

CITY OF RANCHO CORDOVA



CITY COUNCIL MEETING

Monday, October 18, 2021

5:00 PM – Special Meeting/Closed Session

5:30 PM – Regular Meeting

David B. Roberts Council Chambers

City Hall

2729 Prospect Park Drive, Rancho Cordova

In response to Governor’s Executive Order N-29-20 and the Resolution Declaring the Existence of a Local Emergency Relating to the COVID-19 Pandemic adopted by the City of Rancho Cordova, the City is following the state and local guidelines. This meeting will also be available to the public via video/teleconferencing.

Join the Meeting Via Zoom Link:

<https://cityofranhocordova.zoom.us/j/85011344548?pwd=U0lpcHlyN1hnZkxIS1l6ZFIsWnNZQT09>

Join the Meeting via the Zoom Phone Number

Zoom Phone Number: US: +1 669 900 6833, +1 253 215 8782, 888 475 4499 (Toll Free)

Webinar ID: 850 1134 4548

Password: 578969

Instructions to Make Public Comment

Submitting Public Comment via Email

Members of the public who wish to provide public comment via email will need to submit comments to CityClerk@cityofranhocordova.org no later than 3:00 p.m. on Monday, October 18, 2021. All comments submitted later than 3:00 p.m. will be sent to the City Council for their review and may not be read during the meeting.

Listening to a Zoom Meeting by Zoom Video Conference

To make a public comment using the Zoom platform, please use the “raise hand” feature at the bottom center of the screen. Please make sure to enable audio controls once access has been given by the City Clerk’s office to speak. Please wait to be called upon by the City Clerk.

Listening to a Zoom Meeting by Phone Only

You can join a Zoom meeting via teleconferencing/audio conferencing using a cell phone or traditional landline phone. To request to make a public comment by phone press *9 to raise your hand. Please wait to be called upon by the City Clerk.

All public comments will be limited to three-minutes.

If you have questions related to the City Council Meeting or the use of Zoom, please contact the City Clerk's Office at (916) 851-8720 Monday, October 18, 2021 before 3:00 p.m.

AGENDA

1. SPECIAL MEETING - CALL TO ORDER/ROLL CALL

Council Members Linda Budge, Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

2. PUBLIC COMMENT

At a special meeting, citizens wishing to address the Council for any matter on the agenda may do so at the time the matter is discussed. Under the provisions of the California Government Code, the City Council is prohibited from discussing or taking action on any item not on the agenda.

3. ADJOURN TO CLOSED SESSION

Mayor Gatewood will adjourn the meeting to closed session.

4. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Council Members Linda Budge, Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

5. CLOSED SESSION

Council will meet in closed session to discuss the following item:

CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: Significant Exposure to Litigation Pursuant to Government Code Section 54956.9(d)(2) (One Case).

6. OPEN SESSION - REPORT FROM CLOSED SESSION

The City Attorney will report on action taken in closed session.

7. ADJOURN TO REGULAR MEETING

Mayor Gatewood will adjourn closed session to the Regular meeting in the David B. Roberts Council Chambers.

8. REGULAR MEETING - CALL TO ORDER/ROLL CALL

Council Members Linda Budge, Siri Pulipati, David Sander, Donald Terry and Mayor Garrett Gatewood.

9. METRO CABLE TV TELEVISION ANNOUNCEMENT

The Clerk will announce the meetings video recording and playback schedules.

10. PLEDGE OF ALLEGIANCE

The Mayor will call on someone in attendance to lead the Pledge.

11. INVOCATION

Dr. Colette Charles will give the invocation.

12. PRESENTATIONS

12.1. Introduction of New Probation Officer and Probation Partnership Update with Sacramento County Probation.

12.2. Presentation of Proclamation to Children's Choice for Hearing and Talking (CCHAT) Center for 25 Years of Service and to Recognize National Audiology Awareness Month.

12.3. Mayor Garrett Gatewood's Birthday on October 23, 2021.

13. PUBLIC COMMENT

Citizens wishing to address the Council for any matter not on the agenda may do so at this time via teleconference or by completing and submitting a Speaker Card to the City Clerk.

If you want to make a public comment via teleconference, please use the "raise hand" feature at the bottom center of the screen. If you are participating by telephone and you want to make a public comment, please press *9 to raise your hand. For those participating by Zoom or telephone, please wait to be called upon by the City Clerk.

For items on the agenda, speakers will be called by the Mayor at the point on the agenda when the item will be heard.

Speakers are encouraged to keep comments to three minutes or less and to state name and community of residence. Under the provisions of the California Government Code, the City Council is prohibited from discussing or taking immediate action on any item not on the agenda unless it can be demonstrated to be of an emergency nature or the need to take immediate action arose after the posting of the agenda.

14. COUNCIL REPORTS

15. CITY MANAGER'S REPORT

16. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

16.1. **Subject:** Meeting Minutes from the Special Meeting of September 28, 2021, the Regular City Council Meeting of October 4, 2021, and the Special Meeting of October 12, 2021.

Recommendation: Adopt the Minutes.

16.2. **Subject:** A Resolution Declaring Results of the Mail Ballot Election Relating to the Imposition of the Annual Stormwater Utility Fee on the Falconer Commercial Building Project.

Recommendation: Adopt the Resolution declaring the results of the mail ballot election relating to the imposition of the annual Stormwater Utility Fee on the Falconer Commercial Building project.

- 16.3. **Subject:** A Resolution Declaring Results of the Mail Ballot Election Relating to the Imposition of the Annual Stormwater Utility Fee on the Sunrise Palms Project.
Recommendation: Adopt the Resolution declaring the results of the mail ballot election relating to the imposition of the annual Stormwater Utility Fee on the Sunrise Palms project.
- 16.4. **Subject:** A Resolution Approving the Annexation Boundary Map for the Express Sewer and Drain Project and Annexation to the City of Rancho Cordova Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance).
Recommendation: Adopt the Resolution.
- 16.5. **Subject:** A Resolution Declaring City's Intention to Impose an Annual Stormwater Utility Fee for the Maintenance of Storm Drainage and Flood Protection Systems for the Express Sewer and Drain Project.
Recommendation: Adopt the Resolution.
- 16.6. **Subject:** Resolutions of Intention to Establish the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1, to Levy a Special Tax Therein, and to Incur Bonded Indebtedness in and for the District to Finance the Acquisition and Construction of Certain Public Facilities in and for such District.
Recommendation: Adopt the Resolutions.
- 16.7. **Subject:** A Resolution of the City Council of the City of Rancho Cordova Adopting Caltrans Local Assistance Procedures Manual Chapter 10: Consultant Selection.
Recommendation: Adopt the Resolution.
- 16.8. **Subject:** A Resolution Approving the Final Map of Montelena Village 4, Subdivision No. Rc-04-132.4, and Authorizing the City Manager to Execute the Subdivision Improvement Agreement Contract No. 2021-301 with Montelena Douglas LLC.
Recommendation: Adopt the Resolution.
- 16.9. **Subject:** A Resolution Approving the Final Map of Montelena Village 6, Subdivision No. FM-2014-007-42, and Authorizing the City Manager to Execute the Subdivision Improvement Agreement Contract No. 2021-302 with Montelena Douglas LLC.
Recommendation: Adopt the Resolution.
- 16.10. **Subject:** Rescind all Action Taken by the City Council on Agenda Item 10.1 "Amendment to the General Plan and Certain Entitlement for the Rio Del Oro Specific Plan Area Regarding Parks in Rio Del Oro" on the June 7, 2021 City Council Meeting Agenda. The Cordova Recreation and Park District is the Park Service Provider in the Rio Del Oro Specific Plan Area Pursuant to Public Resource Code Sections 5780 et seq.
Recommendation: Move to "Rescind all action taken by the City Council on Agenda Item 10.1 'Amendment to the General Plan and Certain Entitlement for the Rio Del Oro Specific Plan Area Regarding Parks in Rio Del Oro' on the June 7, 2021 City Council Meeting Agenda. The Cordova Recreation and Park District is the park service provider in the Rio Del Oro Specific Plan Area pursuant to Public Resource Code sections 5780 et seq."
17. **CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE**
- 17.1. **Subject:** A Resolution Creating Special Tax Area Zone 32 and an Ordinance Establishing a Special Tax for Transit-Related Services for the Express Sewer and Drain Project.
Recommendation: Adopt the Resolution creating special tax area Zone 32 and introduce and waive the first reading of the Ordinance, establishing a Special Tax for Transit-Related

services for the Express Sewer and Drain project.

18. PUBLIC HEARING ITEMS

- 18.1. **Subject:** Stone Creek Village - Tentative Parcel Map, Tentative Subdivision Map, Major Design Review, and Unified Sign Program - Project DD10072 - Located at Zinfandel Drive Between Bear Hollow Drive and Spoto Drive; APN 072-2360-002-0000.

Recommendation: Determine the project Exempt per Section 15183 Projects Consistent with a Community Plan, General Plan, or Zoning, of the CEQA Guidelines; and Adopt the Resolution for Tentative Parcel Map, Tentative Subdivision Map, Major Design Review, and Unified Sign Program.

- 18.2. **Subject:** Eco Site II, Cellular Telecommunication Tower at the Southeast Corner of Zinfandel Drive and Folsom Boulevard - Conditional Use Permit - Project No. DD10018.

Recommendation: Provide Planning staff direction on the design. If a change is desired, direct staff and the City Attorney to prepare a Resolution for consideration at the November 1, 2021 meeting rescinding the August 16, 2021 approval and approving the revised design.

19. REGULAR CALENDAR ITEMS

- 19.1. **Subject:** Rancho Cordova Youth Center Operations Discussion.

Recommendation: Receive presentation on the Rancho Cordova Youth Center Operations and provide Council input.

- 19.2. **Subject:** A Resolution of the City Council of the City of Rancho Cordova and on Behalf of Commissions and Committees Created by the City Council Pursuant to Government Code Section 54952(b) Confirming the State of Emergency Under Government Code Section 8625, Recognizing Continued Measures to Promote Social Distancing, and Re-authorizing Remote Teleconference Meetings of the City for the Period from October 18, 2021 to November 17, 2021.

Recommendation: Adopt the Resolution.

20. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

21. ADJOURNMENT

ADDITIONAL INFORMATION

SPECIAL MEETINGS LISTED BELOW ARE SUBJECT TO CHANGE/CANCELLATION WITHOUT FURTHER NOTICE.

UNLESS THE COUNCIL ADOPTS A MOTION TO EXTEND THE MEETING, ANY ITEM THAT IS NOT INITIATED BEFORE 11:00 PM WILL BE CONTINUED TO THE NEXT DAY AT 5:30 PM OR SCHEDULED ON THE NEXT REGULAR MEETING AGENDA OF THE COUNCIL.

Public documents related to items on the open session portion of this agenda, which are distributed to the City Council less than 72 hours prior to the meeting, shall be available for public inspection at the time the documents are distributed to the Council. Documents are available for inspection at the City Clerk's office located in Rancho Cordova City Hall.

The agenda items are accessible on the City's website at www.cityofranchocordova.org on Thursdays or Fridays prior to the Regular City Council Meeting.

UPCOMING MEETINGS

November 1, 2021	4:00 PM Special Meeting/Regular Meeting
November 9, 2021	5:30 PM Special Meeting/Work Session
November 15, 2021	5:30 PM Regular Meeting
December 6, 2021	4:00 PM Special Meeting/Regular Meeting
December 14, 2021	5:30 PM Special Meeting/Work Session
December 20, 2021	5:30 PM Regular Meeting

If you have any technical questions related to the agenda items, please contact City Hall at (916) 851-8700.

The Rancho Cordova City Council meeting will be videotaped in its entirety and will be cablecast without interruption on Metro Cable 14, the Government Affairs Channel on the Comcast, Consolidated Communications and AT&T U-Verse Systems. Closed Captioning will be available on the playback cablecast. A DVD copy is available from the City Clerk's Department and a webcast of this meeting will be available for viewing via video streaming from the City's website within 48 hours of adjournment of this meeting.

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the City Clerk's Office at (916) 851-8720 at least 48 hours prior to the meeting.

CERTIFICATION OF POSTING OF AGENDA

I, Stacy Leitner, City Clerk for the City of Rancho Cordova, declare that the foregoing agenda for the October 18, 2021 Regular Meeting of the Rancho Cordova City Council was posted and available for review on October 14, 2021 at City Hall of the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, California, 95670. The agenda is also available on the city website at www.cityofranhocordova.org.

Signed October 14, 2021 at Rancho Cordova, California.



Stacy Leitner, CMC
City Clerk

ITEM 16.1.

CITY OF RANCHO CORDOVA



**CITY COUNCIL MEETING
Tuesday, September 28, 2021**

**5:30 PM – Special Meeting/Closed Session
David B. Roberts Council Chambers**

**City Hall
2729 Prospect Park Drive, Rancho Cordova**

DRAFT MINUTES

1. SPECIAL MEETING - CALL TO ORDER/ROLL CALL

Mayor Gatewood called the meeting to order in the David B. Roberts Council Chambers at 5:34 p.m.

Council Members Present: Linda Budge, Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

Council Members Absent: None

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie Riley

2. PUBLIC COMMENT

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

3. ADJOURN TO CLOSED SESSION

Mayor Gatewood adjourned the meeting to closed session at 5:38 p.m.

4. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Mayor Gatewood called closed session to order at 5:34 p.m.

Council Members Present: Linda Budge, Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

Council Members Absent: None

Staff Members Present: Cyrus Abhar and Adam Lindgren

ITEM 16.1.

Rancho Cordova City Council – DRAFT MINUTES
Meeting of Tuesday, September 28, 2021

5. CLOSED SESSION

Council will meet in closed session to discuss the following item:

PUBLIC EMPLOYEE PERFORMANCE EVALUATION: City Manager: Pursuant to Government Code Section 54957.

6. OPEN SESSION - REPORT FROM CLOSED SESSION

City Attorney Adam Lindgren reported that the City Council conducted and concluded the City Manager's performance evaluation. The Council reports that the City Manager's performance has been exemplary.

7. ADJOURNMENT

Mayor Gatewood adjourned the meeting at 7:35 p.m.

Stacy Leitner, CMC
City Clerk

ITEM 16.1.

CITY OF RANCHO CORDOVA



CITY COUNCIL MEETING

Monday, October 4, 2021

5:30 PM – Regular Meeting

David B. Roberts Council Chambers

City Hall

2729 Prospect Park Drive, Rancho Cordova

In response to Governor's Executive Order N-29-20 and the Resolution Declaring the Existence of a Local Emergency Relating to the COVID-19 Pandemic adopted by the City of Rancho Cordova, the City is following the state and local guidelines. This meeting will also be available to the public via video/teleconferencing.

DRAFT MINUTES

1. REGULAR MEETING - CALL TO ORDER/ROLL CALL

Mayor Gatewood called the Regular meeting to order in the David B. Roberts Council Chambers at 5:35 p.m.

Council Members Present: Linda Budge, Siri Pulipati, David Sander, and Mayor Garrett Gatewood

Council Members Absent: Donald Terry

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie Riley

2. METRO CABLE TV TELEVISION ANNOUNCEMENT

The City Clerk read the meetings recordings and playback schedule.

3. PLEDGE OF ALLEGIANCE

Derald Langwell led the pledge.

4. INVOCATION

Mayor Garrett Gatewood gave the invocation.

5. PRESENTATIONS

- 5.1. Proclamation to Soroptimist International of Rancho Cordova and Gold River in honor of

ITEM 16.1.

Rancho Cordova City Council - DRAFT MINUTES
Meeting of Monday, October 4, 2021

Soroptimist International's 100th anniversary as an organization and the dedication of the local club's service to Rancho Cordova.

6. PUBLIC COMMENT

Mayor Gatewood opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Angel Ball
2. Scott Faulds
3. Helen Whelan Bashaw
4. Fayzah Mughal
5. Eleni
6. Ace Duffy Pegan
7. Chris

Mayor Gatewood closed the public comment period.

7. COUNCIL REPORTS

Council reported on events since the last meeting.

8. CITY MANAGER'S REPORT

City Manager Cyrus Abhar gave his report.

9. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

Mayor Gatewood asked that item 9.7 be pulled for separate discussion.

ACTION: Motion to approve item 9.1 through 9.6 and 9.8 through 9.9 by Budge second by Pulipati;

Motion passed with a 4:0 vote.

AYES: Budge, Pulipati, Sander, and Mayor Gatewood

NOES: None

ABSENT: Terry

ABSTAIN: None

- 9.1. **Subject:** Meeting Minutes from the Regular City Council Meeting of September 20, 2021.

Recommendation: Adopt the Minutes.

- 9.2. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-278 with Women in Data Science and Analytics, Inc. in an Amount Not to Exceed \$249,000 for Workforce Recovery Program Services.

Recommendation: Adopt the Resolution.

- 9.3. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-277 with Udacity, Inc., in an Amount Not to Exceed \$160,000 for Workforce Recovery Program Services.

Recommendation: Adopt the Resolution.

- 9.4. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-273 with Coursera Inc. in an Amount Not to Exceed \$315,000 for Workforce Recovery Program Services.

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Rancho Cordova City Council - DRAFT MINUTES
Meeting of Monday, October 4, 2021

Recommendation: Adopt the Resolution.

- 9.5. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-276 with General Assembly, Inc. in an Amount Not to Exceed \$300,000 for Workforce Recovery Program Services.

Recommendation: Adopt the Resolution.

- 9.6. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-284 for Professional Services with Sacramento Splash in an Amount not to Exceed \$120,000.

Recommendation: Adopt the Resolution.

- 9.7. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-299 in an Amount of \$364,250.00 with Wood Rodgers, Inc. for Engineering Design and Right of Way Acquisition Support Services for Phase 3 of the White Rock Road Safety and Beautification Project, CP22-2228.

Recommendation: Adopt the Resolution.

ACTION: Motion to continue item 9.7 to a future date by Budge second by Pulipati;
Motion passed with a 4:0 vote.

AYES: Budge, Pulipati, Sander, and Mayor Gatewood

NOES: None

ABSENT: Terry

ABSTAIN: None

- 9.8. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-307 with Michael Baker International, Inc. in an Amount not to Exceed \$420,000 for a Term of October 1, 2021 to June 30, 2023 for Planning, Housing, and Public Works Support Services.

Recommendation: Adopt the Resolution.

10. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

- 10.1. **Subject:** Rio Del Oro Parcel 66 - Major Design Review Project No. DD10073.

Recommendation: Find the project is exempt under CEQA Exemption 15182, Residential Projects Pursuant to a Specific Plan. The project was analyzed as part of the Rio Del Oro Specific Plan (RDOSP) Environmental Impact Report (EIR); and Adopt the Resolution for the Rio Del Oro Parcel 66 Major Design Review.

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

ACTION: Motion to approve item 10.1. by Budge second by Pulipati;
Motion passed with a 4:0 vote.

AYES: Budge, Pulipati, Sander, and Mayor Gatewood

NOES: None

ABSENT: Terry

ABSTAIN: None

11. PUBLIC HEARING ITEMS

None.

12. REGULAR CALENDAR ITEMS

ITEM 16.1.

Rancho Cordova City Council - DRAFT MINUTES
Meeting of Monday, October 4, 2021

- 12.1. **Subject:** A Resolution Authorizing the City Manager to Execute Contract No. 2021-275 with Folsom Cordova Community Partnership in an Amount Not to Exceed \$344,000 for Workforce Recovery Program Services.

Recommendation: Adopt the Resolution.

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

ACTION: Motion to approve item 12.1. by Budge second by Pulipati;
Motion passed with a 4:0 vote.

AYES: Budge, Pulipati, Sander, and Mayor Gatewood

NOES: None

ABSENT: Terry

ABSTAIN: None

- 12.2. **Subject:** Discussion on Naming of Public Facilities and Streets

Recommendation: Receive information and provide direction as needed.

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

ACTION: Input was received regarding the Naming of Public Facilities and Streets.

13. **COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS**

None.

14. **ADJOURNMENT**

Mayor Gatewood adjourned the meeting at 7:35 p.m.

Stacy Leitner, CMC
City Clerk

ITEM 16.1.

CITY OF RANCHO CORDOVA



CITY COUNCIL MEETING

Tuesday, October 12, 2021

5:30 PM – Special Meeting/Work Session
David B. Roberts Council Chambers

City Hall
2729 Prospect Park Drive, Rancho Cordova

DRAFT MINUTES

1. SPECIAL MEETING - CALL TO ORDER/ROLL CALL

Mayor Gatewood called the Special meeting to order in the David B. Roberts Council Chambers at 5:34 p.m.

Council Members Present: Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

Council Members Absent: Linda Budge

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie Riley

2. PUBLIC COMMENT

Mayor Gatewood opened the public comment period. The following individuals addressed the Council:

1. Deane Burk

Mayor Gatewood closed the public comment period.

3. SPECIAL MEETING

3.1. **Subject:** Measure R and Measure H/Community Enhancement Fund Citizen Oversight Board Appointments.

Recommendation: The City Council discuss, and select, by a majority vote of the full City Council, two, two-year term board members and two, one-year term at-large student appointees, to fill the combined Measure R and Measure H/Community Enhancement Fund Citizen Oversight Board. The two-year term appointments are mid-term vacancy

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Rancho Cordova City Council - DRAFT MINUTES
Meeting of Tuesday, October 12, 2021

appointments and have one year remaining on the term.

Mayor Gatewood opened the public comment period. Seeing no speakers. Mayor Gatewood closed the public comment period.

ACTION: Motion to appoint Deane Burk and Travis Hughes to the Measure R and Measure H/Community Enhancement und Citizen Oversight Board by Terry second by Sander;
Motion passed with a 3:0 vote.

AYES: Sander, Terry, and Mayor Gatewood

NOES: None

ABSENT: Budge and Pulipati

ACTION: Direction was received regarding the re-naming of the Measure R and Measure H/Community Enhancement Fund the Community Enhancement and Investment Fund.

4. **ADJOURN TO CLOSED SESSION**

Mayor Gatewood adjourned the meeting to closed session at 6:03 p.m.

5. **CLOSED SESSION - CALL TO ORDER/ROLL CALL**

Mayor Gatewood called the Regular meeting to order at 6:04 p.m.

Council Members Present: Linda Budge, Siri Pulipati, David Sander, Donald Terry, and Mayor Garrett Gatewood

Council Members Absent: None

Staff Members Present: Cyrus Abhar and Adam Lindgren

6. **CLOSED SESSION**

Council will meet in closed session to discuss the following item:

PUBLIC EMPLOYEE PERFORMANCE EVALUATION: City Manager: Pursuant to Government Code Section 54957.

7. **OPEN SESSION - REPORT FROM CLOSED SESSION**

City Manager Cyrus Abhar reported that staff was given direction and there was no reportable action taken in closed session.

8. **ADJOURNMENT**

Mayor Gatewood adjourned the meeting at 7:59 p.m.

Stacy Leitner, CMC
City Clerk

MEMORANDUM



ITEM 16.2.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Elizabeth Sparkman, Community Development Director
SUBJECT: **A RESOLUTION DECLARING RESULTS OF THE MAIL BALLOT ELECTION RELATING TO THE IMPOSITION OF THE ANNUAL STORMWATER UTILITY FEE ON THE FALCONER COMMERCIAL BUILDING PROJECT**

RECOMMENDATION

Adopt the Resolution declaring the results of the mail ballot election relating to the imposition of the annual Stormwater Utility Fee on the Falconer Commercial Building project.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution will declare the results of the ballot tabulation for the proposed imposition of the annual Stormwater Utility Fee on the Falconer Commercial Building project. If majority approval exists, the City Council may impose the annual Stormwater Utility Fee on the Falconer Commercial Building project pursuant to the Fee Ordinance.

BACKGROUND

The City Council previously adopted a Resolution on August 16, 2021 declaring its intention to impose the annual Stormwater Utility Fee ("Fee") pursuant to Ordinance No. 7-2014 on the Falconer Commercial Building project. A protest hearing was conducted on September 7, 2021 at which time no written protest was received from the property owner representing a majority of the parcel subject to the Fee. Council then adopted a Resolution authorizing the mailing of a property owner ballot for the purpose of submitting the Fee to a vote of the owner, subject to the Fee. Only one parcel is subject to the fee.

The Clerk has tabulated the final ballot returned by the property owner for the Falconer Commercial Building project. The majority vote of the owner of the parcel approved to impose the annual Fee on the Falconer Commercial Building project pursuant to the Ordinance. The Council action tonight is to adopt the Resolution declaring the results of the mail ballot election.

FISCAL IMPACT AND FUNDING SOURCE

There is no impact to the City's General Fund.

ATTACHMENT(S)

1. Resolution
2. Exhibit A to Resolution - Ballot
3. Exhibit B to Resolution -City Clerk Certificate

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, DECLARING THE RESULTS OF A MAIL BALLOT ELECTION RELATING TO THE IMPOSITION OF THE ANNUAL STORMWATER UTILITY FEE ON THE FALCONER COMMERCIAL BUILDING PROJECT IN THE CITY OF RANCHO CORDOVA

WHEREAS, on August 16, 2021, the City Council adopted a Resolution declaring its intention to impose the Annual Stormwater Utility Fee ("Fee") for the Falconer Commercial Building project; and

WHEREAS, Article XIII D of the California Constitution (Proposition 218) requires the City to follow certain procedural and substantive requirements relating to the imposition of property-related fees and charges (as defined in Proposition 218); and

WHEREAS, the City has determined that the Fee is a property related fee, subject to the provisions of Proposition 218; and

WHEREAS, before imposing the Fee, the City Council is required to hold a noticed public hearing on a written report (the "Written Report") containing a description of each parcel of real property within the City to which the Fee is applicable and the amount of the Fee for each such parcel for Fiscal Year 2021-2022 and to consider protests to the Fee and, if a majority protest is not received at the public hearing, the Council must submit the question of the imposition of the Fee to a vote of the owners of the property subject to the proposed Fee for approval before the proposed Fee may be levied; and

WHEREAS, in accordance with Proposition 218 the City Council held a duly noticed public hearing on the matter of the Written Report and the proposed Fee on September 7, 2021 and took testimony, both written and oral; and

WHEREAS, having determined a written protest was not received from property owner representing a majority of the parcels subject to the Fee, the City Council adopted a Resolution authorizing the mailing of a property owner ballot (the "Ballot Measure") for the purpose of submitting the Fee to a vote of the owner of parcel subject to the Fee, and subject to approval by a majority vote of the owner of parcel subject to the Fee; and

WHEREAS, pursuant to the terms of Ordinance No. 7-2014 and the unanimous consent of the property owner, the Property Owner Balloting was conducted and completed, and the City Clerk has on file a Certificate of the City Clerk as to the Results of the Canvass of the Ballot Return in Connection with the Proposed Stormwater Utility Fee (the "Certificate"), a copy of which is attached hereto as Exhibit B and by this reference incorporated herein.

NOW, THEREFORE, BE IT IS HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA:

1. The above recitals are true and correct.
2. The Certificate is hereby accepted into the records of the City.

ITEM 16.2.

ATTACHMENT 1

3. The Ballot Measure is authorized as set forth in Exhibit A attached hereto and by this reference incorporated herein.
4. The results of the Ballot Measure are as set forth in the Certificate on file with the City Clerk and attached to this Resolution as Exhibit B ("Certificate").
5. The City Clerk is authorized to declare the results of the mail ballot election relating to the imposition of the Stormwater Utility fee on the Falconer Commercial Building project.
6. Pursuant to said Certificate, the Ballot Measure submitted was approved by a majority vote of the owner of parcel subject to the Fee, the Fee is hereby imposed pursuant to Ordinance No. 7-2014 on the Falconer Commercial Building project.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 18th day of October 2021, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

Rancho Cordova Stormwater Utility Fee – Official Property Owner Ballot

The person completing and submitting this Property Owner Ballot must be the owner of the property identified above or the representative of the owner of such property who is legally authorized to complete and submit this ballot for and on behalf of the owner. The enclosed "Summary of Property Owner Ballot Procedures" has been provided to assist you in filling out the ballot. If there are two or more property owners, only one needs to sign and return the ballot. One ballot will be counted per property.

Assessor's Parcel Numbers: 072-0450-062
Property Address: 3248 Luyung Drive
Rancho Cordova, CA 95742
Designation: Vacant Land
Total Parcel(s) Area (acres): 0.574
DMU: $10.0 \times 0.574 = 5.74$

Assessor's Parcel Numbers: 072-0450-062

Owner Name: William C. Falconer, Jr.

Proposed Maximum FY 2021-2022 Annual Fee Amount: \$137.62 per DMU

In order to provide the City of Rancho Cordova with a dedicated funding source to repair, reconstruct and maintain the storm drain system and to protect water quality, shall the City impose an annual Stormwater Utility Fee as shown in the Rate Analysis Report, dated 8/7/2014?

☒ **YES** I support the proposed annual Stormwater Utility Fee

☐ **NO** I oppose the proposed annual Stormwater Utility Fee

I hereby declare, under penalty of perjury under the laws of the State of California, that I am the owner, or the authorized representative of the owner, of the parcel identified above. Your ballot will not be counted if you do not sign below.

9/30/21
Date

William Falconer
Printed Name

[Signature]
Signature

Vote Here

If approved by a majority of the returned ballots, the proposed maximum annual Storm Drain User Fee rate for FY 2021-2022 will be \$137.62 per Drainage Measurement Unit (DMU). The maximum rate per DMU will increase annually by the amount of the increase of the CPI. However, each year the City Council will hold a public hearing and determine the actual rate per DMU that will be charged. At the annual public hearing, the City Council will set the actual rate for the next year, which would be equal to or less than the annual maximum rate. The Council may decide to reduce the rate or set the rate to \$0 per DMU in any fiscal year.

Please mark your ballot in ink and return the entire page.

Upon completion, fold the ballot, place it in the addressed, return envelope and seal the envelope. Pursuant to the enclosed instructions, mail the ballot to the address shown on the return envelope, or deliver to the City Clerk at City Hall located at 1:30 p.m. Thursday, September 30, 2021.

Return to:

**City of Rancho Cordova
Attn: City Clerk
2729 Prospect Park Drive
Rancho Cordova, CA 95670**

Exhibit B

**CERTIFICATE OF THE CITY CLERK AS TO
THE RESULTS OF THE CANVASS OF THE ELECTION RETURNS
IN CONNECTION WITH THE PROPOSED STORMWATER UTILITY FEE
IN THE CITY OF RANCHO CORDOVA**

I, Stacy Leitner, City Clerk of the City of Rancho Cordova, hereby certify that I canvassed the returns of the election in connection with the imposition of an annual stormwater utility fee that the day for the return of mailed ballot, September 30, 2021, The election was concluded on that date and that the total number of ballots cast in said election and the total number of votes cast for and against the ballot measure, as specified below, are full, true and correct.

Total of Ballots Received: 1

Total "Yes" Ballots: 1

Total "No" Ballots: 0



Stacy Leitner, CMC
City Clerk

MEMORANDUM



ITEM 16.3.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Elizabeth Sparkman, Community Development Director
SUBJECT: **A RESOLUTION DECLARING RESULTS OF THE MAIL BALLOT ELECTION RELATING TO THE IMPOSITION OF THE ANNUAL STORMWATER UTILITY FEE ON THE SUNRISE PALMS PROJECT**

RECOMMENDATION

Adopt the Resolution declaring the results of the mail ballot election relating to the imposition of the annual Stormwater Utility Fee on the Sunrise Palms project.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution will declare the results of the ballot tabulation for the proposed imposition of the annual Stormwater Utility Fee on the Sunrise Palms project. If majority approval exists, the City Council may impose the annual Stormwater Utility Fee on the Sunrise Palms project pursuant to the Fee Ordinance.

BACKGROUND

The City Council previously adopted a Resolution on August 16, 2021 declaring its intention to impose the annual Stormwater Utility Fee ("Fee") pursuant to Ordinance No. 7-2014 on the Sunrise Palms project. A protest hearing was conducted on September 7, 2021 at which time no written protest was received from the property owner representing a majority of the parcel subject to the Fee. Council then adopted a Resolution authorizing the mailing of a property owner ballot for the purpose of submitting the Fee to a vote of the owner, subject to the Fee. Only one parcel is subject to the fee.

The Clerk has tabulated the ballot returned by the property owner for the Sunrise Palms project. The majority vote of the owner of the parcel approved to impose the annual Fee on the Sunrise Palms project pursuant to the Ordinance. The Council action tonight is to adopt the Resolution declaring the results of the mail ballot election.

FISCAL IMPACT AND FUNDING SOURCE

There is no impact to the City's General Fund.

ATTACHMENT(S)

1. Resolution
2. Exhibit A to the Resolution - Ballot
3. Exhibit B to the Resolution - City Clerk Certificate

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, DECLARING THE RESULTS OF A MAIL BALLOT ELECTION RELATING TO THE IMPOSITION OF THE ANNUAL STORMWATER UTILITY FEE ON THE SUNRISE PALMS PROJECT IN THE CITY OF RANCHO CORDOVA

WHEREAS, on August 16, 2021, the City Council adopted a Resolution declaring its intention to impose the Annual Stormwater Utility Fee ("Fee") for the Sunrise Palms project; and

WHEREAS, Article XIII D of the California Constitution (Proposition 218) requires the City to follow certain procedural and substantive requirements relating to the imposition of property-related fees and charges (as defined in Proposition 218); and

WHEREAS, the City has determined that the Fee is a property related fee, subject to the provisions of Proposition 218; and

WHEREAS, before imposing the Fee, the City Council is required to hold a noticed public hearing on a written report (the "Written Report") containing a description of each parcel of real property within the City to which the Fee is applicable and the amount of the Fee for each such parcel for Fiscal Year 2021-2022 and to consider protests to the Fee and, if a majority protest is not received at the public hearing, the Council must submit the question of the imposition of the Fee to a vote of the owners of the property subject to the proposed Fee for approval before the proposed Fee may be levied; and

WHEREAS, in accordance with Proposition 218 the City Council held a duly noticed public hearing on the matter of the Written Report and the proposed Fee on September 7, 2021 and took testimony, both written and oral; and

WHEREAS, having determined a written protest was not received from property owner representing a majority of the parcels subject to the Fee, the City Council adopted a Resolution authorizing the mailing of a property owner ballot (the "Ballot Measure") for the purpose of submitting the Fee to a vote of the owner of parcel subject to the Fee, and subject to approval by a majority vote of the owner of parcel subject to the Fee; and

WHEREAS, pursuant to the terms of Ordinance No. 7-2014 and the unanimous consent of the property owner, the Property Owner Balloting was conducted and completed, and the City Clerk has on file a Certificate of the City Clerk as to the Results of the Canvass of the Ballot Return in Connection with the Proposed Stormwater Utility Fee (the "Certificate"), a copy of which is attached hereto as Exhibit B and by this reference incorporated herein.

NOW, THEREFORE, BE IT IS HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA:

1. The above recitals are true and correct.
2. The Certificate is hereby accepted into the records of the City.
3. The Ballot Measure is authorized as set forth in Exhibit A attached hereto and by this reference incorporated herein.

ITEM 16.3.

ATTACHMENT 1

4. The results of the Ballot Measure are as set forth in the Certificate on file with the City Clerk and attached to this Resolution as Exhibit B ("Certificate").
5. The City Clerk is authorized to declare the results of the mail ballot election relating to the imposition of the Stormwater Utility fee on the Sunrise Palms project.
6. Pursuant to said Certificate, the Ballot Measure submitted was approved by a majority vote of the owner of parcel subject to the Fee, the Fee is hereby imposed pursuant to Ordinance No. 7-2014 on the Sunrise Palms project.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 18th day of October 2021, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

ITEM 16.3.**ATTACHMENT 2
Exhibit A to the Resolution****Rancho Cordova Stormwater Utility Fee – Official Property Owner Ballot**

The person completing and submitting this Property Owner Ballot must be the owner of the property identified above or the representative of the owner of such property who is legally authorized to complete and submit this ballot for and on behalf of the owner. The enclosed "Summary of Property Owner Ballot Procedures" has been provided to assist you in filling out the ballot. If there are two or more property owners, only one needs to sign and return the ballot. One ballot will be counted per property.

Assessor's Parcel Numbers: 072-0410-094
Property Address: 3251 & 3261 Sunrise Boulevard
Rancho Cordova, CA 95742
Designation: Vacant Land
Total Parcel(s) Area (acres): 1.44
DMU: $9.375 \times 1.44 = 13.5$

Assessor's Parcel Numbers: 072-0410-094

Owner Name: STHM RanchoC, LLC

Proposed Maximum FY 2021-2022 Annual Fee Amount: \$137.62 per DMU

In order to provide the City of Rancho Cordova with a dedicated funding source to repair, reconstruct and maintain the storm drain system and to protect water quality, shall the City impose an annual Stormwater Utility Fee as shown in the Rate Analysis Report, dated 8/7/2014?

☒ **YES** I support the proposed annual Stormwater Utility Fee
☐ **NO** I oppose the proposed annual Stormwater Utility Fee

I hereby declare, under penalty of perjury under the laws of the State of California, that I am the owner, or the authorized representative of the owner, of the parcel identified above. Your ballot will not be counted if you do not sign below.

9/13/21
Date

Ross Hillesheim
Printed Name


Signature

Vote Here

If approved by a majority of the returned ballots, the proposed maximum annual Storm Drain User Fee rate for FY 2021-2022 will be \$137.62 per Drainage Measurement Unit (DMU). The maximum rate per DMU will increase annually by the amount of the increase of the CPI. However, each year the City Council will hold a public hearing and determine the actual rate per DMU that will be charged. At the annual public hearing, the City Council will set the actual rate for the next year, which would be equal to or less than the annual maximum rate. The Council may decide to reduce the rate or set the rate to \$0 per DMU in any fiscal year.

Please mark your ballot in ink and return the entire page.

Upon completion, fold the ballot, place it in the addressed, return envelope and seal the envelope. Pursuant to the enclosed instructions, mail the ballot to the address shown on the return envelope, or deliver to the City Clerk at City Hall located at 1:30 p.m. Thursday, September 30, 2021.

Return to:

City of Rancho Cordova
Attn: City Clerk
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Exhibit B

**CERTIFICATE OF THE CITY CLERK AS TO
THE RESULTS OF THE CANVASS OF THE ELECTION RETURNS
IN CONNECTION WITH THE PROPOSED STORMWATER UTILITY FEE
IN THE CITY OF RANCHO CORDOVA**

I, Stacy Leitner, City Clerk of the City of Rancho Cordova, hereby certify that I canvassed the returns of the election in connection with the imposition of an annual stormwater utility fee that the day for the return of mailed ballot, September 30, 2021, The election was concluded on that date and that the total number of ballots cast in said election and the total number of votes cast for and against the ballot measure, as specified below, are full, true and correct.

Total of Ballots Received: 1

Total "Yes" Ballots: 1

Total "No" Ballots: 0


Stacy Leitner, CMC
City Clerk

MEMORANDUM



ITEM 16.4.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Elizabeth Sparkman, Community Development Director
SUBJECT: **A RESOLUTION APPROVING THE ANNEXATION BOUNDARY MAP FOR THE EXPRESS SEWER AND DRAIN PROJECT AND ANNEXATION TO THE CITY OF RANCHO CORDOVA COMMUNITY FACILITIES DISTRICT NO. 2008-1 (STREET LIGHTING AND ROAD MAINTENANCE)**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution approves Annexation Boundary Map No. 35 for the Express Sewer and Drain project and Annexation of the Property to Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance, hereinafter "CFD No. 2008-1"). There is no financial impact to existing residents.

BACKGROUND

On October 6, 2008, the City adopted a resolution of intention to establish a Community Facilities District (CFD) and Future Annexation Area for Citywide street lighting and road maintenance services. On November 17, 2008, the City adopted the Resolution forming CFD No. 2008-1 pursuant to the Mello-Roos Community Facilities Act of 1982 per State of California Government Code Section 5311 et seq. (the "Act"). The Resolution of Intention provided that parcels in the Future Annexation Area for the District shall be annexed into the District without the need for additional noticing and public hearings as long as the owners of the annexed parcels unanimously approved the annexation. Thus, the annexation process for projects within the Future Annexation Area consists of receiving a petition and waiver from the property owner(s), the City Council approving the Annexation Boundary Map by resolution, followed by the recording of the Boundary Map and Notice of Special Tax Lien by the City Clerk.

DISCUSSION

The Express Sewer and Drain project was conditioned to annex to CFD No. 2008-1 to provide funding for maintenance services including the maintenance, repair, replacement and lighting of public streets and roads and appurtenant facilities in the public right of way. The property owner signed a Petition (with waivers) of the annexation to CFD No. 2008-1. Adoption of the attached Resolution approves Annexation Boundary Map No. 35 for the project, approves the annexation of the Property into the CFD, and directs the Clerk to execute and record the Map and Notice of Special Tax Lien for the Property.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact to the City's General Fund.

ATTACHMENT(S)

1. Resolution Approving Boundary Map Annexation to 2008-1
2. Exhibit A to the Resolution
3. Exhibit B to the Resolution

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, APPROVING THE ANNEXATION BOUNDARY MAP FOR THE EXPRESS SEWER AND DRAIN PROJECT AND ANNEXATION TO THE CITY OF RANCHO CORDOVA COMMUNITY FACILITIES DISTRICT NO. 2008-1 (STREET LIGHTING AND ROAD MAINTENANCE)

WHEREAS, on October 6, 2008, the City adopted Resolution No. 108-2008 declaring its intention to establish Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance) (the "District") and Future Annexation Area for maintenance of street lighting and road maintenance services. On November 17, 2008, the City adopted Resolution No. 129-2008 forming CFD No. 2008-1 pursuant to the Mello-Roos Community Facilities Act of 1982 per State of California Government Code Section 5311 et seq. (the "Act"); and

WHEREAS, the resolution of intention to form the District provided for a more efficient process for the annexation of property into the District when the property owners have provided for their unanimous consent of said annexation process by submitting a petition, consent and waiver from the property owner(s); and

WHEREAS, in September 2021 the property owner of the subject property signed a Petition with Waivers form which irrevocably consents to and votes in favor of the annexation of the property to the District and the levy of the special tax on the property to finance the services of the CFD in accordance with the Rate and Method of the District; and

WHEREAS, in the case of annexation proceedings, pursuant to Streets and Highways Code Section 3110.5 a separate map of the area proposed to be annexed is required to be prepared and adopted; and

WHEREAS, City staff has caused to be prepared Annexation Boundary Map No. 35 for the property known as the Express Sewer and Drain project, Exhibit A attached hereto, for the annexation of the property CFD No. 2008-1 (Street Lighting and Road Maintenance).

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA:

1. The above recitals are true and correct, and the Council so finds and determines.
2. Council approves Annexation Boundary Map No. 35 and finds and determines that the territory shown in the Boundary Map is hereby added to and made a part of the District with full legal effect;
3. The City Clerk is directed to execute and record Annexation Boundary Map No. 35 in the office of the County Recorder of Sacramento County no later than 15 days after the adoption of this resolution;
4. The City Council finds and determines that a special tax shall be levied within the Territory to be annexed and which special tax shall be the same as the tax to be levied within the District. Collection of said tax shall commence in Fiscal Year 2022-2023, and

ITEM 16.4.

ATTACHMENT 1

the rate and method of apportionment of said tax shall be as set forth in the Resolution of Formation of the District.

5. The City Clerk is directed to execute and record a Notice of Special Tax Lien in substantially the same form as shown in Exhibit B, attached hereto, in the office of the County Recorder of Sacramento County not later than 15 days after recordation of the Annexation Map No. 35.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October, 2021, by the following vote of the City Council:

AYES:

NOES:

ABSENT:

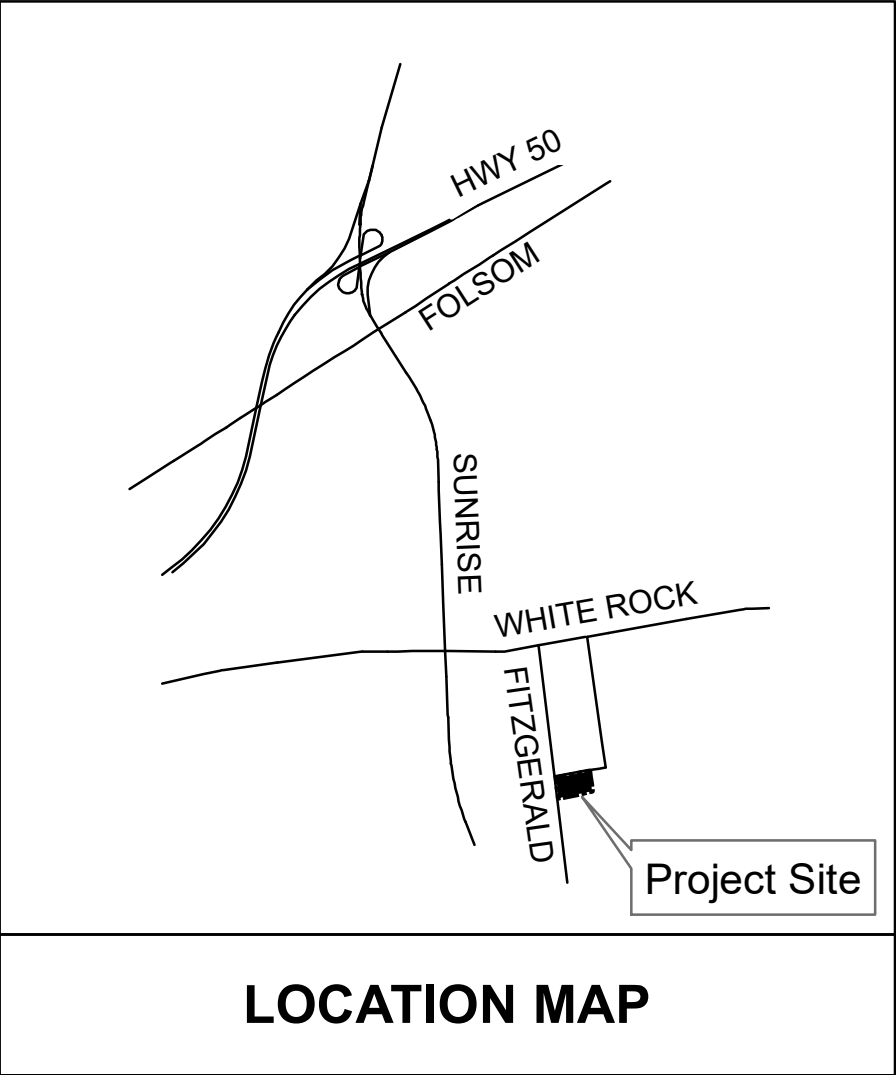
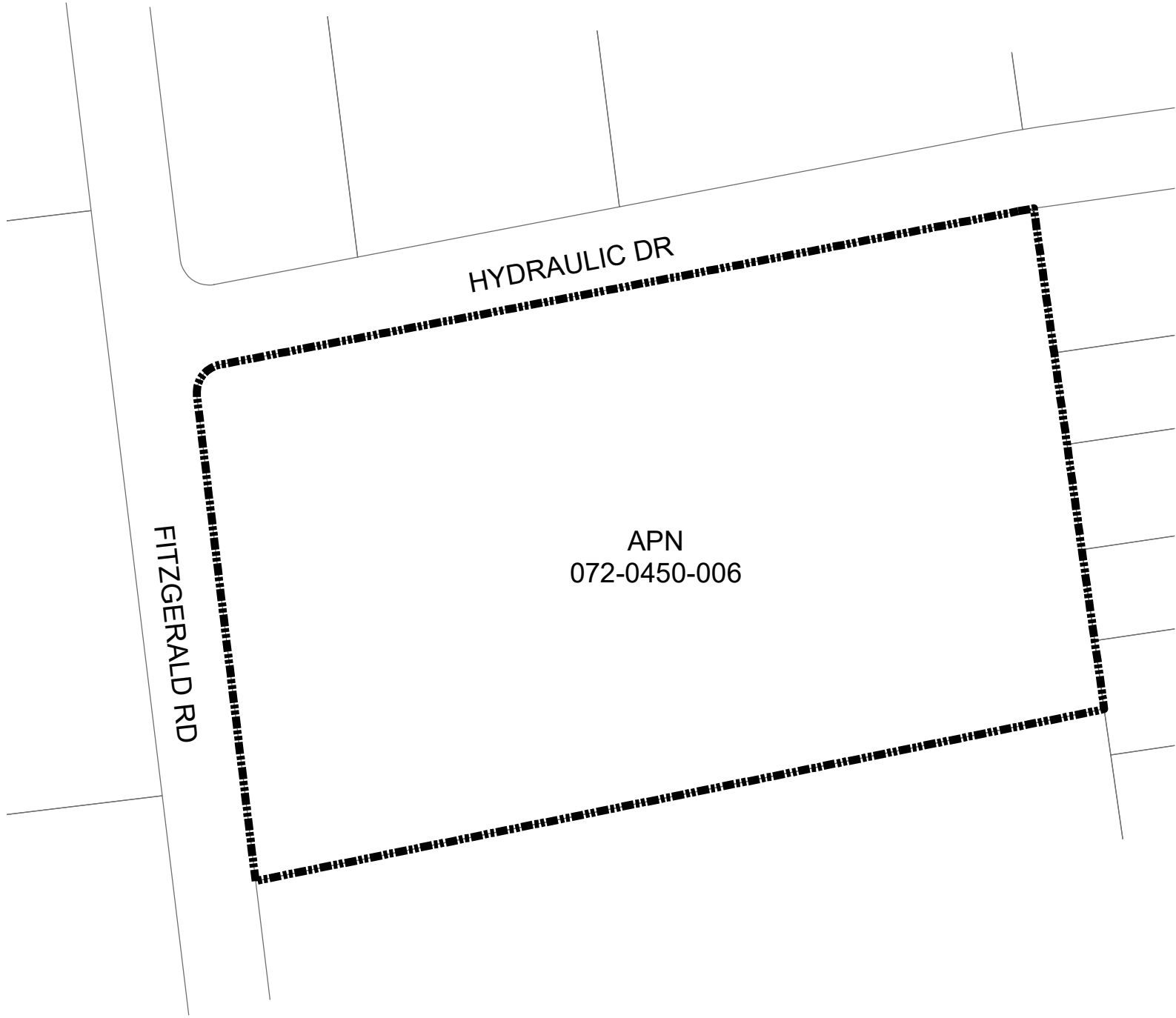
ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

ANNEXATION MAP NO. 35
EXPRESS SEWER & DRAIN PROJECT
COMMUNITY FACILITIES DISTRICT NO. 2008-1
(STREET LIGHTING AND ROAD MAINTENANCE)
CITY OF RANCHO CORDOVA
COUNTY OF SACRAMENTO, STATE OF CALIFORNIA



CLERK'S MAP STATEMENT

FILED IN THE OFFICE OF THE CITY CLERK OF THE CITY OF RANCHO CORDOVA THIS _____ DAY OF _____ 2021.

CITY CLERK OF THE CITY OF RANCHO CORDOVA

CLERK'S MAP STATEMENT

I HEREBY CERTIFY THAT THE AREA SHOWN ON THIS MAP OF THE PROPOSED ANNEXATION 35 TO COMMUNITY FACILITIES DISTRICT NO. 2008-1, (STREET LIGHTING AND ROAD MAINTENANCE), CITY OF RANCHO CORDOVA, COUNTY OF SACRAMENTO, STATE OF CALIFORNIA, WAS APPROVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AT A REGULARLY SCHEDULED MEETING THEREOF, HELD ON THE ____ DAY OF _____ 2021. BY ITS RESOLUTION NO. _____.

CITY CLERK OF THE CITY OF RANCHO CORDOVA

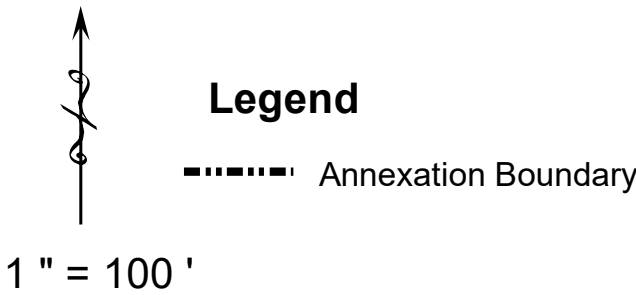
COUNTY RECORDER'S FILING STATEMENT

FILED THIS _____ DAY OF _____ 2021. AT THE HOUR OF _____ O'CLOCK ____M. IN BOOK _____ OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS PAGE NO. ____ IN THE OFFICE OF THE COUNTY RECORDER IN THE COUNTY OF SACRAMENTO, STATE OF CALIFORNIA.

DONNA ALLRED
COUNTY RECORDER OF THE COUNTY OF SACRAMENTO, CALIFORNIA

BY: _____
DEPUTY

FILE: _____



HARRIS & ASSOCIATES
22 EXECUTIVE PARK SUITE 200
IRVINE, CALIFORNIA 92614
800-827-4901

REFERENCE IS MADE TO THE ORIGINAL BOUNDARY MAP OF THE DISTRICT, ENTITLED AND RECORDED AS FOLLOWS:

"PROPOSED BOUNDARIES OF THE COUNTY OF SACRAMENTO COMMUNITY FACILITIES DISTRICT NO. 2008-1 (STREET LIGHTING AND ROAD MAINTENANCE) AND FUTURE ANNEXATION AREA, RECORDED ON OCTOBER 14, 2008 IN BOOK 110 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, AT PAGE 12, IN THE OFFICE OF THE COUNTY RECORDER OF SACRAMENTO COUNTY, CALIFORNIA."

REFERENCE IS MADE TO THE FUTURE ANNEXATION AREA MAP OF THE DISTRICT, ENTITLED AND RECORDED AS FOLLOWS:

"PROPOSED FUTURE ANNEXATION AREA OF THE COUNTY OF SACRAMENTO COMMUNITY FACILITIES DISTRICT NO. 2008-1 (STREET LIGHTING AND ROAD MAINTENANCE) AND FUTURE ANNEXATION AREA, RECORDED ON OCTOBER 14, 2008 IN BOOK 110 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, AT PAGE 12, IN THE OFFICE OF THE COUNTY RECORDER OF SACRAMENTO COUNTY, CALIFORNIA."

ANNEXATION MAP

City of Rancho Cordova
Community Facilities District No. 2008-1
Annexation 35 (Express Sewer & Drain
Project), County of Sacramento, California

Sheet 1 of 1

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, California 95670
Attention: City Clerk

AMENDED NOTICE OF SPECIAL TAX LIEN

Pursuant to the requirements of Section 3114.5 of the Streets and Highways Code and Section 53311 of the Government Code, the undersigned clerk of the legislative body of the City of Rancho Cordova (the "City"), State of California, hereby gives notice that a lien to secure payment of special taxes is hereby imposed by the City Council of the City. The special tax secured by this lien is authorized to be levied for the purpose providing certain public services described in Exhibit A attached hereto and hereby made a part hereof.

The special taxes are authorized to be levied within Annexation Map No. 35 (the "Annexed Area") of the City of Rancho Cordova Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance) (the "CFD"), which has now been officially annexed to the District, and the lien of the special taxes are a continuing lien which shall secure each annual levy of the special taxes and which shall continue in force and effect until the special taxes cease to be levied and a notice of cessation of special taxes is recorded in accordance with Section 53330.5 of the Government Code.

The rate, method of apportionment, and manner of collection of authorized special tax is as set forth in Exhibit B attached hereto and hereby made a part hereof. The obligation to pay the special tax may not be prepaid and permanently satisfied and the lien of the special taxes canceled.

Notice is further given that upon the recording of this notice in the office of the county recorder, the obligation to pay the special tax levies shall become a lien upon all nonexempt real property within the District in accordance with Section 3115.5 of the Streets and Highways Code.

The name of the owner and the assessor's tax parcel number(s) of the real property included within the District and not exempt from the special tax are as set forth in Exhibit C attached hereto.

Reference is hereby made to the Notice of Special Tax Lien with respect to the District recorded on December 2, 2008, as Document No. 20081202, Page 0781 in the office of the County Clerk & Recorder of the County of Sacramento, California, which contains a list of the then existing owners and assessor tax parcel numbers of the original boundaries of the District.

Reference is made to the boundary map of the District recorded at Book 110 of Maps of Assessment and Community Facilities Districts at Page 10 (Document No. 20081014-0822), in the office of the County Recorder for the County of Sacramento, State of California (the "Original Boundary Map"), and the map of the Annexed Territory recorded at Book 135, Page 12, Document No. 202108200214 in the Office of the County Recorder for the County of Sacramento, State of California, which map together with the Original Boundary Map and the boundary maps of record for all prior annexations, are now the final boundary maps of the Community Facilities District including the Annexed Territory.

For further information concerning the current and estimated future tax liability of owners or purchasers of real property subject to this special tax lien, interested persons should contact the Department of Public Works of the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, California 95670.

Date: _____

By: _____

Stacy Leitner, CMC, City Clerk
City of Rancho Cordova

EXHIBIT A

**CITY OF RANCHO CORDOVA
COMMUNITY FACILITIES DISTRICT NO. 2008-1
(STREET LIGHTING AND ROAD MAINTENANCE)**

DESCRIPTION OF DISTRICT SERVICES

Description of services:

Maintenance and lighting of public streets and roads

- Maintenance means the furnishing of services and materials for the ordinary and usual operation, maintenance and servicing of the street improvements, the street-lighting network, dedicated easements, and appurtenant facilities, and administration and overhead of all aspects of the District.

Reserve Fund

- The Special Taxes may be collected and set-aside in designated funds, collected over several years, that may be used by the District to fund future repairs to street lighting and roadway improvements and other services as determined by the District.

EXHIBIT B

CITY OF RANCHO CORDOVA
COMMUNITY FACILITIES DISTRICT NO. 2008-1
(STREET LIGHTING AND ROAD MAINTENANCE)

RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

A Special Tax applicable to each Assessor's Parcel in Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance) shall be levied and collected according to the tax liability determined by the City Council, acting in its capacity as the legislative body of CFD No. 2008-1, through the application of the appropriate Special Tax rate, as described below. All of the property in CFD No. 2008-1, unless exempted by law or by the provisions of Section E below, shall be taxed for the purposes, to the extent, and in the manner herein provided, including property subsequently annexed to CFD No. 2008-1 unless a separate Rate and Method of Apportionment of Special Tax is adopted for the annexation area.

A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

"Acreage" or "Acre" means the land area making up an Assessor's Parcel as shown on an Assessor's Parcel Map, or if the land area is not shown on an Assessor's Parcel Map, the land area shown on the applicable final subdivision map or other parcel map recorded at the County Recorder's Office.

"Additional Load and Decorative Lighting Parcel" means any Parcel that is determined by the City to be both an Additional Load Parcel and a Decorative Lighting Parcel.

"Additional Load Parcel" means any Parcel of Commercial Property or Industrial Property that is determined by the City to create excessive wear and tear on the roadways and/or a high volume of vehicular traffic.

"Administrative Expenses" means the costs incurred by the City to determine, levy and collect the Special Tax, including salaries of City employees and fees of consultants and the costs of collecting installments of the Special Taxes upon the general tax rolls, preparation of required reports, and any other costs required to administer the CFD.

"Administrator" means the person or firm designated by the City to administer the Special Taxes according to this Rate and Method of Apportionment of Special Tax.

"Assessor's Parcel" or "Parcel" means a lot or parcel shown in an Assessor's Parcel Map with an assigned Assessor's Parcel number.

“Assessor’s Parcel Map” means an official map of the County Assessor designating parcels by Assessor’s Parcel number.

“Authorized Services” means the public services authorized to be funded by CFD No. 2008-1 as set forth in the documents adopted by the City Council when the CFD was formed.

“CFD” or **“CFD No. 2008-1”** means the City of Rancho Cordova Community Facilities District No. 2008-1 (Street Lighting and Road Maintenance).

“City” means the City of Rancho Cordova.

“City Council” means the City Council of the City of Rancho Cordova, acting as the legislative body of CFD No. 2008-1.

“Commercial Property” means, in any Fiscal Year, all Developed Property for which a building permit or use permit has been issued for a commercial establishment which includes, but is not limited to, retail stores, clothing stores, book stores, video rental stores, drug stores, professional services (i.e., barber shops, dry cleaners), restaurants, supermarkets, hospitals, movie theaters, appliance and electronic stores, home supply stores, auto parts stores, and other businesses providing auto-related products and services. The City shall make the determination if a Parcel is Commercial Property.

“County” means the County of Sacramento.

“Decorative Lighting Parcel” means any Parcel of Developed Property that is determined by the City to have or benefit from decorative lighting features.

“Developed Property” means, in any Fiscal Year, all Parcels of Taxable Property for which a use permit or building permit for new construction of a residential or non-residential structure (which shall not include a permit issued solely for construction of the foundation if another permit remains to be issued for vertical construction of the building) was issued prior to June 30 of the preceding Fiscal Year.

“Fiscal Year” means the period starting on July 1 and ending on the following June 30.

“Hotel Property” means, in any Fiscal Year, all Developed Property for which a building permit or use permit has been issued for a structure that constitutes a place of lodging providing sleeping accommodations and related facilities for travelers.

“Industrial Property” means, in any Fiscal Year, all Developed Property for which a building permit or use permit has been issued for construction of an industrial, manufacturing, or warehousing structure. The City shall make the determination if a Parcel is Industrial Property.

“Maximum Special Tax” means the greatest amount of Special Tax that can be levied on an Assessor’s Parcel in any Fiscal Year determined in accordance with Section C below.

“Multi-Family Property” means, in any Fiscal Year, all Parcels of Developed Property for which a building permit or use permit has been issued for construction of a residential structure with five or more Units that share a single Assessor’s Parcel number, all of which are offered for rent to the general public and cannot be purchased by individual homebuyers.

“Non-Residential Property” means, collectively, Commercial Property, Hotel Property, Industrial Property, and Office Property.

“Office Property” means, in any Fiscal Year, all Parcels of Developed Property for which a building permit or use permit has been issued for a building in which professional, banking, insurance, real estate, administrative or in-office medical or dental activities are conducted. The City shall make the determination if a Parcel is Office Property.

“Ordinary Use Parcel” means any Parcel of Taxable Property that is not an Additional Load Parcel, Decorative Lighting Parcel, Residential Alley Parcel, Additional Load and Decorative Lighting Parcel, or Residential Alley and Decorative Lighting Parcel.

“Proportionately” means that the ratio of the actual Special Tax levy to the Maximum Special Tax is equal for all Parcels of Developed Property.

“Public Property” means any property within the boundaries of CFD No. 2008-1 that is owned by the federal government, State of California, County, City, or other public agency.

“Residential Alley and Decorative Lighting Parcel” means any Parcel that is determined by the City to be both a Residential Alley Parcel and a Decorative Lighting Parcel.

“Residential Alley Parcel” means any Parcel of Residential Property that is determined by the City to have residential alleys that are part of the public roadways.

“Residential Property” means, collectively, Single Family Attached Property, Single Family Detached Property, and Multi-Family Property.

“Single Family Attached Property” means, in any Fiscal Year, all Parcels of Developed Property for which a building permit was issued for construction of a residential structure consisting of two or more Units that share common walls, have separate Assessor’s Parcel numbers assigned to them (except for a duplex unit, which may share an Assessor’s Parcel with another duplex unit), and are offered as for-sale Units (which shall still be the case even if the Units are purchased and subsequently offered for rent by the owner of the Unit(s)), including such residential structures that meet the statutory definition of a condominium contained in Civil Code Section 1351.

“Single Family Detached Property” means, in any Fiscal Year, all Parcels of Developed Property for which a building permit was issued for construction of a Unit that does not share a common wall with another Unit.

“Special Tax Requirement” means the amount of revenue needed in any Fiscal Year to pay for the following: (i) Authorized Services, (ii) Administrative Expenses, and (iii) amounts needed to cure any delinquencies in the payment of Special Taxes which have occurred or (based on delinquency rates in prior years) may be expected to occur in the Fiscal Year in which the tax will be collected.

“Special Tax” means a special tax levied in any Fiscal Year on property within CFD No. 2008-1 to pay the Special Tax Requirement.

“Square Foot,” “Square Footage,” or “Square Feet” means the building square footage reflected on the original building permit issued for construction of a building.

“Taxable Property” means all Assessor’s Parcels within the boundaries of CFD No. 2008-1 which are not exempt from the Special Tax pursuant to law or Section E below.

“Taxable Public Property” means, in any Fiscal Year, all Assessor’s Parcels in CFD No. 2008-1 that had, in prior Fiscal Years, been taxed as Developed Property and subsequently came under the ownership of a public agency.

“Tax Zone” means one of the three mutually exclusive tax zones identified in Attachment 1 of this Rate and Method of Apportionment of Special Tax, as may be updated to include new Parcels or new tax zones added to the CFD as a result of future annexations.

“Tax Zone 1” means the geographic area that is identified by Assessor’s Parcel number in Attachment 1 of this Rate and Method of Apportionment of Special Tax as Tax Zone 1 and any property annexed into Tax Zone 1 after formation of the CFD.

“Tax Zone 2” means the geographic area that is identified by Assessor’s Parcel number in Attachment 1 of this Rate and Method of Apportionment of Special Tax as Tax Zone 2 and any property annexed into Tax Zone 2 after formation of the CFD.

“Tax Zone 3” means the geographic areas that are identified by Assessor’s Parcel number in Attachment 1 of this Rate and Method of Apportionment of Special Tax as Tax Zone 3 and any property annexed into Tax Zone 3 after formation of the CFD.

“Unit” means an individual single-family detached unit or an individual residential unit within a duplex, triplex, fourplex, townhome, condominium, or apartment structure. Unit shall also mean a single room or unit on a Parcel of Hotel Property.

B. DATA COLLECTION FOR ANNUAL TAX LEVY

Each Fiscal Year, the Administrator shall identify the current Assessor’s Parcel number for all Parcels of Taxable Property within CFD No. 2008-1 and shall determine within which Tax Zone each Assessor’s Parcel is located. Upon each annexation of property into CFD No. 2008-1, the Administrator shall update Attachment 1 to include the new Assessor’s Parcel number(s). In addition, for all Parcels of Developed Property, if applicable to the Tax Zone in which the

Parcels are located, the Administrator shall determine if each Parcel is an Ordinary Use Parcel, an Additional Load Parcel, a Residential Alley Parcel, a Decorative Lighting Parcel, an Additional Load and Decorative Lighting Parcel, or a Residential Alley and Decorative Lighting Parcel.

Based on review of building permit records for property within the CFD, the Administrator shall determine which Parcels in the CFD are Developed Property for purposes of levying the Special Tax pursuant to Section D below. For Single Family Attached Property, Multi-Family Property, and Hotel Property, the number of Units shall be determined by referencing the condominium plan, apartment plan, site plan or other development plan for the property. For Residential Property, the Administrator shall determine the Square Footage of each Unit. For Non-Residential Property, the Administrator shall determine the Acreage of, and Square Footage on, each Parcel.

If a Parcel in the CFD is rezoned prior to such Parcel becoming Developed Property, the City may in its sole discretion, move the Parcel to a different Tax Zone based on the rezone. If a Parcel rezones after the Parcel has been taxed as Developed Property in prior Fiscal Years, the City can either continue to apply the Maximum Special Tax to the Parcel that had applied prior to the rezone or, in the City's sole discretion, allow for the Parcel to be moved to a different Tax Zone based on the rezone.

In any Fiscal Year, if it is determined that (i) a parcel map for a portion of property in CFD No. 2008-1 was recorded after January 1 of the prior Fiscal Year (or any other date after which the Assessor will not incorporate the newly-created Parcels into the then current tax roll), (ii) because of the date the parcel map was recorded, the Assessor does not yet recognize the new Parcels created by the parcel map, and (iii) one or more of the newly-created Parcels meets the definition of Developed Property, the Administrator shall calculate the Special Tax for the property affected by recordation of the parcel map by determining the Special Tax that applies separately to each newly-created Parcel, then applying the sum of the individual Special Taxes to the Parcel that was subdivided by recordation of the parcel map.

C. MAXIMUM SPECIAL TAX

1. Tax Zone 1

The Maximum Special Tax for a Parcel of Developed Property in Tax Zone 1 for Fiscal Year 2008-09 shall be \$0.0771 per Square Foot. On each January 1, commencing January 1, 2009, this Maximum Special Tax shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

2. Tax Zone 2

The Maximum Special Tax for a Parcel of Developed Property in Tax Zone 2 for Fiscal Year 2008-09 shall be \$0.0211 per Square Foot. On each January 1, commencing January 1, 2009, this Maximum Special Tax shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

3. Tax Zone 3

The following Maximum Special Taxes apply to all Parcels of Developed Property within Tax Zone 3 of CFD No. 2008-1:

a. Ordinary Use Parcels

**MAXIMUM SPECIAL TAXES
ORDINARY USE PARCELS
(FISCAL YEAR 2008-09)**

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	\$335.81 per Unit
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	\$295.51 per Unit
Single Family Attached Property	Units greater than 1,200 Square Feet	\$295.51 per Unit
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	\$235.06 per Unit
Multi-Family Property	N/A	\$235.06 per Unit
Commercial Property	N/A	The greater of \$973.30 per Acre or \$0.0944 per Square Foot
Hotel Property	N/A	The greater of \$2,688.49 per Acre or \$56.98 per Unit
Industrial Property	N/A	The greater of \$222.20 per Acre or \$0.0351 per Square Foot
Office Property	N/A	The greater of \$851.74 per Acre or \$0.0827 per Square Foot

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

b. Residential Alley Parcels

**MAXIMUM SPECIAL TAXES
RESIDENTIAL ALLEY PARCELS
(FISCAL YEAR 2008-09)**

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	\$463.41 per Unit
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	\$407.80 per Unit
Single Family Attached Property	Units greater than 1,200 Square Feet	\$407.80 per Unit
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	\$324.39 per Unit
Multi-Family Property	N/A	\$324.39 per Unit
Commercial Property	N/A	N/A
Hotel Property	N/A	N/A
Industrial Property	N/A	N/A
Office Property	N/A	N/A

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

c. *Decorative Lighting Parcels*MAXIMUM SPECIAL TAXES
DECORATIVE LIGHTING PARCELS
(FISCAL YEAR 2008-09)

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	\$360.99 per Unit
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	\$317.67 per Unit
Single Family Attached Property	Units greater than 1,200 Square Feet	\$317.67 per Unit
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	\$252.69 per Unit
Multi-Family Property	N/A	\$252.69 per Unit
Commercial Property	N/A	The greater of \$1,046.30 per Acre or \$0.1015 per Square Foot
Hotel Property	N/A	The greater of \$2,890.13 per Acre or \$61.25 per Unit
Industrial Property	N/A	The greater of \$238.87 per Acre or \$0.0377 per Square Foot
Office Property	N/A	The greater of \$915.62 per Acre or \$0.0889 per Square Foot

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

*d. Additional Load Parcels*MAXIMUM SPECIAL TAXES
ADDITIONAL LOAD PARCELS
(FISCAL YEAR 2008-09)

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	N/A
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	N/A
Single Family Attached Property	Units greater than 1,200 Square Feet	N/A
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	N/A
Multi-Family Property	N/A	N/A
Commercial Property	N/A	The greater of \$1,216.63 per Acre or \$0.1180 per Square Foot
Hotel Property	N/A	N/A
Industrial Property	N/A	The greater of \$277.75 per Acre or \$0.0439 per Square Foot
Office Property	N/A	N/A

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

e. Additional Load and Decorative Lighting Parcels

**MAXIMUM SPECIAL TAXES
ADDITIONAL LOAD AND DECORATIVE LIGHTING PARCELS
(FISCAL YEAR 2008-09)**

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	N/A
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	N/A
Single Family Attached Property	Units greater than 1,200 Square Feet	N/A
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	N/A
Multi-Family Property	N/A	N/A
Commercial Property	N/A	The greater of \$1,289.63 per Acre or \$0.1251 per Square Foot
Hotel Property	N/A	N/A
Industrial Property	N/A	The greater of \$294.42 per Acre or \$0.0465 per Square Foot
Office Property	N/A	N/A

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

f. Residential Alley and Decorative Lighting Parcels

**MAXIMUM SPECIAL TAXES
RESIDENTIAL ALLEY AND DECORATIVE LIGHTING PARCELS
(FISCAL YEAR 2008-09)**

Land Use Class	Square Footage	Maximum Special Tax
Single Family Detached Property	Units greater than 1,200 Square Feet	\$488.60 per Unit
Single Family Detached Property	Units less than or equal to 1,200 Square Feet	\$429.97 per Unit
Single Family Attached Property	Units greater than 1,200 Square Feet	\$429.97 per Unit
Single Family Attached Property	Units less than or equal to 1,200 Square Feet	\$342.02 per Unit
Multi-Family Property	N/A	\$342.02 per Unit
Commercial Property	N/A	N/A
Hotel Property	N/A	N/A
Industrial Property	N/A	N/A
Office Property	N/A	N/A

On each January 1, commencing January 1, 2009, the Maximum Special Taxes shown above shall be increased by an amount equal to the percentage increase, if any, in the construction cost index for the San Francisco region for the prior 12-month period (December to December) as published in the Engineering News Record or other comparable source.

D. METHOD OF LEVY AND COLLECTION OF SPECIAL TAX

Each Fiscal Year, the Special Tax shall be levied as follows until the amount of the levy equals the Special Tax Requirement for that Fiscal Year:

First: The Special Tax shall be levied proportionately on each Parcel of Developed Property up to 100% of the Maximum Special Tax determined for each category of Developed Property within each Tax Zone until the amount levied is equal to the Special Tax Requirement for the Fiscal Year.

Second: If additional revenue is needed after the first step has been completed, the Special Tax shall be levied proportionately on each Parcel of Taxable Public Property up to 100% of the Maximum Special Tax that would have

applied to the Parcel had the Parcel not become Public Property until the amount levied is equal to the Special Tax Requirement for the Fiscal Year.

The Special Tax for CFD No. 2008-1 shall be collected at the same time and in the same manner as ordinary ad valorem property taxes provided, however, that the City may (under the authority of Government Code Section 53340) collect Special Taxes at a different time or in a different manner if necessary to meet CFD No. 2008-1 financial obligations and the Special Tax shall be equally subject to foreclosure if delinquent.

E. LIMITATIONS

Notwithstanding any other provision of this Rate and Method of Apportionment of Special Tax, no Special Tax shall be levied on (i) any Parcel of Public Property that is not Taxable Public Property, and (ii) any Parcel in CFD No. 2008-1 that is not Developed Property.

F. INTERPRETATION OF SPECIAL TAX FORMULA

The City reserves the right to make minor administrative and technical changes to this document that do not materially affect the Rate and Method of Apportionment of Special Taxes. In addition, the interpretation and application of any section of this document shall be left to the City's discretion. The City may make interpretations by ordinance or resolution for purposes of clarifying any vagueness or ambiguity in this Rate and Method of Apportionment of Special Taxes.

ATTACHMENT 1

CITY OF RANCHO CORDOVA
COMMUNITY FACILITIES DISTRICT 2008-1
(STREET LIGHTING AND ROAD MAINTENANCE)

IDENTIFICATION OF TAX ZONES

Tax Zone	Assessor's Parcels Included in Tax Zone *	Fiscal Year In Which Property Was Added to CFD No. 2008-1
1	077-0050-085	2008-09
2	067-0010-060	2008-09
3	067-0990-001	2008-09
	067-1000-001	2008-09
	072-0500-040	2008-09
	072-0500-041	2008-09

** The property identified by the Assessor's Parcel Numbers listed above shall remain part of the identified Tax Zone regardless of changes in the configuration of the Assessor's Parcels or changes to APNs in future Fiscal Years. As APNs change, the City may update Attachment 1 to reflect the most current APNs.*

EXHIBIT C

CITY OF RANCHO CORDOVA
COMMUNITY FACILITIES DISTRICT NO. 2008-1
(STREET LIGHTING AND ROAD MAINTENANCE)

ASSESSOR'S PARCEL NUMBERS AND OWNERS OF LAND WITHIN COMMUNITY
FACILITIES DISTRICT

Assessor's
Parcel Nos.

072-0450-006

Names of Property Owners

The Heinselman Family Trust dated
March 20, 2017

MEMORANDUM



ITEM 16.5.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Elizabeth Sparkman, Community Development Director
SUBJECT: **A RESOLUTION DECLARING CITY'S INTENTION TO IMPOSE AN ANNUAL STORMWATER UTILITY FEE FOR THE MAINTENANCE OF STORM DRAINAGE AND FLOOD PROTECTION SYSTEMS FOR THE EXPRESS SEWER AND DRAIN PROJECT**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution will declare the Council's intention to impose the annual Stormwater Utility Fee for the maintenance of the storm drainage and flood protection system for the Express Sewer and Drain project and sets a public hearing for November 1, 2021 in the matter.

BACKGROUND

The Council previously approved the Express Sewer and Drain project with a condition of approval which requires that the property owner fund operation and maintenance of the storm drainage system. This condition will be satisfied by participation in the City's Stormwater Utility Fee for storm drainage and flood protection services which is the subject of this action.

Previously, projects were required to annex to the County's Stormwater Utility. Since the City has taken over drainage maintenance and operations services from the County, it was necessary to establish the Stormwater Utility District to fund drainage services to ensure compliance with new state and federal laws and regulations. The Stormwater Utility Fee was established on September 2, 2014 by Ordinance No. 7-2014.

DISCUSSION

The property owner has submitted a petition and waiver for the City to institute the proceedings to impose the Stormwater Utility Fee. The Express Sewer and Drain project parcel is being annexed into the Stormwater Utility Fee (Attachment 3). The maintenance services to be

funded include the furnishing of services and materials for the ordinary and usual operation, maintenance, and servicing of the storm drain and flood protection improvements.

A “Rate Analysis Report” was adopted on August 7, 2014 by Resolution No. 103-2014. The report calculated the Fiscal Year 2014/2015 maximum annual Stormwater Utility Fee amount for each parcel proportionate to the estimated stormwater runoff for each parcel. The maximum annual fee increases each subsequent Fiscal Year by the annual change in the Consumer Price Index (CPI), during the preceding year, for All Urban Consumers, for the San Francisco-Oakland-San Jose areas, published by the United States Department of Labor, Bureau of Labor Statistics.

A sample of the Stormwater Utility Fees for Fiscal Year 2021-2022 are summarized in Attachment 4.

In accordance with Article XIII D, the “Procedures for the Conduct of a Protest Hearing and Balloting Relating to a Proposed Stormwater Utility Fee” as set forth in Attachment 2 and incorporated herein by reference (the “Procedures”).

The Resolution (Attachment 1) sets the public hearing at 5:30 p.m., or as soon thereafter as possible, on November 1, 2021 as the time and date for a hearing on the matters set forth therein and directs the City Clerk to give notice of the public hearing. Notice of the Public Hearing will be published in the Grapevine Independent as required by law.

FISCAL IMPACT AND FUNDING SOURCE

There is no impact to the General Fund.

ATTACHMENT(S)

1. Resolution
2. Exhibit A to the Resolution -Procedures for the Conduct of a Protest Hearing
3. Annexation Map
4. Stormwater Utility Fee- Rate Sheet FY21-22

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, DESIGNATING A TIME AND PLACE FOR HEARING PROTESTS IN CONNECTION WITH THE ANNUAL STORMWATER UTILITY FEE FOR THE EXPRESS SEWER AND DRAIN PROJECT

WHEREAS, the Stormwater Utility Fee was established on September 2, 2014 by Ordinance No. 7-2014 to fund services and facilities furnished by the City in connection with its storm drain system. The Proposed Stormwater Utility Fee may be billed through the County Utility Billing Service (CUBS) as part of the consolidated utility bill or may be collected on the County of Sacramento tax roll, commencing in Fiscal Year 2022-2023, in the same manner, by the same persons, and at the same time as, together with and not separately from, the general taxes of the City in the manner prescribed by Sections 5471 et seq. of the California Health and Safety Code; and

WHEREAS, this Council has caused a written report entitled, "Rate Analysis Report", dated August 7, 2014, (the "Written Report") prepared by Harris & Associates and filed with the City Clerk containing a description of each parcel of real property within the City to which the Proposed Stormwater Utility Fee is applicable (collectively, the "Identified Parcels") and the amount of the Proposed Stormwater Utility Fee for each such Identified Parcel for Fiscal Year 2014-15. The Written Report is on file in the office of the City Clerk and is available for public inspection; and

WHEREAS, Article XIII D of the California Constitution and the Proposition 218 Omnibus Implementation Act (Government Code Section 53750, et seq.) (the "Implementation Act") imposes certain procedural and substantive requirements relating to the imposition of property-related fees and charges (as defined in Article XIII D), such as the Proposed Stormwater Utility Fee, including the requirement to conduct a protest hearing and balloting for consideration of the Proposed Stormwater Utility Fee. In accordance with Article XIII D and the Implementation Act, the City Council hereby approves the "Procedures for the Conduct of a Protest Hearing and Balloting Relating to a Proposed Stormwater Utility Fee" as set forth in Exhibit A and incorporated herein by reference (the "Procedures").

WHEREAS this Council has received petitions and waivers from the owners of 100% of the area of land proposed to be included in the Proposed Stormwater Utility Fee; and

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA:

1. The foregoing recitals are true and correct and incorporated herein.
2. Notice is hereby given that the City Council designates Monday, November 1, 2021 at the hour of 5:30 p.m., in the Council Chambers, City Hall, 2729 Prospect Park Drive, Rancho Cordova, California, as the time and place for a public hearing on the above-described written report and protests or objections to the imposition of the proposed Stormwater Utility Fee.

At the above-described public hearing, all interested persons shall be afforded the opportunity to hear and be heard, and the City Council shall consider all protests against the Proposed Stormwater Utility Fee. If written protests against the Stormwater Utility Fee are presented by a majority of owners of the Identified Parcels, the City shall not impose the Proposed Stormwater Utility Fee. In the absence of a majority protest, the City Council may submit the Proposed Stormwater Utility Fee to a vote of the property owners in accordance with Article XIII D of the California Constitution.

3. The City Clerk is hereby authorized and directed to give notice of the above described public hearing in accordance with law and the Procedures.
4. Reference is hereby made to the Written Report described in Section 2 hereof, which is on file in the office of the City Clerk, for a full and detailed description of the Proposed Stormwater Utility Fee upon parcels of land within the City.
5. The City Council hereby designates Elizabeth Sparkman, Community Development Director, telephone number, (916) 851-8714 to answer inquiries regarding the public hearing, protest proceedings and procedural or technical matters.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day October 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

EXHIBIT "A"

PROCEDURES FOR THE CONDUCT OF A
PROTEST HEARING AND VOTE RELATING TO A PROPOSED
STORMWATER UTILITY FEE

The following Procedures have been adopted by the City Council of the City of Rancho Cordova for the purpose of conducting a protest hearing required by Article XIII D of the California Constitution for consideration of the imposition of a proposed Stormwater Utility Fee (the "Proposed Stormwater Utility Fee").

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A. Written Report

The City shall cause to be prepared a written report ("Written Report"), which shall contain a list of all parcels to which the Proposed Stormwater Utility Fee will apply (the "Identified Parcels") and the amount of the Proposed Stormwater Utility Fee for each Identified Parcel for Fiscal Year 2020-2021.

The Written Report shall be placed on file in the office of the City Clerk prior to the mailing of the Notice of Public Hearing on the Proposed Stormwater Utility Fee and shall remain available for public inspection.

B. Notice of the Public Hearing on the Proposed Stormwater Utility Fee

Notice of the public hearing on the Proposed Stormwater Utility Fee shall be sent, postage prepaid, by first class mail at least forty-five (45) days prior to the date set for the public hearing to the Record Owner of each Identified Parcel. The forty-five (45) day requirement may be waived with the unanimous consent of the property owners.

"Record Owner" means the owner of an Identified Parcel whose name and address appears on the last Sacramento County equalized secured property tax assessment roll (the "Assessment Roll"), or in the case of any public entity, the State of California, or the United States, means the representative of that public entity at the address of that entity known to the City.

Notices shall be mailed to the Record Owners of the Identified Parcels, addressed to the names and addresses as they appear on the Assessment Roll, and, in the case of any public entity, the State of California, or the United States, addressed to the public entity at the address of that entity known to the City. In addition, notices shall be mailed to owners of the Identified Parcels, addressed to the names and addresses known to the City Clerk, if different than shown on the Assessment Roll.

Each mailed notice shall contain all of the following:

- A reference to filing of the Written Report;
- A reference to the proposed ordinance imposing the Proposed Stormwater Utility Fee and providing for the collection of the Fee on the County tax roll;
- The amount of the Proposed Stormwater Utility Fee to be imposed upon the Identified Parcel covered by the notice;
- The basis upon which the amount of the Proposed Stormwater Utility Fee was calculated;
- The reason for the Proposed Stormwater Utility Fee;
- A statement that the Proposed Stormwater Utility Fee may be collected as part of a consolidated utility bill via CUBS or on the County of Sacramento tax roll each year, commencing with Fiscal Year 2021-2022.
- The effect of a majority protest; and
- The date, time and location of a public hearing on the Proposed Stormwater Utility Fee.

The City Clerk, or the designee of the City Clerk, may certify the proper mailing of notices by an affidavit, which shall constitute conclusive proof of mailing in the absence of fraud.

Failure of any person to receive notice shall not invalidate the proceedings.

Notice of the filing of the Written Report and the public hearing shall be published once a week for two successive weeks in the Grapevine Independent, with the first publication at least fourteen (14) days prior to the date of the public hearing, and with at least five (5) days intervening between the first and second publications. The published notice may be waived by unanimous consent of the property owners.

C . Eligibility to File a Protest

The Assessment Roll shall be presumptive evidence of ownership of an Identified Parcel for protest purposes.

If the owner of any Identified Parcel is not shown on the Assessment Roll, such owner may file a protest for such parcel by filing with the City Clerk a proxy from the Record Owner in a form satisfactory to the City Attorney or evidence of ownership satisfactory to the City Attorney. Any such proxy or evidence must be received by the City Clerk prior to the conclusion of the public hearing.

When an Identified Parcel is held by a partnership, as community property, in joint tenancy, or as a tenancy in common, any partner, spouse, joint tenant, or tenant in common, as the case may be, may file a protest for such parcel.

An executor, administrator, or guardian may file a protest for an Identified Parcel on behalf of the estate it represents. If such representative is shown on the Assessment Roll as paying taxes and assessments levied against the parcel, that fact shall establish the right of such representative to file the protest. If such representative is not shown on the Assessment Roll, the representative must file with the City Clerk written documentation satisfactory to the City Attorney establishing the legal representation. Any such documentation must be filed with the City Clerk prior to the conclusion of the public hearing.

When an Identified Parcel is held by a corporation or unincorporated association, a protest may be filed by any person authorized in writing by the board of directors or trustees or other managing body thereof to take such actions. The corporation or unincorporated association must file with the City Clerk written authorization satisfactory to the City Attorney. Any such written authorization must be filed with the City Clerk prior to the conclusion of the public hearing.

D. Submission of Written Protests

Written protests may be mailed (via U.S. mail) to the City Clerk at City Hall or delivered in person to the City Clerk at City Hall or at the public hearing.

No protests delivered via e-mail will be counted for purposes of determining whether a majority protest exists, but the City Council may, in its discretion, consider such protests in making determinations regarding the Proposed Stormwater Utility Fee

Each written protest must identify the property covered by the protest and be signed.

No protest received after the close of the public hearing shall be counted in determining the existence of a majority protest. The last pick up by the City Clerk of protests mailed or delivered to City Hall will occur at 5:30 p.m. on the date scheduled for the public hearing. To ensure that protests which are mailed or delivered to City Hall are received by the City Clerk prior to the close of the public hearing, such protests must be received by the City Clerk at City Hall prior to 5:30 p.m. on the date scheduled for the public hearing. The City Clerk shall endorse on each written protest the date it is filed with the City. The City Clerk shall identify any protests which are received after the close of the public hearing.

Written protests may be withdrawn in writing at any time before the conclusion of the public hearing by the person who submitted the written protest.

For purposes of determining whether a majority protest exists, only one protest for each Identified Parcel will be counted.

All written protests shall be considered public records.

E. Conduct of the Public Hearing: Determination of a Majority Protest

1. At the time, date and place fixed for the public hearing, the City Council shall:
 - (i) Conduct a public hearing pertaining to the Proposed Stormwater Utility Fee;
 - (ii) Hear all persons interested in the matter of the Proposed Stormwater Utility Fee; and
 - (iii) Receive all written communications regarding the Proposed Stormwater Utility Fee.
2. The public hearing may be continued from time to time, as the City Council determines is necessary to complete its consideration of the Proposed Stormwater Utility Fee.
3. If the City Council determines at the close of the public hearing that written protests have been presented, and not withdrawn, by a majority of owners of the Identified Parcels (i.e., there is a majority protest), the Proposed Stormwater Utility Fee shall not be approved.
4. If the City Council determines at the close of the public hearing that there is not a majority protest, the City Council may:
 - (i) Remedy and correct any clerical error in the Written Report or otherwise modify the Written Report; provided that any such modification or correction shall not result in a Proposed Stormwater Utility Fee for any Identified Parcel which is greater than the amount shown in the notice of the public hearing that was mailed to the Record Owner of the Identified Parcel;
 - (ii) Confirm the Written Report, as originally filed or as amended in accordance with subparagraph (i), above;
 - (iii) Adopt a resolution calling for a property owner vote regarding the Proposed Stormwater Utility Fee.

F. Conduct Property Owner Vote: Determination of a Majority Consent

Pursuant to Government Code Section 53755.S(c), the proceedings described in this section shall not constitute an election or voting for purposes of Article II of the California Constitution or of the Elections Code.

An election on the Proposed Stormwater Utility Fee shall be sent, postage prepaid, by first class mail at least forty-five (45) days prior to the date set for the election to the Record Owner of each Identified Parcel. The forty-five (45) day requirement may be waived with the unanimous consent of the property owners.

Each mailed ballot shall contain all of the following:

- On the face of the envelope in which the notice of election and ballot are mailed, there shall appear in substantially the following form in no smaller than 16-point bold type: "OFFICIAL BALLOT ENCLOSED."

- The ballot shall include the agency's address for return of the ballot, the date and location where the ballots will be tabulated, and a place where the person returning it may indicate his or her name, a reasonable identification of the parcel, and his or her support or opposition to the proposed fee. The ballots shall be tabulated in a location accessible to the public. The ballot shall be in a form that conceals its content once it is sealed by the person submitting it. The ballot shall remain sealed until the ballot tabulation commences.

No ballot received after the time of the ballot tabulation shall be counted in determining the existence of majority consent. The last pick up by the City Clerk of ballots mailed or delivered to City Hall will occur at 1:30 p.m. on the date scheduled for the election. To ensure that ballots which are mailed or delivered to City Hall are received by the City Clerk prior to the commencement of the ballot tabulation, such ballots must be received by the City Clerk at City Hall prior to 5:30 p.m. on the date scheduled for the ballot tabulation. The City Clerk shall endorse on each ballot the date it is filed with the City. The City Clerk shall identify any ballots which are received after the commencement of the ballot tabulation.

An impartial person designated by the City who does not have a vested interest in the outcome of the proposed fee shall tabulate the ballots submitted in support of or opposition to the proposed fee. An impartial person includes, but is not limited to, the City Clerk. If the City uses City personnel for the ballot tabulation, or if the City contracts with a vendor for the ballot tabulation and the vendor or its affiliates participated in the research, design, engineering, public education, or promotion of the fee, the ballots shall be unsealed and tabulated in public view to permit all interested persons to meaningfully monitor the accuracy of the tabulation process.

The ballot tabulation may be continued to a different time or different location accessible to the public, provided that the time and location are announced at the location at which the tabulation commenced and posted by the City in a location accessible to the public. The impartial person may use technological methods to tabulate the ballots, including, but not limited to, punchcard or optically readable (bar-coded) ballots. During and after the tabulation, the ballots and, if applicable, the information used to determine the weight of each ballot, shall be treated as public records, subject to public disclosure and made available for inspection by any interested person. The ballots shall be preserved for a minimum of two years, after which they may be destroyed.

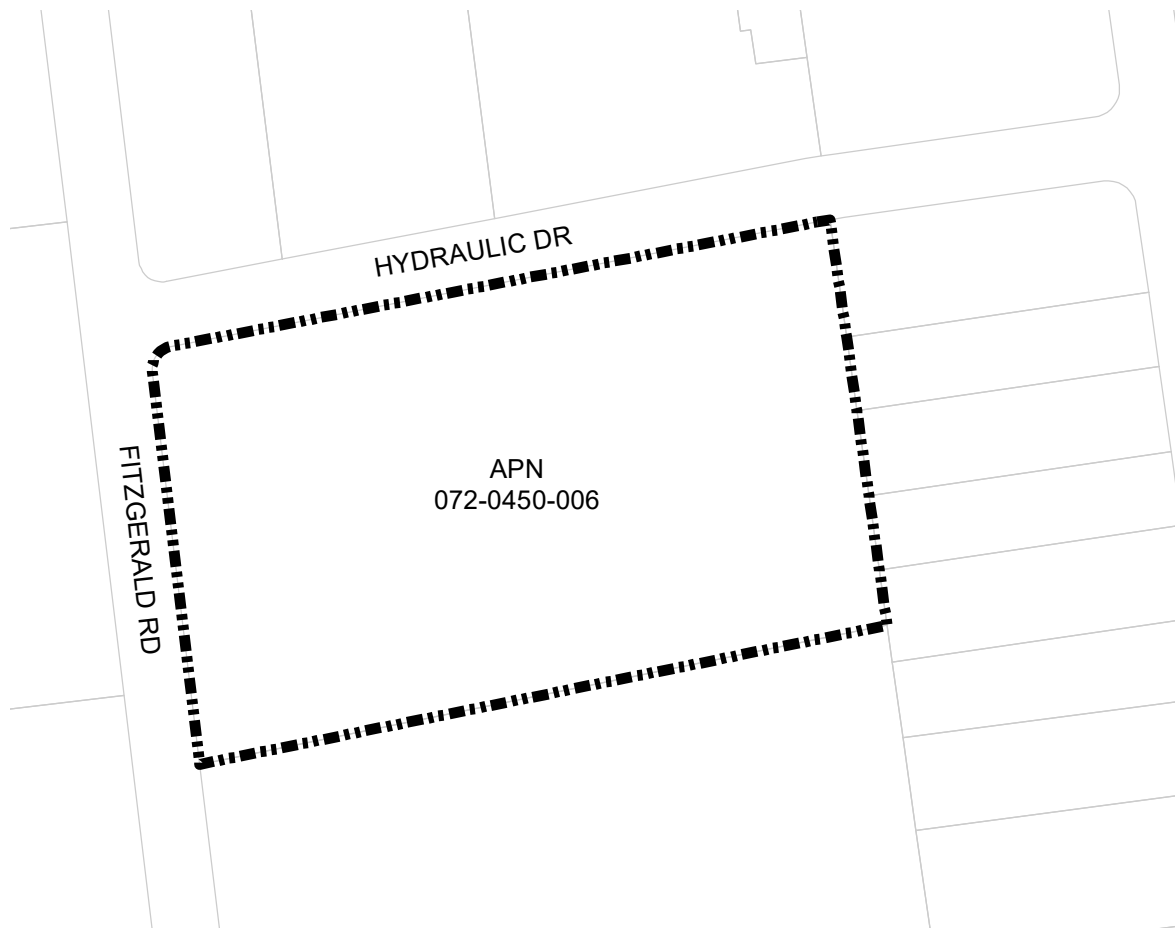
Majority approval of the Record Owners shall exist if the number of valid ballots in favor of the fee exceeds the number of valid ballots in opposition to the fee.

At the time, date and place fixed for the ballot tabulation, the City Council shall direct the City Clerk to commence the ballot tabulation.

If there is no majority approval, the Stormwater Utility Fee shall not be imposed.

If majority approval exists, the City Council may impose the Stormwater Utility Fee pursuant to the Ordinance.

CITY OF RANCHO CORDOVA
STORMWATER UTILITY FEE AREA
ANNEXATION 31
(EXPRESS SEWER & DRAIN PROJECT)



-  Annexation Boundary
-  Parcel Boundary

Stormwater Utility Fee

Sample of the Stormwater Utility Fees for Fiscal Year 2021-2022:

Table 1

Land Use Description	Total Area (acres)	Sample Fee
Single Family Residential (SFR1)	0.16	\$137.62
Single Family Residential (SFR2)	0.22	\$151.38
Single Family Residential (SFR3)	0.30	\$161.72
Single Family Residential (SFR4)	0.40	\$172.02
Single Family Residential (SFR5)	1.00	\$172.02
Multi-Family Residential (MFR1)	5.00	\$1,204.35
Commercial	1.00	\$1,290.39
Industrial	1.00	\$1,376.43
Schools	5.00	\$860.26
Private Recreation	1.00	\$430.11
Parks/Greenbelts	2.00	\$172.02
Public Property (with structures)	2.00	\$516.14

MEMORANDUM



ITEM 16.6.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Michelle Mingay, Senior Finance Analyst

SUBJECT: **RESOLUTIONS OF INTENTION TO ESTABLISH THE CITY OF RANCHO CORDOVA THE RANCH COMMUNITY FACILITIES DISTRICT NO. 2021-1, TO LEVY A SPECIAL TAX THEREIN, AND TO INCUR BONDED INDEBTEDNESS IN AND FOR THE DISTRICT TO FINANCE THE ACQUISITION AND CONSTRUCTION OF CERTAIN PUBLIC FACILITIES IN AND FOR SUCH DISTRICT**

RECOMMENDATION

Adopt the Resolutions.

RESULT OF RECOMMENDED ACTION

Adoption of these Resolutions begins the process of forming the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1, with bonded indebtedness in the principal amount not to exceed Sixty Five Million Dollars (\$65,000,000) to pay for certain Public Facilities in and for such Community Facilities District, and sets 5:30 p.m. on December 6, 2021 as the time and date for a public hearing on the matter.

BACKGROUND

The property owner of the Ranch project has requested the City proceed with the formation of a Mello-Roos Community Facilities District ("CFD") to assist in the funding of public infrastructure and payment of certain fees within the project. The district is proposed to be called the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1 (hereinafter referred to as "CFD No. 2021-1").

The Ranch project is an approximately 530 mixed use acre parcel located south of Douglas Boulevard, east of Rancho Cordova Parkway, north of the approved Suncreek Specific Plan, and west of Grantline 208 and Arista Del Sol subdivisions. The development anticipates 1,690 total lots consisting of 1,437 market rate/age qualified, 215 multi-family residential (affordable) and 38 multi-family residential. The proposed CFD will include 732 market rate and 705 age

qualified lots, the multi-family units are not intended to be taxed as part of the CFD. While the CFD will be formed over the full development project, the CFD will be phased in through the use of Improvement Areas. The first Improvement Area will include 467 market rate lots ranging in size from 30' x 78' and 50' x 105' in size. Through the subdivision map and entitlement process, the CFD properties will be required to construct all appropriate infrastructure. The CFD program simply provides a funding mechanism for a part of the total costs. The balance of the costs will be paid by the developer.

City staff has reviewed the list of improvements and services authorized by CFD No. 2021-1 to make certain that all appropriate projects are included. Keep in mind however, that the underlying entitlement requirements and subdivision map processing are the governing documents for the scope and timing of improvements, the CFD simply provides a financing mechanism for the improvements.

The proposed special tax rates in Improvement Area 1 range between \$1,397 - \$2,129 per market rate unit in the base year (fiscal year 2021 - 2022) but may be as high as \$3,033 in future annexation areas. These rates are consistent with current rates being levied in surrounding projects including the Anatolia CFD, which range between \$978 - \$1,625, the North Douglas CFD, which range between \$1,250 - \$2,073, and the Grantline 208 CFD, which range between \$2,122 - \$2,600 in 2021-22 dollars. The special tax will automatically increase annually, starting July 1, 2022, for the life of the CFD.

A Resolution of Intention to establish CFD No. 2021-1 is attached. The resolution sets forth the City's intention to establish the CFD, designates the name of the district, identifies the facilities to be funded, calls for the preparation of a CFD Report and states the City's intention to levy a special tax to pay for these facilities. Attached to the Resolution of Intention is the proposed Rate and Method of Apportionment (RMA) of Special Tax for CFD No. 2021-1 (Exhibit A), which details how and when the special tax will be levied on properties within the district, a list of authorized facilities to be provided (Exhibit B), and a copy of the public hearing notice, in a form as required by the "Mello-Roos Community Facilities Act of 1982," being Chapter 2.5, Part 1, Division 2, Title 5 of the Government Code of the State of California, which requires publication in a newspaper of general circulation circulated within the Community Facilities District at least 7 days before the public hearing (Exhibit C). The resolution also sets 5:30 p.m., or as soon thereafter as possible, on December 6, 2021 as the time and date for a hearing on the matters set forth therein. Notice of the Public Hearing will be published in the Grapevine Independent at least seven days prior to the hearing date.

A Resolution Declaring the Intent to Incur Bonded Indebtedness is also attached. This Resolution declares there is a public convenience which requires bonded indebtedness and sets the not to exceed amount for the bonds at Eighty Six Million Four Hundred Seventy Thousand Dollars (\$86,470,000). The bonds are to be used to finance the acquisition and construction of, and the payment of fees for, the Facilities in and for the Community Facilities District.

This CFD is being formed with 100% property owner approval and the election by property owners is expected to generate a 100% favorable vote. It is anticipated the property owners will be waiving their rights to challenge the accelerated CFD formation process that is planned for this CFD.

FISCAL IMPACT AND FUNDING SOURCE

There is no Fiscal Impact to the City. Any Special tax Bonds to be issued on behalf of the CFD are secured solely by the Special Tax levies within the District and are not debt of the City's General Fund.

ATTACHMENT(S)

1. Resolution - Rancho Cordova Ranch CFD
2. Exhibit A to the Resolution - The Ranch RMA
3. Exhibit B to the Resolution - List of Facilities
4. Exhibit C to the Resolution - Legal Notice
5. Resolution - Bonds - Rancho Cordova Ranch CFD

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF INTENTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, TO FORM THE RANCH COMMUNITY FACILITIES DISTRICT NO. 2021-1, DESIGNATE AN INITIAL IMPROVEMENT AREA THEREIN AND ESTABLISH A FUTURE ANNEXATION AREA, AND TO LEVY SPECIAL TAXES THEREIN TO FINANCE THE ACQUISITION AND CONSTRUCTION OF CERTAIN PUBLIC FACILITIES IN AND FOR SUCH COMMUNITY FACILITIES DISTRICT

WHEREAS, the City Council (the "City Council") of the City of Rancho Cordova (the "City") having received indications of interest on behalf of the owners of the area of land proposed to be included in a community facilities district, has duly considered the advisability and necessity of establishing a community facilities district in an area of the City described herein and levying a special tax therein to finance the acquisition and construction of certain public facilities in and for such community facilities district under and pursuant to the terms and provisions of the "Mello-Roos Community Facilities Act of 1982," being Chapter 2.5, Part 1, Division 2, Title 5 of the Government Code of the State of California (the "Act"); and

WHEREAS, the City Council, desires to proceed with the establishment of a community facilities district in order to finance costs of public infrastructure necessary or incidental to new development in the City; and

WHEREAS, the Act provides that for purposes of financing of, or contributing to the financing of, all or a portion of public facilities to be financed by the community facilities district, the legislative body of the City may provide that a portion or portions of the district be established as one or more improvement areas and that after the designation of an improvement area, all proceedings for purposes of the Act will apply only to the improvement area for those specified facilities; and

WHEREAS, pursuant to Section 53339.3 of the Act, this Council further desires to provide for future annexation of territory to the proposed community facilities district; and

WHEREAS, the City Council has determined that the establishment of such community facilities district is substantially consistent with and follows the local goals and policies concerning the use of the Act that have been adopted by the City Council and are now in effect; and

WHEREAS, the City Council is fully advised in this matter;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AS FOLLOWS:

1. It is the intention of the Council to establish a community facilities district within the City of Rancho Cordova and provide that certain territory within the City may be annexed thereto in the future upon the unanimous approval of the owner of each parcel or parcel to be annexed, and to establish improvement areas therein, all under the terms of the Act for the purpose of financing costs of public infrastructure necessary or incidental to new development in the City.

2. The name for the proposed community facilities district is the “City of Rancho Cordova The Ranch Community Facilities District No. 2021-1” (the “CFD”). Pursuant to Section 53350 of the Act, all of the territory to be initially included in the CFD (as shown on the map described in Section 3 hereof) is hereby designated as “Improvement Area No. 1 of the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1” (“Improvement Area No. 1”).

The name proposed for the territory proposed to be annexed into the CFD in the future is City of Rancho Cordova The Ranch Community Facilities District No. 2021-1 (“Future Annexation Area”) (the “Future Annexation Area”).

3. The proposed boundaries of the CFD, Improvement Area No. 1 and the Future Annexation Area are as shown on the map on the Map of Proposed Boundary of a proposed community facilities district to be known as The Ranch Community Facilities District No. 2021-1, on file with the City Clerk, which the City Council approves as the map describing the extent of the territory included in the proposed community facilities district, Improvement Area No. 1 and the Future Annexation Area. The City Council finds that the map is in the form and contains the matters prescribed by Section 3110 of the California Streets and Highways Code. The City Council directs the City Clerk to certify the adoption of this resolution on the face of the map, and to file a copy of the map in the office of the City Clerk in accordance with Section 3111 of the California Streets and Highways Code and within 15 days of the date of adoption of this resolution but in no event later than 15 days prior to the public hearing provided for herein, transmit the map to the County Recorder for recording in the Book of Maps of Assessment and Community Facilities Districts in the office of the County Recorder of the County of Sacramento.
4. Except to the extent that funds are otherwise available to the CFD to pay for the Facilities (as defined below), and/or the principal and interest as it becomes due on bonds issued by the City for the CFD to construct and/or acquire the Facilities, a special tax (the “Special Tax”) sufficient to pay the costs thereof, secured by recordation of a continuing lien against all non-exempt real property in the CFD, will be levied annually within the CFD, and collected in the same manner as ordinary *ad valorem* property taxes, or in such other manner as the City Council or its designee shall determine, including direct billing of the affected property owners. The proposed rate and method of apportionment of the Special Tax among the parcels of real property within the CFD in sufficient detail to allow each landowner within the proposed CFD to estimate the maximum amount such owner will have to pay, are described in **Exhibit A** attached hereto and hereby incorporated herein.

Parcels within the Future Annexation Area shall be annexed to the CFD only with the unanimous approval (each, a “Unanimous Approval”) of the owner or owners of each parcel or parcels at the time that parcel or those parcels are annexed, without any requirement for further public hearings or additional proceedings.

All or any portions of territory that annexes into the CFD from the Future Annexation Area or otherwise may be annexed into a separate improvement area (each, a “Future Improvement Area”) then in existence or to be formed at the time of such annexation and no additional hearings or procedures are required. The designation of a parcel or parcels as a Future Improvement Area shall be specified and approved by the Unanimous Approval at the time that the parcel or parcels are annexed to the CFD. After the designation of a parcel or parcels as an improvement area, all proceedings for approval of an appropriations limit, the rate and method of apportionment and manner of collection

of special taxes, and the authorization to incur bonded indebtedness may differ from other areas of the CFD, all as set forth in the Unanimous Approval, and shall apply only to the parcel or parcels within such improvement area.

The City Council hereby finds that the provisions of Section 53313.6, 53313.7 and 53313.9 of the Act (relating to adjustments to *ad valorem* property taxes and schools financed by a community facilities district) are inapplicable to the proposed CFD.

5. The type of public facilities proposed to be financed by the CFD, Improvement Area No. 1 and any Future Improvement Areas pursuant to the Act shall consist of those items listed as Facilities, and incidental costs related thereto (the "Facilities") on **Exhibit B** hereto and hereby incorporated herein. The financing of the costs of Facilities may include, without limitation, the payment of principal of and interest on bonds together with all direct, indirect periodic, and/or other related costs (including, without limitation, costs of administering the CFD, levying the Special Tax and administering the bonds, and establishing and replenishing reserve funds). The City Council hereby finds and determines that the public interest will not be served by allowing the property owners in the CFD to enter into a contract in accordance with Section 53329.5(a) of the Act. Notwithstanding the foregoing, the City Council, on behalf of the CFD, may enter into one or more contracts directly with any of the property owners with respect to the construction and/or acquisition of any portion of the Facilities.
6. It is the intention of the Council that, except as may otherwise be provided by law or by the rate and method of apportionment of the Special Tax for the CFD, all lands owned by any public entity, including the United States, the State of California and the City, or any departments or political subdivisions thereof, shall be omitted from the levy of the Special Tax. In the event that a portion of the property within the CFD shall become for any reason exempt, wholly or in part, from the levy of the Special Tax, the City will, on behalf of the CFD, increase the levy to the extent necessary upon the remaining property within the CFD which is not exempt in order to yield the required debt service payments and other annual expenses of the CFD, if any, subject to the provisions of the rate and method of apportionment of the Special Tax. It is anticipated that the Special Tax will be billed as a separate line item on the regular property tax bill. However, the City Council reserves the right, under Section 53340, to utilize any method of collecting the Special Tax which it shall, from time to time, determine to be in the best interests of the City, including, but not limited to, direct billing by the City to the property owners and supplemental billing.

The proposed rate and method of apportionment of the Special Tax among the parcels of real property within a Future Improvement Area, in sufficient detail to allow each landowner within such Future Improvement Area to estimate the maximum amount such owner will have to pay, shall be set forth in the applicable Unanimous Approval. The Special Tax shall not be levied in a Future Improvement Area after the fiscal year identified in the rate and method for such Future Improvement Area, except that a special tax that was lawfully levied in or before the final tax year and that remains delinquent may be collected in subsequent years. Under no circumstances shall the special tax levied against any parcel in a Future Improvement Area for private residential purposes be increased as a consequence of delinquency or default by the owner of any other parcel or parcels within such Future Improvement Area by more than 10 percent.

For Future Improvement Areas, a different rate and method may be adopted than the Rate and Method adopted for Improvement Area No. 1 if the annexed territory is designated as

a separate zone or improvement area. No supplements to the Rate and Method for any of the Future Improvement Areas and no new rate and method will cause the maximum tax rate in the then-existing territory of the CFD (including Improvement Area No. 1) to increase. The designation as an improvement area of any territory annexing to the CFD, the maximum amount of bonded indebtedness and other debt for such improvement area, the facilities to be financed, the rate and method of apportionment of special tax for such improvement area and the appropriations limit for such improvement area shall be identified and approved in the Unanimous Approval executed by the applicable property owner(s) in connection with each annexation to the CFD from the Future Annexation Area. The annexation and related matters described in the Unanimous Approval shall be implemented and completed without the need for Council approval as long as the following conditions are met:

(i) The rate and method of apportionment of special tax for the new improvement area is prepared by a special tax consultant retained by the City.

(ii) The rate and method of apportionment of special tax for the new improvement area substantially complies with the City's local goals and policies concerning the use of the Act.

(iii) The rate and method of apportionment of special tax for the new improvement area does not establish a maximum special tax amount for the initial fiscal year in which the special tax may be levied for any category of special tax set forth in the Rate and Method for Improvement Area No. 1 that is greater than 125% of the maximum amount of the same or closest category of special tax for the same fiscal year calculated pursuant to the Rate and Method for Improvement Area No. 1.

(iv) The rate and method of apportionment of special tax for the new improvement area does not introduce a type of special tax that was not included in the Rate and Method for Improvement Area No. 1 (e.g., a single special tax that is levied and must be paid in a single fiscal year).

The rate and method of apportionment of special tax for the new improvement area includes a mechanism that protects against revenue loss as a result of land use changes.

(v) The Special Tax proposed to pay for the Facilities to be supplied within the territory annexed will be equal to the Special Taxes levied to pay for the same Facilities in previously-existing areas of the CFD and Improvement Area No. 1, except that (i) a higher Special Tax may be levied on territory annexing into the CFD to pay for the same Facilities to compensate for the interest and principal previously paid from Special Taxes in the original area of the CFD and Improvement Area No. 1, less any depreciation allocable to the financed Facilities, and (ii) a higher Special Tax may be levied on territory annexing into the CFD to pay for new or additional Facilities, with or without bond financing.

This Council hereby finds that the provisions of Section 53313.6, 53313.7 and 53313.9 of the Act (relating to adjustments to *ad valorem* property taxes and schools financed by a community facilities district) are inapplicable to the proposed CFD and Improvement Area No. 1.

7. The levy of the Improvement Area No. 1 Special Tax shall be subject to the approval of the qualified electors within Improvement Area No. 1 at a special election. The proposed voting procedure shall be by mailed or hand-delivered ballot among the landowners in Improvement Area No. 1, with each owner having one vote for each acre or portion of an acre such owner owns in Improvement Area No. 1 not exempt from the Improvement Area No. 1 Special Tax.

The Special Tax shall be levied in a Future Annexation Area only with the Unanimous Approval of the owner or owners of each parcel or parcels at the time that parcel or those parcels are annexed, without any requirement for further public hearings or additional proceedings. The designation as an improvement area of any territory annexing to the CFD, the maximum amount of bonded indebtedness and other debt for such improvement area, the facilities to be financed, the rate and method of apportionment of special tax for such improvement area and the appropriations limit for such improvement area shall be identified and approved in the Unanimous Approval executed by property owners in connection with their annexation to the CFD, without the need for any further public hearings or proceedings.

8. In order to finance the costs of the Facilities it is necessary to incur bonded indebtedness on behalf of the CFD and it is the intention of this Council, acting as the legislative body for the CFD, to cause bonds of the City to be issued for the CFD pursuant to the Act to finance in whole or in part the construction and/or acquisition of the Facilities.
9. The Administrative Services Director of the City, as the officer having charge and control of the Facilities, or the designee of such official, is hereby directed to cause and direct a study of said proposed CFD and the Facilities and to cause to be prepared for filing at the public hearing the report required by Section 53321.5 of the Act (the "CFD Report") presenting at least the following:

(a) A brief description of the Facilities by type which will be required to adequately meet the needs of the CFD.

(b) An estimate of the fair and reasonable cost of the Facilities including the cost of acquisition of lands, rights-of-way and easements, any physical facilities required in conjunction therewith and incidental expenses in connection therewith, including the costs of the proposed bond financing and all other related costs as provided in Section 53345.3 of the Act.

The CFD Report shall be made a part of the record of the public hearing specified below.

10. The City Council also intends to establish the annual appropriations limit of the CFD in the amount not to exceed the amount of bonds authorized for the CFD.
11. The City Council hereby sets Monday, December 6, 2021, at the hour of 5:30 P.M., at the regular meeting place of the City Council, City Council Chambers, Rancho Cordova City Hall, 2729 Prospect Park Drive, Rancho Cordova, California 95670, as the time and place when and where the City Council, as legislative body for the CFD, will conduct a public hearing on the establishment of the CFD, Improvement Area No. 1, the designation of Future Annexation Area, and consider and finally determine whether the public interest, convenience and necessity require the formation of the CFD, Improvement Area No. 1,

and the Future Annexation Area, and the levy of the Special Tax. At the hearing, testimony concerning the CFD, the extent of the CFD or the furnishing of the particular types of public facilities will be heard and protests will be considered from registered voters residing within the CFD and persons owning real property within the CFD. Written protests by the owners of a majority of the land which would be subject to special taxation within the proposed the CFD will require the suspension of proceedings for at least one year. Written protests must be filed with the City Clerk at or before the time fixed for the hearing. If such protests are directed only against certain elements of the proposed improvements or proposed special tax, and if such protests constitute a majority protest, only those elements shall be deleted from the proceedings.

12. The City Clerk is hereby directed to cause notice of the public hearing, in the form attached hereto as **Exhibit C**, to be given in the form required by the Act, which requires publication in a newspaper of general circulation circulated within the CFD, which such publication shall be made pursuant to Section 6061 of the Government Code of the State of California. The publication shall be completed at least 7 days before the date of the public hearing referenced above. The notice shall be substantially in the form specified in Section 53322 of the Act and attached hereto, with the form summarizing the provisions hereof hereby specifically approved.
14. Section 53314.9 of the Act provides that, either before or after formation of the CFD, the City may accept work in-kind from any source, including, but not limited to, private persons or private entities, may provide, by resolution, for the use of that work in-kind for any authorized purpose and the Council may enter into an agreement (an "Acquisition Agreement"), by resolution, with the person or entity advancing the work in-kind, to reimburse the person or entity for the value, or cost, whichever is less, of the work in-kind, as determined by the Council, with or without interest, under the conditions specified in the Act. Any work in-kind must be performed or constructed as if the work had been performed or constructed under the direction and supervision, or under the authority of, the City.

Section 53316.2 of the Act provides that a community facilities district may finance facilities to be owned or operated by a public agency other than the agency that created the district, or services to be provided by a public agency other than the agency that created the district, or any combination, only pursuant to a joint community facilities agreement or a joint exercise of powers agreement adopted pursuant to this section. The Administrative Services Director of the City and each other authorized officer of the City is hereby authorized and directed to enter into such joint community facilities agreements as are needed with respect to any entity other than the City that will own or operate any of the Facilities, as may be necessary to comply with the provisions of Section 53316.2 of the Act. The Council hereby declares that such joint agreements will be beneficial to owners of property in the area of the CFD.

13. The City Council finds and determines that adoption of this Resolution is not a "project" under the California Environmental Quality Act, because the Resolution does not involve any commitment to a specific project which may result in a potentially significant physical impact on the environment, as contemplated by Title 14, California Code of Regulations, Section 15378(b)(4).
- 14 This Resolution shall take effect from and after its adoption.

ITEM 16.6.

ATTACHMENT 1

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 18th day of October 2021, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Garrett Gatewood, Mayor

Stacy Leitner, CMC
City Clerk

**IMPROVEMENT AREA NO. 1 OF THE
CITY OF RANCHO CORDOVA
THE RANCH
COMMUNITY FACILITIES DISTRICT NO. 2021-1**

RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

A Special Tax applicable to each Assessor's Parcel in Improvement Area No. 1 of the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1 shall be levied and collected according to the tax liability determined by the City Council through the application of the appropriate amount or rate for Taxable Property, as described below. All of the property in Improvement Area No. 1, unless exempted by law or by the provisions of Section G below, shall be taxed for the purposes, to the extent, and in the manner herein provided, including property subsequently annexed to Improvement Area No. 1 unless a separate Rate and Method of Apportionment is adopted for the annexation area.

A. DEFINITIONS

The terms hereinafter set forth have the following meanings:

“Acre” or “Acreage” means the land area of an Assessor's Parcel as shown on an Assessor's Parcel Map, or if the land area is not shown on an Assessor's Parcel Map, the land area shown on the applicable Final Map or other parcel map recorded at the County Recorder's Office.

“Act” means the Mello-Roos Community Facilities Act of 1982, as amended, being Chapter 2.5, (commencing with Section 53311), Part 1, Division 2 of Title 5 of the Government Code of the State of California.

“Administrative Expenses” means any or all of the following: the fees and expenses of any fiscal agent or trustee (including any fees or expenses of its counsel) employed in connection with any Bonds, and the expenses of the City in carrying out its duties with respect to Improvement Area No. 1, the CFD and the Bonds, including, but not limited to, the levy and collection of Special Taxes, the fees and expenses of its counsel, charges levied by the County in connection with the levy and collection of Special Taxes, costs related to property owner inquiries regarding the Special Tax, costs associated with appeals or requests for interpretation associated with the Special Tax and this RMA, amounts needed to pay rebate to the federal government with respect to Bonds, costs associated with complying with continuing disclosure requirements for the City and any major property owners or other obligated parties, costs associated with foreclosure and collection of delinquent Special Taxes, and all other costs and expenses of the City and County in any way related to the establishment or administration of Improvement Area No. 1 and the CFD.

“Administrator” shall mean the person or firm designated by the City to administer the Special Tax according to this RMA.

“Assessor's Parcel” or “Parcel” means a lot or parcel shown on an Assessor's Parcel Map with an assigned Assessor's Parcel number.

“Assessor’s Parcel Map” means an official map of the County Assessor designating Parcels by Assessor’s Parcel Number.

“Authorized Facilities” means the public facilities authorized to be financed, in whole or in part, by the CFD.

“Base Special Tax” means, for any Land Use Category, the applicable Special Tax initially identified in Table 1 in Section C, as may be adjusted pursuant to Sections D or H herein.

“Bonds” means bonds or other debt (as defined in the Act), whether in one or more series, secured by the Special Tax and issued or assumed by or for Improvement Area No. 1 to fund Authorized Facilities.

“Building Permit” means a permit that allows for vertical construction of a building or buildings, which shall not include a separate permit issued for construction of the foundation thereof.

“Capitalized Interest” means funds in any capitalized interest account available to pay debt service on Bonds.

“CFD” means the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1.

“CFD Formation” means the date on which the Resolution of Formation to form the CFD and Improvement Area No. 1 was adopted by the City Council.

“City” means the City of Rancho Cordova.

“City Council” means the City Council of the City of Rancho Cordova.

“County” means the County of Sacramento.

“Developed Property” means, in any Fiscal Year, all Parcels of Taxable Property that are not Taxable Owners Association Property, Taxable Public Property, or Taxable Welfare Exemption Property for which a Building Permit for new construction was issued prior to June 1 of the preceding Fiscal Year.

“Development Class” means, individually, Developed Property, Final Map Property, Undeveloped Property, Taxable Owners Association Property, Taxable Public Property, and Taxable Welfare Exemption Property.

“Expected Land Uses” means the number of Residential Units and the Acreage of Other Property expected within Improvement Area No. 1 at CFD Formation, as identified in Attachments 1 and 2 of this RMA. Pursuant to Section D of this RMA, the Administrator shall update Attachment 2 each time there is a Land Use Change. Such update(s) shall be maintained internally by the Administrator and shall not require recordation of an amended RMA.

“Expected Maximum Special Tax Revenues” means the aggregate Special Tax that can be levied based on application of the Base Special Tax to the Expected Land Uses. The Expected Maximum Special Tax Revenues at CFD Formation are shown in Attachment 2 and may be revised pursuant to Sections D or H herein. Such update(s) will be maintained internally by the Administrator and will not require recordation of an amended RMA.

“Final Map” means a final map, or portion thereof, approved by the City or County pursuant to the Subdivision Map Act (California Government Code Section 66410 *et seq*) that creates SFD Lots. The term “Final Map” shall not include any large-lot subdivision map, Assessor’s Parcel Map, or subdivision map or portion thereof, that does not create SFD Lots, including Assessor’s Parcels that are designated as remainder parcels.

“Final Map Property” means, in any Fiscal Year, all SFD Lots created within Final Maps that had recorded prior to June 30 of the preceding Fiscal Year and which have not yet become Developed Property.

“First Bond Sale” means issuance of the first series of Bonds secured, in whole or in part, by Special Taxes levied and collected from Parcels in Improvement Area No. 1.

“Fiscal Year” means the period starting July 1 and ending on the following June 30.

“Improvement Area No. 1” means Improvement Area No. 1 of the CFD.

“Improvement Fund” means the account (regardless of its name) identified in the Indenture to hold funds that are available for expenditure to acquire or construct Authorized Facilities.

“Indenture” means the bond indenture, fiscal agent agreement, trust agreement, resolution or other instrument pursuant to which Bonds are issued, as modified, amended, and/or supplemented from time to time, and any instrument replacing or supplementing the same.

“Land Use Category” means the categories of land use identified in Table 1 in Section C below.

“Land Use Change” means a proposed or approved change to the Expected Land Uses after CFD Formation.

“Maximum Special Tax” means the greatest amount of Special Tax that can be levied on a Parcel in any Fiscal Year, as determined in accordance with Sections C and D below.

“Other Property” means any Parcel of Developed Property in Improvement Area No. 1 that does not fit within the definition of Single Family Property.

“Owners Association” means a homeowners association or property owners association that provides services to, and collects assessments, fees, dues, or charges from, property within Improvement Area No. 1.

“Owners Association Property” means any property within the boundaries of Improvement Area No. 1 that is owned in fee or by easement by an Owners Association, not including any such property that is located directly under a residential structure.

“Proportionately” means, for each Development Class, that the ratio of the actual Special Tax levied in any Fiscal Year to the Maximum Special Tax authorized to be levied in that Fiscal Year is equal for all parcels assigned to the Development Class.

“Public Property” means any property within the boundaries of Improvement Area No. 1 that is owned by the City, federal government, State of California or other public agency.

“Required Coverage” means the amount by which the Expected Maximum Special Tax Revenues must exceed the Bond debt service and priority Administrative Expenses (if any), as set forth in the Indenture, Certificate of Special Tax Consultant, or other formation or bond document that identifies the minimum required debt service coverage.

“Residential Unit” means an SFD Unit or an individual residential unit within a duplex, halfplex, triplex, fourplex, townhome, live/work or condominium structure, or apartment building. A second unit (granny flat) that shares a Parcel with an SFD Unit will not be considered a Residential Unit for purposes of levying the Special Tax.

“RMA” means this Rate and Method of Apportionment of Special Tax.

“SFD Lot” means an individual residential lot, identified and numbered on a recorded Final Map, on which a Building Permit has been or is permitted to be issued for construction of an SFD Unit without further subdivision of the lot and for which no further subdivision of the lot is anticipated pursuant to an approved Tentative Map.

“SFD Unit” means a residential unit that does not share a common wall with another residential unit.

“Single Family Property” means, in any Fiscal Year, all Parcels of Taxable Property for which a Building Permit was or is expected to be issued for: (i) construction of an SFD Unit, or (ii) construction of a residential structure consisting of two or more Residential Units that share common walls, have separate Assessor’s Parcel numbers assigned to them (except for a duplex unit, which may share an Assessor’s Parcel with another duplex unit), and may be purchased by individual homebuyers (which shall still be the case even if the Residential Units are purchased and subsequently offered for rent by the owners of the Residential Units), including such residential structures that meet the statutory definition of a condominium contained in Civil Code Section 4125.

“Special Tax” means a special tax levied in any Fiscal Year to pay the Special Tax Requirement.

“Special Tax Requirement” means the amount necessary in any Fiscal Year to: (i) pay principal and interest on Bonds that are due in the calendar year that begins in such Fiscal Year; (ii) pay periodic costs on the Bonds, including but not limited to, credit enhancement, liquidity support and rebate payments on the Bonds; (iii) replenish reserve funds created for the Bonds under the Indenture to the extent such replenishment has not been included in the computation of the Special Tax Requirement in a previous Fiscal Year; (iv) cure any delinquencies in the payment of principal or interest on Bonds which have occurred in the prior Fiscal Year or, based

on prior delinquencies, are expected to occur in the current Fiscal Year; (v) pay Administrative Expenses; and (vi) pay directly for Authorized Facilities, so long as such levy under this clause (vi) does not increase the Special Tax levied on Final Map Property or Undeveloped Property. The amounts referred to in clauses (i) and (ii) of the definition of Special Tax Requirement may be reduced in any Fiscal Year by: (a) interest earnings on or surplus balances in funds and accounts for the Bonds to the extent that such earnings or balances are available to apply against such costs pursuant to the Indenture; (b) in the sole and absolute discretion of the City, proceeds received by the CFD from the collection of penalties associated with delinquent Special Taxes; and (c) any other revenues available to pay such costs, each as determined in the sole discretion of the City.

“Taxable Owners Association Property” means, in any Fiscal Year after the First Bond Sale, any Parcel of Owners Association Property that satisfies all three of the following conditions: (i) the Parcel had not been Owners Association Property on the date of the First Bond Sale, (ii) based on reference to Attachments 1 and 2 (as may be updated pursuant to Section D below), the Parcel was not anticipated to be Owners Association Property as determined by the Administrator, and (iii) if the Parcel were to be exempt from the Special Tax because it is Owners Association Property, the Expected Maximum Special Tax Revenues would be reduced to a point at which Required Coverage could not be maintained.

“Taxable Property” means all of the Parcels within the boundaries of Improvement Area No. 1 that are not exempt from the Special Tax pursuant to law or Section G below.

“Taxable Public Property” means in any Fiscal Year after the First Bond Sale, any Parcel of Public Property that satisfies all three of the following conditions: (i) the Parcel had not been Public Property on the date of the First Bond Sale, (ii) based on reference to Attachments 1 and 2 (as may be updated pursuant to Section D below), the Parcel was not anticipated to be Public Property as determined by the Administrator, and (iii) if the Parcel were to be exempt from the Special Tax because it is Public Property, the Expected Maximum Special Tax Revenues would be reduced to a point at which Required Coverage could not be maintained.

“Taxable Welfare Exemption Property” means in any Fiscal Year after the First Bond Sale, any Parcel of Welfare Exemption Property that satisfies all three of the following conditions: (i) the Parcel had not been Welfare Exemption Property on the date of issuance of the First Bond Sale; (ii) based on reference to Attachments 1 and 2 (as may be updated pursuant to Section D herein), the Parcel was not anticipated to be Welfare Exemption Property based on the Expected Land Uses, as determined by the Administrator; and (iii) if the Parcel were to be exempt from the Special Tax because it has become Welfare Exemption Property, the Expected Maximum Special Tax Revenues would be reduced to a point at which Required Coverage could not be maintained.

“Tentative Map” means a tentative map or substantial conformance exhibit for property in Improvement Area No. 1, including any adjustments or amendments thereto.

“Undeveloped Property” means, in any Fiscal Year, all Parcels of Taxable Property that are not Final Map Property or Developed Property, as defined herein.

“Village” means a specific geographic area within Improvement Area No. 1 that (i) is identified by an assigned number on Attachment 1, (ii) is expected to have single family lots that are all of a similar size, and (iii) is assigned Expected Maximum Special Tax Revenues in Attachment 2 based on the Expected Land Uses for that Village.

“Welfare Exemption Property” means, in any Fiscal Year, any Parcels in the CFD that have received a welfare exemption under subdivision (g) of Section 214 of the Revenue and Taxation Code and for which such welfare exemption is still in place.

B. DATA FOR ADMINISTRATION OF THE SPECIAL TAX

Each Fiscal Year, the Administrator shall: (i) assign each Parcel of Taxable Property to the appropriate Development Class, (ii) for Developed Property, categorize each Parcel as Single Family Property or Other Property, (iii) for Single Family Property, determine within which Village each Parcel of Developed Property is located and the number of Residential Units on the Parcel; (iv) for Other Property, determine the Acreage of each Parcel; and (v) determine the Special Tax Requirement for the Fiscal Year. In addition, the Administrator shall, on an ongoing basis, monitor the Tentative Map, Final Maps, and Building Permits to determine if there are any proposed Land Use Changes that would change the Expected Maximum Special Tax Revenues. If the Expected Maximum Special Tax Revenues will be revised pursuant to a proposed Land Use Change, the Administrator shall apply the steps set forth in Section D below.

In any Fiscal Year, if it is determined that: (i) a parcel map for property in Improvement Area No. 1 was recorded after January 1 of the prior Fiscal Year (or any other date after which the Assessor will not incorporate the newly-created Parcels into the then current tax roll), (ii) because of the date the parcel map was recorded, the Assessor does not yet recognize the new Parcels created by the parcel map, and (iii) one or more of the newly-created Parcels is in a different Development Class and/or Land Use Category than other Parcels created by the subdivision, the Administrator shall calculate the Special Taxes for the property affected by recordation of the parcel map by determining the Special Taxes that apply separately to the property within each Development Class and/or Land Use Category, then applying the sum of the individual Special Taxes to the Parcel that was subdivided by recordation of the parcel map.

C. MAXIMUM SPECIAL TAX

1. Developed Property and Final Map Property

The Maximum Special Tax for a Parcel of Developed Property or Final Map Property is the greater of (i) the Base Special Tax set forth in Table 1 below, or, (ii) the Maximum Special Tax determined pursuant to Section D.

Table 1
Base Special Tax
Developed Property and Final Map Property

Land Use	Base Special Tax Fiscal Year 2021-22 *
<u>Single Family Property</u>	
Village 3	\$2,129 per Residential Unit or SFD Lot
Village 4	\$1,676 per Residential Unit or SFD Lot
Village 5	\$1,879 per Residential Unit or SFD Lot
Village 6	\$1,879 per Residential Unit or SFD Lot
Village 8	\$1,397 per Residential Unit or SFD Lot
Village 9	\$1,615 per Residential Unit or SFD Lot
Other Property	\$21,037 per Acre

* On July 1, 2022, and on each July 1 thereafter, all figures shown in Table 1 above shall be increased by an amount equal to 2.0% of the amount in effect for the prior Fiscal Year.

2. *Undeveloped Property, Taxable Owners Association Property, Taxable Public Property, and Taxable Welfare Exemption Property*

The Maximum Special Tax for Undeveloped Property, Taxable Owners Association Property, Taxable Public Property, and Taxable Welfare Exemption Property is \$21,037 per Acre for Fiscal Year 2021-22, which amount shall increase on July 1, 2022 and each July 1 thereafter by an amount equal to 2.0% of the amount in effect for the prior Fiscal Year.

D. CHANGES TO THE MAXIMUM SPECIAL TAX

1. *Land Use Changes*

The Expected Maximum Special Tax Revenues shown in Attachment 2 were originally calculated based on the Expected Land Uses at CFD Formation. Attachment 2 is subject to modification upon the occurrence of Land Use Changes, as described below. The Administrator shall review all Land Use Changes and compare the revised land uses to the Expected Land Uses to evaluate the impact on the Expected Maximum Special Tax Revenues.

Prior to the First Bond Sale, if a Land Use Change is proposed or identified that will result in a change in the Expected Maximum Special Tax Revenues, no action will be needed pursuant to this Section D. Upon approval of the Land Use Change, the Administrator shall update Attachment 2 to show the revised Expected Maximum Special Tax Revenues.

After the First Bond Sale, if a Land Use Change is proposed or identified, Steps 1 through 3 must be applied:

- Step 1:** By reference to Attachment 2 (which shall be updated by the Administrator each time a Land Use Change has been processed according to this Section D or a prepayment has been made), the Administrator shall identify the Expected Maximum Special Tax Revenues prior to the Land Use Change.
- Step 2:** The Administrator shall calculate the Expected Maximum Special Tax Revenues that could be collected from Taxable Property in Improvement Area No. 1 after the Land Use Change based on application of the Base Special Taxes from Table 1.
- Step 3:** If the revenues calculated in Step 2 are (i) higher than those determined in Step 1 or (ii) less than those calculated in Step 1, but the reduction in Expected Maximum Special Tax Revenues does not reduce debt service coverage on outstanding Bonds below Required Coverage, no further action is needed, and the Administrator shall update Attachment 2 to show the revised Expected Maximum Special Tax Revenues.

If the revenues calculated in Step 2 are less than those calculated in Step 1, and the Administrator determines that the reduction in Expected Maximum Special Tax Revenues would reduce debt service coverage on outstanding Bonds below the Required Coverage, one of the following shall occur:

3.a. The landowner requesting the Land Use Change (the “Requesting Landowner”) may make a prepayment in an amount that will ensure that the reduced Expected Maximum Special Tax Revenues are sufficient to provide Required Coverage, as determined pursuant to Section H below. If the Requesting Landowner notifies the Administrator that he/she would like to remedy the reduction by making a prepayment, such prepayment must be made by the earlier of (i) 30 days from the date of delivery of the prepayment estimate or (ii) the date of issuance of any Building Permits for any Parcel owned by the Requesting Landowner that was Final Map Property or Undeveloped Property at the time the Administrator prepared the prepayment estimate, **or**

3.b. If a prepayment is not received by the due date specified above, the Base Special Tax used to determine the Maximum Special Tax for each Parcel of Taxable Property in the area affected by the Land Use Change shall be increased proportionately until the Expected Maximum Special Tax Revenues are sufficient to maintain Required Coverage.

Pursuant to this Section D.3, the Administrator may from time to time update Attachment 2 to reflect revised Expected Maximum Special Tax Revenues. Such update shall be maintained internally by the Administrator and shall not require recordation of an amended RMA.

If multiple Land Use Changes are proposed simultaneously by a single landowner (which may include approval of multiple Final Maps at one time), and the landowner requests that the impact of two or more of the Land Use Changes be considered together, the Administrator shall consider the combined effect of the Land Use Changes to determine if there is a reduction in Expected

Maximum Special Tax Revenues. If there is a reduction that would reduce debt service coverage below the Required Coverage, and no prepayment has been received, then the Base Special Tax used to determine the Maximum Special Tax for each Parcel of Taxable Property in the areas affected by the Land Use Changes shall be increased proportionately until the aggregate amount that can be levied within such areas is equal to the amount that could have been levied prior to the proposed Land Use Changes. If Land Use Changes are proposed simultaneously by multiple landowners, or if an individual landowner proposing multiple Land Use Changes does not request that such Land Use Changes be considered together, the Administrator shall consider the proposed Land Use Changes individually.

Notwithstanding the foregoing, once a certificate of occupancy has been issued for a Residential Unit on a Parcel, the Maximum Special Tax for the Parcel cannot be increased because of subsequent Land Use Changes that may occur within the area in which the Parcel is located.

The duties imposed on the Administrator pursuant to this Section D to review Land Use Changes, and to review Final Maps and make certain calculations, are intended only to facilitate the administration of the Special Tax and to better assure the sufficiency of tax capacity to pay debt service on Bonds. Such duties are not intended to give any developer, subdivider, or owner of property the right to receive notice of the potential impact of Land Use Changes on the Special Tax applicable to a Parcel; and each developer, subdivider, or owner of property whose property is the subject of a Land Use Change shall be responsible for understanding the impact thereof on the Special Tax applicable to such property.

2. *Partial Prepayments*

If a Parcel makes a partial prepayment pursuant to Section H below, the Administrator shall recalculate the Maximum Special Tax for the Parcel pursuant to Section H.2. In addition, the Administrator shall update Attachment 2 to reflect the prepayment and the revised Expected Maximum Special Tax Revenues for Improvement Area No. 1. After the prepayment has been received, the application of Sections D and H of this RMA shall be based on the adjusted Expected Maximum Special Tax Revenues after the prepayment.

3. *Conversion of a Parcel of Public Property to Private Use*

If, in any Fiscal Year, a Parcel of Public Property is converted to private use, such Parcel shall be subject to the levy of the Special Tax. The Maximum Special Tax for each such Parcel shall be determined based on the applicable Base Special Tax for the Parcel, as determined by the Administrator. In addition, the Administrator shall update Attachment 2 to reflect the conversion and the revised Expected Maximum Special Tax Revenues for Improvement Area No. 1.

4. *Transfer of Expected Maximum Special Tax Revenues from One Village to Another*

The Expected Maximum Special Tax Revenues were determined for each Village based on the Expected Land Uses within that Village. If the expected number of Residential Units is transferred from one Village to another, the City may, in its sole discretion, allow for a corresponding transfer of Expected Maximum Special Tax Revenues between the Villages. Such a transfer shall only be allowed if (i) all adjustments are agreed to in writing by the affected property owners and the City, and (ii) there is no reduction in the total Expected Maximum Special Tax Revenues as a result of the transfer. In addition, the Administrator shall update

Attachment 2 to reflect the transfer and the revised Expected Maximum Special Tax Revenues for Improvement Area No. 1.

E. METHOD OF LEVY OF THE SPECIAL TAX

Each Fiscal Year, the Administrator shall determine the Special Tax Requirement to be collected in that Fiscal Year. A Special Tax shall then be levied according to the following steps:

- Step 1:** The Special Tax shall be levied Proportionately on each Parcel of Developed Property up to 100% of the Maximum Special Tax for each Parcel of Developed Property until the amount levied is equal to the Special Tax Requirement prior to applying any Capitalized Interest that is available in the CFD accounts.
- Step 2:** If additional revenue is needed after Step 1 in order to meet the Special Tax Requirement after Capitalized Interest has been applied to reduce the Special Tax Requirement, the Special Tax shall be levied Proportionately on each Parcel of Final Map Property up to 100% of the Maximum Special Tax for each Parcel of Final Map Property until the amount levied is equal to the Special Tax Requirement.
- Step 3:** If additional revenue is needed after Step 2, the Special Tax shall be levied Proportionately on each Parcel of Undeveloped Property up to 100% of the Maximum Special Tax for each Parcel of Undeveloped Property until the amount levied is equal to the Special Tax Requirement.
- Step 4:** If additional revenue is needed after Step 3, the Special Tax shall be levied Proportionately on each Parcel of Taxable Welfare Exemption Property, up to 100% of the Maximum Special Tax for each Parcel of Taxable Welfare Exemption Property for such Fiscal Year until the amount levied is equal to the Special Tax Requirement.
- Step 5:** If additional revenue is needed after Step 4, the Special Tax shall be levied Proportionately on each Parcel of Taxable Owners Association Property, up to 100% of the Maximum Special Tax for each Parcel of Taxable Owners Association Property until the amount levied is equal to the Special Tax Requirement.
- Step 6:** If additional revenue is needed after Step 5, the Special Tax shall be levied Proportionately on each Parcel of Taxable Public Property, up to 100% of the Maximum Special Tax for each Parcel of Taxable Public Property until the amount levied is equal to the Special Tax Requirement.

F. MANNER OF COLLECTION OF SPECIAL TAX

The Special Tax shall be collected in the same manner and at the same time as ordinary ad valorem property taxes, provided, however, that prepayments are permitted as set forth in

Section H below and provided further that the City may directly bill the Special Tax, may collect Special Taxes at a different time or in a different manner, and may collect delinquent Special Taxes through foreclosure or other available methods.

The Special Tax shall be levied and collected until principal and interest on Bonds have been repaid. However, in no event shall Special Taxes be levied after Fiscal Year 2062-63. Under no circumstances may the Special Tax on a Parcel of Developed Property in residential use be increased in any Fiscal Year as a consequence of delinquency or default in payment of the Special Tax levied on another Parcel or Parcels by more than ten percent (10%) above the amount that would have been levied in that Fiscal Year had there never been any such delinquencies or defaults.

G. EXEMPTIONS

Notwithstanding any other provision of this RMA, no Special Tax shall be levied in any Fiscal Year on the following:

- (1) Public Property, except Taxable Public Property.
- (2) Owners Association Property, except Taxable Owners Association Property.
- (3) Welfare Exemption Property, except Taxable Welfare Exemption Property.
- (4) Parcels that are owned by a public utility for an unmanned facility.
- (5) Parcels that are subject to an easement that precludes any other use on the Parcel.
- (6) Parcels that have fully prepaid the Special Tax obligation assigned to the Parcel pursuant to the formula set forth in Section H below.

H. PREPAYMENTS

The following definitions apply to this Section H:

“Outstanding Bonds” means all Previously Issued Bonds which remain outstanding, with the following exception: if a Special Tax has been levied against, or already paid by, an Assessor’s Parcel making a prepayment, and a portion of the Special Tax will be used to pay a portion of the next principal payment on the Bonds that remain outstanding (as determined by the Administrator), that next principal payment shall be subtracted from the total Bond principal that remains outstanding, and the difference shall be used as the amount of Outstanding Bonds for purposes of this prepayment formula.

“Previously Issued Bonds” means all Bonds that have been issued prior to the date of prepayment.

“Public Facilities Requirement” means either \$13.2 million in 2021 dollars, which shall increase on January 1, 2022, and on each January 1 thereafter by 2% of the amount in effect in the prior year or such other number as shall be determined by the City as sufficient to fund improvements that are authorized to be funded by Improvement Area No. 1. The Public Facilities Requirement shown above may be adjusted each time property annexes into Improvement Area No. 1 or there is an adjustment to the Expected Maximum Special Tax Revenues due to a Land Use Change.

“Remaining Facilities Costs” means the Public Facilities Requirement minus public facility costs funded by Previously Issued Bonds, developer equity and any other source of funding.

1. *Full Prepayment*

The Special Tax obligation applicable to a Parcel in Improvement Area No. 1 may be prepaid and the obligation of the Parcel to pay the Special Tax permanently satisfied as described herein, provided that a prepayment may be made only if there are no delinquent Special Taxes with respect to such Parcel at the time of prepayment. An owner of a Parcel intending to prepay the Special Tax obligation shall provide the City with written notice of intent to prepay. Within 30 days of receipt of such written notice, the City or its designee shall notify such owner of the prepayment amount for such Parcel. Prepayment must be made not less than 75 days prior to any redemption date for Bonds to be redeemed with the proceeds of such prepaid Special Taxes. The Prepayment Amount shall be calculated as follows: (capitalized terms as defined below):

	Bond Redemption Amount
plus	Remaining Facilities Amount
plus	Redemption Premium
plus	Defeasance Requirement
plus	Administrative Fees and Expenses
<u>less</u>	<u>Reserve Fund Credit</u>
equals	Prepayment Amount

As of the proposed date of prepayment, the Prepayment Amount shall be determined by application of the following steps:

- Step 1.** Compute the amount that could be collected from the Parcel prepaying the Special Tax in the Fiscal Year in which prepayment would be received by the City by applying the Base Special Tax to the Expected Land Uses for the Parcel. If this Section H is being applied to calculate a prepayment pursuant to Section D above, compute the amount by which the proposed Land Use Change would reduce Expected Maximum Special Tax Revenues below the amount needed for Required Coverage, and use this amount for purposes of this Step 1.
- Step 2.** Divide the Maximum Special Tax computed pursuant to Step 1 for such Parcel by the total Expected Maximum Special Tax Revenues for all property in Improvement Area No. 1, as shown in Attachment 2.

- Step 3.** Multiply the quotient computed pursuant to Step 2 by the Outstanding Bonds to compute the amount of Outstanding Bonds to be retired and prepaid (*the “Bond Redemption Amount”*).
- Step 4.** Compute the current Remaining Facilities Costs (if any).
- Step 5.** Multiply the quotient computed pursuant to Step 2 by the amount determined pursuant to Step 4 to compute the amount of Remaining Facilities Costs to be prepaid (*the “Remaining Facilities Amount”*).
- Step 6.** Multiply the Bond Redemption Amount computed pursuant to Step 3 by the applicable redemption premium, if any, on the Outstanding Bonds to be redeemed (*the “Redemption Premium”*).
- Step 7.** Compute the amount needed to pay interest on the Bond Redemption Amount starting with the first Bond interest payment date after which the prepayment will be received until the earliest redemption date for the Outstanding Bonds. However, if Bonds are callable at the first interest payment date after the prepayment has been received, Steps 7, 8 and 9 of this prepayment formula will not apply.
- Step 8:** Compute the amount of interest the City reasonably expects to derive from reinvestment of the Bond Redemption Amount plus the Redemption Premium from the first Bond interest payment date after which the prepayment has been received until the redemption date for the Outstanding Bonds.
- Step 9:** Subtract the amount computed pursuant to Step 8 from the amount computed pursuant to Step 7 (*the “Defeasance Requirement”*).
- Step 10.** The administrative fees and expenses associated with the prepayment will be determined by the Administrator and include the costs of computing the prepayment, redeeming Bonds and recording any notices to evidence the prepayment and the redemption (*the “Administrative Fees and Expenses”*).
- Step 11.** If and to the extent so provided in the Indenture, a reserve fund credit shall be calculated as a reduction in the applicable reserve fund for the Outstanding Bonds to be redeemed pursuant to the prepayment (*the “Reserve Fund Credit”*).
- Step 12.** The Special Tax prepayment is equal to the sum of the amounts computed pursuant to Steps 3, 5, 6, 9, and 10, less the amount computed pursuant to Step 11 (*the “Prepayment Amount”*).
- Step 13.** From the Prepayment Amount, the amounts computed pursuant to Steps 3, 6, and 9 shall be deposited into the appropriate fund as established under the Indenture and be used to retire Outstanding Bonds or make debt

ITEM 16.6.

Exhibit A to the Resolution

service payments. The amount computed pursuant to Step 5 shall be deposited into the Improvement Fund. The amount computed pursuant to Step 10 shall be retained in the account or fund that is established to pay Administrative Expenses.

Once a full prepayment of a Parcel's Special Tax obligation has been received, a Notice of Cancellation of Special Tax Lien shall be recorded against the Parcel to reflect the discharge of the Parcel's obligation to pay the Special Tax. However, a Notice of Cancellation of Special Tax Lien shall not be recorded until all Special Taxes levied on the Parcel in the current or prior Fiscal Years have been collected.

2. *Partial Prepayment*

A partial prepayment may be made in an amount equal to any percentage of full prepayment desired by the party making a partial prepayment, except that the full amount of Administrative Fees and Expenses determined in Step 10 shall be included in the partial prepayment. The Maximum Special Tax that can be levied on a Parcel after a partial prepayment is made shall be equal to the portion of the Maximum Special Tax that was not prepaid. Once a partial prepayment has been received, an Amended Notice of Special Tax Lien shall be recorded against the Parcel to reflect the reduced Special Tax lien for the Parcel, and the Administrator shall update Attachment 2 to show the revised Expected Maximum Special Tax Revenues. However, an Amended Notice of Special Tax Lien shall not be recorded until all Special Taxes levied on the Parcel in the current or prior Fiscal Years have been collected.

3. *Maintaining Required Coverage*

Notwithstanding the foregoing, if at any point in time the Administrator determines that the Maximum Special Tax revenue that could be collected from Taxable Property that remains subject to the Special Tax after the proposed prepayment would be less than the Required Coverage on Bonds that will remain outstanding after defeasance or redemption of Bonds from proceeds of the estimated prepayment, the amount of the prepayment shall be increased until the amount of Bonds defeased or redeemed is sufficient to reduce remaining annual debt service to a point at which Required Coverage is maintained.

I. INTERPRETATION OF RMA

Interpretations may be made by Resolution of the City Council to interpret, clarify, and/or revise this RMA to correct any inconsistency, vagueness, or ambiguity as it relates to the Special Tax, method of apportionment, classification of properties, or any definition applicable to Improvement Area No. 1 of the CFD, as long as such correction does not materially affect the levy and collection of Special Taxes. The City, upon the request of an owner of land within Improvement Area No. 1 which is not Developed Property, may also amend this RMA in any manner acceptable to the City, by resolution or ordinance following a public hearing, upon the affirmative vote of such owner to such amendment and without the vote of owners of any other land within Improvement Area No. 1, provided such amendment only affects such owner's land. Under no circumstances may such revisions to the RMA decrease the Expected Maximum Special Tax Revenues to a level that will reduce debt service coverage below the Required Coverage.

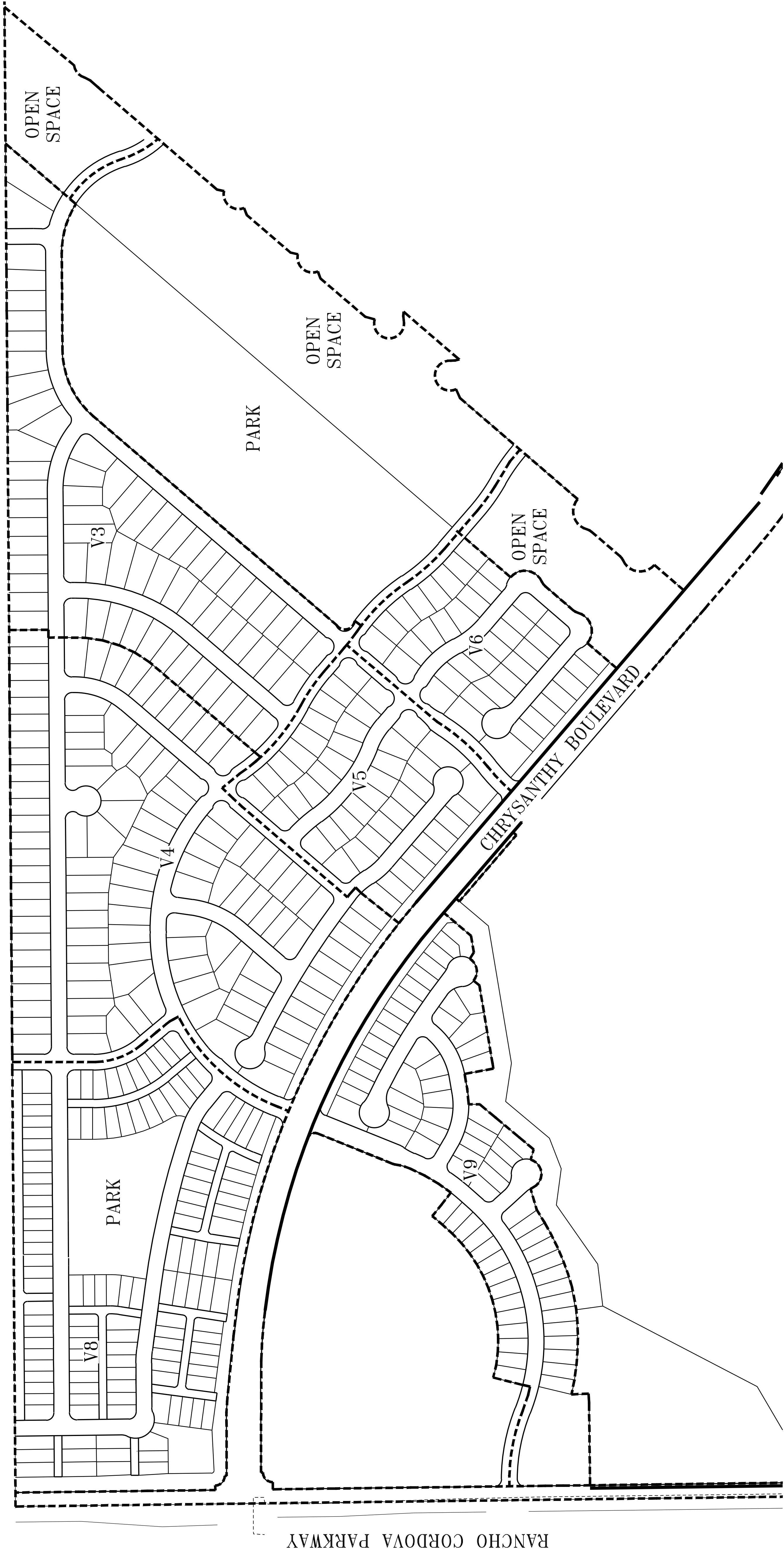
ATTACHMENT 1

**Improvement Area No. 1 of the
City of Rancho Cordova
The Ranch
Community Facilities District No. 2021-1**

**The Ranch
Expected Lot Layout in Improvement Area No. 1**

ATTACHMENT 1
THE RANCH - EXPECTED LOT LAYOUT IN
IMPROVEMENT AREA NO 1 OF THE RANCH CFD

K. HOVNANIAN HOMES
RANCHO CORDOVA, CALIFORNIA



ATTACHMENT 2

**Improvement Area No. 1 of the
City of Rancho Cordova
The Ranch
Community Facilities District No. 2021-1**

**Expected Land Uses and Expected Maximum Special Tax Revenues
in Improvement Area No. 1**

Village	Expected Land Uses	Base Special Tax (FY 2021-22) *	Expected Maximum Special Tax Revenues (FY 2021-22) *
Village 3	65 Residential Units	\$2,129 per Residential Unit	\$138,385
Village 4	116 Residential Units	\$1,676 per Residential Unit	\$194,416
Village 5	45 Residential Units	\$1,879 per Residential Unit	\$84,555
Village 6	40 Residential Units	\$1,879 per Residential Unit	\$75,160
Village 8	130 Residential Units	\$1,397 per Residential Unit	\$181,610
Village 9	71 Residential Units	\$1,615 per Residential Unit	\$114,665
Expected Maximum Special Tax Revenues (FY 2021-22 \$)			\$788,791

* On July 1, 2022, and each July 1 thereafter, all dollar amounts shown above shall be increased by 2% of the amount in effect in the prior Fiscal Year.

LIST OF FACILITIES

The Facilities and Services shown below are to be finance by the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1 (the, "CFD").

Facilities. The Facilities which are proposed to be financed with the proceeds of the sales of bonds of the proposed CFD, or the payment of the fees to the appropriate jurisdiction with respect to such facilities proposed to be financed with the proceeds of the sale of bonds of the proposed CFD, are generally described as follows:

Roadway Facilities

Including: Pavement, Curb, Gutter, Sidewalks, Joint Trench Utilities, Signals, Street Lights, Stop Signs, General Signage, Local & Regional Drainage, Landscaping & Irrigation (incl. backflow preventers), Soundwalls, Entry Monumentation, and Striping

- R-1 Chrysanthy Boulevard
- R-2 Rancho Cordova Parkway
- R-3 North Campus Road
- R-2 Any and all major streets, residential collectors and minor residential streets within The Ranch.

Sewer Facilities

- S-1 Any and all major Sewer facilities necessary to provide sewer service to The Ranch

Water Facilities

- W-1 Any and all major Water facilities necessary to provide water service to The Ranch

Drainage Facilities

- D-1 Detention Basin(s)
- D-2 Any and all major Drainage facilities necessary to provide drainage conveyance, detention or water quality treatment for The Ranch

Impact, Development Agreement and Sunridge Specific Plan Area Fees

- I-1 Transportation Development Impact Fee
- I-2 Supplemental Transportation Fee
- I-3 Community Facilities Impact Fee
- I-4 Park Renovation Fee
- 1-5 SD Roadway Fee

Engineering Studies, Permitting, Public Facilities Report, Financing Plan

- E-1 Consultant fees, application fees, processing fees, and document production costs associated with the CFD preparation and processing of Public Facilities Reports, Engineering Studies, CFD Reports, Financing Plans, Environmental Permitting, and Environmental Studies, as well as other costs associated with the District Formation and Bond Sales process.

Other

- O-1 Any other facilities serving substantially the same purpose as the above described facilities.
- O-2 Any other facilities permitted under the Mello-Roos Community Facilities Act of 1982, including the facilities described in Section 53313.5 of the California Government Code, as amended from time to time, provided that such facilities satisfy at least one of the following criteria: 1) augment, improve or expand existing District facilities that are primarily for the benefit of the District, or 2) repair or rehabilitate existing District facilities.

The foregoing description of the type of Facilities eligible to be financed is general in nature and includes any appurtenant work and incidental expenses related to the Facilities. The final nature and location of the facilities will be determined upon the preparation of final plans and specifications for such facilities.

Incidentals. The bond related expenses authorized include the City, underwriters discount, financial advisor, appraisals, reserve fund balance, capitalized interest, bond counsel, disclosure counsel, special tax consultant, bond and official statement printing and all other incidental expenses.

Administrative fees include those of the City, the Community Facilities District, the Bond Trustee, the Special Tax Consultant and the Fiscal Agent, related to the Community Facilities District and the Bonds.

CITY OF RANCHO CORDOVA NOTICE OF PUBLIC HEARING

NOTICE is hereby given that on **Monday, December 6, 2021**, at **5:30 p.m.**, or as soon thereafter as the matter may be heard, the City Council of the City of Rancho Cordova will hold a Public Hearing at the **Rancho Cordova City Hall, located at 2729 Prospect Park Drive, Rancho Cordova**, to consider the following:

PROPOSED "THE RANCH COMMUNITY FACILITIES DISTRICT NO. 2021-1"

The purpose of this public hearing is: **The City of Rancho Cordova is considering the formation of a community facilities district (the "CFD") under the authority of the Mello-Roos Community Facilities District Act of 1982, as amended, to fund certain public facilities related to new development within the City of Rancho Cordova.**

This Notice contains a brief summary of the proposal, but you are referred to the City Council's resolution "A Resolution of Intention of the City Council to Form a Community Facilities District and Levy a Special Tax in City of Rancho Cordova The Ranch Community Facilities District No. 2021-1 to Finance the Acquisition and Construction of Certain Public Facilities in and for such Community Facilities District" adopted _____, 2021 and its resolution "A Resolution of the City Council Declaring its Intention to Incur a Bonded Indebtedness to Finance the Acquisition and Construction of Certain Public Facilities in and for City of Rancho Cordova The Ranch Community Facilities District No. 2021-1" adopted _____, 2021 for the definitive description of the proposal.

The proposal is to subject the property within the CFD to a special tax which will be used to pay for facilities of benefit to land within the CFD, including paying principal and interest on bonds used to build facilities, and will expire when the bonds are retired and all eligible facilities are financed. The proceeds of the bonds will be used to pay for the facilities and other expenses set forth in the resolutions referred to in the preceding paragraph. A map showing the land proposed to be included in the CFD is on file with the City Clerk.

As set forth above, the City Council will hold a public hearing on the establishment of the CFD, the facilities to be financed by the CFD, and the levy of the special tax within the CFD.

The proposal also includes authority to issue up to \$_____ in bonds to be repaid by the special tax. Neither the City of Rancho Cordova nor any person outside the CFD has any liability for the special tax or the bonds. The security for the bonds is limited to the property subject to the special tax within the CFD.

In order to confer the authority upon the Rancho Cordova City Council to levy the special tax and to issue the bonds, a public hearing must be held on the proposal, then the City Council will decide whether to form the CFD, and finally the qualified electors within the CFD must approve the proposal by a two-thirds vote. Where the CFD is uninhabited (as is the case here) the qualified electors are, pursuant to law, the owners of property within the CFD.

At the hearing, the testimony of all interested persons or potential special taxpayers for or against the formation of the proposed community facilities district, the authorization to levy the special tax, and the authorization to issue the bonds will be heard. If written protests against the proposed CFD are delivered to the City Clerk at or before the time set for the hearing by either registered voters residing within, or the owners of property within, the proposed CFD, they will be counted

ITEM 16.6.

ATTACHMENT 4 Exhibit C to the Resolution

toward a possible majority protest. Such protests by a majority of the registered voters residing within the CFD or by the owners of a majority of the land area within CFD which is or will be subject to the special tax, if not withdrawn prior to the close of the hearing so as to reduce the value of the protests to less than a majority, will require the proposed CFD to be eliminated from immediate consideration, and prevent its being included in a subsequent proceedings for at least one year.

If the City Council, after the public hearing, determines that a majority protest under Section 53324 of the California Government Code was not made at the hearing, the City Council may conduct an election by mailed ballot to levy a special tax and incur bonded indebtedness.

The City of Rancho Cordova encourages interested parties to attend public meetings and comment on the issues being discussed. If you wish to provide testimony and are unable to attend the meeting, written comments that are delivered to the City Clerk's office prior to the time of the hearing will be made a part of the public record. Questions regarding this matter should be directed to the **City of Rancho Cordova Finance Department at (916) 851-8730.**

NOTICE REGARDING CHALLENGES TO DECISIONS

Pursuant to all applicable laws and regulations, including without limitation, California Government Code Section 65009 and/or California Public Resources Code Section 21177, if you wish to challenge in court any of the above decisions (regarding planning, zoning and/or environmental decisions), you may be limited to raising only those issues you or someone else raised at the public hearing(s) described in this notice/agenda, or in written correspondence delivered to the city at, or prior to, this public hearing.

ADA COMPLIANCE STATEMENT

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Department at (916) 851-8720. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

Printed in the Grapevine Independent on _____, 2021

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, DECLARING ITS INTENTION TO INCUR A BONDED INDEBTEDNESS TO FINANCE THE ACQUISITION AND CONSTRUCTION OF CERTAIN PUBLIC FACILITIES IN AND FOR CITY OF RANCHO CORDOVA THE RANCH COMMUNITY FACILITIES DISTRICT NO. 2021-1

WHEREAS, the City Council (the "City Council") of the City of Rancho Cordova (the "City") has duly adopted Resolution No. ____-2021 (the "Resolution of Intention") on _____, 2021, wherein it declared its intention to establish a community facilities district under and pursuant to the terms and provisions of the "Mello-Roos Community Facilities Act of 1982," being Chapter 2.5, Part 1, Division 2, Title 5 of the Government Code of the State of California (the "Act"), to be known and designated as the "City of Rancho Cordova The Ranch Community Facilities District No. 2021-1" (the "CFD") , designate therein "Improvement Area No. 1 of the City of Rancho Cordova The Ranch Community Facilities District No. 2021-1" ("Improvement Area No. 1"), and form a future annexation area for the CFD (the "Future Annexation Area"), and to levy a special tax therein to finance the acquisition and construction of certain public facilities (collectively the "Facilities") listed in Exhibit B to the Resolution of Intention and incorporated therein and made a part hereof; and

WHEREAS, in order to finance the costs of the Facilities it is necessary to incur bonded indebtedness in the amount of not to exceed \$86,470,000 on behalf of the CFD and a bonded indebtedness limit for Improvement Area No. 1; and

WHEREAS, the City Council is fully advised in this matter;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, AS FOLLOWS:

1. The above recitals are true and correct, and the City Council so finds and determines.
2. The City Council hereby declares that the public convenience and necessity require that a bonded indebtedness in the principal amount of not to exceed \$86,470,000 be incurred in one or more series to finance the acquisition and construction of the Facilities, which amount includes all costs and estimated costs incidental to, or connected with, the accomplishment of the purpose for which such bonded indebtedness is proposed to be incurred (the "Authorization"), initially allocated as follows: (i) for Improvement Area No. 1, the bonded indebtedness limit is \$20,350,000 and (ii) for land within the Future Annexation Area (the "Future Improvement Area, the bonded indebtedness limit is not to exceed \$66,120,000 (the "Future Improvement Area Indebtedness Limit"). Indebtedness subject to this limit shall only include indebtedness evidenced by bonds or notes and shall not include bonds described in Section 53364.2(e) of the Act.

Upon designation of a parcel or parcels annexed into the CFD from the Future Annexation Area as a Future Improvement Area, the Unanimous Consent shall include an authorization to incur bonded indebtedness for such Future Improvement Area in a

maximum amount which does not exceed the Future Improvement Area Indebtedness Limit, net of the amount or amounts of the Future Improvement Area Indebtedness Limit previously established in connection with a prior annexation from the Future Annexation Area, which limit shall be set forth in a Unanimous Consent. Such allocation may be made without any requirement for further public hearings, Council action or other additional proceedings, and the Authority shall include the Unanimous Consent in the records for the CFD.

3. This Council, acting as legislative body for the CFD, intends to authorize the issuance and sale of bonds and other debt in one or more series in the maximum aggregate principal amount of not to exceed the sum of the Improvement Area No. 1 bonded indebtedness limit bearing interest payable semi-annually or in such other manner as this Council shall determine, at a rate not to exceed the maximum rate of interest as may be authorized by applicable law at the time of sale of such bonds and other debt, and maturing not to exceed 40 years from the date of the issuance of each series of the bonds and other debt.

This Council, acting as legislative body for the CFD, intends to authorize the issuance and sale of bonds and other debt in one or more series in the maximum aggregate principal amount with respect to the Future Improvement Areas to be determined at the time of annexation (not to exceed the Future Improvement Area Indebtedness Limit in the aggregate), bearing interest payable semi-annually or in such other manner as this Council shall determine, at a rate not to exceed the maximum rate of interest as may be authorized by applicable law at the time of sale of each series of bonds and other debt, and maturing not to exceed 40 years from the date of the issuance of the respective series of bonds and other debt.

4. Notice is given that Monday, December 6, 2021, at the hour of 5:30 P.M., at the regular meeting place of the City Council, City Council Chambers, Rancho Cordova City Hall, 2729 Prospect Park Drive, Rancho Cordova, California 95670, has been fixed by the City Council as the time and place for a public hearing to be held by the City Council to consider the incurring of such bonded indebtedness to finance the acquisition and construction of the Facilities in and for the CFD. At the hearing, testimony concerning the incurring of such bonded indebtedness secured by a special tax to be levied within the CFD to finance the acquisition and construction of the Facilities will be heard and protests will be considered from registered voters residing within the CFD and persons owning real property within the CFD. Written protests by the owners of a majority of the land which would be subject to special taxation within the proposed the CFD will require the suspension of proceedings for at least one year. Written protests must be filed with the City Clerk at or before the time fixed for the hearing.
5. The City Clerk is hereby directed to cause notice of the public hearing to be given in the form required by the Act, which requires publication in a newspaper of general circulation circulated within the CFD, which such publication shall be made pursuant to Section 6061 of the Government Code of the State of California. The publication shall be completed at least 7 days before the date of the public hearing referenced above. The notice shall be substantially in the form specified in Section 53346 of the Act and attached hereto, with the form summarizing the provisions hereof hereby specifically approved.

ITEM 16.6.

ATTACHMENT 5

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 18th day of October, 2021, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

MEMORANDUM



ITEM 16.7.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director
Jesse Yabes, Assistant Civil Engineer

SUBJECT: **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA ADOPTING CALTRANS LOCAL ASSISTANCE PROCEDURES MANUAL CHAPTER 10: CONSULTANT SELECTION**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution will authorize the City to adopt Caltrans Local Assistance Procedures Manual Chapter 10: Consultant Selection.

BACKGROUND

The City of Rancho Cordova routinely engages consultants to perform Architectural and Engineering (A&E) professional services, and related consulting services necessary to deliver state and federal funded Capital Improvement Program projects and studies. These necessary A&E professional services typically include field surveying; environmental services for compliance with National Environmental Policy Act and California Environmental Quality Act; preliminary and final design; preparation of plans, specifications and estimates; construction management and inspection services; and other related consultant services necessary for state and federal funded projects.

Title 23 of the Code of Federal Regulations section 172.5 (b) and (b)(1) requires subrecipients to adopt written policies and procedures prescribed by the awarding state transportation agency for the procurement, management, and administration of engineering and design-related consultant services in accordance with applicable federal and state laws and regulations. Caltrans has developed the Local Assistance Procedures Manual (LAPM), Chapter 10, Consultant Selection, which sets forth policies and procedures for procurement and management of contracts for engineering and design related consultant services contracts for federal and state funded transportation projects to ensure compliance with applicable

federal and state laws and regulations.

City of Rancho Cordova and other local agencies must follow the selection and contracting procedures in Chapter 10 of the Caltrans LAPM, Consultant Selection, when state and federal funds are used for A&E professional services and other consulting services.

FISCAL IMPACT AND FUNDING SOURCE

Funding for Consultants are included in the City's current approved Capital Improvement Plan and in the 2020/2021 budget adopted by Council on June 7, 2021.

There is no impact to the City's General Fund.

ATTACHMENT(S)

1. Resolution

CITY OF RANCHO CORDOVA**RESOLUTION NO. XX-2021****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA,
STATE OF CALIFORNIA, ADOPTING CALTRANS LOCAL ASSISTANCE PROCEDURES
MANUAL CHAPTER 10: CONSULTANT SELECTION**

WHEREAS, the City of Rancho Cordova is responsible for constructing transportation projects that are state and federally funded; and

WHEREAS, in order to comply with the Federal regulations and due to limited staffing and expertise, certain services including Architectural and Engineering (A&E) are contracted out to qualified firms; and

WHEREAS, the Federal regulations set forth standards for procuring and administering A&E contracts; and

WHEREAS, the provisions of the Brooks Act (40 United States Code, Section 1104) requires local agencies to award federally funded engineering and design-related contracts, otherwise known as A&E contracts, on the basis of fair and open competitive negotiations, demonstrated competence, and professional qualifications (23 CFR 31.201-3); and

WHEREAS, pursuant to 23 CFR 172.5 (b), local agencies shall develop and sustain organizational capacity and provide the resources necessary for the procurement, management, and administration of engineering and design related consultant services, reimbursed in whole or in part with Federal-Aid Highway Program funding as specified in 23 U.S.C. 106(g)(4)(A); and

WHEREAS, the provision 23 CFR 172.5 (b)(1) requires local agencies to adopt written policies and procedures for the procurement, management, and administration of engineering and design related consultant services in accordance with applicable Federal and State laws and regulations; and

WHEREAS, the State of California Department of Transportation (Caltrans) has developed the Local Assistance Procedures Manual (LAPM), Chapter 10, Consultant Selection which sets forth policies and procedures to be utilized by local agencies in the procurement and management of A&E contracts on state and federal funded transportation projects to ensure compliance with applicable Federal and State laws and regulations and to maintain eligibility for Federal-Aid reimbursement; and

WHEREAS, the City of Rancho Cordova has developed additional policies, dated June 4, 2012, to ensure avoidance of conflict of interests in the performance of A&E services for state and federal funded transportation projects; and

WHEREAS, the City of Rancho Cordova desires to adopt Caltrans's LAPM Chapter 10 and the City's conflict of interest policies for compliance with Federal regulations on the

procurement and administration of A&E contracts.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA as follows:

Section 1. The above recitals are true and correct findings of the Rancho Cordova City Council.

Section 2. The Local Assistance Procedures Manual, Chapter 10, Consultant Selection dated August 4, 2021 or as amended in future updates, is approved and adopted.

Section 3. The A&E Services Administration and Procurement Policies developed by the City of Rancho Cordova for State and Federal Funded Projects dated June 4, 2012, are approved and adopted.

Section 4. Authorizes the City Manager to approve amendments to the City's adopted A&E Services Administration and Procurement Policies in consultation with the Federal Highways Administration.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October 2021 by following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Garrett Gatewood, Mayor

Stacy Leitner, CMC
City Clerk

MEMORANDUM



ITEM 16.8.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director
Quoc Nham, Senior Civil Engineer

SUBJECT: **A RESOLUTION APPROVING THE FINAL MAP OF MONTELENA VILLAGE 4, SUBDIVISION NO. RC-04-132.4, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE SUBDIVISION IMPROVEMENT AGREEMENT CONTRACT NO. 2021-301 WITH MONTELENA DOUGLAS LLC.**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution will authorize the City Manager to execute Subdivision Improvement Agreement Contract No. 2021-301, [Attachment 2](#), guaranteeing the construction of public roads and utilities with Montelena Douglas, LLC, and the recording of the final subdivision map for Montelena Village 4, creating 55 residentially zoned lots located south of Douglas Road and west of Rancho Cordova Parkway.

BACKGROUND

The map has been examined and checked for compliance with Title 22 of the City of Rancho Cordova Municipal code and the California Subdivision map Act. The City Council approved the Tentative Map on March 20, 2006. A Development Agreement by the City and CP Sunridge, LLC was entered into on April 3, 2006. Montelena Douglas, LLC was assigned all of the interest of CP Sunridge, LLC in the Agreement in 2008 dated February 14, 2008, and recorded on February 15, 2008 in the Official Records of Sacramento County at Book 20080215, Page 0899. A copy of the final map [Attachment 3](#), and copy of the vicinity map [Attachment 4](#), are included with this letter.

Roads are offered for dedication with this subdivision. Montelena Douglas, LLC has provided a performance and labor and material bond guaranteeing the construction of the public improvements. MacKay & Soms, Inc. has waived the requirement for a bond to guarantee

payment for setting the survey monuments with the subdivision. The soil report requirement has been satisfied by Wallace-Kuhl and Associates dated December 12, 2013.

There are no delinquent taxes against the property and the Tax Collector has so certified. The 2020/2021 estimated taxes have been secured with the Sacramento County Tax Collector.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact to the City.

ATTACHMENT(S)

1. Resolution
2. Subdivision Improvement Agreement - Montelena 4
3. Final Map Montelena 4
4. Vicinity Map Montelena 4

CITY OF RANCHO CORDOVA

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, APPROVING THE FINAL MAP OF MONTELENA VILLAGE 4, SUBDIVISION NO. RC-04-132.4, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE SUBDIVISION IMPROVEMENT AGREEMENT CONTRACT NO. 2021-301 WITH MONTELENA DOUGLAS, LLC.

WHEREAS, the City Council approved the Tentative Map on March 20, 2006 per Resolution No. 26-2006; and

WHEREAS, the map is in substantial compliance with the approved tentative map; and

WHEREAS, the conditions of approval have been complied with; and

WHEREAS, the map complies with Title 22 of the City of Rancho Cordova municipal code and the California Subdivision Map Act; and

WHEREAS, the approval of final maps is exempt from review under the California Environmental Quality Act (CEQA) pursuant to CEQA Regulation Section 15268(b)(3) as a ministerial approval; and

WHEREAS, the City desires to enter into a subdivision improvement agreement with the developer to ensure necessary public improvements are completed and secured with a bond.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does approve the Final Map of Montelena Village 4, Subdivision No. RC-04-132.4 and does authorize the City Manager to execute Subdivision Improvement Agreement Contract No. 2021-301 with Montelena Douglas, LLC, in a form approved by the City Attorney.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Garrett Gatewood, Mayor

ITEM 16.8.

ATTACHMENT 1

Stacy Leitner, CMC
City Clerk

SUBDIVISION IMPROVEMENT AGREEMENT**MONTELENA VILLAGE 4 SUBDIVISION NO. RC-04-132.4**

THIS SUBDIVISION IMPROVEMENT AGREEMENT (hereinafter, "Agreement") entered into this _____ day of _____, 20__, by and between the City of Rancho Cordova, (hereinafter "City"), a California municipal corporation, and **Montelena Douglas, LLC.**, a California limited liability company (hereinafter "Principal").

RECITALS

WHEREAS, Section 66462 of the Government Code provides that if the work of improvement required therein is not completed prior to the acceptance of a final subdivision map, the owner of the subdivision may enter into an agreement with the City to perform the work of improvement as required by said sections in consideration of the acceptance of said final subdivision map by the City; and

WHEREAS, Section 66499 of the Government Code requires that said agreement be secured by a surety bond or by an instrument of credit issued by a financial institution subject to regulation by the State or federal governments or by a cash deposit; and

WHEREAS, Section 66499.3 establishes the types and amount of security to guarantee the performance of any such improvement agreement; and

WHEREAS, City and Principal desire to enter into an improvement agreement as authorized by the Subdivision Map Act under the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises, conditions and covenants hereinafter set forth, City and Principal agree as follows:

1. **Incorporation of Recitals.** The foregoing recitals are hereby incorporated by reference.
2. **Findings and Conditions of Subdivision Map.** Principal recognizes that approval of its subdivision was subject to the findings and conditions attached to such approval and hereby acknowledges and agrees to be bound by such findings and conditions.
3. **City Approval of Subdivision Map.** City agrees to approve the final map of the subdivision presented to it by Principal and designated **Montelena Village 4 Subdivision No. RC-04-132.4** and to accept on behalf of the public all lands, rights of way and easements therein offered in dedication, in accordance with the conditions hereinafter set forth.
4. **Completion of Improvements.** In consideration of such approval, Principal

ITEM 16.8.

ATTACHMENT 2 Contract No. 2021-301

agrees to complete the work of improvement required for said subdivision in accordance with the requirements of the Rancho Cordova Municipal Code and such standard specifications created by applicable City ordinances or resolutions which are in effect at the time of the installation of said improvements. The work required may lie within or outside the subdivision and must be completed within **24** months of the date of this Agreement.

5. Payment For Services. Principal further agrees to promptly pay, when due, all costs for plan checking, inspection services and material testing performed by City pursuant to the requirements of Sections 12.03.210 et. seq. of the Rancho Cordova Municipal Code.

6. Community Facilities Renovation Fee. Principal acknowledges that under the terms of the Development Agreement [Amended and Restated Development Agreement By and Between the City of Rancho Cordova and Montelena Douglas, LLC, Chrysanthy Rd. Inv., LLC and Premier Chrysanthy, LLC for Villages 1, 2, 4, 6, 8, and Vacant Parcels in Villages 9 and 10] Recorded as Sacramento County Recorder # _____. Principal is obligated to pay the City a fee in the amount of **\$One Thousand Five Hundred Seven Dollars and Seventy Cents (\$1,507.70)** per single family lot within the Final Map ("Park Renovation Fee"). Principal acknowledges and agrees that such fee will be paid prior to the issuance of a building permit for the respective lot.

7. Acceptance of Improvements. Upon satisfactory completion of all public improvements in accordance with standard specifications created by City ordinances or resolutions which are in effect at the time of the installation of said improvements, City agrees to accept for maintenance the work of improvement within the dedicated parcels shown on said final subdivision map, and any off site easements granted, subject to the provisions of paragraph 9 hereof. Acceptance will be postponed until such time the City determines a public purpose exists. Public Purpose is defined as existence of habitable structures within the subdivision.

8. Notice of Commencement of Work. Principal shall notify the City Engineer in writing of the commencement of the work of improvements.

9. Correction of Defects. Principal agrees to remedy any defects in the improvement arising from faulty or defective construction of said improvements occurring within twelve months after acceptance thereof by City.

10. Indemnity. Principal shall indemnify and hold harmless with counsel selected by the City, the City of Rancho Cordova, its agents, officers, consultants, and employees ("City") from any and all loss, damage or liability arising out of or resulting from Principal's performance or non-performance of his duties and obligations under this Agreement, or from the negligent

ITEM 16.8.

ATTACHMENT 2 Contract No. 2021-301

act or omission of himself, his agents, servants and employees. Principal shall, at his own cost and expense, defend any and all actions, suits, or legal proceedings arising out of or resulting from the performance or nonperformance of this Agreement, that may be brought or instituted against the City, its officers and employees, on any such claim or demand, and pay or satisfy any judgment that may be rendered against the City in any such action, suit or legal proceedings, or result thereof, regardless whether caused in part by a party indemnified hereunder.

11. Extension of Completion Date. If the construction of the work or improvement should be delayed without fault of Principal, the time for completion thereof may be extended by City for such period of time as City may deem reasonable.

12. Improvement Security. (a) Principal shall obtain and furnish to City an improvement security consisting of a surety bond in favor of City, issued by a corporate surety authorized to do business in the State of California, and in form approved by City, securing the faithful performance by Principal of the work of improvement required, and also securing the payment of the costs and interest, if any, due under Sections 12.030.210 et seq. of the Rancho Cordova Municipal Code, as provided in Paragraph 5 herein and an additional bond issued by a corporate surety authorized to do business in the State of California, in the amount of not less than 50 percent of the total estimated cost of the improvement, securing payment to contractor, his subcontractors, and to persons renting equipment or furnishing labor or materials for the improvement.

(b) In lieu of said corporate surety bonds, Principal may furnish an improvement security consisting of a letter of credit, certificate of deposit, or similar instrument of credit, in form satisfactory to City, issued by a financial institution subject to regulation by the State or Federal government, pledging that the funds necessary to meet the performance required herein are on deposit, and guaranteed for payment on demand. Said letter of credit, certificate of deposit, or similar instrument of credit shall provide that the funds designated therein shall become trust funds for the purposes set forth in said instrument.

(c) The failure of Principal to commence the required work of improvements, or to complete the same within the time required after commencement thereof, shall entitle City to the full payment of the security, or so much thereof as may be necessary to complete the required work of improvement. The amount of the surety bond for faithful performance shall be in the sum of **\$849,454.00 (Eight Hundred Forty-Nine Thousand Four Hundred Fifty-Four Dollars).** The amount of the surety bond for the payment of the claims of the contractor, his subcontractors, and to persons renting equipment or furnishing labor or materials for the

ITEM 16.8.

ATTACHMENT 2 Contract No. 2021-301

improvement shall be at least 50 percent of the above amount. The letter of credit, certificate of deposit or similar instrument of credit, or cash deposit for faithful performance, shall be in the above amount plus an additional 50 percent for the purposes set forth herein.

13. Improvement Security As Condition Precedent. The furnishing of the improvement security by Principal as required by paragraph 12 hereof shall be a condition precedent to acceptance by City of the above described real property and the performance by the City of the covenants herein on its part to be performed.

14. Inspection of Work In Progress. (a) Principal may request The City Engineer to inspect the work as it progresses. If the work performed is found to be in accordance with the requirements of City, it may be accepted as it progresses and a partial refund of the cash deposit, or a release pro tanto of the faithful performance bond, letter of credit, certificate of deposit or similar instrument of credit shall be made in a sum in the same ratio to the total deposit as the work accepted bears to the total work to be done. No refund in excess of 85 percent of the total amount of the improvement security for faithful performance shall be made until all the work has been completed and accepted.

(b) The determination of the Administrator of Public Works of City as to the amount of work done, and the amount of refund or partial release pro tanto, shall be final and conclusive. When the work of improvement is accepted, 10 percent of the improvement security shall be retained to guarantee faithful performance of the provisions of paragraph 9 of this Agreement.

(c) Improvement security given to secure payment to contractor, his subcontractors and to persons renting equipment or furnishing labor or materials for the work of improvement may, six months after completion and acceptance of the work, be reduced to an amount not less than the total of all claims on which an action has been filed, and notice thereof given in writing to City, and if there are no actions filed, such improvement security may be released in full.

15. Execution By Real Party In Interest. Where title to the subdivision property is held by the record owner thereof under a holding Agreement, this Agreement and the bond given pursuant thereto must be executed by the real party or parties in interest.

16. Waiver of Civil Code Section 2819. Any extension of time hereunder shall not operate to release the surety on the bond filed pursuant to this Agreement. In this connection the surety waives the provisions of Section 2819 of the Civil Code of the State of California.

17. City Construction of Improvements. In the event that all or any portion of the works of improvement contemplated herein are proposed to be constructed by street improvement proceedings under the control of City, the undertaking of such proceedings shall in

ITEM 16.8.**ATTACHMENT 2
Contract No. 2021-301**

no way relieve Principal of any duties under this Agreement, except where all of the works of improvement that are required under this Agreement have in fact been constructed and accepted by City.

18. Interest. Interest shall accrue at the highest rate permitted by law on all sums from the date payment is due under the terms of this Agreement and the sum due is certain or reasonably capable of being made certain.

19. Attorneys' Fees. In the event that it is necessary for the City to enforce the obligations secured by the improvement security furnished pursuant to Paragraph 12 hereof, the City shall be entitled to recover its costs and reasonable expenses and fees, including reasonable attorneys' fees, as provided for in Government Code Section 66499.4.

20. Amendments. This Agreement may be modified or amended, or any of its provisions waived, only by a subsequent written agreement executed by the parties hereto.

21. Entire Agreement. This Agreement and any attachments hereto constitute the sole, final, complete, exclusive and integrated expression and statement of the terms and conditions of this Agreement among the parties hereto concerning the subject matter addressed herein, and supercedes all prior negotiations, representations or agreements, oral or written, that may be related to the subject matter of this Agreement.

22. Construction and Interpretation. It is agreed and acknowledged by the Principal that the provisions of this Agreement have been arrived at through negotiation, and that the Principal has had a full and fair opportunity to revise the provisions of this Agreement and to have such provisions reviewed by legal counsel. Therefore, the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not apply in construing or interpreting this Agreement.

23. Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and assigns of the parties hereto.

24. Time. Time is of the essence in the performance of each and every term of this Agreement.

SIGNATURE PAGE FOLLOWING

ITEM 16.8.

**ATTACHMENT 2
Contract No. 2021-301**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first set forth above, which date shall be considered by the Parties to be the effective date of this Agreement.

CITY OF RANCHO CORDOVA,
California Municipal Corporation

MONTELENA DOUGLAS, LLC.
California Limited Liability Company

Cyrus Abhar, City Manager

Charles Sommers, Managing Member

Date: _____

Date: _____

ATTEST:

Stacy Leitner, CMC, City Clerk

APPROVED AS TO FORM:

Adam U. Lindgren, City Attorney

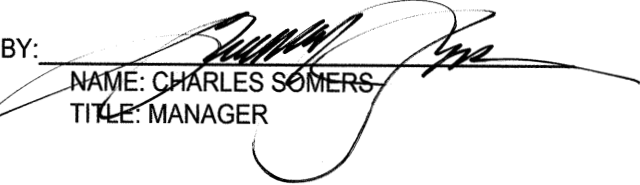
Date: _____

OWNER'S STATEMENT

THE UNDERSIGNED HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP OF "SUBDIVISION NO. RC-04-132.4 FINAL MAP OF MONTELENA VILLAGE 4", THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES. THE UNDERSIGNED OFFERS FOR DEDICATION AND DOES HEREBY DEDICATE TO ANY AND ALL PUBLIC USES THE PUBLIC ROADS DESIGNATED MONTELENA DRIVE, ARMANDI WAY, BATIA WAY AND MIRECOURT CIRCLE SHOWN HEREON, AND ALSO OFFERS FOR DEDICATION AND DOES HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

- A. AN EASEMENT FOR CONSTRUCTING AND MAINTAINING CENTRALIZED MAIL DELIVERY BOXES, PEDESTALS AND SLABS, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, INCLUDING PEDESTRIAN ACCESS FOR DELIVERY AND RECEIPT OF MAIL ON, OVER, UNDER AND ACROSS STRIPS OF LAND FIVE (5.00) FEET IN WIDTH, LYING CONTIGUOUS TO THE RIGHT-OF-WAYS MONTELENA DRIVE, ARMANDI WAY, BATIA WAY AND MIRECOURT CIRCLE SHOWN HEREON.
- B. EASEMENTS FOR PLANTING AND MAINTAINING TREES, INSTALLATION AND MAINTENANCE OF ELECTROLIERS, TRAFFIC CONTROL DEVICES, WATER AND GAS PIPES, AND FOR UNDERGROUND WIRES AND CONDUITS FOR ELECTRICAL, TELEPHONE AND TELEVISION SERVICES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND TWELVE AND ONE-HALF (12.5) FEET, IN WIDTH AND CONTIGUOUS TO THE PUBLIC ROADS DESIGNATED MONTELENA DRIVE, ARMANDI WAY, BATIA WAY AND MIRECOURT CIRCLE SHOWN HEREON AND DESIGNATED "PUBLIC UTILITY EASEMENT" (P.U.E.).

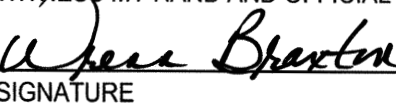
MONTELENA DOUGLAS, LLC
A CALIFORNIA LIMITED LIABILITY COMPANY

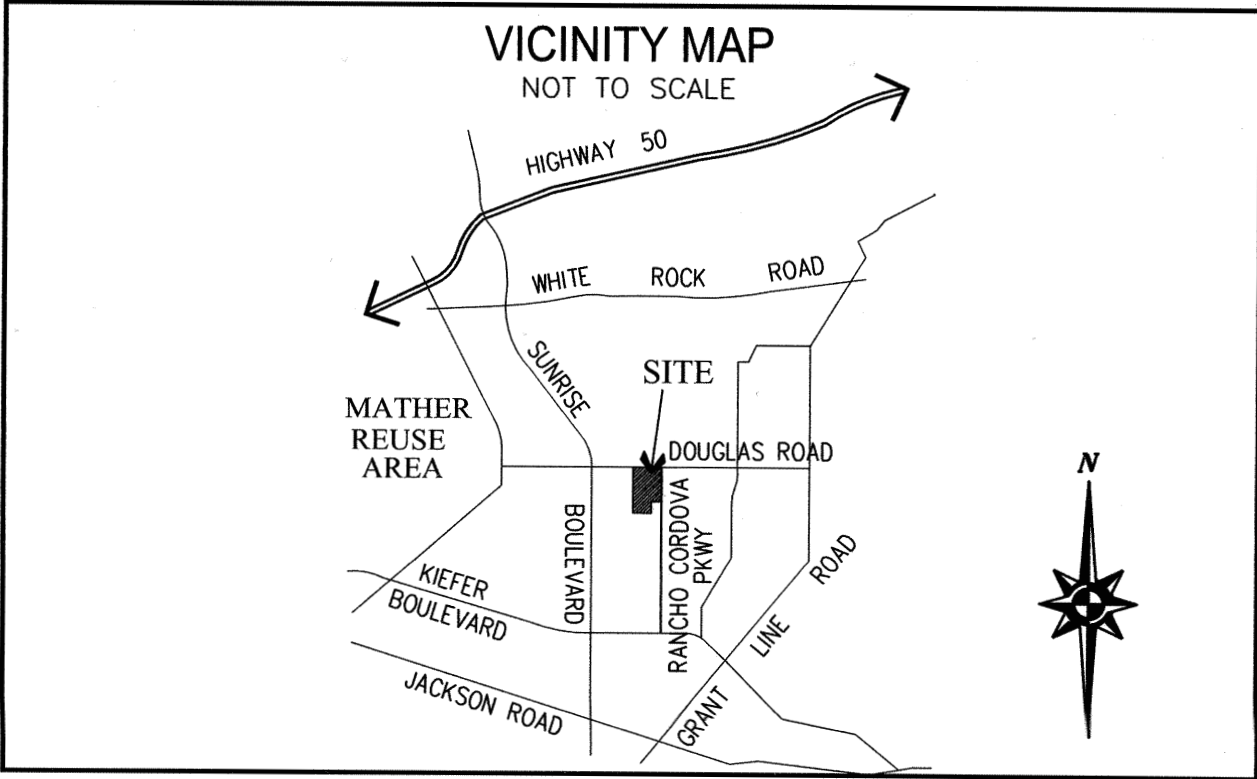
BY: 
NAME: CHARLES SOMERS
TITLE: MANAGER

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
COUNTY OF SACRAMENTO
ON SEP. 20, 2021 BEFORE ME, WRENN BRAXTON, A NOTARY PUBLIC
PERSONALLY APPEARED CHARLES SOMERS
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.
WITNESS MY HAND AND OFFICIAL SEAL.
 WRENN BRAXTON
SIGNATURE PRINTED NAME
MY PRINCIPAL PLACE OF BUSINESS IS SACRAMENTO COUNTY
MY COMMISSION EXPIRES: OCT. 30, 2021 MY COMMISSION NUMBER: 2216812



CITY ENGINEER'S STATEMENT

I, HEREBY STATE THAT I HAVE EXAMINED THIS MAP OF "SUBDIVISION NO. RC-04-132.4 FINAL MAP OF MONTELENA VILLAGE 4" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP APPROVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.



CITY ENGINEER, ALBERT STRICKER
R.C.E. 64057
EXPIRATION DATE: 09/30/2022

DATE: _____

CITY SURVEYOR'S STATEMENT

I, HEREBY STATE THAT I AM SATISFIED THAT THIS MAP OF "SUBDIVISION NO. RC-04-132.4 FINAL MAP OF MONTELENA VILLAGE 4" IS TECHNICALLY CORRECT.



CITY SURVEYOR, CYRUS E. ABHAR
P.L.S. 7723
EXPIRATION DATE: 12/31/2021

DATE: _____

CITY CLERK'S STATEMENT

I, HEREBY STATE THAT THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HAS APPROVED THIS MAP OF "SUBDIVISION NO. RC-04-132.4 FINAL MAP OF MONTELENA VILLAGE 4" AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, ALL LANDS, EASEMENTS AND RIGHTS-OF-WAY SHOWN HEREON AS THE CIRCLE, DRIVE AND WAYS TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, SUBJECT TO THE IMPROVEMENT THEREOF AND DO CERTIFY THE ABANDONMENT OF THE EASEMENTS LISTED HEREON.

STACY LEITNER, CITY CLERK
CITY OF RANCHO CORDOVA, CALIFORNIA

DATE: _____

RECORDER'S STATEMENT

FILED THIS _____ DAY OF _____, 2021, AT _____ M. IN BOOK _____ OF MAPS, AT PAGE _____ AT THE REQUEST OF MACKAY & SOMPS CIVIL ENGINEERS, INC.

DONNA ALLRED, COUNTY RECORDER
FEE: \$ _____
CERTIFICATE NO.: _____
BY: _____ FILE NO.: _____
DEPUTY COUNTY RECORDER

SUBDIVISION NO. RC-04-132.4
FINAL MAP OF
MONTELENA VILLAGE 4
BEING ALL OF LOT 3 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED FOR RECORD IN BOOK 406 OF MAPS, AT PAGE 6, SACRAMENTO COUNTY RECORDS, SITUATED IN FRACTIONAL SECTION 8, TOWNSHIP 8 NORTH, RANGE 7 EAST, M.D.M.
CITY OF RANCHO CORDOVA • SACRAMENTO COUNTY • CALIFORNIA
Mackay & Somps
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189
SEPTEMBER 2021
SHEET 1 OF 4 27042.040

SURVEYOR'S STATEMENT

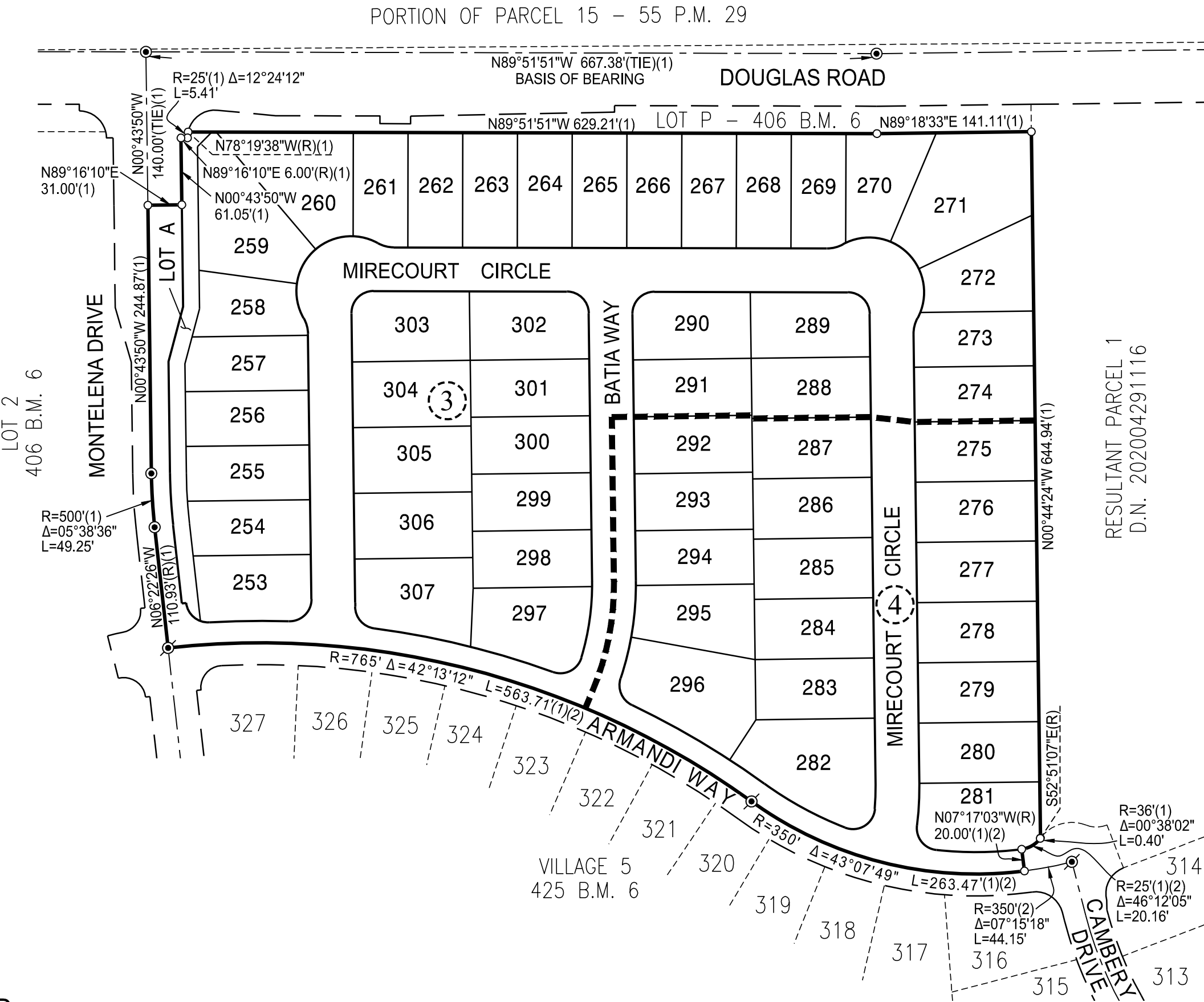
THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF MONTELENA DOUGLAS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY IN MARCH, 2014. I HEREBY STATE THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITION INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS BEFORE DECEMBER 31, 2023, AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, AND THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP.

MACKAY & SOMPS CIVIL ENGINEERS, INC.




PAUL FERGUSON, JR., P.L.S. 9265
EXPIRATION DATE: MARCH 31, 2022

DATE: 9/14/2021



LEGEND	
	FOUND MONUMENT AS NOTED
	3/4" IRON PIPE WITH PLASTIC PLUG STAMPED "LS 5760" TO BE SET PER (1)
	3/4" IRON PIPE WITH PLASTIC PLUG STAMPED "LS 9265" TO BE SET PER (2)
	SET 3/4" IRON PIPE WITH PLASTIC CAP STAMPED "LS 9265"
	DIMENSION POINT ONLY (SEE NOTES 7 & 8 RE: LOT CORNER MONUMENTS)
	RECORD DATA PER REFERENCE
B.M.	BOOK OF MAPS
COR	CORNER
DN	DOCUMENT NUMBER
I.O.D.	IRREVOCABLE OFFER OF DEDICATION
L.E.	LANDSCAPE EASEMENT
(OA)	OVERALL
P.E.	PEDESTRAIN EASEMENT
P.U.E.	PUBLIC UTILITY EASEMENT
(R)	RADIAL BEARING
R/W	RIGHT-OF-WAY
S.F	SQUARE FEET
	SHEET REFERENCE
	BOUNDARY
	RIGHT OF WAY
	LOT LINE
	EX R/W AND I.O.D.
	CENTER LINE
	EASEMENT LINE
	SECTION LINE
	ADJACENT PROPERTY LINE

NOTES

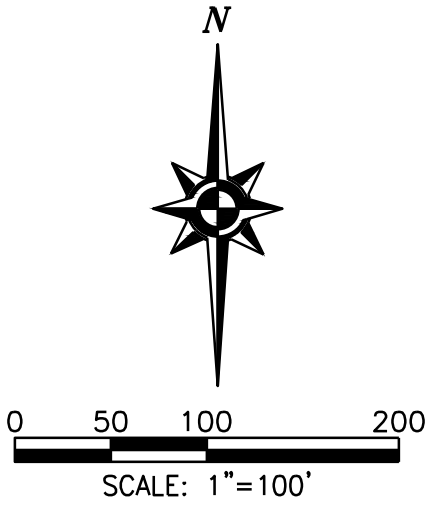
- ALL CURVE DIMENSIONS ARE RADIUS, DELTA AND ARC LENGTH. ALL DISTANCES SHOWN ARE GROUND DISTANCES AND ARE IN FEET AND DECIMALS THEREOF. DUE TO ROUNDING THE SUM OF INDIVIDUAL DIMENSIONS MAY NOT EQUAL THE OVERALL DIMENSION.
- TOTAL AREA OF THIS MAP IS 10.214 ± ACRES, CONSISTING OF 55 LOTS AND 1 MISCELLANEOUS LOT.
- A PRELIMINARY SOILS REPORT WAS PREPARED WALLACE-KUHL AND ASSOC., WKA NO. 6961.18, DATED DECEMBER 12, 2013. A COPY OF THIS REPORT IS AVAILABLE FOR PUBLIC INSPECTION AT THE CITY OF RANCHO CORDOVA BUILDING INSPECTION DEPARTMENT.
- THERE SHALL BE A 12.5 FOOT WIDE PUBLIC UTILITY EASEMENT WITHIN EACH LOT ALONG ALL PUBLIC RIGHTS-OF-WAY AS SHOWN HEREON.
- THERE SHALL BE A 5.00 FOOT POSTAL EASEMENT LOCATED ALONG THE STREET RIGHT-OF-WAYS SHOWN HEREON.
- LOT A SHALL BE GRANTED IN FEE SIMPLE TO CITY OF RANCHO CORDOVA FOR LANDSCAPE PURPOSES BY SEPARATE DOCUMENT.
- ALL FRONT LOT CORNERS WILL BE SET ON 1.00 FOOT OFFSET ONTO THE SIDEWALK ON THE SIDE PROPERTY LINE EXTENDED WITH A 1" DIAMETER BRASS DISC STAMPED "LS 9265".
- ALL REAR LOT CORNERS AND ANGLE POINTS WILL BE SET WITH 5/8" REBAR, WITH 1-1/2" ALUMINUM "LS 9265", WHERE MONUMENTS FALL WITHIN A RETAINING WALL, SOUND WALL OR CONCRETE FOOTING, A 5/8" REBAR WITH 1-1/2" ALUMINUM CAP STAMPED "LS 9265" WILL BE SET ON THE SIDE LOT LINE ON A FOUR (4) FOOT OFFSET TO THE REAR LOT CORNER OR A 3/4" BRASS TAG STAMPED "LS 9265" WILL BE SET TWO (2) FEET ABOVE GROUND WHERE AN OFFSET MONUMENT CANNOT BE SET.
- PURSUANT TO SECTION 66434(G) OF THE GOVERNMENT CODE, THE FOLLOWING ARE HEREBY ABANDONED:
 - IRREVOCABLE OFFER OF DEDICATION (I.O.D.) OF MONTELENA DRIVE AND THE I.O.D. WITHIN LOT 3 PER 406 B.M. 6 (RE-DEDICATED WITH THIS MAP).
 - PUBLIC UTILITY EASEMENT (P.U.E.) ALONG IRREVOCABLE OFFER OF DEDICATION OF THE I.O.D. WITHIN LOT 3 PER 406 B.M. 6 (RE-DEDICATED WITH THIS MAP).
 - P.E./L.E./P.U.E. ALONG THE IRREVOCABLE OFFER OF DEDICATION OF MONTELENA DRIVE WITHIN LOT 3 PER 406 B.M. 6 (RE-DEDICATED WITH THIS MAP).

BASIS OF BEARINGS

THE BEARING NORTH 89°51'51" WEST AS SHOWN BETWEEN FOUND MONUMENTS ALONG THE CENTERLINE OF DOUGLAS ROAD AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED IN BOOK 406 OF MAPS, AT PAGE 6, SACRAMENTO COUNTY RECORDS IS THE BASIS OF BEARINGS FOR THIS MAP.

REFERENCES

- (1) 406 B.M. 6 - LARGE LOT MAP
(2) 425 B.M. 5 - MONTELENA VILLAGE 5



SUBDIVISION NO. RC-04-132.4

FINAL MAP OF

MONTELENA VILLAGE 4

BEING ALL OF LOT 3 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED FOR RECORD IN BOOK 406 OF MAPS, AT PAGE 6, SACRAMENTO COUNTY RECORDS, SITUATED IN FRACTIONAL SECTION 8, TOWNSHIP 8 NORTH, RANGE 7 EAST, M.D.M.

CITY OF RANCHO CORDOVA • SACRAMENTO COUNTY • CALIFORNIA

SEPTEMBER 2021

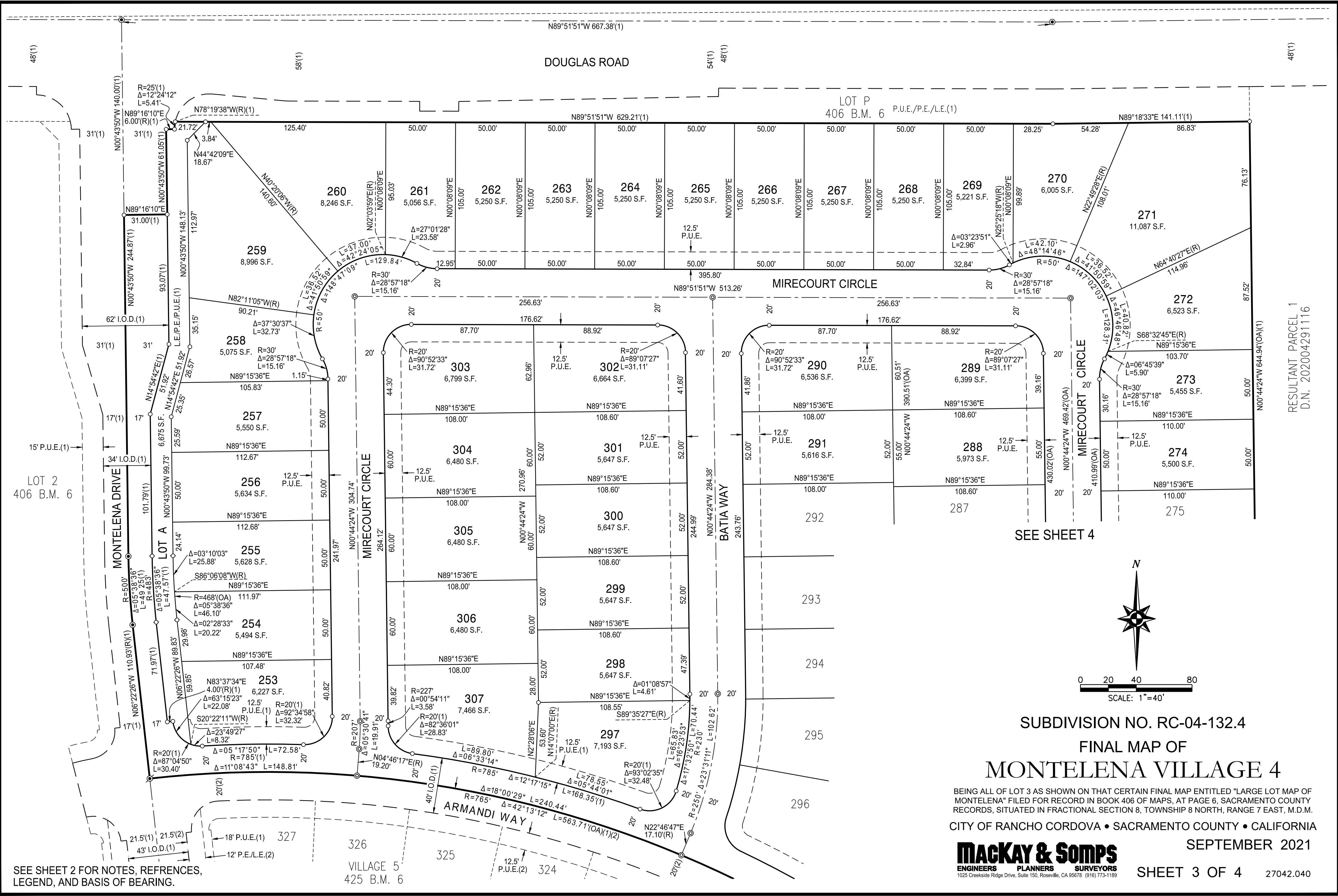
SHEET 2 OF 4

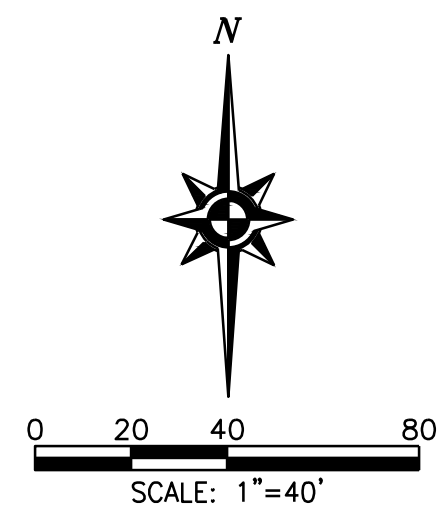
27042.040

MacKAY & SompS

ENGINEERS PLANNERS SURVEYORS

1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189





BEING ALL OF LOT 3 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED FOR RECORD IN BOOK 406 OF MAPS, AT PAGE 6, SACRAMENTO COUNTY RECORDS, SITUATED IN FRACTIONAL SECTION 8, TOWNSHIP 8 NORTH, RANGE 7 EAST, M.D.M.

CITY OF RANCHO CORDOVA • SACRAMENTO COUNTY • CALIFORNIA

SHEET 4 OF 4 27042.040

SEE SHEET 2 FOR NOTES, REFERENCES,
LEGEND, AND BASIS OF BEARING.



FINAL MAP OF MONTELENA VILLAGE 4

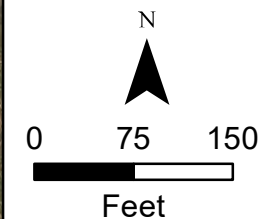
DOUGLAS RD

VALANCE WAY

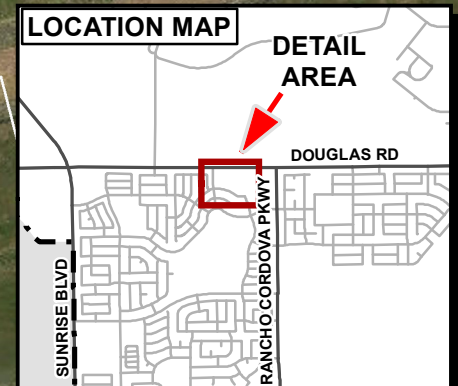
ARMANDI WAY

MONTELENA DR

EFFORT WAY



Aerial Photo Date: March 2018



MEMORANDUM



ITEM 16.9.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director
Quoc Nham, Senior Civil Engineer

SUBJECT: **A RESOLUTION APPROVING THE FINAL MAP OF MONTELENA VILLAGE 6, SUBDIVISION NO. FM-2014-007-42, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE SUBDIVISION IMPROVEMENT AGREEMENT CONTRACT NO. 2021-302 WITH MONTELENA DOUGLAS LLC.**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the resolution will authorize the City Manager to execute Subdivision Improvement Agreement Contract No. 2021-302, Attachment 2, guaranteeing the construction of public roads and utilities with Montelena Douglas, LLC. and the recording of the final subdivision map for Montelena Village 6, creating 38 residentially zoned lots located south of Douglas Road and west of Rancho Cordova Parkway.

BACKGROUND

The map has been examined and checked for compliance with Title 22 of the City of Rancho Cordova Municipal code and the California Subdivision Map Act. The City Council approved the Tentative Map on March 20, 2006. A Development Agreement by the City and CP Sunridge, LLC was entered into on April 3, 2006. Montelena Douglas, LLC was assigned all of the interest of CP Sunridge, LLC in the Agreement in 2008 dated February 14, 2008, and recorded on February 15, 2008, in the Official Records of Sacramento County at Book 20080215, Page 0899. A copy of the final map, Attachment 3, and copy of the vicinity map, Attachment 4, are included with this letter.

Roads are offered for dedication with this subdivision. Montelena Douglas, LLC. has provided a performance and labor and material bond guaranteeing the construction of the public improvements. MacKay & Soms, Inc. has waived the requirement for a bond to guarantee

payment for setting the survey monuments with the subdivision. The soil report requirement has been satisfied by Wallace-Kuhl and Associates dated December 12, 2013.

There are no delinquent taxes against the property and the Tax Collector has so certified. The 2020/2021 estimated taxes have been secured with the Sacramento County Tax Collector.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact to the City.

ATTACHMENT(S)

1. Resolution
2. Subdivision Improvement Agreement Montelena V6
3. Final Map Montelena V6
4. Vicinity Map Montelena V6

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, APPROVING THE FINAL MAP OF MONTELENA VILLAGE 6, SUBDIVISION NO. FM-2014-007-42, AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE SUBDIVISION IMPROVEMENT AGREEMENT CONTRACT NO. 2021-302 WITH MONTELENA DOUGLAS, LLC.

WHEREAS, the City Council approved the Tentative Map on March 20, 2006 per Resolution No. 26-2006; and

WHEREAS, the map is in substantial compliance with the approved tentative map; and

WHEREAS, the conditions of approval have been complied with; and

WHEREAS, the map complies with Title 22 of the City of Rancho Cordova municipal code and the California Subdivision Map Act; and

WHEREAS, the approval of final maps is exempt from review under the California Environmental Quality Act (CEQA) pursuant to CEQA Regulation Section 15268(b)(3) as a ministerial approval; and

WHEREAS, the City desires to enter into a subdivision improvement agreement with the developer to ensure necessary public improvements are completed and secured with a bond.

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does approve the Final Map of Montelena Village 6, Subdivision No. FM-2014-007-42 and does authorize the City Manager to execute Subdivision Improvement Agreement Contract No. 2021-302 with Montelena Douglas, LLC., in a form approved by the City Attorney.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Garrett Gatewood, Mayor

ITEM 16.9.

ATTACHMENT 1

Stacy Leitner, CMC
City Clerk

SUBDIVISION IMPROVEMENT AGREEMENT**MONTELENA VILLAGE 6 SUBDIVISION NO. FM-2014-007-42**

THIS SUBDIVISION IMPROVEMENT AGREEMENT (hereinafter, "Agreement") entered into this _____ day of _____, 20__, by and between the City of Rancho Cordova, (hereinafter "City"), a California municipal corporation, and **Montelena Douglas, LLC.**, a California limited liability company (hereinafter "Principal").

RECITALS

WHEREAS, Section 66462 of the Government Code provides that if the work of improvement required therein is not completed prior to the acceptance of a final subdivision map, the owner of the subdivision may enter into an agreement with the City to perform the work of improvement as required by said sections in consideration of the acceptance of said final subdivision map by the City; and

WHEREAS, Section 66499 of the Government Code requires that said agreement be secured by a surety bond or by an instrument of credit issued by a financial institution subject to regulation by the State or federal governments or by a cash deposit; and

WHEREAS, Section 66499.3 establishes the types and amount of security to guarantee the performance of any such improvement agreement; and

WHEREAS, City and Principal desire to enter into an improvement agreement as authorized by the Subdivision Map Act under the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual promises, conditions and covenants hereinafter set forth, City and Principal agree as follows:

1. **Incorporation of Recitals.** The foregoing recitals are hereby incorporated by reference.
2. **Findings and Conditions of Subdivision Map.** Principal recognizes that approval of its subdivision was subject to the findings and conditions attached to such approval and hereby acknowledges and agrees to be bound by such findings and conditions.
3. **City Approval of Subdivision Map.** City agrees to approve the final map of the subdivision presented to it by Principal and designated **Montelena Village 6 Subdivision No. FM-2014-007-42** and to accept on behalf of the public all lands, rights of way and easements therein offered in dedication, in accordance with the conditions hereinafter set forth.
4. **Completion of Improvements.** In consideration of such approval, Principal

agrees to complete the work of improvement required for said subdivision in accordance with the requirements of the Rancho Cordova Municipal Code and such standard specifications created by applicable City ordinances or resolutions which are in effect at the time of the installation of said improvements. The work required may lie within or outside the subdivision and must be completed within **24** months of the date of this Agreement.

5. Payment For Services. Principal further agrees to promptly pay, when due, all costs for plan checking, inspection services and material testing performed by City pursuant to the requirements of Sections 12.03.210 et. seq. of the Rancho Cordova Municipal Code.

6. Community Facilities Renovation Fee. Principal acknowledges that under the terms of the Development Agreement [Amended and Restated Development Agreement By and Between the City of Rancho Cordova and Montelena Douglas, LLC, Chrysanthy Rd. Inv., LLC and Premier Chrysanthy, LLC for Villages 1, 2, 4, 6, 8, and Vacant Parcels in Villages 9 and 10] Recorded as Sacramento County Recorder # _____. Principal is obligated to pay the City a fee in the amount of **\$One Thousand Five Hundred Seven Dollars and Seventy Cents (\$1,507.70)** per single family lot within the Final Map ("Park Renovation Fee"). Principal acknowledges and agrees that such fee will be paid prior to the issuance of a building permit for the respective lot.

7. Acceptance of Improvements. Upon satisfactory completion of all public improvements in accordance with standard specifications created by City ordinances or resolutions which are in effect at the time of the installation of said improvements, City agrees to accept for maintenance the work of improvement within the dedicated parcels shown on said final subdivision map, and any off site easements granted, subject to the provisions of paragraph 9 hereof. Acceptance will be postponed until such time the City determines a public purpose exists. Public Purpose is defined as existence of habitable structures within the subdivision.

8. Notice of Commencement of Work. Principal shall notify the City Engineer in writing of the commencement of the work of improvements.

9. Correction of Defects. Principal agrees to remedy any defects in the improvement arising from faulty or defective construction of said improvements occurring within twelve months after acceptance thereof by City.

10. Indemnity. Principal shall indemnify and hold harmless with counsel selected by the City, the City of Rancho Cordova, its agents, officers, consultants, and employees ("City") from any and all loss, damage or liability arising out of or resulting from Principal's performance or non-performance of his duties and obligations under this Agreement, or from the negligent

act or omission of himself, his agents, servants and employees. Principal shall, at his own cost and expense, defend any and all actions, suits, or legal proceedings arising out of or resulting from the performance or nonperformance of this Agreement, that may be brought or instituted against the City, its officers and employees, on any such claim or demand, and pay or satisfy any judgment that may be rendered against the City in any such action, suit or legal proceedings, or result thereof, regardless whether caused in part by a party indemnified hereunder.

11. Extension of Completion Date. If the construction of the work or improvement should be delayed without fault of Principal, the time for completion thereof may be extended by City for such period of time as City may deem reasonable.

12. Improvement Security. (a) Principal shall obtain and furnish to City an improvement security consisting of a surety bond in favor of City, issued by a corporate surety authorized to do business in the State of California, and in form approved by City, securing the faithful performance by Principal of the work of improvement required, and also securing the payment of the costs and interest, if any, due under Sections 12.030.210 et seq. of the Rancho Cordova Municipal Code, as provided in Paragraph 5 herein and an additional bond issued by a corporate surety authorized to do business in the State of California, in the amount of not less than 50 percent of the total estimated cost of the improvement, securing payment to contractor, his subcontractors, and to persons renting equipment or furnishing labor or materials for the improvement.

(b) In lieu of said corporate surety bonds, Principal may furnish an improvement security consisting of a letter of credit, certificate of deposit, or similar instrument of credit, in form satisfactory to City, issued by a financial institution subject to regulation by the State or Federal government, pledging that the funds necessary to meet the performance required herein are on deposit, and guaranteed for payment on demand. Said letter of credit, certificate of deposit, or similar instrument of credit shall provide that the funds designated therein shall become trust funds for the purposes set forth in said instrument.

(c) The failure of Principal to commence the required work of improvements, or to complete the same within the time required after commencement thereof, shall entitle City to the full payment of the security, or so much thereof as may be necessary to complete the required work of improvement. The amount of the surety bond for faithful performance shall be in the sum of **\$587,368.00 (Five Hundred Eighty-Seven Thousand Three Hundred Sixty-Eight Dollars).**

The amount of the surety bond for the payment of the claims of the contractor, his subcontractors, and to persons renting equipment or furnishing labor or materials for the

improvement shall be at least 50 percent of the above amount. The letter of credit, certificate of deposit or similar instrument of credit, or cash deposit for faithful performance, shall be in the above amount plus an additional 50 percent for the purposes set forth herein.

13. Improvement Security As Condition Precedent. The furnishing of the improvement security by Principal as required by paragraph 12 hereof shall be a condition precedent to acceptance by City of the above described real property and the performance by the City of the covenants herein on its part to be performed.

14. Inspection of Work In Progress. (a) Principal may request The City Engineer to inspect the work as it progresses. If the work performed is found to be in accordance with the requirements of City, it may be accepted as it progresses and a partial refund of the cash deposit, or a release pro tanto of the faithful performance bond, letter of credit, certificate of deposit or similar instrument of credit shall be made in a sum in the same ratio to the total deposit as the work accepted bears to the total work to be done. No refund in excess of 85 percent of the total amount of the improvement security for faithful performance shall be made until all the work has been completed and accepted.

(b) The determination of the Administrator of Public Works of City as to the amount of work done, and the amount of refund or partial release pro tanto, shall be final and conclusive. When the work of improvement is accepted, 10 percent of the improvement security shall be retained to guarantee faithful performance of the provisions of paragraph 9 of this Agreement.

(c) Improvement security given to secure payment to contractor, his subcontractors and to persons renting equipment or furnishing labor or materials for the work of improvement may, six months after completion and acceptance of the work, be reduced to an amount not less than the total of all claims on which an action has been filed, and notice thereof given in writing to City, and if there are no actions filed, such improvement security may be released in full.

15. Execution By Real Party In Interest. Where title to the subdivision property is held by the record owner thereof under a holding Agreement, this Agreement and the bond given pursuant thereto must be executed by the real party or parties in interest.

16. Waiver of Civil Code Section 2819. Any extension of time hereunder shall not operate to release the surety on the bond filed pursuant to this Agreement. In this connection the surety waives the provisions of Section 2819 of the Civil Code of the State of California.

17. City Construction of Improvements. In the event that all or any portion of the works of improvement contemplated herein are proposed to be constructed by street improvement proceedings under the control of City, the undertaking of such proceedings shall in

no way relieve Principal of any duties under this Agreement, except where all of the works of improvement that are required under this Agreement have in fact been constructed and accepted by City.

18. Interest. Interest shall accrue at the highest rate permitted by law on all sums from the date payment is due under the terms of this Agreement and the sum due is certain or reasonably capable of being made certain.

19. Attorneys' Fees. In the event that it is necessary for the City to enforce the obligations secured by the improvement security furnished pursuant to Paragraph 12 hereof, the City shall be entitled to recover its costs and reasonable expenses and fees, including reasonable attorneys' fees, as provided for in Government Code Section 66499.4.

20. Amendments. This Agreement may be modified or amended, or any of its provisions waived, only by a subsequent written agreement executed by the parties hereto.

21. Entire Agreement. This Agreement and any attachments hereto constitute the sole, final, complete, exclusive and integrated expression and statement of the terms and conditions of this Agreement among the parties hereto concerning the subject matter addressed herein, and supercedes all prior negotiations, representations or agreements, oral or written, that may be related to the subject matter of this Agreement.

22. Construction and Interpretation. It is agreed and acknowledged by the Principal that the provisions of this Agreement have been arrived at through negotiation, and that the Principal has had a full and fair opportunity to revise the provisions of this Agreement and to have such provisions reviewed by legal counsel. Therefore, the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not apply in construing or interpreting this Agreement.

23. Successors and Assigns. This Agreement shall bind and inure to the benefit of the respective successors and assigns of the parties hereto.

24. Time. Time is of the essence in the performance of each and every term of this Agreement.

SIGNATURE PAGE FOLLOWING

ITEM 16.9.

**ATTACHMENT 2
Contract No. 2021-302**

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first set forth above, which date shall be considered by the Parties to be the effective date of this Agreement.

CITY OF RANCHO CORDOVA,
California Municipal Corporation

MONTELENA DOUGLAS, LLC.
California Limited Liability Company

Cyrus Abhar, City Manager

Charles Sommers, Managing Member

Date: _____

Date: _____

ATTEST:

Stacy Leitner, CMC, City Clerk

APPROVED AS TO FORM:

Adam U. Lindgren, City Attorney

Date: _____

OWNER'S STATEMENT

THE UNDERSIGNED HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS MAP OF SUBDIVISION NO. FM 2014-007-42 FINAL MAP OF MONTELENA VILLAGE 6. THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES. THE UNDERSIGNED OFFERS FOR DEDICATION AND DOES HEREBY DEDICATE TO ANY AND ALL PUBLIC USES THE PUBLIC ROADS DESIGNATED ALERIA CIRCLE, BORDERLANDS DRIVE AND CAMBERY DRIVE SHOWN HEREON, AND ALSO OFFERS FOR DEDICATION AND DOES HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

- A.

AN EASEMENT FOR CONSTRUCTING AND MAINTAINING CENTRALIZED MAIL DELIVERY BOXES, PEDESTALS AND SLABS, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, INCLUDING PEDESTRIAN ACCESS FOR DELIVERY AND RECEIPT OF MAIL ON, OVER, UNDER AND ACROSS STRIPS OF LAND FIVE (5.00) FEET IN WIDTH WITHIN EACH RESIDENTIAL LOT, LYING CONTIGUOUS TO THE PUBLIC ROADS: ALERIA CIRCLE, BORDERLANDS DRIVE AND CAMBERY DRIVE SHOWN HEREON.
- B.

EASEMENTS FOR PLANTING AND MAINTAINING TREES, INSTALLATION AND MAINTENANCE OF ELECTROLIERS, TRAFFIC CONTROL DEVICES, WATER AND GAS PIPES, AND FOR UNDERGROUND WIRES AND CONDUITS FOR ELECTRICAL, TELEPHONE AND TELEVISION SERVICES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND TWELVE AND ONE-HALF (12.5) AND TWENTY-TWO AND ONE-HALF (22.5) FEET IN WIDTH AND CONTIGUOUS TO THE PUBLIC ROADS ALERIA CIRCLE, BORDERLANDS DRIVE AND CAMBERY DRIVE SHOWN HEREON AND DESIGNATED "PUBLIC UTILITY EASEMENT" (P.U.E.).
- C.

RIGHTS-OF-WAY AND EASEMENTS FOR THE INSTALLATION AND UNINTERRUPTED USE OF A PEDESTRIAN WALKWAY, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "PEDESTRIAN EASEMENT." (P.E.) THE MAINTENANCE AND REPAIR OF THE WALKWAY SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
- D.

A RIGHT-OF-WAY AND DRAINAGE EASEMENT FOR THE PURPOSE OF DIGGING, CONSTRUCTING, RECONSTRUCTING, REPAIRING, AND FOREVER MAINTAINING THEREON A DRAINAGE CANAL, DITCH, OR PIPELINE FOR DRAINAGE PURPOSES, TOGETHER WITH THE SPOIL BANKS AND APPURTENANT STRUCTURES THEREOF OVER LOT A SHOWN HEREON AND DESIGNATED "DRAINAGE EASEMENT." (D.E.)

MONTELENA DOUGLAS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: 

NAME: CHARLES SOMERS
TITLE: MANAGER

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

ON SEP. 20, 2021 BEFORE ME, WRENN BRAXTON, A NOTARY PUBLIC

PERSONALLY APPEARED CHARLES SOMERS

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

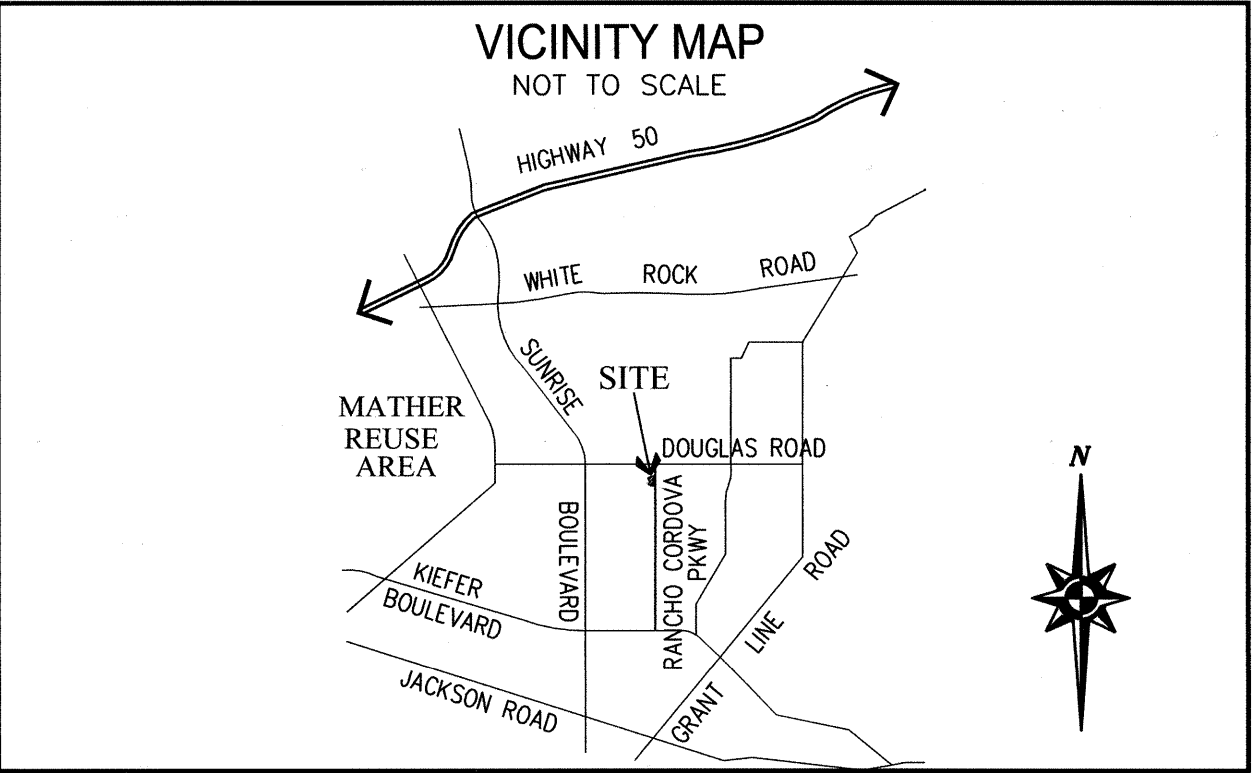
WITNESS MY HAND AND OFFICIAL SEAL.

Wrenn Braxton

SIGNATUREPRINTED NAME

MY PRINCIPAL PLACE OF BUSINESS IS SACRAMENTO COUNTY

MY COMMISSION EXPIRES: OCT. 30, 2021 MY COMMISSION NUMBER: 2216812



CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS MAP OF "SUBDIVISION NO. FM 2014-007-42 FINAL MAP OF MONTELENA VILLAGE 6" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP APPROVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

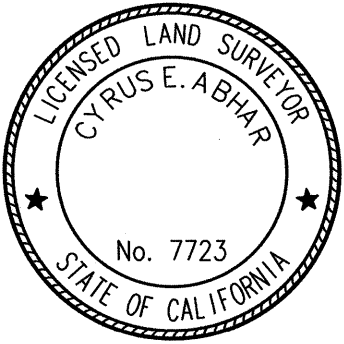


CITY ENGINEER, ALBERT STRICKER
R.C.E. 64057
EXPIRATION DATE: 09/30/2022

DATE: _____

CITY SURVEYOR'S STATEMENT

I HEREBY STATE THAT I AM SATISFIED THAT THIS MAP OF "SUBDIVISION NO. FM 2014-007-42 FINAL MAP OF MONTELENA VILLAGE 6" IS TECHNICALLY CORRECT.



CITY SURVEYOR, CYRUS E. ABHAR
P.L.S. 7723
EXPIRATION DATE: 12/31/2021

DATE: _____

CITY CLERK'S STATEMENT

I HEREBY STATE THAT THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HAS APPROVED THIS MAP OF "SUBDIVISION NO. FM 2014-007-42 FINAL MAP OF MONTELENA VILLAGE 6" AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, ALL LANDS, EASEMENTS AND RIGHTS-OF-WAY SHOWN HEREON AS THE CIRCLE AND DRIVES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, SUBJECT TO THE IMPROVEMENT THEREOF AND DO CERTIFY THE ABANDONMENT OF THE EASEMENTS LISTED HEREON.

STACY LEITNER, CITY CLERK
CITY OF RANCHO CORDOVA, CALIFORNIA

DATE: _____

RECORDER'S STATEMENT

FILED THIS _____ DAY OF _____, 2021, AT _____ M. IN BOOK _____ OF MAPS, AT PAGE _____ AT THE REQUEST OF MACKAY & SOMPS CIVIL ENGINEERS, INC.

DONNA ALLRED, COUNTY RECORDERFEE: \$ _____

CERTIFICATE NO.: _____

BY: _____ FILE NO.: _____
DEPUTY COUNTY RECORDER

SUBDIVISION NO. FM 2014-007-42
FINAL MAP OF
MONTELENA VILLAGE 6

A MERGER AND RESUBDIVISION OF LOT 5 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED FOR RECORD IN BOOK 406 OF MAPS, AT PAGE 6, S.C.R. SITUATED IN FRACTIONAL SECTION 8 AND SECTION 17, TOWNSHIP 8 NORTH, RANGE 7 EAST, M.D.M.

CITY OF RANCHO CORDOVA • SACRAMENTO COUNTY • CALIFORNIA

Mackay & Somps
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

SEPTEMBER 2021

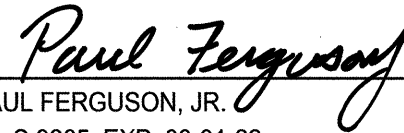
SHEET 1 OF 4 27042.060

SURVEYOR'S STATEMENT

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF MONTELENA DOUGLAS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY IN MARCH, 2014. I HEREBY STATE THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITION INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS BEFORE DECEMBER 31, 2023, AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, AND THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP.

MACKAY & SOMPS CIVIL ENGINEERS, INC.




PAUL FERGUSON, JR.
P.L.S. 9265 EXP. 03-31-22

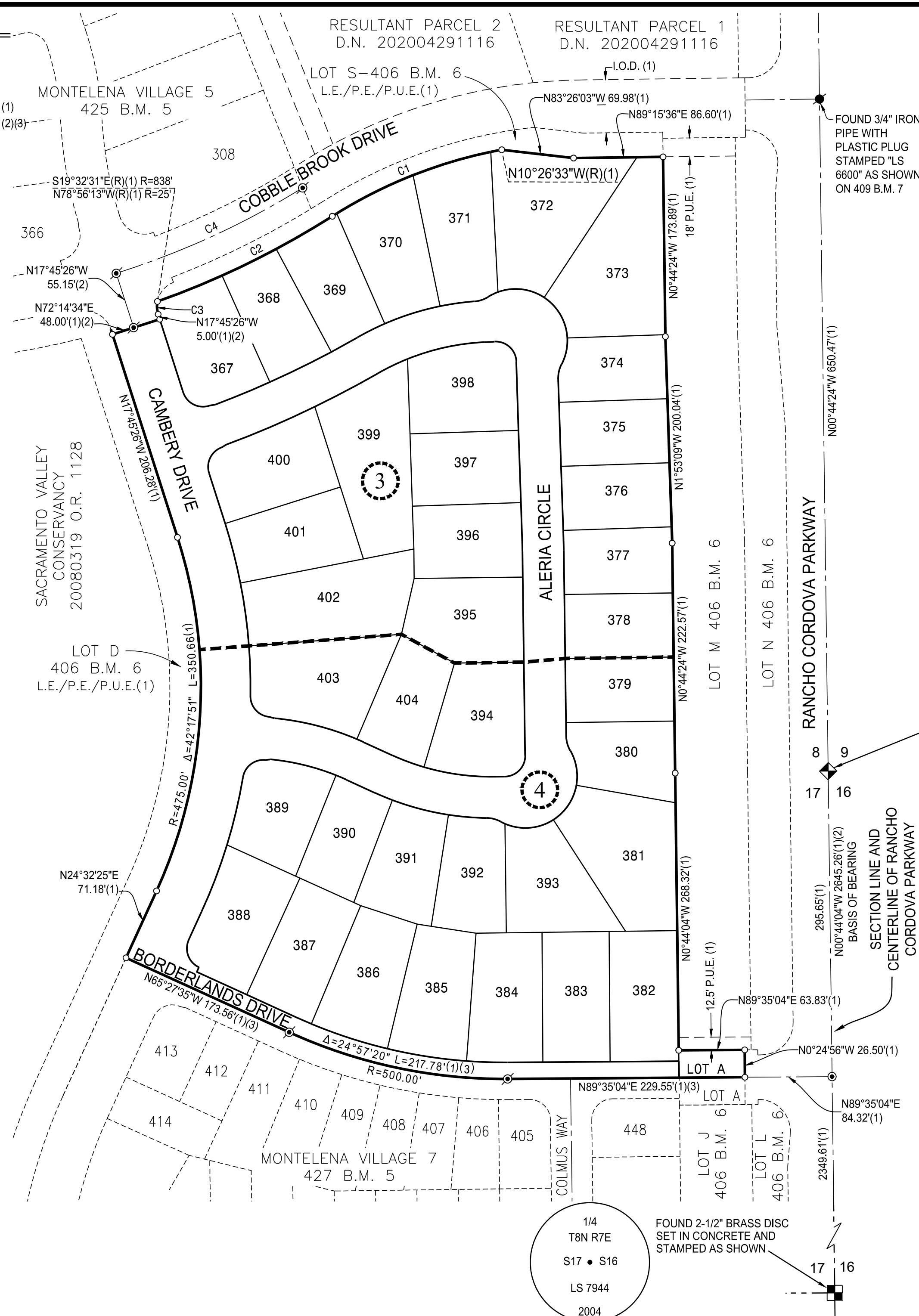
DATE: 9/14/2021

	FOUND SECTION CORNER AS NOTED
	FOUND ONE-QUARTER SECTION CORNER AS NOTED
	FOUND MONUMENT AS NOTED
	3/4" IRON PIPE WITH PLASTIC PLUG STAMPED L
	3/4" IRON PIPE WITH PLASTIC PLUG STAMPED L
	SET 3/4" IRON PIPE WITH PLASTIC PLUG STAMPED L
	DIMENSION POINT
()	RECORD DATA PER REFERENCE
B.M.	BOOK OF MAPS
BNDY	BOUNDARY
D.E.	DRAINAGE EASEMENT
D.N.	DOCUMENT NUMBER
I.O.D.	IRREVOCABLE OFFER OF DEDICATION
(OA)	OVERALL
O.R.	OFFICIAL RECORDS OF SACRAMENTO COUNTY
P.E.	PEDESTRIAN EASEMENT
P.M.	PARCEL MAPS
P.U.E.	PUBLIC UTILITY EASEMENT
(R)	RADIAL BEARING
R.S.	RECORD OF SURVEY
R/W	RIGHT OF WAY
S.F.	SQUARE FEET
	SHEET REFERENCE
_____	BOUNDARY
_____	RIGHT OF WAY
_____	LOT LINE
- - - - -	EXISTING R/W AND I.O.D.
- - - - -	CENTER LINE
- - - - -	EASEMENT LINE
- - - - -	SECTION LINE
- - - - -	ADJACENT PROPERTY LINE

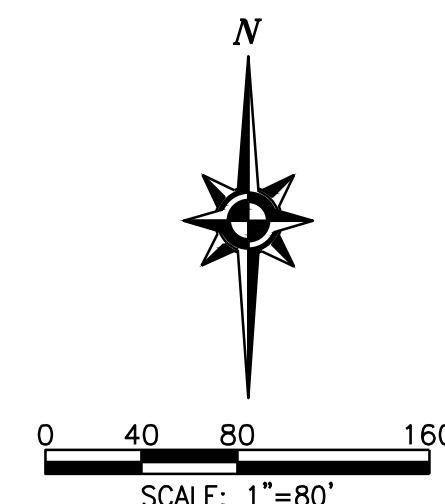
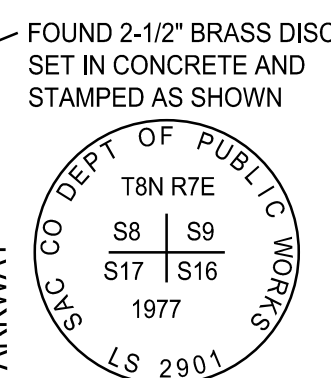
THE BEARING NORTH 00°44'04" WEST AS SHOWN BETWEEN FOUND MONUMENTS ALONG THE EAST LINE OF THE NORTHEAST ONE-QUARTER OF SECTION 17 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED IN BOOK 406 OF MAPS, AT PAGE 6, SACRAMENTO COUNTY RECORDS, IS THE BASIS OF BEARINGS FOR THIS MAP.

- (1) 406 B.M. 6 (LLM)
- (2) 425 B.M. 5 (VILLAGE 5)
- (3) 427 B.M. 5 (VILLAGE 7)

Curve Table			
Curve #	Radius	Delta	Length
C1 (1)	461.50'	21°59'40"	177.16'
C2 (1)	838.00'	12°53'42"	188.60'
C3 (1)	25.00'	28°49'14"	12.58'
C4 (2)	799.50'	14°15'06"	198.87'



1. ALL CURVE DIMENSIONS ARE RADIUS, DELTA AND ARC LENGTH. ALL DISTANCES SHOWN ARE GROUND DISTANCES AND ARE IN FEET AND DECIMALS THEREOF. DUE TO ROUNDING THE SUM OF INDIVIDUAL DIMENSIONS MAY NOT EQUAL THE OVERALL DIMENSION.
2. TOTAL AREA OF THIS MAP IS 9.324± ACRES, CONSISTING OF 38 RESIDENTIAL LOTS AND 1 MISCELLANEOUS LOT.
3. A PRELIMINARY SOILS REPORT WAS PREPARED BY WALLACE-KUHL AND ASSOC., WKA NO. 6961.18, DATED DECEMBER 12, 2013. A COPY OF THIS REPORT IS AVAILABLE FOR PUBLIC INSPECTION AT THE CITY OF RANCHO CORDOVA BUILDING INSPECTION DEPARTMENT.
4. THERE SHALL BE A 12.50 OR 22.50 FOOT WIDE PUBLIC UTILITY EASEMENT WITHIN EACH LOT ALONG ALL PUBLIC RIGHTS-OF-WAY AS SHOWN HEREON.
5. LOT 4 SHALL BE GRANTED IN FEE SIMPLE TO CITY OF RANCHO CORDOVA FOR DRAINAGE PURPOSES BY SEPARATE DOCUMENT.
6. THERE SHALL BE A 5.00 FOOT POSTAL EASEMENT LOCATED WITHIN EACH RESIDENTIAL LOT CONTIGUOUS TO THE PUBLIC ROADS.
7. ALL FRONT LOT CORNERS WILL BE SET ON A 7.00 FOOT OFFSET ONTO THE DETACHED SIDEWALK ON THE SIDE PROPERTY LINE OR AT A 1.00 FOOT PROJECTION ONTO THE ATTACHED SIDEWALK ON THE SIDE PROPERTY LINE EXTENDED WITH A 1" DIAMETER BRASS DISC STAMPED "LS 9265".
8. ALL REAR LOT CORNERS AND ANGLE POINTS WILL BE SET WITH 5/8" REBAR WITH 1-1/2" ALUMINIUM CAP STAMPED "LS 9265", WHERE MONUMENTS FALL WITHIN A RETAINING WALL, SOUND WALL OR CONCRETE FOOTING, A 5/8" REBAR WITH 1-1/2" ALUMINIUM CAP STAMPED "LS 9265" WILL BE SET ON THE SIDE LOT LINE FOUR (4) FOOT OFFSET TO THE REAR LOT CORNER OR A BRASS TAG STAMPED "LS 9265" WILL BE SET TWO (2) FEET ABOVE GROUND, WHERE AN OFFSET MONUMENT CANNOT BE SET.
9. PURSUANT TO SECTION 66434(G) OF THE GOVERNMENT CODE, THE FOLLOWING ARE HEREBY ABANDONED:
 - A) IRREVOCABLE OFFER OF DEDICATION OF CAMBERY DRIVE AND BORDERLANDS DRIVE WITHIN LOT 5 PER 406 B.M. 6 NOT SHOWN HEREON.
 - B) 12.5' L.E./P.E./P.U.E. ALONG THE IRREVOCABLE OFFER OF DEDICATION OF BORDERLANDS DRIVE WITHIN LOT 5 PER 406 B.M. 6 NOT SHOWN HEREON.
 - C) 12.5' P.U.E. ALONG THE IRREVOCABLE OFFER OF DEDICATION OF CAMBERY DRIVE WITHIN LOT 5 PER 406 B.M. 6 NOT SHOWN HEREON.
10. THE KIEFER LANDFILL, OPERATED BY THE SACRAMENTO COUNTY DEPARTMENT OF WASTE MANAGEMENT AND RECYCLING, IS LOCATED APPROXIMATELY 3 MILES SOUTHEASTERLY FROM THIS PROPERTY.



SUBDIVISION NO. FM 2014-007-42

FINAL MAP OF MONTELENA VILLAGE 6

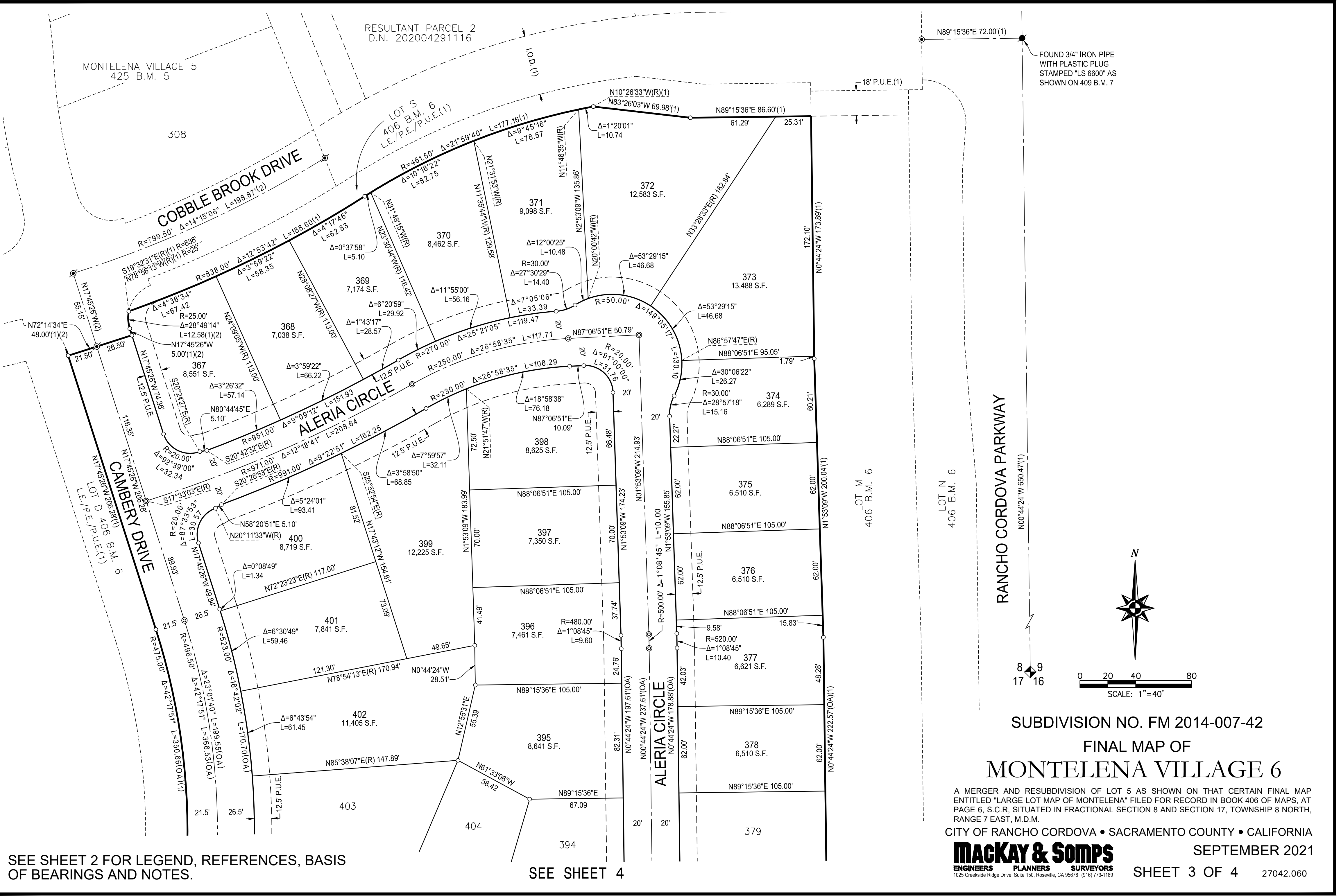
A MERGER AND RESUBDIVISION OF LOT 5 AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "LARGE LOT MAP OF MONTELENA" FILED FOR RECORD IN BOOK 406 OF MAPS, AT PAGE 6, S.C.R, SITUATED IN FRACTIONAL SECTION 8 AND SECTION 17, TOWNSHIP 8 NORTH, RANGE 7 EAST, M.D.M.

CITY OF RANCHO CORDOVA • SACRAMENTO COUNTY • CALIFORNIA

MACKEY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

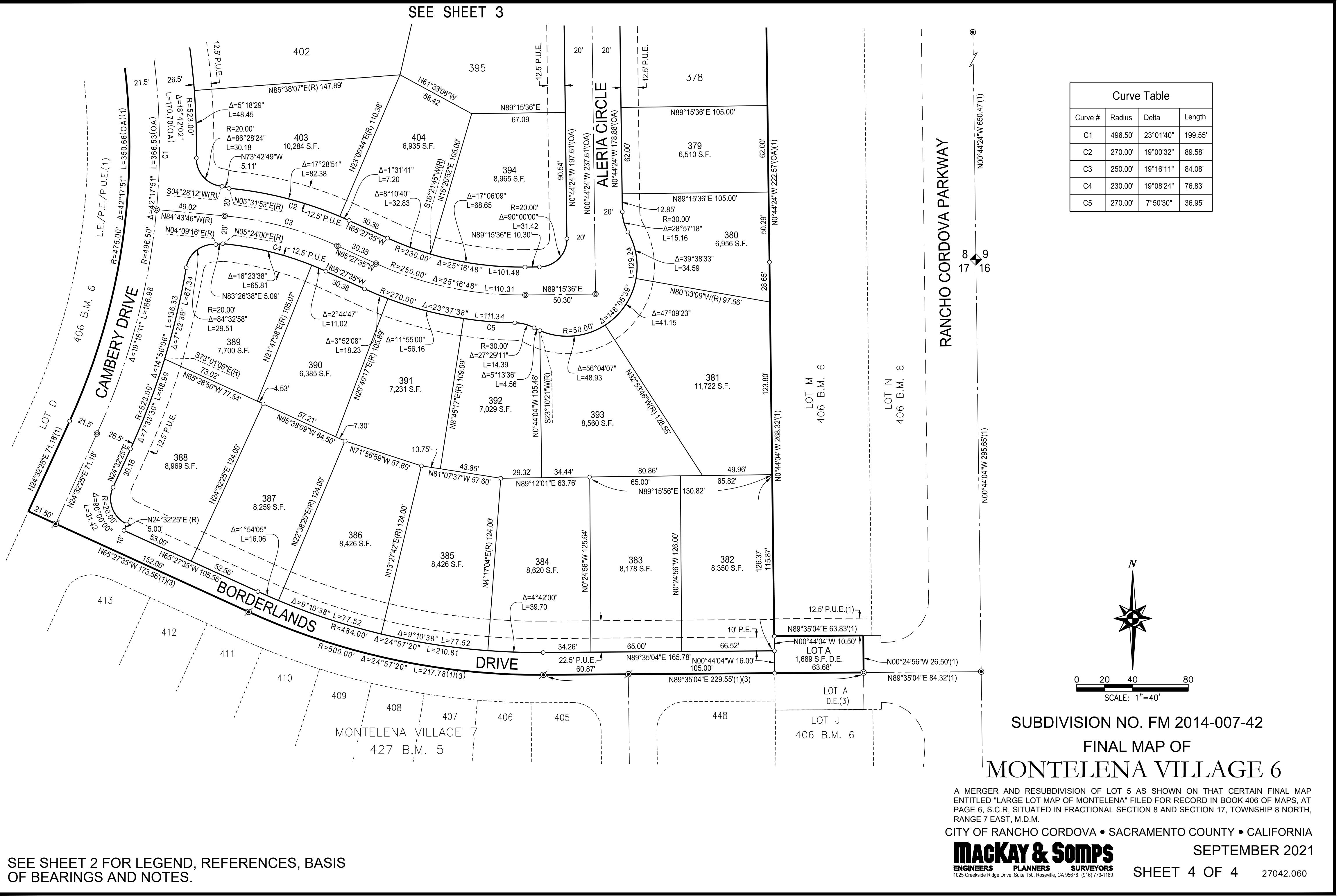
SEPTEMBER 2021

SHEET 2 OF 4 27042.060

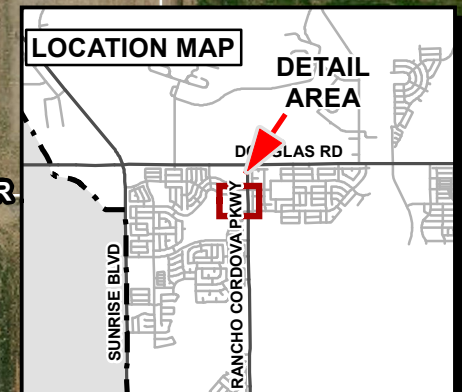
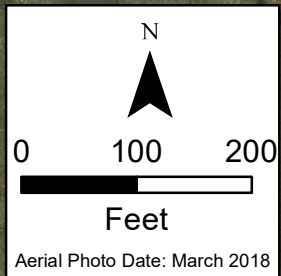
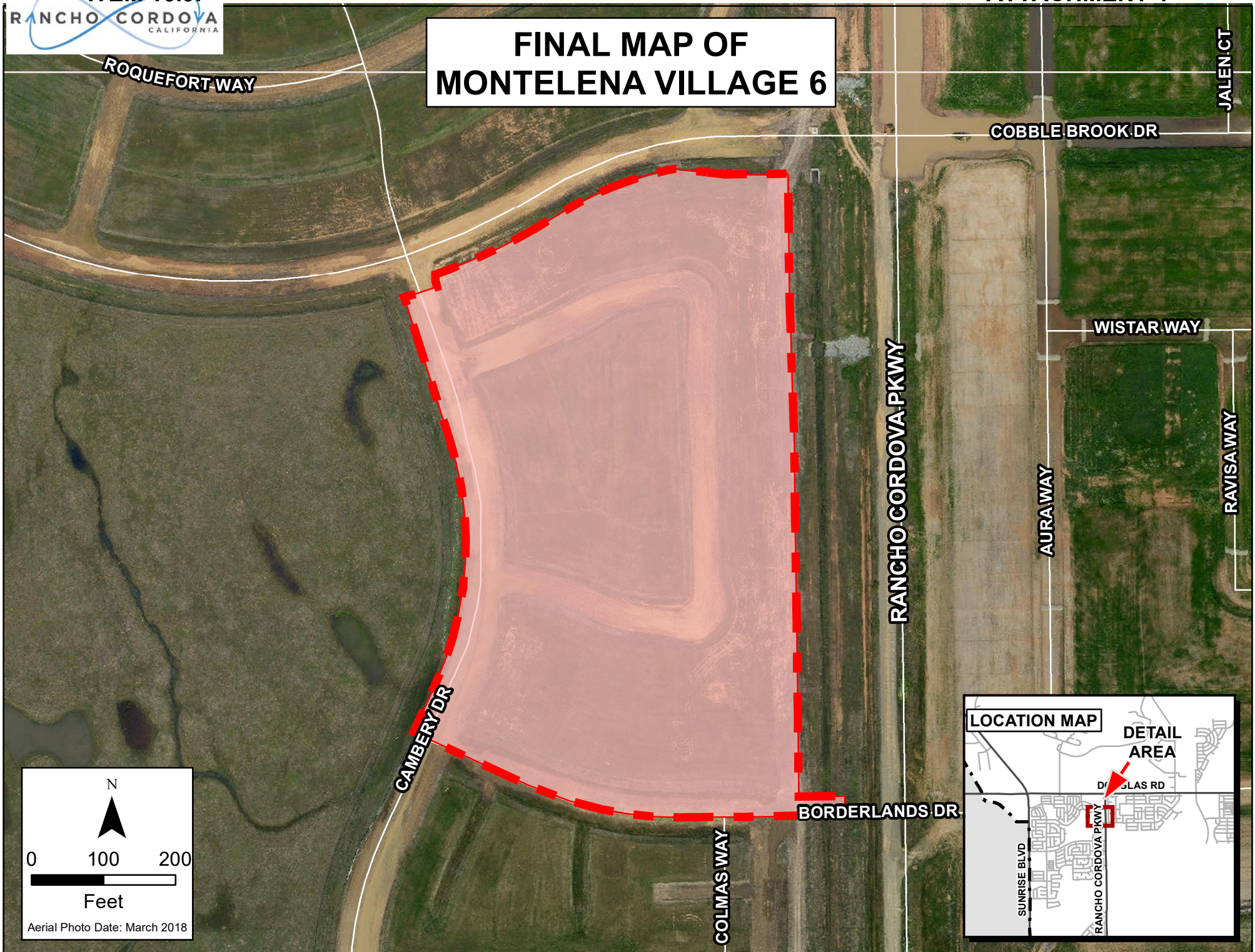


SEE SHEET 2 FOR LEGEND, REFERENCES, BASIS
OF BEARINGS AND NOTES.

SEE SHEET 4



FINAL MAP OF MONTELENA VILLAGE 6



MEMORANDUM



ITEM 17.1.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Elizabeth Sparkman, Community Development Director
SUBJECT: **A RESOLUTION CREATING SPECIAL TAX AREA ZONE 32 AND AN ORDINANCE ESTABLISHING A SPECIAL TAX FOR TRANSIT-RELATED SERVICES FOR THE EXPRESS SEWER AND DRAIN PROJECT**

RECOMMENDATION

Adopt the Resolution creating special tax area Zone 32 and introduce and waive the first reading of the Ordinance, establishing a Special Tax for Transit-Related services for the Express Sewer and Drain project.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution and Ordinance will assist the City in meeting the costs of providing transit-related services by creating a special tax area zone and establishing a special tax for transit-related services for the Express Sewer and Drain project.

BACKGROUND

The City Council adopted Resolution No. 141-2005 on November 7, 2005, providing for a special tax for transit-related services to be imposed upon new development within the City. Pursuant to that Resolution, a property owner approves a special tax on the parcels within a subdivision or project. The City Council then adopts a resolution creating a zone that encompasses the subdivision or project and an ordinance establishing the special tax.

On June 7, 2021, a Major Design Review for a 30,000 square-foot office/warehouse building was approved by the City Council for the Express Sewer and Drain project. The provision of funding to provide transit-related services by approving a special tax was made a condition of approval for the design review.

This item will establish tax area Zone 32, the boundaries of which will be contiguous to the boundaries of the Express Sewer and Drain project. In addition to creating the special tax, the Resolution will also set the date for the transit-related services tax election, which will be held

on December 2, 2021, at which time the ballot(s) will be tabulated by the City Clerk, and the results be declared at the City Council meeting on December 20, 2021.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact to the City's General Fund.

ATTACHMENT(S)

1. Resolution Establishing Tax Zone
2. Exhibit A to the Resolution
3. Ordinance
4. Exhibit A to the Ordinance
5. Exhibit B to the Ordinance- Property Land Use Catagory

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2021

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, CREATING SPECIAL TAX AREA ZONE 32 FOR THE EXPRESS SEWER AND DRAIN PROJECT

WHEREAS, it is the intention of the City Council to create Zone 32 within the City of Rancho Cordova Transit-Related Services Special Tax Area and authorize an election; and

WHEREAS, it is the intention of the City Council to adopt an ordinance establishing a special tax for transit-related services within Zone 32; and

WHEREAS, the City recognizes the need for increased transit-related services in Zone 32 and the difficulty of funding the current or increased level of services with revenues now available; and

WHEREAS, it is the intention of the City Council to direct the City Clerk to conduct an election by mail ballot pursuant to Elections Code Section 4000 and to be held on the earliest date permitted by law; and

WHEREAS, on June 7, 2021, a Major Design Review for a 30,000 square-foot office/warehouse building was approved by the City Council for the Express Sewer and Drain project. The provision of funding to provide transit-related services was made a condition of approval for the project. Condition No. 36 of the Major Design Approval requires the property owner/applicant to participate in the provision of funding to provide transit-related services for the project. This will be accomplished by the property owner(s) participation in the transit-related services special tax area; and

WHEREAS, the transit-related services tax as inflated to Fiscal Year 2021-2022 is \$77.19 per low density residential dwelling unit or low density residential dwelling unit equivalent, \$61.75 per medium density residential dwelling unit or medium density residential dwelling unit equivalent, \$46.31 per high density residential dwelling unit or high density residential dwelling unit equivalent, \$1,979.15 per retail and service commercial acre, \$1,701.27 per business park use or office acre, and \$710.15 per light industrial acre, subject to an annual inflator formula based on the Consumer Price Index for the San Francisco-Oakland-San Jose Area, or six percent, whichever is less. Multi-family residential units on a single parcel shall be assessed on a proportionately equivalent basis (e.g., a two-unit attached housing structure, such as a duplex, would be deemed to consist of two residential parcels for purposes of the transportation tax); and

WHEREAS, for the purposes of this Resolution, a "voter" entitled to vote on the creation of Zone 32 is a person who owns real property within Zone 32, as shown on the last equalized assessment role prepared by the Sacramento County Assessor's Office, at the time that the City Council submits an ordinance authorizing the imposition of a transit-related services tax to the voters of Zone 32. At the time that the Council adopted this Resolution, there were zero (0) registered voters residing within Zone 32 and one property owner. Because the Transit-Related Services Special Tax will be imposed on property in Zone 32 and paid by the owner of the property, the Council finds that restricting the vote on the Transit-Related Services Special Tax

to property owners in Zone 32 is appropriate and consistent with the principles and requirements of California Constitution article XIII C (Proposition 218).

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA as follows:

1. That portion of the City of Rancho Cordova shown on the Map, Exhibit A hereto is established as Zone 32 of the Rancho Cordova Transit-Related Services Special Tax Area.
2. That Ordinance, reviewed and approved by the City Council on the same date as the resolution, is to be presented for approval of the voter of Zone 32 by a mail ballot election, to be held on December 2, 2021. The ballot proposition shall read as follows:

"Shall Ordinance No. XX-2021 of the City Council of the City of Rancho Cordova be approved so as to authorize a special tax on property located in Zone 32 of the Rancho Cordova Transit-Related Services Special Tax Area to maintain the present level of transit-related services and provide additional funding for increased transit-related services?"
3. The City Clerk is directed to take all steps necessary to conduct the election required by this order. Said election shall be conducted by mailed ballot pursuant to Elections Code Section 4000 and shall be held December 2, 2021.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October 2021 by the following vote:

AYES:

NOES:

ABSENT:

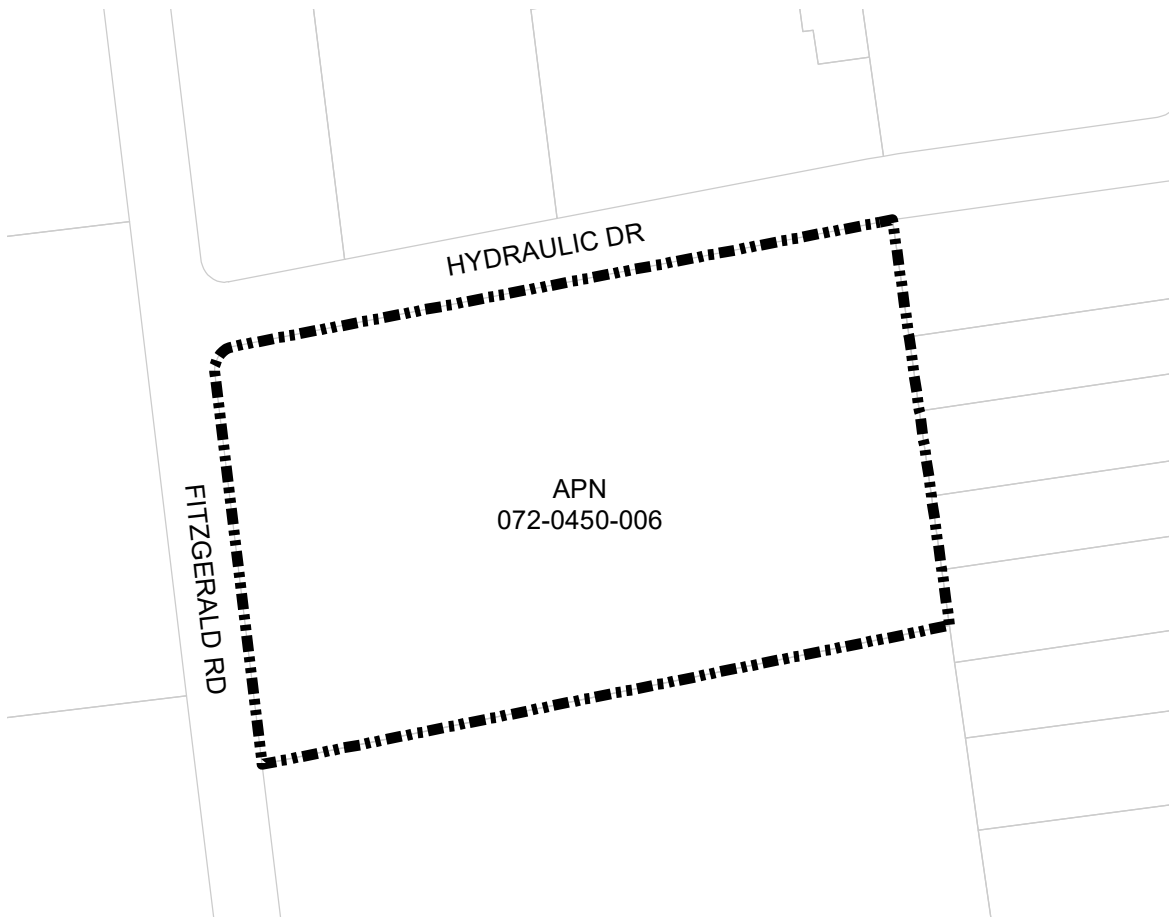
ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA
TRANSIT RELATED SERVICES SPECIAL TAX AREA
ANNEXATION 32
(EXPRESS SEWER & DRAIN PROJECT)

**Legend**

-  Annexation Boundary
-  Parcel Boundary

CITY OF RANCHO CORDOVA

ORDINANCE NO. XX-2021

**AN ORDINANCE OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA,
ESTABLISHING A SPECIAL TAX FOR TRANSIT-RELATED SERVICES FOR THE
EXPRESS SEWER AND DRAIN PROJECT SUBJECT TO VOTER APPROVAL****THE CITY COUNCIL OF THE CITY OF THE RANCHO CORDOVA DOES ORDAIN AS
FOLLOWS:**Section 1. Purpose, Intent and Authority.

It is of critical importance to the City Council of the City of Rancho Cordova that residents of and employees working in the City receive high quality transit-related services. In carefully reviewing the City's budget and revenue projections, it is clear to City staff that the City budget does not contain adequate funding to ensure the continued delivery of adequate high-quality transit-related services unless additional revenues are obtained.

It is the purpose and intent of this non-codified Ordinance to generate additional funds to pay for transit-related services by authorizing the levy of a tax on improved parcels of real property on the secured property tax roll of Sacramento County that are within Zone 32 of the Rancho Cordova Transit-Related Services Special Tax Area (the "Zone").

This tax is a special tax within the meaning of Section 4 of the Article XIII A of the California Constitution. Because the burden of this tax falls upon property, this tax also is a property tax, but this tax is not determined according to nor in any manner based upon the value of property; this tax is levied on a parcel and use of property basis. Insofar as not inconsistent with this Ordinance or with legislation authorizing special taxes and insofar as applicable to a property tax that is not based on value, such provisions of the California Revenue and Taxation Code and of Article XIII of the California Constitution as relate to ad valorem property taxes are intended to apply to the collection and administration of this tax (Section 4 of this Ordinance), as authorized by law. This tax is not an ad valorem property tax; it is an excise tax on the use of property. Because the revenue from the tax may be used only to fund transit-related services, it is also a special tax.

The revenues raised by this tax are to be used solely for the purpose of providing transit-related services as are deemed necessary by the City Council for the benefit of the residents and/or employees of Zone 32.

At the time that the Council adopted this non-codified Ordinance, there were zero (0) registered voters residing in Zone 32 and one (1) property owner. Because the Transit-Related Services Special Tax will be imposed on property in Zone 32 and paid by the owners of the property, the Council finds that restricting the vote on the Transit-Related Services Special Tax to property owners in Zone 32 is appropriate and consistent with the principles and requirements of California Constitution article XIII C (Proposition 218).

Section 2. Definitions.

The following definitions shall apply throughout this Ordinance.

A. "Constant first year dollars" shall mean an actual dollar amount which, in years subsequent to the first fiscal year the tax is levied, shall have the same purchasing price as the base amount in first fiscal year dollars as measured by the Consumer Price Index. The base amount shall be the amount of tax per parcel as specified in Section 3(A) herein. The adjustments from actual to constant dollars shall be made by use of the Consumer Price Index, as specified in Section 3(B) herein.

B. "Consumer Price Index" means the Consumer Price Index for all Urban Consumers (CPI-U) for the San Francisco-Oakland-San Jose Area as published by the U.S. Department of Labor, Bureau of Labor Statistics. If the Consumer Price Index is discontinued or revised, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the Consumer Price Index had not been discontinued or revised.

C. "Fiscal year" means the period of July 1 through the following June 30.

D. "Parcel" means the land and any improvements thereon, designated by an assessor's parcel map and parcel number and carried on the secured property tax roll of Sacramento County. For the purposes of this Ordinance, parcel does not include any land or improvements outside the boundaries of Zone 32, nor any land or improvements owned by any governmental entity.

E. "Rancho Cordova Transit-Related Services Special Tax Area" means all the properties within the jurisdictional limits of the City of Rancho Cordova.

F. "Rancho Cordova Transit-Related Services Special Tax Area Zone 32 (the "Zone")" means that portion of the incorporated area of the City of Rancho Cordova located within the boundaries as shown on the map Exhibit A.

G. "Transit-Related Services" means providing, operating, maintaining and subsidizing transit services and all supporting facilities, infrastructure, programs and incentives that benefit the residents of the Rancho Cordova Transit-Related Services Special Tax Area, and shall be calculated and set according to the methodology described in Engineer's Report County Service Area No. 10 and Benefit Zone No. 1 County of Sacramento, November 18, 2004, which established the methodology for the original service charge for Benefit Zone No. 1.

H. "Voter" means a person who owns real property within Zone 32, as shown on the last equalized assessment role prepared by the Sacramento County Assessor's Office, at the time that the City Council adopts an ordinance authorizing the imposition of a transit-related services tax to the voters of Zone 32.

Section 3. Amount and Level of Taxes.

The tax per year on each parcel in the Zone shall not exceed the amount applicable to the parcel, as specified below.

A. For First Fiscal Year:

The tax per year for the first fiscal year (July 1, 2022 through June 30, 2023) shall be the amount of Tax per Parcel for a Land Use Code Category as set forth on Exhibit B hereto. The use code assigned to each parcel shall be reviewed and updated periodically. Rates in Exhibit B shall be calculated and set according to the methodology described in Engineer's Report County Service Area No. 10 and Benefit Zone No. 1 County of Sacramento, November 18, 2004 which established the methodology for the original service charge for Benefit Zone No. 1.

B. For Subsequent Fiscal Years:

In order to keep the tax on each parcel in constant first year dollars for each fiscal year subsequent to the first fiscal year, the tax per year shall be adjusted as set forth below to reflect any increase in the Consumer Price Index beyond the first fiscal year the tax is levied.

In June or July of each year, City Council shall determine the amount of taxes to be levied upon the parcels in Zone 32 for the then current fiscal year, as set forth below.

For each Land Use Category on Exhibit B, the tax per year on each parcel for each fiscal year subsequent to the first fiscal year shall be an amount determined as follows:

Tax Per Parcel For then Current Fiscal Year	=	Tax Per Parcel For Immediately Preceding X Fiscal Year	Consumer Price Index from April of immediately Preceding Fiscal Year to April of then Current Fiscal Year OR 6 percent, whichever is less
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Provided, however, that in no event shall the tax per parcel for any fiscal year be less than the amount established for the first fiscal year.

C. Nature of Tax Levy.

The taxes levied on each parcel pursuant to this Article shall be a charge upon the parcel and shall be due and collectible as set forth in Section 4, below.

Section 4. Collection and Administration.A. Taxes as Liens Against the Property.

The amount of taxes for each parcel each year shall constitute a lien on such property, in accordance with Revenue and Taxation Code Section 2187, and shall have the same effect as an ad valorem real property tax lien until fully paid.

B. Collection.

The taxes on each parcel shall be billed on the secured roll tax bills for ad valorem property taxes and are to be collected in the same manner in which Sacramento County collects secured roll ad valorem property taxes. Insofar as feasible and insofar as not inconsistent with this Ordinance, the times and procedures regarding exceptions, due dates,

installment payments, corrections, cancellations, refunds, late payments, penalties, liens, and collections for secured roll ad valorem property taxes (as established by Sacramento County) shall be applicable to the collection of this tax. Notwithstanding anything to the contrary in the foregoing, as to this tax:

1. The secured roll tax bills shall be the only notices required for this tax, and
2. The homeowners and veterans exemptions shall not be applicable because such exemptions are determined by dollar amount of value.

C. Costs of Administration by County.

The reasonable costs incurred by the County officers collecting and administering this tax shall be deducted from the collected taxes.

D. Use of Tax Revenue.

The revenue collected from the tax imposed by this ordinance shall be placed into a separate account and may be used only to fund transit-related services, including the costs of administering and collecting the tax and enforcing the provisions of this ordinance. Revenue from the tax may be used for transit-related services citywide.

E. Refunds.

1. Whenever the amount of any tax, interest or penalty has been overpaid or paid more than once or has been erroneously or illegally collected or received by the City pursuant to this ordinance, it may be refunded as provided in this Section.
2. No refund may be made except upon a written claim verified by the person who paid the tax or by his or her guardian or conservator or the executor or administrator of his or her will or estate and stating the grounds upon which the claim is made. All claims filed pursuant to this subsection must be presented within one year after payment of the amount for which the claimant is seeking a refund.
3. No order of a refund may be made until a written claim therefor has been presented in accordance with this subsection. No suit for money, damages or a refund may be brought against the City until a written claim therefor has been presented to the City and has been acted upon or has been deemed rejected by the City, in accordance with this subsection. Only the person who filed the claim may bring such a suit, and if another person should do so, judgment shall not be rendered for the plaintiff.

F. Initiatives to Affect Tax.

Consistent with the California Constitution (art. XIII C, § 3) the tax imposed by this ordinance may be affected by initiative. The procedures for qualification of such an initiative and the election on a qualified initiative shall be consistent with the California Constitution (art. 2, sec. 8), the California Elections Code (Chapter 3 of Division 9), and the Municipal Code. The minimum number of signatures necessary to qualify an initiative to affect the tax approved by this ordinance shall be equal to 5 percent of the votes in the City for all

candidates for Governor at the last gubernatorial election. The election on a qualified initiative to affect the tax shall be a regular citywide election. An initiative affecting the tax shall be approved only if at least two-thirds of the votes cast on the measure are in favor of its approval.

Section 5. Severability Clause.

If any article, section, subsection, sentence, phrase or clause of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion of this Ordinance. The voters of Zone 32 hereby declare that they would have adopted the remainder of this Ordinance, including each article, section, subsection, sentence, phrase or clause, irrespective of the invalidity of any other article, section, subsection, sentence, phrase or clause.

Section 6. Effective Date and Posting.

This Ordinance shall take effect immediately upon its approval by two-thirds of the voters voting within the Zone in an election to be held on December 2, 2021, so that taxes shall first be collected hereunder for the tax year beginning July 1, 2022.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____ day of _____ 2021 by the following vote:

AYES:

NOES:

ABSENT:

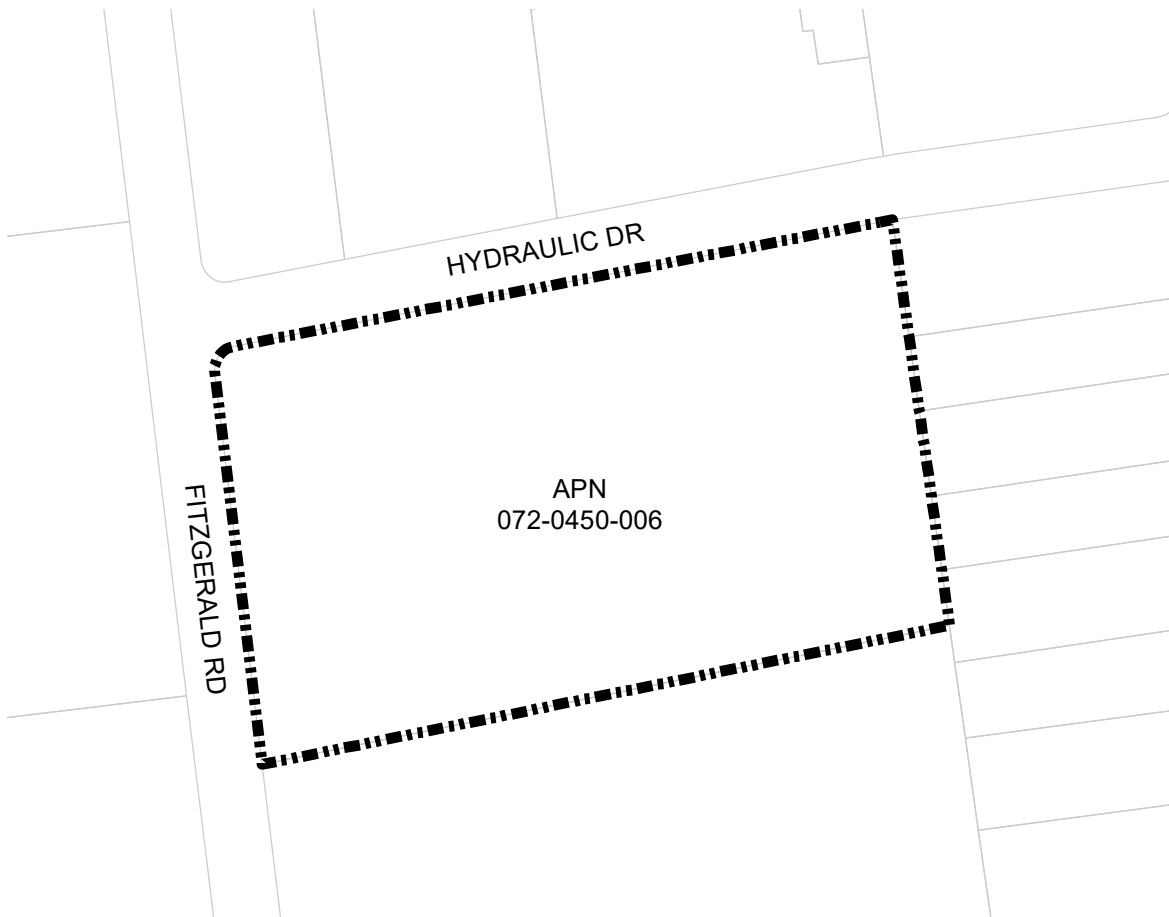
ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA
TRANSIT RELATED SERVICES SPECIAL TAX AREA
ANNEXATION 32
(EXPRESS SEWER & DRAIN PROJECT)

**Legend**

-  Annexation Boundary
-  Parcel Boundary

Amount of Tax per Parcel by Land Use Category**A. Residential Dwelling Units**

As adjusted for inflation from the original base year, the amount of Tax per Parcel for fiscal year 2021-2022 for Residential Land Use Categories shall be \$77.19 per low density residential dwelling unit or low density residential dwelling unit equivalent, \$61.75 per medium density residential dwelling unit or medium density residential dwelling unit equivalent, or \$46.31 per high density residential dwelling unit or high density residential dwelling unit equivalent (Multi-family residential units on a single parcel shall be assessed on a proportionately equivalent basis (e.g., a two-unit attached housing structure, such as a duplex, would be deemed to consist of two residential parcels for purposes of the Transit-Related Services Special Tax).

B. Non-Residential

As adjusted for inflation from the original base year, the amount of Tax per Parcel for fiscal year 2021-2022 for Non-Residential Land Use Categories (except Recreational and Agricultural) shall be \$1,979.15 per retail and service commercial acre, \$1,701.27 per commercial mixed use or office commercial acre, and \$710.15 per light industrial acre.

C. Inflator Formula

The tax is subject to an annual inflator formula based on the Consumer Price Index for all Urban Consumers (CPI-U) for the San Francisco-Oakland-San Jose Area, or six percent, whichever is less.

MEMORANDUM



ITEM 18.1.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Nicholas Sosa, Associate Planner

SUBJECT: STONE CREEK VILLAGE – TENTATIVE PARCEL MAP, TENTATIVE SUBDIVISION MAP, MAJOR DESIGN REVIEW, AND UNIFIED SIGN PROGRAM – PROJECT DD10072 – LOCATED AT ZINFANDEL DRIVE BETWEEN BEAR HOLLOW DRIVE AND SPOTO DRIVE; APN: 072-2360-002-0000

PROPERTY OWNER:	APPLICANT/DEVELOPER:
Elliott Homes	Price Walker
240 Palladio Parkway, Suite 521	240 Palladio Parkway, Suite 521
Folsom, CA 95630	Folsom, CA 95630

PROJECT:	Stone Creek Village
FILE:	DD10072
LOCATION:	Zinfandel Drive between Bear Hollow Drive and Spoto Drive
APN:	072-2360-002-0000
PLANNER:	Nicholas Sosa, Associate Planner

RECOMMENDATION

Determine the project Exempt per Section 15183 Projects Consistent with a Community Plan, General Plan, or Zoning, of the CEQA Guidelines; and Adopt the Resolution for Tentative Parcel Map, Tentative Subdivision Map, Major Design Review, and Unified Sign Program.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution would determine the project exempt from further CEQA analysis and approve the Applicant's request to subdivide the property into 128 single-family lots, 7 common area lots, 4 commercial lots, and 1 multi-family lot. The approval would also allow for the construction of the shopping center, a 151-unit apartment community, and the master plans for the single-family home designs and acceptance of the unified sign guidelines for the project.

BACKGROUND

The 25.12+/- acre project site is located along Zinfandel Drive between Bear Hollow Drive and Spoto Drive (**See Figure 1**). The property is zoned Retail Commercial (RC) and is located within the Zinfandel Special Planning Area (ZSPA). The ZSPA was originally approved by Sacramento

County on August 7, 2002. The intent of the ZSPA is to permit infill development in a manner consistent with the General Plan that allows for mixed land use development including residential, industrial, office, commercial, public/quasi-public, and recreational uses. Since the ZSPA was approved in 2002 under the Sacramento County Zoning Code, this code continues to be applicable when processing applications within the Special Planning Area.

Figure 1: Project Location



PROJECT DESCRIPTION

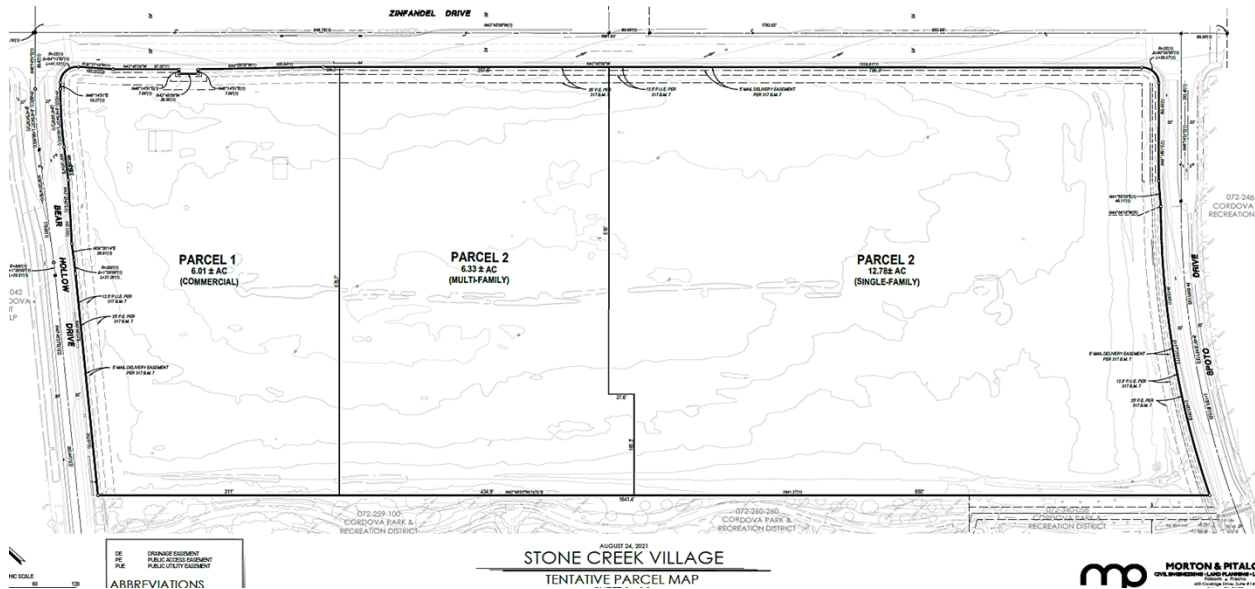
An application was submitted on June 23, 2021, for a Tentative Parcel Map (TPM), Tentative Subdivision Map (TSM), Major Design Review, and Unified Sign Program. The Stone Creek Village project proposes three core areas which include a shopping center (with a 23,000 SF anchor tenant, in-line tenants, a pad building with a drive-thru, and a potential gas station), a 151-unit multi-family building, and a subdivision of 128 single-family homes. The project has been reviewed by staff for each requested entitlement and the analysis for these entitlements is provided below.

TENTATIVE PARCEL MAP

The proposed TPM would divide the overall 25.12+/- acre site into three separate parcels to create distinct areas for the shopping center, multi-family, and single-family homes (**See Figure 2**).

- Parcel 1 – 6.01+/- acres – Commercial Use
- Parcel 2 – 6.33+/- acres – Multi-Family Use
- Parcel 3 – 12.78+/- acres – Single-Family Homes

Figure 2: Proposed Tentative Parcel Map



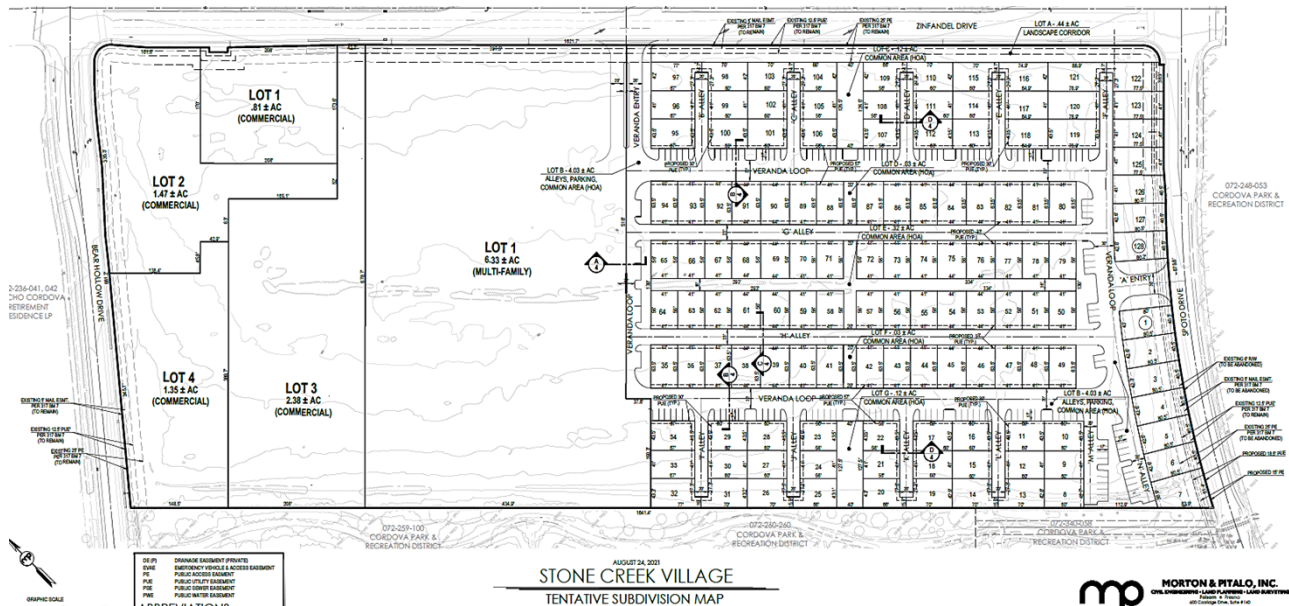
TENTATIVE SUBDIVISION MAP

The proposed TSM further subdivides the overall property into a total of 140 lots. The further subdivision of the property is to separate the individual lots for the pad buildings and inline tenants of the shopping center, and also the 128 single family homes and common area lots for HOA maintenance (**See Figure 3**). The further breakdown of the property is as follows:

<u>Lots</u>	<u>Area</u>	<u>Land Use</u>
A	0.44 AC	Landscape Corridor
B – G	4.65 AC	Alleys, Parking, Common Areas
1 – 128	7.69 AC	Single- Family
1	6.33 AC	Multi-Family
1 – 4	6.01 AC	Commercial

The southern portion of the property is divided into 128 single family homes. The Retail Center (RC) zoning designation allows for residential uses consistent with RD-10, RD-15, and RD-20. The single-family development proposes a density of 10 units per acre which is consistent with the RD-10 designation.

Figure 3: Tentative Subdivision Map



Required permits and Regulatory Basis

According to the State Subdivision Map Act and Municipal Code, a parcel may be subdivided into multiple separate lots with a Parcel Map, guided by the following provisions:

1. Subdivision Map Act
2. RCMC Title 22, Land Development, provides the local authority under the Subdivision Map Act to subdivide land.
3. RCMC Title 23, Zoning

Title 22 - Land Development: Title 22 of the City of Rancho Cordova Municipal Code regulates land division and is intended to supplement and implement the Subdivision Map Act. The proposed project, as conditioned, is consistent with requirements and procedures of a tentative parcel map application.

FINDINGS & EVIDENCE

Section 66474 of the California Subdivision Map Act requires a City to deny approval of a tentative map, if any of the following findings are found to be true. In the case of the proposed map, none of the required findings were found to be true. The following evidence supports the map request:

1. **Finding:** That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451.

Evidence: The proposed project is consistent with the General Plan and land use designation specified for this parcel. The property is designated as Commercial Mixed Use (CMU) within the Rancho Cordova General Plan. CMU encourages the integration of retail service commercial uses with office and/or residential uses. This horizontal mixed-use project provides the commercial shopping center area with a multi-family and single-family residential use. The project site is also zoned Retail Commercial (RC) within the Zinfandel Special Planning Area (ZSPA). This zoning designation also encourages mixed use

development and promotes this site as a central hub to the overall ZSPA. The proposed project upholds the intended purpose of the RC zone.

2. **Finding:** That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.

Evidence: The proposed Tentative Parcel/Subdivision Map is consistent with the existing development standards of the General Plan designation of CMU and the standards of the RC zoning designation for the ZSPA. The anticipated future improvement of the project maintains the mixed-use development that was intended by this zone and the general plan designation.

3. **Finding:** That the site is not physically suitable for the type of development.

Evidence: The site is physically suitable to subdivide. The existing 25.12+/- acre parcel will be split into a total of 140 lots to accommodate individual buildings and homes. Each new parcel will be supported by cross access parking and utilities for future development. The parcel will also provide adequate access to the north on Bear Hollow Drive, to the east on Zinfandel Drive, and to the south on Spoto Drive, as well as pedestrian access to the west by way of the city bike trail. The map has also been conditioned to have reciprocal parking and access agreements between parcels to maintain the seamless circulation and adequate parking as originally approved.

4. **Finding:** That the site is not physically suitable for the proposed density of development.

Evidence: The site is physically suitable for the proposed density of the development. The existing zoning designation of RC allows for both retail space and residential areas in this location and encourages mixed uses developments. The zoning designation also allows for residential uses consistent with RD-10, RD-15 and RD-20 at this location and the proposed residential areas of the map would be within the allowable density of the respective parcels.

5. **Finding:** That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Evidence: The proposed design of the Tentative Parcel Map and Tentative Subdivision Map are not likely to cause any environmental damage. The site is currently undeveloped without any sensitive plant and/or wildlife. The proposed project is consistent with the approved EIR for the Zinfandel Special Planning Area and can be found exempt from environmental review pursuant to Section 15183 of the CEQA guidelines.

6. **Finding:** That the design of the subdivision or the type of improvements is likely to cause serious public health problems.

Evidence: The subdivision of one parcel into a total of 140 lots would not cause any serious public health problems. The overall project is designed to promote pedestrian walkability and reduce vehicle miles traveled within the surrounding area. The subdivision would allow for the sale, lease, or finance of the future development of each lot and would not result in any future public health issues.

7. **Finding:** That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.

Evidence: No change is proposed with this subdivision and a condition has been placed on the project to ensure the access and shared parking remains for all businesses prior to sale of the new parcels.

MAJOR DESIGN REVIEW

The project submittal also requests a Major Design Review entitlement that included the anchor tenant (Sprouts) and inline tenants for the shopping center, the design of the multi-family building, the master designs for the single-family homes, and the overall layout, circulation and landscaping of the site. The project site plan and circulation will also be reviewed as part of this design review. (See **Figure 4** for an overall site plan)

Figure 4: Stone Creek Village Site Plan



Commercial Area

The commercial component of project proposes a 23,000 SF anchor tenant which has been confirmed to be a Sprouts Farmers Market, 8,000 SF of in-line tenant shops, a 3,000 SF pad building, and a future gas station. The pad building and gas station design are not included as part of this design review and will be required to obtain separate design reviews once a tenant is determined.

Parking & Loading

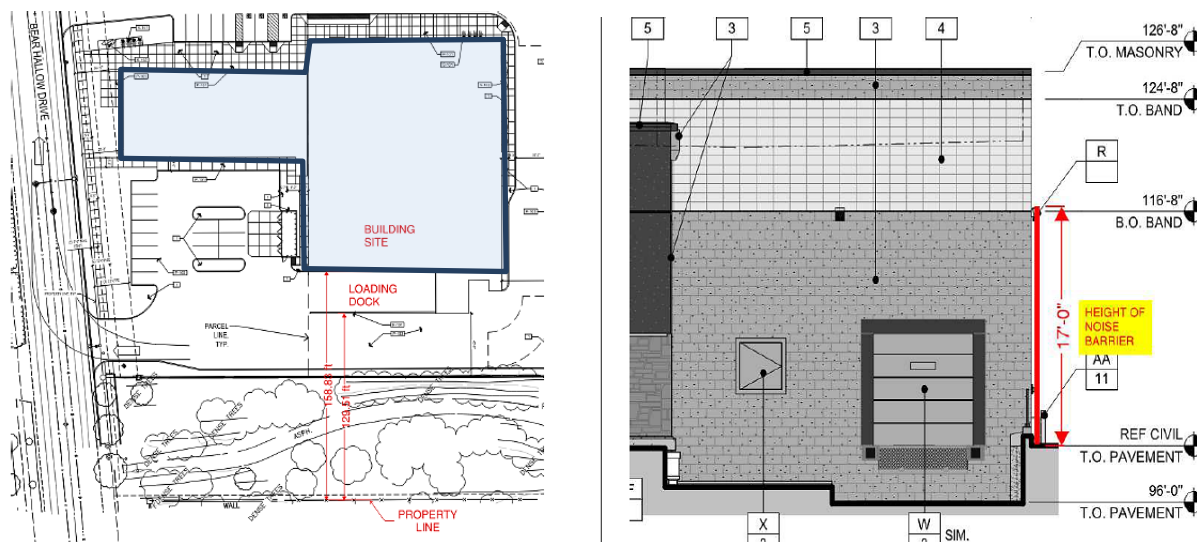
Stone Creek Village provides more than adequate parking spaces for the commercial area. As proposed, the project includes a total of 34,000 SF plus a future gas station on site. Utilizing the "regional shopping center" parking ratio of 5.5 spaces per 1,000 SF, the parking requirement for the 34,000 SF would be 187 parking spaces. The site provides a total of 217 parking spaces on-

site which accommodates for the required as well as the future gas station which will be reviewed at later date.

Along the west portion of the project is a loading dock to be utilized for deliveries to the future Sprouts anchor tenant. To ensure that the loading dock area does not create future concerns with the single-family homes across the city bike trail, a noise study was required as part of the project review. The noise study took into consideration exterior mechanical equipment, the proposed trash compactor and the loading dock for the anchor tenant. The study focused on the properties located along Nouveau Way which is west of the Sprouts site. After a full review of the property, the acoustical consultant determined that the predicted sound levels for the mechanical equipment, trash compactor and loading dock would exceed the allowable residential decibel levels of 55db and that a noise control barrier would need to be added to the project in order to ensure code requirements are met.

The recommendation to achieve the required noise ordinance levels was to install a noise control barrier specifically to screen the trash compactor and loading dock area. The barrier would include an additional 17' tall CMU wall along the loading dock area as shown in **Figure 6**, measured from the highest part of the loading ramp. The project has also been conditioned to add signage and alert delivery drivers that trucks that are loading and unloading are not able to idle and must be shut off for the duration of the delivery. The combination of these measures will keep the noise levels at the acceptable decibel level per chapter 6.12 of the municipal code.

Figure 6: Commercial Area Layout



Building Design

The project submittal includes architectural designs for the anchor tenant and the inline tenants of the shopping center. Design review for pad 1 and the gas station, shown on the proposed site plan, will be submitted at a later date once a tenant is found for these sites.

The anchor tenant has been determined at this time to be a Sprouts Farmers Market and has proposed a farmhouse design that is shown consistently throughout the retail center. The project proposes vertical siding in a bold jade color along with dark metal roofing for the main entrance

of the Sprouts to enhance the farmhouse architectural style. The building also includes stone veneer and wood posts that create a local market look for the front façade along with both smooth face and split face CMU construction that adds texture to the exterior of the building. The project also includes landscape walls with greenery to soften the façade and add a natural look to the exterior. The applicant has incorporated many of these architectural features throughout all elevations of the building to maintain aesthetics from all directions. These elevations can be seen in **Figure 7**.

Figure 7: Anchor Building and In-Line Tenants Renderings



Multi-Family

Stone Creek Village includes a 151-unit multi-family apartment community at the center of the site with on-site amenities including a pool, clubhouse, bark park, tuck under garages, carports, and surface parking. The project also provides a main entrance onto Zinfandel Drive as well as connections to both the shopping area to the north and the 128 single-family homes to the south.

Access & Parking

As previously mentioned, the multi-family portion of the project provides vehicular access directly to Zinfandel Drive and secondary access to the adjacent shopping center and single-family homes. Access between the three parcels will be able to flow freely from south to north with the required reciprocal parking and access notation that has been conditioned for the TPM and TSM. No gates or other physical limitations have been included that would interfere with the free flow of on-site access.

In addition to the vehicular access, the multi-family parcel also provides multiple avenues of pedestrian access to adjacent parcels and Zinfandel Drive. The main pedestrian thoroughfare that connects the southern portion of the project to the shopping center cuts through the complex providing direct access to the future Sprouts and other retail stores. The multi-family area will also have a direct connection to the adjacent bike trail to the west for easy access to the City's overall bike trail system. Currently, the site has an existing 6-foot CMU wall along the west property line however the project proposes to remove a portion of the wall for access and to encourage the use of the trail.

In review of the project, it was determined that the project is able to provide adequate parking for the proposed 151-units with the approval of an allowable reduction of the required spaces due to the project's horizontal mixed-use design. Parking ratios for multi-family buildings are calculated dependent upon the number of bedrooms in each unit. The parking required for the multi-family portion of the project is as follows:

Type of Unit	Ratio Requirement	Number of Units	Required Parking
1 Bedroom Units	1.5 spaces / unit	54 units	81 spaces
2 Bedroom Units	2 spaces / unit	93 units	186 spaces
3 Bedroom Units	2 spaces / unit	4 units	8 spaces
+ Guest Parking	0.6 spaces / unit	151 units	90.6 spaces
			Total 365.6 Spaces

Given the above table, the 151-unit apartment community would require a total of 365.6 spaces for the site. As proposed, project proposes 44 tuck-under garage parking spaces, 98 carport spaces, and 152 surface parking spaces for a total of 294 spaces. However, Section 23.719.080 of the City of Rancho Cordova Zoning Code allows for reduced motor vehicle parking for mixed-use projects in the anticipation that some parking spaces will be shared due to difference in peak parking demand with the adjacent retail area. The project has been designed as a mixed-use development and therefore is permitted to utilize the reduced allowances that are stated below:

- 1. Calculation of the minimum vehicular parking for the portion of the building occupied by the primary is based on 100 percent of the floor area.*
- 2. Calculation of the minimum vehicular parking for the portion of the building occupied by secondary or subsequent uses may be calculated at 80 percent of the floor area.*

For Stone Creek Village, although it is the smaller of the three areas, the primary use of the project was considered to be the retail center due to retail being a more intensive use in terms of traffic and visitors compared to residential uses. The secondary use of the project was considered to be the multi-family and single-family homes of the project. Given the revised calculation formula as shown above, the retail center would be calculated at 100% of the required parking and the multi-family required parking would be able to be calculated at 80% of the required parking providing a reduction of 20%. With this reduction, the required parking for the multi-family site would be 292 spaces and with the 294 spaces shown in the plans, the site would be in compliance.

In addition to required vehicle parking, the multi-family building will also provide adequate bicycle parking on the property to encourage residents to use alternative forms of transportation when visiting the shopping center. The required bicycle parking for the multi-family is 5 percent of the required number of vehicle parking spaces. As previously mentioned, the site is required to have 292 spaces for vehicles which would entail a bicycle parking requirement of approximately 15 spaces. The project includes 76 long term bike parking spaces and 15 short term bike parking spaces for a total of 91 bicycle spaces for both multi-family and commercial area which is more than adequate to sustain both uses.

Building Design

The design review for the multi-family building includes seven 3-story residential buildings, two amenity buildings, pool area, and nine carports. There are 4 structures of "Building A" and 3 structures of "Building B". The Building A structures are the larger design and provide tuck under garages for the first floor with direct access to the apartment units. Building B structures do not provide garages but instead provide areas for long term indoor bicycle parking of up to 40 bikes (**See Figure 8-11**).

The buildings are designed to be consistent with the proposed Sprouts Farmers Market and maintain the overall farmhouse design concept. The design provides a white main base color with blue accents to emphasize architectural pop outs. The apartment buildings also incorporate the vertical siding from the commercial center as well as the dark metal accent features and white accent colors to maintain the consistent style. The apartments utilize a lighter tone stone veneer to add detail and texture to the large buildings (**See Figures 8 -11**). These details are consistent throughout the elevations of each building.

Figure 8: Building A: Facing Zinfandel Drive



Figure 9: Building B: Baroque Drive Main Entrance



Figure 10: Clubhouse Building and Pool Area

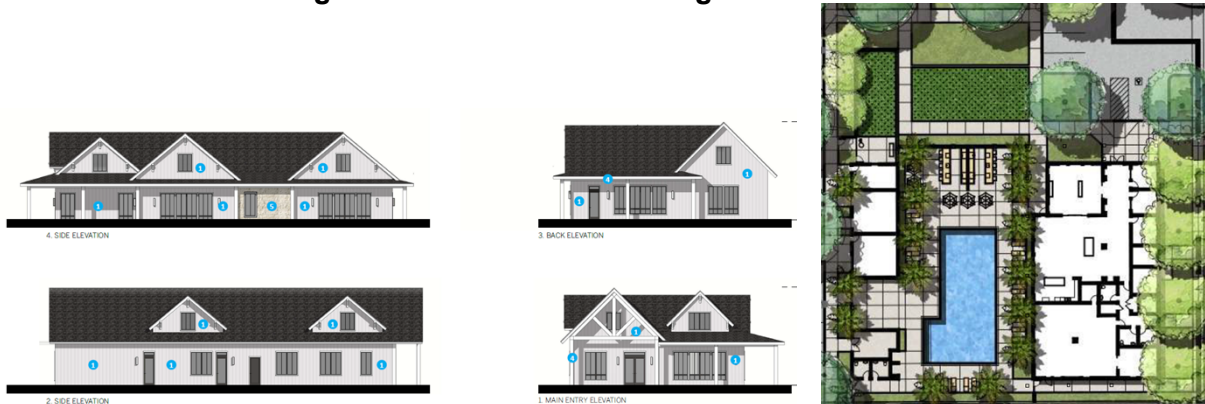
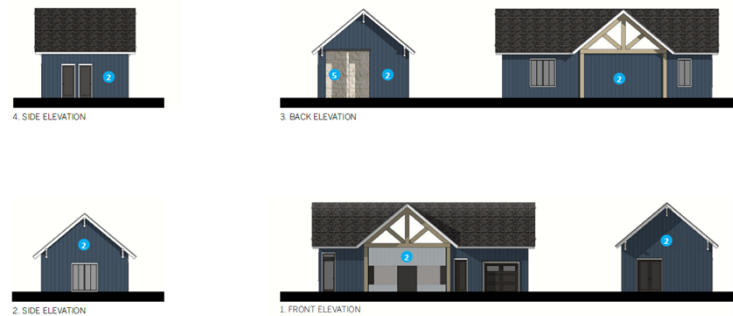


Figure 11: Amenities Building



Single-Family Residential

The third component of the Stone Creek Village project is the addition of 128 single-family homes. The single-family component consists of a paseo style design with alley loaded products and homes facing a pedestrian walkway, similar to the design of the neighboring subdivision of Veranda at Stone Creek, just across the City Bike Trail. The subdivision provides lots with an average dimension of 41 feet wide and 56 feet deep and 123 surface parking spaces throughout the neighborhood. Residents of the single-family homes will have direct access to the shopping center by vehicle, through the apartment buildings, as well as pedestrian access via the pedestrian thoroughfare connecting from Spoto Drive to Sprouts. Pedestrian access will also be provided from east to west connecting the subdivision to both Zinfandel Drive and the City Bike Trail.

Master Home Plan Designs

The overall project continues to maintain the farmhouse architectural style concept within the single-family home designs. The product includes homes ranging from 1,452 SF to 1,930 SF in size. The homes incorporate various versions of the farmhouse style with designs labeled as artisan, traditional, and modern. All designs incorporate the vertical siding material connecting the homes to the overall project, while also incorporating stone veneer and shutters for the traditional design and a metal awning and bolder colors for the modern design. Elevations of the designs can be seen in **Figures 12 – 15** with a schematic rendering in **Figure 16**.

Figure 12: Plan 1 (1,452 SF)



Figure 13: Plan 2 (1,542 SF)



ARTISAN



TRADITIONAL



MODERN

Figure 14: Plan 3 (1,684 SF)



ARTISAN



TRADITIONAL



MODERN

Figure 15: Plan 4 (1,930 SF)



ARTISAN



TRADITIONAL



MODERN

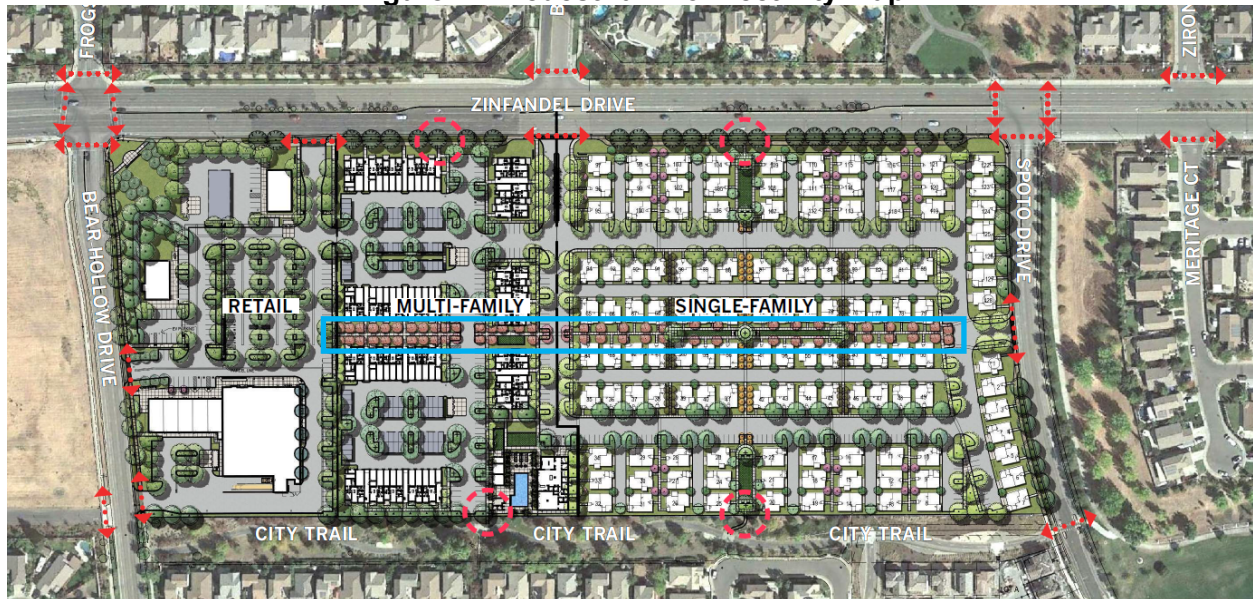
Figure 16: Schematic Street View Rendering



Overall Pedestrian Walkability & Vehicular Access

The proposed horizontal mixed-use project provides both retail and residential components and has provided significant pedestrian connections and vehicular access throughout the site. The project provides a main pedestrian thoroughfare that connects the southernmost part of the single-family homes through the project to the shopping center area (framed in blue in **Figure 17**). The proposal also includes direct connections from both the single-family and multi-family areas to the city bike trail that runs along the west side of the project. City design guidelines typically require open view fencing between residential and open space to promote safety however, there is an existing CMU block wall separating the project site from the adjacent bike trail that is proposed to remain. Sections of the wall are proposed to be removed in order to provide pedestrian access. Although one side of the bike trail will be a solid wall, the west side of the bike trail along the existing single-family homes, will continue to have wrought iron fencing to promote “eyes on the area” and discourages any mischievous activities from taking place within the open space trail. A pedestrian connectivity plan was included with the project in order to portray the connections (shown in red dashed lines) to adjacent properties and off-site amenities (See **Figure 17**).

Figure 17: Pedestrian Connectivity Map



For vehicular access and circulation, the overall project provides multiple entries from Bear Hollow Drive to the north, Spoto Drive to the south, and Zinfandel Drive along the east side of the property. The project also provides direct access for internal residents from each component of the project to the shopping center. Each entry to the public right of way will provide stamped concrete for pedestrian safety as well as an aesthetic enhancement for the property entrances. Each entry will also provide a monument sign which will be discussed in further detail as part of the Unified Sign Program also included as part of this application. This entitlement will be discussed further, later in the Staff Report.

Site Landscaping

In addition to walkability, the projects preliminary landscape plan shows a variation of trees, shrubs, and groundcover that soften the large development area and provide small gathering

areas for residents. The project meets the minimum 50% shade requirement for parking lot areas in both the commercial and residential areas of the project and also maintains a significant landscape buffer along Bear Hollow, Zinfandel, and Spoto Drive that has been landscaped and will be maintained by the property management for the commercial and multi-family parcels and by the area's HOA for the single-family homes. The proposed trees highlight project entrances from each public right of way and interior trees also highlight and shade main pedestrian pathways that make these pathways more inviting for residents and encourage walkability. Turf areas have also been included within the single-family residential areas to provide a green space within the subdivision that will also serve as a gathering area for pets and residents (**See Figure 18**). Additional details regarding the landscaping for each component of the project can be seen in the project plans (Exhibit A) of the resolution.

Figure 18: Preliminary Landscape Plan



Neighborhood Meeting

As part of the project review, staff had the Applicant conduct a community meeting with the adjacent properties. A notice was mailed out for all residents and property owners within 500' of the project to present the project and receive feedback and address any concerns regarding the proposed Stone Creek Village.

The meeting was held on August 31, 2021 via Zoom to ensure all participants were able to attend. After presenting the project, there were some concerns regarding noise of the loading dock area, lighting of the shopping center, the price point of the apartments and homes, security of the apartments, and speed concerns on Zinfandel. The Applicant responded with the following comments:

1. Noise

- The Applicant stated that proper mitigation measures would be completed regarding the noise behind the retail center to meet the City's Noise Ordinances. The Applicant also provided a Noise Study to staff in which the recommendations provided by the acoustical engineer have been added as conditions of approval for the project.

2. Lighting
 - For the lighting concerns, the Applicant provided details of the photometric plan and assured residents that lighting would be in compliance with the City's outdoor lighting standards and shielded from adjacent properties.
3. Price Points
 - Although the apartments and homes do not currently have an estimated price range, it was stated that the homes would be comparable to the homes in the adjacent Veranda at Stone Creek subdivision which are similar in design (paseo and alley loaded) and size and that the apartments would be comparable to those at BDX in Capital Village.
4. Speed and Traffic Concerns on Zinfandel
 - Applicant assured residents that their team would continue to work with City Staff to mitigate any traffic concerns that were created due to the development of the project. However, it was also mentioned that some concerns, such as speeding vehicles, are existing and may not be fully mitigated by the improvements completed for the project.

DESIGN REVIEW FINDINGS & EVIDENCE

Approval of the Major Design Review, subject to the Design Review Package ([Attachment 2](#)) and the Conditions of Approval ([Attachment 3](#)) must provide sufficient evidence for the Findings required by Zoning Code Section 23.141.070. Findings and supportive evidence are shown below:

- A. **Finding:** The proposed project is consistent with the objectives of the General Plan, complies with applicable zoning regulations, Specific Plan provisions, and special planning area provisions, and is consistent with the applicable Rancho Cordova Design Guidelines.

Evidence: The proposed Design Review for the Stone Creek Village project is designated as a Commercial Mixed Use (CMU) site within the City's General Plan. The CMU designation encourages the integration of both commercial uses and residential uses as shown within the proposed project. This site is also located within the Zinfandel Special Planning Area (ZSPA) and is zoned Retail Center (RC) which also encourages mixed use design. The project proposes over 34,000 square feet of retail space as well as 151 multi-family units, and 128 single family homes which is consistent with the intended mixed-use development of both the General Plan, ZSPA, and Rancho Cordova Design Guidelines.

- B. **Finding:** The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community.

Evidence: The Applicant, Elliot Homes, is presenting a design package that includes three major components of a shopping center, 151 multi-family apartments, and 128 single-family homes. The project is zoned RC which does allow for all three of these components. The design of the overall project provides adequate access to all public rights of way surrounding the project site and provides, both vehicular and pedestrian, and also maintains a consistent design concept throughout the entire site. The proposed farmhouse style, shady landscaping, and alley loaded product encourage pedestrian activity throughout the property and also create a visually interesting streetscape, enhancing the neighborhood and community.

- C. **Finding:** The architecture, including the character, scale, and quality of the design, relationship with the site and other buildings, building materials, screening of exterior appurtenances, exterior lighting and signing, and similar elements establishes a clear design concept and is compatible with the character of existing or anticipated buildings on adjoining and nearby properties.

Evidence: The project has consistently maintained a farmhouse style throughout the entire project while still providing enough variation to remain visually interesting. The retail center, apartment building, and single-family homes, all share consistent materials and colors that enhance the farmers market appearance that the Sprouts anchor tenant portrays to its customers. The project is also compatible with existing single-family homes in the area as well as the design of the future retirement facility across Bear Hollow Drive. The vehicular access and pedestrian connections also work to create an overall cohesive product.

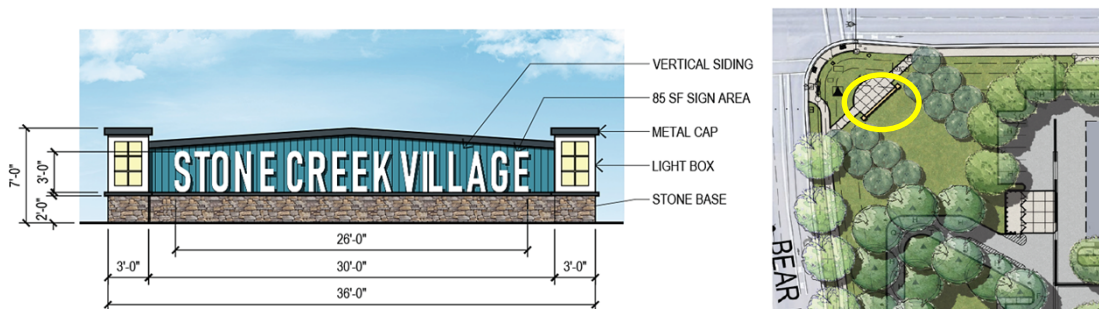
- D. **Finding:** The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.

Evidence: The intent of the project is to provide a horizontal mixed-use product that encourage cross access and promotes on-site circulation. Stone Creek Village has provided thorough vehicular and pedestrian access across all areas of the project and will not create any conflicts with any modes of transportation. The components of the project are consistent with the allowed uses of the Retail Commercial zone which was reviewed for traffic as part of the original EIR for the Zinfandel Special Planning Area.

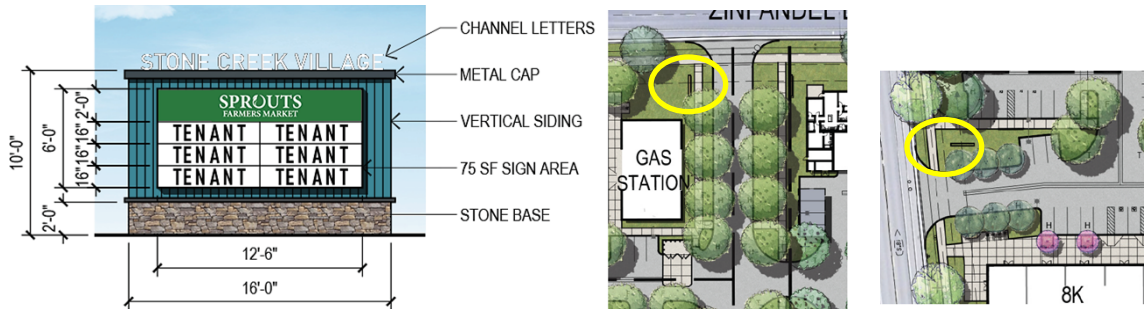
UNIFIED SIGN PROGRAM

The Applicant has also submitted for a Unified Sign Program (USP) entitlement for the overall project. The USP provides signage guidelines and limitations for the tenants of the shopping center, including the pad building and gas station, as well as signage for the multi-family building. The USP also provides preliminary designs and size allowances for the monument signage at various entries to the project. The three key monument signs are as follows:

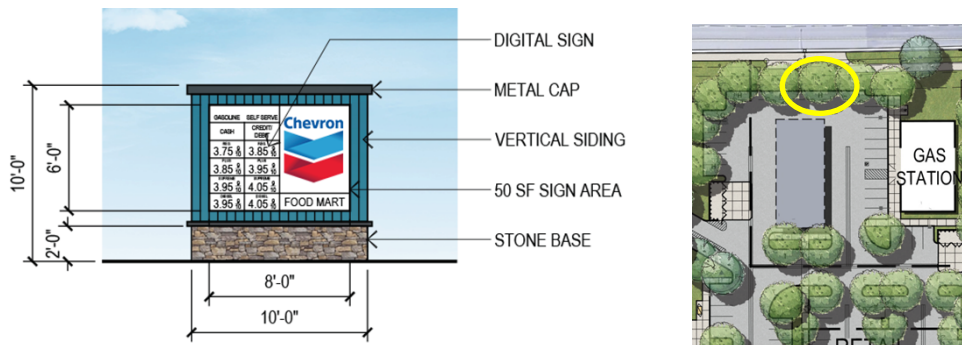
- Project Monument sign at the corner of Zinfandel Drive and Bear Hollow Drive proposed to be 7 feet in height and 36 feet wide.



- Multi-Tenant Monument Signs (2) at entrance off of Zinfandel Drive and entrance from Bear Hollow Drive with an overall height of 10' and a total width of 16'.



- Gas Station Monument Sign along Zinfandel Drive between the Zinfandel Drive and Bear Hollow Drive intersection and the Zinfandel entrance to the shopping center. A final location will be determined as part of a separate design review for the station. Proposed at a height of 10' and a width of 10'. (Chevron only shown as an example)



All proposed monument signs incorporate the vertical siding and stone veneer that is included in the design of the Sprouts Farmers Market. This maintains a cohesive design concept throughout the center. The multi-family and single-family components are also allowed to have monument signs at each entrance, according to the USP, and are limited to 6 feet in height and 10 feet in width. No preliminary designs were provided for these signs however, when submitted for permits, they will be required to be consistent with the overall design of the project.

UNIFIED SIGN PROGRAM FINDINGS & EVIDENCE

The approval authority shall approve, or approve with conditions, an application for a unified sign program after finding all of the following findings and evidence.

- A. **Finding:** The proposed sign program does not violate provisions of this zoning code and the municipal code.

Evidence: The Zinfandel Special Planning Area (ZSPA) only provides a short excerpt regarding signage, stating that a comprehensive sign program with consistent theme and character should be provided. The Applicant has provided a sign program that is within the allowable parameters of Chapter 23.119 Unified Sign Program of the municipal code. The intent of the USP, as stated in the code, is to adopt unique and specific design and development standards for mixed use developments and this program has achieved that intent in developing signage that is consistent with the overall farmhouse theme of the retail center.

- B. **Finding:** The proposed sign program is generally consistent with location, size, height, setback and other requirements of the underlying zoning district and applicable design guidelines for signs permitted with or without a unified sign program requirement.

Evidence: The project is within the ZSPA which does not provide specific design guidelines within the area. The ZSPA defers to the Sacramento County Code which provides standards and requirements for the underlying commercial zoning that are generally consistent with what is proposed within the USP. The program upholds the design guidelines in providing a consistent theme throughout the center while also maintaining setbacks and location requirements.

- C. **Finding:** The appearance, scale, materials, design and graphics, and orientation of signs are keeping with the character of the site and buildings, and the surrounding neighborhood.

Evidence: The design of the signage is consistent with the farmers market concept that is portrayed by the Sprouts grocery store. The theme is maintained throughout all signage in the retail center as well as the designs of the adjacent multi-family building and residential homes. All signage will be reviewed again at building permit stage to ensure consistency with the proposed unified sign program and to ensure that the theme of the project is maintained.

- D. **Finding:** Approval of the unified sign program would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity in which the project is located.

Evidence: The proposed unified sign program is in the public interest to ensure that the signs are of an appropriate size and within an appropriate location that will not create a safety hazard for vehicles or pedestrians. The program will also ensure that the design of the signage is appropriate for all types of signage within the shopping center and overall project.

GENERAL PLAN

The project site is located within the Commercial Mixed Use (CMU) designation of the City's General Plan. The CMU category encourages the integration of retail service commercial uses with office and/or residential uses. This project provides a horizontal mixed-use development with a cohesive design concept that incorporates a retail center with a grocery store anchor, a 151-unit multi-family apartment community and 128 single-family homes. The project provides both on-site vehicular and pedestrian access that encourage walkability and on-site circulation throughout the entire project which upholds the intent of the General Plan's CMU designation.

ZONING CODE

The project is located within the Zinfandel Special Planning Area (ZSPA) and is zoned Retail Commercial (RC) which is consistent with the CMU designation provided by the General Plan. The RC zoning designation refers to allowable uses and standards provided within the commercial zones of the previous Sacramento County Zoning Code. The purpose of this zone is to provide an area for commercial retail businesses but also allows for residential uses when located in conjunction with retail commercial uses. The project has been designated as a mixed-use development and the proposed apartment community and single family homes have been designed to be compatible with the retail area.

FISCAL IMPACT

Staff anticipates that the project will have a positive fiscal impact due to the short term and long term positions for the construction and operation of the commercial center as well as an increase in retail sales. The development of multi-family housing and single-family housing will also provide an additional positive impact through the increase in property taxes on the site as well as within the surrounding area.

ENVIRONMENTAL

The Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review associated with the Stone Creek Village project would be exempt from CEQA review under CEQA State Guidelines Section 15183. This exempts from CEQA projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Stone Creek Village Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review involves construction and operation of a mixed-use development with a grocery store, retail shops, gas station, and an apartment community located adjacent to a small lot single-family home community and adjacent to a pedestrian paseo traversing east west across the site. The mixed-use development is located within the Village of Zinfandel Community Plan area. The Stone Creek Village site was previously approved as part of the overall Village of Zinfandel Community Plan area and was identified in the *Village of Zinfandel Community Plan Amendment, Rezone, Development Agreement, Zoning Ordinance Amendment, Tentative Subdivision Maps, and Transportation System Management Plan Draft Environmental Impact Report* (DEIR) dated June 1997 (SCH 1996042019) and *Draft Supplemental Environmental Impact Report* (DSEIR) dated October 1999.

The approved Stone Creek Village project also included the following reports and studies to identify any potential environmental effects that could be peculiar to the project and/or its site:

- Drainage Report – concluded that preliminary grading and utility plans would accommodate on-site improvements and that storm drainpipe locations, sizes and inverts would also accommodate on-site improvements.
- Noise Study - determined that construction of a noise barrier wall would reduce sound levels associated with operation of the grocery store into compliance with the Rancho Cordova noise standards.
- Traffic Study (traffic movements) – identified site access improvements that should be implemented as part of the project design to ensure adequate and safe vehicle movements. The project design will implement the recommended access improvements.
- Traffic Study (vehicle miles travelled) - analyzed the project's potential effects on regional vehicle miles traveled (VMT) because VMT was not considered in the original DEIR or DSEIR. The residential uses will be a less intense trip generator than the originally analyzed commercial uses for the Stone Creek Village site. The residential uses will generate approximately 2,306 daily trips compared to the approximately 7,800 daily trips anticipated to be generated by commercial uses on the same site. The overall regional VMT would be reduced because the trip generation and overall travel generated by residential uses would be less than that with commercial uses that were previously analyzed.

As this Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review is consistent with the Village of Zinfandel Community Plan and the environmental documentation prepared for

the Village of Zinfandel Community Plan, it is exempt from CEQA review. So long as the project does not have any project-specific significant effects peculiar to the Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review, and not identified in the previous environmental documentation, the project is exempt and no environmental document pursuant to CEQA is required.

RECOMMENDED MOTIONS

Staff recommends that the City Council find the project to be in compliance with the California Environmental Quality Act (CEQA) per section 15183 Projects Consistent with a Community Plan, General Plan, or Zoning and adopt the resolution approving the Tentative Parcel Map, Tentative Subdivision Map, Major Design Review, and Unified Sign Program for Stone Creek Village (DD10072), subject to the findings, Project Plans (Exhibit A) and Conditions of Approval (Exhibit B).

ATTACHMENT(S)

1. Resolution
- 2A. Exhibit A to the Resolution - Project Plans
- 2B. Exhibit A to the Resolution – Unified Sign Design
3. Exhibit B to the Resolution - Conditions of Approval
4. Drainage Study dated August 23, 2021
5. Traffic Analysis dated October 5, 2021
6. Environmental Noise Study dated October 7, 2021
7. 500' Radius Map and Labels.

CITY OF RANCHO CORDOVA

CITY COUNCIL RESOLUTION NO. XX-2021

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA,
STATE OF CALIFORNIA, APPROVING A TENTATIVE PARCEL MAP, TENTATIVE
SUBDIVISION MAP, MAJOR DESIGN REVIEW, AND UNIFIED SIGN PROGRAM FOR THE
STONE CREEK VILLAGE PROJECT NO. DD10072**

WHEREAS, Elliott Homes, (hereinafter referred to as Applicant) filed an application with the City of Rancho Cordova for a Tentative Parcel Map, Tentative Subdivision Map, Major Design Review, and Unified Sign Program approval for the Stone Creek Village project; and

WHEREAS, the City Council is the appropriate authority to hear and take action on this project; and

WHEREAS, the project site is located at Zinfandel Drive between Bear Hollow Drive and Spoto Drive and includes designs for a grocery store, retail shops, retail pad building with drive-thru, service station, 151-unit apartment community, and 128 single family homes. The project also includes a Unified Sign Program for on-site signage and monument signs at key entrances to the property; and

WHEREAS, the City Council of the City of Rancho Cordova has conducted a properly noticed public hearing pursuant to Government Code section 65090 and has duly considered all written and verbal testimony presented during the hearing.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA
HEREBY RESOLVES AS FOLLOWS:**

1. The CEQA exemption found in California Code of Regulation Title 14, sections 15183 (Consistent with the Community Plan, General Plan or Zoning) is an adequate exemption according to the Guidelines of the California Environmental Quality Act.
 - A. **Finding:** The project has been analyzed and is exempt per California Environmental Quality Act Guidelines Section 15183 "Consistent with the Community Plan, General Plan or Zoning."

Evidence: The Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review associated with the Stone Creek Village project would be exempt from CEQA review under CEQA State Guidelines Section 15183. This exempts from CEQA projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. The Stone Creek Village Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review involves construction and operation of a mixed-use development with a grocery store, retail shops, gas station, and an apartment community located adjacent to a small lot single-family home community and adjacent to a pedestrian paseo traversing east west across the site. The mixed-use development is located within the Village of Zinfandel Community Plan area. The Stone Creek Village site was previously approved as part of the overall Village of Zinfandel Community Plan area and was identified in the *Village of Zinfandel Community Plan Amendment, Rezone, Development Agreement, Zoning*

Ordinance Amendment, Tentative Subdivision Maps, and Transportation System Management Plan Draft Environmental Impact Report (DEIR) dated June 1997 (SCH 1996042019) and *Draft Supplemental Environmental Impact Report (DSEIR)* dated October 1999.

The approved Stone Creek Village project also included the following reports and studies to identify any potential environmental effects that could be peculiar to the project and/or its site:

- Drainage Report – concluded that preliminary grading and utility plans would accommodate on-site improvements and that storm drainpipe locations, sizes and inverts would also accommodate on-site improvements.
- Noise Study - determined that construction of a noise barrier wall would reduce sound levels associated with operation of the grocery store into compliance with the Rancho Cordova noise standards.
- Traffic Study (traffic movements) – identified site access improvements that should be implemented as part of the project design to ensure adequate and safe vehicle movements. The project design will implement the recommended access improvements.
- Traffic Study (vehicle miles travelled) - analyzed the project's potential effects on regional vehicle miles traveled (VMT) because VMT was not considered in the original DEIR or DSEIR. The residential uses will be a less intense trip generator than the originally analyzed commercial uses for the Stone Creek Village site. The residential uses will generate approximately 2,306 daily trips compared to the approximately 7,800 daily trips anticipated to be generated by commercial uses on the same site. The overall regional VMT would be reduced because the trip generation and overall travel generated by residential uses would be less than that with commercial uses that were previously analyzed.

As this Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review is consistent with the Village of Zinfandel Community Plan and the environmental documentation prepared for the Village of Zinfandel Community Plan, it is exempt from CEQA review. So long as the project does not have any project-specific significant effects peculiar to the Tentative Parcel Map, Tentative Subdivision Map, and Major Design Review, and not identified in the previous environmental documentation, the project is exempt and no environmental document pursuant to CEQA is required.

2. Section 66474 of the California Subdivision Map Act requires a City to deny approval of a tentative map, if any of the following findings are found to be true. In the case of the proposed map, none of the required findings were found to be true. The following evidence supports the map request:

- A. **Finding:** That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451.

Evidence: The proposed project is consistent with the General Plan and land use designation specified for this parcel. The property is designated as Commercial Mixed Use (CMU) within the Rancho Cordova General Plan. CMU encourages the integration of retail service commercial uses with office and/or residential uses. This horizontal

mixed-use project provides the commercial shopping center area with a multi-family and single-family residential use. The project site is also zoned Retail Commercial (RC) with the Zinfandel Special Planning Area (ZSPA). This zoning designation also encourages mixed use development and promotes this site as a central hub to the overall ZSPA. The proposed project upholds the intended purpose of the RC zone

- B. **Finding:** That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.

Evidence: The proposed Tentative Parcel/Subdivision Map is consistent with the existing development standards of the General Plan designation of CMU and the standards of the RC zoning designation for the ZSPA. The anticipated future improvement of the project maintains the mixed-use development that was intended by this zone and the general plan designation.

- C. **Finding:** That the site is not physically suitable for the type of development.

Evidence: The site is physically suitable to subdivide. The existing 25.12+/- acre parcel will be split into a total of 140 lots to accommodate individual buildings and homes. Each new parcel will be supported by cross access parking and utilities for future development. The parcel will also provide adequate access to the north on Bear Hollow Drive, to the east on Zinfandel Drive, and to the south on Spoto Drive, as well as pedestrian access to the west by way of the city bike trail. The map has also been conditioned to have reciprocal parking and access agreements between parcels to maintain the seamless circulation and adequate parking as originally approved

- D. **Finding:** That the site is not physically suitable for the proposed density of development.

Evidence: The site is physically suitable for the proposed density of the development. The existing zoning designation of RC allows for both retail space and residential areas in this location and encourages mixed uses developments. The zoning designation also allows for residential uses consistent with RD-10, RD-15 and RD-20 at this location and the proposed residential areas of the map would be within the allowable density of the respective parcels.

- E. **Finding:** That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

Evidence: The proposed design of the Tentative Parcel Map and Tentative Subdivision Map are not likely to cause any environmental damage. The site is currently undeveloped without any sensitive plant and/or wildlife. The proposed project is consistent with the approved EIR for the Zinfandel Special Planning Area and can be found exempt from environmental review pursuant to Section 15183 of the CEQA guidelines.

- F. **Finding:** That the design of the subdivision or the type of improvements is likely to cause serious public health problems.

Evidence: The subdivision of one parcel into a total of 140 lots would not cause any serious public health problems. The overall project is designed to promote pedestrian walkability and reduce vehicle miles traveled within the surrounding area. The subdivision would allow for the sale, lease, or finance of the future development of each lot and would not result in any future public health issues.

- G. **Finding:** That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.

Evidence: No change is proposed with this subdivision and a condition has been placed on the project to ensure the access and shared parking remains for all businesses prior to sale of the new parcels.

3. Approval of the Major Design Review, subject to the Design Review Package ([Attachment 2](#)) and the Conditions of Approval ([Attachment 3](#)) must provide sufficient evidence for the Findings required by Zoning Code Section 23.141.070. Findings and supportive evidence are shown below:

- A. **Finding:** The proposed project is consistent with the objectives of the General Plan, complies with applicable zoning regulations, Specific Plan provisions, and special planning area provisions, and is consistent with the applicable Rancho Cordova Design Guidelines.

Evidence: The proposed Design Review for the Stone Creek Village project is designated as a Commercial Mixed Use (CMU) site within the City's General Plan. The CMU designation encourages the integration of both commercial uses and residential uses as shown within the proposed project. This site is also located within the Zinfandel Special Planning Area (ZSPA) and is zoned Retail Center (RC) which also encourages mixed use design. The project proposes over 34,000 square feet of retail space as well as 151 multi-family units, and 128 single family homes which is consistent with the intended mixed-use development of both the General Plan, ZSPA, and Rancho Cordova Design Guidelines.

- B. **Finding:** The proposed architecture, site design, and landscape are suitable for the purposes of the building and the site and will enhance the character of the neighborhood and community.

Evidence: The Applicant, Elliot Homes, is presenting a design package that includes three major components of a shopping center, 151 multi-family apartments, and 128 single-family homes. The project is zoned RC which does allow for all three of these components. The design of the overall project provides adequate access to all public rights of way surrounding the project site and provides, both vehicular and pedestrian, and also maintains a consistent design concept throughout the entire site. The proposed farmhouse style, shady landscaping, and alley loaded product encourage pedestrian activity throughout the property and also create a visually interesting streetscape, enhancing the neighborhood and community.

- C. **Finding:** The architecture, including the character, scale, and quality of the design, relationship with the site and other buildings, building materials, screening of exterior appurtenances, exterior lighting and signing, and similar elements establishes a clear design concept and is compatible with the character of existing or anticipated buildings on adjoining and nearby properties.

Evidence: The project has consistently maintained a farmhouse style throughout the entire project while still providing enough variation to remain visually interesting. The retail center, apartment building, and single-family homes, all share consistent materials and colors that enhance the farmers market appearance that the Sprouts anchor tenant portrays to its customers. The project is also compatible with existing single-family homes in the area as well as the design of the future retirement facility across Bear Hollow Drive. The vehicular access and pedestrian connections also work to create an overall cohesive product.

- D. **Finding:** The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.

Evidence: The intent of the project is to provide a horizontal mixed-use product that encourage cross access and promotes on-site circulation. Stone Creek Village has provided thorough vehicular and pedestrian access across all areas of the project and will not create any conflicts with any modes of transportation. The components of the project are consistent with the allowed uses of the Retail Commercial zone which was reviewed for traffic as part of the original EIR for the Zinfandel Special Planning Area.

4. The approval authority shall approve, or approve with conditions, an application for a Unified Sign Program after finding all of the following findings and evidence.

- A. **Finding:** The proposed sign program does not violate provisions of this zoning code and the municipal code.

Evidence: The Zinfandel Special Planning Area (ZSPA) only provides a short excerpt regarding signage, stating that a comprehensive sign program with consistent theme and character should be provided. The Applicant has provided a sign program that is within the allowable parameters of Chapter 23.119 Unified Sign Program of the municipal code. The intent of the USP, as stated in the code, is to adopt unique and specific design and development standards for mixed use developments and this program has achieved that intent in developing signage that is consistent with the overall farmhouse theme of the retail center.

- B. **Finding:** The proposed sign program is generally consistent with location, size, height, setback and other requirements of the underlying zoning district and applicable design guidelines for signs permitted with or without a unified sign program requirement.

Evidence: The project is within the ZSPA which does not provide specific design guidelines within the area. The ZSPA defers to the Sacramento County Code which provides standards and requirements for the underlying commercial zoning that are generally consistent with what is proposed within the USP. The program upholds the design guidelines in providing a consistent theme throughout the center while also maintaining setbacks and location requirements.

- C. **Finding:** The appearance, scale, materials, design and graphics, and orientation of signs are keeping with the character of the site and buildings, and the surrounding neighborhood.

Evidence: The design of the signage is consistent with the farmers market concept that is portrayed by the Sprouts grocery store. The theme is maintained throughout all signage in the retail center as well as the designs of the adjacent multi-family building and residential homes. All signage will be reviewed again at building permit stage to ensure consistency with the proposed unified sign program and to ensure that the theme of the project is maintained.

- D. **Finding:** Approval of the unified sign program would not be detrimental to the public interest, health, safety, convenience, or welfare, or materially injurious to persons, property, or improvements in the vicinity in which the project is located.

Evidence: The proposed unified sign program is in the public interest to ensure that the signs are of an appropriate size and within an appropriate location that will not create a safety hazard for vehicles or pedestrians. The program will also ensure that the design of the signage is appropriate for all types of signage within the shopping center and overall project.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 18th day of October 2021 by the following vote:

AYES:

NOES:

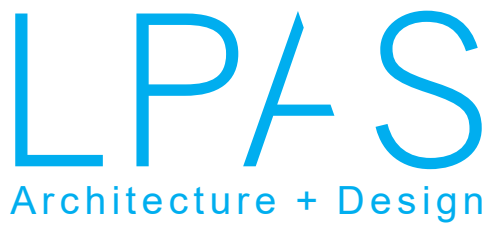
ABSENT:

ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk



STONE CREEK VILLAGE

Rancho Cordova, CA



ENTITLEMENT SET

PROJECT NO. 835-0005

August 24, 2021

PROJECT DESCRIPTION

Stone Creek Village is a horizontal mixed use development with a Sprout’s grocery store, retail shops, a gas station, an apartment community adjacent to a small lot single family home community organized along a pedestrian paseo traversing east west across the site. This paseo offers generous landscaping areas to shape an attractive public space to facilitate neighbors’ interactions.

The 151 apartments are organized in seven buildings which are Type VA with 3 stories.

The 128 rear loaded single family homes front onto Spoto Drive as well as the main east west paseo walk which leads to Sprout’s grocery store to promote an outstanding pedestrian experience.

For the apartment community, a range of outdoor amenities are provided to enhance the resident experience and meld the project into the neighborhood. The project’s clubhouse amenity is located along the open space trail and provides a wide range of amenities, such as: lap pool, outdoor kitchen and dining areas, lounge areas for groups of varying sizes and a bark park. Indoor amenities include a fitness center, leasing center, pet spa and clubroom lounge overlooking the pool.

PROJECT TEAM

Developer:
ELLIOTT HOMES, INC.
340 PALLADIO PARKWAY, SUITE 521,
FOLSOM CA 95630-8832

Attn: Price Walker
Tel: (916) 984-1300 x1223
Cell: (916) 600-8427
Email: p.walker@elliotthomes.com

Architect:
LPAS, Inc.
2484 Natomas Park Drive, Suite 100
Sacramento, CA 95818

Attn: Chris Kelly
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Cell: (949) 290-5548
Email: ckelly@lpas.com

Landscape Architect:
LPAS, Inc.
2484 Natomas Park Drive, Suite 100
Sacramento, CA 95818

Attn: Michael Millet
Tel: (916) 443-0335
Email: mmillett@lpas.com

Civil Engineer:
MORTON & PITALO, INC.
600 COOLIDGE DRIVE, SUITE 140
FOLSOM, CA 95630

Attn: Scott Pedersen
Tel: (916) 984-7621
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Email: spedersen@mpengr.com

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A.02 PROJECT DATA
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A.10 BUILDING A - FLOOR PLANS
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A.12 BUILDING B - FLOOR PLANS
A.13 CLUBHOUSE - FLOOR PLAN
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CIVIL

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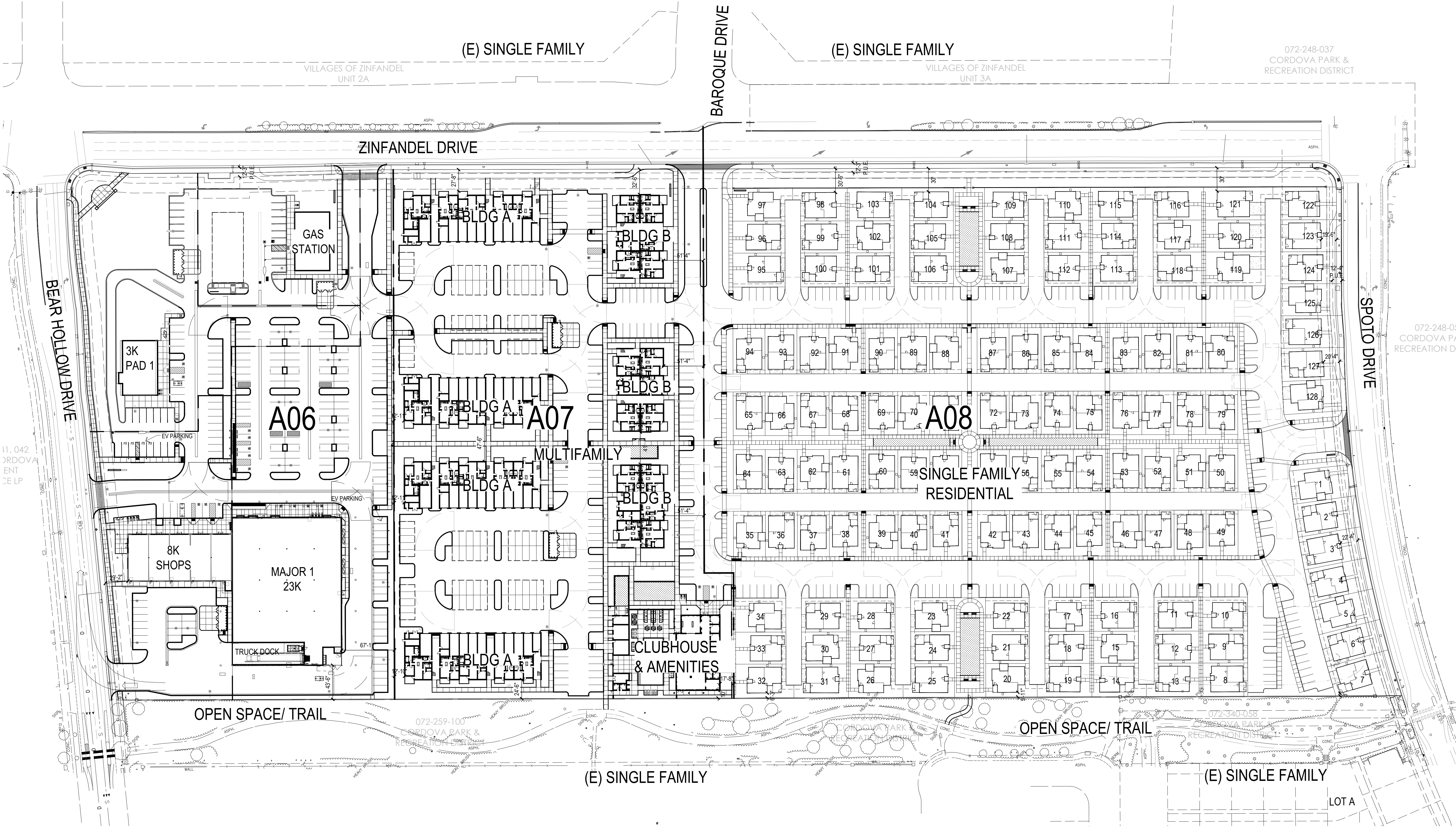
SHEET 1 OF 2 PRELIMINARY PHOTOMETRIC PLAN
SHEET 2 OF 2 PRELIMINARY PHOTOMETRIC PLAN

STONE CREEK VILLAGE
6/18/2021

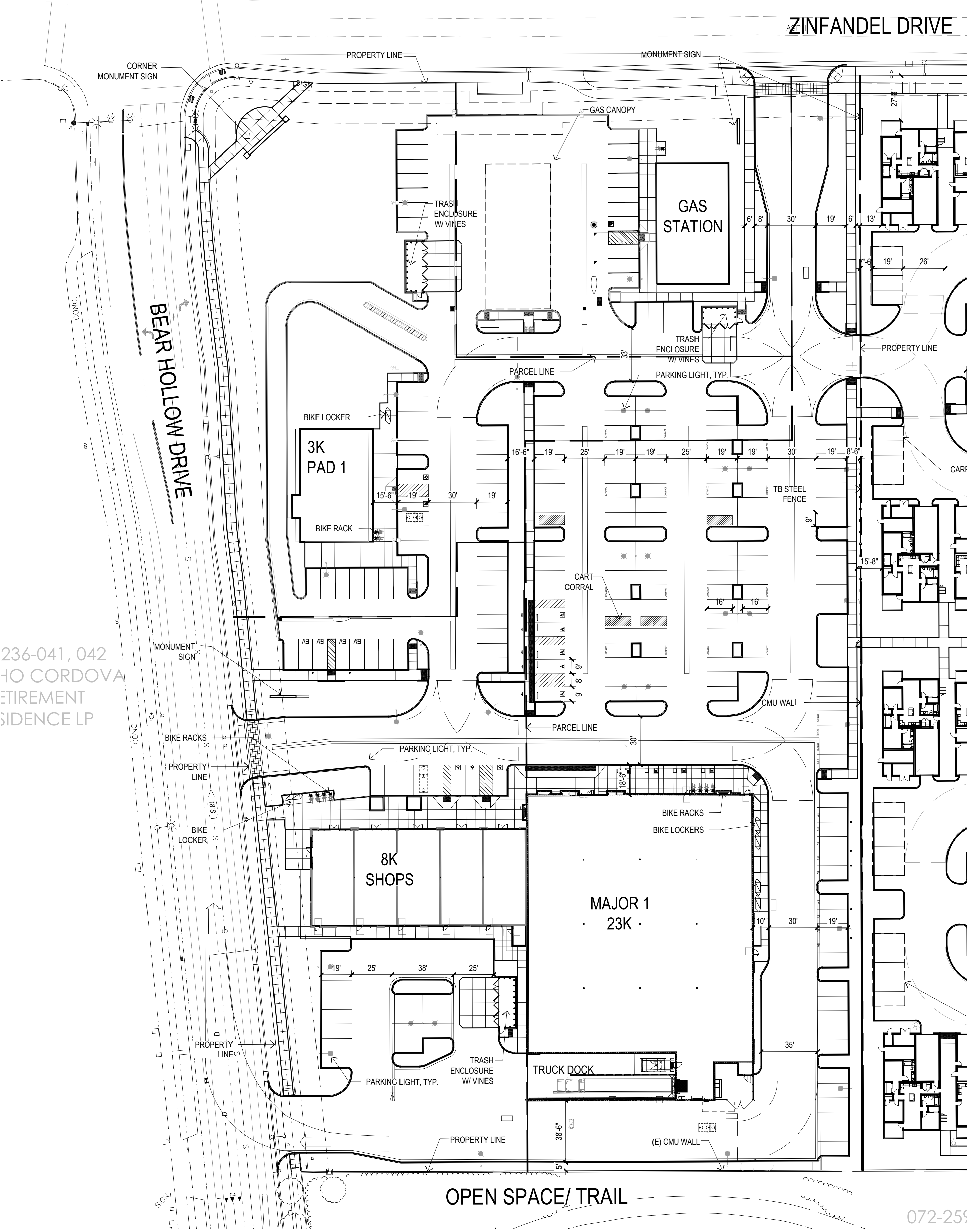
PROJECT DATA										
SITE AREA:		6.23 ACRES				271,379				
PROPOSED DENSITY:		24.2 DU/ACRE								
NUMBER OF UNITS:			BLDG. A TYP. OF 4			BLDG. B TYP. OF 3				
UNIT TYPE			X4		X3		TOTAL	%	TOTAL NET SF	
A1/A1.1	1 BDR / 1 BTH:	725 SF	6	24	3	9	33 UNITS	22%	23,925	NSF
A1.2/A1.3	1 BDR / 1 BTH:	737 SF	3	12	3	9	21 UNITS	14%	15,477	NSF
B1	2 BDR / 2 BTH:	1,003 SF	4	16	2	6	22 UNITS	15%	22,066	NSF
B1.1/B1.2	2 BDR / 2 BTH:	992 SF	1	4	1	3	7 UNITS	5%	6,944	NSF
B2	2 BDR / 2 BTH:	1,035 SF	2	8	0	0	8 UNITS	5%	8,280	NSF
B2.1	2 BDR / 2 BTH:	1,005 SF	0	0	1	3	3 UNITS	2%	3,015	NSF
B2.2	2 BDR / 2 BTH:	1,050 SF	2	8	2	6	14 UNITS	9%	14,700	NSF
B3	2 BDR / 2 BTH:	963 SF	4	16	0	0	16 UNITS	11%	15,408	NSF
B4	2 BDR / 2 BTH:	1,030 SF	2	8	2	6	14 UNITS	9%	14,420	NSF
B4.1	2 BDR / 2 BTH:	992	0	0	1	3	3 UNITS	2%	2,976	NSF
B5	2 BDR / 2 BTH:	1,060 SF	0	0	2	6	6 UNITS	4%	6,360	NSF
C1	3 BDR / 2 BTH:	1,254 SF	1	4	0	0	4 UNITS	3%	5,016	NSF
TOTAL UNITS:		918 AVE SF	100		51		151 UNITS	100%	138,587	NSF
GROSS BUILDING AREAS:		CLUBHOUSE	SUPORT BLDG	BLDG. A TYP. OF 4		BLDG. B TYP. OF 3				
			X4		X3					
NET RENTABLE AREA:			22,901	91,604	15,661	46,983	138,587	SF		
GARAGE			3,894	15,576	-	-	15,576	SF		
BUILDING SUPPORT:			-	266	1,064	324	972	2,036	SF	
CIRCULATION:				3,325	13,300	2,249	6,747	20,047	SF	
AMENITY:			5,246	172	688	353	1,059	6,993	SF	
SUPPORT BLDG:				1,840	-	-	1,840	SF		
TOTAL GROSS AREA:		5,246	1,840	122,232		55,761		185,079	SF	
MULTIFAMILY - VEHICLE PARKING SUMMARY:										
PARKING REQUIRED:										
1BDR		54	1.5 SPACES / UNIT				81	SPACES		
2BDR		93	2 SPACES / UNIT				186	SPACES		
3BDR		4	2 SPACES / UNIT				8	SPACES		
GUEST			0.6 SPACES/UNIT				91	SPACES		
20% REDUCTION FOR BIKE PARKING							(73)	SPACES		
TOTAL							293	SPACES		
PARKING PROVIDED:			BLDG A	X4	BLDG B	X3				
TUCK-UNDER GARAGES:				44		0	44	SPACES		
CARPORTS							98	SPACES		
SURFACE:							146	SPACES		
PARALLET PARKING							6	SPACES		
TOTAL		1.95	SPACES / UNIT				294	SPACES		
BIKE PARKING SUMMARY:										
PARKING REQUIRED:										
LONG TERM BIKE PARKING		151	0.5 BIKES / UNIT				76	BIKES		
SHORT TERM BIKE PARKING		151	0.1 BIKES / UNIT				15	BIKES		
TOTAL							91	BIKES		
PARKING PROVIDED							214	BIKES		
SINGLE FAMILY - VEHICLE PARKING SUMMARY:										
PARKING PROVIDED:										
GARAGE							256	SPACES		
SURFACE PARKING							123	SPACES		
TOTAL							379	SPACES		
RETAIL - VEHICLE PARKING SUMMARY:										
PARKING PROVIDED:										
SURFACE PARKING							217	SPACES		
TOTAL							217	SPACES		







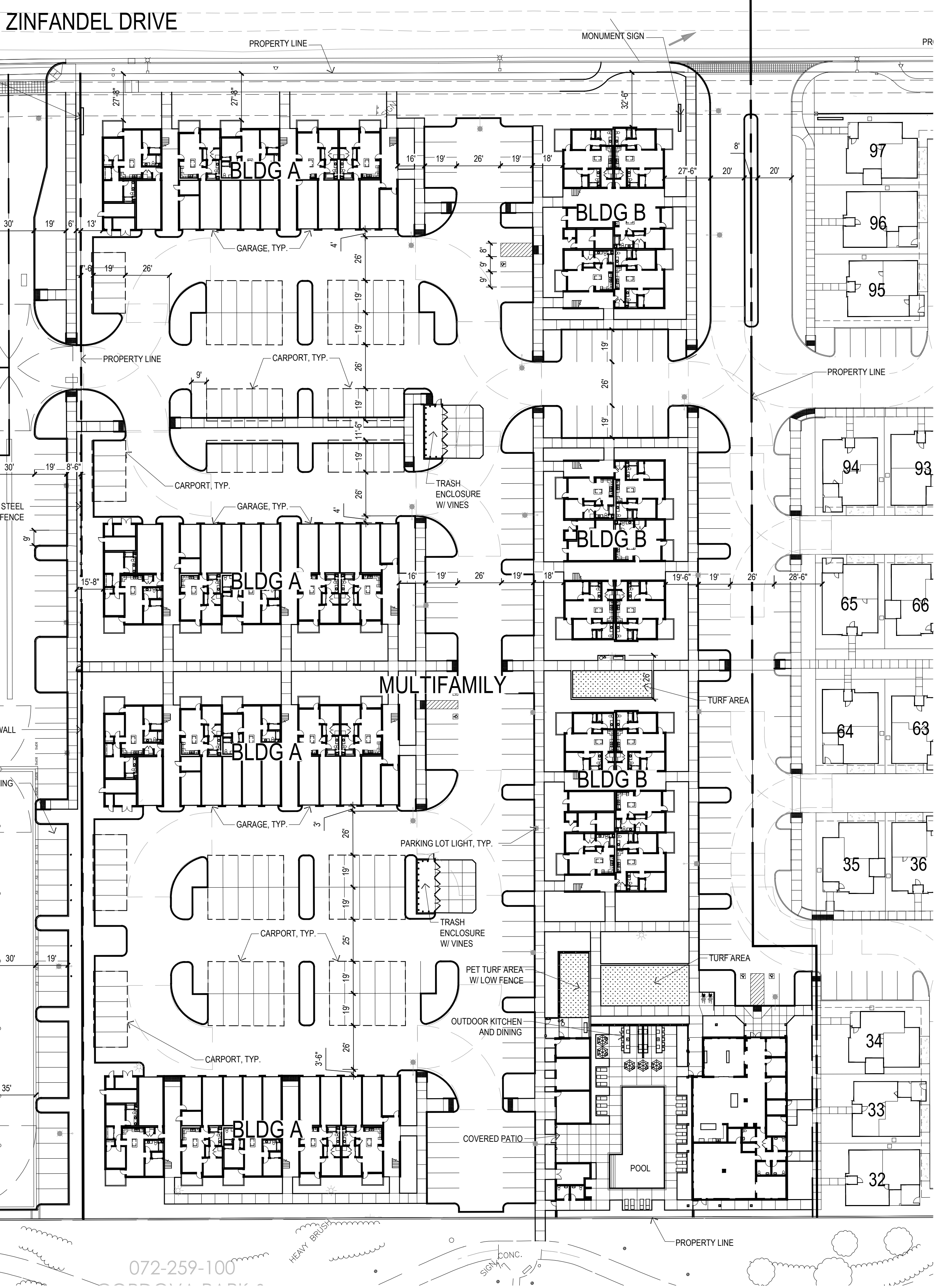
ITEM 18.1.



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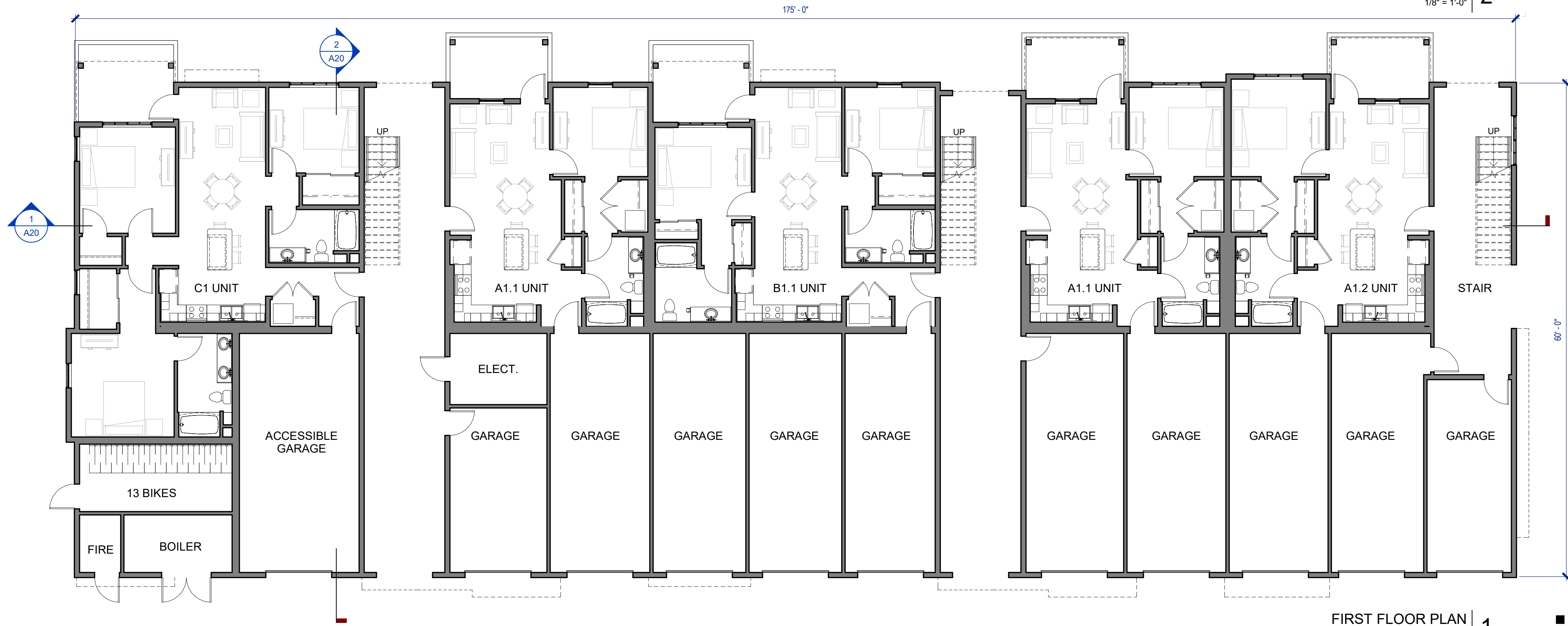
ZINFANDEL DRIVE



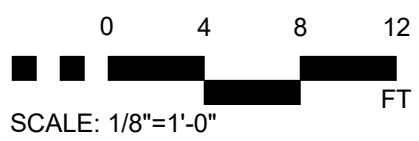


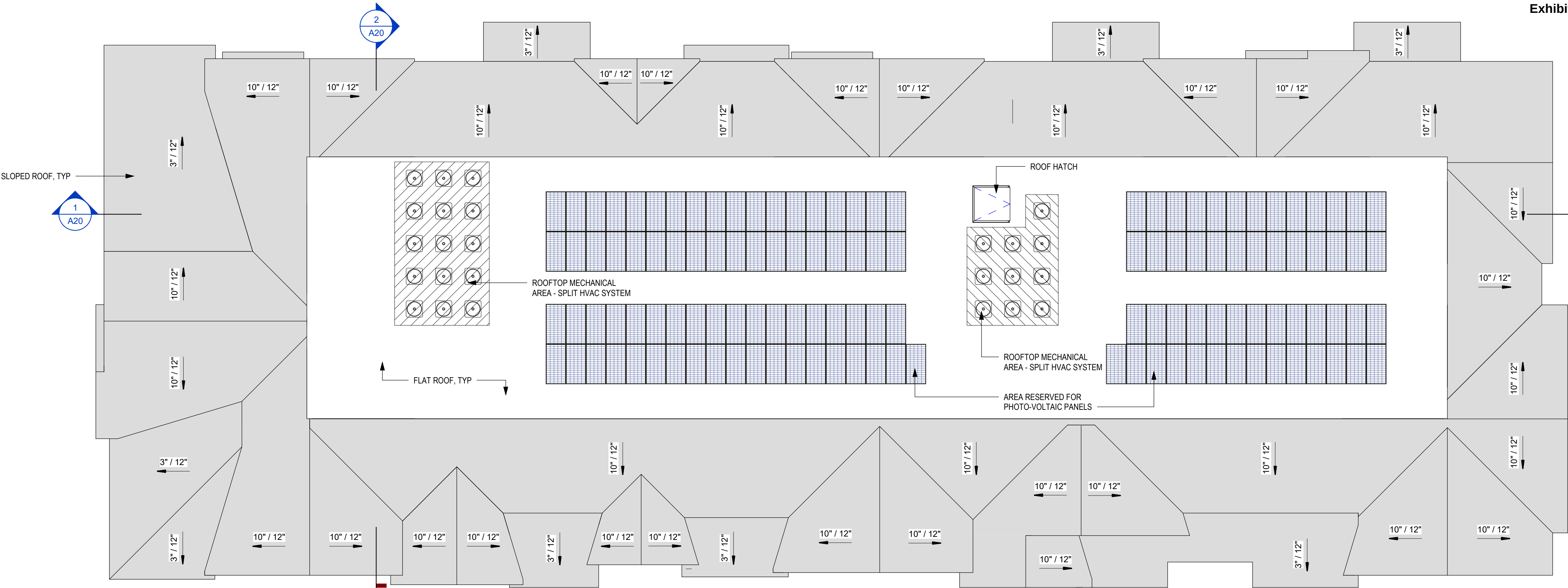


SECOND FLOOR PLAN | 2
1/8" = 1'-0"



FIRST FLOOR PLAN | 1
1/8" = 1'-0"

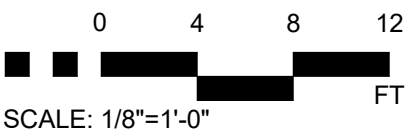


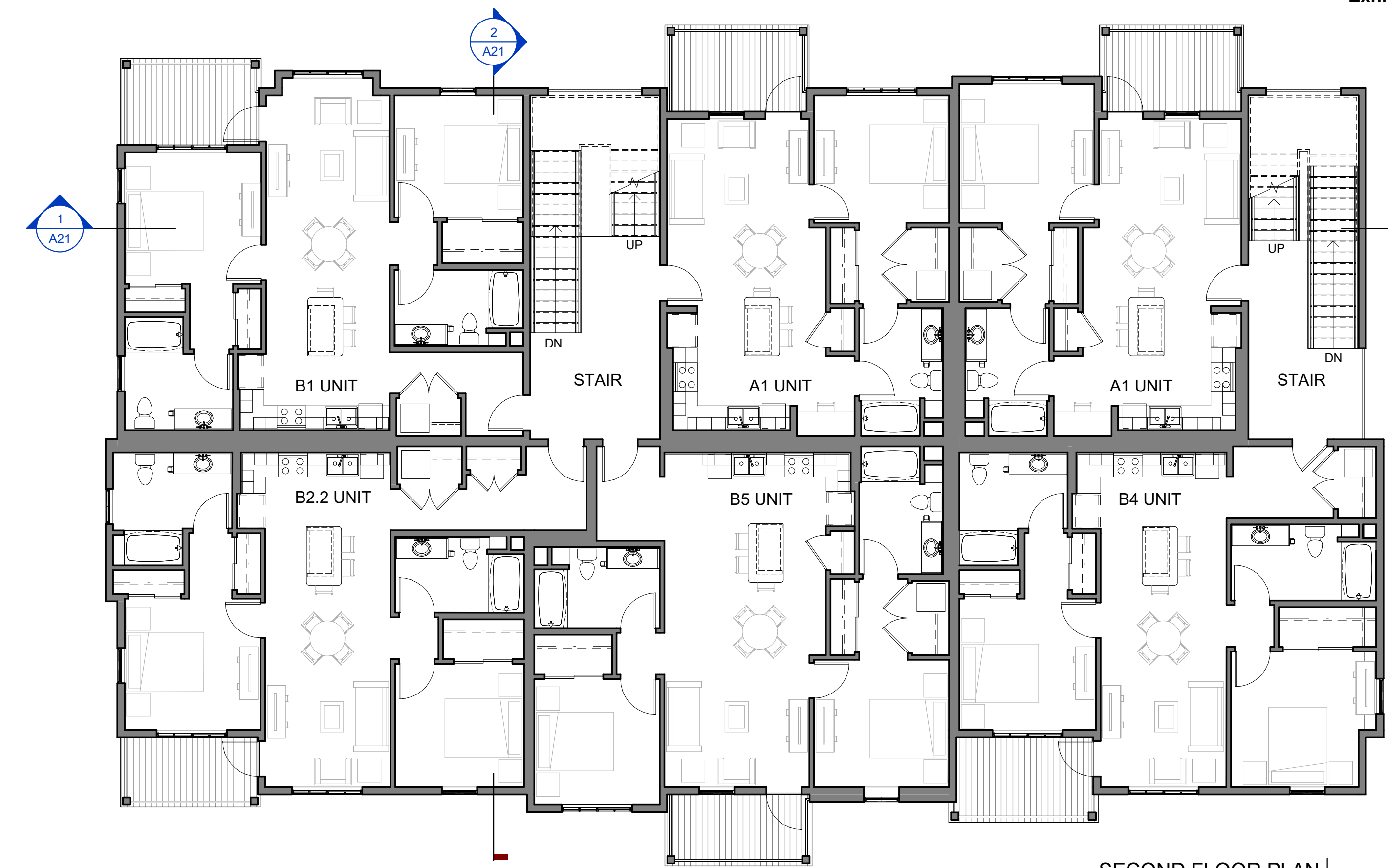


ROOF PLAN | 2
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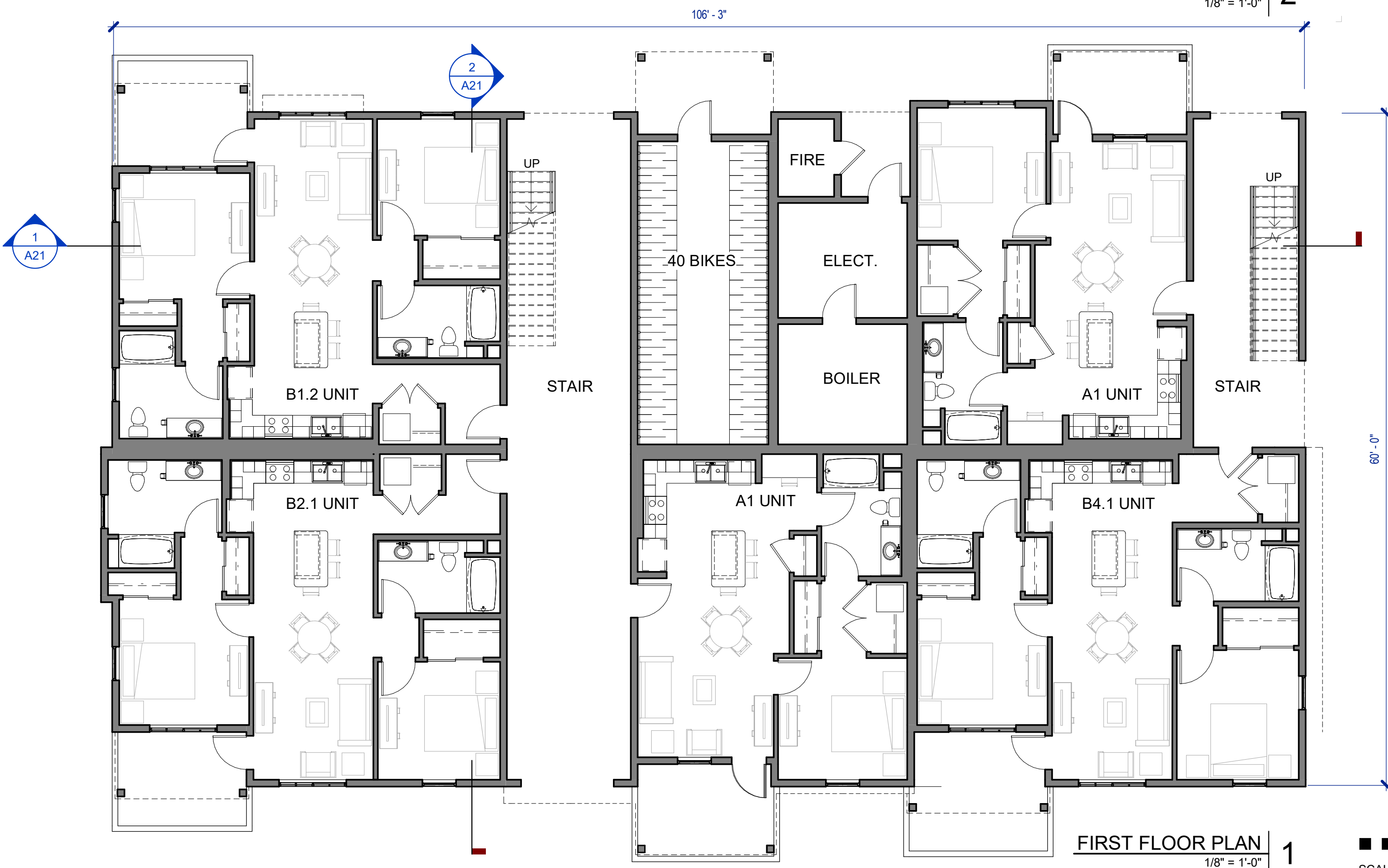


THIRD FLOOR PLAN | 1
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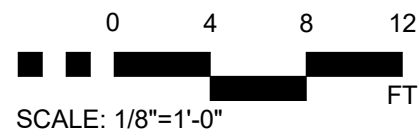


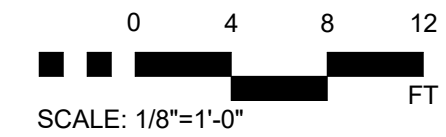
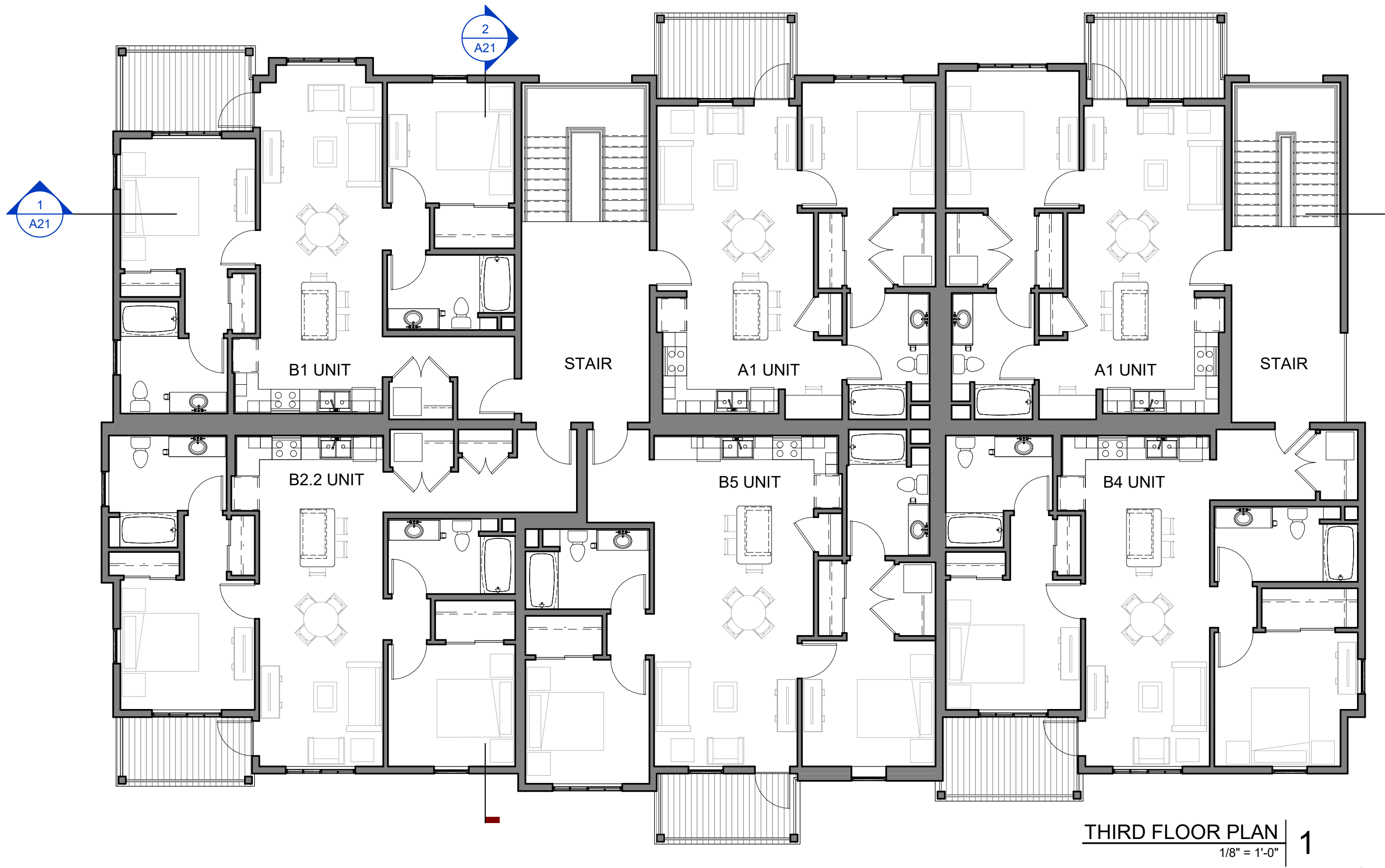
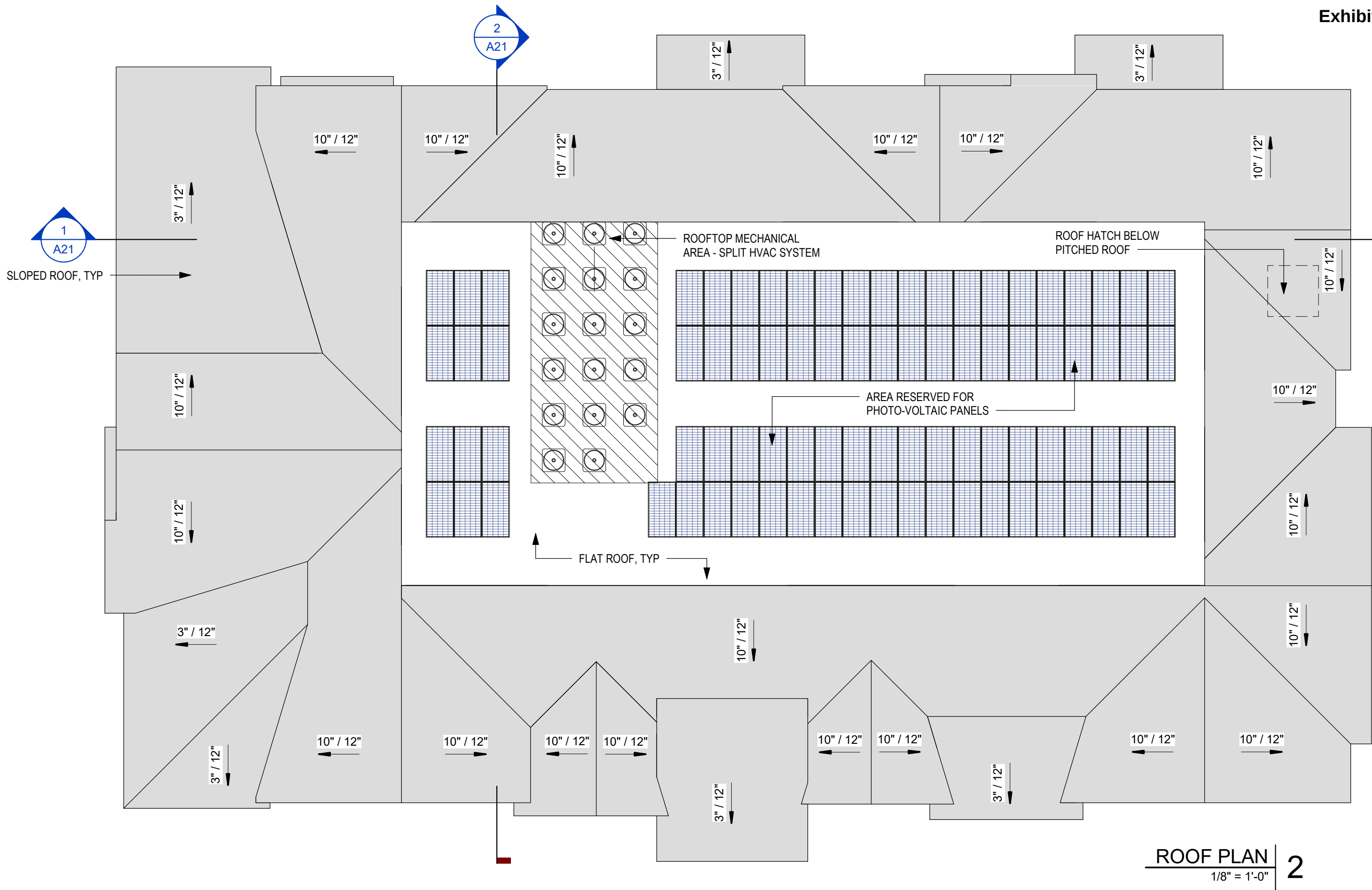


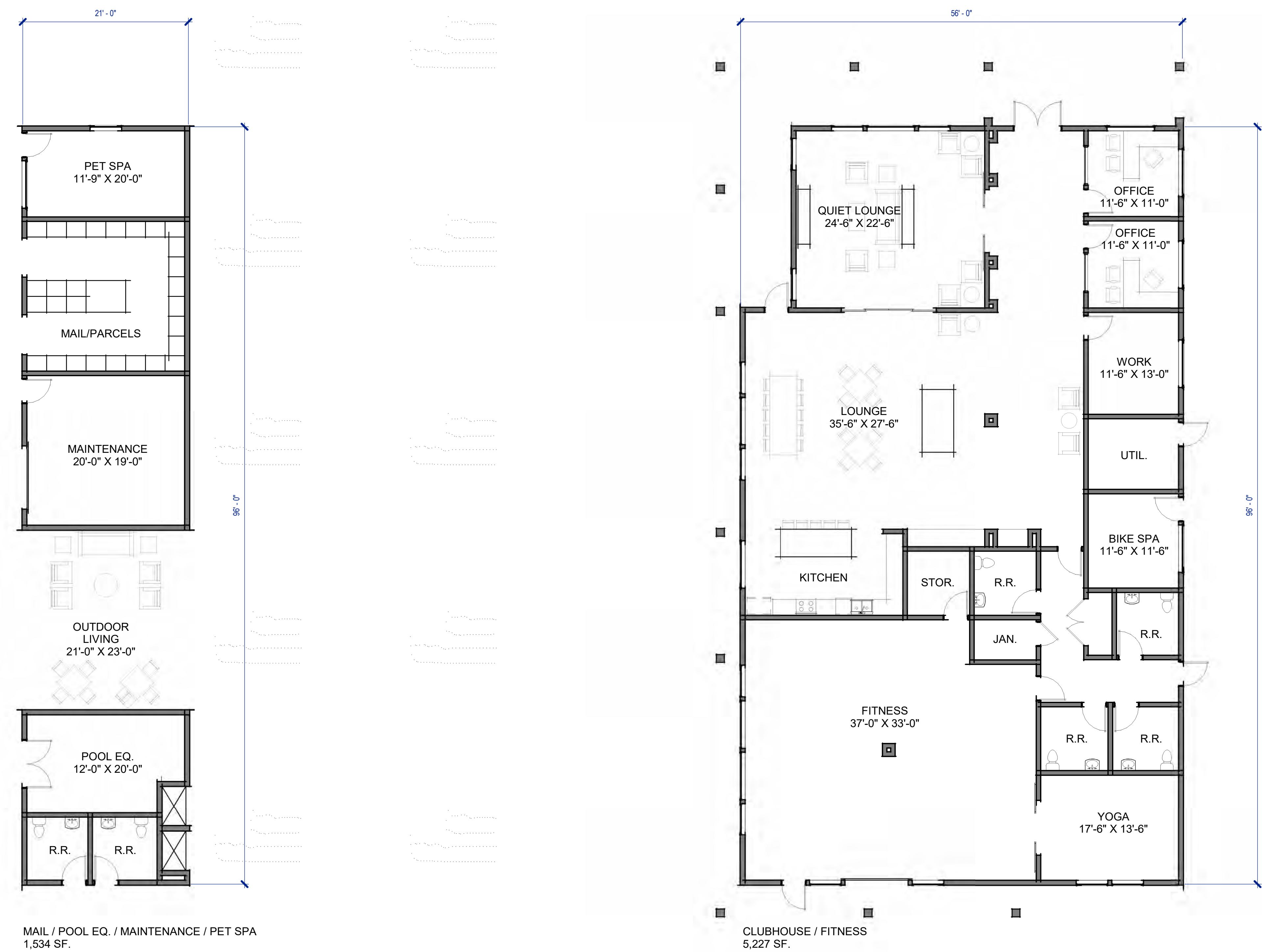
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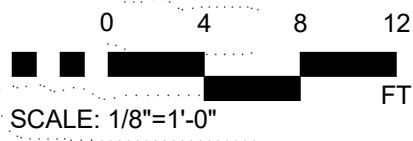
FIRST FLOOR PLAN | 1
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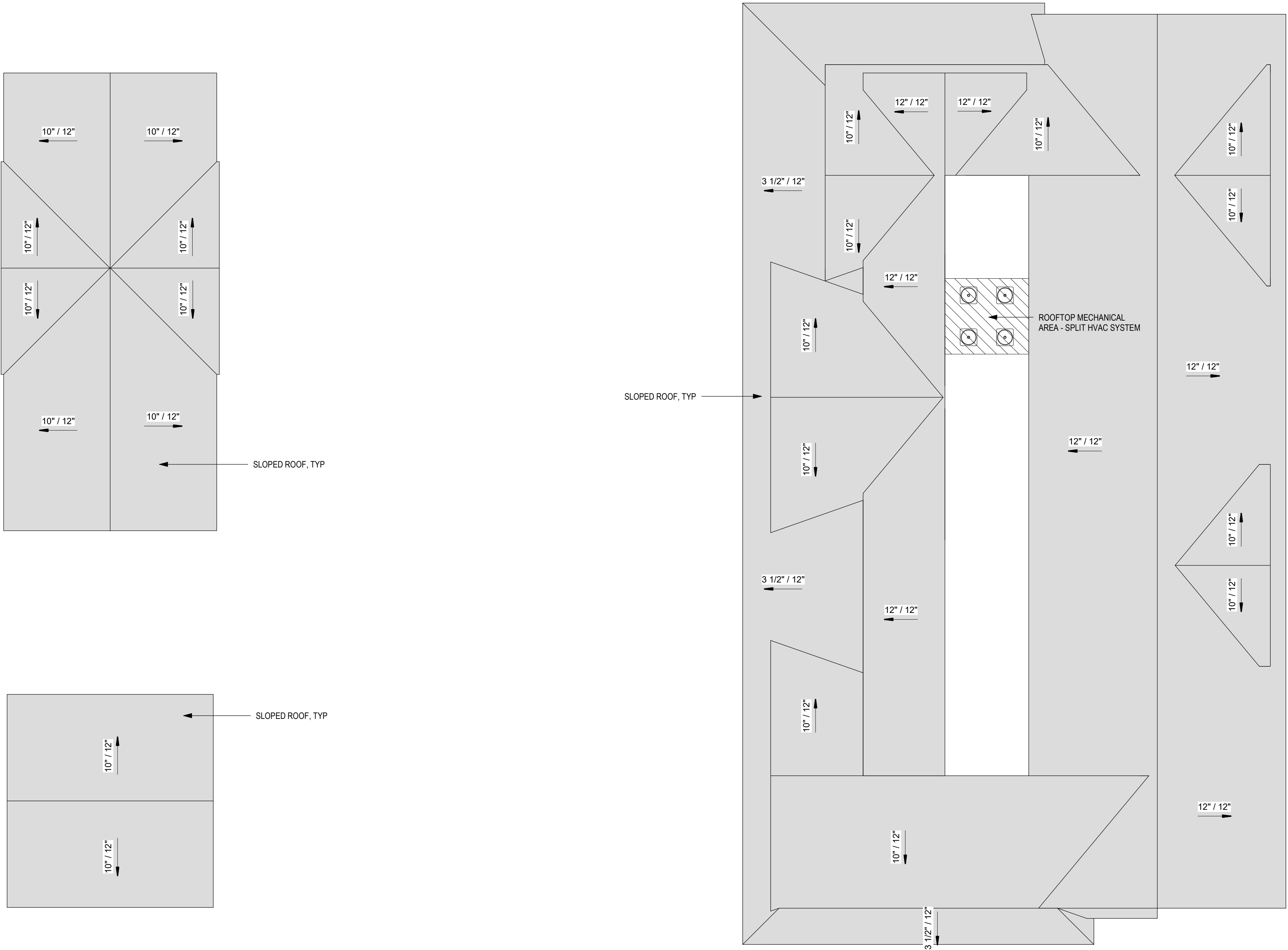




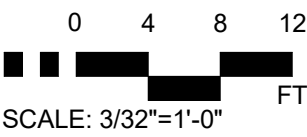


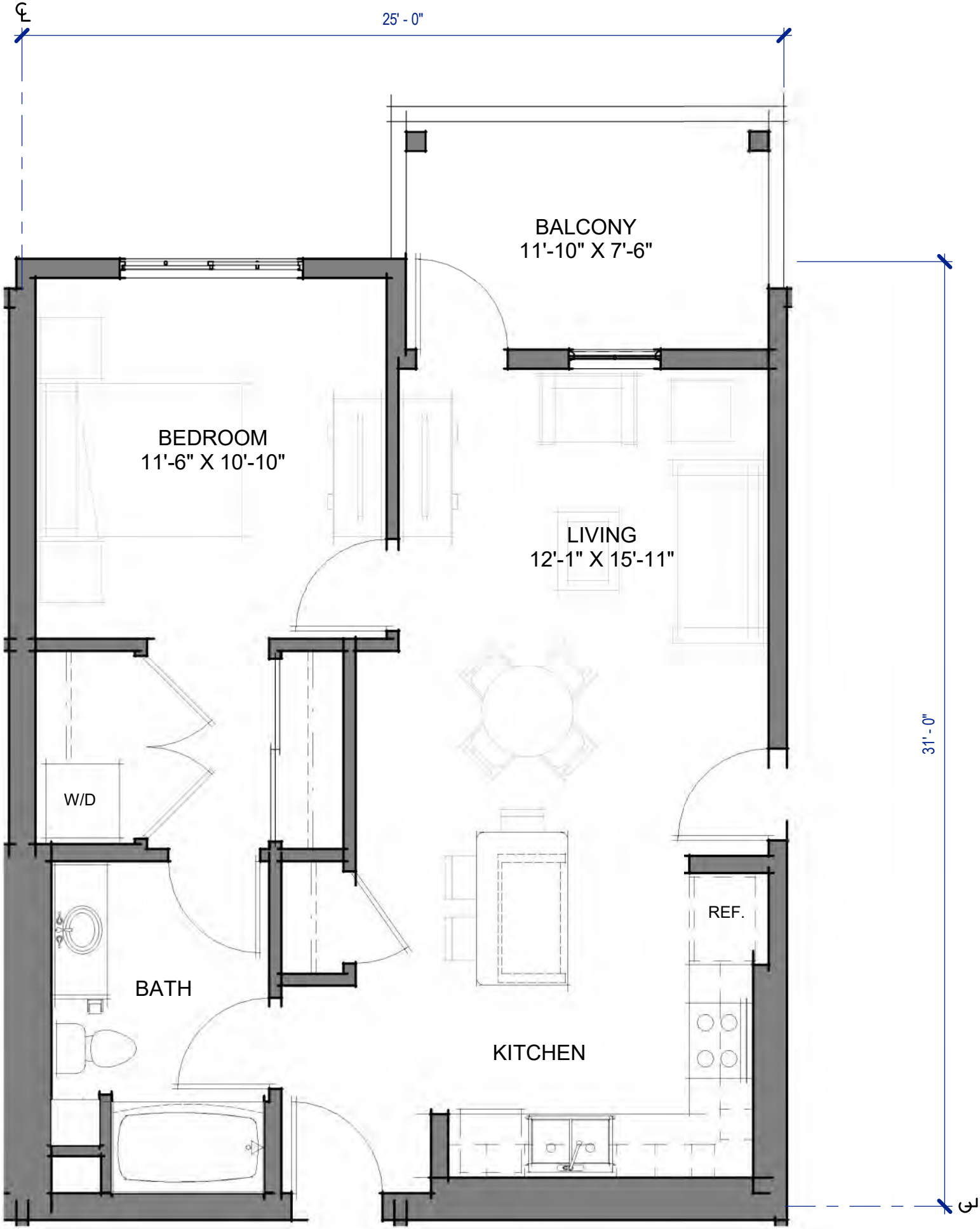
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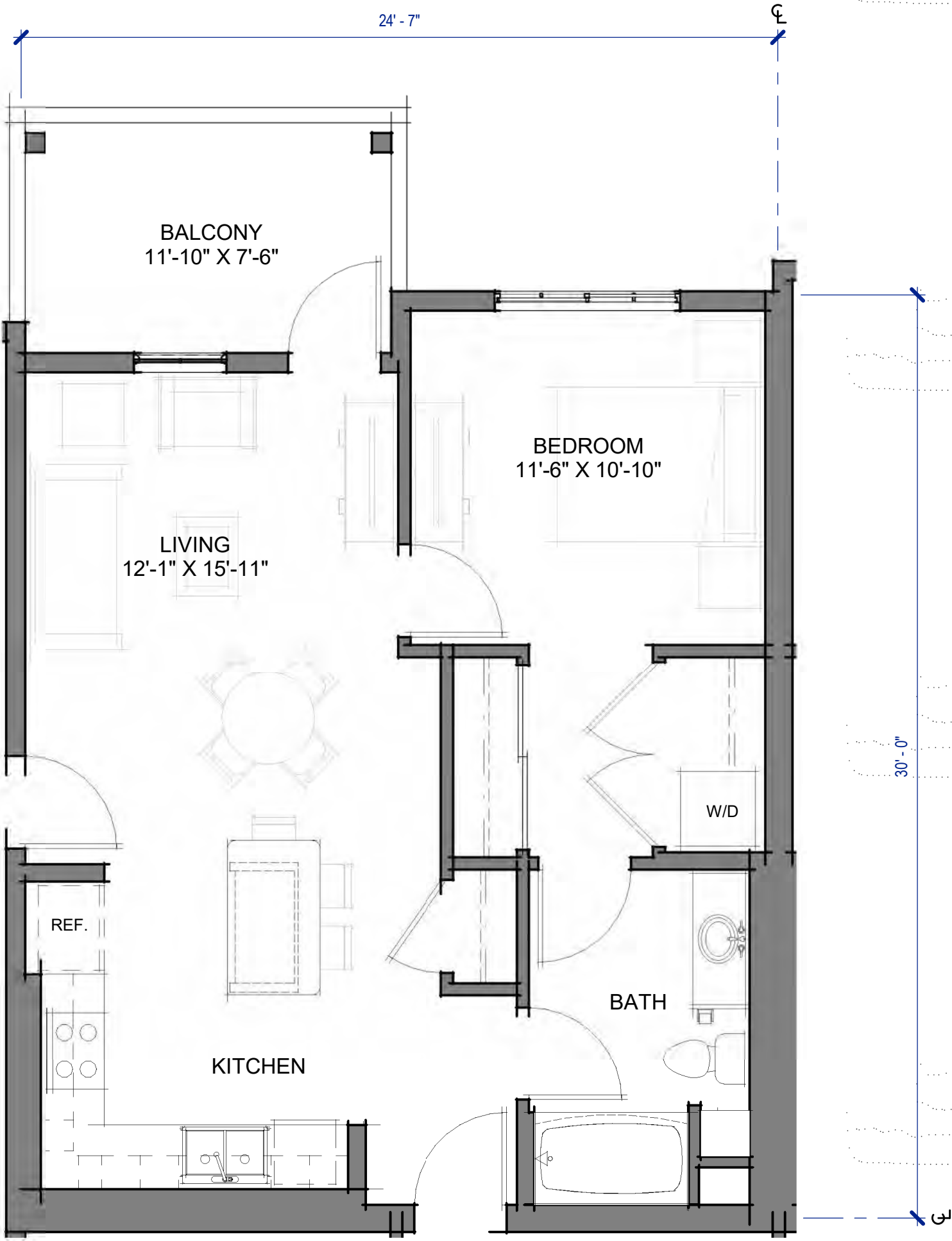


AMENITY ROOF PLAN | 1
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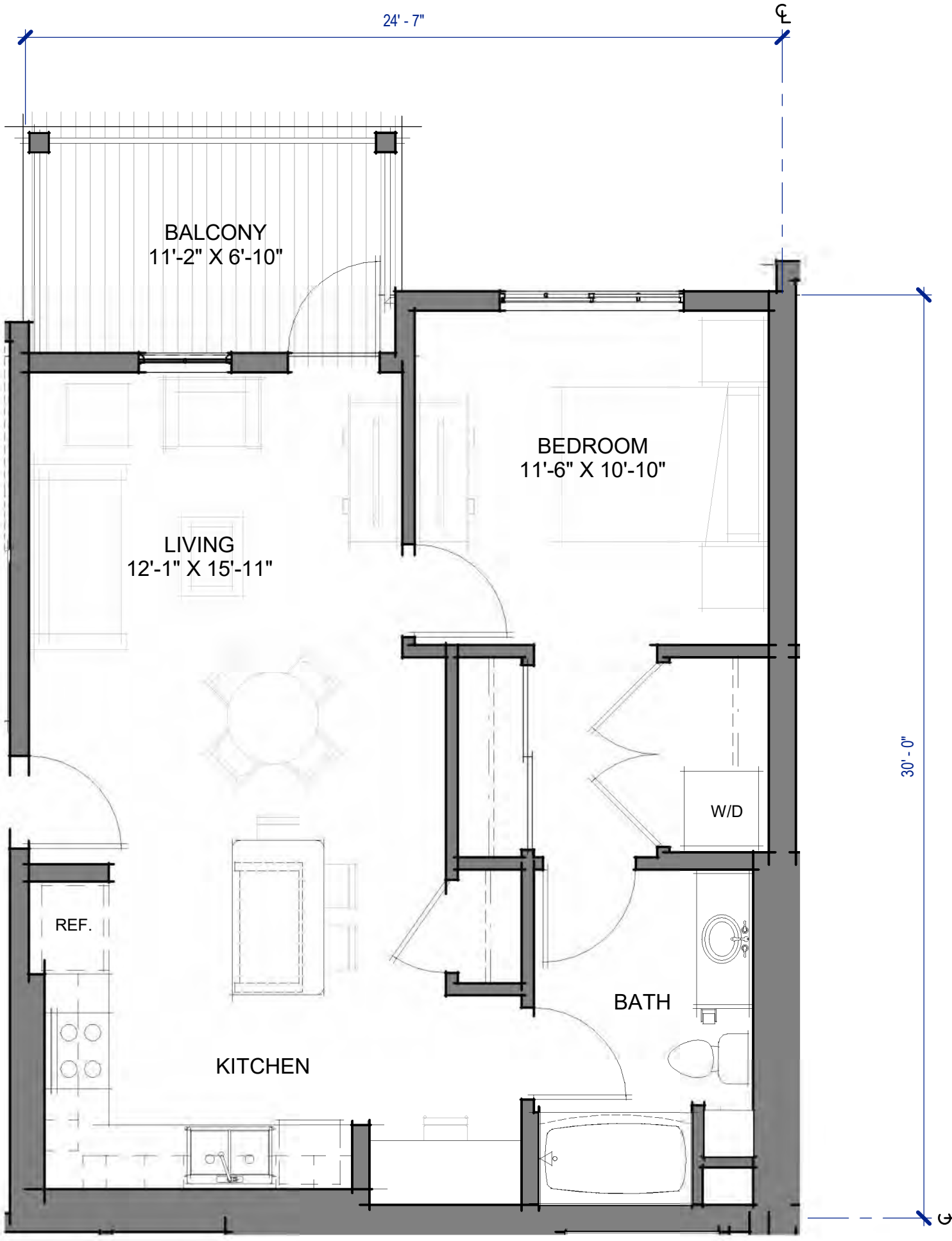




