100e-003	0.0344	299.2722

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6622	0.0000	0.6622	0.1003	0.0000	0.1003			0.0000			0.0000
Off-Road	1.4725	14.3184	13.4577	0.0241		0.6766	0.6766		0.6328	0.6328	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278
Total	1.4725	14.3184	13.4577	0.0241	0.6622	0.6766	1.3388	0.1003	0.6328	0.7330	0.0000	2,324.3959	2,324.3959	0.5893		2,339.1278

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	6.1300e-003	0.4216	0.0981	1.8400e-003	0.0534	3.3500e-003	0.0567	0.0146	3.2000e-003	0.0178		200.7544	200.7544	6.5900e-003	0.0318	210.3994
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0422	0.4465	0.3957	2.7000e-003	0.1601	3.8800e-003	0.1640	0.0430	3.6900e-003	0.0466		288.7882	288.7882	9.3100e-003	0.0344	299.2722

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668		1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709		1,666.057 3	1,666.057 3	0.5388		1,679.528 2

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909
Total	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.1339	12.4250	6.6420	0.0172		0.5074	0.5074		0.4668	0.4668	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2
Total	1.1339	12.4250	6.6420	0.0172	6.2662	0.5074	6.7736	3.0041	0.4668	3.4709	0.0000	1,666.057 3	1,666.057 3	0.5388		1,679.528 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909
Total	0.0222	0.0153	0.1832	5.3000e-004	0.0657	3.3000e-004	0.0660	0.0174	3.0000e-004	0.0177		54.1746	54.1746	1.6700e-003	1.5900e-003	54.6909

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560		1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807		1,995.614 7	1,995.614 7	0.6454		2,011.750 3

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637
Total	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.3330	14.4676	8.7038	0.0206		0.6044	0.6044		0.5560	0.5560	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3
Total	1.3330	14.4676	8.7038	0.0206	7.0826	0.6044	7.6869	3.4247	0.5560	3.9807	0.0000	1,995.614 7	1,995.614 7	0.6454		2,011.750 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637
Total	0.0277	0.0192	0.2290	6.6000e-004	0.0822	4.1000e-004	0.0826	0.0218	3.8000e-004	0.0222		67.7183	67.7183	2.0900e-003	1.9900e-003	68.3637

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.688 0	1,297.688 0	0.4114		1,307.972 5

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728
Total	0.0361	0.0249	0.2976	8.6000e-004	0.1068	5.3000e-004	0.1073	0.0283	4.9000e-004	0.0288		88.0338	88.0338	2.7200e-003	2.5900e-003	88.8728

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858

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	0.0000
Vendor	0.0126	0.5446	0.1700	2.4400e-003	0.0813	3.1300e-003	0.0844	0.0234	2.9900e-003	0.0264		261.3265	261.3265	5.3100e-003	0.0387	272.9844
Worker	0.0888	0.0614	0.7327	2.1200e-003	0.2629	1.3000e-003	0.2642	0.0697	1.2000e-003	0.0709		216.6986	216.6986	6.6800e-003	6.3700e-003	218.7637
Total	0.1014	0.6060	0.9026	4.5600e-003	0.3441	4.4300e-003	0.3486	0.0931	4.1900e-003	0.0973		478.0251	478.0251	0.0120	0.0451	491.7481

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0126	0.5446	0.1700	2.4400e-003	0.0813	3.1300e-003	0.0844	0.0234	2.9900e-003	0.0264		261.3265	261.3265	5.3100e-003	0.0387	272.9844
Worker	0.0888	0.0614	0.7327	2.1200e-003	0.2629	1.3000e-003	0.2642	0.0697	1.2000e-003	0.0709		216.6986	216.6986	6.6800e-003	6.3700e-003	218.7637
Total	0.1014	0.6060	0.9026	4.5600e-003	0.3441	4.4300e-003	0.3486	0.0931	4.1900e-003	0.0973		478.0251	478.0251	0.0120	0.0451	491.7481

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348		2,001.921 4	2,001.921 4	0.3334		2,010.256 3

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	0.0000
Vendor	0.0122	0.5449	0.1664	2.4000e-003	0.0813	3.1500e-003	0.0844	0.0234	3.0200e-003	0.0264		257.2593	257.2593	5.2800e-003	0.0381	268.7348
Worker	0.0833	0.0548	0.6853	2.0500e-003	0.2629	1.2400e-003	0.2641	0.0697	1.1400e-003	0.0709		211.3559	211.3559	6.0700e-003	5.9300e-003	213.2760
Total	0.0955	0.5996	0.8517	4.4500e-003	0.3441	4.3900e-003	0.3485	0.0931	4.1600e-003	0.0973		468.6153	468.6153	0.0114	0.0440	482.0108

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Building Construction - 2024

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	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3
Total	1.4200	11.0639	12.5172	0.0221		0.4506	0.4506		0.4348	0.4348	0.0000	2,001.921 4	2,001.921 4	0.3334		2,010.256 3

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0122	0.5449	0.1664	2.4000e-003	0.0813	3.1500e-003	0.0844	0.0234	3.0200e-003	0.0264		257.2593	257.2593	5.2800e-003	0.0381	268.7348
Worker	0.0833	0.0548	0.6853	2.0500e-003	0.2629	1.2400e-003	0.2641	0.0697	1.1400e-003	0.0709		211.3559	211.3559	6.0700e-003	5.9300e-003	213.2760
Total	0.0955	0.5996	0.8517	4.4500e-003	0.3441	4.3900e-003	0.3485	0.0931	4.1600e-003	0.0973		468.6153	468.6153	0.0114	0.0440	482.0108

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	4.1369	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182
Total	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.7 Architectural Coating - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.1369	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182
Total	0.0166	0.0115	0.1374	4.0000e-004	0.0493	2.4000e-004	0.0495	0.0131	2.3000e-004	0.0133		40.6310	40.6310	1.2500e-003	1.1900e-003	41.0182

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	4.1260	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893
Total	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2024

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	3.9452					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	4.1260	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893
Total	0.0156	0.0103	0.1285	3.8000e-004	0.0493	2.3000e-004	0.0495	0.0131	2.1000e-004	0.0133		39.6292	39.6292	1.1400e-003	1.1100e-003	39.9893

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2869	1.4391	12.0807	0.0220	2.4405	0.0168	2.4572	0.6500	0.0156	0.6656		2,270.678 1	2,270.678 1	0.1748	0.1210	2,311.105 8
Unmitigated	1.2869	1.4391	12.0807	0.0220	2.4405	0.0168	2.4572	0.6500	0.0156	0.6656		2,270.678 1	2,270.678 1	0.1748	0.1210	2,311.105 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	610.28	597.87	434.35	1,108,371	1,108,371
Total	610.28	597.87	434.35	1,108,371	1,108,371

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Hotel	0.553342	0.058522	0.188738	0.121080	0.023016	0.005623	0.010412	0.007562	0.000987	0.000568	0.026444	0.000834	0.002871

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
NaturalGas Unmitigated	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

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					
Hotel	9102	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Total		0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	9.102	0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871
Total		0.0982	0.8924	0.7496	5.3500e-003		0.0678	0.0678		0.0678	0.0678		1,070.8237	1,070.8237	0.0205	0.0196	1,077.1871

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	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Unmitigated	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**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	0.2162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Total	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2162					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.6191					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.9000e-004	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170
Total	1.8360	7.0000e-005	7.4400e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005		0.0160	0.0160	4.0000e-005		0.0170

7.0 Water Detail

7.1 Mitigation Measures Water

Granada Hotel - Proposed Project - Bay Area AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation