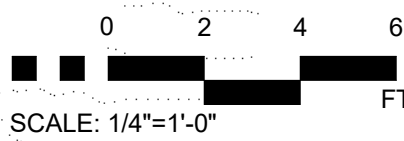
UNIT A1.2 - 737 SF
1/4" = 1'-0" 3

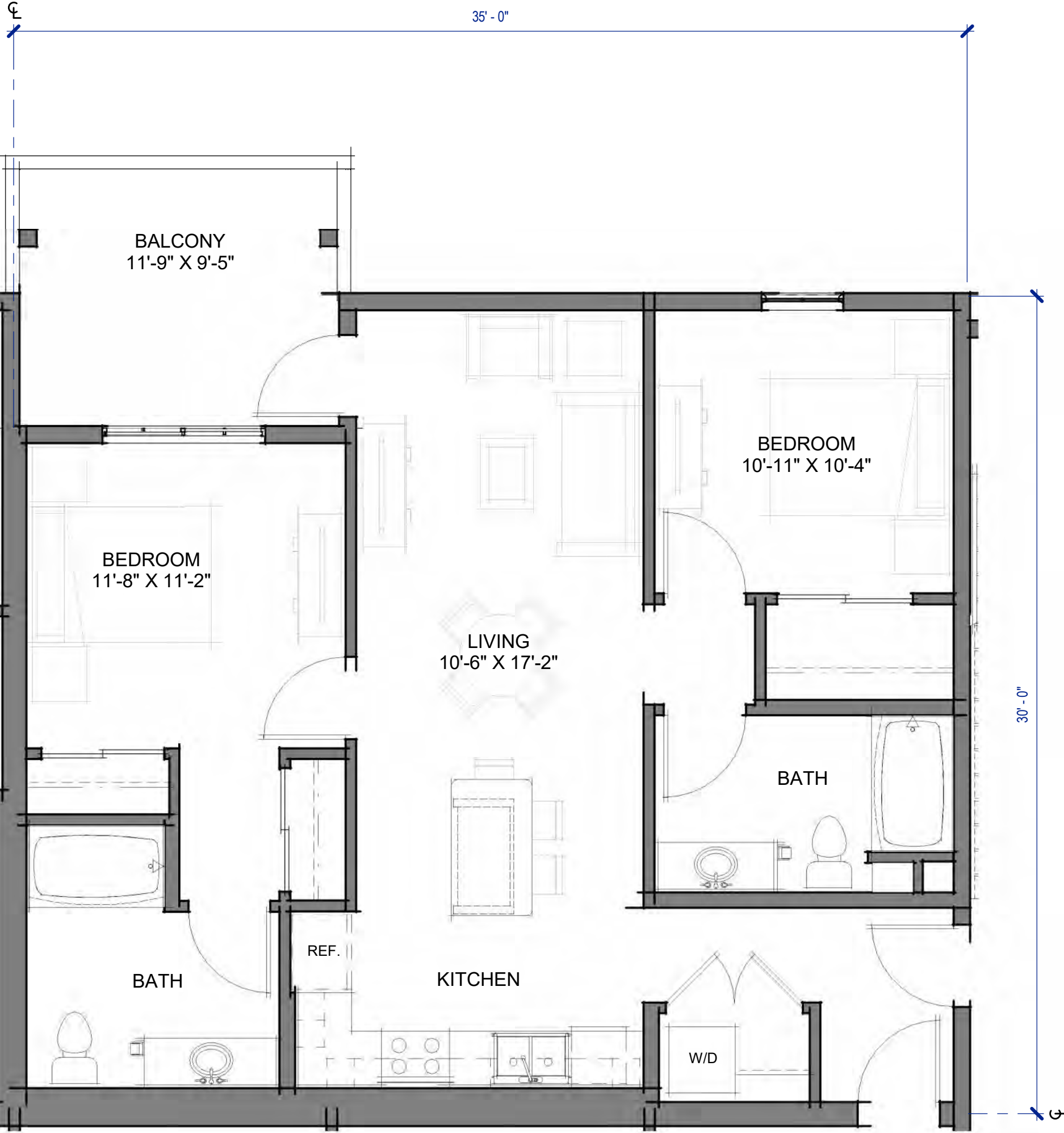


UNIT A1.1 - 725 SF
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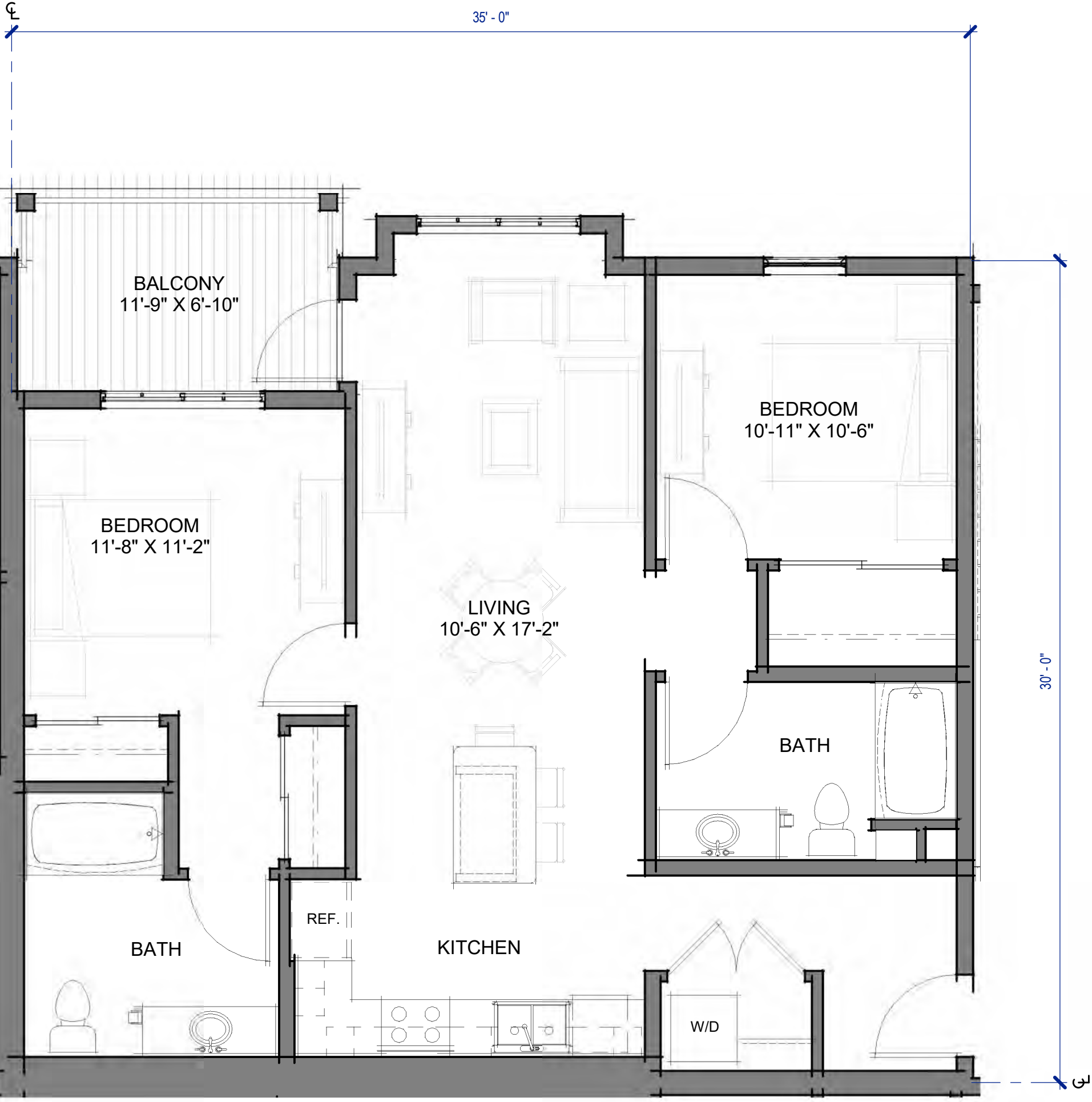


UNIT A1 - 725 SF
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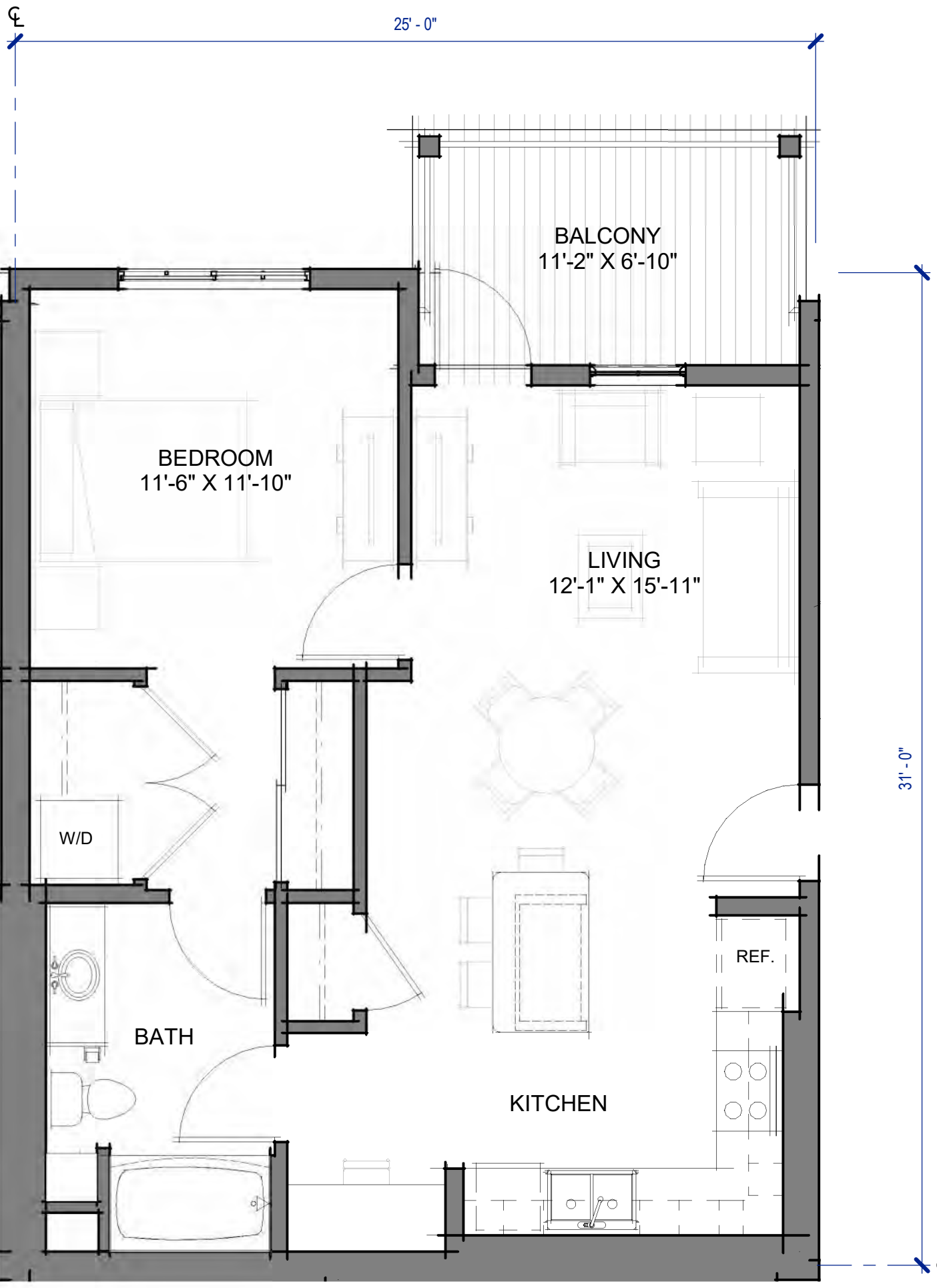




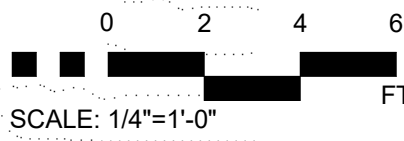
UNIT B1.1 - 992 SF
1/4" = 1'-0" 3

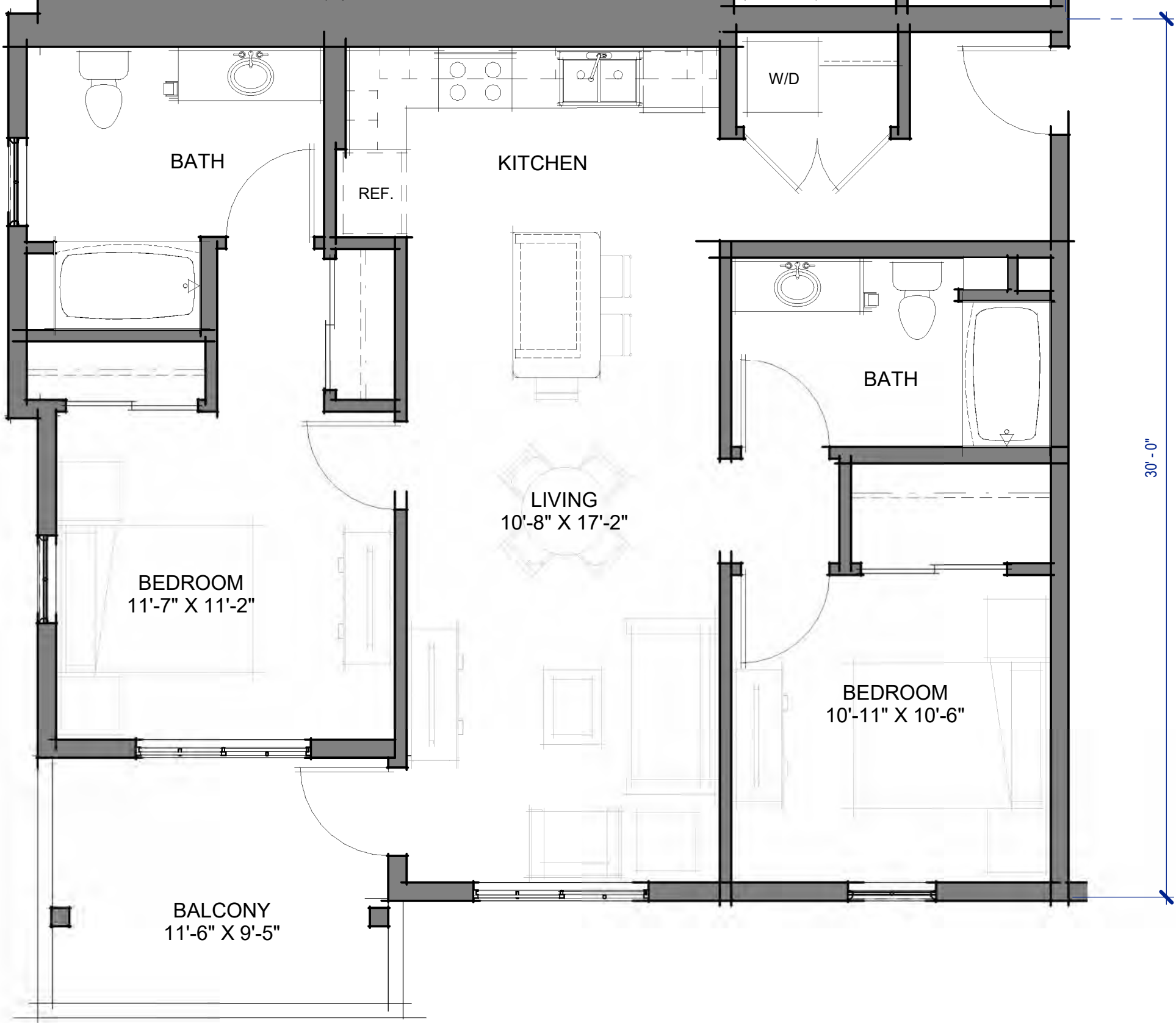


UNIT B1 - 1,003 SF
1/4" = 1'-0" 2



UNIT A1.3 - 737 SF
1/4" = 1'-0" 1

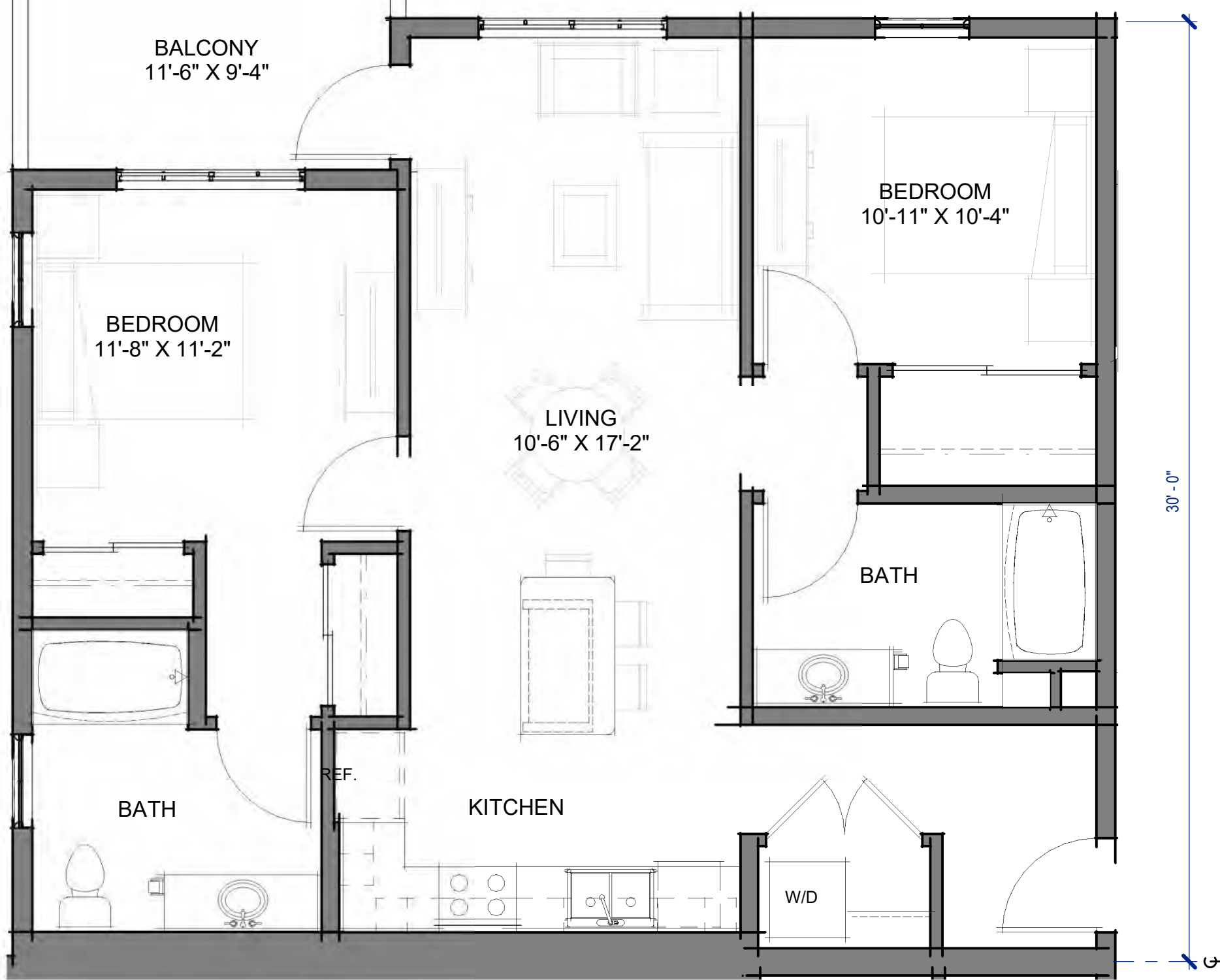




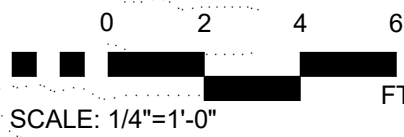
UNIT B2.1 - 1,005 SF
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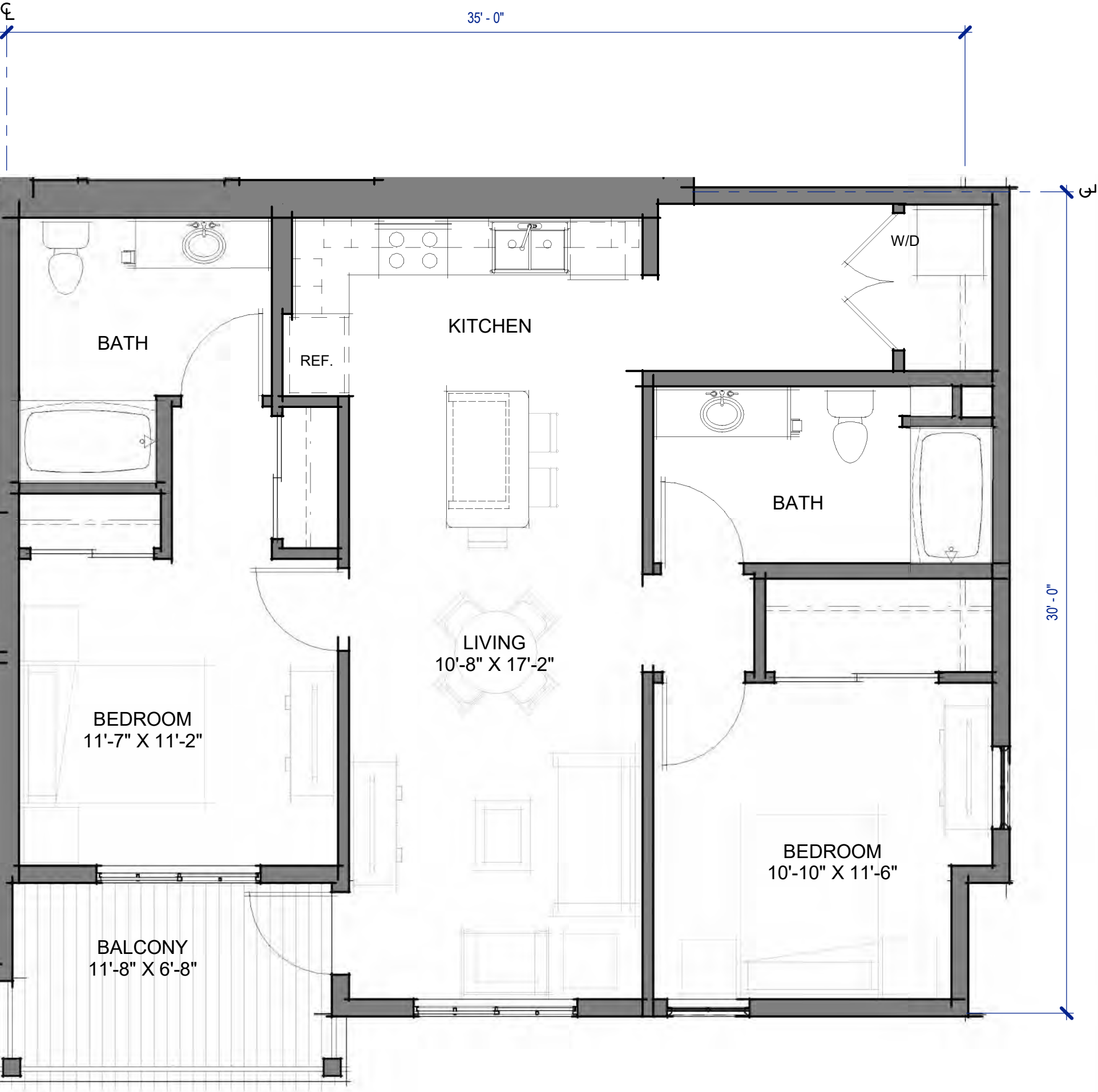


UNIT B2 - 1,035 SF
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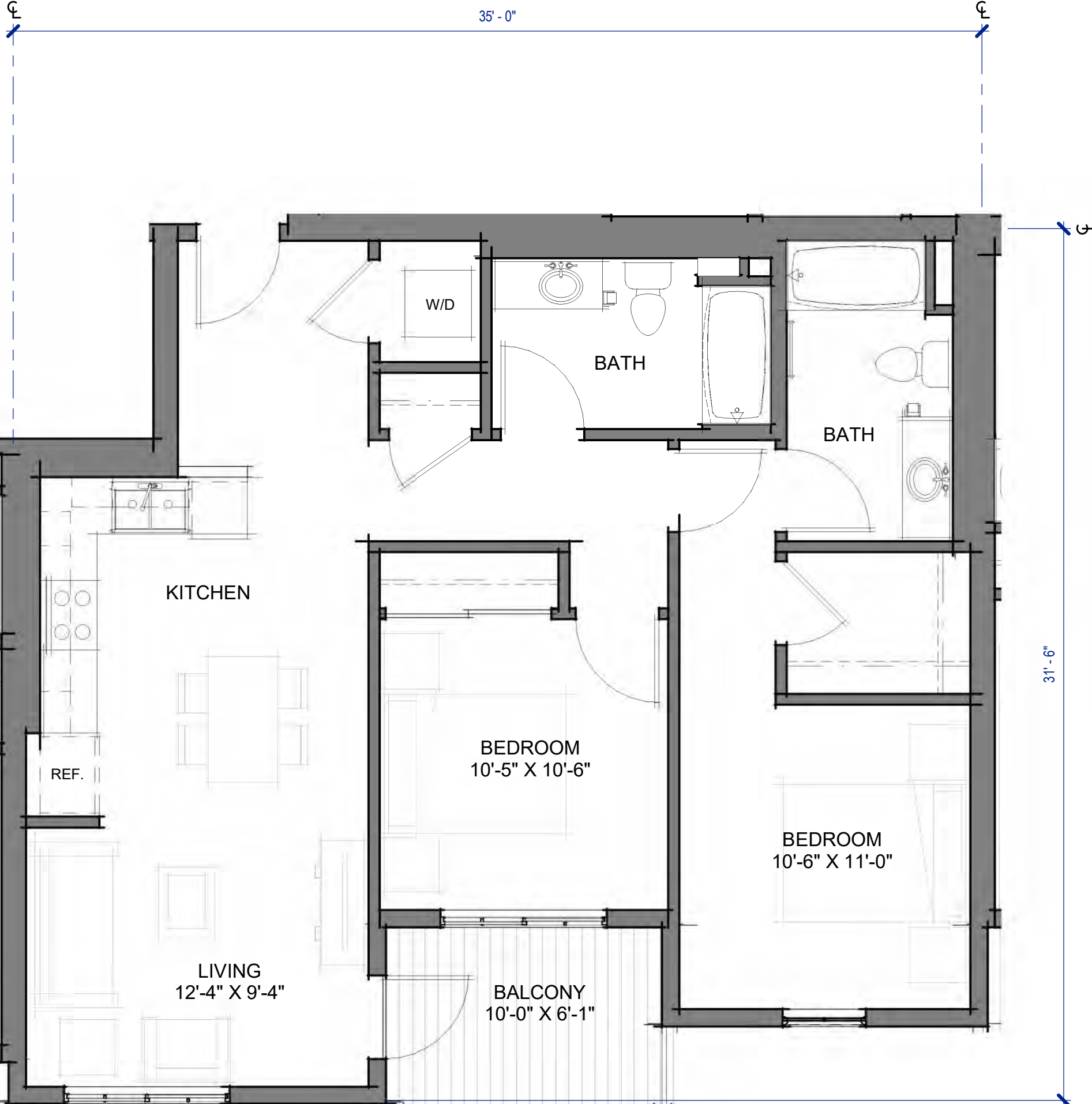
UNIT B1.2 - 992 SF
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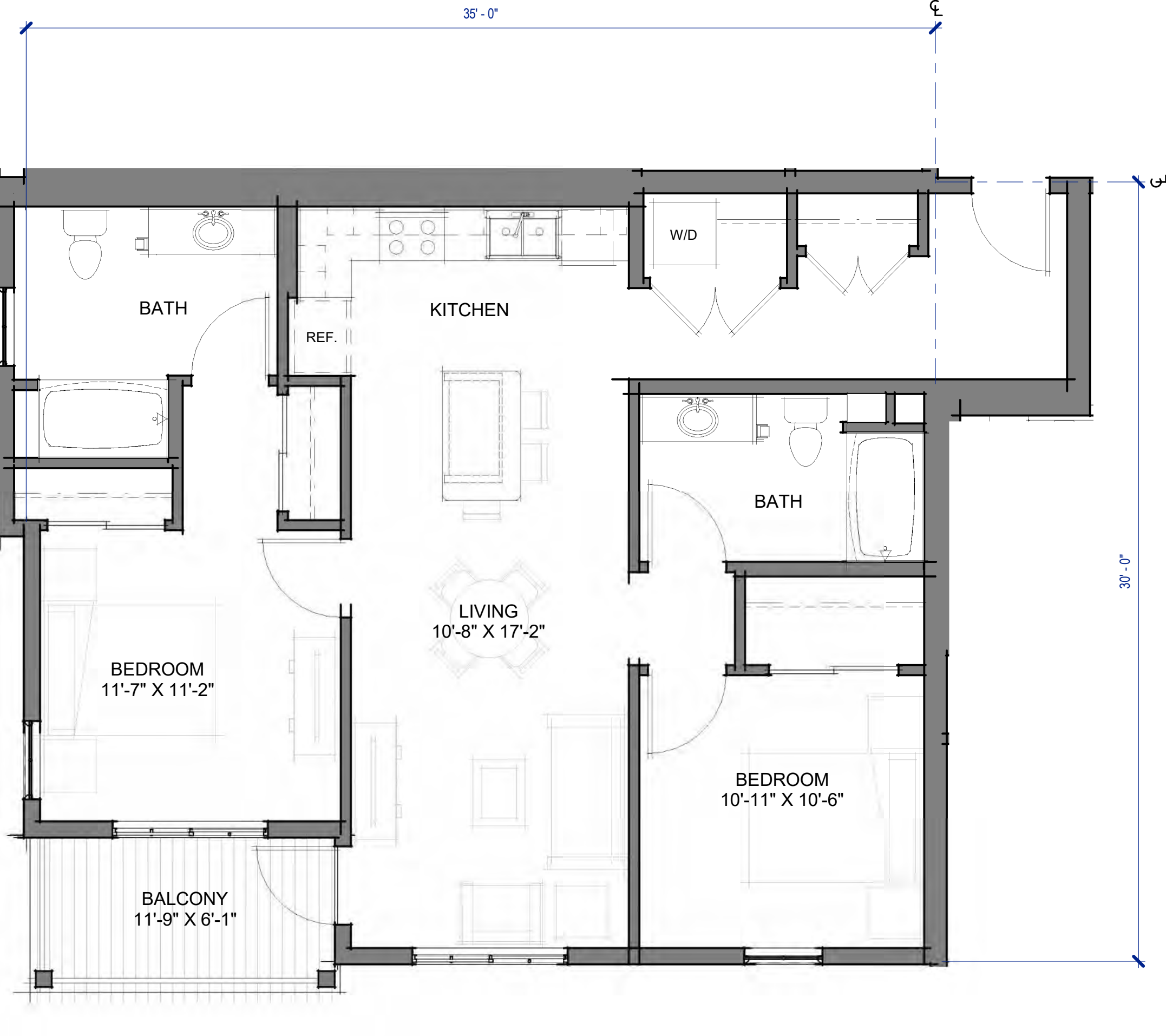
UNIT B4 - 1,030 SF
1/4" = 1'-0"

3



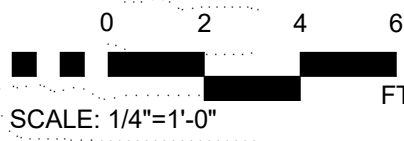
UNIT B3 - 963 SF
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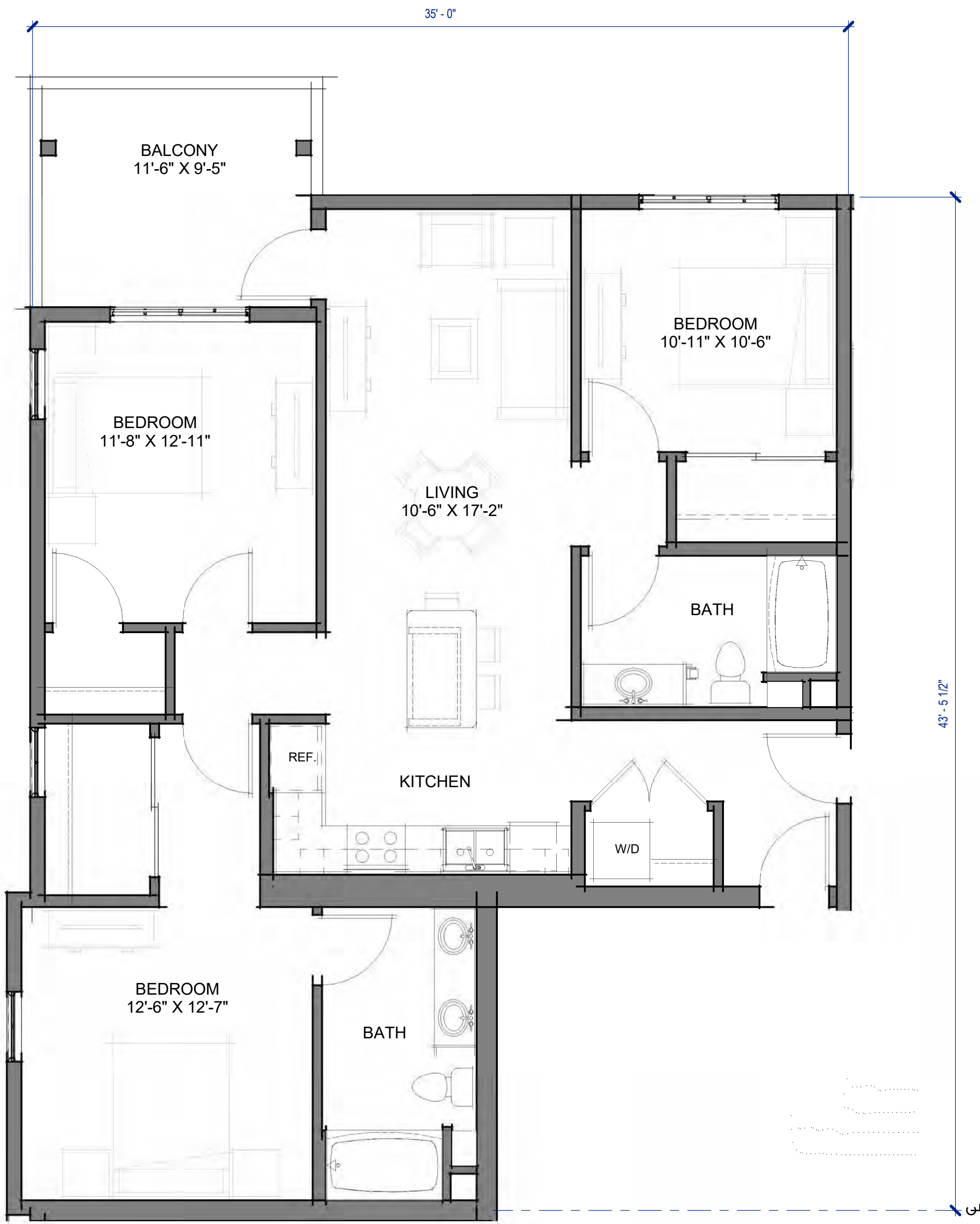
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UNIT B2.2 - 1,050 SF
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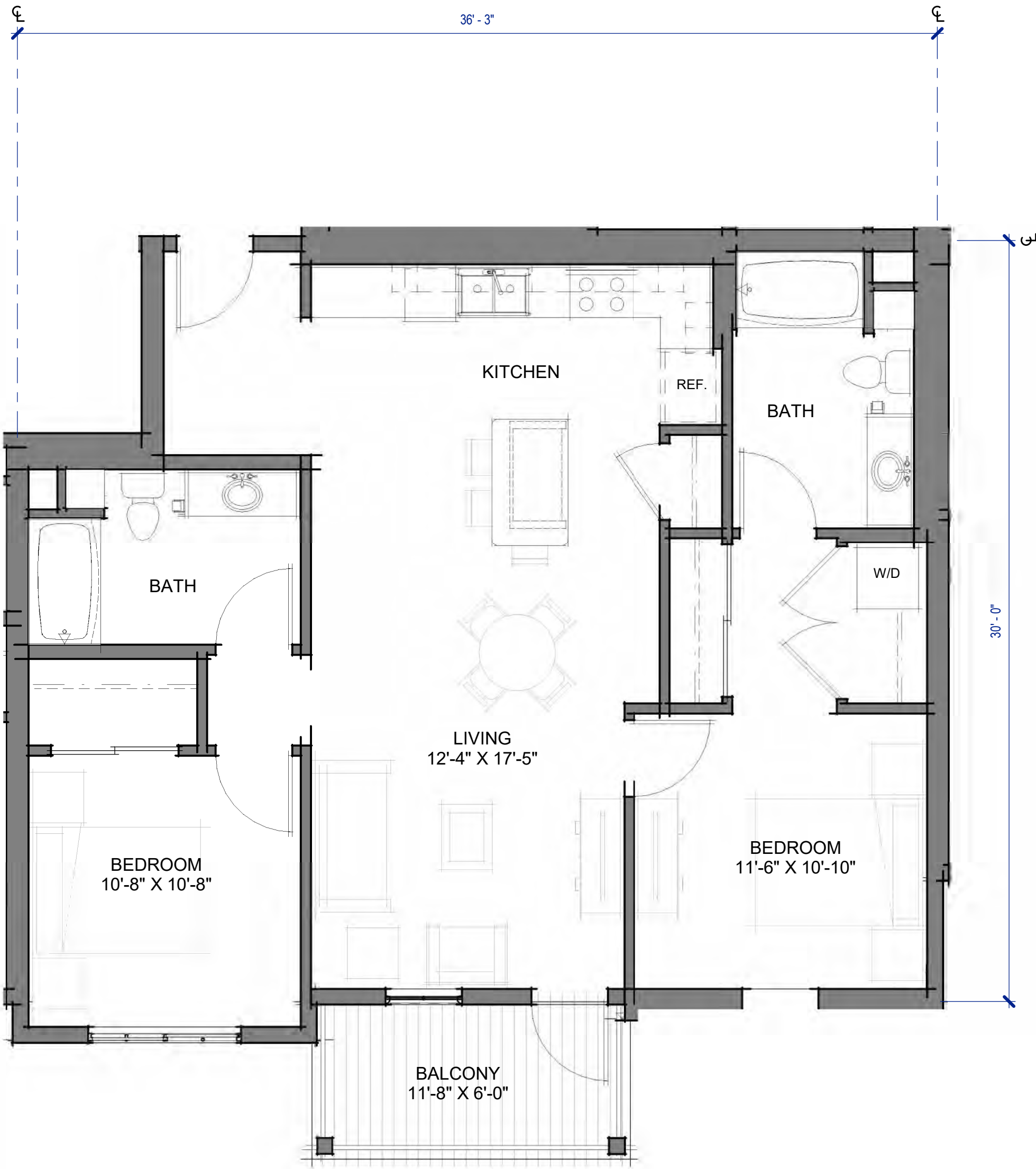
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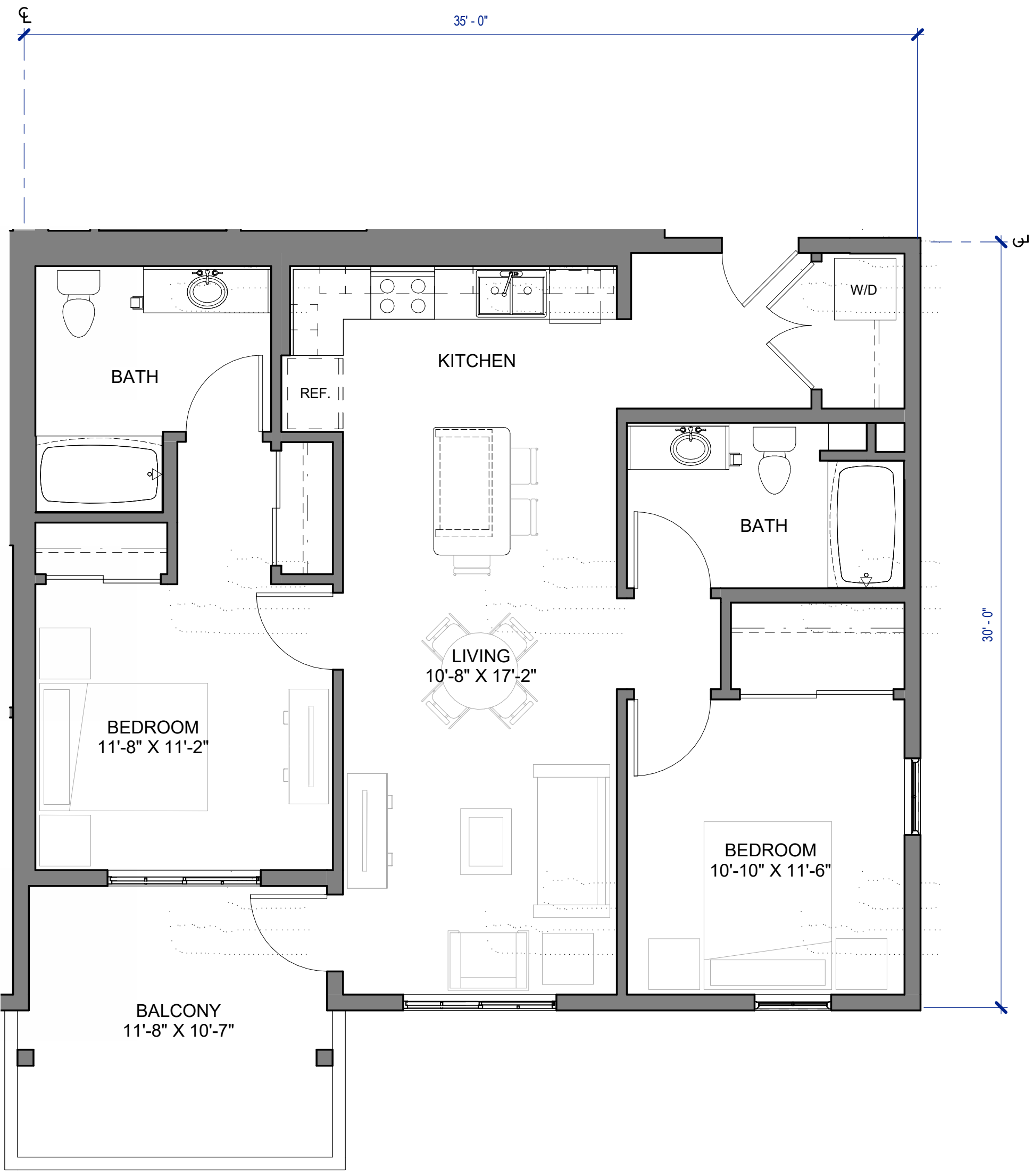
UNIT C1 - 1,254 SF
1/4" = 1'-0"

3



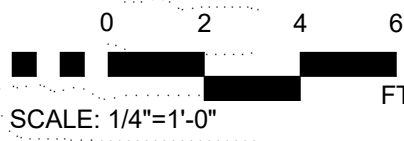
UNIT B5 - 1,060 SF
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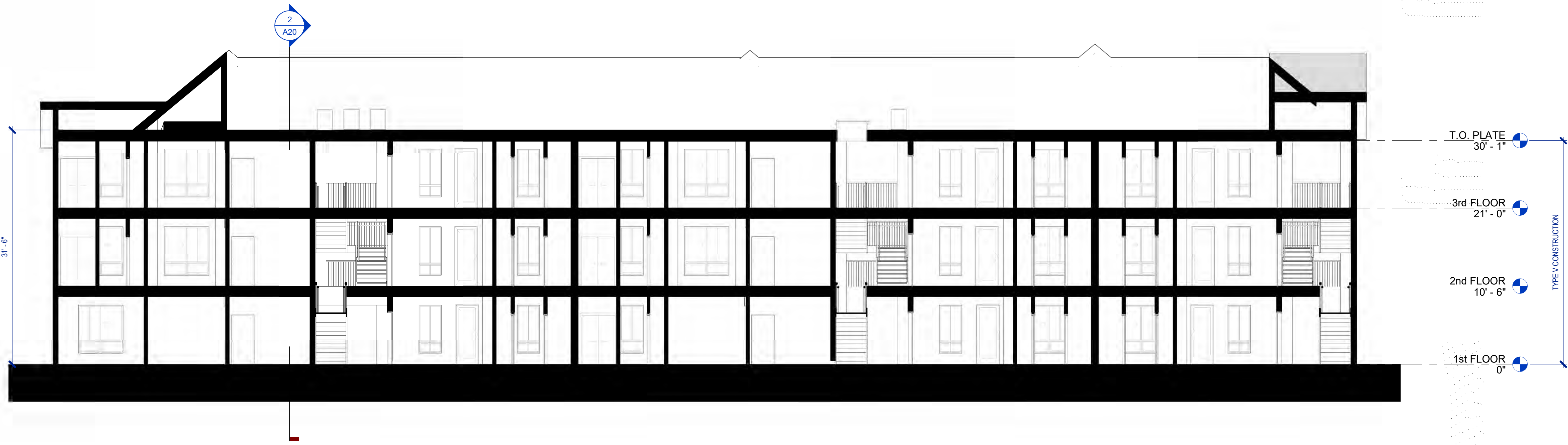
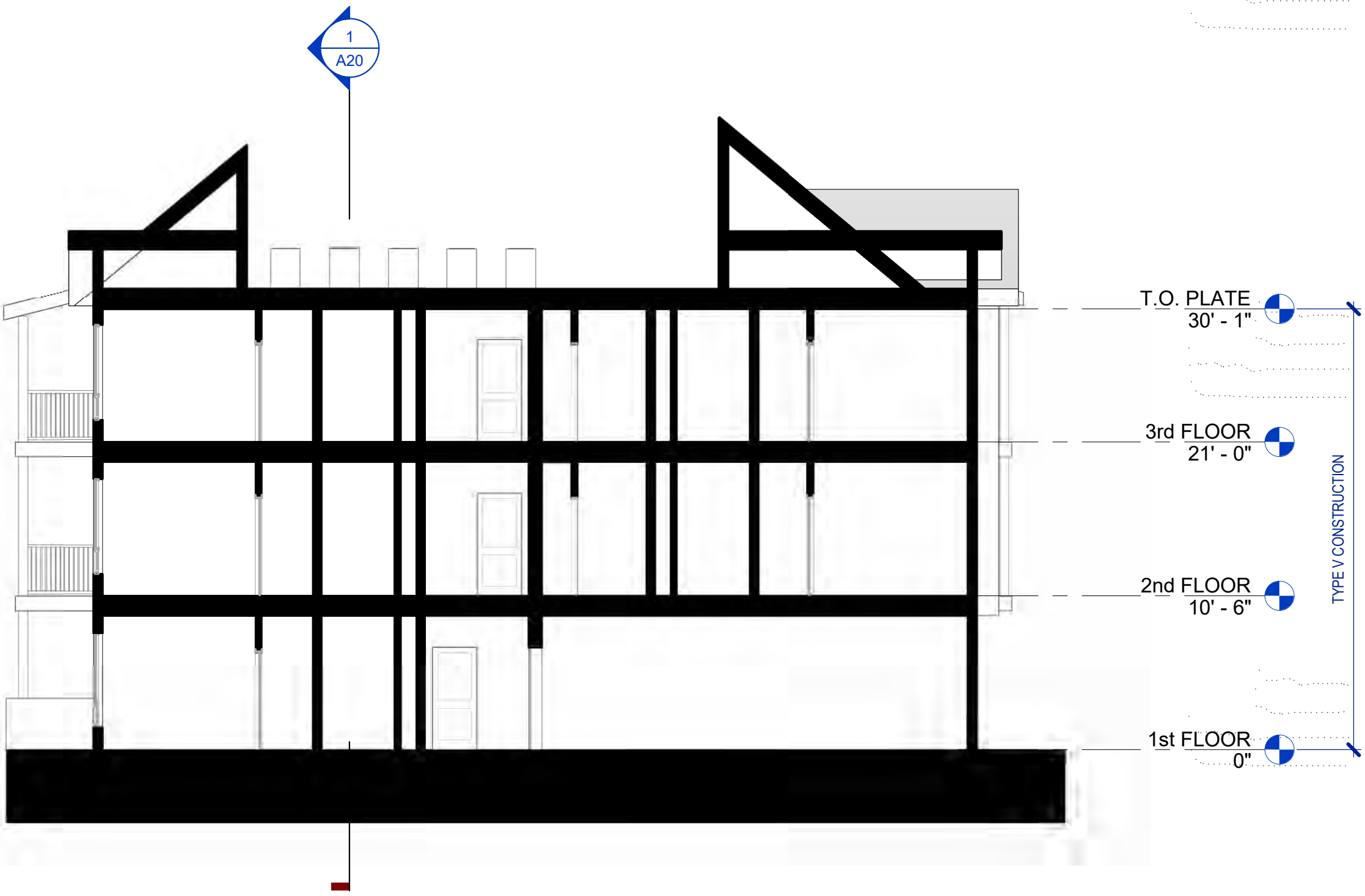
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UNIT A4.1 - 992 SF
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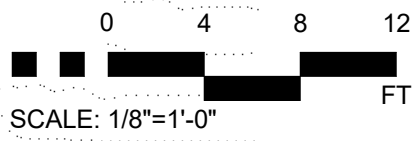
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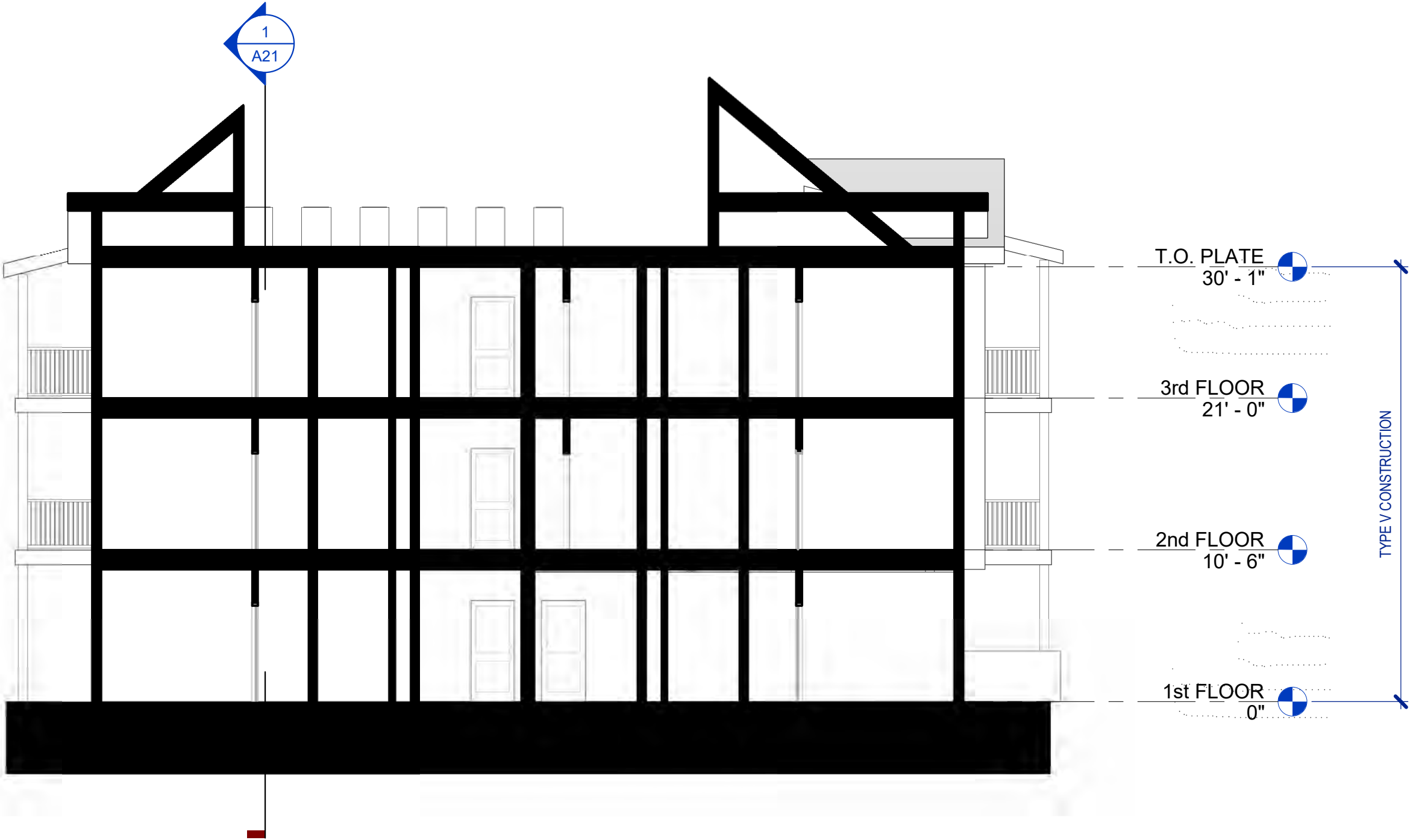




BUILDING A - SECTION 2
1/8" = 1'-0" 2

BUILDING A - SECTION 1
1/8" = 1'-0" 1

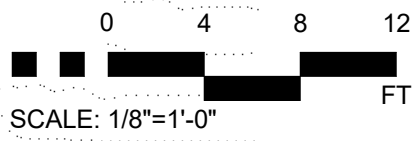


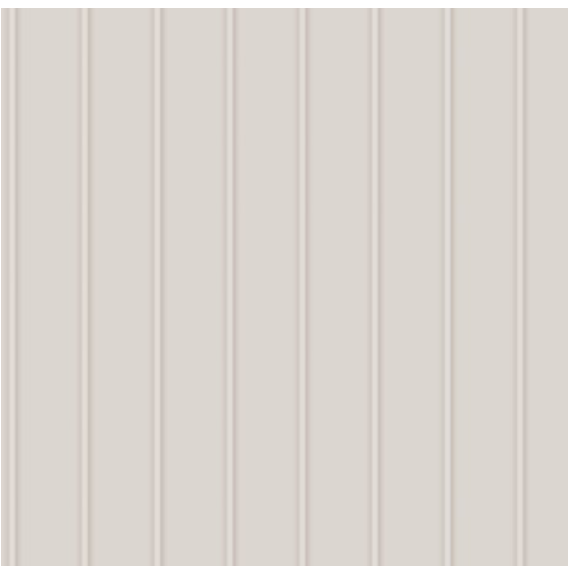


BUILDING B - SECTION 2
1/8" = 1'-0" 2



BUILDING B - SECTION 1
1/8" = 1'-0" 1





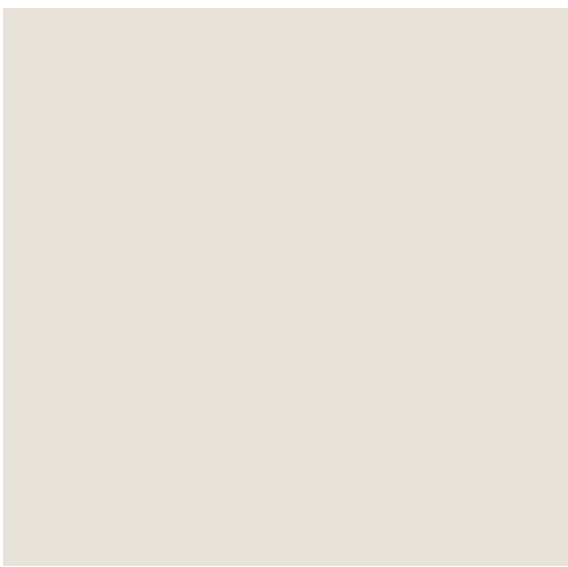
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ARTIC WHITE



2. HARDIE VERTICAL -
CHARCOAL BLUE



3. DARK METAL ACCENT
- DARKROOM SW



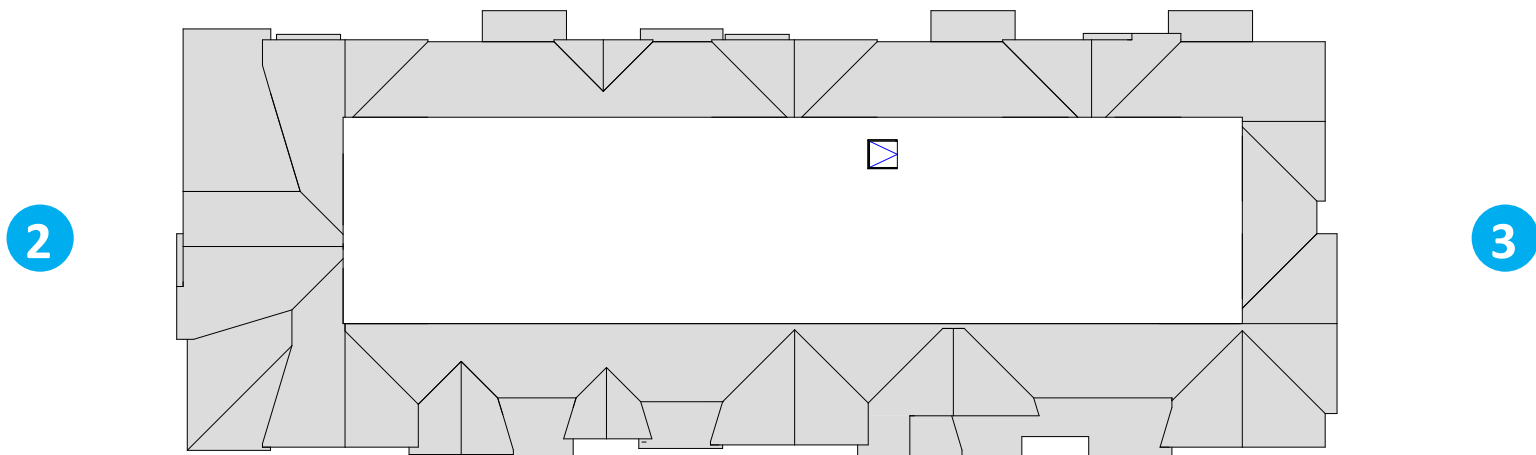
4. LIGHT ACCENT -
PEARLY WHITE SW



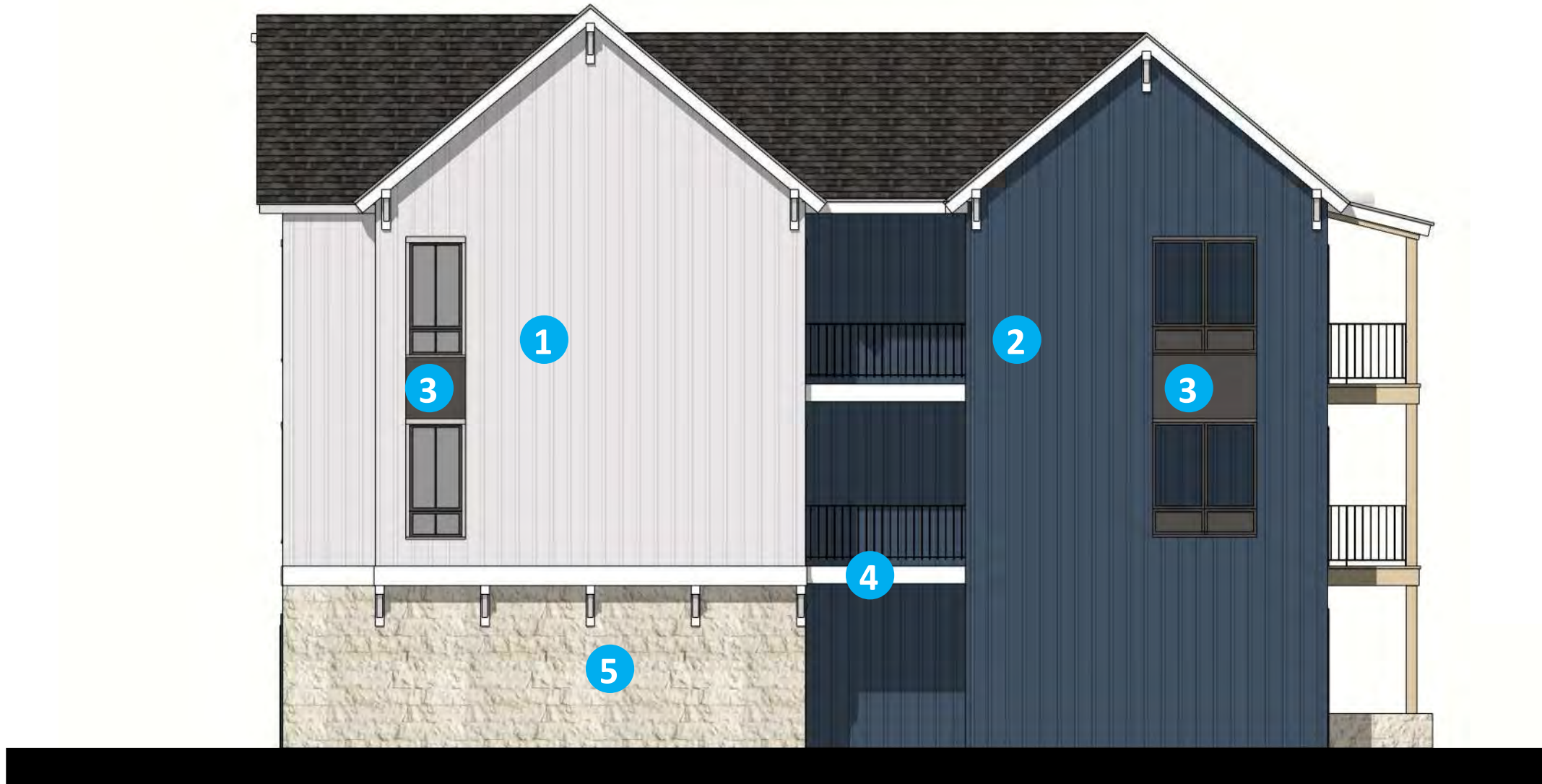
5. STONE VENEER
BASE - SANDOLLAR



6. VINYL WINDOW
DARK BRONZE
FINISH



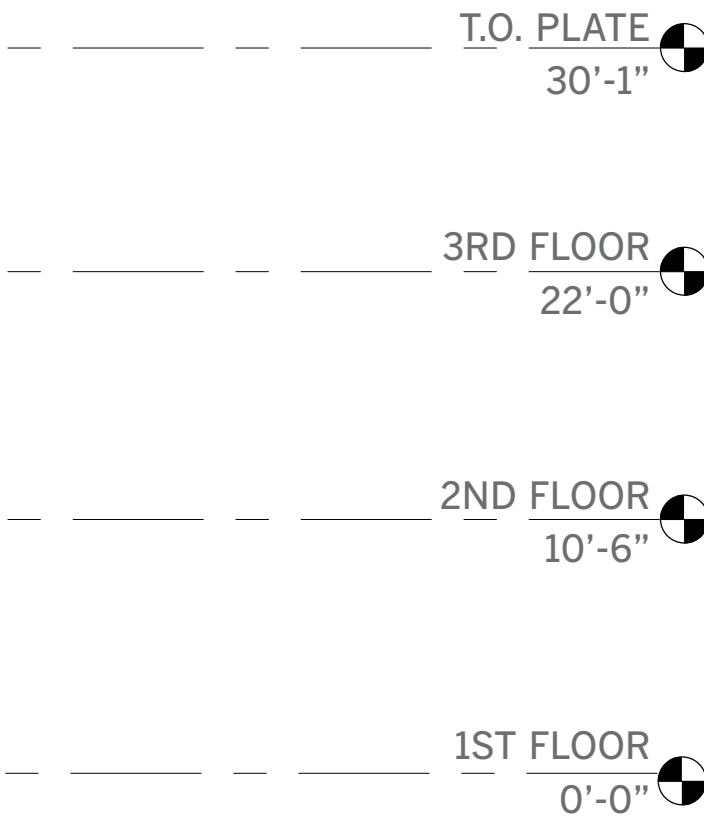
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ELEVATIONS KEY PLAN



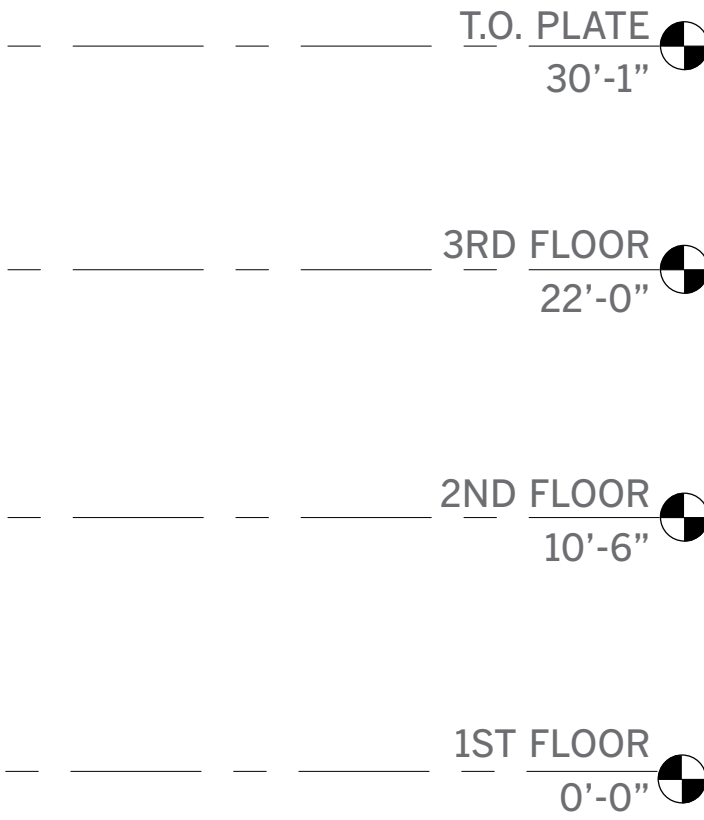
3. SIDE ELEVATION



2. SIDE ELEVATION

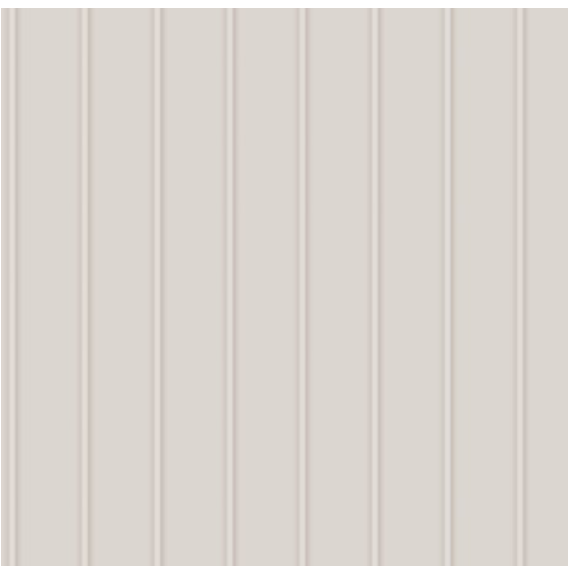


1. FRONT ELEVATION



Scale: 1/8" = 1'-0" (Full Scale 34" x 22" Sheet)





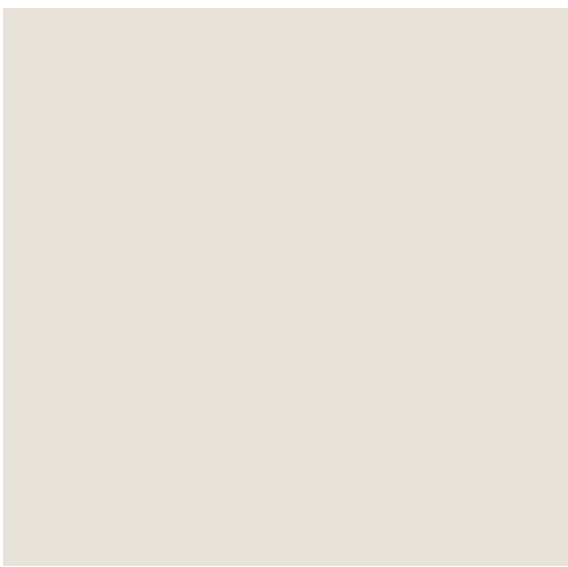
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ARTIC WHITE



2. HARDIE VERTICAL -
CHARCOAL BLUE



3. DARK METAL ACCENT
- DARKROOM SW



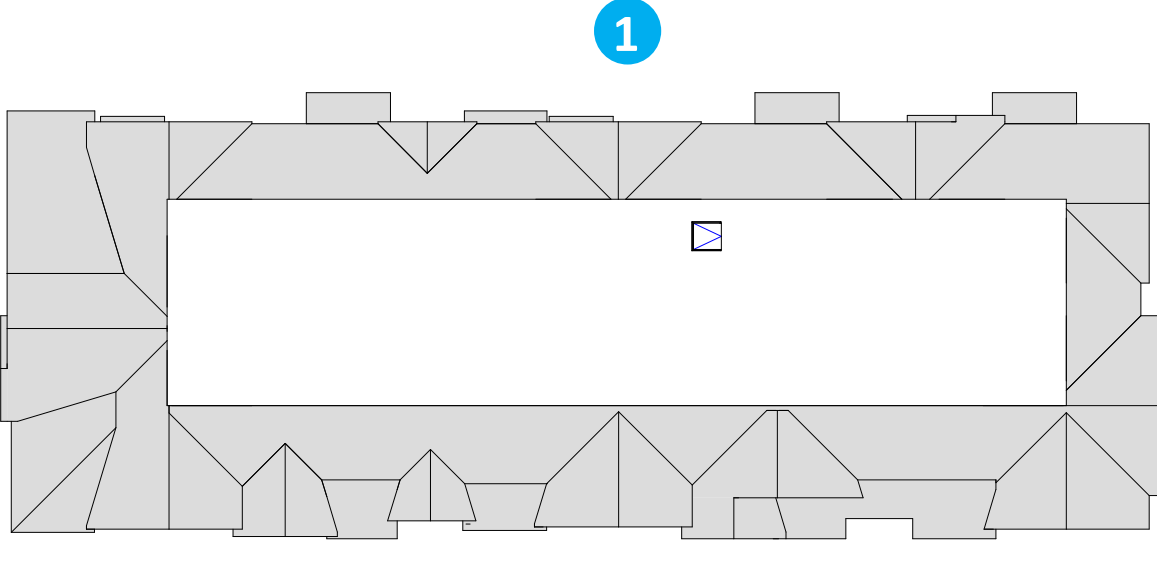
4. LIGHT ACCENT -
PEARLY WHITE SW



5. STONE VENEER
BASE - SANDOLLAR



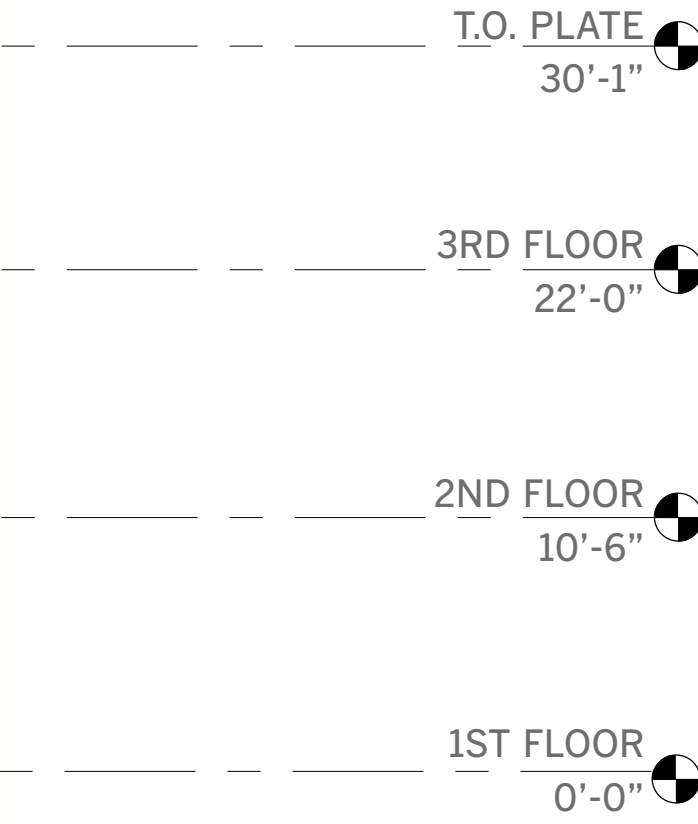
6. VINYL WINDOW
DARK BRONZE
FINISH



ELEVATIONS KEY PLAN



1. BACK ELEVATION

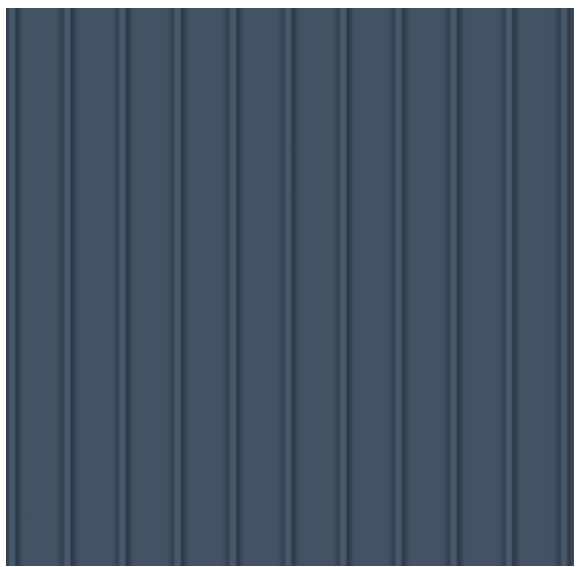


Scale: 1/8" = 1'-0" (Full Scale 34" x 22" Sheet)





1. HARDIE VERTICAL -
ARTIC WHITE



2. HARDIE VERTICAL -
CHARCOAL BLUE



3. DARK METAL ACCENT
- DARKROOM SW



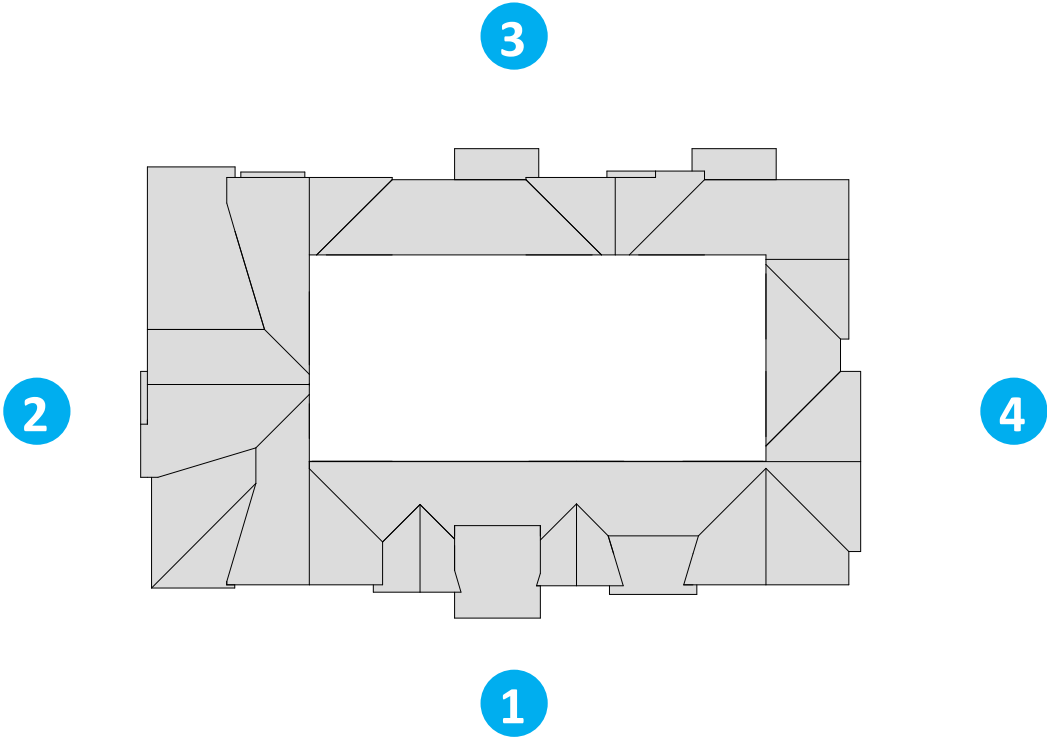
4. LIGHT ACCENT -
PEARLY WHITE SW



5. STONE VENEER
BASE - SANDOLLAR



6. VINYL WINDOW
DARK BRONZE
FINISH



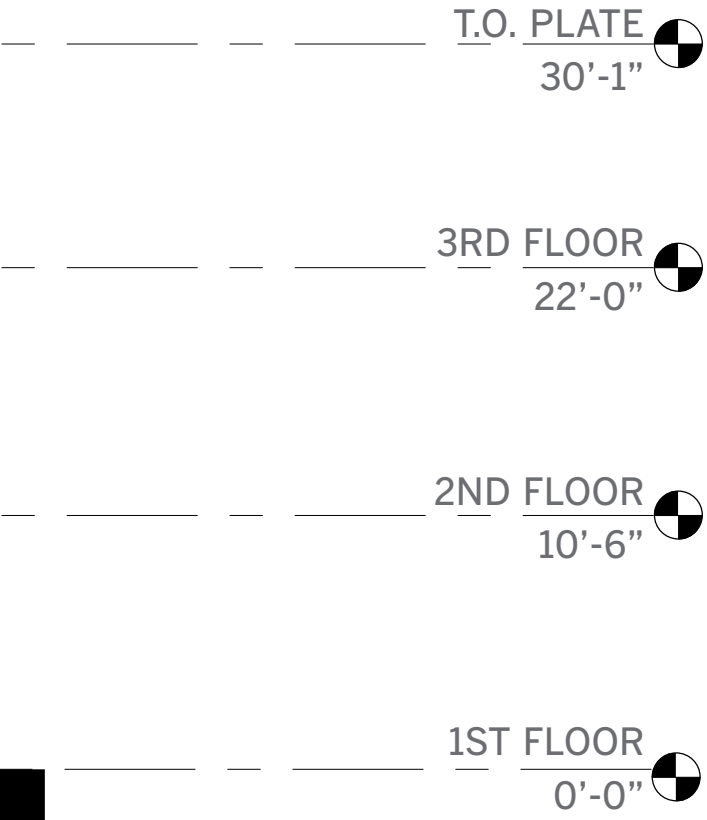
ELEVATIONS KEY PLAN



4. SIDE ELEVATION



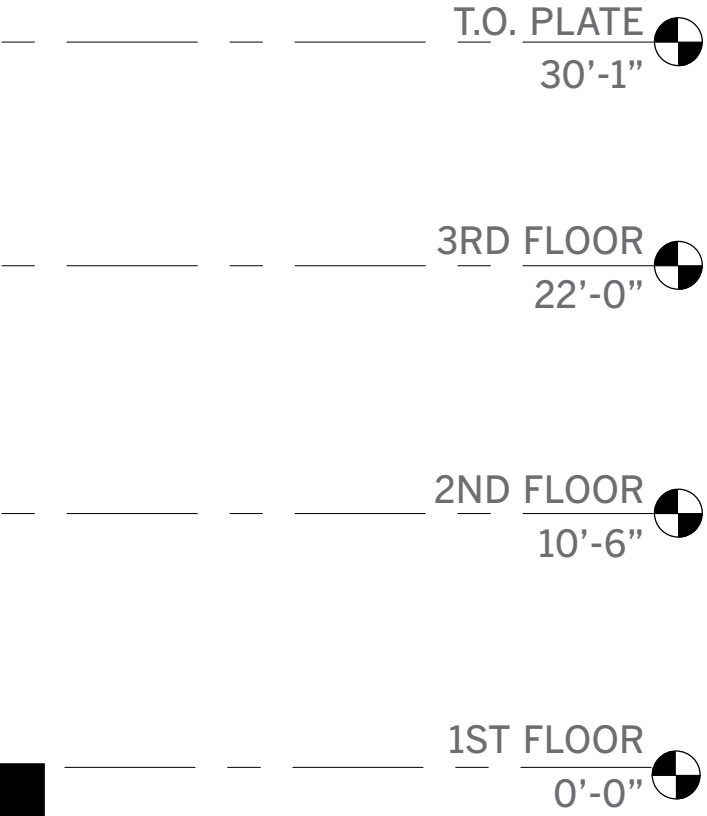
3. FRONT ELEVATION



2. SIDE ELEVATION

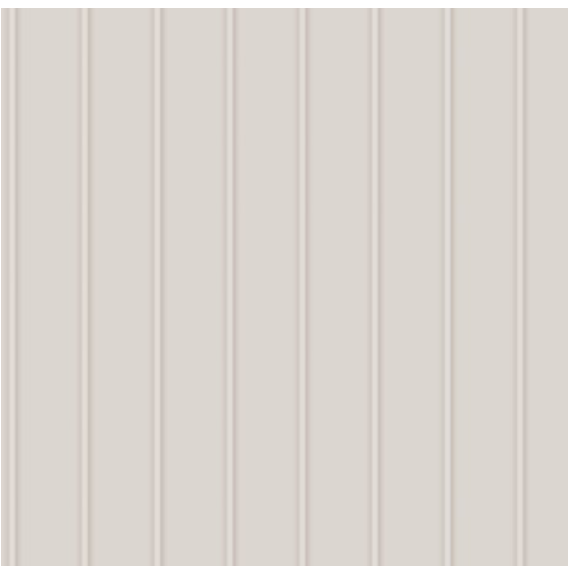


1. BACK ELEVATION



Scale: 1/8" = 1'-0" (Full Scale 34" x 22" Sheet)





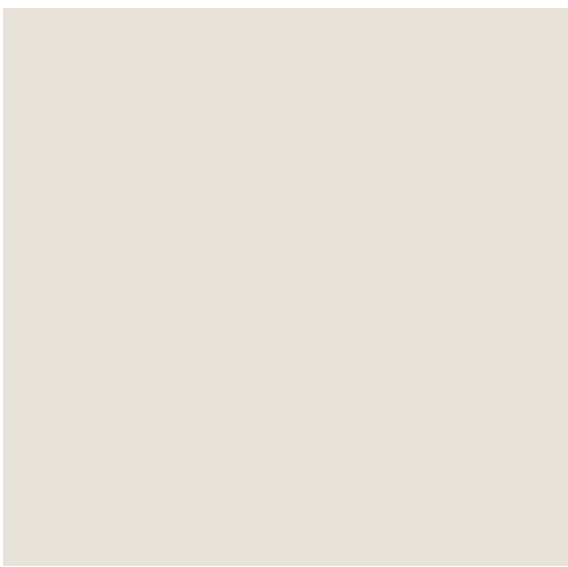
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ARTIC WHITE



2. HARDIE VERTICAL -
CHARCOAL BLUE



3. DARK METAL ACCENT
- DARKROOM SW



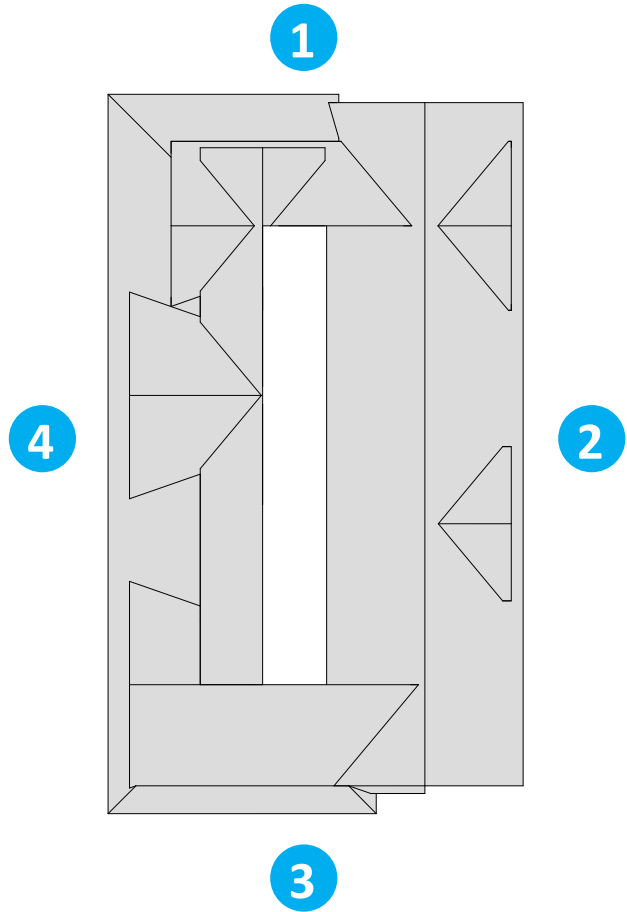
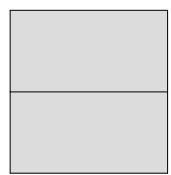
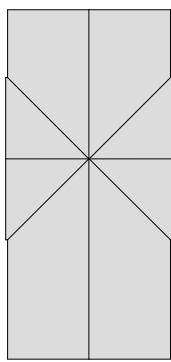
4. LIGHT ACCENT -
PEARLY WHITE SW



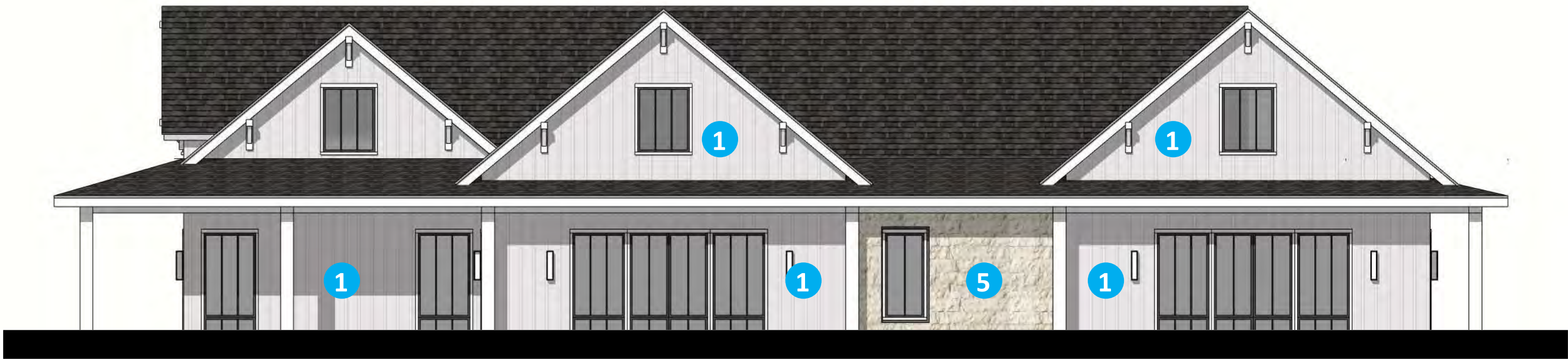
5. STONE VENEER
BASE - SANDOLLAR



6. VINYL WINDOW
DARK BRONZE
FINISH



ELEVATIONS KEY PLAN



4. SIDE ELEVATION



3. BACK ELEVATION

T.O. ROOF RIDGE
27'-9"

1ST FLOOR
0'-0"



2. SIDE ELEVATION



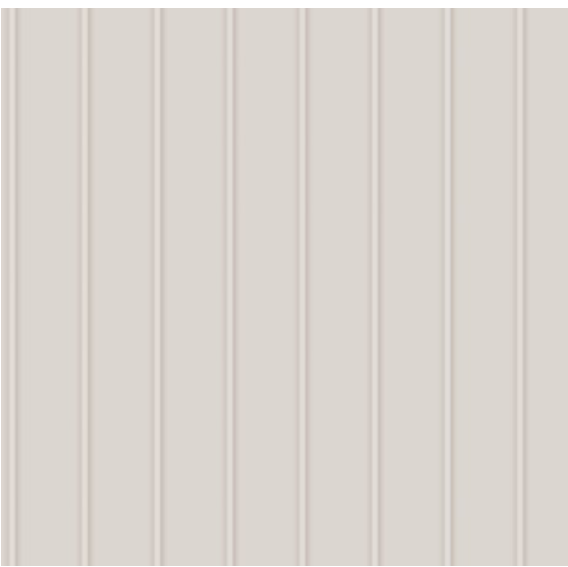
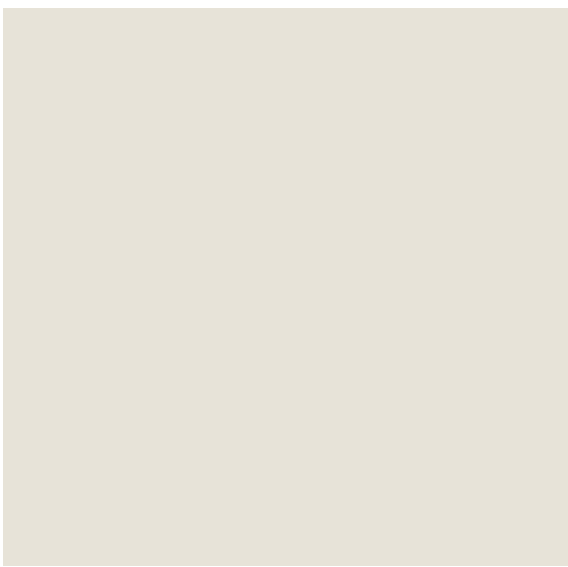
1. MAIN ENTRY ELEVATION

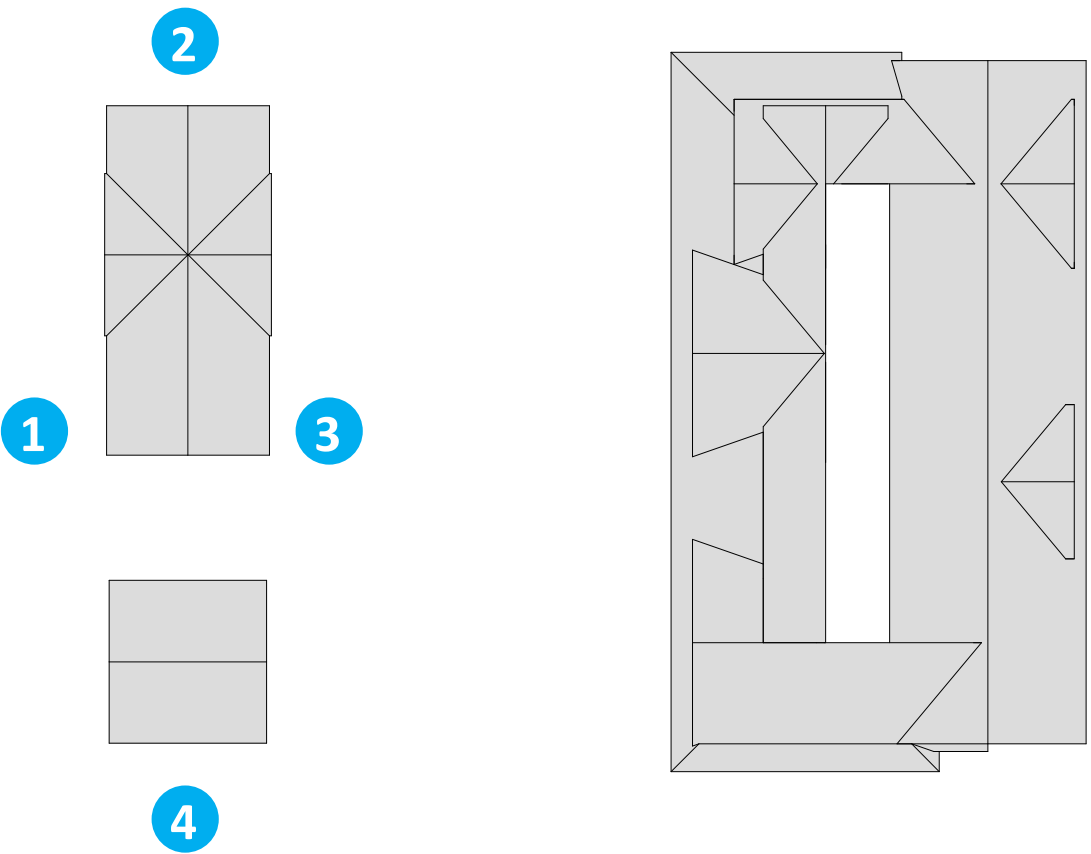
T.O. ROOF RIDGE
27'-9"

1ST FLOOR
0'-0"

Scale: 1/8" = 1'-0" (Full Scale 34" x 22" Sheet)



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1. HARDIE VERTICAL -
ARTIC WHITE
2. HARDIE VERTICAL -
CHARCOAL BLUE
3. DARK METAL ACCENT
- DARKROOM SW
4. LIGHT ACCENT -
PEARLY WHITE SW
5. STONE VENEER
BASE - SANDOLLAR
6. VINYL WINDOW
DARK BRONZE
FINISH



ELEVATIONS KEY PLAN



4. SIDE ELEVATION



3. BACK ELEVATION



2. SIDE ELEVATION



1. FRONT ELEVATION

T.O. ROOF RIDGE
27'-9"

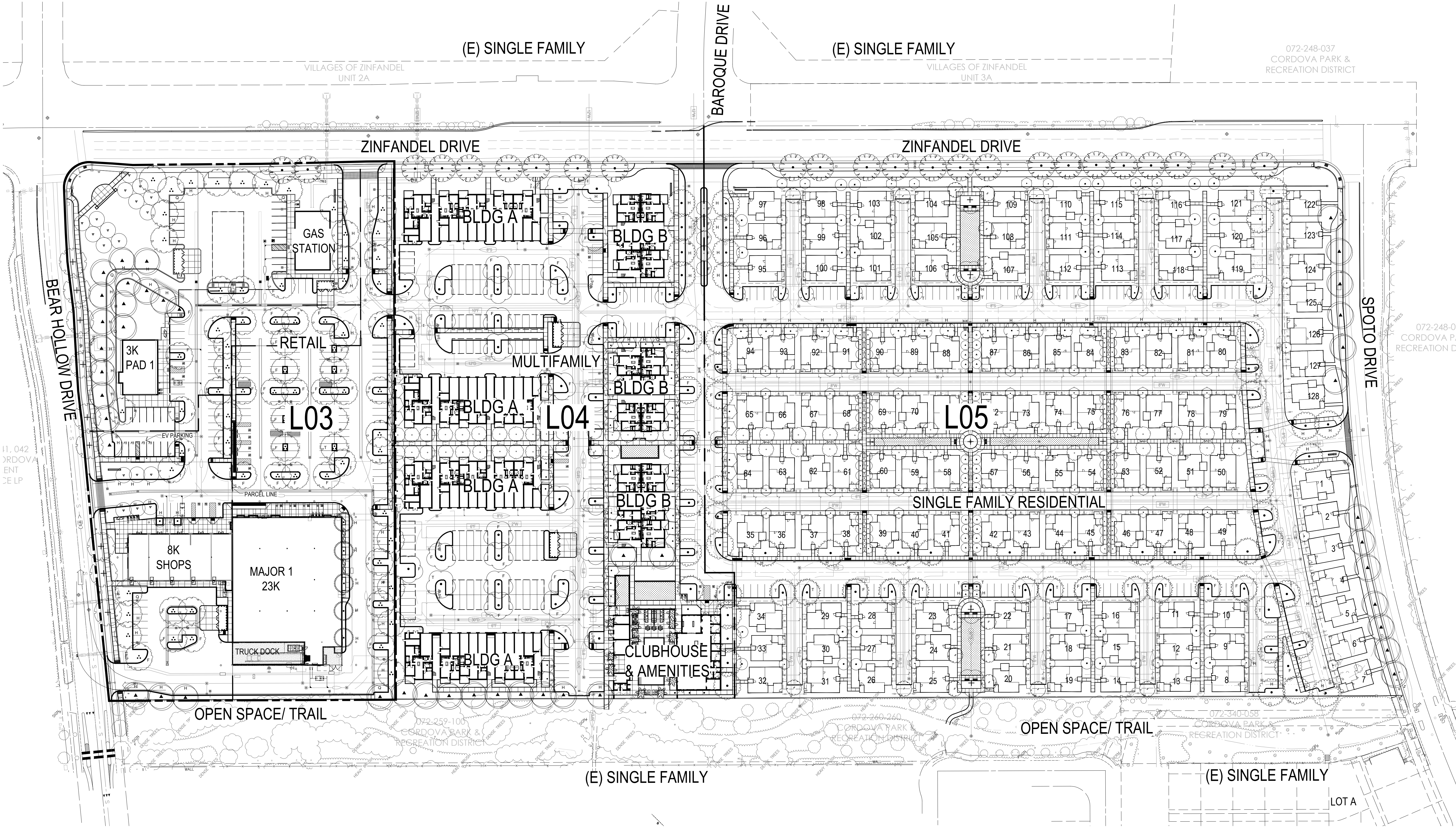
1ST FLOOR
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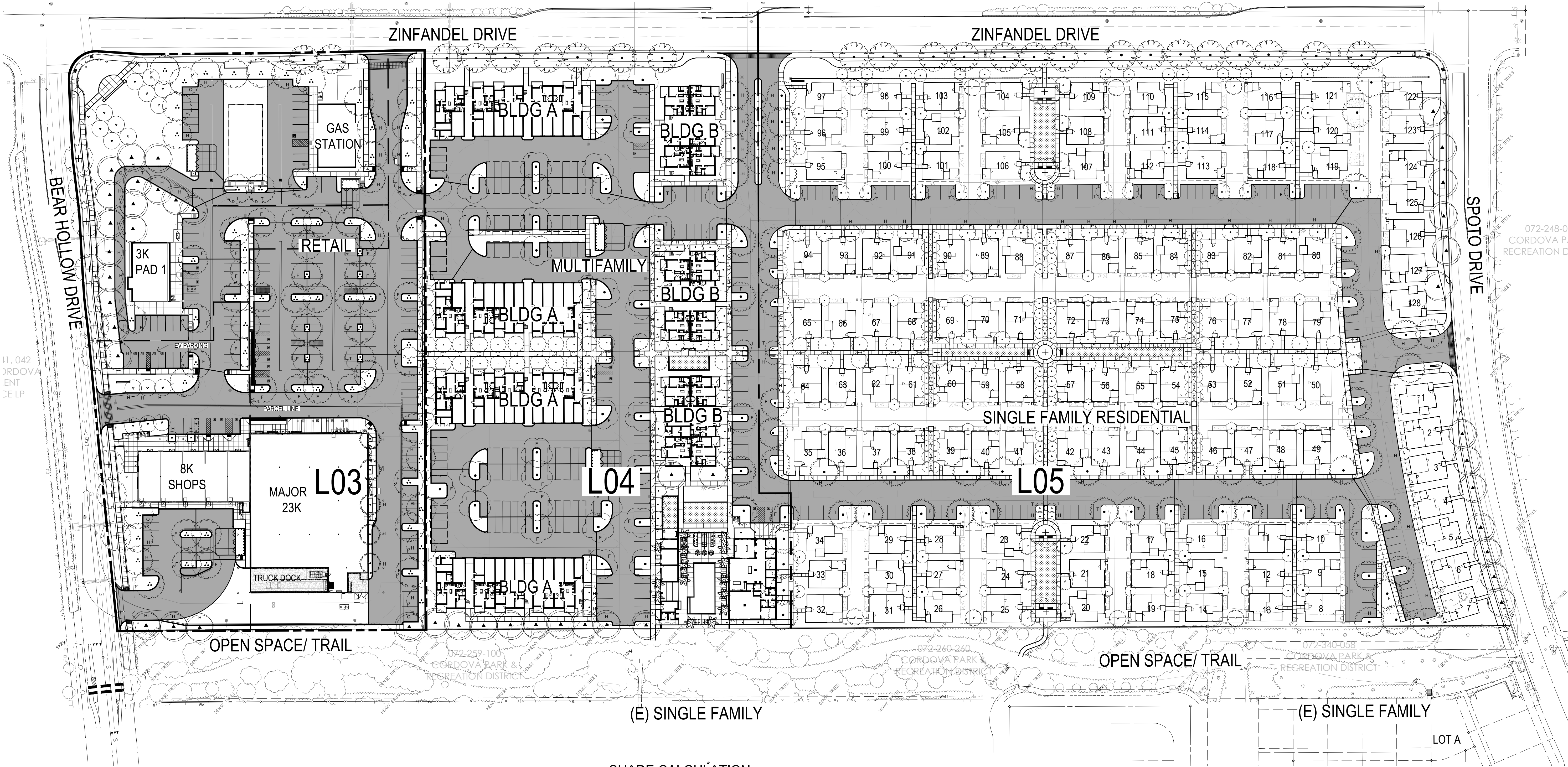
T.O. ROOF RIDGE
27'-9"

1ST FLOOR
0'-0"

Scale: 1/8" = 1'-0" (Full Scale 34" x 22" Sheet)







SHADE CALCULATION

Tree Species	Tree Size	Coverage	Qty	Area	Shade Total
<i>Koelreutaria bipinnata</i>	35'	Full	85	962 SF	81,770 SF
<i>Quercus buckleyi</i>		Three-Qtrs	36	722 SF	25,992 SF
<i>Quercus wislizenii</i>		Half	61	481 SF	29,341 SF
<i>Ulmus parvifolia</i> 'Drake'		Quarter	10	241 SF	2,410 SF
<i>Ulmus x 'Frontier'</i>					
			Total		139,513 SF
<i>Elaeocarpus decipiens</i>	25'	Full	0	491 SF	0 SF
		Three-Qtrs	0	368 SF	0 SF
		Half	5	246 SF	1,230 SF
		Quarter	0	123 SF	0 SF
			Total		1,230 SF

Tree Species	Tree Size	Coverage	Qty	Area	Shade Total
<i>Arbutus x 'Marina'</i>	20'	Full	8	314 SF	2,512 SF
<i>Lagerstroemia x fauriei</i> 'Notchez'		Three-Qtrs	17	236 SF	4,012 SF
<i>Olea europaea</i> 'Swan Hill'		Half	59	157 SF	9,263 SF
<i>Zelkova serrata</i> 'JFS-KW1' TM		Quarter	7	79 SF	553 SF
			Total		16,340 SF
<i>Acacia stenophylla</i>	15'	Full	0	177 SF	0 SF
<i>Acer rubrum</i> 'Armstrong Gold'		Three-Qtrs	4	133 SF	532 SF
		Half	11	89 SF	979 SF
		Quarter	0	44 SF	0 SF
			Total		1,511 SF

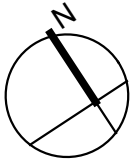
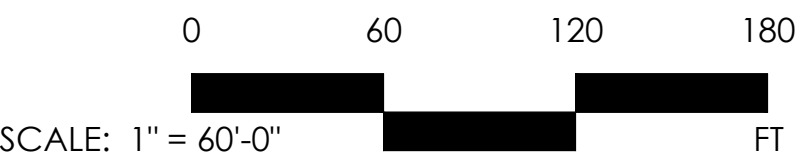
*(SF) = Square Feet

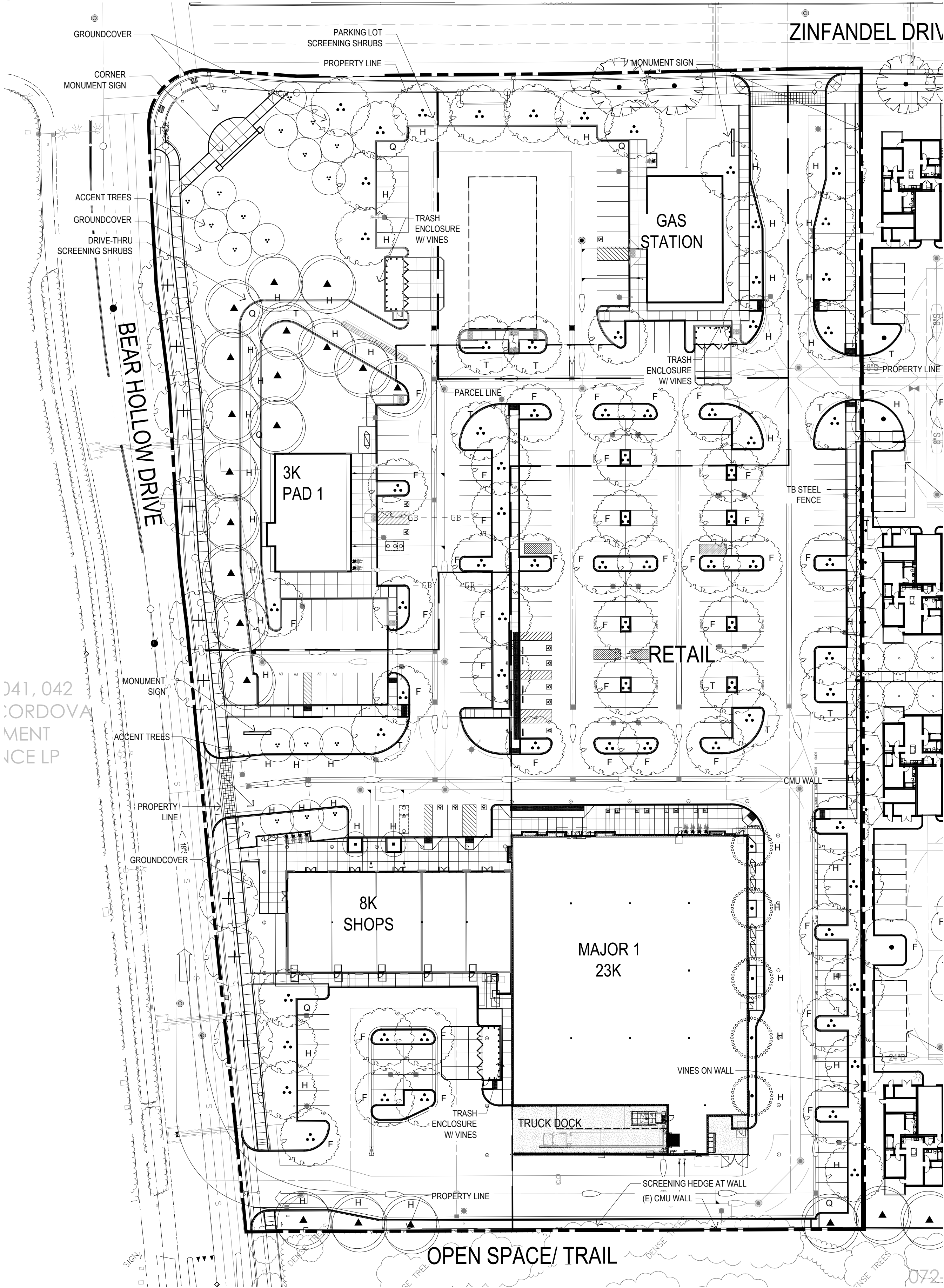
SHADE CALCULATION LEGEND



TOTAL PARKING AREA: 310,088 SF

Total Tree Shaded Area Provided (SF)	158,594 SF
Total Carport Area Provided (SF)	16,920 SF
Percent of Parking Shaded	56.6%
Total Parking Area (SF)	310,088 SF





PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	SIZE (HXW)
	Acacia stenophylla (Evergreen) Shoestring Acacia	15 gal	Low	59	30' X 15'
	Acer buergerianum Trident Maple	24"box	Med	20	25' X 20'
	Acer rubrum 'Armstrong Gold' Armstrong Gold Maple	24"box	Med	40	45' X 15'
	Arbutus x 'Marina' (Evergreen) Marina Strawberry Tree	24"box	Low	48	30' X 20'
	Elaeocarpus decipiens (Evergreen) Japanese Blueberry Tree	24"box	Med	5	45' X 25'
	Koelreuteria bipinnata Chinese Flame Tree	24"box	Med	36	35' X 35'
	Lagerstroemia indica x fauriei 'Muskogee' Muskogee Crape Myrtle	24"box	Low	36	20' X 15'
	Lagerstroemia indica x fauriei 'Natchez' Natchez Crape Myrtle	24"box	Med	71	25' X 20'
	Magnolia grandiflora 'Little Gem' (Evergreen) Little Gem Dwarf Southern Magnolia	24"box	Med	64	22' X 12'
	Olea europaea 'Swan Hill' TM (Evergreen) Swan Hill Olive	24"box	Low	18	30' X 20'
	Pistacia chinensis Chinese Pistache	24"box	Low	9	45' X 35'
	Quercus buckleyi Buckley Oak	24"box	Med	42	35' X 35'
	Quercus virginiana (Evergreen) Southern Live Oak	24"box	Low	7	45' X 35'
	Quercus wislizenii (Evergreen) Interior Live Oak	24"box	Low	44	45' X 35'
	Ulmus parvifolia 'Drake' Drake Lacebark Elm	24"box	Med	74	50' X 35'
	Ulmus 'Frontier' Frontier Elm	24"box	Low	23	35' X 35'
	Washingtonia filifera (Evergreen) California Fan Palm	12' BTH	Med	15	50' X 15'
	Zelkova serrata Sawleaf Zelkova	24"box	Low	24	50' X 35'
	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova	24"box	Med	29	25' X 20'

SHRUBS

BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (HXW)	PLANT USE
Agave x 'Blue Glow' Blue Glow Agave	5 gal	Low	18" X 24"	Accent/Border
Anigozanthos x 'Bush Ranger' Big Red Kangaroo Paw	5 gal	Low	18" X 18"	Accent/Border
Asparagus densiflorus 'Myers' Myers Asparagus	5 gal	Med	18" X 18"	Accent/Border
Berberis thunbergii 'Orange Rocket' Orange Rocket Barberry	1 gal	Med	5' X 3'	Border/Container
Coprosma x 'Tequila Sunrise' Gold Mirror Plant	5 gal	Med	4' X 4'	Accent/Border/Hedge
Cordylina x 'Electric Pink' Pink Cordylina	5 gal	Low	3' X 3'	Border/Container
Dianella revoluta 'Baby Bliss' Baby Flax	1 gal	Low	18" X 18"	Border/Massing
Erysimum x 'Bowles' Mauve' Wallflower	1 gal	Low	24" X 18"	Border/Massing
Galvezia speciosa 'Firecracker' Bush Snapdragon	5 gal	Low	3' X 5'	Border/Container
Gardenia jasminoides 'August Beauty' Gardenia	5 gal	Med	5' X 3'	Foundation/Screen
Heuchera x 'Electric Lime' Coral Bells	1 gal	Med	4' X 4'	Accent/Container
Liriope spicata 'Big Blue' Creeping Lily Turf	1 gal	Med	12" X 12"	Border/Massing
Mahonia eurybracteata 'Soft Caress' Mahonia Soft Caress	5 gal	Low	3' X 4'	Accent/Massing
Nandina domestica 'Gulf Stream' TM Heavenly Bamboo	5 gal	Low	3' X 3'	Accent/Border/Massing
Olea europaea 'Little Ollie' TM Little Ollie Olive	5 gal	Low	5' X 5'	Foundation/Hedge
Pittosporum tenuifolium 'Golf Ball' Tawhiwhi	5 gal	Med	3' X 3'	Border/Hedge
Pittosporum tobira 'Cream De Mint' TM Cream De Mint Dwarf Mock Orange	5 gal	Med	2' X 2'	Border
Punica granatum 'Nana' Dwarf Pomegranate	1 gal	Low	3' X 3'	Foundation/Hedge
Rhamnus californica 'Mound San Bruno' California Coffeeberry	5 gal	Low	6' X 6'	Border/Foundation
Rosmarinus officinalis 'Tuscan Blue' Tuscan Blue Rosemary	5 gal	Low	6' X 4'	Accent/Hedge/Massing
Salvia microphylla 'Hot Lips' Baby Sage	1 gal	Low	3' X 3'	Accent/Border
Spiraea x bumalda 'Limemound' TM Limemound Spirea	5 gal	Med	3' X 4'	Accent/Border/Massing

BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	PLANT USE
Pandorea jasminoides Bower Vine	15 gal	Med	---	Trellis/Arbor/Wall
Parthenocissus tricuspidata 'Veitchii' Boston Ivy	15 gal	Med	---	Trellis/Arbor/Wall

GROUND COVERS

BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	PLANT USE
Arctostaphylos uva-ursi 'Point Reyes' Kinnikinnick	1 gal	Low	48" o.c.	Border/Massing
Bouteloua gracilis 'Blonde Ambition' Blue Grama	1 gal	Low	24" o.c.	Accent/Border/Massing
Carex divulsa Berkeley Sedge	1 gal	Low	18" o.c.	Edging/Massing
Lomandra longifolia 'Platinum Beauty' Variegated Dwarf Mat Grass	1 gal	Low	30" o.c.	Border/Container/Slope
Myoporum parvifolium Trailing Myoporum	1 gal	Low	42" o.c.	Edging/Massing

PLANTING NOTES

- ROOT BARRIERS ARE REQUIRED FOR ALL TREES PLANTED WITHIN 10' OF PAVING OR HARDSCAPE.
- APPLY PRE-EMERGENT IN ALL NON-SEEDED LANDSCAPE AREAS PRIOR TO PLANTING.
- A 3" MINIMUM LAYER OF BARK MULCH IS REQUIRED IN ALL NON-TURF PLANTERS.
- INSTALL A WEED CONTROL LAYER IN ALL BARK MULCH AREAS.

EVERGREEN TREE CALCULATION

TREE TOTAL:	664
REQUIRED EVERGREEN TREES:	200 (30%)
EVERGREEN TREES PROVIDED:	260 (39%)

24" BOX TREE CALCULATION

TREE TOTAL:	664
REQUIRED 24" BOX TREES:	166 (25%)
24" BOX OR LARGER TREES PROVIDED:	590 (89%)

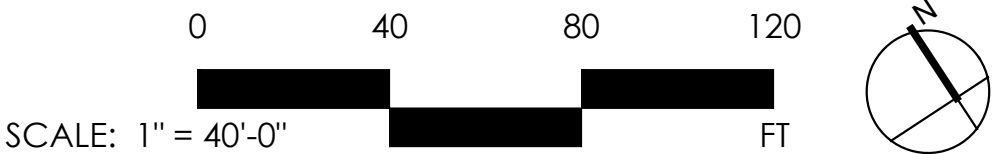
PROJECT STATEMENT

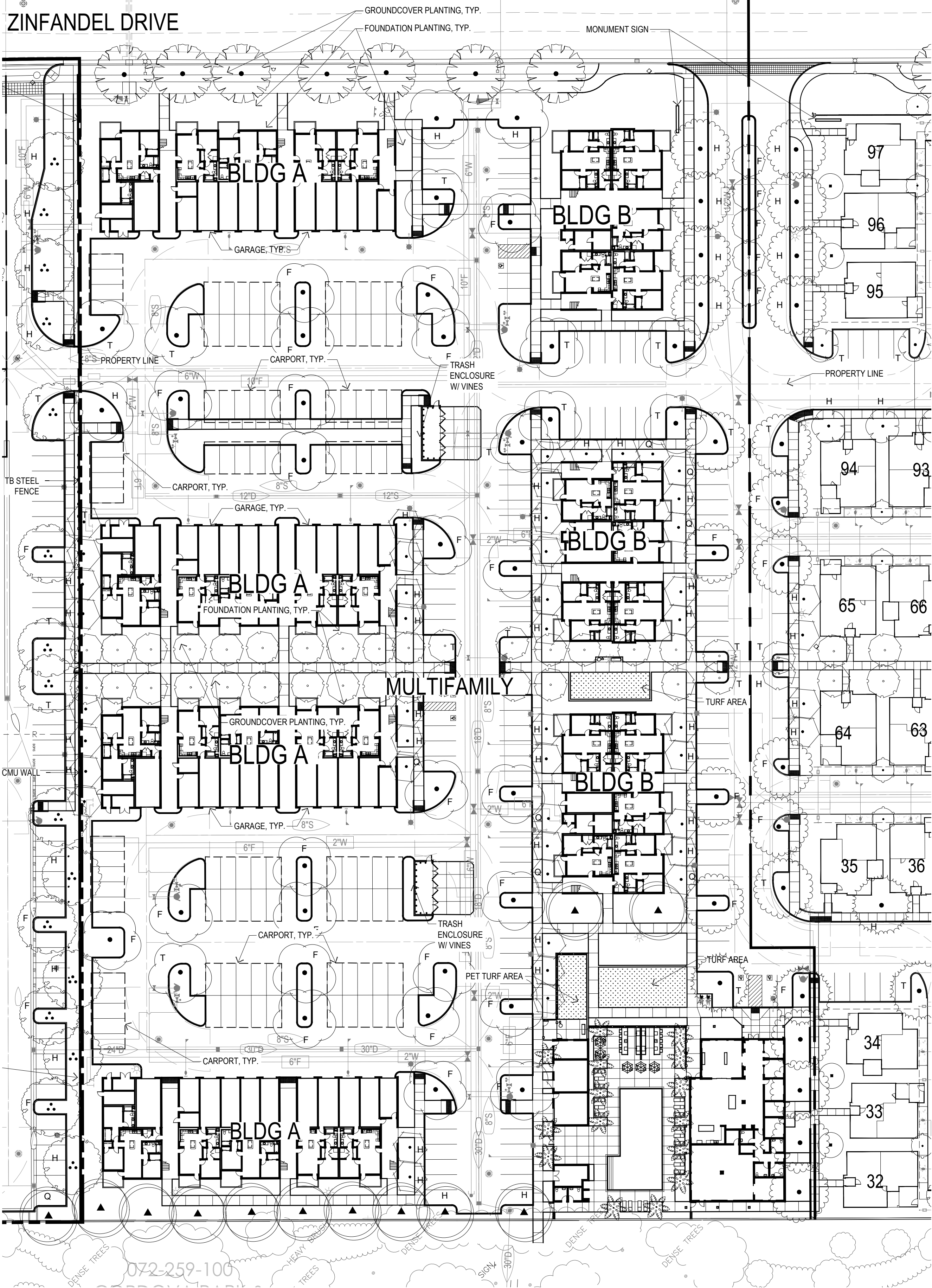
- IRRIGATION WILL BE SUB-SURFACE IRRIGATION FOR SHRUBS AND GROUND COVER. TREES WILL BE IRRIGATED BY DEEP ROOT BUBBLERS. TURF BY OVERHEAD IRRIGATION WITH WATER EFFICIENT NOZZLES THAT MEET WELO STANDARDS.

WATER EFFICIENT LANDSCAPE ORDINANCE:

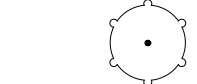
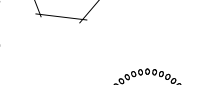
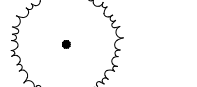
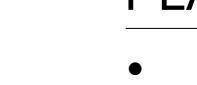
"I have complied with the criteria of the Water Efficient Landscape Ordinance and applied such criteria for the efficient use of water in the landscape design plan."

	4836	10.01.2021
Applicant Signature	License Number	Date





PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	SIZE (HXW)
	Acacia stenophylla (<i>Evergreen</i>) Shoestring Acacia	15 gal	Low	59	30' X 15'
	Acer buergerianum Trident Maple	24"box	Med	20	25' X 20'
	Acer rubrum 'Armstrong Gold' Armstrong Gold Maple	24"box	Med	40	45' X 15'
	Arbutus x 'Marina' (<i>Evergreen</i>) Marina Strawberry Tree	24"box	Low	48	30' X 20'
	Elaeocarpus decipiens (<i>Evergreen</i>) Japanese Blueberry Tree	24"box	Med	5	45' X 25'
	Koelreuteria bipinnata Chinese Flame Tree	24"box	Med	36	35' X 35'
	Lagerstroemia indica x fauriei 'Muskogee' Muskogee Crape Myrtle	24"box	Low	36	20' X 15'
	Lagerstroemia indica x fauriei 'Natchez' Natchez Crape Myrtle	24"box	Med	71	25' X 20'
	Magnolia grandiflora 'Little Gem' (<i>Evergreen</i>) Little Gem Dwarf Southern Magnolia	24"box	Med	64	22' X 12'
	Olea europaea 'Swan Hill' TM (<i>Evergreen</i>) Swan Hill Olive	24"box	Low	18	30' X 20'
	Pistacia chinensis Chinese Pistache	24"box	Low	9	45' X 35'
	Quercus buckleyi Buckley Oak	24"box	Med	42	35' X 35'
	Quercus virginiana (<i>Evergreen</i>) Southern Live Oak	24"box	Low	7	45' X 35'
	Quercus wislizenii (<i>Evergreen</i>) Interior Live Oak	24"box	Low	44	45' X 35'
	Ulmus parvifolia 'Drake' Drake Lacebark Elm	24"box	Med	74	50' X 35'
	Ulmus 'Frontier' Frontier Elm	24"box	Low	23	35' X 35'
	Washingtonia filifera (<i>Evergreen</i>) California Fan Palm	12' BTH	Med	15	50' X 15'
	Zelkova serrata Sawleaf Zelkova	24"box	Low	24	50' X 35'
	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova	24"box	Med	29	25' X 20'

SHRUBS

BOTANICAL / COMMON NAME	CONT	WATER USE	SIZE (HXW)	PLANT USE
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Asparagus densiflorus 'Myers' Myers Asparagus	5 gal	Med	18" X 18"	Accent/Border
Berberis thunbergii 'Orange Rocket' Orange Rocket Barberry	1 gal	Med	5' X 3'	Border/Container
Coprosma x 'Tequila Sunrise' Gold Mirror Plant	5 gal	Med	4' X 4'	Accent/Border/Hedge
Cordylina x 'Electric Pink' Pink Cordylina	5 gal	Low	3' X 3'	Border/Container
Dianella revoluta 'Baby Bliss' Baby Flax	1 gal	Low	18" X 18"	Border/Massing
Erysimum x 'Bowles' Mauve' Wallflower	1 gal	Low	24" X 18"	Border/Massing
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Pittosporum tenuifolium 'Golf Ball' Tawhiwhi	5 gal	Med	3' X 3'	Border/Hedge
Pittosporum tobira 'Cream De Mint' TM Cream De Mint Dwarf Mock Orange	5 gal	Med	2' X 2'	Border
Punica granatum 'Nana' Dwarf Pomegranate	1 gal	Low	3' X 3'	Foundation/Hedge
Rhamnus californica 'Mound San Bruno' California Coffeeberry	5 gal	Low	6' X 6'	Border/Foundation
Rosmarinus officinalis 'Tuscan Blue' Tuscan Blue Rosemary	5 gal	Low	6' X 4'	Accent/Hedge/Massing
Salvia microphylla 'Hot Lips' Baby Sage	1 gal	Low	3' X 3'	Accent/Border
Spiraea x bumalda 'Limemound' TM Limemound Spirea	5 gal	Med	3' X 4'	Accent/Border/Massing

BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	PLANT USE
Pandorea jasminoides Bower Vine	15 gal	Med	---	Trellis/Arbor/Wall
Parthenocissus tricuspidata 'Veitchii' Boston Ivy	15 gal	Med	---	Trellis/Arbor/Wall

GROUND COVERS

BOTANICAL / COMMON NAME	CONT	WATER USE	SPACING	PLANT USE
Arctostaphylos uva-ursi 'Point Reyes' Kinnikinnick	1 gal	Low	48" o.c.	Border/Massing
Bouteloua gracilis 'Blonde Ambition' Blue Grama	1 gal	Low	24" o.c.	Accent/Border/Massing
Carex divulsa Berkeley Sedge	1 gal	Low	18" o.c.	Edging/Massing
Lomandra longifolia 'Platinum Beauty' Variegated Dwarf Mat Grass	1 gal	Low	30" o.c.	Border/Container/Slope
Myoporum parvifolium Trailing Myoporum	1 gal	Low	42" o.c.	Edging/Massing

PLANTING NOTES

- ROOT BARRIERS ARE REQUIRED FOR ALL TREES PLANTED WITHIN 10' OF PAVING OR HARDSCAPE.
- APPLY PRE-EMERGENT IN ALL NON-SEEDED LANDSCAPE AREAS PRIOR TO PLANTING.
- A 3" MINIMUM LAYER OF BARK MULCH IS REQUIRED IN ALL NON-TURF PLANTERS.
- INSTALL A WEED CONTROL LAYER IN ALL BARK MULCH AREAS.

EVERGREEN TREE CALCULATION

TREE TOTAL:	664
REQUIRED EVERGREEN TREES:	200 (30%)
EVERGREEN TREES PROVIDED:	260 (39%)

24" BOX TREE CALCULATION

TREE TOTAL:	664
REQUIRED 24" BOX TREES:	166 (25%)
24" BOX OR LARGER TREES PROVIDED:	590 (89%)

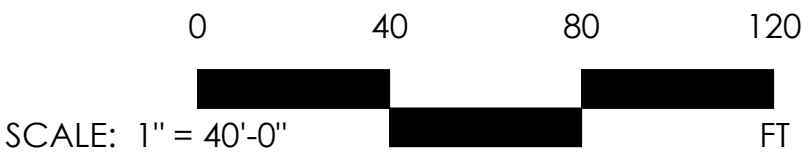
PROJECT STATEMENT

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WATER EFFICIENT LANDSCAPE ORDINANCE:

"I have complied with the criteria of the Water Efficient Landscape Ordinance and applied such criteria for the efficient use of water in the landscape design plan."

	4836	10.01.2021
Applicant Signature	License Number	Date

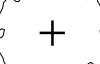
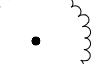
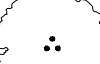
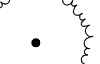




PLANTING NOTES

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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	SIZE (HXW)
	Acacia stenophylla (Evergreen) Shoestring Acacia	15 gal	Low	59	30' X 15'
	Acer buergerianum Tritident Maple	24"box	Med	20	25' X 20'
	Acer rubrum 'Armstrong Gold' Armstrong Gold Maple	24"box	Med	40	45' X 15'
	Arbutus x 'Marina' (Evergreen) Marina Strawberry Tree	24"box	Low	48	30' X 20'
	Elaeocarpus decipiens (Evergreen) Japanese Blueberry Tree	24"box	Med	5	45' X 25'
	Koelreuteria bipinnata Chinese Flame Tree	24"box	Med	36	35' X 35'
	Lagerstroemia indica x fauriei 'Muskogee' Muskogee Crape Myrtle	24"box	Low	36	20' X 15'
	Lagerstroemia indica x fauriei 'Natchez' Natchez Crape Myrtle	24"box	Med	71	25' X 20'
	Magnolia grandiflora 'Little Gem' (Evergreen) Little Gem Dwarf Southern Magnolia	24"box	Med	64	22' X 12'
	Olea europaea 'Swan Hill' TM (Evergreen) Swan Hill Olive	24"box	Low	18	30' X 20'
	Pistacia chinensis Chinese Pistache	24"box	Low	9	45' X 35'
	Quercus buckleyi Buckley Oak	24"box	Med	42	35' X 35'
	Quercus virginiana (Evergreen) Southern Live Oak	24"box	Low	7	45' X 35'
	Quercus wislizenii (Evergreen) Interior Live Oak	24"box	Low	44	45' X 35'
	Ulmus parvifolia 'Drake' Drake Lacebark Elm	24"box	Med	74	50' X 35'
	Ulmus 'Frontier' Frontier Elm	24"box	Low	23	35' X 35'
	Washingtonia filifera (Evergreen) California Fan Palm	12' BTH	Med	15	50' X 15'
	Zelkova serrata Sawleaf Zelkova	24"box	Low	24	50' X 35'
	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova	24"box	Med	29	25' X 20'

EVERGREEN TREE CALCULATION PROJECT STATEMENT

TREE TOTAL: 664
REQUIRED EVERGREEN TREES: 200 (30%)
EVERGREEN TREES PROVIDED: 260 (39%)

24" BOX TREE CALCULATION

TREE TOTAL: 664
REQUIRED 24" BOX TREES: 166 (25%)
24" BOX OR LARGER TREES PROVIDED: 590 (89%)

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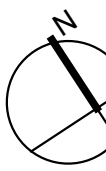
WATER EFFICIENT LANDSCAPE ORDINANCE:

"I have complied with the criteria of the Water Efficient Landscape Ordinance and applied such criteria for the efficient use of water in the landscape design plan."

Shira Del Castillo
Applicant Signature

4836
License Number

10.01.2021
Date

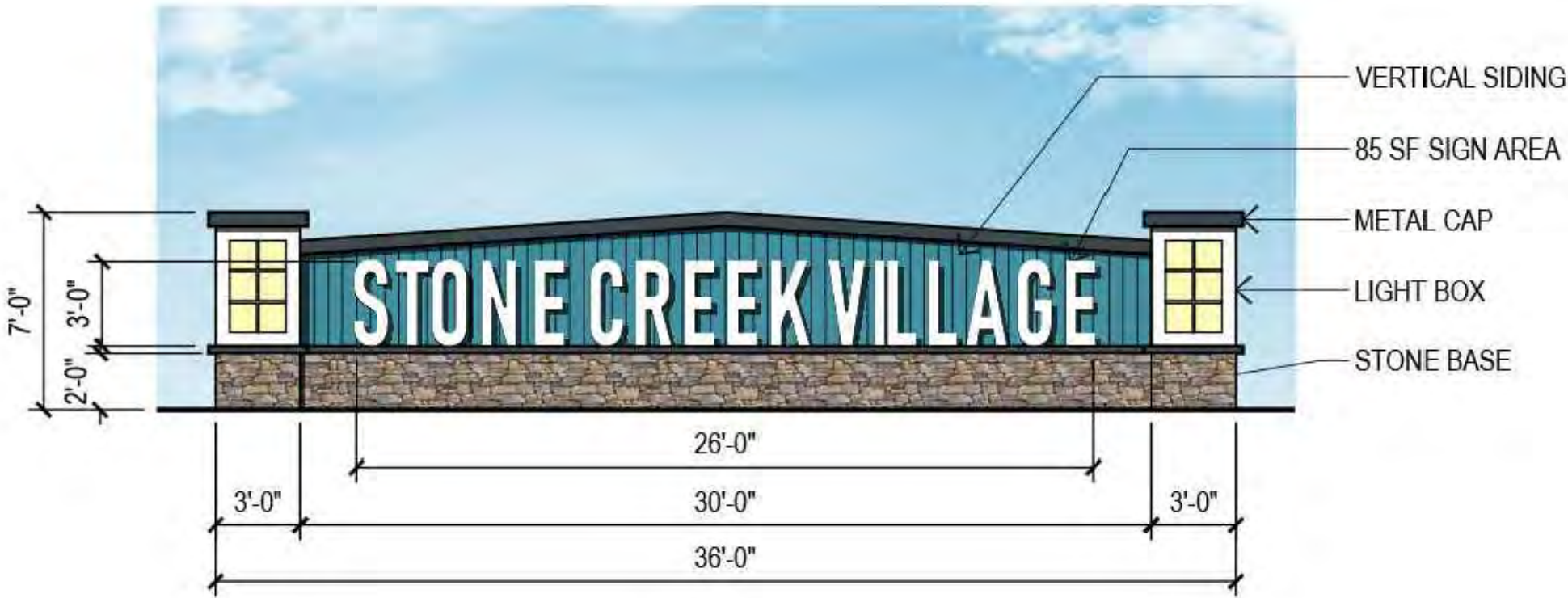


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	Ulmus parvifolia 'Drake' Drake Lacebark Elm	24"box	Med	74	50' X 35'
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	Zelkova serrata Sawleaf Zelkova	24"box	Low	24	50' X 35'
	Zelkova serrata 'JFS-KW1' TM City Sprite Zelkova	24"box	Med	29	25' X 20'

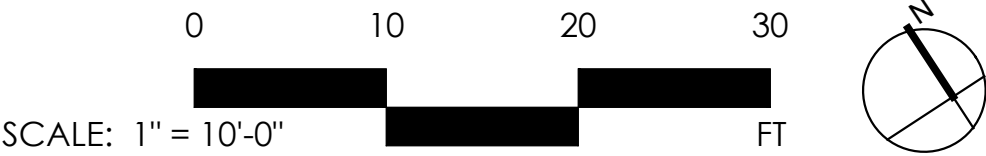
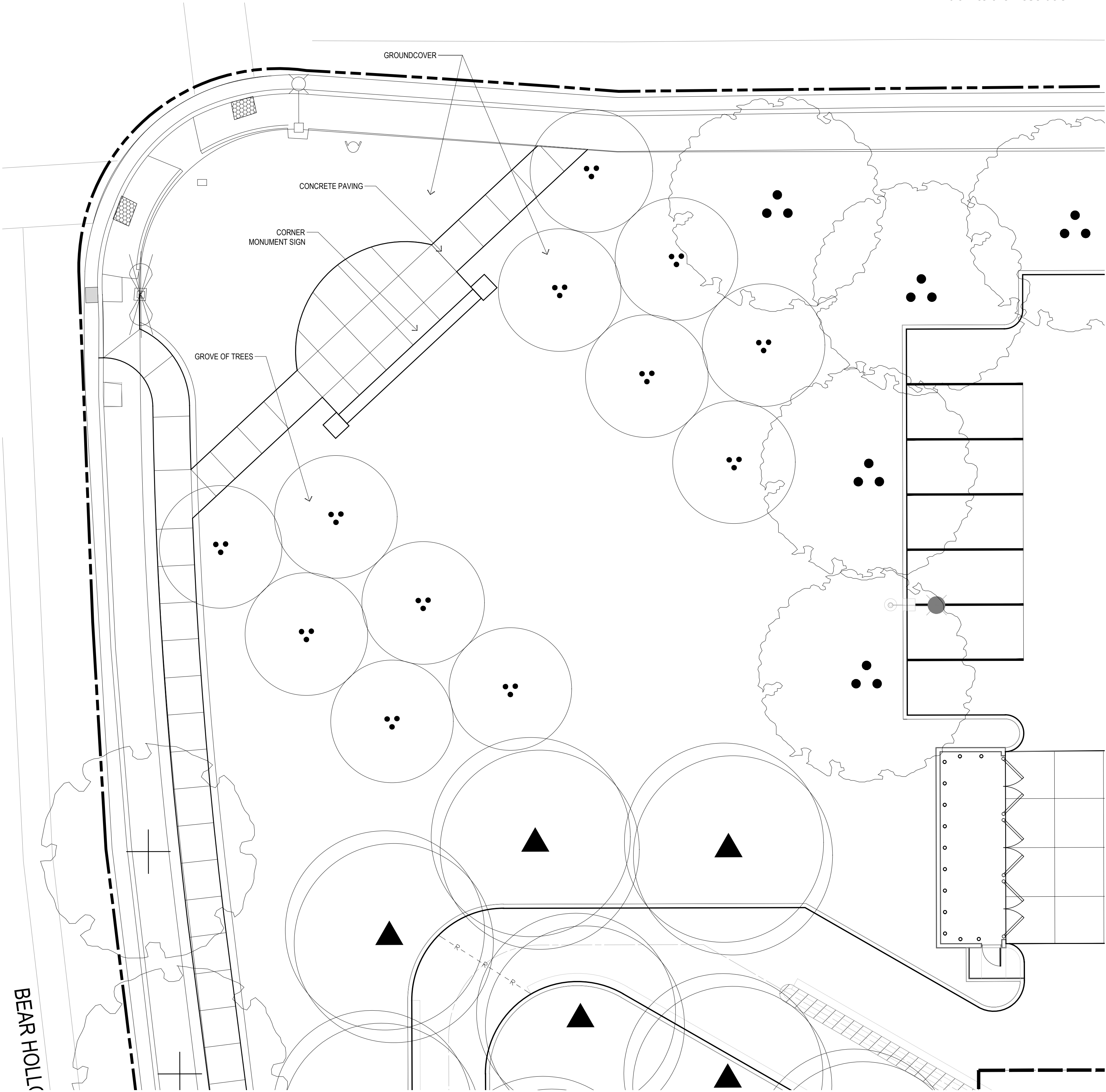


CORNER MONUMENT SIGN

SCALE: NTS

B

BEAR HOLT



CORNER ENLARGEMENT

SCALE: 1" = 10'

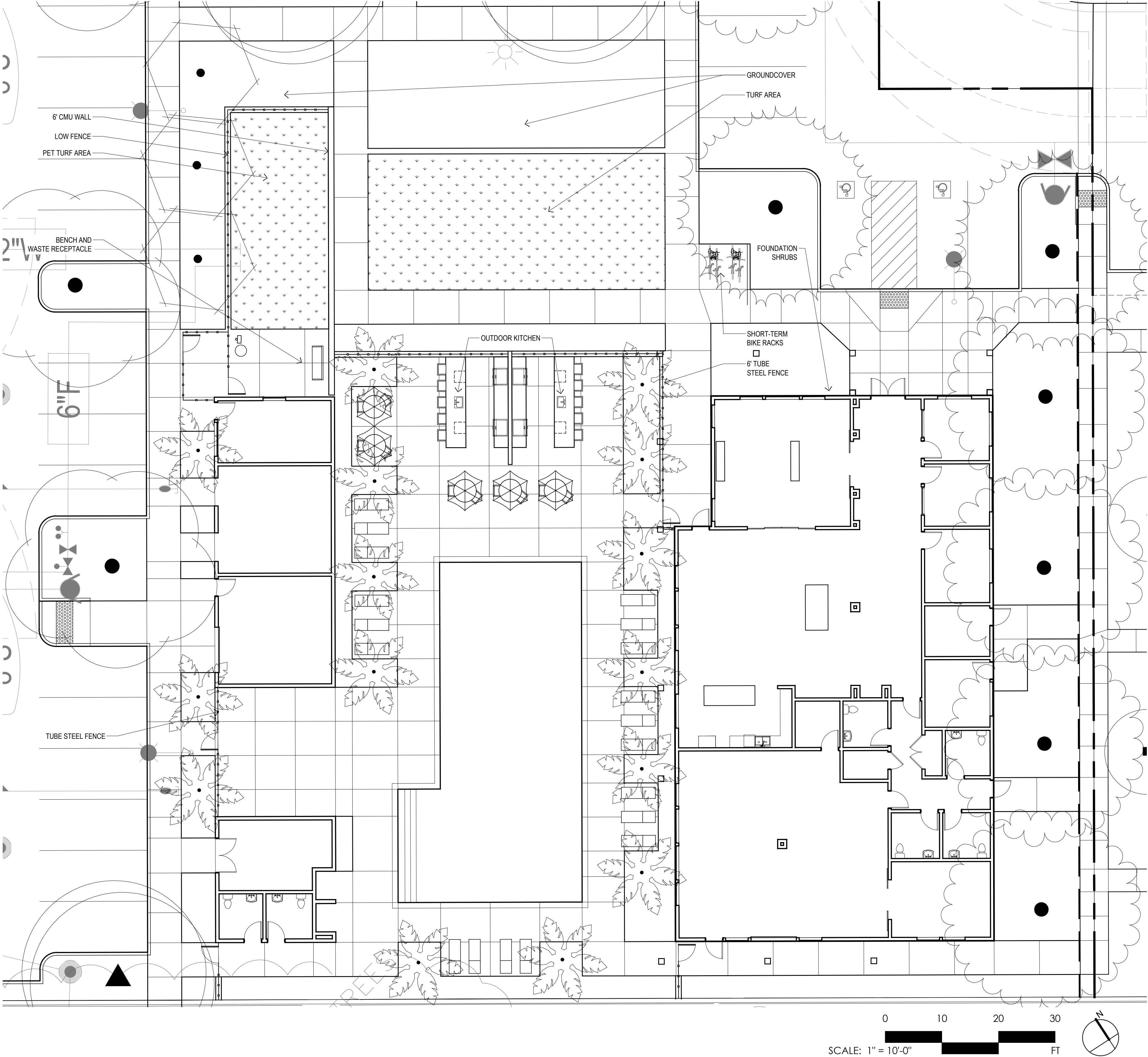
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	SIZE (HXW)
	Acacia stenophylla (<i>Evergreen</i>) Shoestring Acacia	15 gal	Low	59	30' X 15'
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	Olea europaea 'Swan Hill' TM (<i>Evergreen</i>) Swan Hill Olive	24"box	Low	18	30' X 20'
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	Ulmus parvifolia 'Drake' Drake Lacebark Elm	24"box	Med	74	50' X 35'
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0 10 20 30
SCALE: 1" = 10'-0" FT

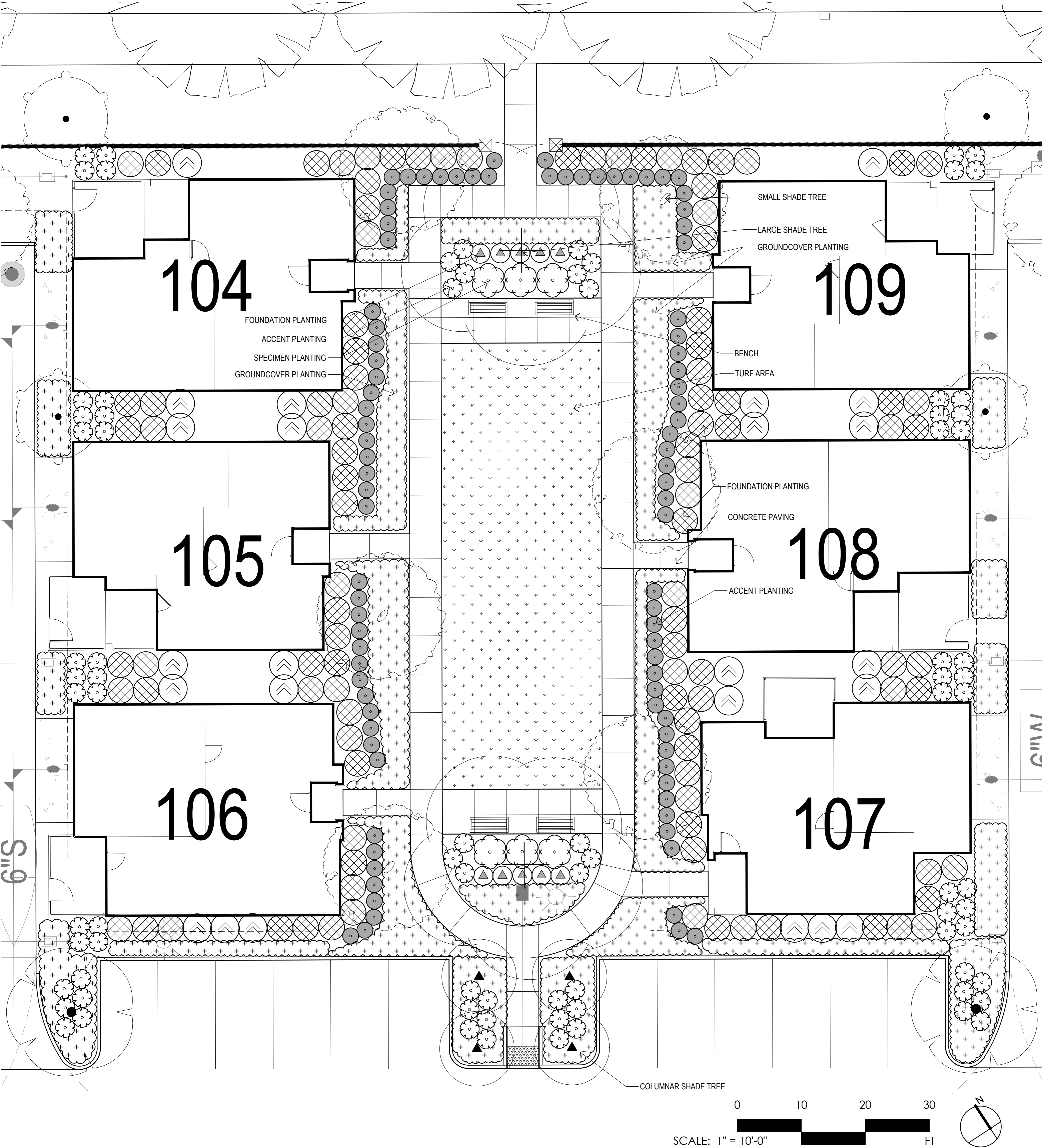
CLUBHOUSE AND AMENITIES ENLARGEMENT
SCALE: 1" = 10'

PLANT SCHEDULE

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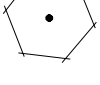


NORTHERN COURTYARD ENLARGEMENT TYPICAL

SCALE: 1" = 10'

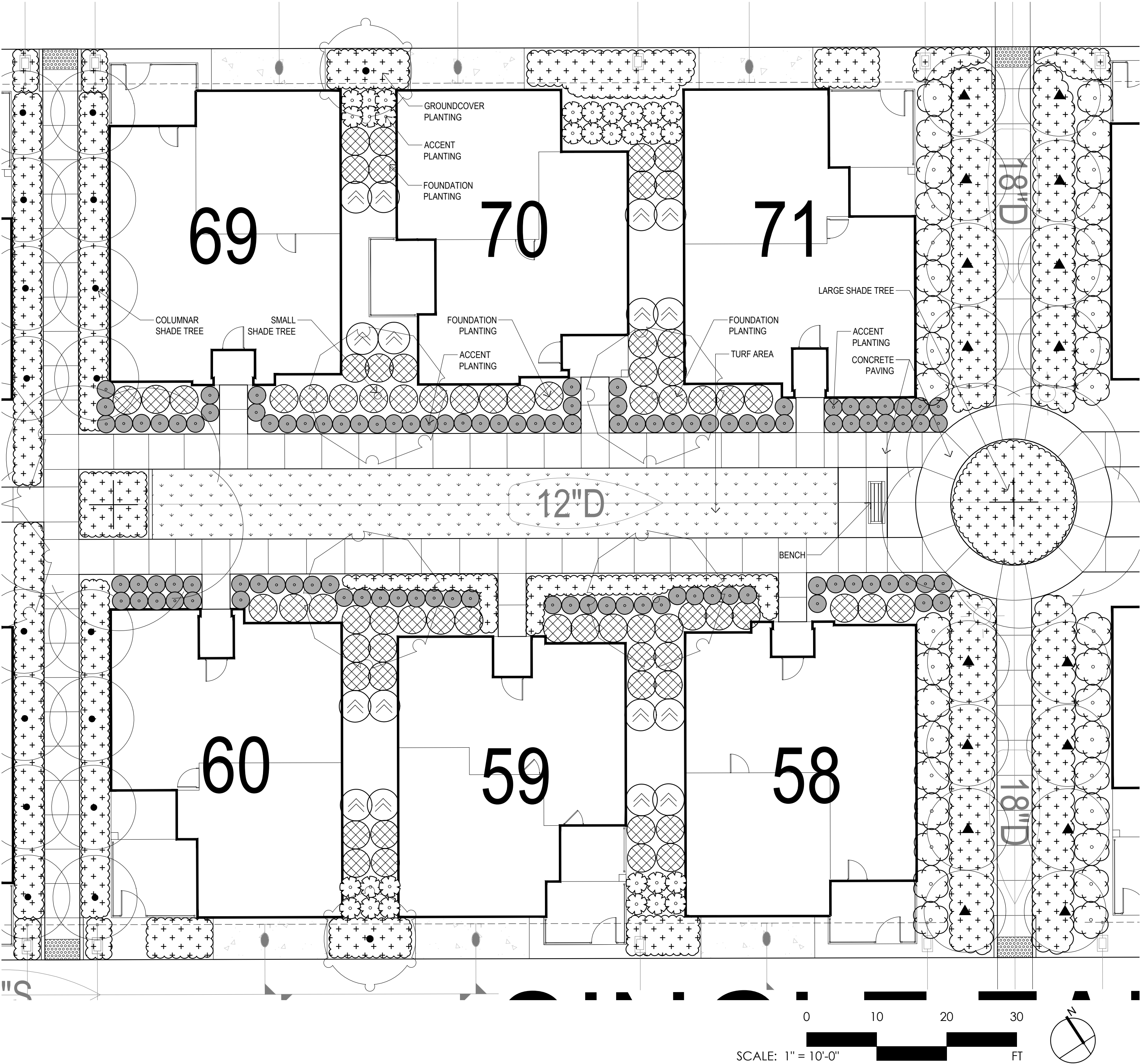
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PLANT SCHEDULE

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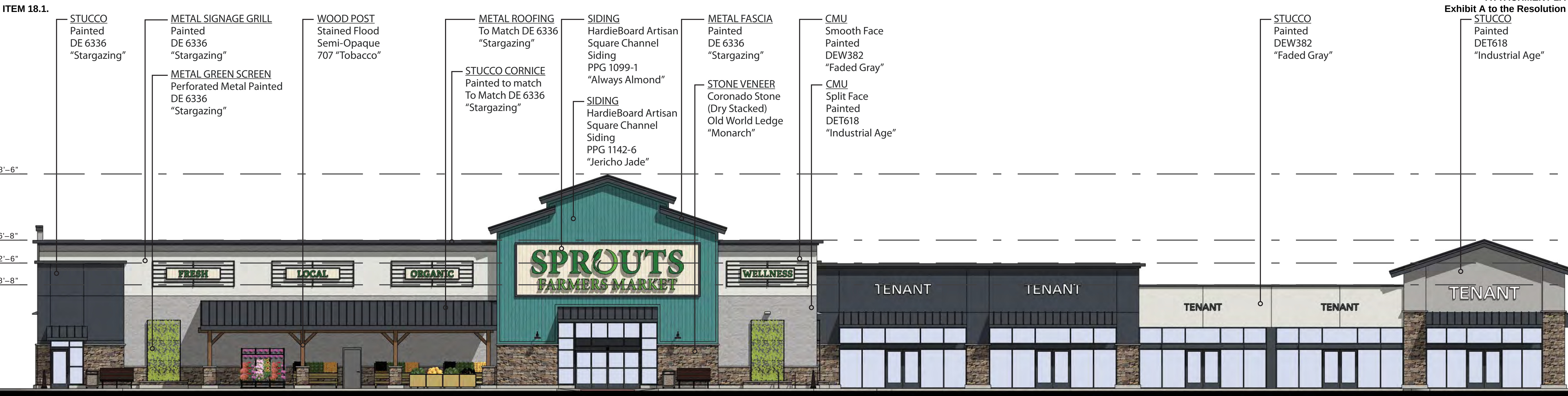
CENTRAL COURTYARD ENLARGEMENT

SCALE: 1" = 10'

A

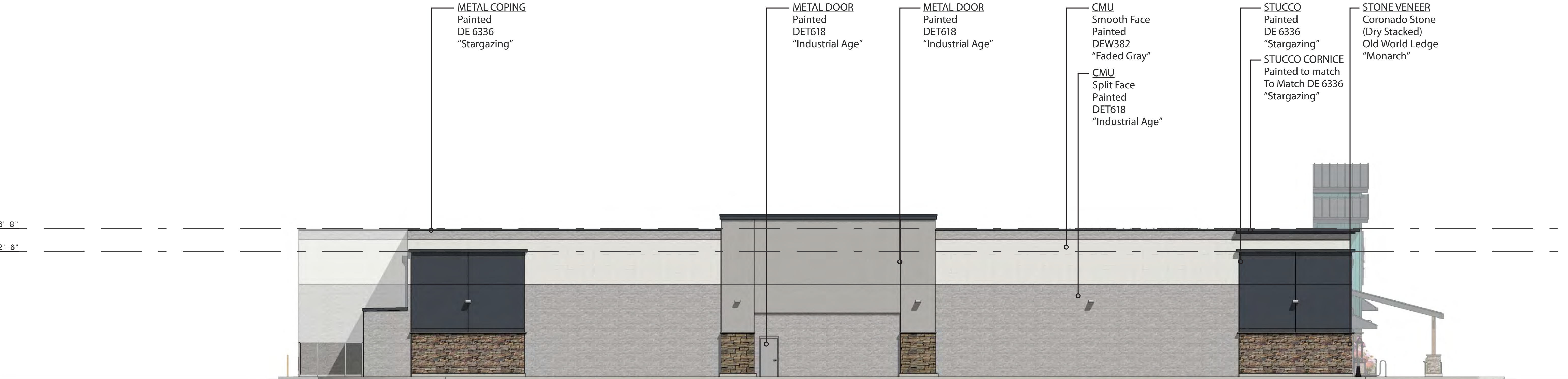






Front Elevation

NTS



Left Elevation

NTS

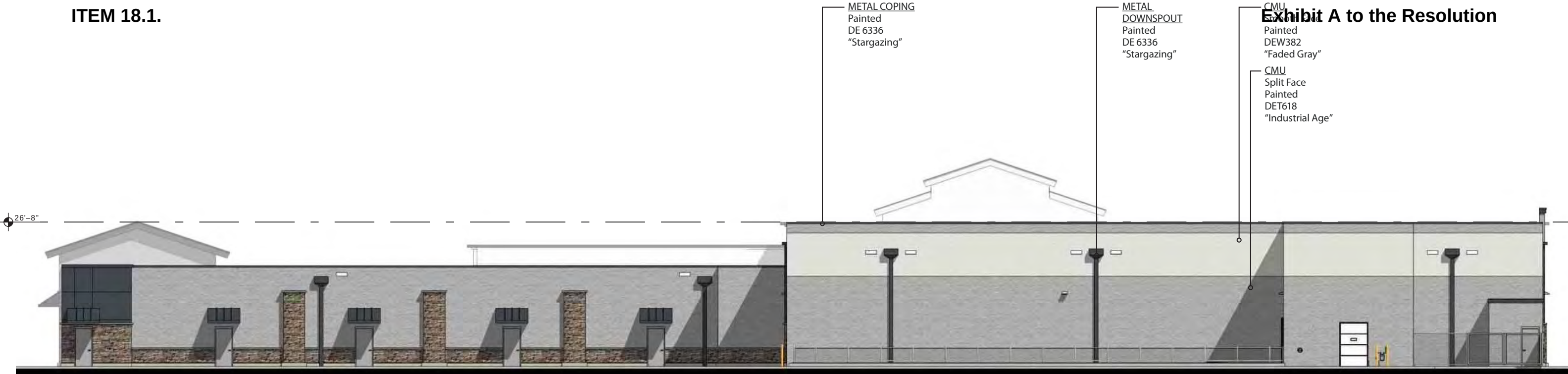
Sprouts Farmers Market | Rancho Cordova (CA)

Exterior Elevations
August 13, 2021

DESIGN REPRESENTATION ONLY - NOT FOR CONSTRUCTION - The images provided throughout this package are a representation of the current design intent only. The images may not reflect variations in color, tone, hue, time, shading, ambient light intensity, materials, texture, contrast, font style and construction variations required by building codes or inspectors, material availability or final design detailing. All images and artwork associated/provided should be reviewed by the client with their print and/or production vendors and adjusted as needed during the proof and shop drawing submittals. Those client-approved drawings take precedence and provide final direction for design, printing and production.



ITEM 18.1.



Rear Elevation

NTS



Right Elevation

NTS

Sprouts Farmers Market | Rancho Cordova (CA)

Exterior Elevations
August 13, 2021

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Sprouts Farmers Market | Rancho Cordova (CA)
Exterior Perspective
August 13, 2021

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Sprouts Farmers Market | Rancho Cordova (CA)
Exterior Perspective
August 13, 2021

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Sprouts Farmers Market | Rancho Cordova (CA)
Exterior Perspective
August 13, 2021

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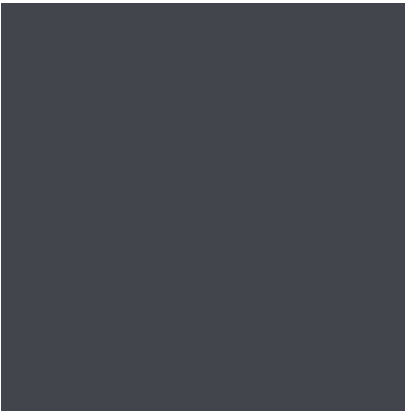
Siding

HardieBoard Artisan
Square Channel Siding
Painted PPG 1099-1
"Always Almond"



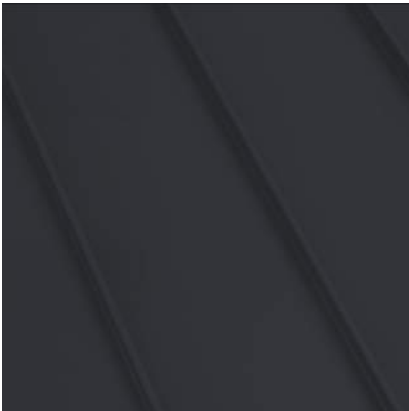
Siding

HardieBoard Artisan
Square Channel Siding
Painted PPG 1142-6
"Jericho Jade"



Paint

DE 6336 "Stargazing"
at Fascia of Metal Roofing



Metal Roofing

Painted DE 6336
"Stargazing"



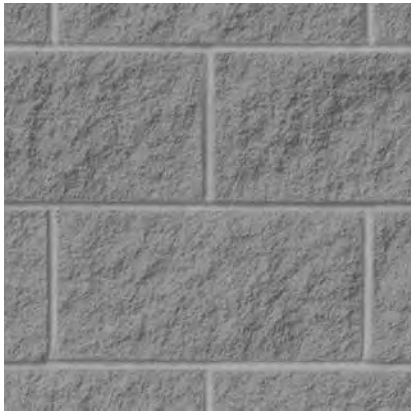
Wood Post

Stained Flood
Semi Transparent
707 "Tobacco"



Stone Veneer

Coronado Stone
Old World Ledge
"Monarch"



CMU

Split Face CMU
Painted DE T618
"Industrial Age"



CMU

Smooth Face CMU
Painted DE W382
"Faded Gray"



Sill

Coronado Stone
900 Series
"Grey"



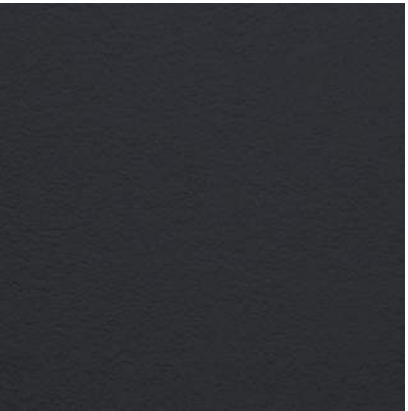
Stucco

Light Dash Finish
Painted DE T618
"Industrial Age"



Stucco

Light Dash Finish
Painted DE W382
"Faded Gray"



Stucco

Light Dash Finish
Painted DE 6336
"Stargazing"

PROJECT INFORMATION

ASSESSOR PARCEL NUMBERS	072-236-002
USE:	VACANT
EXISTING SPECIFIC PLAN ZONING:	RC (ZSPA)
PROPOSED SPECIFIC PLAN ZONING:	RC (ZSPA)
EXISTING	# ACRES
EXISTING NUMBER OF PARCELS	1 25.21 ± AC
PROPOSED	# ACRES
PROPOSED NUMBER OF LOTS	4 6.01 ± AC COMMERCIAL
	1 6.33 ± AC MULTI-FAMILY
	128 7.78 ± AC SINGLE-FAMILY RESIDENTIAL
	1 0.44 ± AC LANDSCAPE CORRIDOR (CITY)
	1 0.43 ± AC ALLEYS, PARKING, COMMON (HOA)
	5 0.62 ± AC COMMON AREA (HOA)
	140 TOTAL

APPLICANT

ELLIOTT HOMES, INC.
340 PALLADIO PARKWAY, SUITE 521
FOLSOM, CA 95630
PHONE: (916) 984-1300
EMAIL: PWALKER@ELLIOTTHOMES.COM

PLANNER / ENGINEER

MORTON & PITALO, INC.
600 COOLIDGE DRIVE, SUITE #140
FOLSOM, CA 95630
CONTACT: KEN TOPPER / SCOTT PEDERSEN
PHONE: (916) 927-2400
EMAIL: KTOPPER@MPENGR.COM
EMAIL: SPEDERSEN@MPENGR.COM

UTILITY PROVIDERS

WATER: GOLDEN STATE WATER
SEWER: CITY OF RANCHO CORDOVA
ELECTRIC: SMUD
GAS: PG&E
TELEPHONE: SBC COMMUNICATIONS

SERVICE PROVIDERS

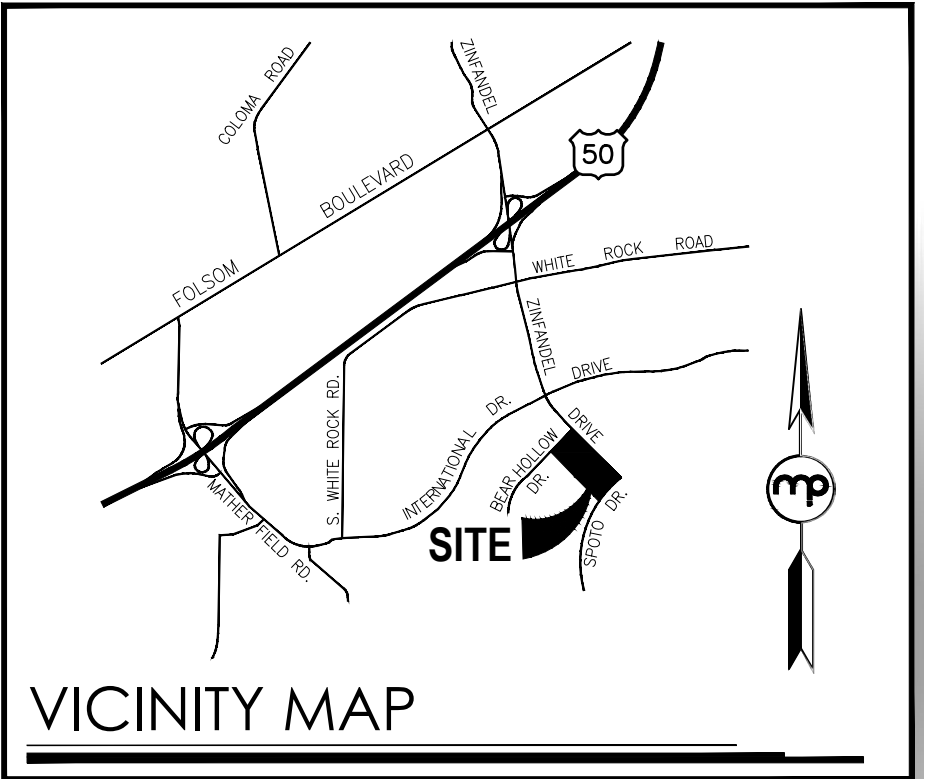
SCHOOL DISTRICT: FOLSOM CORDOVA UNIFIED
FIRE PROTECTION: SACRAMENTO METRO FIRE
POLICE PROTECTION: CITY OF RANCHO CORDOVA
PARKS / RECREATION: CORDOVA PARK DISTRICT
STORM DRAINAGE: CITY OF RANCHO CORDOVA
SOLID WASTE: CITY OF RANCHO CORDOVA

- THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
- MINOR MODIFICATION MAY BE MADE TO LOT LINES AT FINAL MAP.
- FOR PRELIMINARY PLANNING PURPOSES ONLY. BOUNDARY, TOPO, EASEMENTS AND SITE CONDITIONS TO BE VERIFIED PRIOR TO FINAL MAP AND ENGINEERING.
- PURSUANT TO GOVERNMENT CODE SECTION 66456.1 THE SUBDIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE MAP, INCLUDING THE AUTHORITY OF THE LOCAL AGENCY TO IMPOSE REASONABLE CONDITIONS RELATING TO THE FILING OF MULTIPLE FINAL MAPS.
- ALL UTILITY SYSTEMS ILLUSTRATED ON THE TENTATIVE MAP ARE SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
- GRADING SHOWN ON THIS TENTATIVE MAP ILLUSTRATES A GENERAL GRADING CONCEPT AND IS SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
- PURSUANT TO SECTION 66445 (J) OF THE GOVERNMENT CODE, THE FOLLOWING EASEMENTS ARE PROPOSED TO BE ABANDONED:
(A) 5' MAIL EASEMENT PER 317 BM 7 ALONG SPOTO DRIVE
(B) 25' PE PER 317 BM 7 ALONG SPOTO DRIVE
(C) SPOTO DRIVE RIGHT-OF-WAY, 6'
- LOT A IS A LANDSCAPE CORRIDOR LOT TO BE DEDICATED TO THE CITY AND INCLUDES A PUE
- LOTS B IS A ALLEY / PARKING / COMMON AREA LOT. TO BE DEDICATED TO THE HOA FOR ACCESS, PARKING, AND LANDSCAPE PURPOSES AND SHALL INCLUDE DE (P), EAVE, PE, PUE, PSE, & PWE.
- LOTS C-G ARE COMMON AREA LOTS TO BE DEDICATED TO THE HOA FOR LANDSCAPE PURPOSES AND SHALL INCLUDE DE (P), PE, & PUE.
- TOPOGRAPHY CONTOUR INFORMATION HEREON BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WITH BENCHMARK ELEVATION OF 88.97'. THE BENCHMARK ELEVATION OF NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) IS 91.32, RESULTING IN A CONVERSION OF 2.35'.

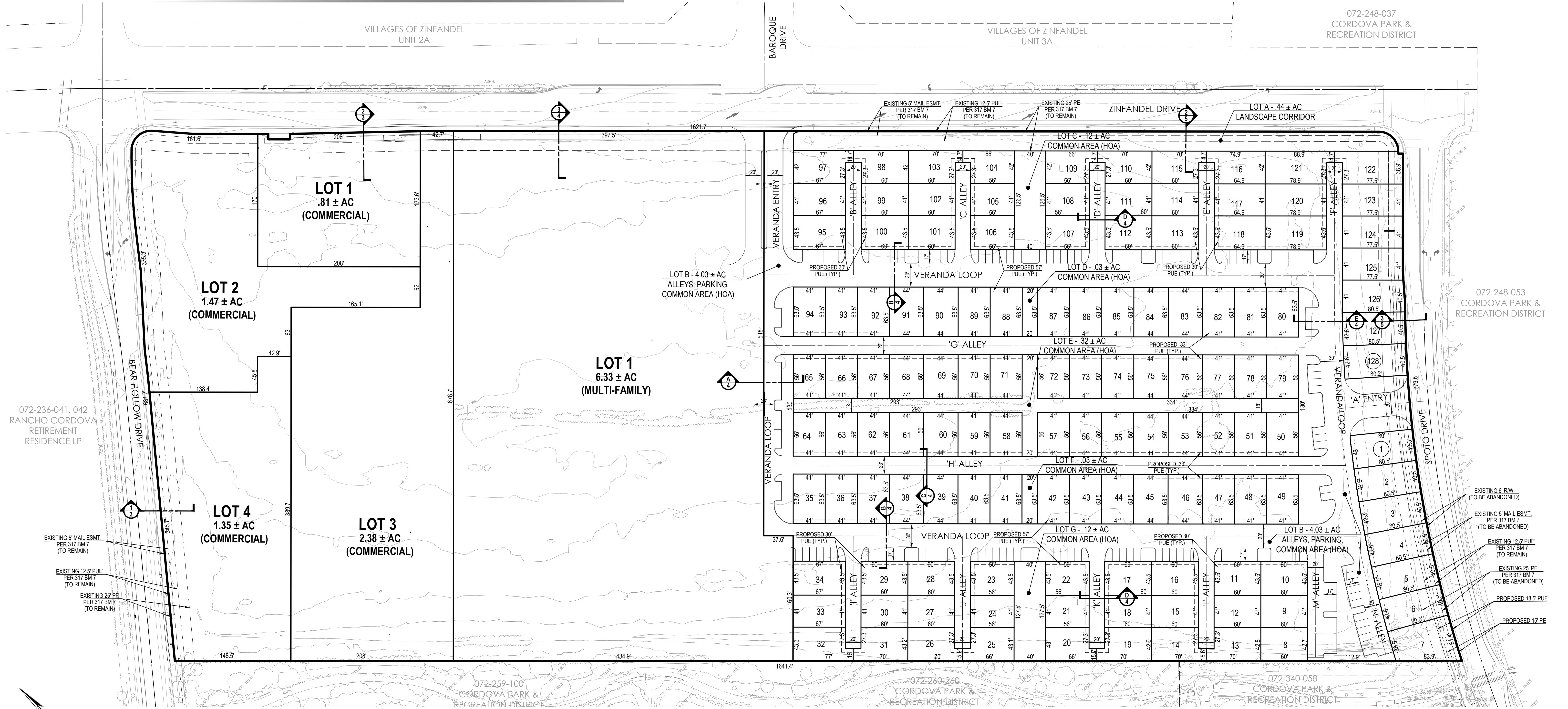
NOTES

LOTS:	AREA	LAND USE
A	0.44 ± AC (19,217 ± SF)	LANDSCAPE CORRIDOR (CITY)
B	4.03 ± AC (175,550 ± SF)	ALLEYS, PARKING, COMMON (HOA)
C	0.12 ± AC (5,060 ± SF)	COMMON AREA (HOA)
D	0.03 ± AC (1,270 ± SF)	COMMON AREA (HOA)
E	0.32 ± AC (13,886 ± SF)	COMMON AREA (HOA)
F	0.03 ± AC (1,270 ± SF)	COMMON AREA (HOA)
G	0.12 ± AC (5,100 ± SF)	COMMON AREA (HOA)
1-128	7.78 ± AC	SINGLE-FAMILY
1	6.33 ± AC	MULTI-FAMILY
1-4	6.01 ± AC	COMMERCIAL
TOTAL AREA:	25.21 ± AC	

LOTING



PROJECT INFORMATION

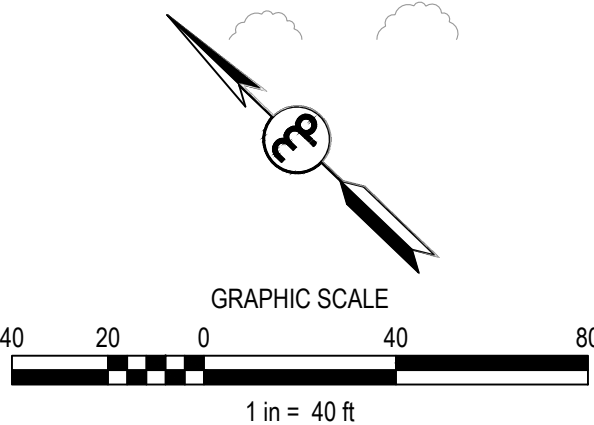
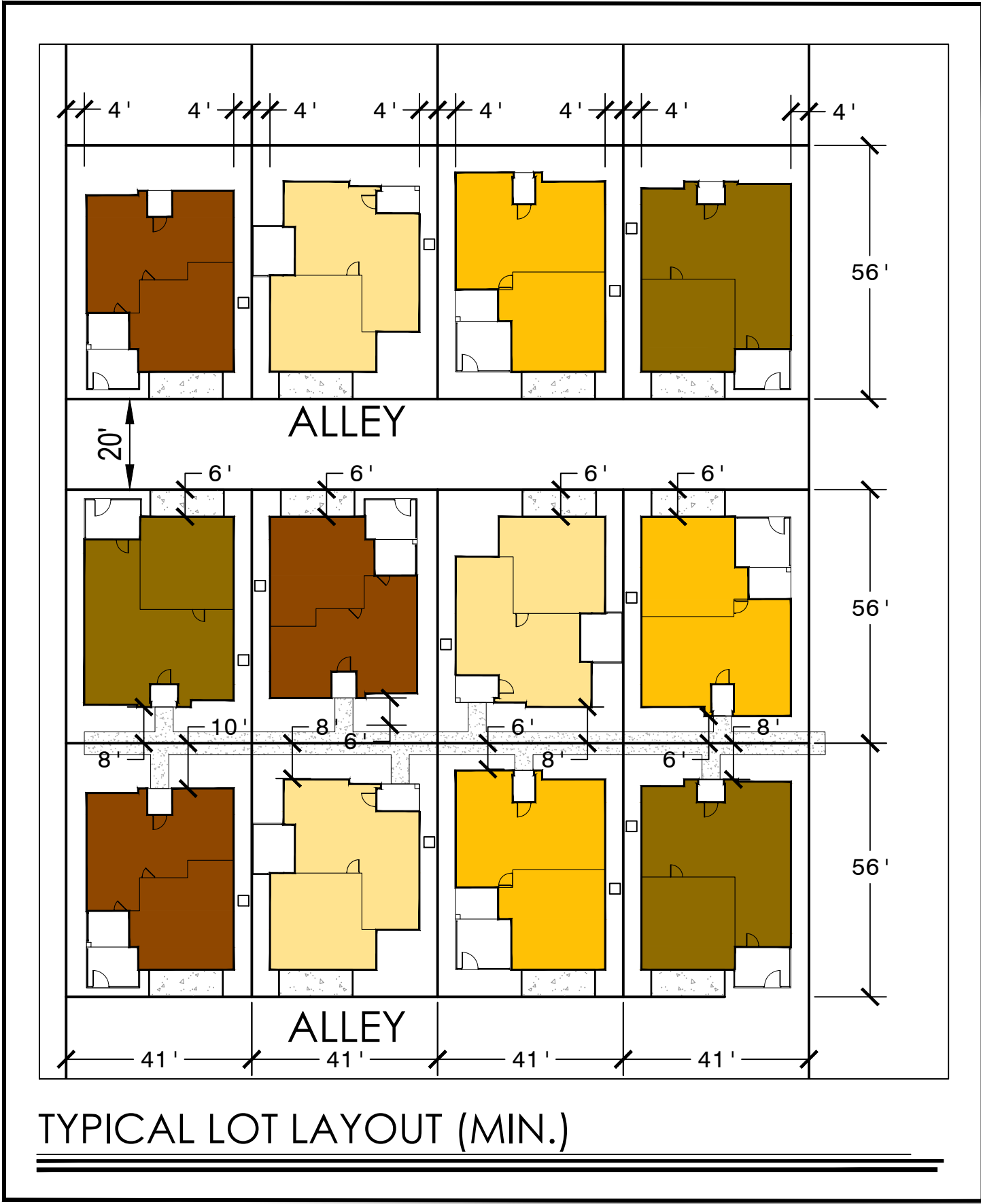
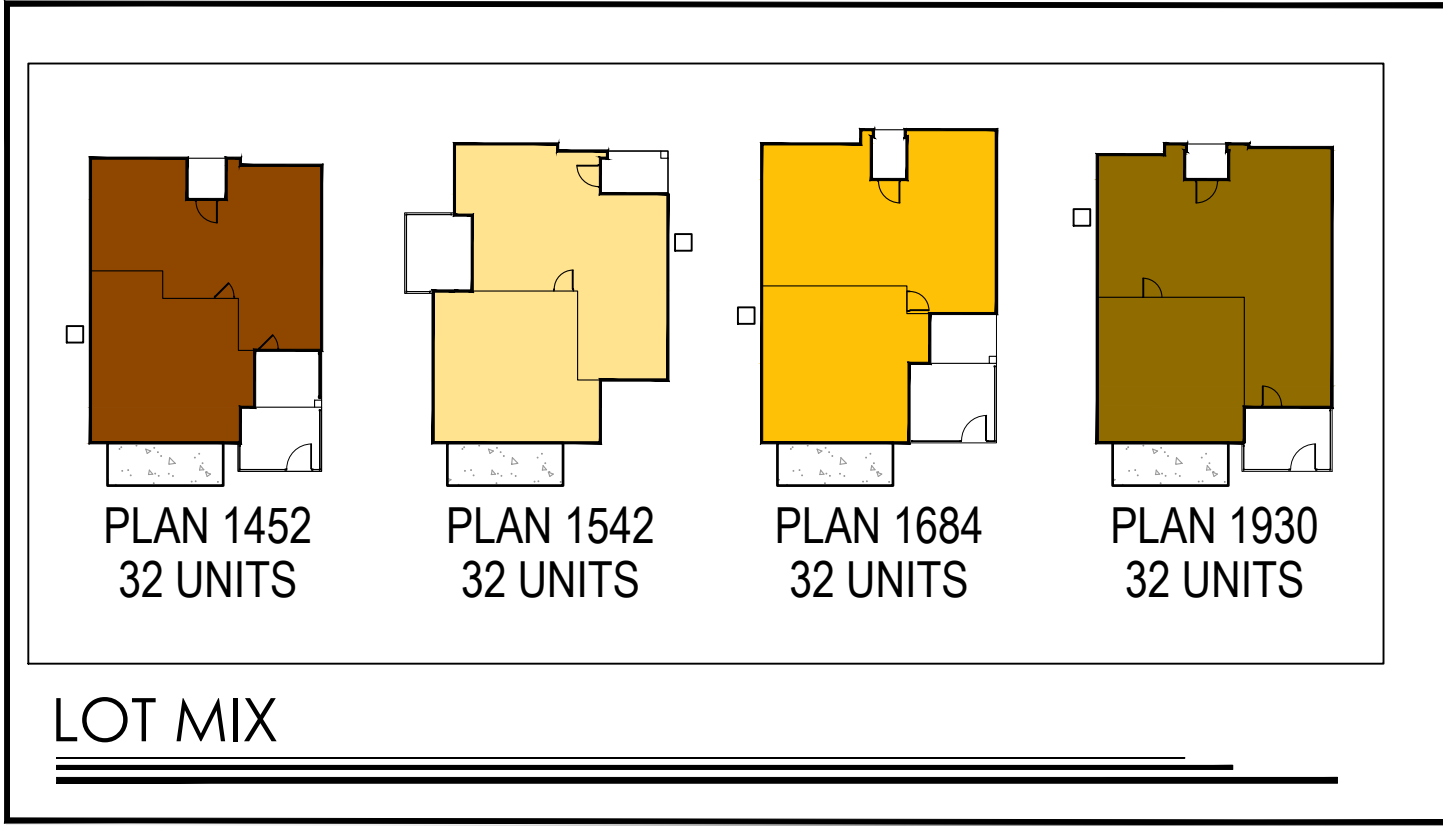
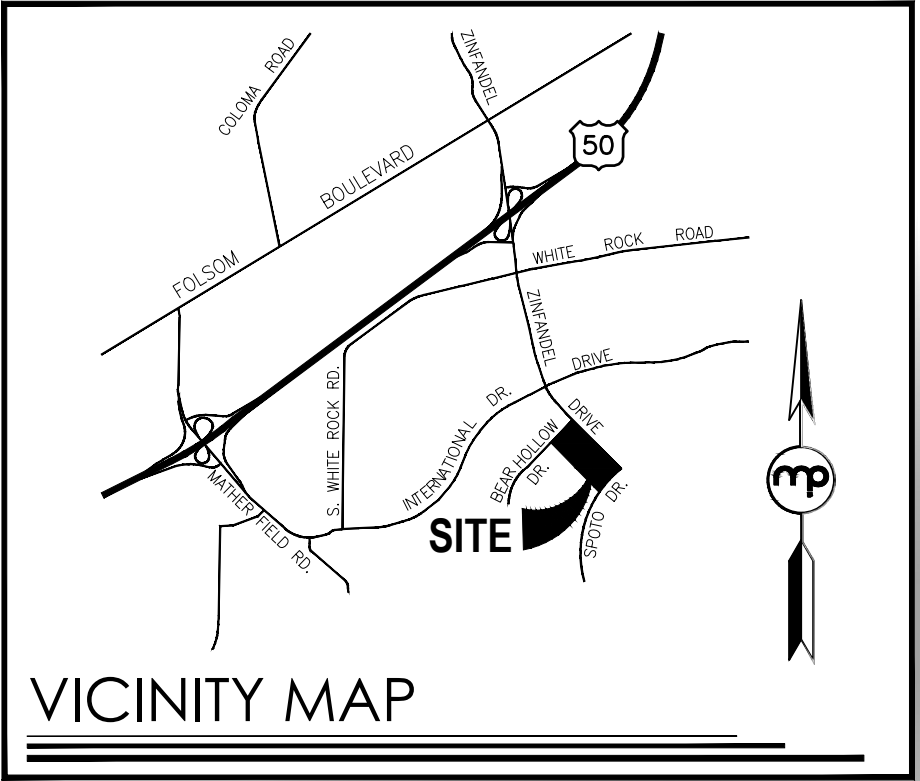


SEPTEMBER 30, 2021
STONE CREEK VILLAGE
TENTATIVE SUBDIVISION MAP
SHEET 1 of 8

DE (P)	DRAINAGE EASEMENT (PRIVATE)
EVAE	EMERGENCY VEHICLE & ACCESS EASEMENT
PE	PUBLIC ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PSE	PUBLIC SEWER EASEMENT
PWE	PUBLIC WATER EASEMENT

ABBREVIATIONS

mp MORTON & PITALO, INC.
CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING
Folsom • Fresno
600 Coolidge Drive, Suite #140
Folsom, CA 95630
phone: (916) 984-7621
web: www.mpengr.com



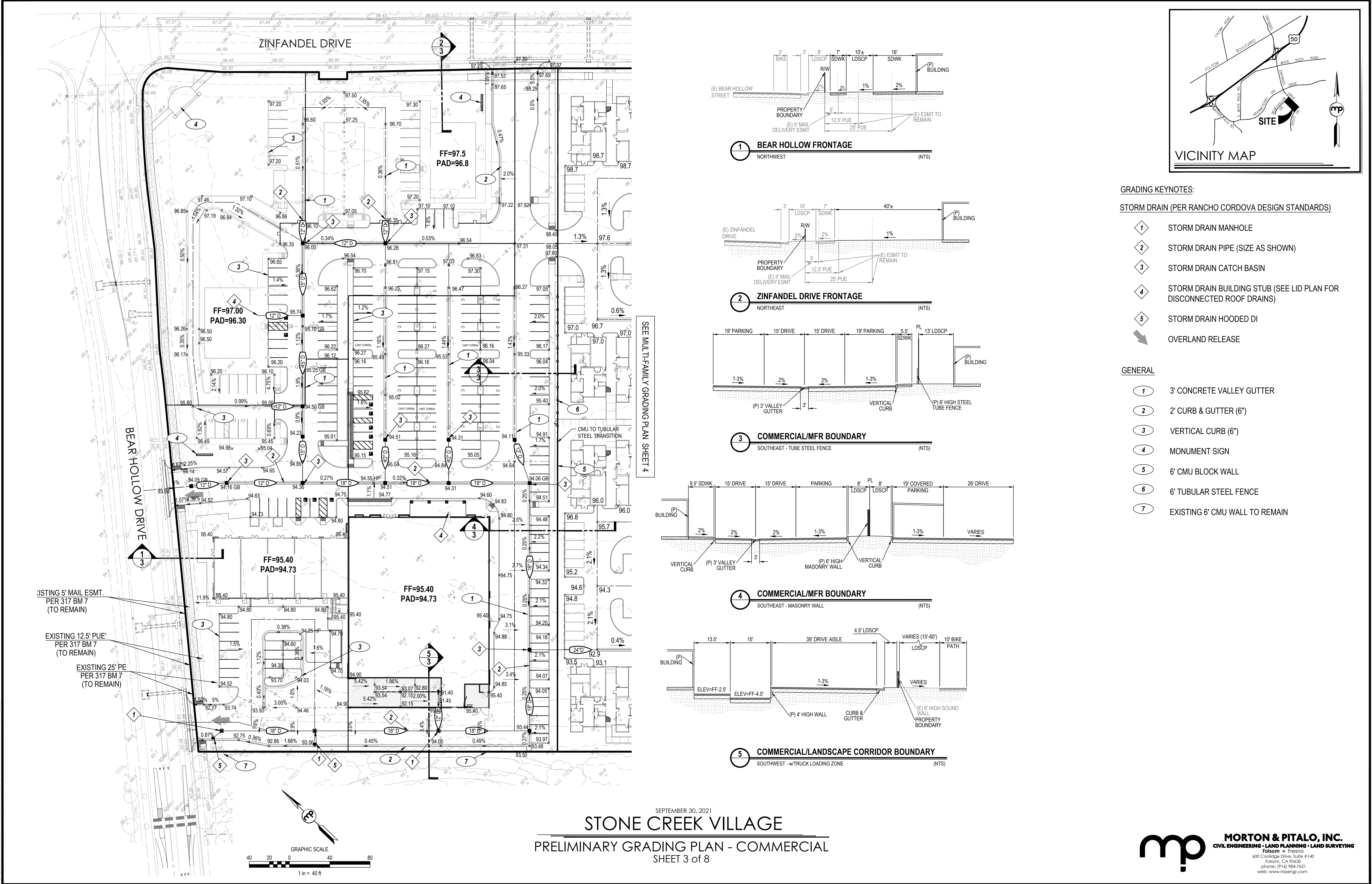
SEPTEMBER 30, 2021

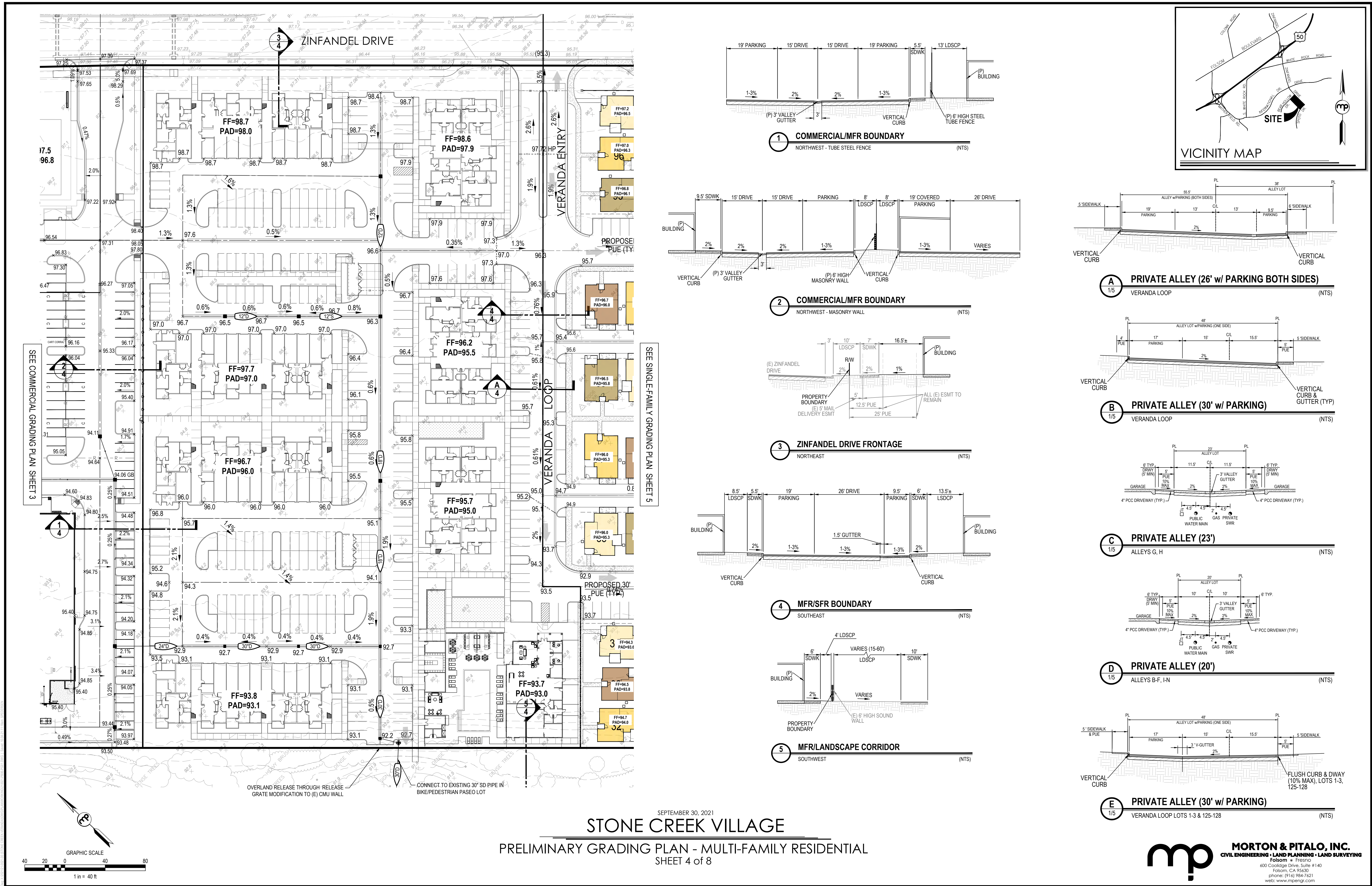
STONE CREEK VILLAGE

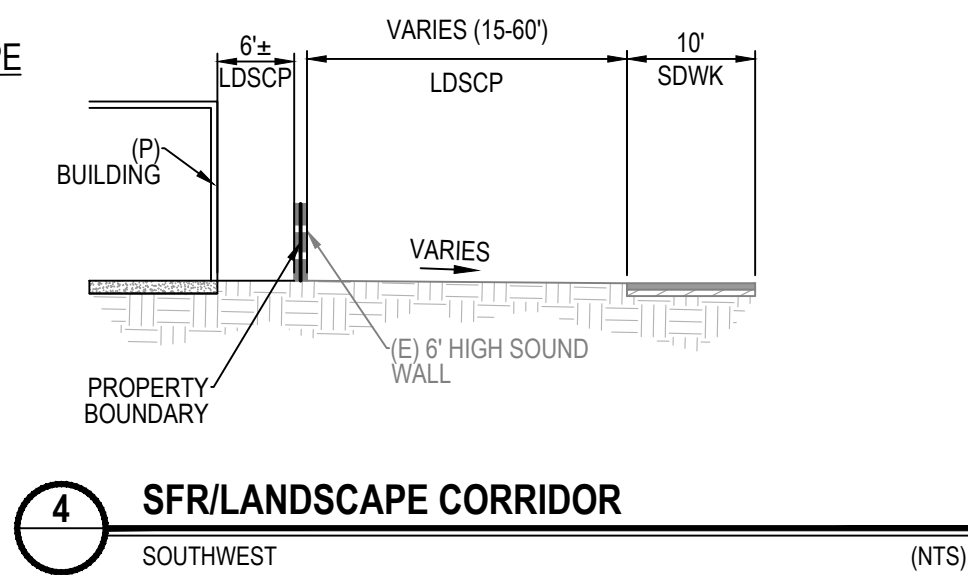
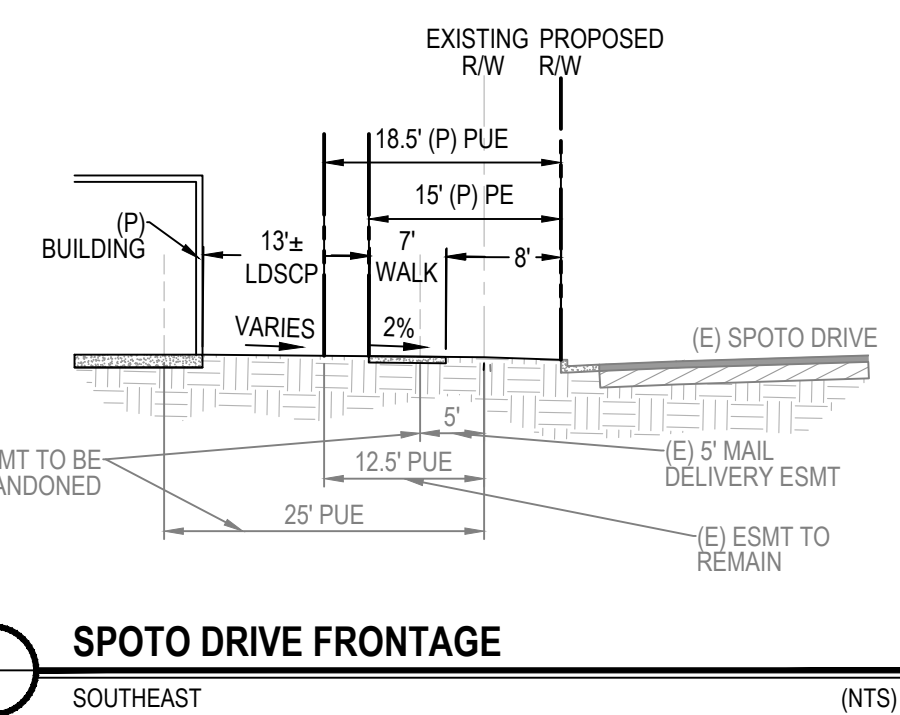
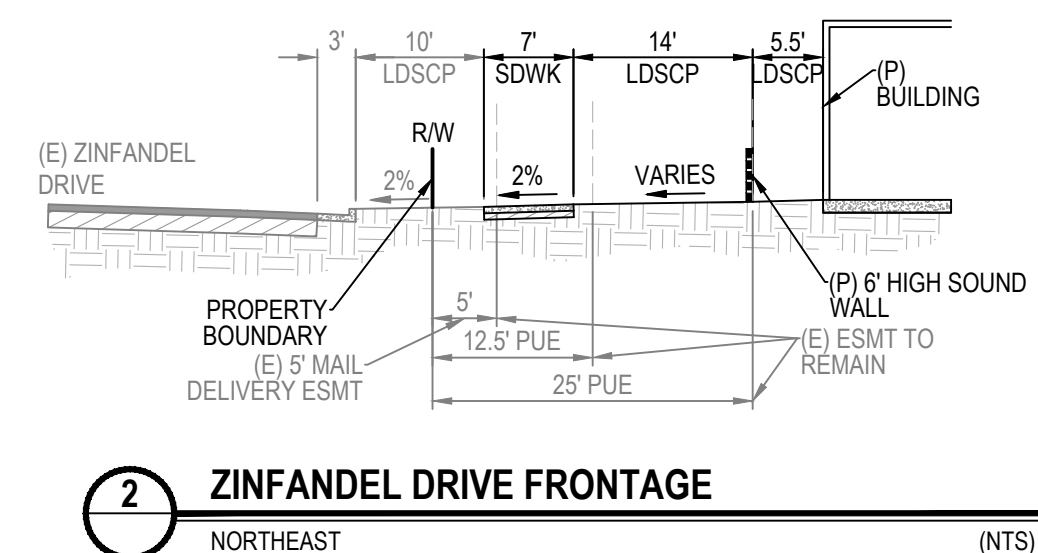
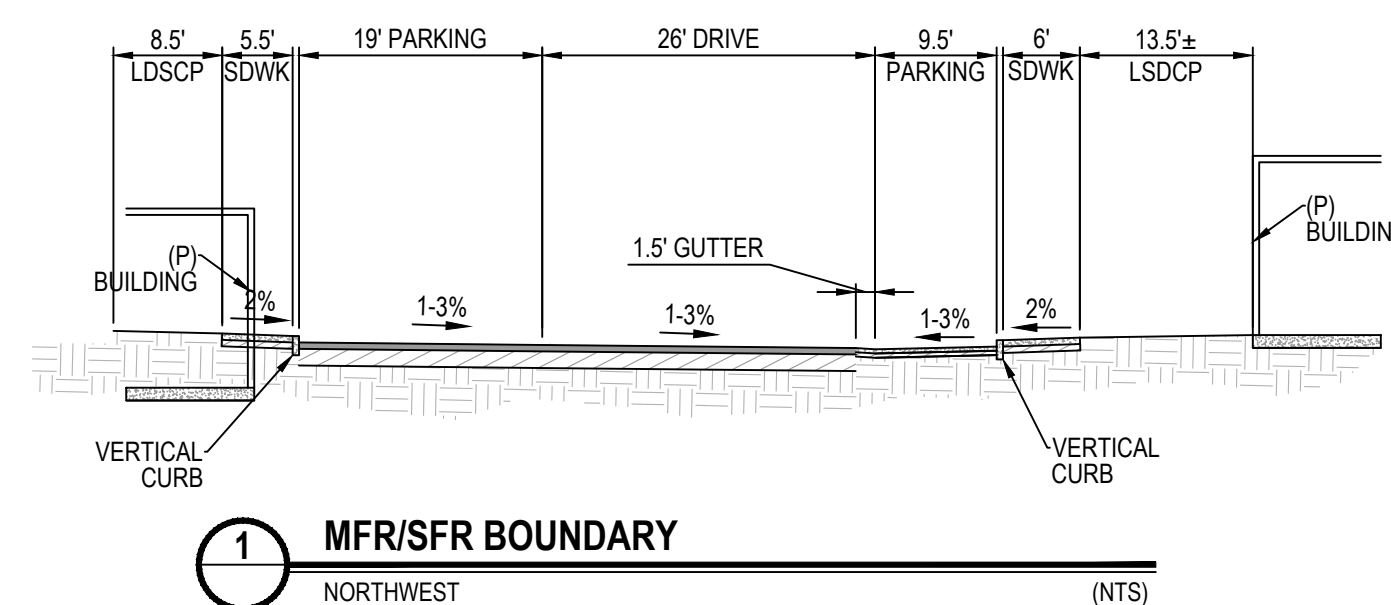
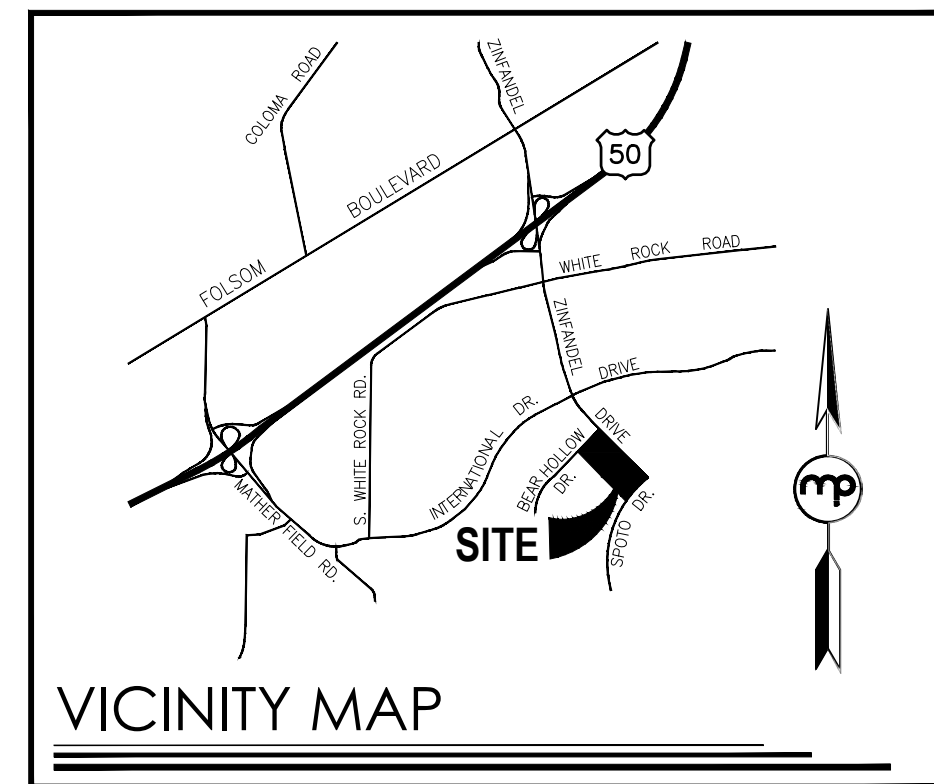
SITE DEVELOPMENT PLAN - VERANDA (SFR)

SHEET 2 of 8

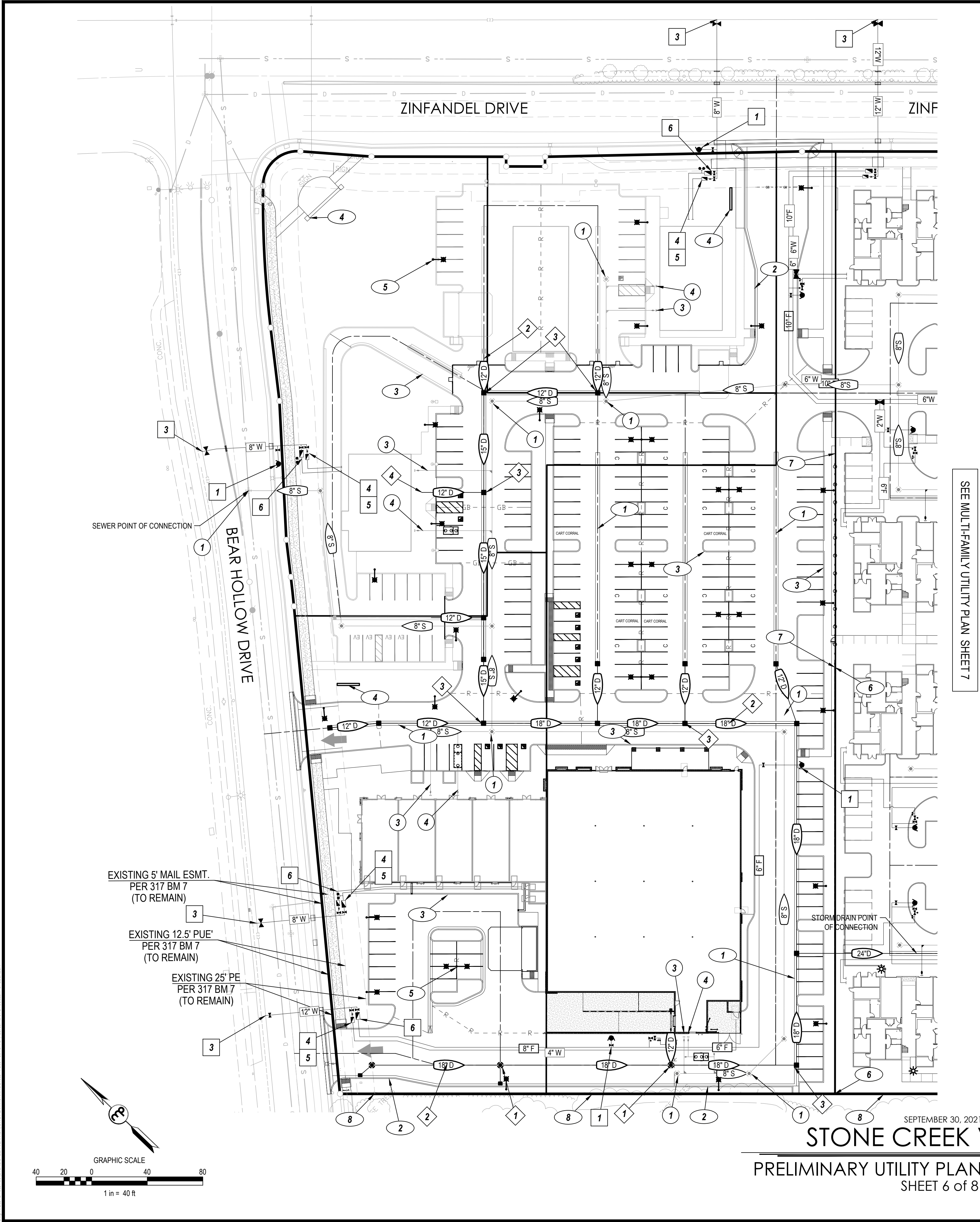
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web: www.mpengr.com



SEE MULTI-FAMILY UTILITY PLAN SHEET 7

UTILITY KEYNOTES:

WATER (PER GOLDEN STATE STANDARD DRAWINGS REV. 1.4, Nov. 2019)

- 1 FIRE HYDRANT PER GOLDEN STATE STANDARD DETAIL (G.S.S.D.) P-8 & C-10
- 2 AIR RELEASE VALVE PER G.S.S.D. P-17
- 3 CUT-IN TEE PER G.S.S.D. P-24
- 4 WATER SERVICE CONNECTION PER G.S.S.D. P-27 & P-28 (SIZE TBD)
- 5 BACKFLOW PREVENTION ASSEMBLY FOR DOMESTIC SERVICE PER G.S.S.D. P-35A
- 6 BACKFLOW PREVENTION ASSEMBLY (WITH FDC) FOR FIRE SERVICE PER G.S.S.D. P-35B

STORM DRAIN (PER RANCHO CORDOVA DESIGN STANDARDS)

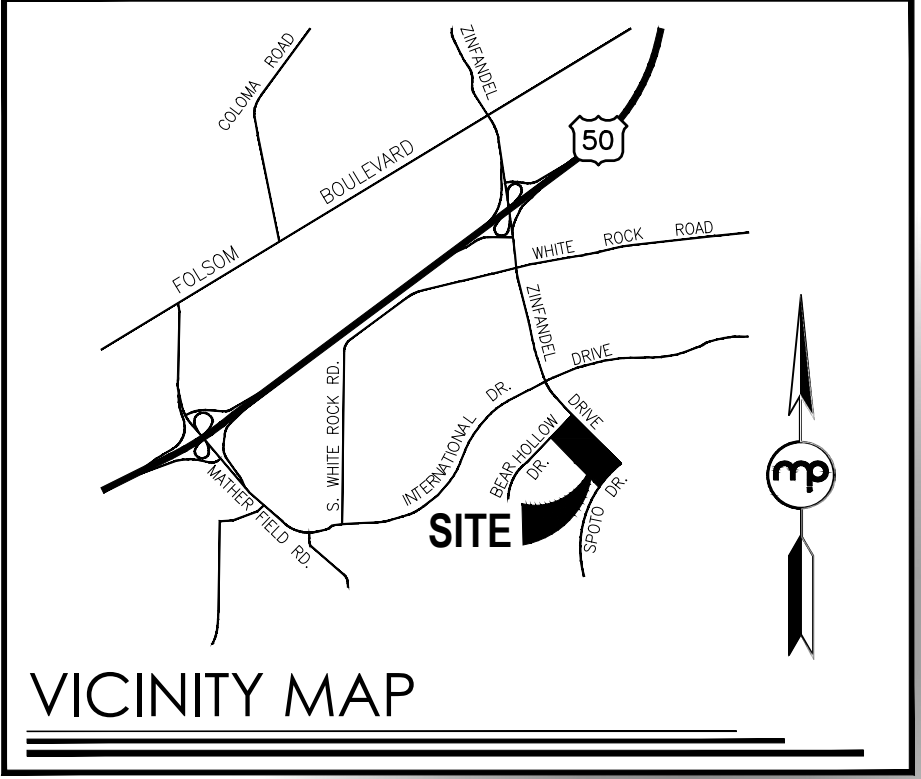
- 1 STORM DRAIN MANHOLE
- 2 STORM DRAIN PIPE (SIZE AS SHOWN)
- 3 STORM DRAIN CATCH BASIN
- 4 STORM DRAIN BUILDING STUB (SEE LID PLAN FOR DISCONNECTED ROOF DRAINS)
- OVERLAND RELEASE

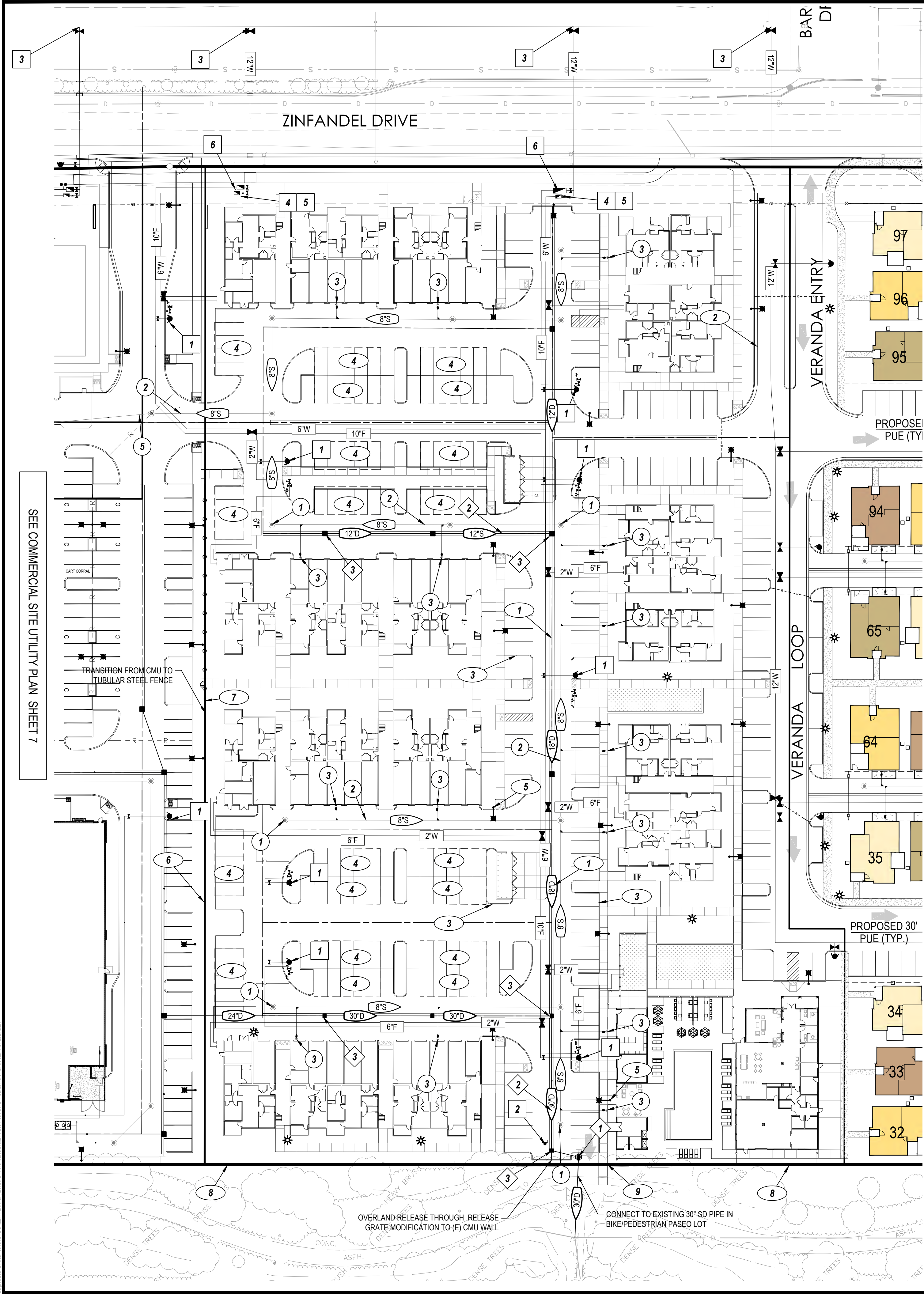
SEWER (PER SACRAMENTO AREA SEWER DISTRICT DESIGN STANDARDS)

- 1 STORM SEWER MANHOLE
- 2 STORM SEWER PIPE
- 3 STORM SEWER SERVICE LATERAL (6")
- 4 GREASE WASTE SERVICE LATERAL WITH INTERCEPTOR (SIZE TBD)

GENERAL

- 1 3' CONCRETE VALLEY GUTTER
- 2 2' CURB & GUTTER (6")
- 3 VERTICAL CURB (6")
- 4 MONUMENT SIGN
- 5 SITE LIGHT
- 6 6' CMU BLOCK WALL
- 7 6' TUBULAR STEEL FENCE
- 8 EXISTING 6' CMU WALL TO REMAIN





UTILITY KEYNOTES:

WATER (PER GOLDEN STATE STANDARD DRAWINGS REV. 1.4, Nov. 2019)

- 1 FIRE HYDRANT PER GOLDEN STATE STANDARD DETAIL (G.S.S.D.) P-8 & C-10
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STORM DRAIN (PER RANCHO CORDOVA DESIGN STANDARDS)

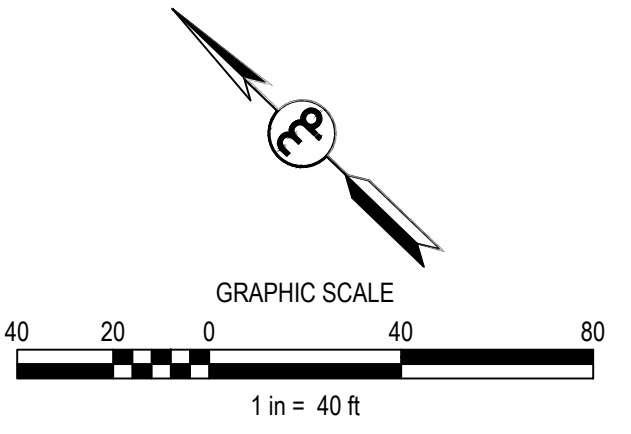
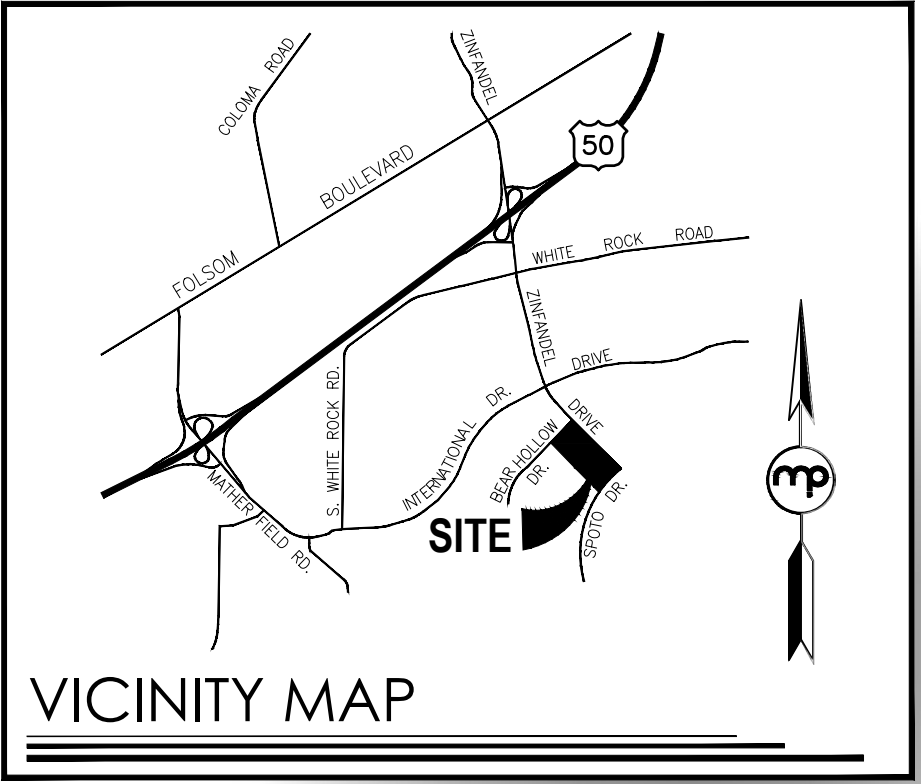
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- 3 STORM DRAIN CATCH BASIN
- 4 STORM DRAIN BUILDING STUB (SEE LID PLAN FOR DISCONNECTED ROOF DRAINS)
- OVERLAND RELEASE

SEWER (PER SACRAMENTO AREA SEWER DISTRICT DESIGN STANDARDS)

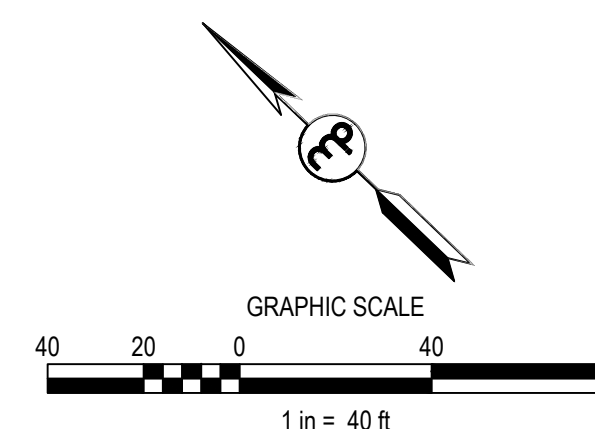
- 1 STORM SEWER MANHOLE
- 2 STORM SEWER PIPE (SEE LAYOUT FOR SIZE)
- 3 STORM SEWER SERVICE LATERAL (6")
- 4 GREASE WASTE SERVICE LATERAL WITH INTERCEPTOR (SIZE TBD)
- 5 SEE COMMERCIAL SHEET 6 FOR SEWER ROUTING AND CONNECTION AT BEAR HOLLOW

GENERAL

- 1 3' CONCRETE VALLEY GUTTER
- 2 2' CURB & GUTTER (6")
- 3 VERTICAL CURB (6")
- 4 UNDER-CANOPY LIGHTING
- 5 SITE LIGHT
- 6 6' CMU BLOCK WALL
- 7 6' TUBULAR STEEL FENCE
- 8 EXISTING 6' CMU WALL TO REMAIN
- 9 PROPOSED CONNECTION TO BIKE/PEDESTRIAN TRAIL ADJACENT



SEPTEMBER 30, 2021
STONE CREEK VILLAGE
PRELIMINARY UTILITY PLAN - MULTI-FAMILY RESIDENTIAL
SHEET 7 of 8



	3' CONCRETE VALLEY GUTTER
	2' CURB & GUTTER (6")
	VERTICAL CURB (6")
	SITE LIGHT
	EXISTING 6" CMU WALL TO REMAIN

SEPTEMBER 30, 2021

POC

STONE CREEK VILLAGE

PRELIMINARY UTILITY PLAN - VERANDA (SFR)

SHEET 8 of 8



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 Folsom, CA 95630
 phone: (916) 984-7621
 web: www.mpenzar.com



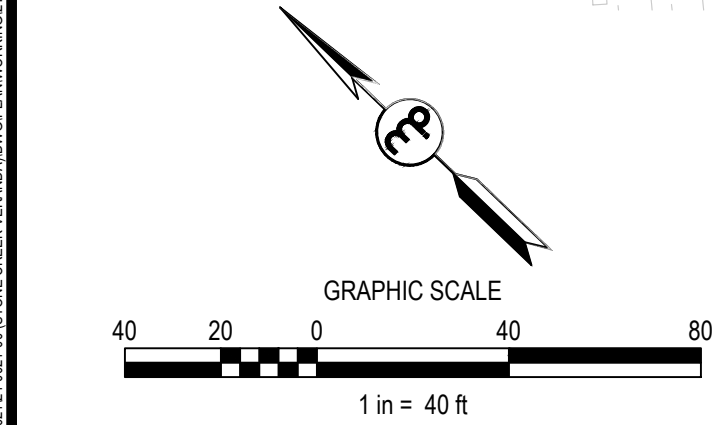
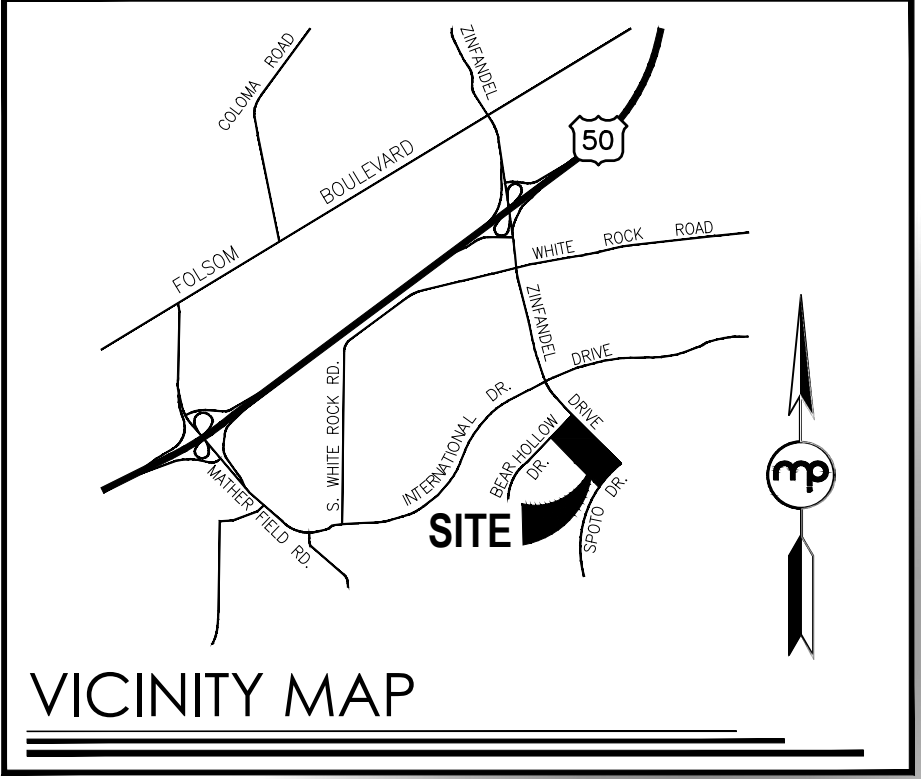
COMMERCIAL LID SUMMARY

TOTAL AREA	261,727 SF (6.01 AC)
IMPERVIOUS AREA	202,452 SF (4.65 AC)
PERVIOUS AREA	59,274 SF (1.36 AC)
DISCONNECTED ROOF AREA	0.33 AC
AMENDED SOIL AREA	17,800 SF
PERCENT IMPERVIOUS	77%
TOTAL LID CREDITS	100.0

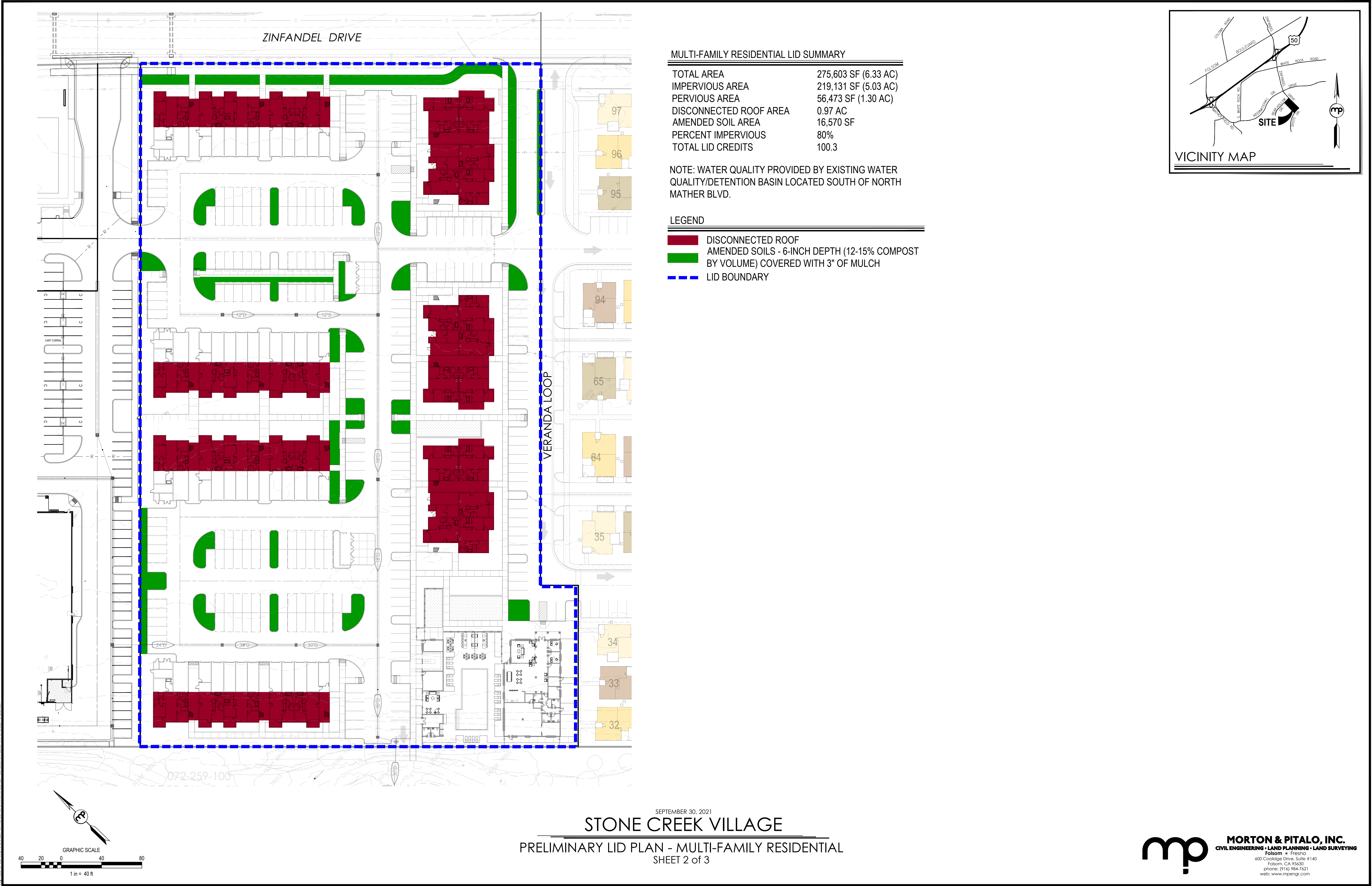
NOTE: WATER QUALITY PROVIDED BY EXISTING WATER QUALITY/DETENTION BASIN LOCATED SOUTH OF NORTH MATHER BLVD.

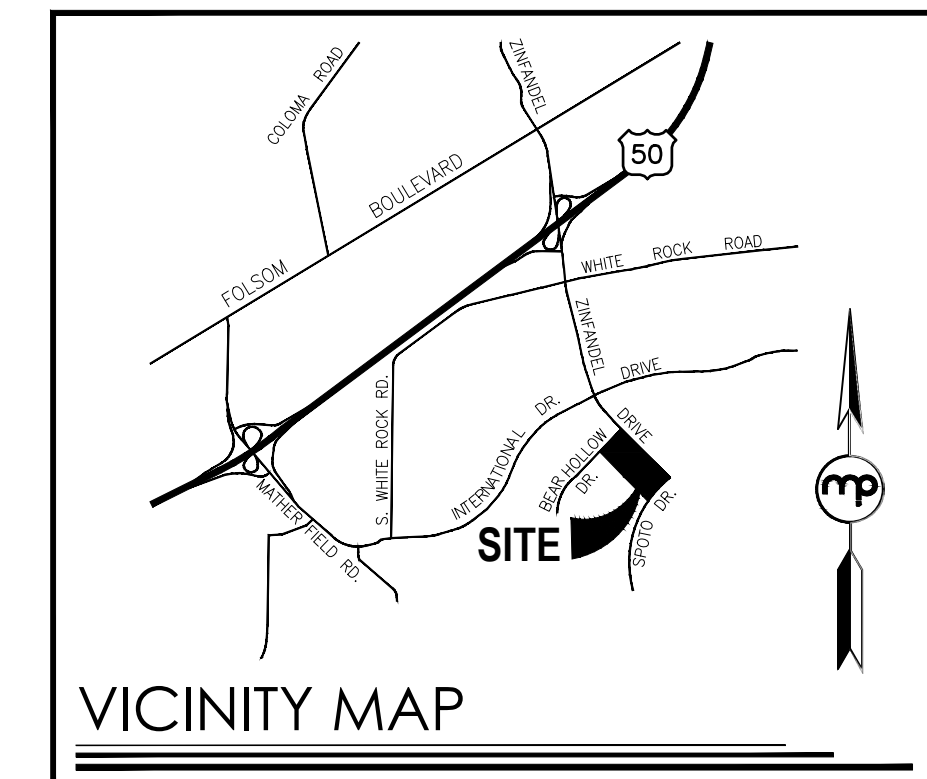
LEGEND

- DISCONNECTED ROOF
- AMENDED SOILS - 6-INCH DEPTH (12-15% COMPOST BY VOLUME) COVERED WITH 3" OF MULCH
- LID BOUNDARY



SEPTEMBER 30, 2021
STONE CREEK VILLAGE
PRELIMINARY LID PLAN - COMMERCIAL
SHEET 1 of 3





SINGLE-FAMILY RESIDENTIAL LID SUMMARY

TOTAL AREA	556,770 SF (12.78 AC)
IMPERVIOUS AREA	383,950 SF (8.81 AC)
PERVIOUS AREA	172,820 SF (3.97 AC)
NUMBER OF UNITS	128
DISCONNECTED ROOF	100% DISCONNECTED
MINIMUM ROOF RUNOFF LENGTH	25'+
AMENDED SOIL AREA	20,660 SF
PERCENT IMPERVIOUS	69%
TOTAL LID CREDITS	100.7

NOTE: WATER QUALITY PROVIDED BY EXISTING WATER QUALITY/DETENTION BASIN LOCATED SOUTH OF NORTH MATHER BLVD.

LEGEND

 AMENDED SOILS - 6-INCH DEPTH (12-15% COMPOST BY VOLUME) COVERED WITH 3" OF MULCH
 LID BOUNDARY

PROJECT INFORMATION

ASSESSOR PARCEL NUMBERS	072-236-002
USE:	VACANT
EXISTING SPECIFIC PLAN ZONING:	RC (ZSPA)
PROPOSED SPECIFIC PLAN ZONING:	RC (ZSPS)
EXISTING	# ACRES
EXISTING NUMBER OF PARCELS	1 25.12 ± AC
PROPOSED	# ACRES
PROPOSED NUMBER OF LOTS	1 6.01 ± AC COMMERCIAL
	1 6.33 ± AC MULTI-FAMILY RESIDENTIAL
	1 12.78 ± AC SINGLE-FAMILY RESIDENTIAL
	3 TOTAL

APPLICANT

ELLIOTT HOMES, INC.
340 PALLADIO PARKWAY, SUITE 521
FOLSOM, CA 95630
PHONE: (916) 984-1300
EMAIL: PWALKER@ELLIOTTHOMES.COM

PLANNER / ENGINEER

MORTON & PITALO, INC.
600 COOLIDGE DRIVE, SUITE #140
FOLSOM, CA 95630
CONTACT: KEN TOPPER / SCOTT PEDERSEN
PHONE: (916) 927-9400
EMAIL: KTOPPER@MPENGR.COM
EMAIL: SPEDERSEN@MPENGR.COM

UTILITY PROVIDERS

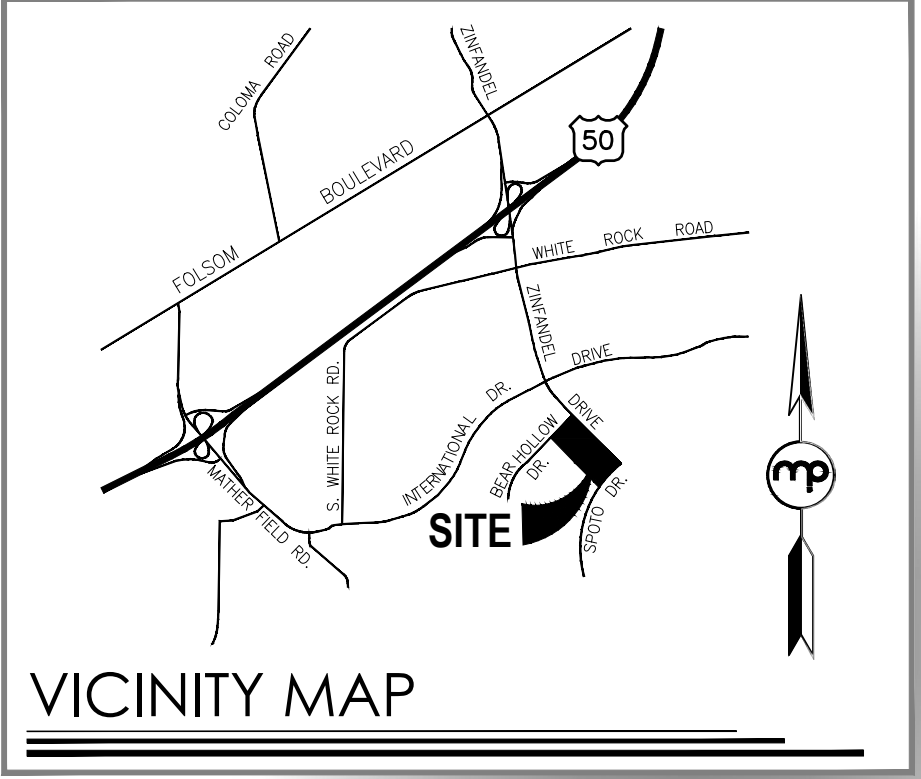
WATER: GOLDEN STATE WATER
SEWER: CITY OF RANCHO CORDOVA
ELECTRIC: SMUD
GAS: PG&E
TELEPHONE: SBC COMMUNICATIONS

SERVICE PROVIDERS

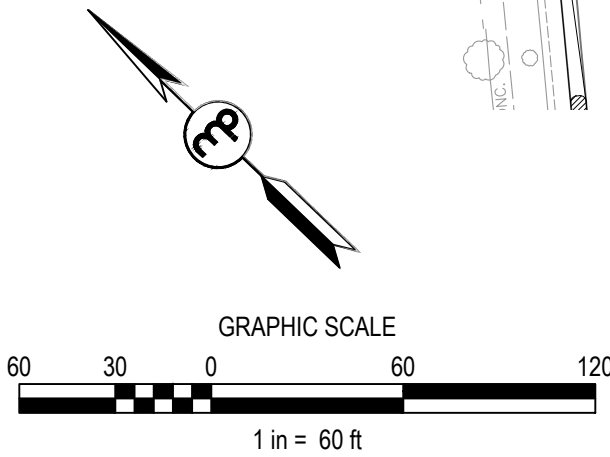
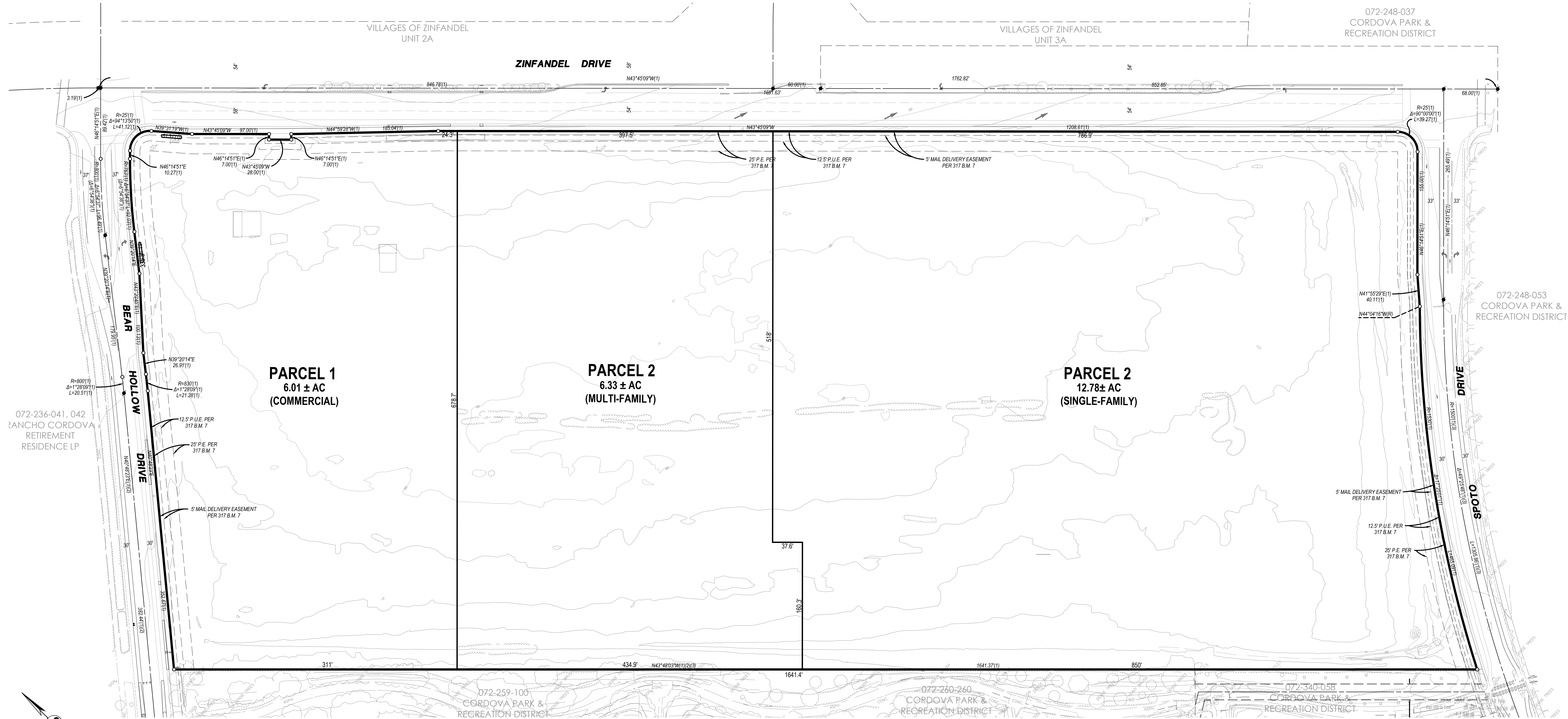
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5. TOPOGRAPHY CONTOUR INFORMATION HEREON BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WITH BENCHMARK ELEVATION OF 88.97. THE BENCHMARK ELEVATION OF NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) IS 91.32, RESULTING IN A CONVERSION OF 2.35.



PROJECT INFORMATION

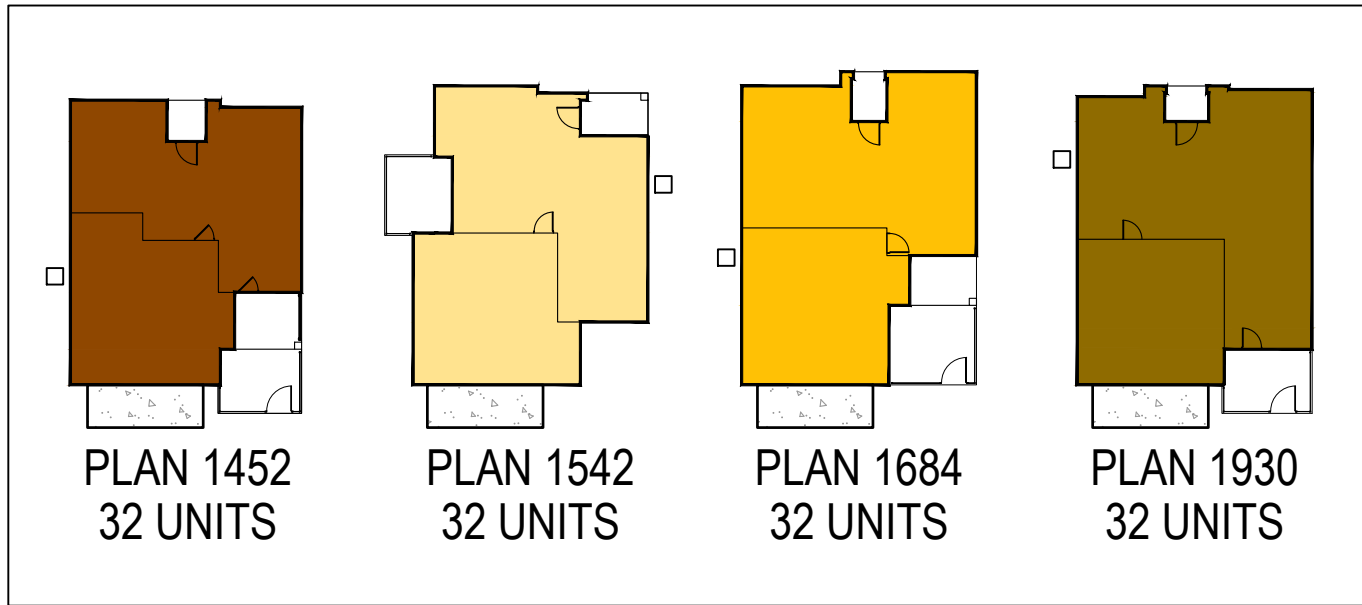
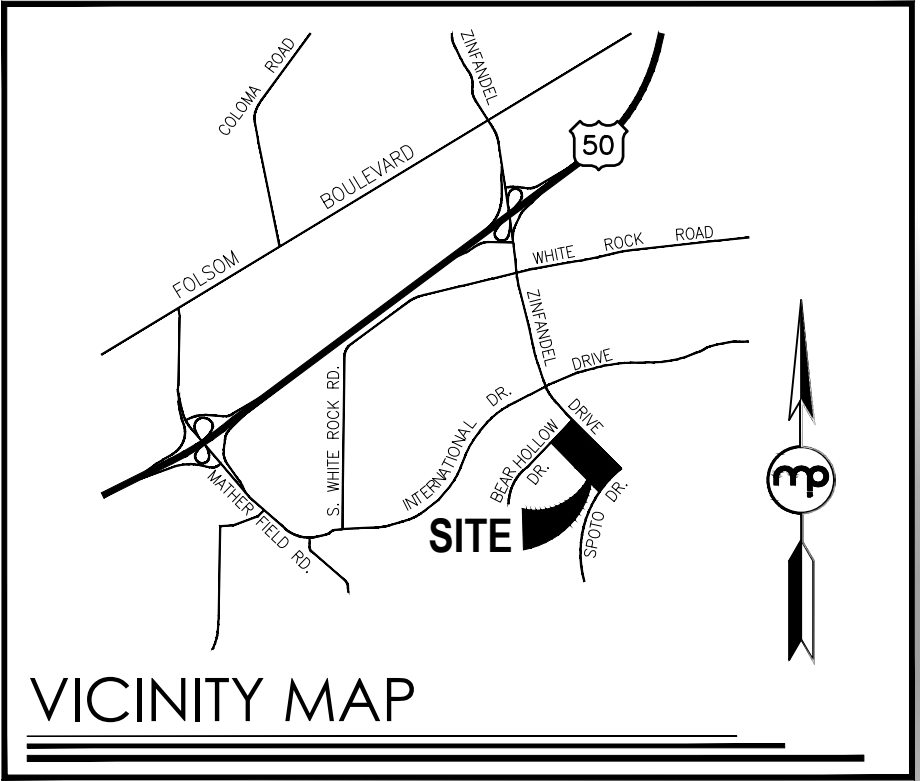


DE DRAINAGE EASEMENT
PE PUBLIC ACCESS EASEMENT
PUE PUBLIC UTILITY EASEMENT

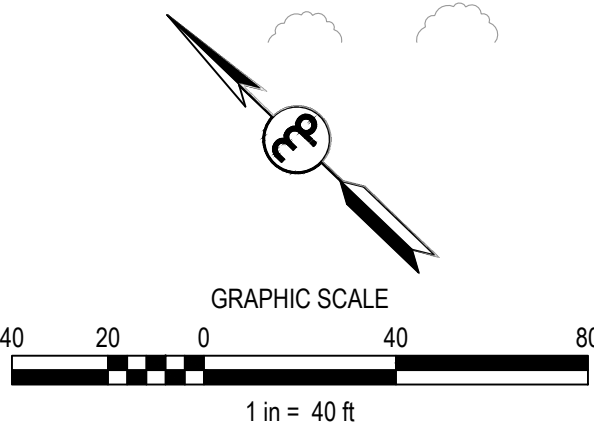
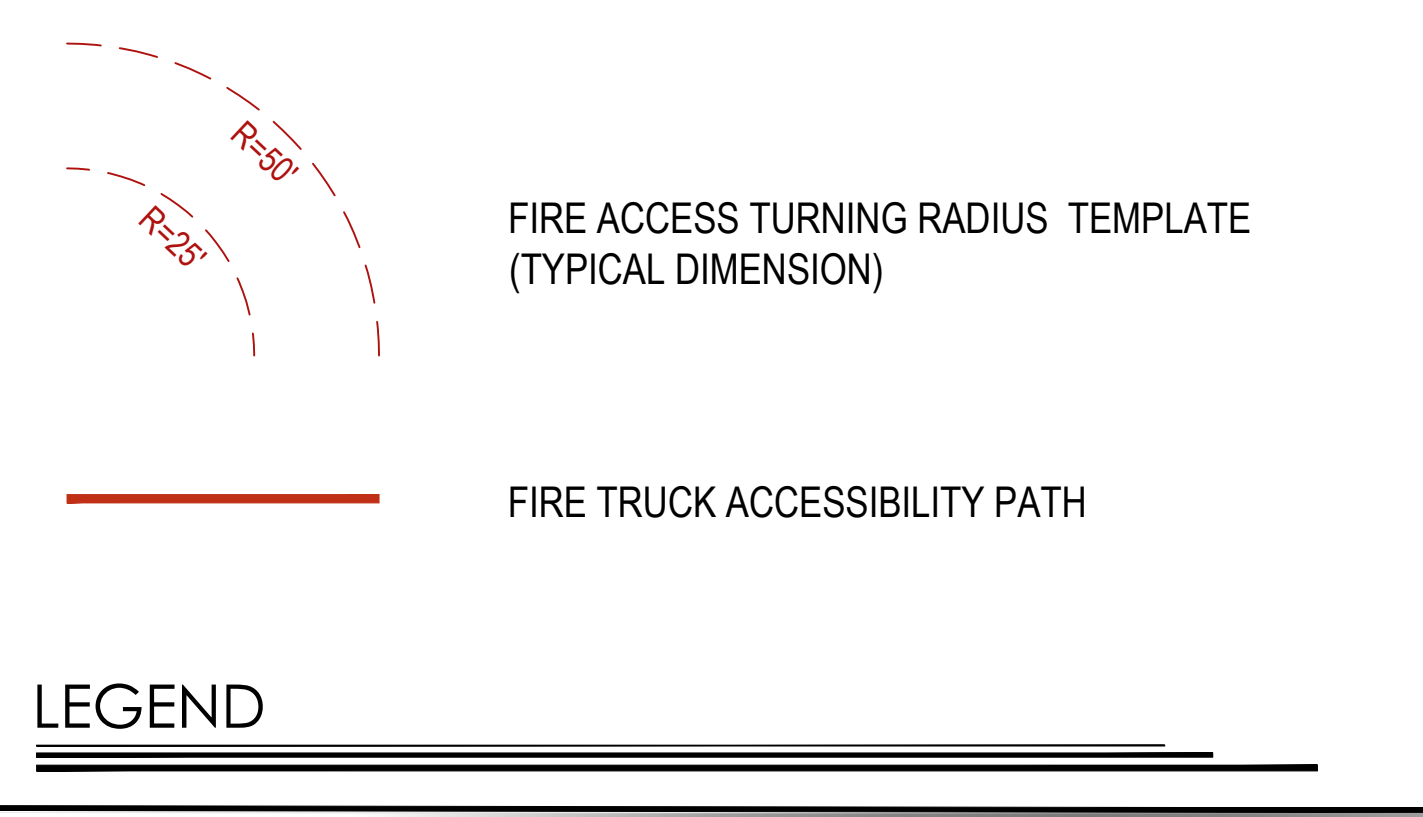
ABBREVIATIONS

SEPTEMBER 30, 2021
STONE CREEK VILLAGE
TENTATIVE PARCEL MAP
SHEET 1 of 1

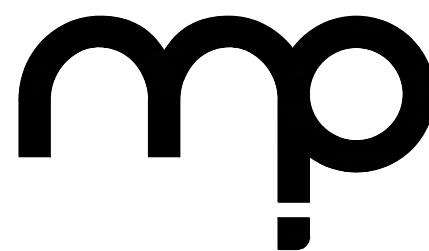
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LOT MIX



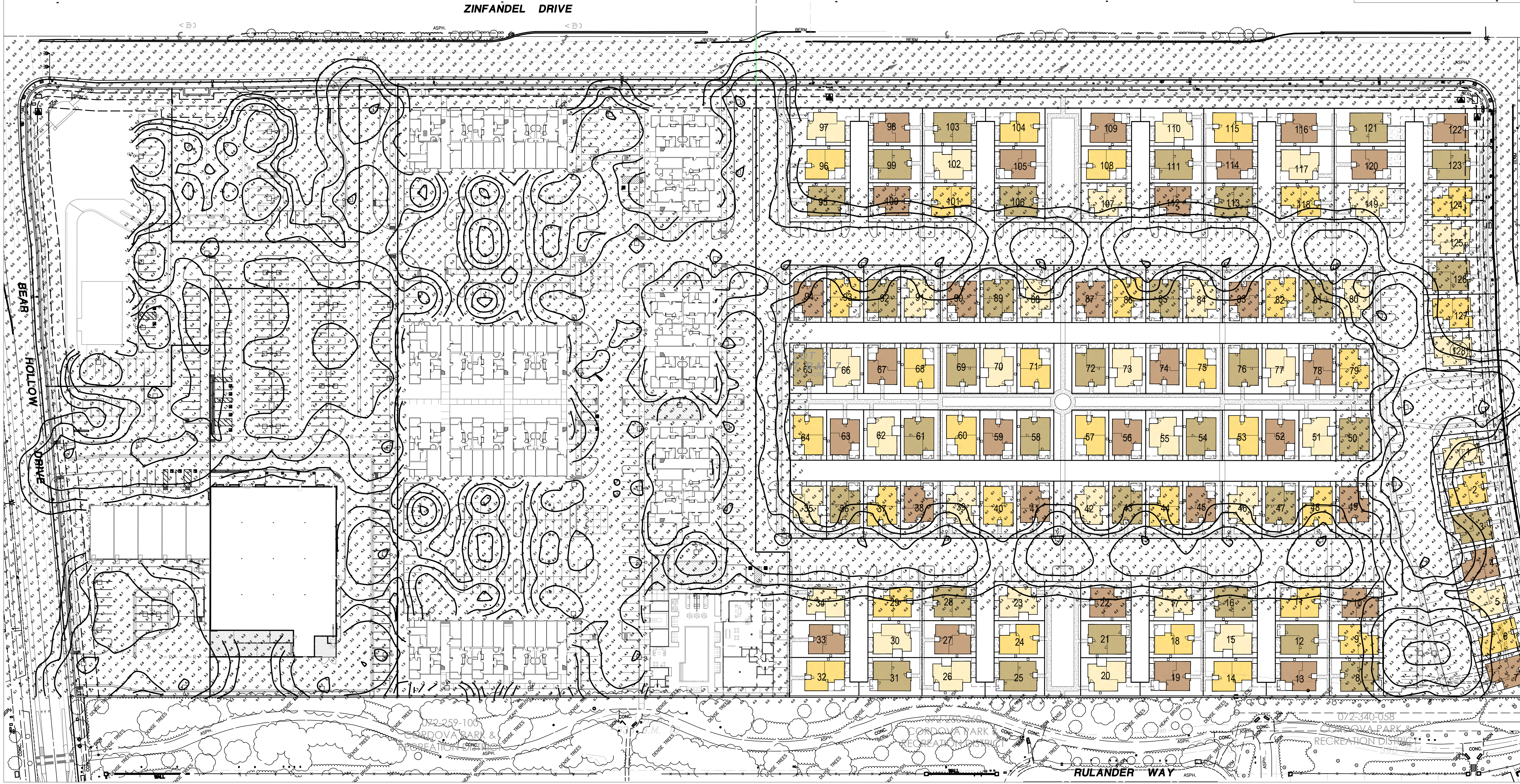
SEPTEMBER 30, 2021
STONE CREEK VILLAGE
FIRE ACCESS EXHIBIT - VERANDA (SFR)
SHEET 1 of 1



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GENERAL
PHOTOMETRIC
SCHEDULE

AVERAGE FOOT-CANDLES	1.64
MAXIMUM FOOT-CANDLES	16.9
MINIMUM FOOT-CANDLES	0
MINIMUM TO MAXIMUM FC RATIO	0
MAXIMUM TO MINIMUM FC RATIO	47932.82
AVERAGE TO MINIMUM FC RATIO	4650.3



REVISIONS	NO.	DESCRIPTION	APPD. ENGR.	DATE	APPD. E.U.	DATE	SCALE:	BENCH MARK	COMPUTED	DESIGNED	DRAWN	PROJ. ENGR.	 MORTON & PITALO, INC. CIVIL ENGINEERING • LAND PLANNING • LAND SURVEYING Folsom • Fresno 600 Coolidge Drive, Suite #140 Folsom, CA 95630 phone: (916) 984-7621 web: www.mpengr.com	ENTITLEMENT PLANS FOR STONE CREEK VILLAGE PRELIMINARY PHOTOMETRIC PLAN CITY OF RANCHO CORDOVA, CALIFORNIA	DATE
															SEPT 30, 2021
															SHEET
															PT1
													OF		2

VERANDA STONE CREEK 13

SINGLE FAMILY HOMES

Elliott Homes
A Tradition of Quality since 1914



CITY OF RANCHO CORDOVA
08.23.2021

SHEET INDEX

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A1.1	SCHEMATIC STREET SCENE + ELEVATION STYLE GUIDE
A1.2	SCHEMATIC RENDERING
A2.1	PLAN 1 SCHEMATIC FLOOR PLANS
A2.2	PLAN 1 SCHEMATIC PERSPECTIVE ARTISAN
A2.3	PLAN 1 SCHEMATIC ELEVATIONS ARTISAN
A2.4	PLAN 1 SCHEMATIC PERSPECTIVE TRADITIONAL
A2.5	PLAN 1 SCHEMATIC ELEVATIONS TRADITIONAL
A2.6	PLAN 1 SCHEMATIC PERSPECTIVE MODERN
A2.7	PLAN 1 SCHEMATIC ELEVATIONS MODERN
A3.1	PLAN 2 SCHEMATIC FLOOR PLANS
A3.2	PLAN 2 SCHEMATIC PERSPECTIVE ARTISAN
A3.3	PLAN 2 SCHEMATIC ELEVATIONS ARTISAN
A3.4	PLAN 2 SCHEMATIC PERSPECTIVE TRADITIONAL
A3.5	PLAN 2 SCHEMATIC ELEVATIONS TRADITIONAL
A3.6	PLAN 2 SCHEMATIC PERSPECTIVE MODERN
A3.7	PLAN 2 SCHEMATIC ELEVATIONS MODERN
A4.1	PLAN 3 SCHEMATIC FLOOR PLANS
A4.2	PLAN 3 SCHEMATIC PERSPECTIVE ARTISAN
A4.3	PLAN 3 SCHEMATIC ELEVATIONS ARTISAN
A4.4	PLAN 3 SCHEMATIC PERSPECTIVE TRADITIONAL
A4.5	PLAN 3 SCHEMATIC ELEVATIONS TRADITIONAL
A4.6	PLAN 3 SCHEMATIC PERSPECTIVE MODERN
A4.7	PLAN 3 SCHEMATIC ELEVATIONS MODERN
A5.1	PLAN 4 SCHEMATIC FLOOR PLANS
A5.2	PLAN 4 SCHEMATIC PERSPECTIVE ARTISAN
A5.3	PLAN 4 SCHEMATIC ELEVATIONS ARTISAN
A5.4	PLAN 4 SCHEMATIC PERSPECTIVE TRADITIONAL
A5.5	PLAN 4 SCHEMATIC ELEVATIONS TRADITIONAL
A5.6	PLAN 4 SCHEMATIC PERSPECTIVE MODERN
A5.7	PLAN 4 SCHEMATIC ELEVATIONS MODERN
A6.1	COLOR + MATERIALS ARTISAN FARMHOUSE
A6.2	COLOR + MATERIALS TRADITIONAL FARMHOUSE
A6.3	COLOR + MATERIALS MODERN FARMHOUSE







ROOF DETAILS

Roof Pitch (Main)	=	5:12
Roof Pitch (Accent Gables)	=	8:12
Eave Dimension	=	12"
Rake Dimension	=	12"

MATERIALS

Tile Roofing
Stucco
Board & Batten [Battens @ 16" O.C]
Decorative Metal Awning (Where occurs)

ROOF DETAILS

Roof Pitch (Main)	=	5:12
Roof Pitch (Accent Gables)	=	8:12
Eave Dimension	=	12"
Rake Dimension	=	12"

MATERIALS

Tile Roofing
Stucco
Horizontal Siding [6" Exposure]
Board & Batten [Battens @ 16" O.C]
Masonry Veneer

ROOF DETAILS

Roof Pitch (Main)	=	5:12
Roof Pitch (Accent Gables)	=	8:12
Eave Dimension	=	12"
Rake Dimension	=	12"

MATERIALS

Tile Roofing
Stucco
Board & Batten [Battens @ 16" O.C]
Decorative Metal Awning (Where occurs)

ROOF DETAILS

Roof Pitch (Main)	=	5:12
Roof Pitch (Accent Gables)	=	8:12
Eave Dimension	=	12"
Rake Dimension	=	12"

MATERIALS

Tile Roofing
Stucco
Board & Batten [Battens @ 16" O.C]
Decorative Metal Awning (Where occurs)

PROJECT NARRATIVE

The traditional farmhouse is heavily rooted in California's history. California has long been a center of agricultural production for America, and the farmhouse is an icon of the rural California lifestyle. The neighborhood of Veranda Stone Creek introduces a palette of three variations of the farmhouse theme: Traditional, Modern, and Artisan. The residential architecture complements the multifamily and retail architecture, creating a cohesive, friendly, and walkable neighborhood for the City of Rancho Cordova.

THE TRADITIONAL FARMHOUSE

The traditional farmhouse style embraces the region's agrarian history with a rich palette of traditional materials, including a combination of board and batten and horizontal siding materials, stucco, brick masonry, and shutters. The classic farmhouse adds a nostalgic and familiar character to the neighborhood.

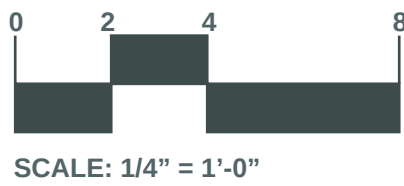
THE MODERN FARMHOUSE

A modern approach to the classic farmhouse, this style features a more minimal material palette of board and batten siding and stucco with simple knee braces and modern metal awnings. The reinterpreted approach to the traditional farmhouse introduces an interesting curb appeal to the community.

THE ARTISAN FARMHOUSE

This rustic approach to the classic farmhouse introduces decorative knee braces, board and batten siding, and standing seam shed elements over significant windows. The artisan approach to the traditional farmhouse elevation style provides a charming and comfortable aspect to the streetscape.

SCHEMATIC STREET SCENE + ELEVATION STYLE GUIDE



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A1.1



08.23.2021 | PROGRESS SET

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SCHEMATIC RENDERING



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A1.2

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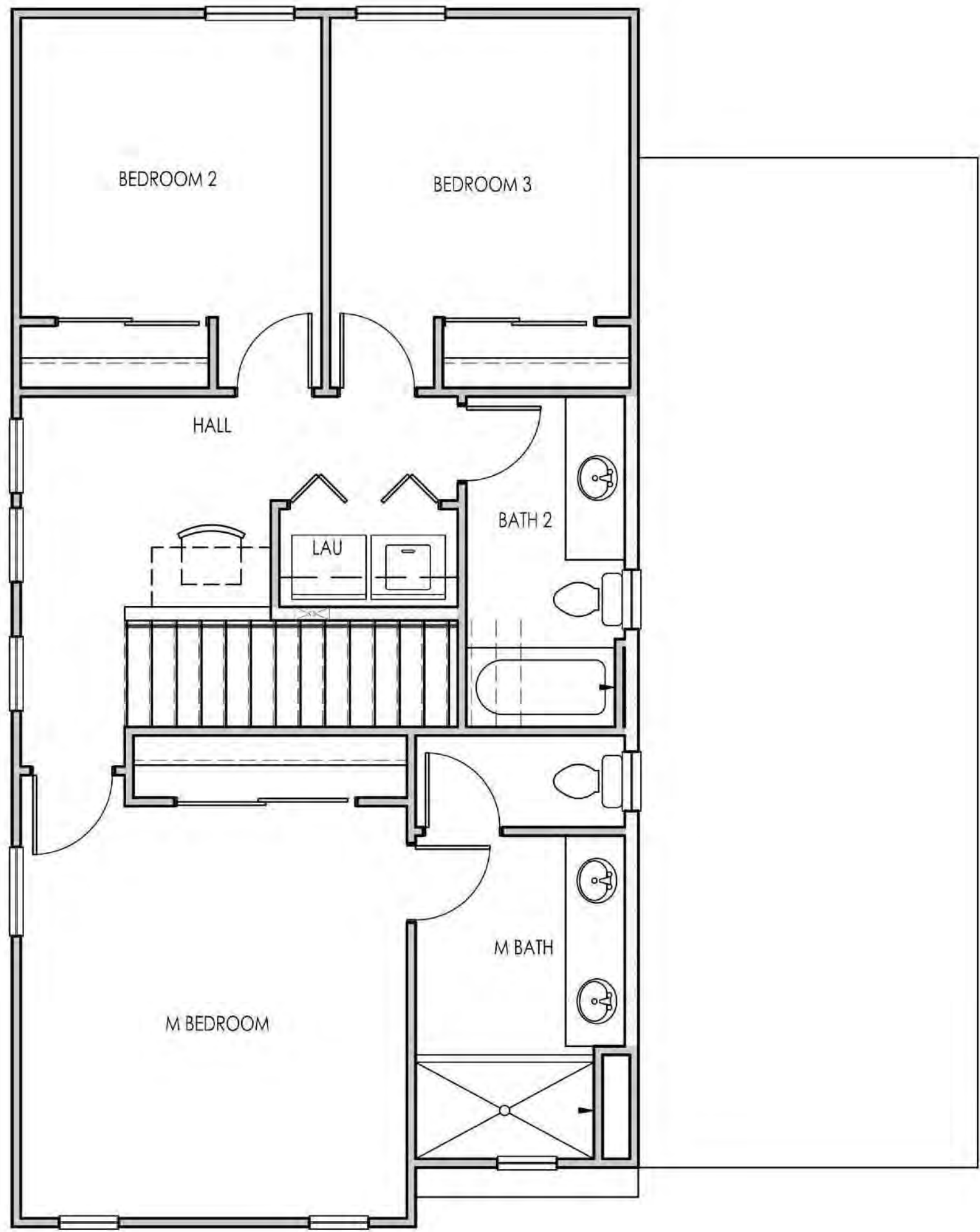
SHEET NOTES

PROGRAM

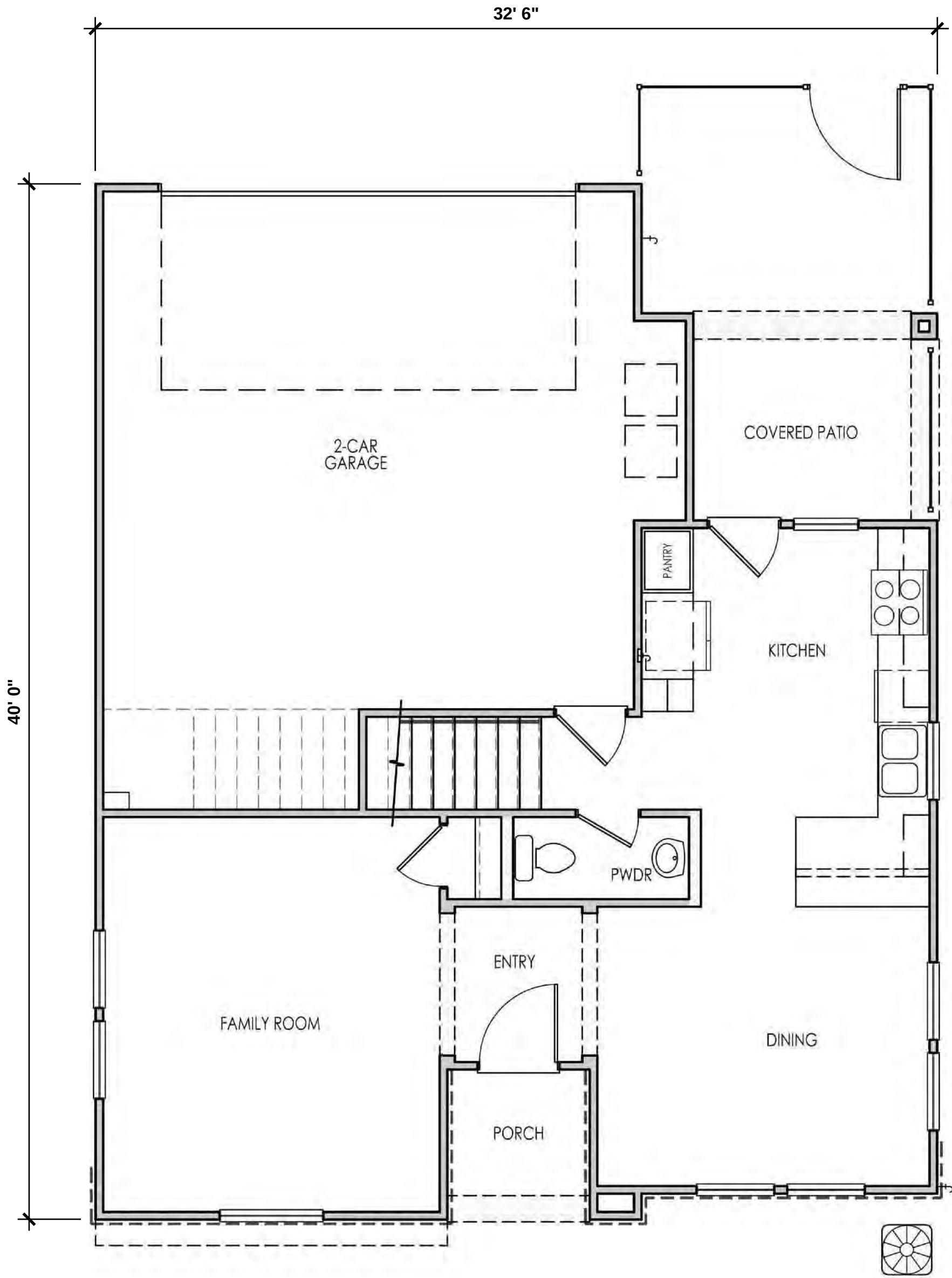
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5
GARAGE	=	2 - CAR
KITCHEN / DINING / FAMILY		
COVERED PATIO		

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,452 SF
GARAGE	=	481 SF
PORCH / PATIO	=	107 SF

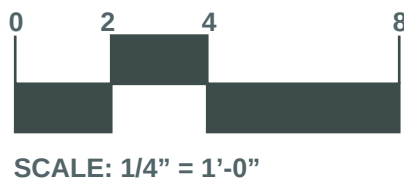


SECOND FLOOR | 809 SF



FIRST FLOOR | 643 SF

PLAN 1 | SCHEMATIC FLOOR PLANS - 1,452 SF



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DATE: 08.23.2021

A2.1



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PLAN 1 | SCHEMATIC PERSPECTIVE | ARTISAN



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A2.2

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SHEET NOTES

PLAN #1

SQUARE FOOTAGE	=	1,452 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

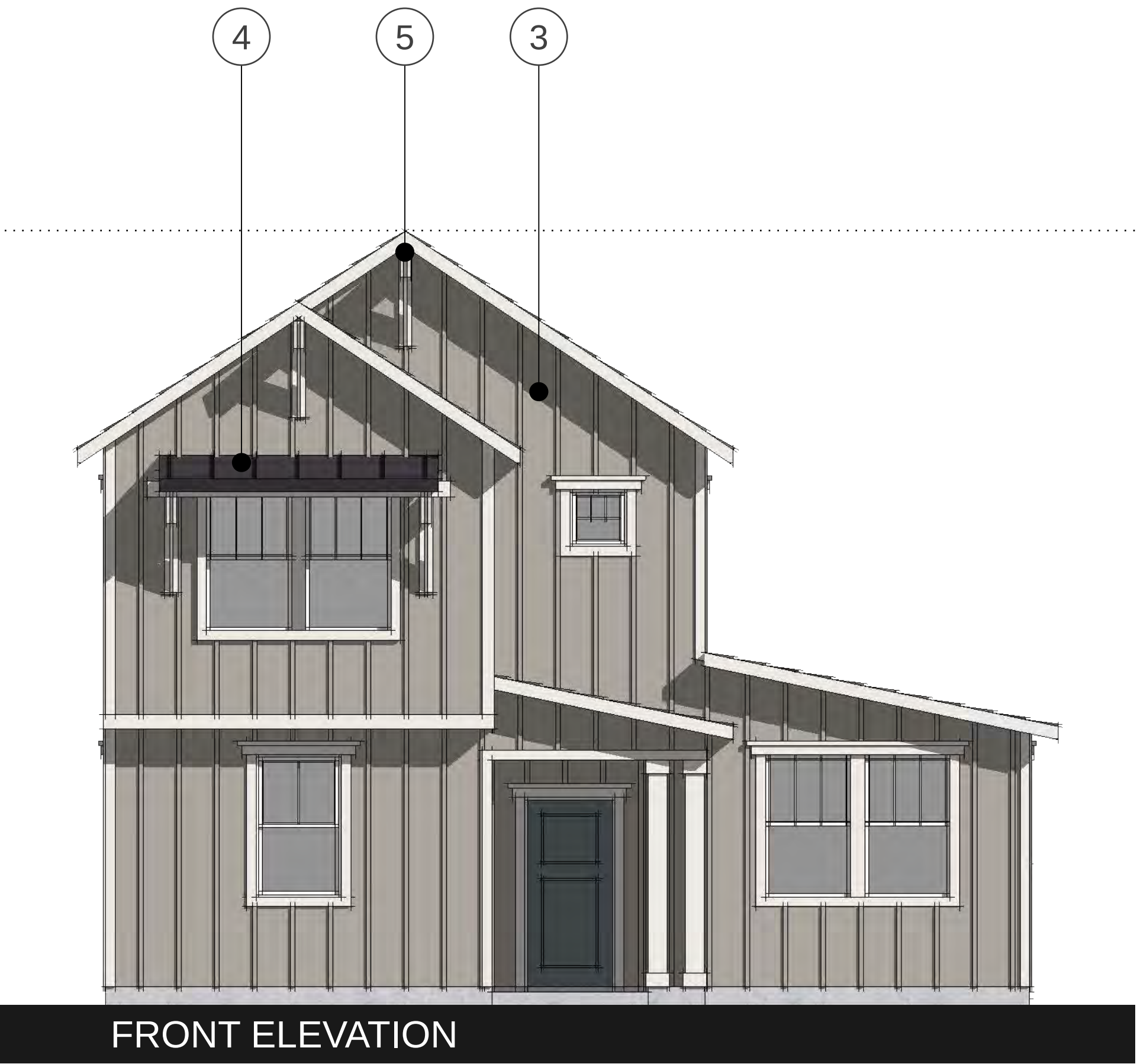
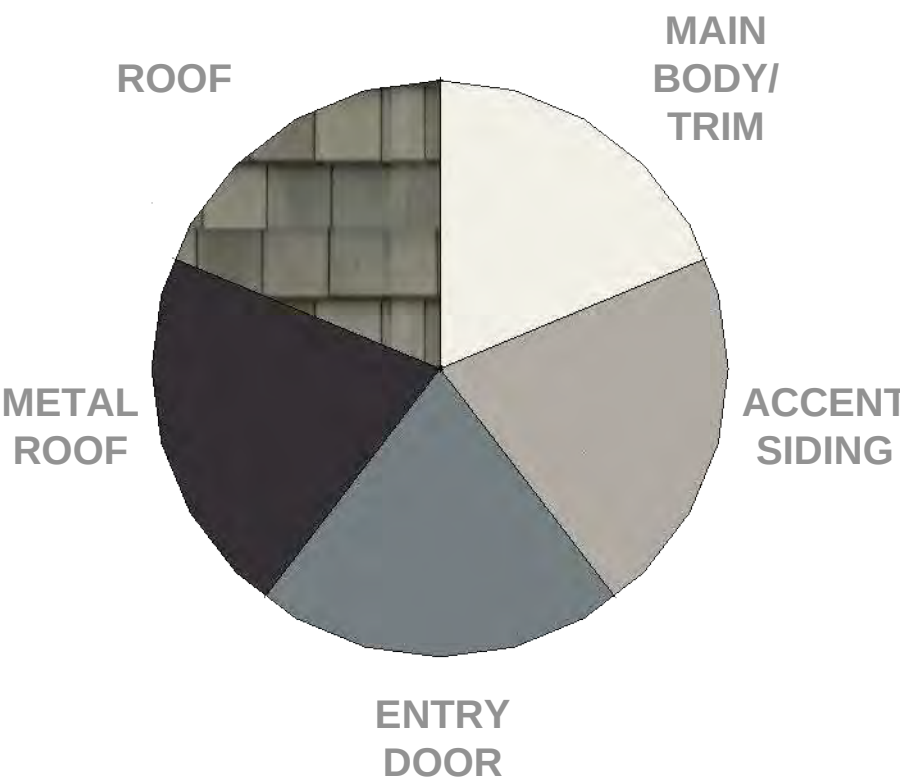
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
ARTISAN | SCHEME #1



FRONT ELEVATION



REAR ELEVATION

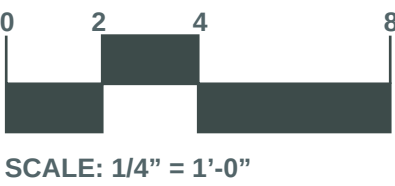


RIGHT ELEVATION



LEFT ELEVATION

PLAN 1 | SCHEMATIC ELEVATIONS | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A2.3

08.23.2021 | PROGRESS SET

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PLAN 1 | SCHEMATIC PERSPECTIVE | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A2.4

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SHEET NOTES

PLAN #1

SQUARE FOOTAGE	=	1,452 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

STUCCO
SMOOTH COAT
- 3

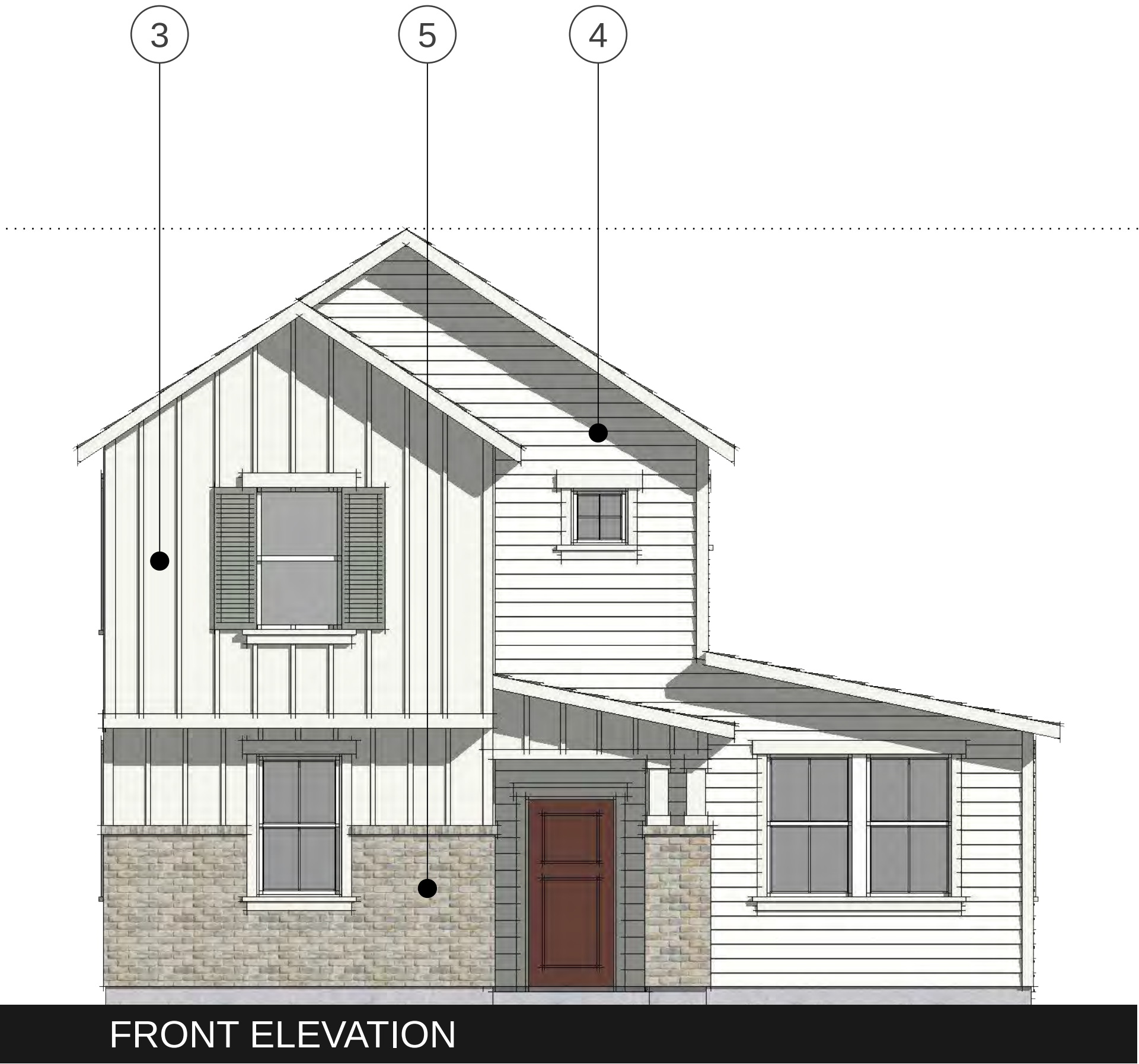
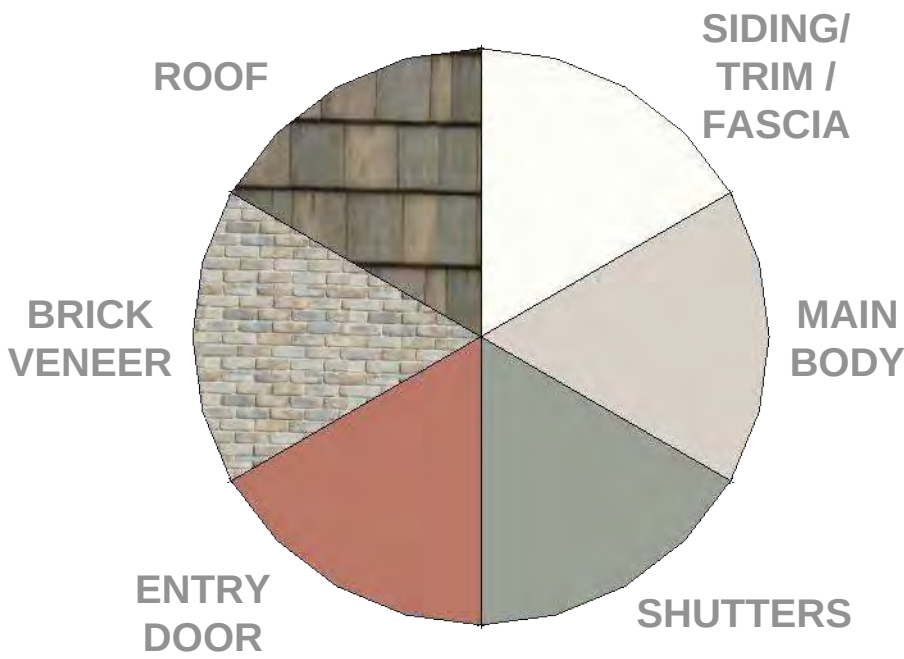
BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

HORIZONTAL LAP SIDING
HARDIEPLANK | 6" EXPOSURE
- 5

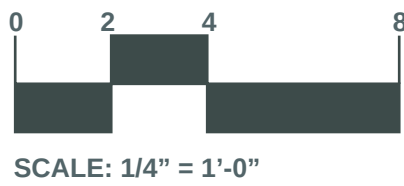
BRICK VENEER
EL DORADO STONE | TUNDRA BRICK

COLOR SCHEME

TRADITIONAL | SCHEME #5



PLAN 1 | SCHEMATIC ELEVATIONS | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A2.5



08.23.2021 | PROGRESS SET

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PLAN 1 | SCHEMATIC PERSPECTIVE | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A2.6

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SHEET NOTES

PLAN #1

SQUARE FOOTAGE	=	1,452 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

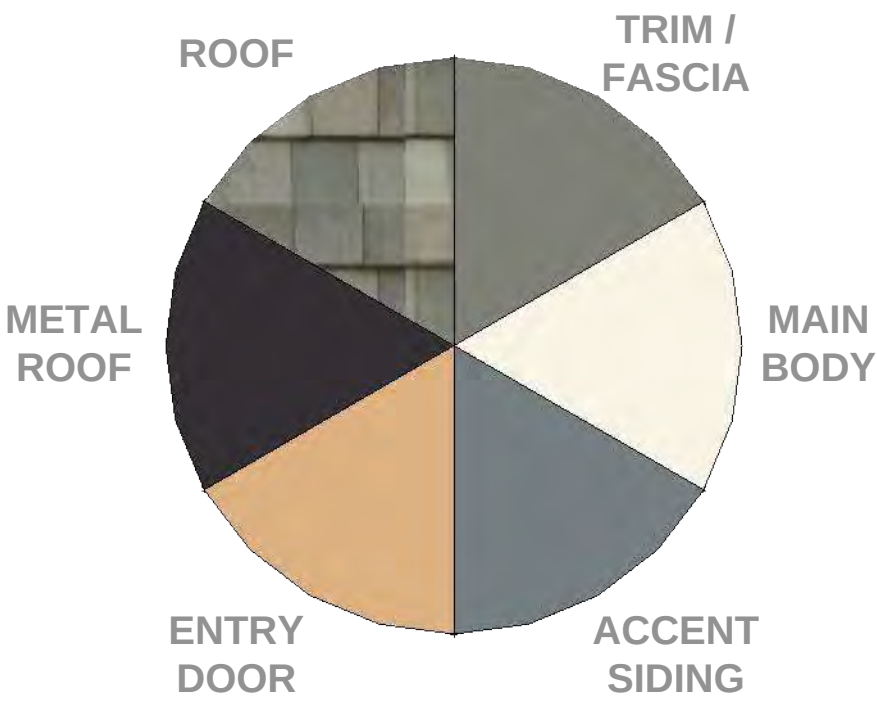
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

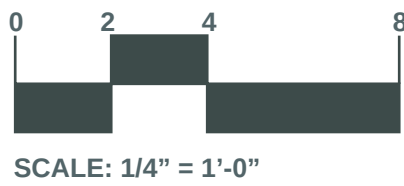
DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
MODERN | SCHEME #7



PLAN 1 | SCHEMATIC ELEVATIONS | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A2.7

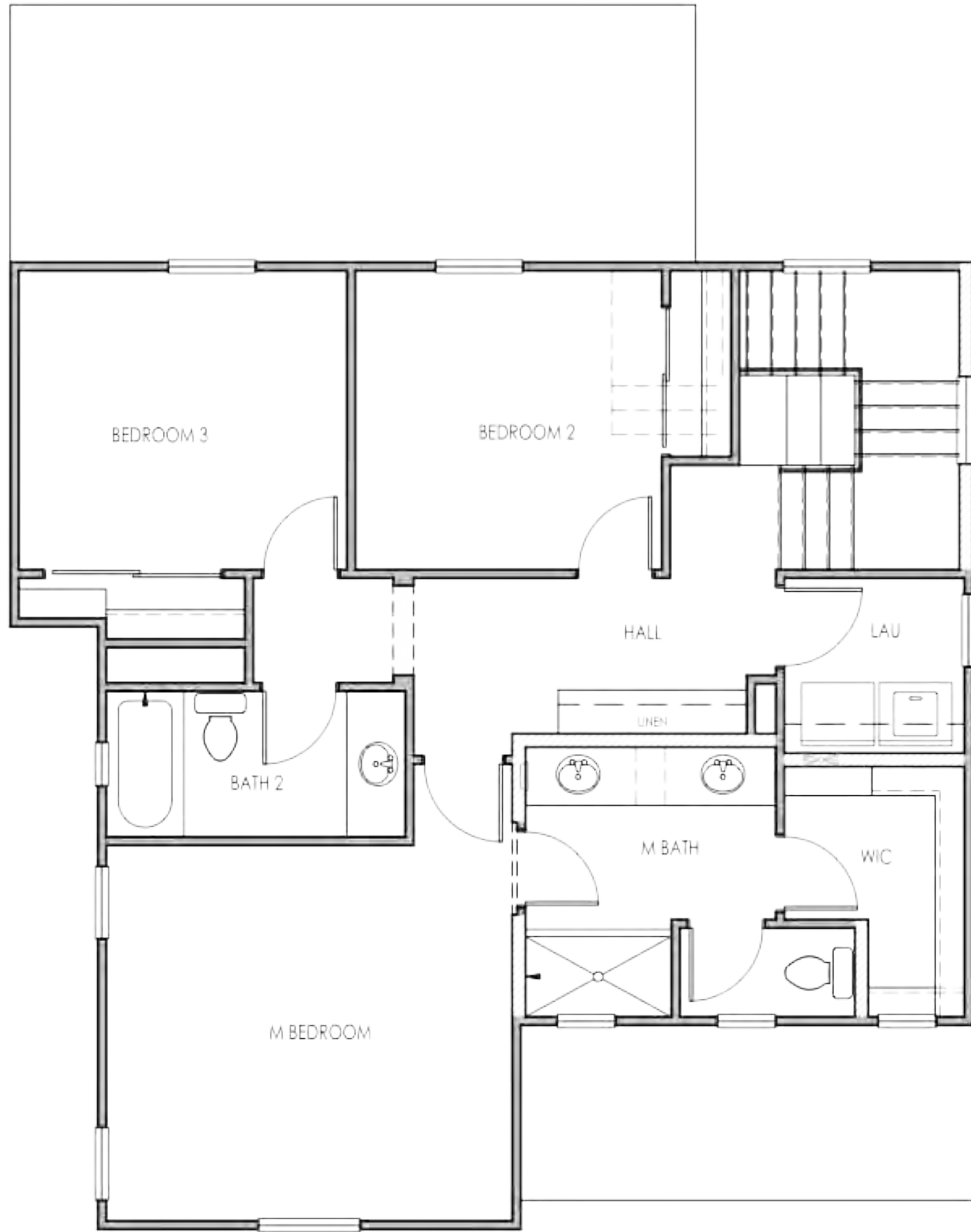
SHEET NOTES

PROGRAM

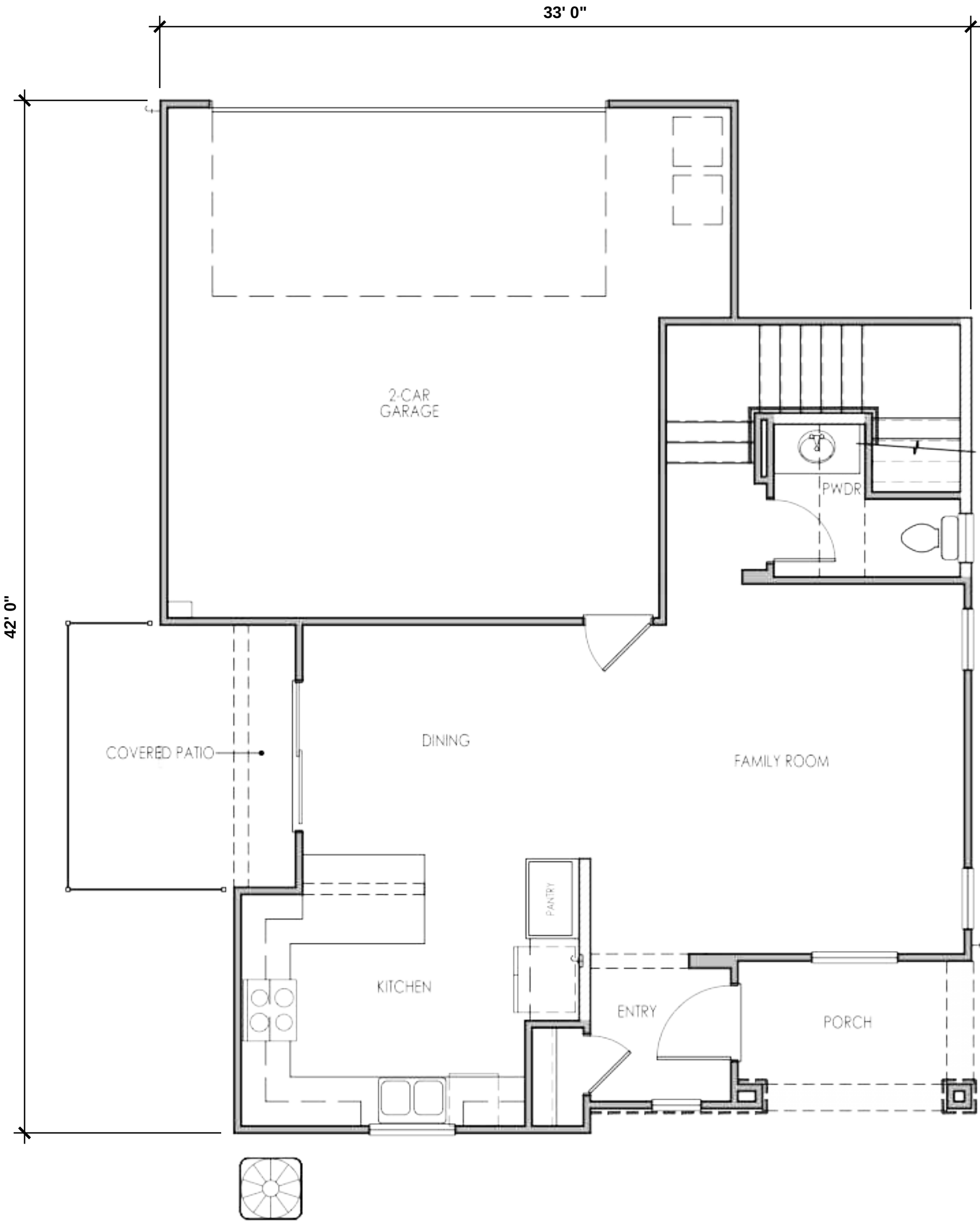
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5
GARAGE	=	2-CAR
KITCHEN / GREAT ROOM		
COVERED PATIO		

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,542 SF
GARAGE	=	457 SF
PORCH / PATIO	=	83 SF

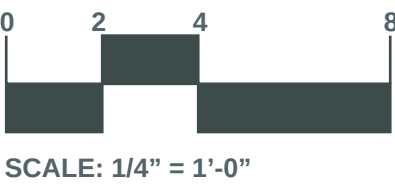


SECOND FLOOR | 857 SF



FIRST FLOOR | 685 SF

PLAN 2 | SCHEMATIC FLOOR PLANS - 1,542 SF



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.1



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PLAN 2 | SCHEMATIC PERSPECTIVE | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.2

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SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,542 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

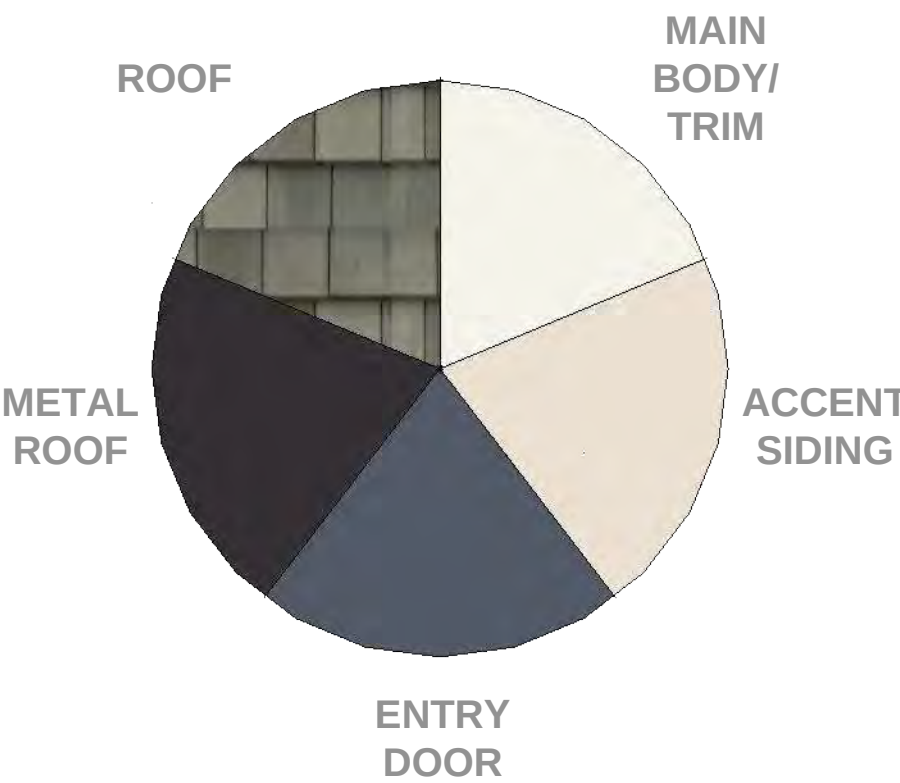
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
ARTISAN | SCHEME #2



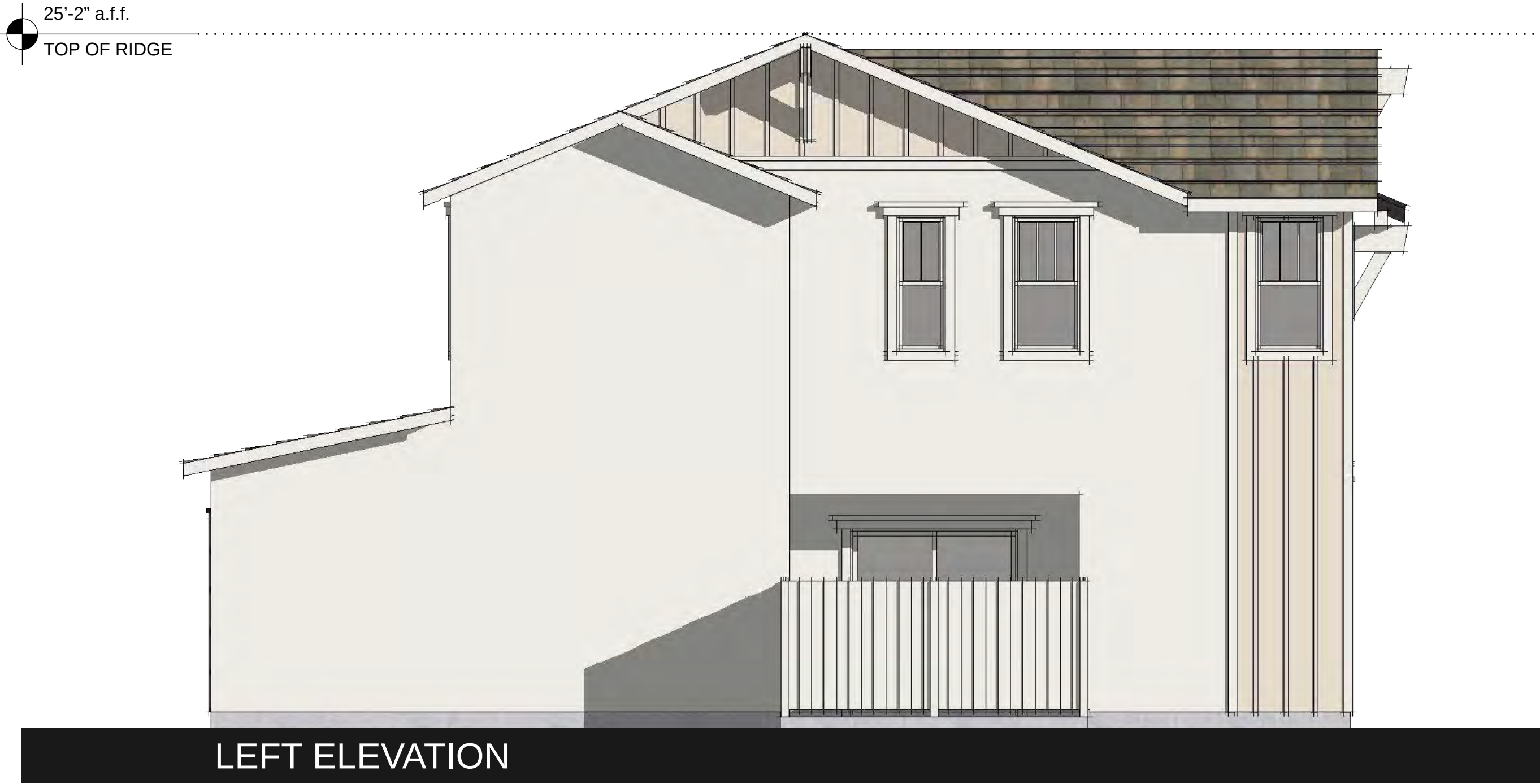
FRONT ELEVATION



REAR ELEVATION

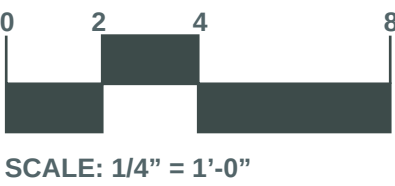


RIGHT ELEVATION



LEFT ELEVATION

PLAN 2 | SCHEMATIC ELEVATIONS | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.3



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PLAN 2 | SCHEMATIC PERSPECTIVE | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.4

SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,542 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

STUCCO
SMOOTH COAT
- 3

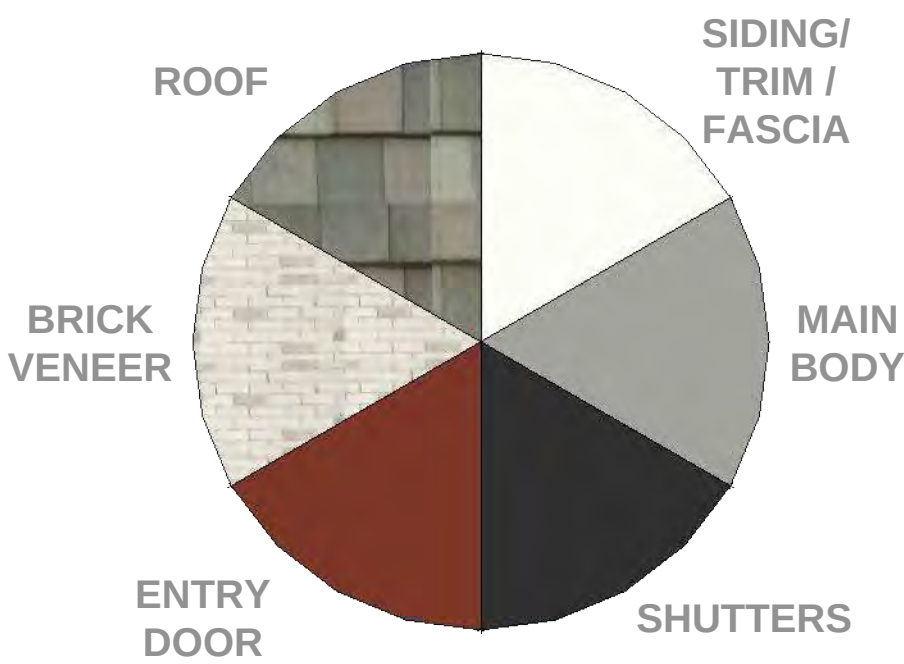
BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

HORIZONTAL LAP SIDING
HARDIEPLANK | 6" EXPOSURE
- 5

BRICK VENEER
EL DORADO STONE | TUNDRA BRICK

COLOR SCHEME

TRADITIONAL | SCHEME # 4



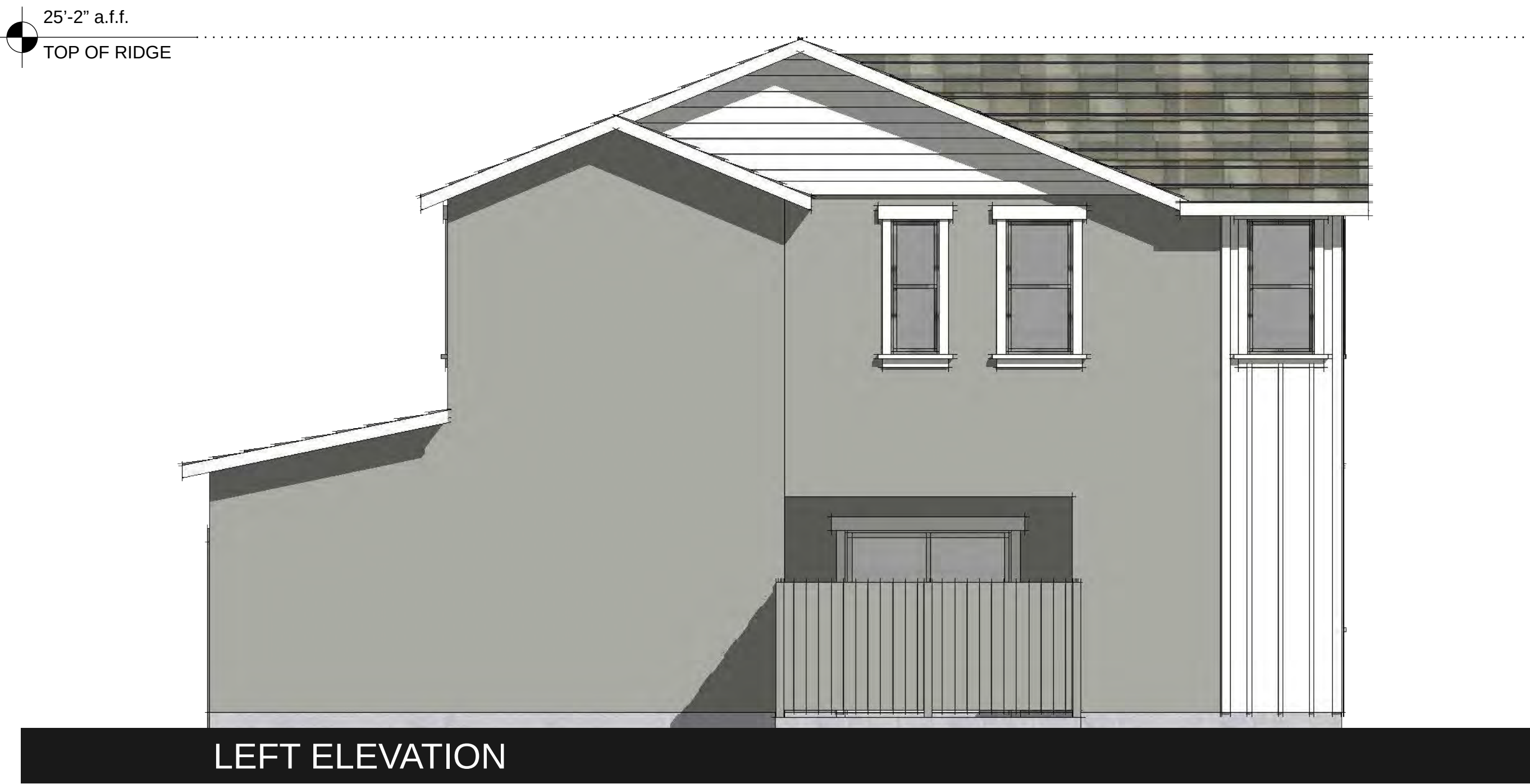
FRONT ELEVATION



REAR ELEVATION

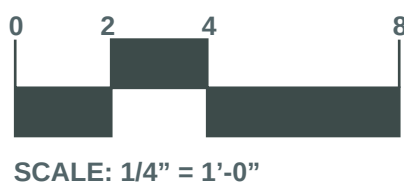


RIGHT ELEVATION



LEFT ELEVATION

PLAN 2 | SCHEMATIC ELEVATIONS | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.5



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PLAN 2 | SCHEMATIC PERSPECTIVE | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A3.6

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SHEET NOTES

PLAN #2

SQUARE FOOTAGE	=	1,542 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

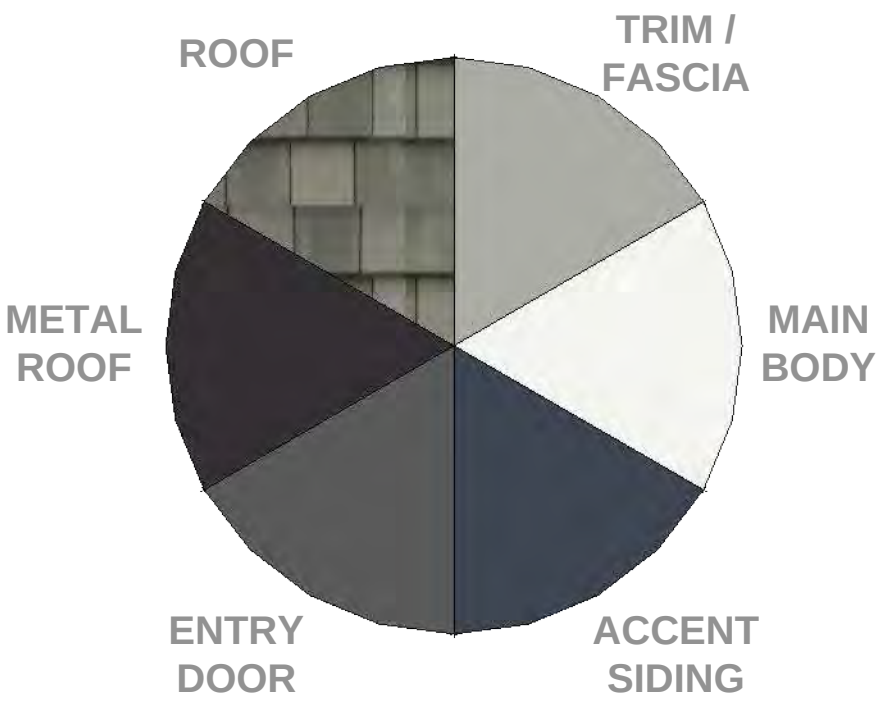
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
MODERN | SCHEME #9



FRONT ELEVATION



REAR ELEVATION



RIGHT ELEVATION



LEFT ELEVATION

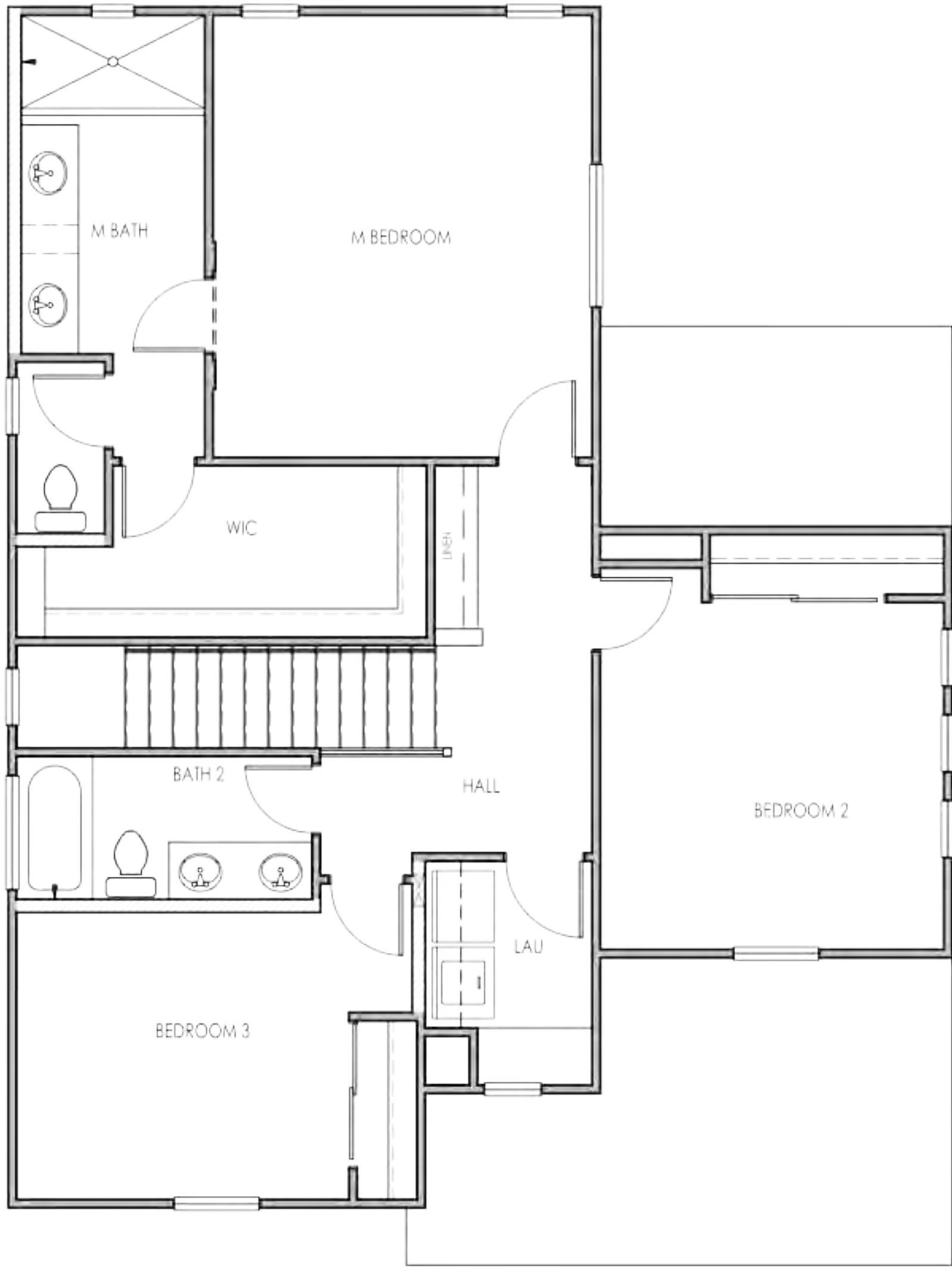
SHEET NOTES

PROGRAM

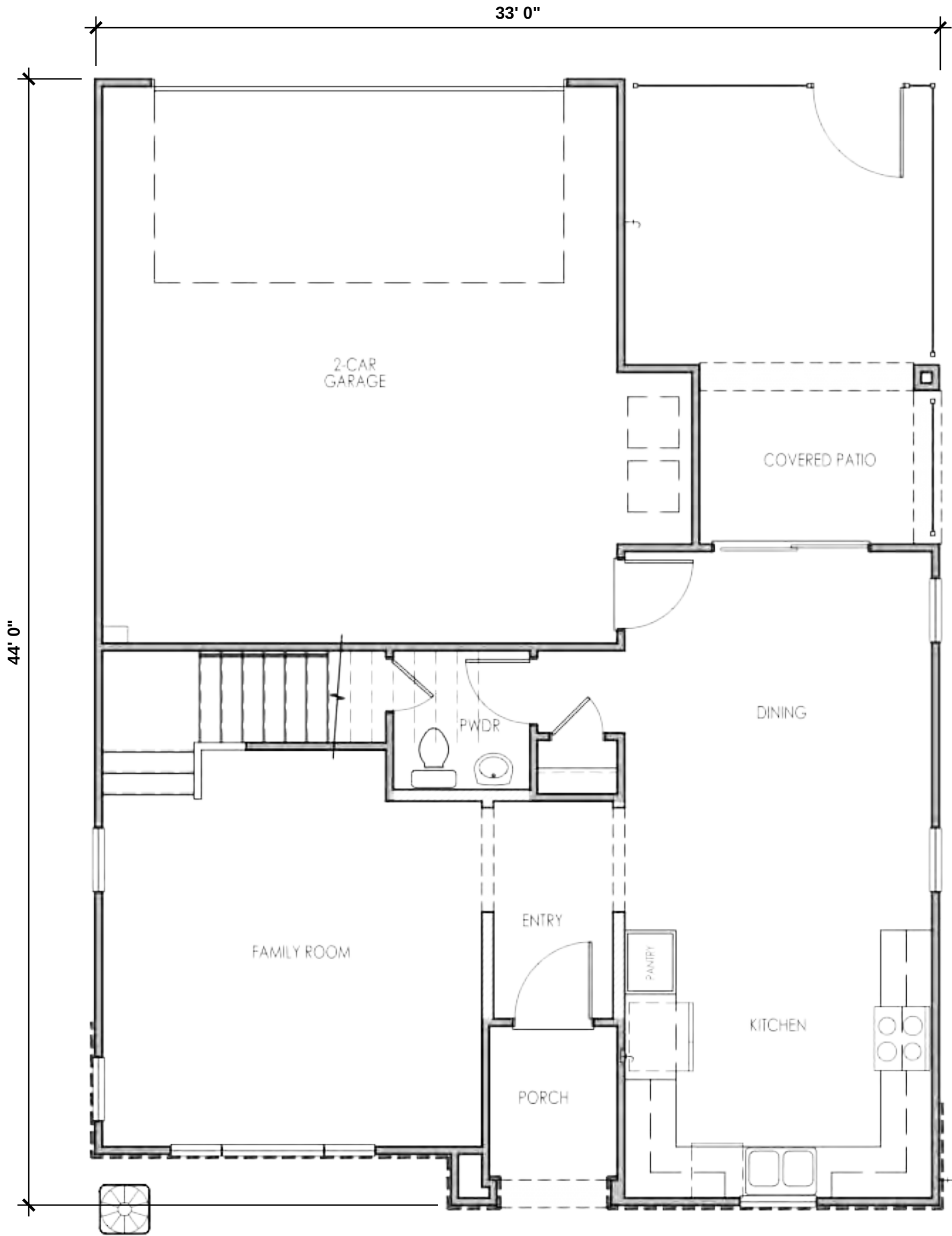
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5
GARAGE	=	2 - CAR
KITCHEN / DINING / FAMILY		
COVERED PATIO		

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,684 SF
GARAGE	=	476 SF
PORCH / PATIO	=	104 SF

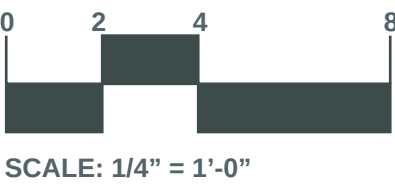


SECOND FLOOR | 977 SF



FIRST FLOOR | 707 SF

PLAN 3 | SCHEMATIC FLOOR PLANS - 1,684 SF



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A4.1

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PLAN 3 | SCHEMATIC PERSPECTIVE | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A4.2

SHEET NOTES

PLAN #3

SQUARE FOOTAGE	=	1,684 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

STUCCO
SMOOTH COAT
- 3

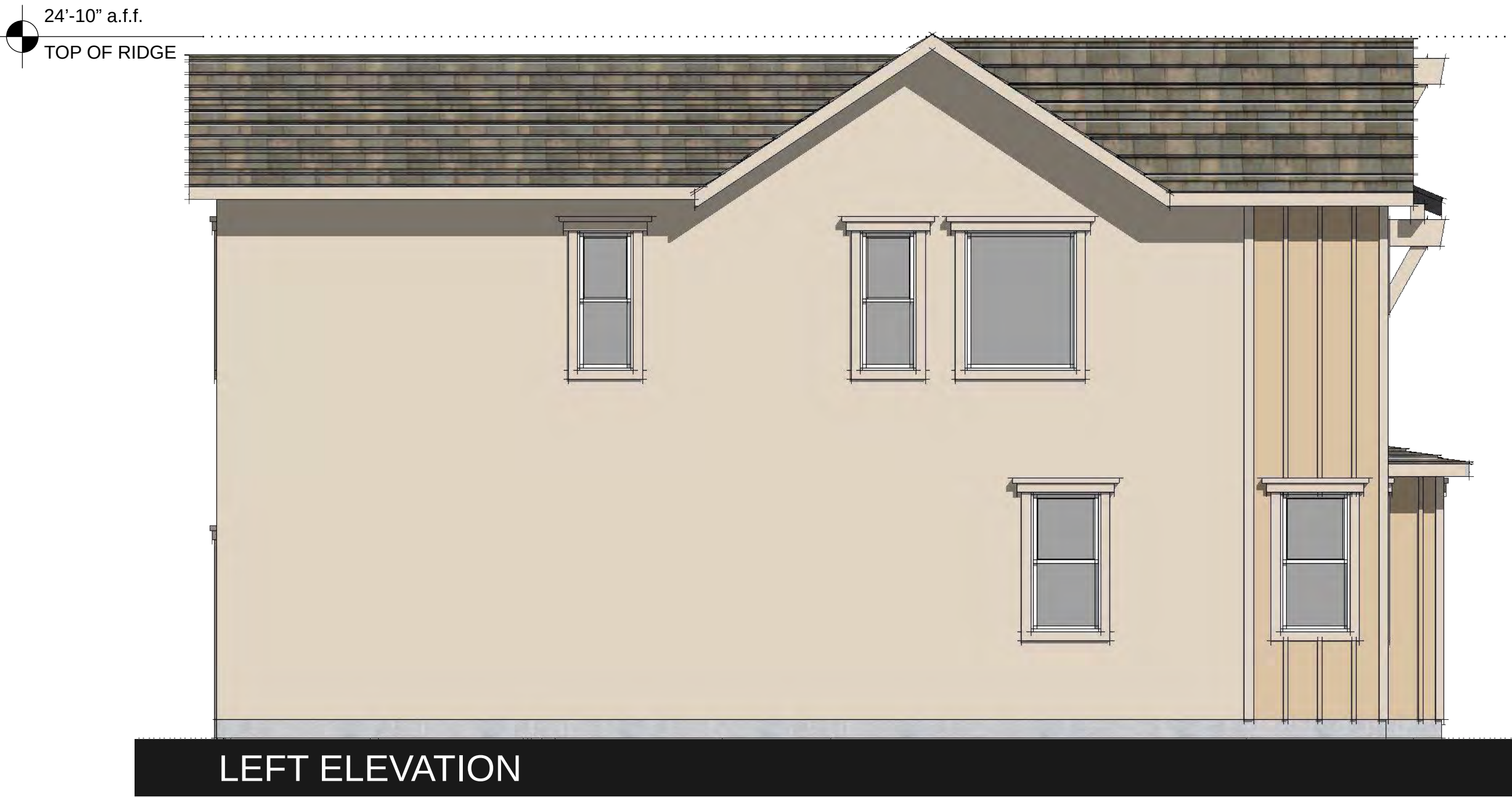
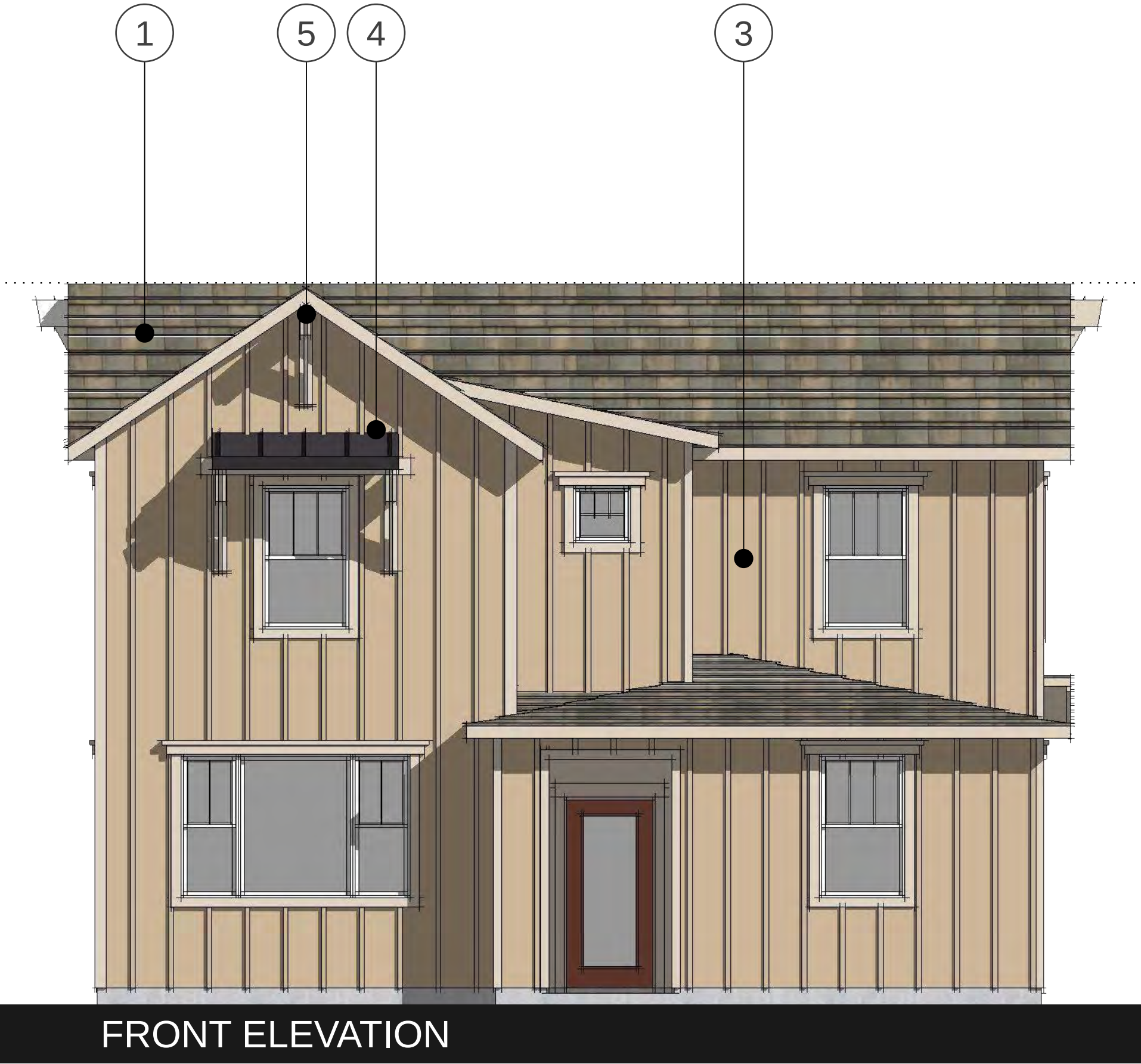
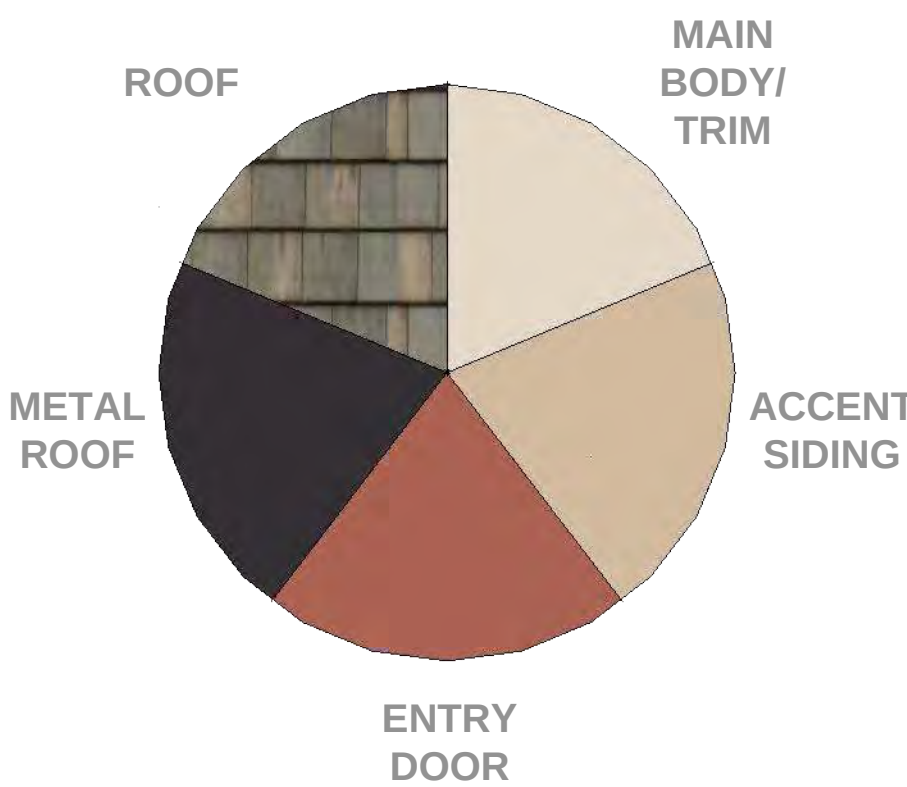
BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME

ARTISAN | SCHEME #3





08.23.2021 | PROGRESS SET

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PLAN 3 | SCHEMATIC PERSPECTIVE | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

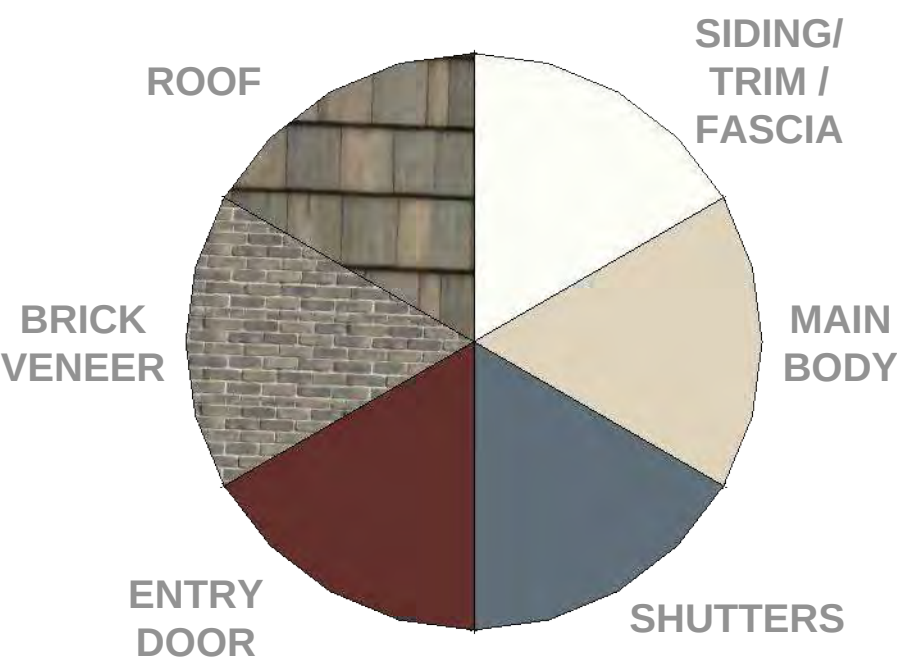
A4.4

SHEET NOTES

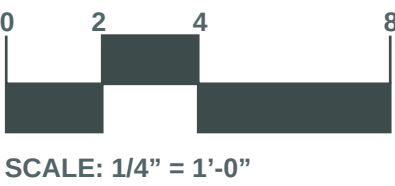
PLAN #3			
SQUARE FOOTAGE	=	1,684	SF
STORIES	=	2	
BEDROOMS	=	3	
BATHROOMS	=	2.5	

MATERIALS	
1	TILE ROOF EAGLE ROOFING BEL AIR
2	STUCCO SMOOTH COAT
3	BOARD & BATTEN HARDIEPLANK 16" O.C.
4	HORIZONTAL LAP SIDING HARDIEPLANK 6" EXPOSURE
5	BRICK VENEER EL DORADO STONE TUNDRA BRICK

COLOR SCHEME	
TRADITIONAL SCHEME #6	



PLAN 3 | SCHEMATIC ELEVATIONS | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A4.5



08.23.2021 | PROGRESS SET

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PLAN 3 | SCHEMATIC PERSPECTIVE | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A4.6

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SHEET NOTES

PLAN #3

SQUARE FOOTAGE	=	1,684 SF
STORIES	=	2
BEDROOMS	=	3
BATHROOMS	=	2.5

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

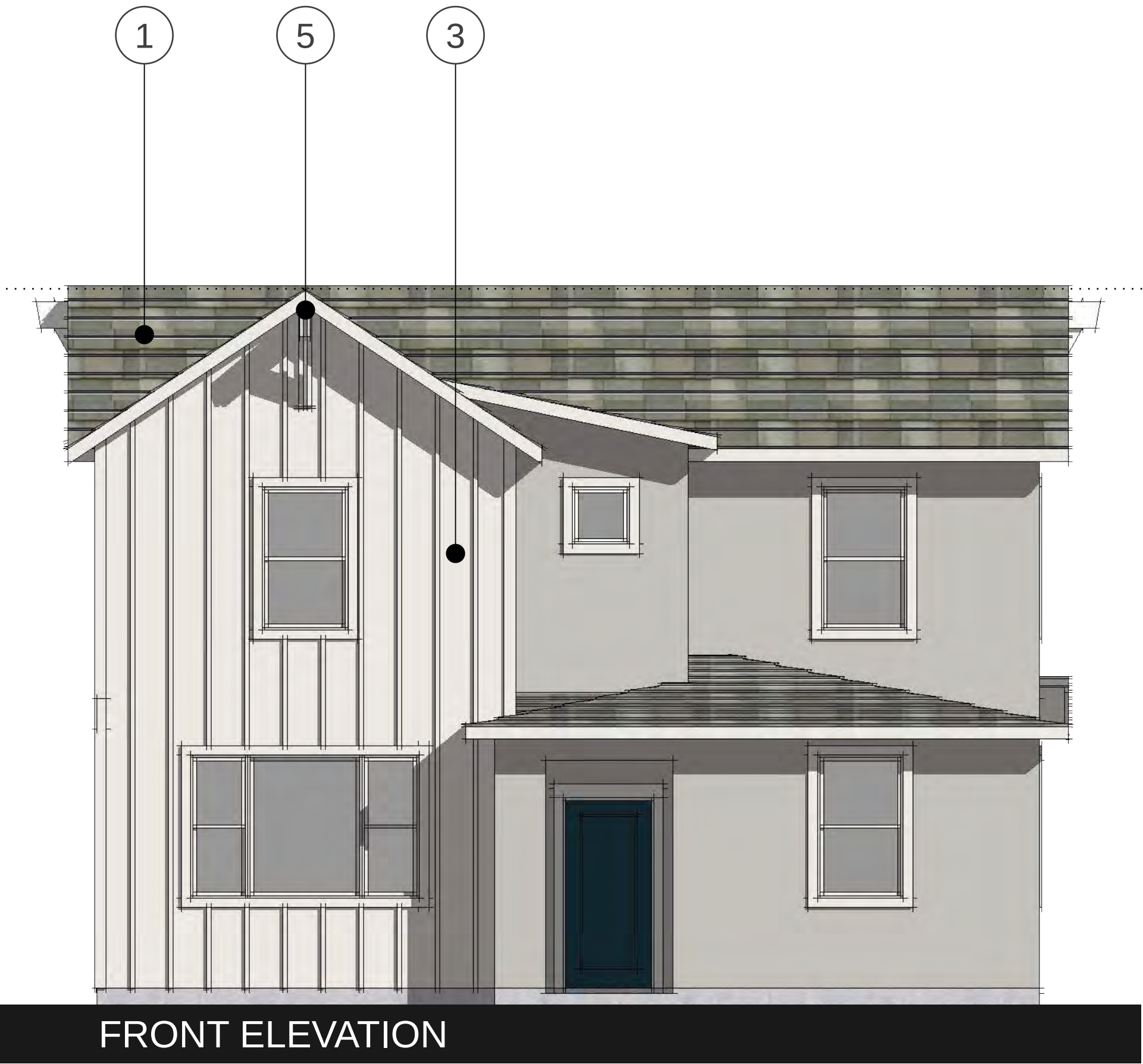
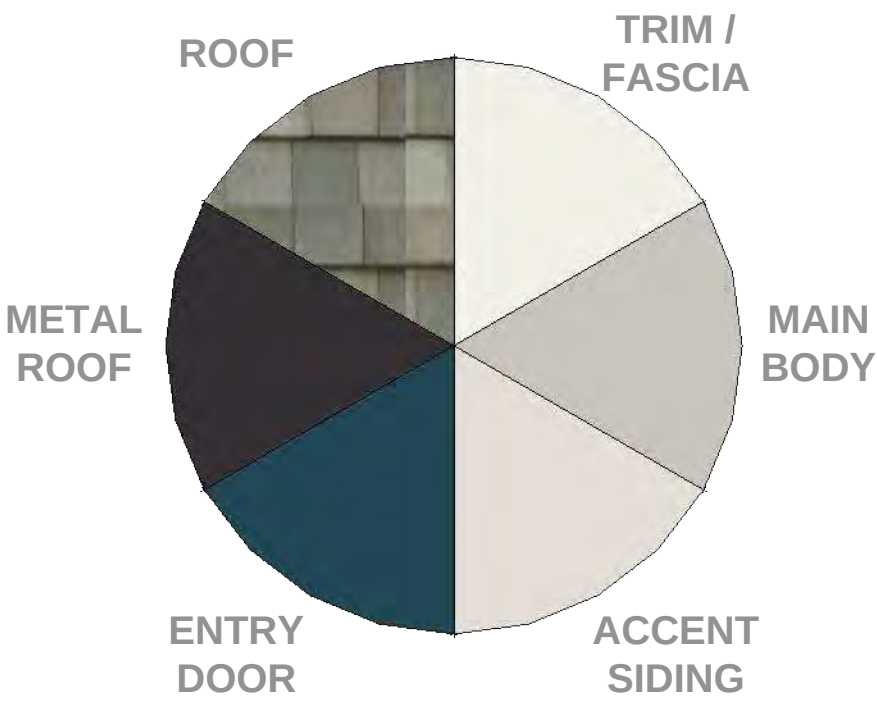
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
MODERN | SCHEME #8



FRONT ELEVATION



REAR ELEVATION

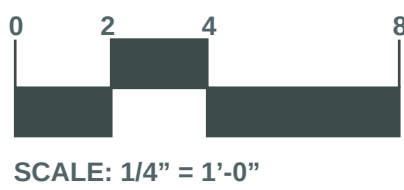


RIGHT ELEVATION



LEFT ELEVATION

PLAN 3 | SCHEMATIC ELEVATIONS | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A4.7

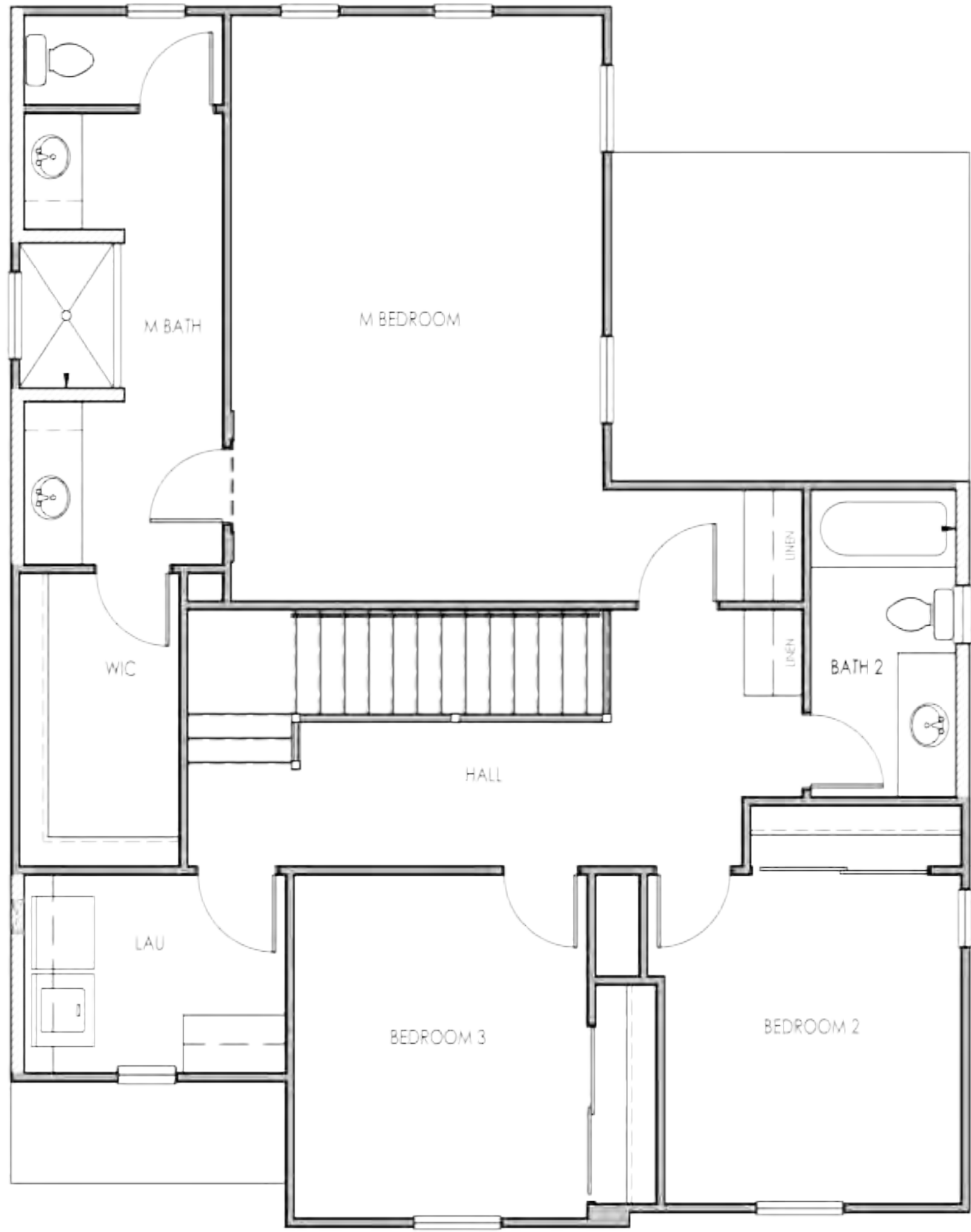
SHEET NOTES

PROGRAM

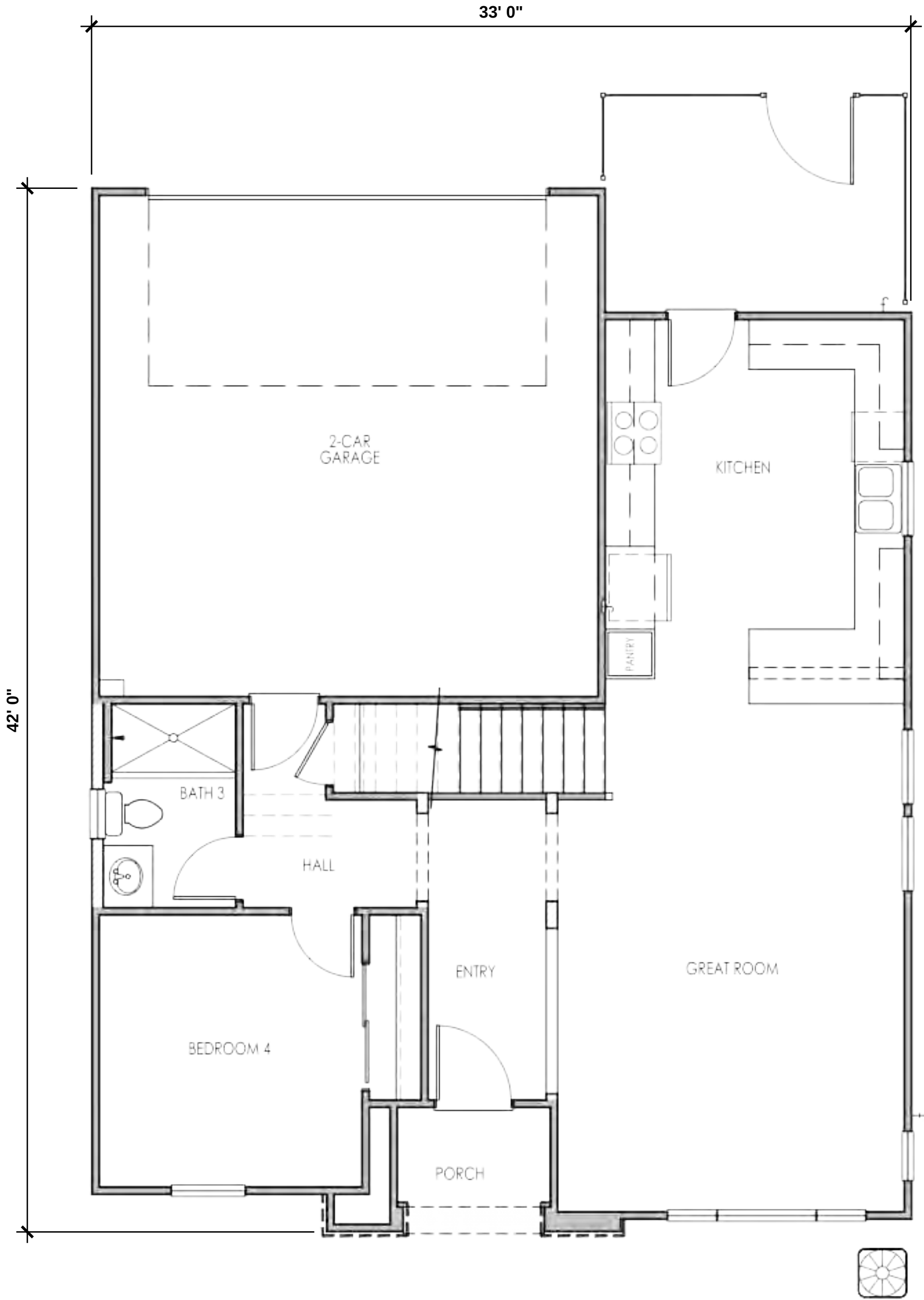
STORIES	=	2
BEDROOMS	=	4
BATHROOMS	=	3
GARAGE	=	2 - CAR
KITCHEN / DINING / GREAT ROOM		

AREA CALCS (Building Total)

LIVING (Conditioned)	=	1,930 SF
GARAGE	=	418 SF
PORCH / PATIO	=	30 SF

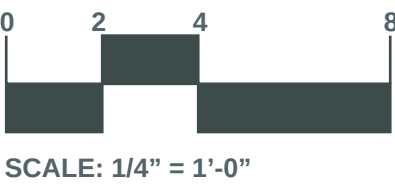


SECOND FLOOR | 1,074 SF



FIRST FLOOR | 856 SF

PLAN 4 | SCHEMATIC FLOOR PLANS - 1,930 SF



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.1



08.23.2021 | PROGRESS SET

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VERANDA STONE CREEK 13

CITY OF RANCHO CORDOVA, CALIFORNIA

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PLAN 4 | SCHEMATIC PERSPECTIVE | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.2

5905 GRANITE LAKE DRIVE | SUITE 140 | GRANITE BAY | CALIFORNIA, 95746 | 916.783.3700 | WWW.JDAARCH.COM

SHEET NOTES

PLAN #4

SQUARE FOOTAGE	=	1,930 SF
STORIES	=	2
BEDROOMS	=	4
BATHROOMS	=	3

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

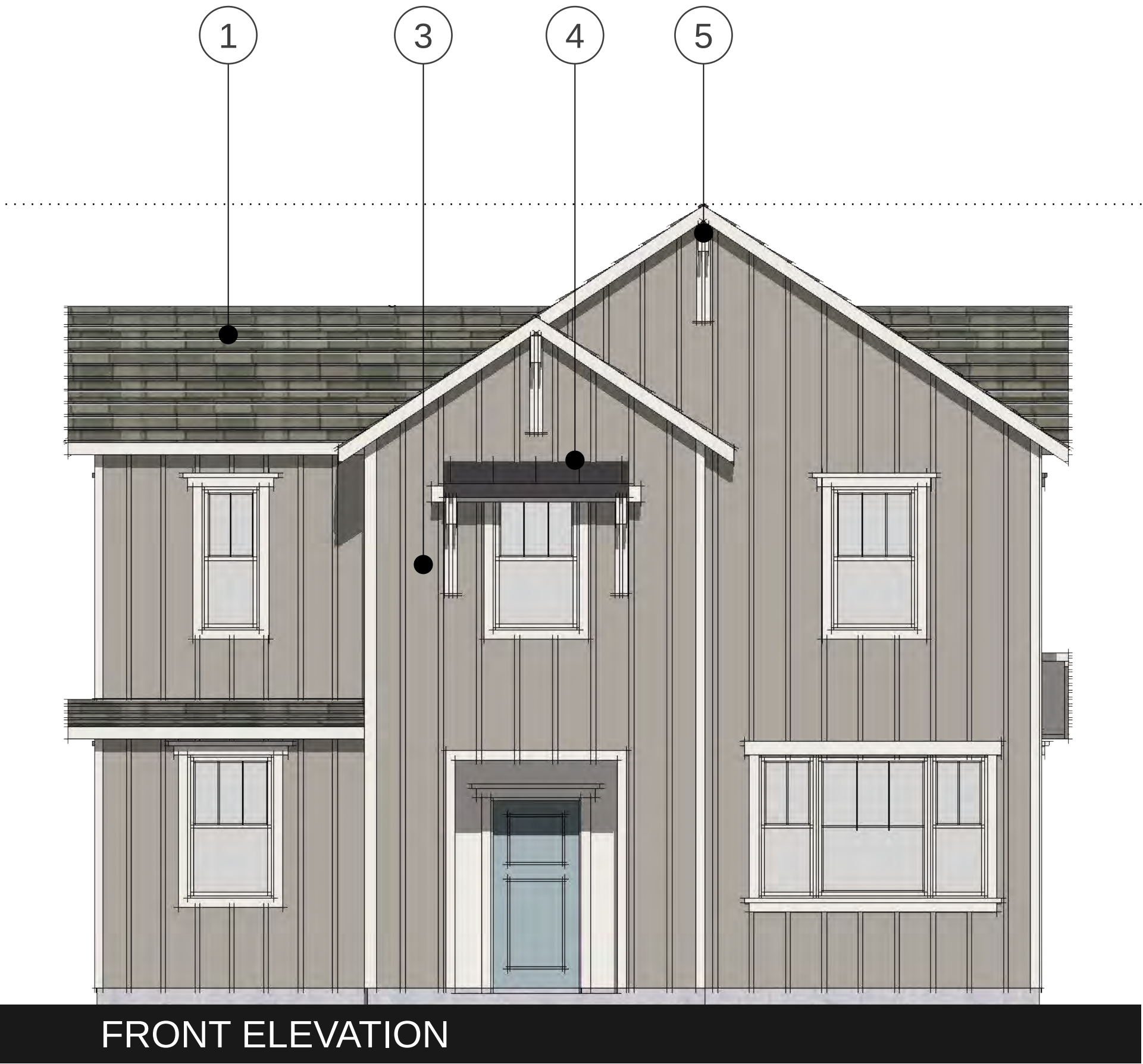
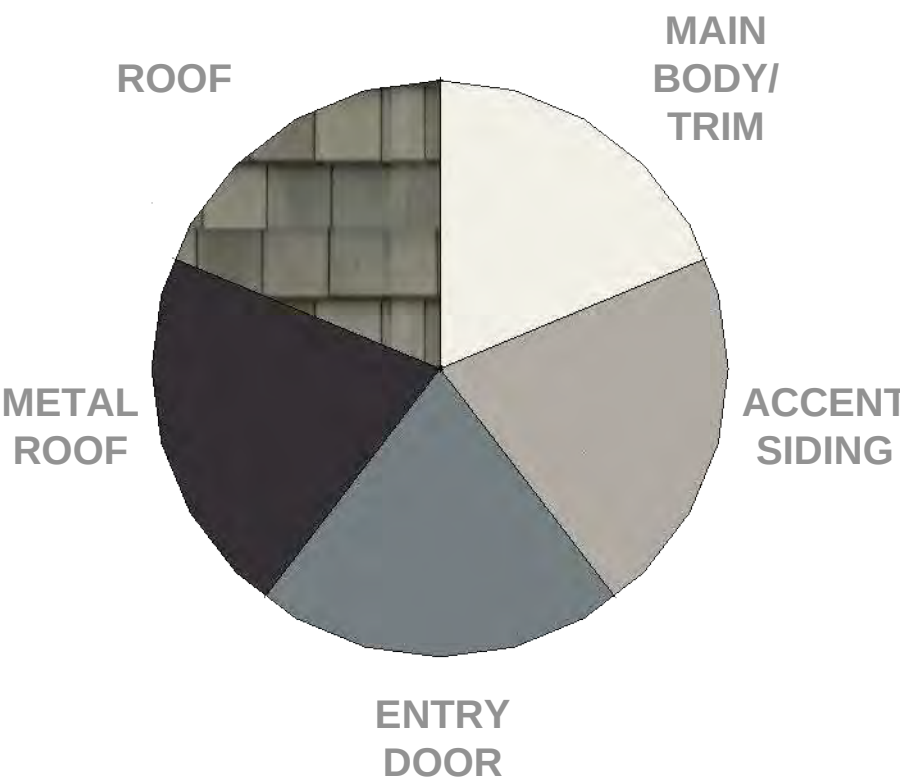
STUCCO
SMOOTH COAT
- 3

BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME
ARTISAN | SCHEME #1



FRONT ELEVATION



REAR ELEVATION

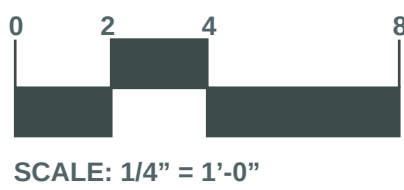


RIGHT ELEVATION



LEFT ELEVATION

PLAN 4 | SCHEMATIC ELEVATIONS | ARTISAN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.3



08.23.2021 | PROGRESS SET

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PLAN 4 | SCHEMATIC PERSPECTIVE | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.4

5905 GRANITE LAKE DRIVE | SUITE 140 | GRANITE BAY | CALIFORNIA, 95746 | 916.783.3700 | WWW.JDAARCH.COM

SHEET NOTES

PLAN #4

SQUARE FOOTAGE	=	1,930 SF
STORIES	=	2
BEDROOMS	=	4
BATHROOMS	=	3

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

STUCCO
SMOOTH COAT
- 3

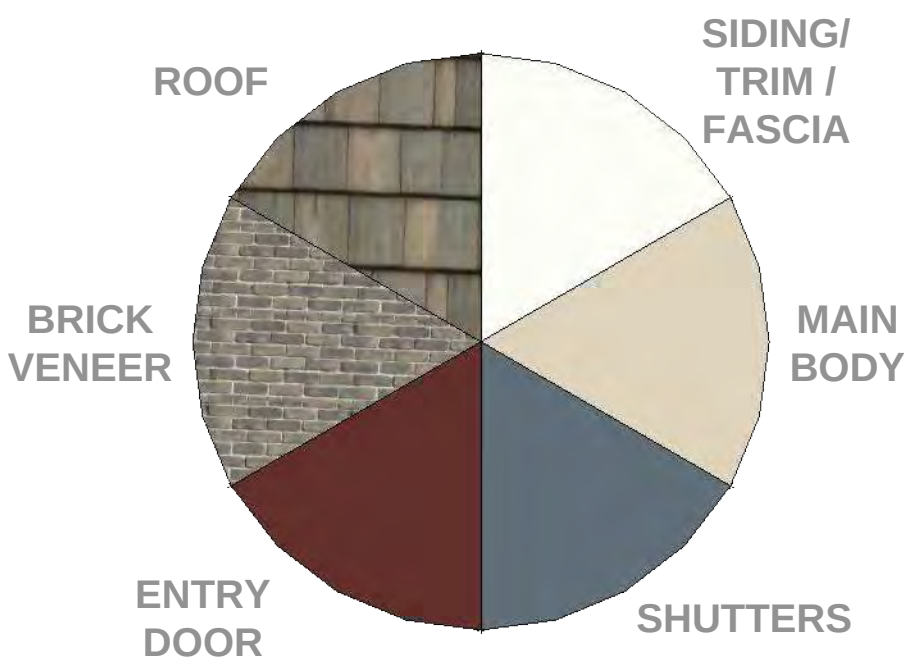
BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

HORIZONTAL LAP SIDING
HARDIEPLANK | 6" EXPOSURE
- 5

BRICK VENEER
EL DORADO STONE | TUNDRA BRICK

COLOR SCHEME

TRADITIONAL | SCHEME #6



FRONT ELEVATION



RIGHT ELEVATION

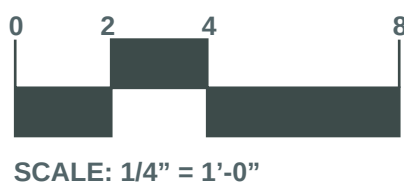


REAR ELEVATION



LEFT ELEVATION

PLAN 4 | SCHEMATIC ELEVATIONS | TRADITIONAL



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.5



08.23.2021 | PROGRESS SET

Elliott Homes
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VERANDA STONE CREEK 13

CITY OF RANCHO CORDOVA, CALIFORNIA

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PLAN 4 | SCHEMATIC PERSPECTIVE | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.6

5905 GRANITE LAKE DRIVE | SUITE 140 | GRANITE BAY | CALIFORNIA, 95746 | 916.783.3700 | WWW.JDAARCH.COM

SHEET NOTES

PLAN #4

SQUARE FOOTAGE	=	1,930 SF
STORIES	=	2
BEDROOMS	=	4
BATHROOMS	=	3

MATERIALS

- 1

TILE ROOF
EAGLE ROOFING | BEL AIR
- 2

STUCCO
SMOOTH COAT
- 3

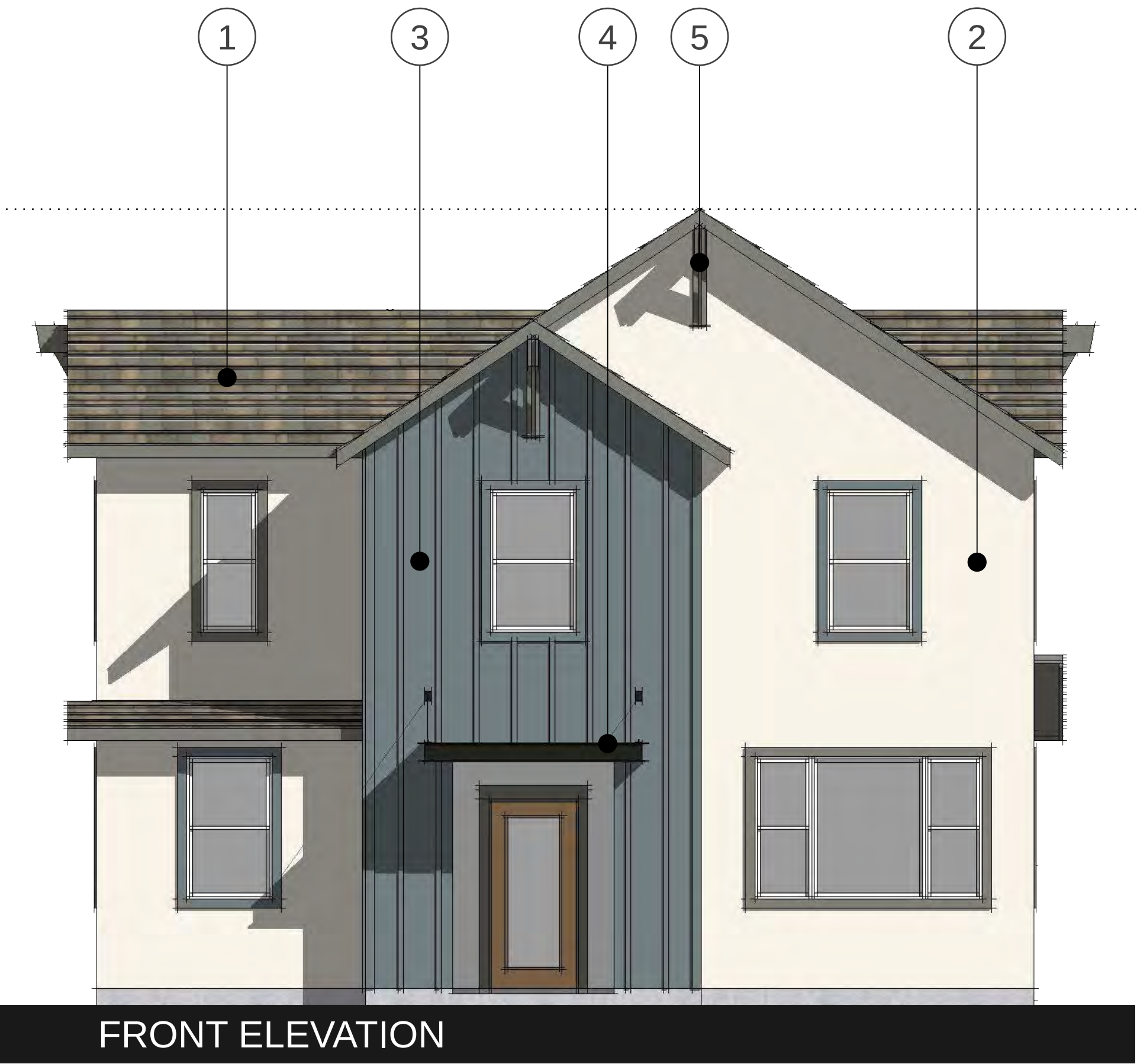
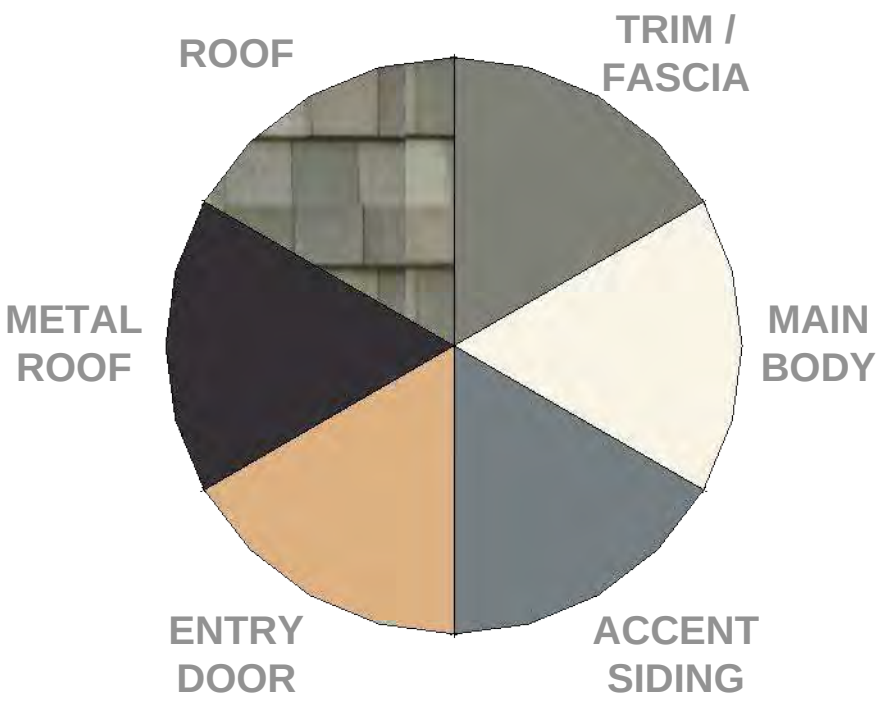
BOARD & BATTEN
HARDIEPLANK | 16" O.C.
- 4

DECORATIVE METAL AWNING
(WHERE OCCURS)
- 5

DECORATIVE WOODEN KNEE BRACE
(WHERE OCCURS)

COLOR SCHEME

MODERN | SCHEME #7



FRONT ELEVATION



RIGHT ELEVATION

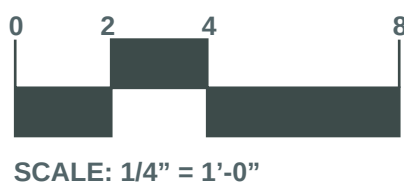


REAR ELEVATION



LEFT ELEVATION

PLAN 4 | SCHEMATIC ELEVATIONS | MODERN



JD+A JOB NUMBER: 21060
DATE: 08.23.2021

A5.7

08.23.2021 | PROGRESS SET

Elliott Homes
A Tradition of Quality since 1914

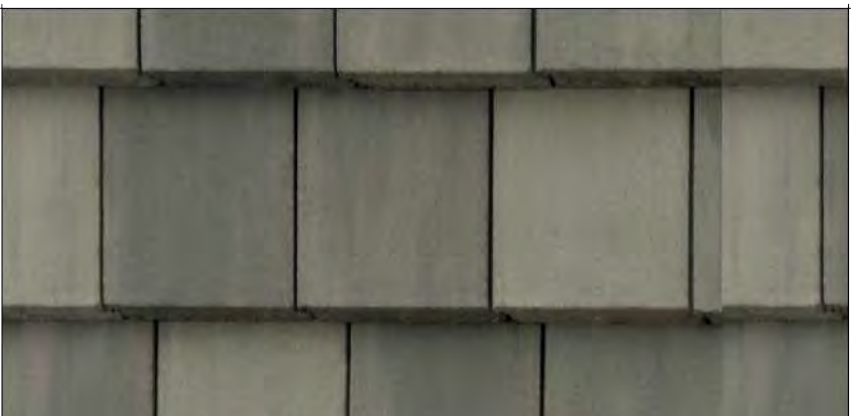
VERANDA STONE CREEK 13

CITY OF RANCHO CORDOVA, CALIFORNIA

© 2004 - 2021 JEFFREY DEMURE + ASSOCIATES ARCHITECTS PLANNERS, INC.

5905 GRANITE LAKE DRIVE | SUITE 140 | GRANITE BAY | CALIFORNIA, 95746 | 916.783.3700 | WWW.JDAARCH.COM

SCHEME 1



EAGLE ROOFING | BEL AIR | 4697 SLATE RANGE
TILE ROOF



BLACK MAGIC | SW 6991
METAL ROOF



SNOWBOUND | SW 7004
MAIN BODY AND TRIM

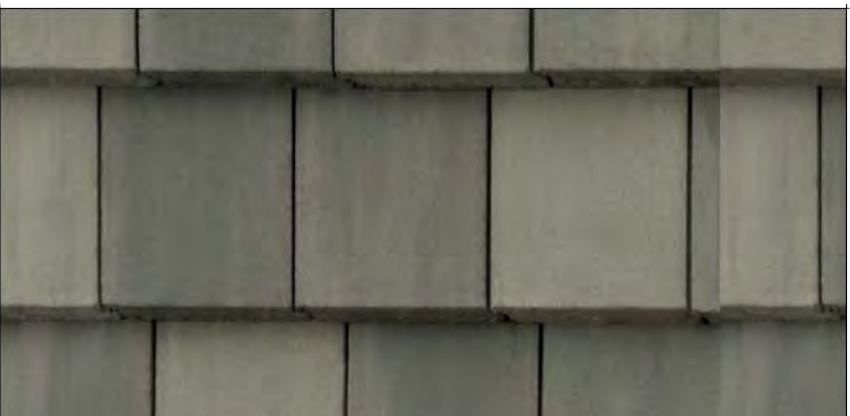


DORIAN GRAY | SW 7017
SIDING



FOGGY DAY | SW 6235
ENTRY DOOR

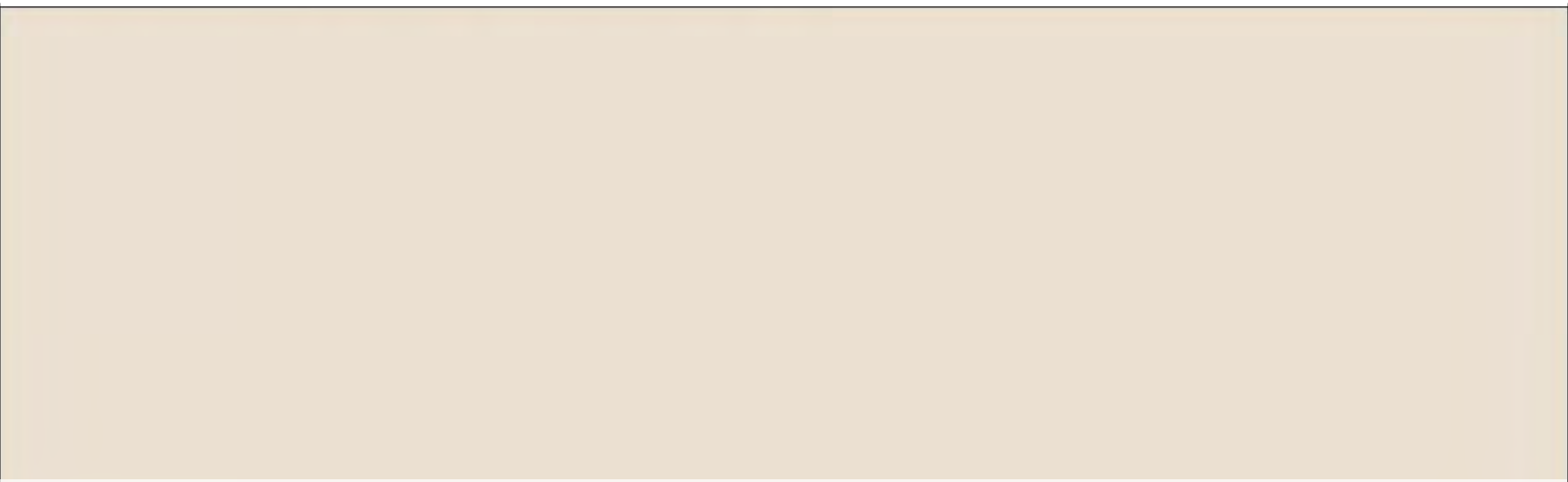
SCHEME 2



EAGLE ROOFING | BEL AIR | 4697 SLATE RANGE
TILE ROOF



BLACK MAGIC | SW 6991
METAL ROOF



PURE WHITE | SW 7005
MAIN BODY AND TRIM

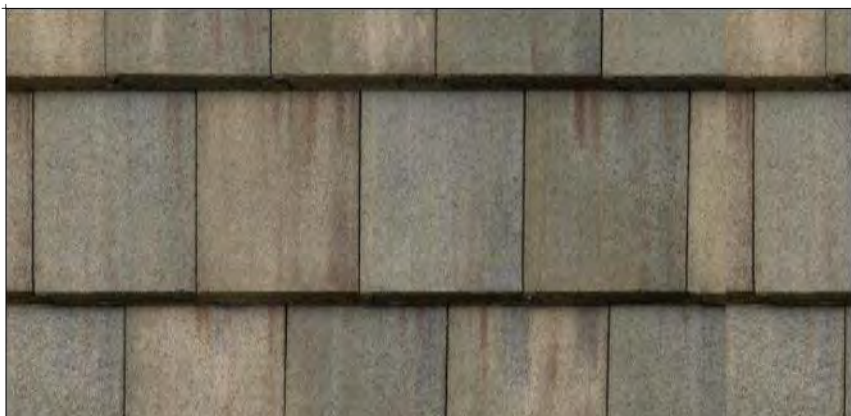


DIVINE WHITE | SW 6105
SIDING



MINERAL GRAY | SW 2740
ENTRY DOOR

SCHEME 3



EAGLE ROOFING | BEL AIR | 4634 KINGS CANYON BLEND
TILE ROOF



BLACK MAGIC | SW 6991
METAL ROOF



NATURAL LINEN | SW 9109
MAIN BODY AND TRIM



MACADAMIA | SW 6142
SIDING

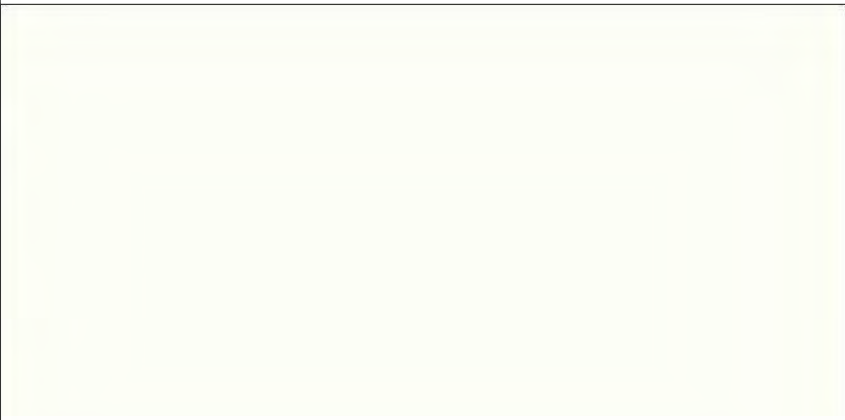


ROYCROFT ADOBE | SW 0040
ENTRY DOOR

SCHEME 4



EAGLE ROOFING | BEL AIR | SCB 8805 SEATTLE BLEND
TILE ROOF



HIGH REFLECTIVE WHITE | SW 7757
TRIM, FASCIA AND GARAGE



STAMPED CONCRETE | SW 7655
STUCCO BODY



TRICORN BLACK | SW 6258
SHUTTERS



ROYCROFT COPPER RED | SW 2839
ENTRY DOOR

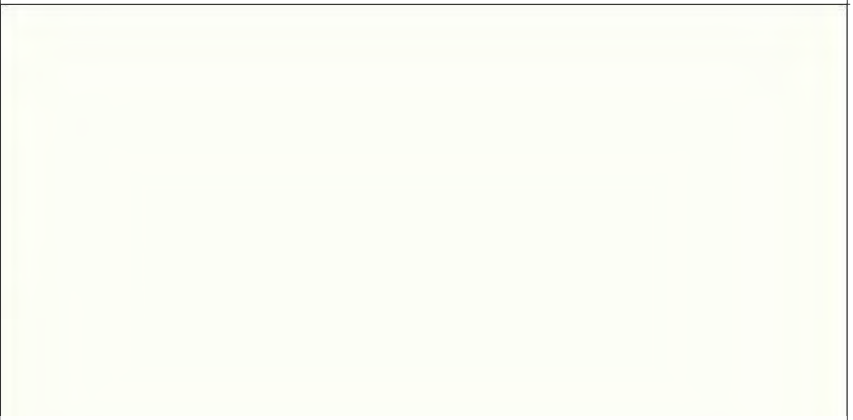


EL DORADO STONE | CHALK DUST | TUNDRA BRICK
MASONRY AREA

SCHEME 5



EAGLE ROOFING | BEL AIR | 4634 KINGS CANYON BLEND
TILE ROOF



HIGH REFLECTIVE WHITE | SW 7757
TRIM, FASCIA AND GARAGE



AGREEABLE GRAY | SW 7029
STUCCO BODY



ACACIA HAZE | SW 9132
SHUTTERS



ROJO DUST | SW 9006
ENTRY DOOR

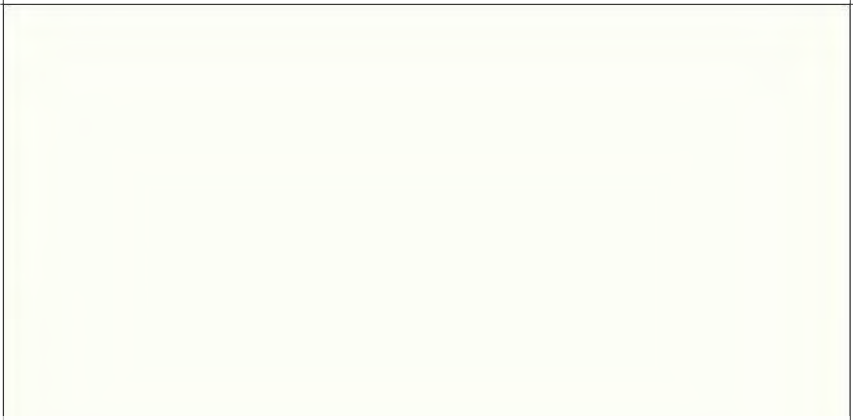


EL DORADO STONE | LATIGO | TUNDRA BRICK
MASONRY AREA

SCHEME 6



EAGLE ROOFING | BEL AIR | 4634 KINGS CANYON BLEND
TILE ROOF



HIGH REFLECTIVE WHITE | SW 7757
TRIM, FASCIA AND GARAGE



WOOL SKEIN | SW 6148
STUCCO BODY



GRANITE PEAK | SW 6250
SHUTTERS



ROOKWOOD RED | SW 2802
ENTRY DOOR



EL DORADO STONE | ASHLAND | TUNDRA BRICK
MASONRY AREA

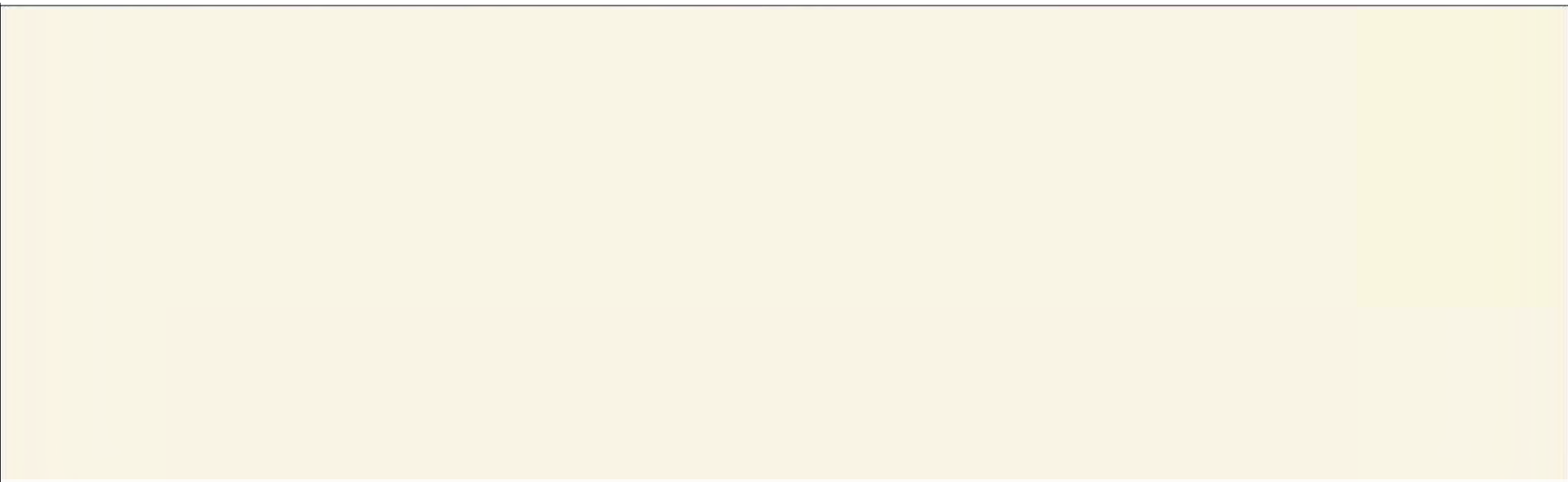
SCHEME 7



EAGLE ROOFING | BEL AIR | SCB 8805 SEATTLE BLEND
TILE ROOF



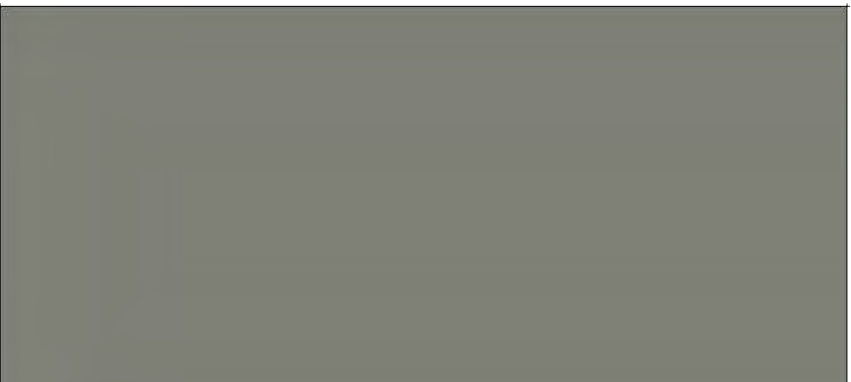
BLACK MAGIC | SW 6991
METAL ROOF



WESTHIGHLAND WHITE | SW 7566
STUCCO BODY



FOGGY DAY | SW 6235
BOARD + BATTEN SIDING



ATTITUDE GRAY | SW 7060
FASCIA, TRIM, GARAGE



GOLDEN GATE | SW 7679
ENTRY DOOR

SCHEME 8



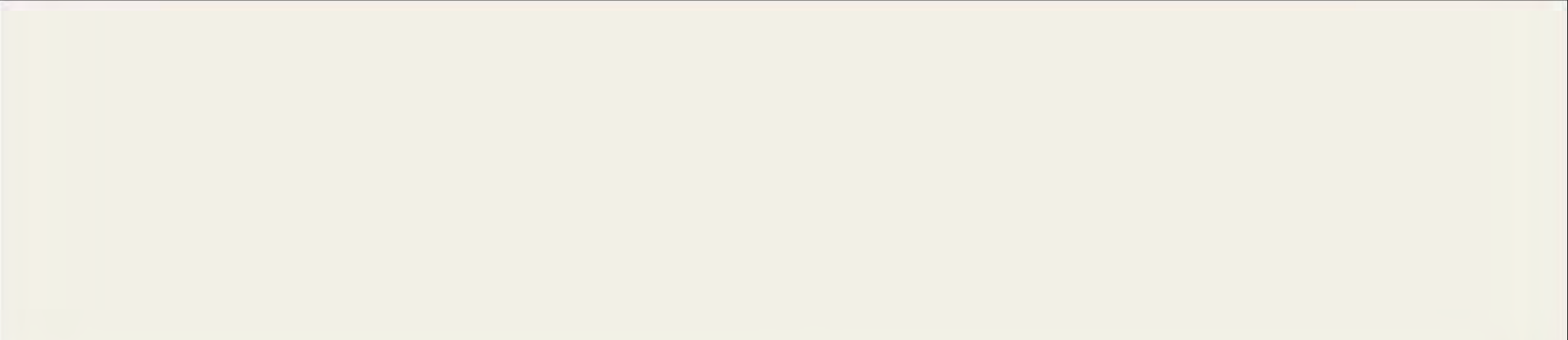
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TILE ROOF



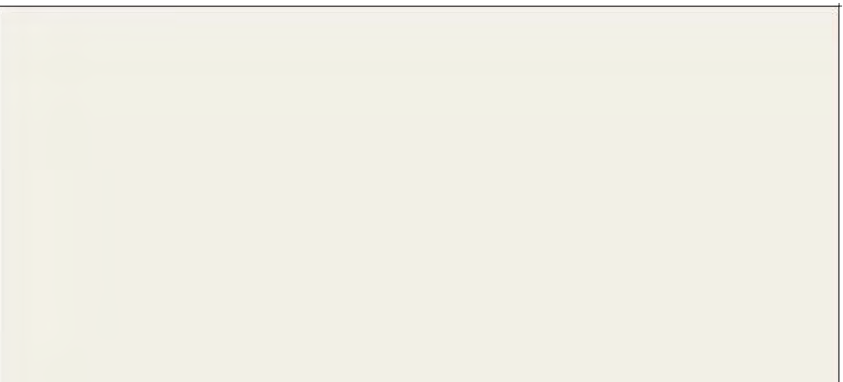
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METAL ROOF



SILVERPLATE | SW 7649
STUCCO BODY



SNOWBOUND | SW 7004
BOARD + BATTEN SIDING

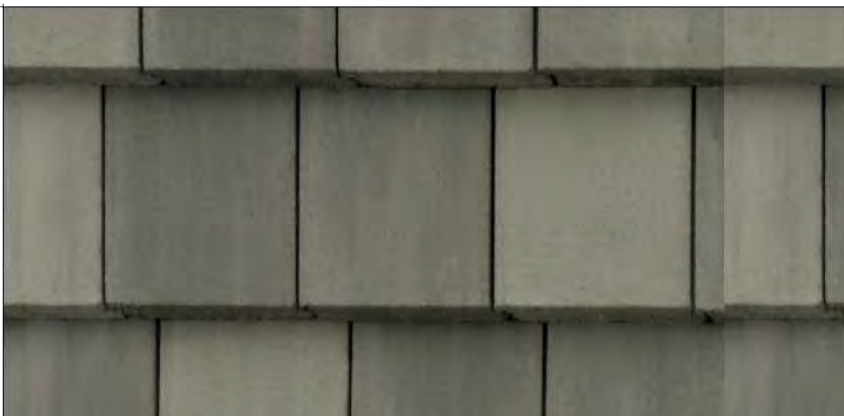


SNOWBOUND | SW 7004
FASCIA, TRIM, GARAGE



MOSCOW MIDNIGHT | SW 9142
ENTRY DOOR

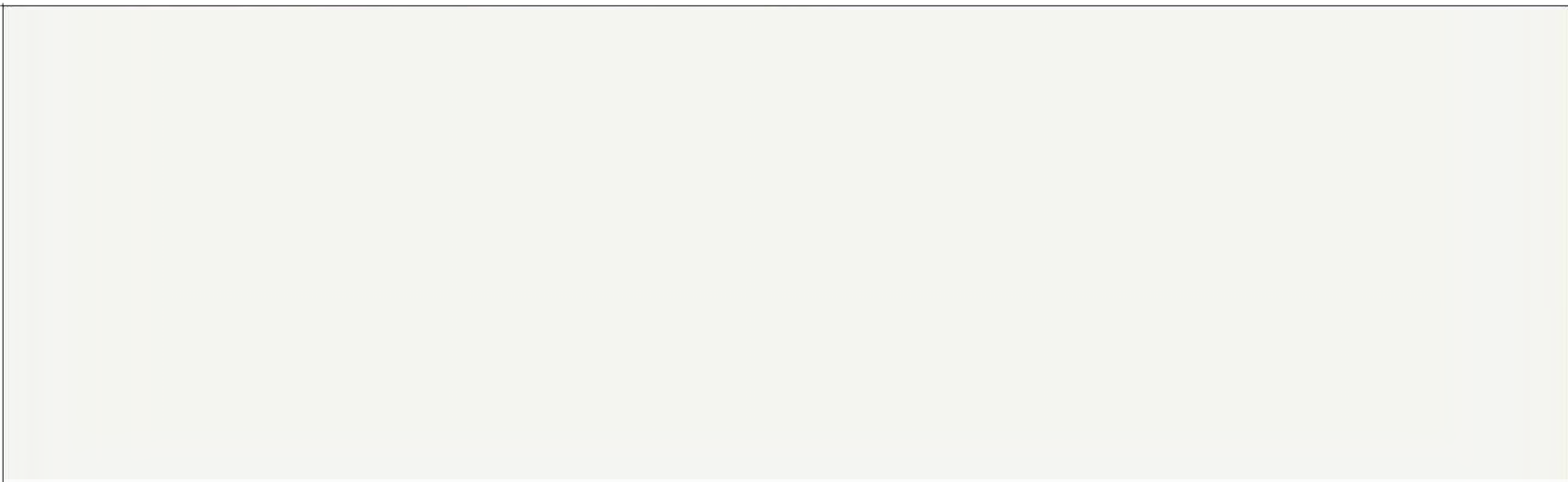
SCHEME 9



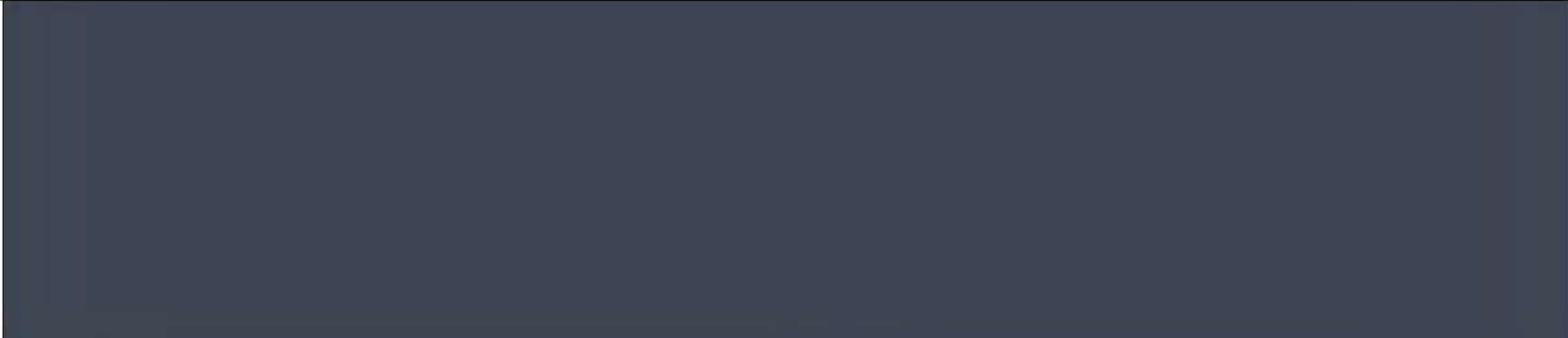
EAGLE ROOFING | BEL AIR | 4697 SLATE RANGE
TILE ROOF



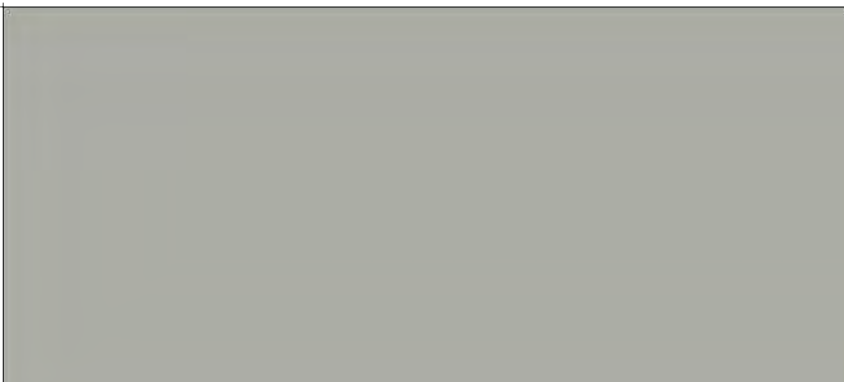
BLACK MAGIC | SW 6991
METAL ROOF



EXTRA WHITE | SW 7006
STUCCO BODY



CHARCOAL BLUE | SW 2739
BOARD + BATTEN SIDING

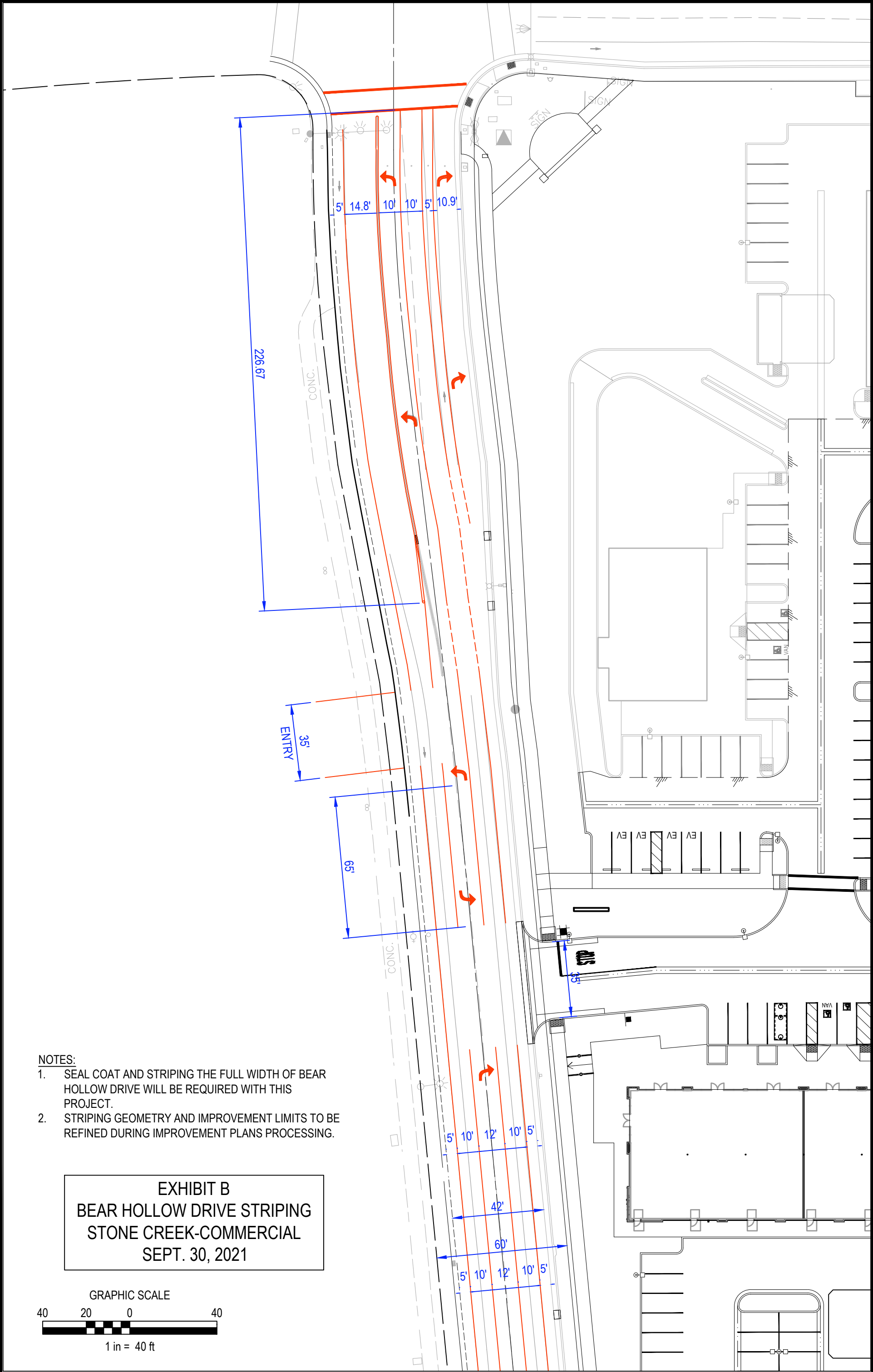


GRAY MATTERS | SW 7066
FASCIA, TRIM, GARAGE



PEPPERCORN | SW 7674
ENTRY DOOR

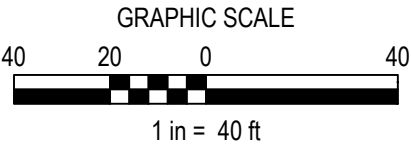




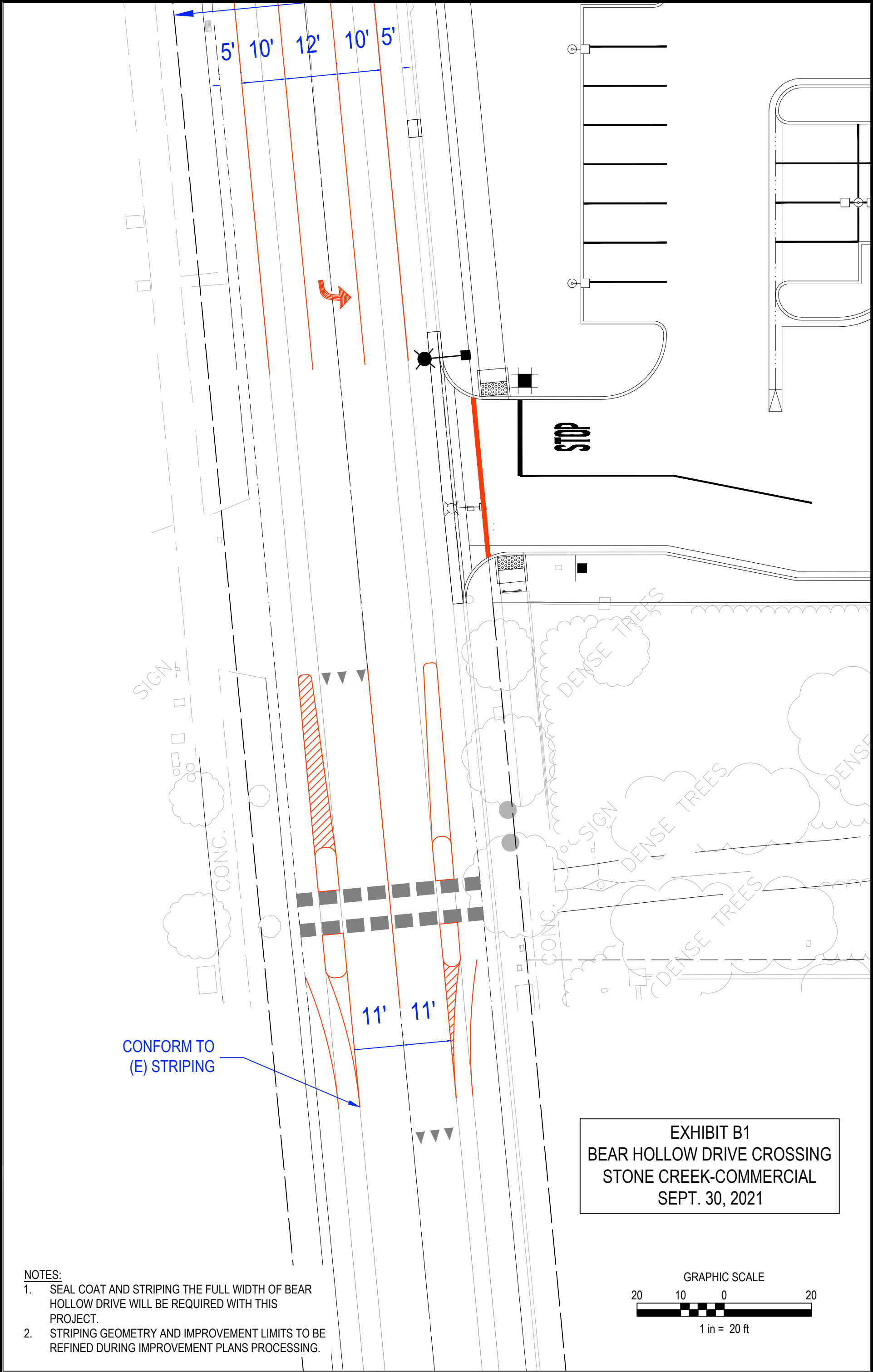
NOTES:

- 1. SEAL COAT AND STRIPING THE FULL WIDTH OF BEAR HOLLOW DRIVE WILL BE REQUIRED WITH THIS PROJECT.
- 2. STRIPING GEOMETRY AND IMPROVEMENT LIMITS TO BE REFINED DURING IMPROVEMENT PLANS PROCESSING.

EXHIBIT B
BEAR HOLLOW DRIVE STRIPING
STONE CREEK-COMMERCIAL
SEPT. 30, 2021



ITEM 18.1.



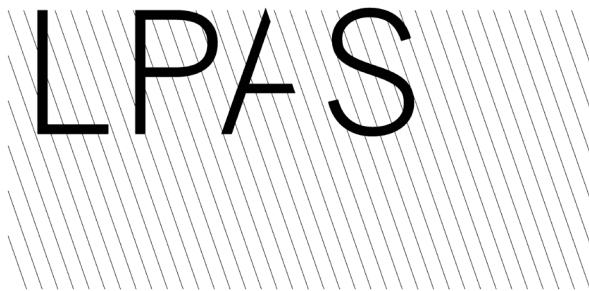
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STONE CREEK VILLAGE

Signage Guidelines

JUNE 2021

Prepared by



2484 Natomas Park Drive Suite 100 Sacramento CA 95833
916 443 0335 lpasdesign.com **Architecture + Design**

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Illumination of Signs.....	17
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ITEM 18.1.

Directory

Owner/Developer

Elliot Homes
340 Palladio Parkway, Suite 521
Folsom, CA 95630
(916) 984-1300

Architect

LPAS, Inc.
2484 Natomas Park Drive, Suite 100
Sacramento, CA 95833
(916) 443-0335

Governmental Agency

City of Rancho Cordova Planning Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
(916) 851-8750

ITEM 18.1.

Purpose

This document establishes guidelines and criteria for the design, implementation, and regulation of project signage as well as site signage and thematic graphics at Stone Creek Village, Rancho Cordova, California.

Signage and graphics have been listed in two broad categories:

Sign Type A illustration overall project identification signage and graphics.

Sign Type B illustrates criteria for Tenant signage.

The Owner/Developer may implement any or all of the sign types outlines herein and accordance with these criteria.

The objectives of the Signage Program are:

- To generate creative and tasteful signage that enhances the center's image and that compliments architectural and landscape elements.
- To provide signage that is functional and that effectively serves the identification needs of the shopping center and its tenants.
- To facilitate the review and approval process for signage by providing guidelines and criteria that constitute standards of acceptability for signs at the center.

It is the responsibility of each Tenant to submit design drawings of the proposed signage to the Owner/Developer and to the City of Rancho Cordova for approval prior to the installation of any signage. The use of professional environmental graphic designers and professional signage companies to determine design detailing and sign placement is highly encouraged. Deviation from these Guidelines will only be considered if the overall purpose is to exceed the quality standards set forth herein. The Guidelines and requirements for the submittal process is detailed in the section "Signage Review, Approvals/Permits and Installation".

ITEM 18.1.

Review, Approvals, Permits, Installation

General

All signage shall be reviewed for conformance with these Guidelines and overall design quality. Approval or disapproval of signage submittals shall remain the right of the Owner/Developer and the City of Rancho Cordova.

Landlord Approval

Tenants shall submittal for approval one (1) reproducible copy and three (3) additional copies of detailed signage drawings indicating the location, size, copy layout, materials, colors, illumination and method of attachment. At least one (1) drawing of the signage must be in color. Provide materials and color samples if requested by the Owner/Developer. The plans must include the building elevation, the location of signage on the building, a site plan indicating the location of the Tenant within the project, and construction specification and details of the proposed signage.

If the plans submitted to the Owner/Developer are not acceptable or require revisions, they must be resubmitted unless they are approved “with conditions”.

After plans are approved by the Owner/Developer, one (1) set of the approved submittal shall be retained by the Owner/Developer, one (1) set of the approved submittal shall be returned to the Tenant, and two (2) sets of the approved submittal shall be submitted to the City of Rancho Cordova by the Tenant.

City of Rancho Cordova Approval

Four (4) sets of plans, including the stamped and approved set from the Owner/Developer, are to be submitted to the City of Rancho Cordova Building Division. All mounting details for signage must be submitted to this department. All electrically illuminated signage shall require an electrical permit.

Permits

All permits for signage and their installation required by the City of Rancho Cordova shall be obtained by the Tenant or its representative at Tenant’s expense prior to installation.

Installation

All signage shall be constructed and installed at Tenant’s expense. Tenants shall be responsible for the installation and maintenance of their signage.

ITEM 18.1.

General Provisions

Signage must be constructed and installed to meet or exceed all applicable codes and City requirements.

Tenants may utilize standard corporate logos and/or prototypical signage graphics, subject to the approval of the Owner/Developer and the City of Rancho Cordova.

All electrical signage shall bear the Underwriters Laboratories (UL) label of approval.

All exterior signage shall be secured by concealed fasteners, unless attachments make an intentional statement. All raceways, transformers, electrode boxes, switches, wiring, conduit and access hatches shall be concealed. Wall signs shall be attached directly to the lease space to which they refer.

Tenant's electrified signage shall be connected to the Tenant's house panel and controlled by a time clock or energy management system. Signage shall be illuminated from dusk to 1:00 am at a minimum.

All penetration of the building structure required for signage installation shall be neatly sealed and water tight. Color and finish of attachments and sealants shall match adjacent exterior finishes.

Logo and letter heights, where specified shall be determined by measuring the normal capital letter of a font exclusive of swashes, ascenders and descenders. See page 8 and 10 regarding the calculation of the signage area.

Notwithstanding the maximum square footages specified for copy area allowances, sign and typography in all cases shall appear balanced and in scale within the context of the sign space and the buildings as a whole. Thickness, height, and color of sign lettering shall be visually balanced and in proportion to other signs on the building.

All sign fabrication work shall be of excellent quality. Surfaces of all signage are intended to be flat without bulges, oil-canning or other deformities. Any seams on signage faces should be finished smooth. All logo images and type styles shall be accurately reproduced. The Owner/Developer reserves the right to reject any fabrication work deemed by the Owner/Developer to be below standard.

General Provisions

Sign Removal or Replacement. When a sign is removed or replaced, all brackets, poles, and other structural elements that support the sign shall also be removed. Affected building surfaces shall be restored to match the adjacent portion of the structure.

The minimum setback distance for signs shall be measured from the back of the public right-of-way, unless an encroachment permit is granted.

Location of Building Signs. Building signs may be located along any frontage of a building that faces directly onto a public right-of-way or an internal circulation path of the site. Orientation of signs such that they face directly onto residential property is to be avoided and is allowed only when there is no practical alternative and the visibility of the sign from the residence is minimized. Building-mounted signage on multi-story buildings shall be integrated into the building architecture and shall not be installed in a manner that results in the sign either extending above the roofline or appearing as such.

ITEM 18.1.

Allowed Permanent Sign Standards

The following table lists the development standards for all on-site permanent signs. These regulations are based on use type, rather than by zoning district, except as otherwise described herein. Only those signs that are permitted are listed. All signs require zoning clearance prior to construction/installation, unless otherwise exempted.

Sign Type		Maximum Number Permitted	Maximum Area	Maximum Height	Illumination Allowed	Minimum Setback
Commercial Uses						
Building-Attached Signs	All types	No Max	< 50 ft from ROW: 2:1 ≥ 50 ft from ROW: 3:1	Not extending above the roofline of the building	Yes	
Freestanding Signs for Individual Buildings Not Part of an Integrated Development	Monument only	1 Per Project Entrance	50 sf	10 ft	Yes	10 ft
Freestanding Signs for Integrated Developments	Monument only	1 Per Project Entrance	150 sf/sign	10 ft	Yes	10 ft
Multifamily Dwellings and Complexes						
Building-Attached Signs	All types	1 Per Entrance	24 sf	Not extending above the roofline of the building	Yes	
Freestanding Sign	Monument only	1 Per Entrance	24 sf	6 ft	Yes	10 ft

ITEM 18.1.

Electronic Message Signs

Provisions of this section apply to the following sign types as defined in this chapter:

1. Video display signs.
2. Electronic graphic display signs.
3. Time and temperature signs.

Signs are permitted in any zoning district and must be located a minimum distance of 100 feet from an abutting residential district boundary.

An electronic sign(s) is limited to a maximum of 32 square feet per site and shall be included as part of the total sign area allowances established on page 8.

Sign must be located on the site of the use identified or advertised by the sign.

Audio speaker or any form of pyrotechnics are prohibited in association with any electronic message signs.

Illumination levels shall be regulated such that the illumination is appropriate to the time of day through the use of such means as light meters and programmed illumination regulation or LEDs that are designed to limit the spread of light. Dimmer controls that are automatically responsive to surrounding light levels are highly encouraged.

Time and Temperature Signs. A time and/or temperature sign does not count toward the otherwise applicable limits as to number and size of signs for the property on which it is located, provided:

Maximum Area and Height: The sign shall have a maximum area of 36 square feet and shall comply with the height requirements established on page 8 for the type of sign (building/freestanding) to which it is attached.

Design: The sign shall be designed in a manner that is architecturally compatible with other signs and with the structure on which it is placed.

Signs are not permitted as fixed attachments to, or as part of the building facade, unless they are not visible in the public right-of-way. Temporary projection onto a building facade is permitted and does not violate this code.

ITEM 18.1.

Allowed Temporary Sign Standards

This section describes standards for temporary on-site signs. All temporary signs require a temporary sign permit prior to their establishment. Temporary commercial signs may include, but are not limited to, signs for special product, sale, or event advertising. All temporary signs must comply with the standards listed in the table below and are subject to the following:

- **Time Duration.** Permitted for a period not to exceed 60 days. No more than two temporary use permits for temporary signs shall be issued for the same property per calendar year.
- **Sign Area.** The allowable combined square footage of all temporary signage on a single property shall not exceed 200 square feet.
- **Illumination.** Temporary signs may not be internally illuminated. Any external illumination of temporary signage shall comply with the illumination standards on page 18.
- **Message.** Temporary signs displaying a commercial message shall be limited to on-site signage only. Off-site signage displaying a commercial message shall not be permitted.
- **Prohibited Signs.** No prohibited signs identified shall be permitted as a temporary sign.

Type	Maximum Permitted	Maximum Area	Maximum Height	Minimum Setback
Commercial, Office, and Industrial Uses, Temporary Building-Attached Signs	2/Establishment	2:1	Roofline	
Commercial, Office, and Industrial Uses, Freestanding Signs	2/Establishment	32 sf/sign	10 ft	5 ft
Commercial, Office, and Industrial Uses, Feather Flags	5/Establishment	50 sf	12 ft	5 ft
Commercial, Office, and Industrial Uses, A-Frame Signs	1/Establishment	8 sf	4 ft	5 ft
Commercial, Office, and Industrial Uses, Inflatables	1/Establishment	100 sf	25 ft	10 ft
Multifamily Dwelling Complexes	3/Complex	< 10 units: 24 sf > 10 units: 32 sf	Roofline; otherwise 10 ft	5 ft

ITEM 18.1.

Prohibited Signs

The signs listed in this section are inconsistent with the purposes and standards of the City of Ranch Cordova development standards

- Moving or rotating signs, except barber poles at barbershops.
- Signs with flashing, moving, or animated illumination (e.g., flashing signs), except barber poles at barbershops and electronic reader boards. Sign content must remain static and not change message or appearance and may only change message or appearance after a minimum period of 60 minutes.
- Any sign displaying any obscene matter.
- Signs located within the clear vision triangle at Driveways and Intersections, and any future updates thereto.
- Signs which imitate or resemble official traffic warning devices or signs, that by color, location, content, or lighting may confuse or disorient vehicular or pedestrian traffic, excluding on-site directional signs.
- Portable signs (e.g., A-frame sign), except as permitted as a temporary sign with a temporary use permit as provided on page 10.
- Temporary signs, except when a valid temporary use permit has been issued or as otherwise exempted.
- Inflatable or lighter-than-air devices (e.g., balloon sign) of any kind when attached or secured from the ground or to any object on the ground, except when a valid temporary use permit has been issued.
- Portable reader board advertising devices which are reader board signs affixed with wheels so as to make them moveable signs.
- Signs projecting over roofs and roof signs, except where specifically provided for under the provisions of signs attached to buildings.
- Signs projecting from buildings, except where provided for in a special sign district ordinance or otherwise specifically provided for.
- Banners, except when allowed through a temporary use permit or a grand opening event as described on page 10.

ITEM 18.1.

Prohibited Signs

- Pennant flags and string pennant flags.
- Wind signs.
- Vehicle signs (large).
- Video display signs, except as provided for on page 9.
- Digital freeway signs.
- Electronic message and graphic display signs.
- Signs with fluctuating illumination, including any changes in light intensity or use of intermittent, strobe, or moving light that does not fall under the definition of another sign.
- Any other advertising device attached to a building, fence, pole, or vehicle on display not specifically mentioned, unless otherwise provided for in this code.
- Any sign in the public right-of-way unless otherwise permitted in this code or by the public works director (e.g., encroachment permit).
- Signs on portions of a structure exempted from the height requirements when said features exceed the height limit of the underlying zone.
- Pylon signs.
- Pole signs.

ITEM 18.1.

Development Standards

A-Frame Signs. A-frame signs may be permitted with a temporary use permit and subject to the standards in the table on page 10 and the following:

- Shall only contain information and advertising for the establishment placing the sign.
- Shall not be located within the public right-of-way, clear vision triangle, required path of travel, parking spaces, drive aisles, and landscape planters, and shall not block building entries or emergency exits.
- Shall have a locking arm or other device to stabilize the structure.
- Shall be displayed only during the regular business hours of the establishment.
- Shall not be illuminated.
- Shall be made of sturdy material not susceptible to fading or damage from use and weather. The use of paper or cloth is not permitted unless located within a glass or plastic enclosure.

Awning and Canopy Signs. Awning or canopy signs may be permitted only as an integral part of the awning or canopy to which they are attached or applied. Awning and canopy signs shall be regularly cleaned and kept free of dust and visible defects.

Blade/Bracket Signs. All signs projecting over walks, halls, corridors, passageways, or aisles shall be installed in compliance with the Handicapped Access Regulations.

Building-Attached Signs. Building-attached signs (e.g., wall signs, channel letter signs) shall comply with the following development standards:

- Location. The sign shall not be placed to obstruct any portion of a window, doorway, transom, or other architectural detail.
- Maximum Area and Height. The sign shall not project above the edge of a structure and shall comply with the height requirements established in the table on page 8.

ITEM 18.1.

Development Standards

Freestanding Signs

- **Design.** The mass/scale of a freestanding sign shall be consistent with the overall design of the building. The design and placement of the sign shall not interfere with the required clear vision triangle.
- **Landscape Requirements.** Landscaping shall be provided at the base of the supporting structure equal to twice the area of one face of the sign. For example, 50 square feet of sign area requires 100 square feet of landscaped area.
- **Construction.** Only monument signs are permitted types of permanent freestanding signs in the city. Signs constructed with exposed metal poles that are not architecturally integrated into the design of the sign are considered pole signs and are prohibited. Freestanding signs may be constructed with poles as a substructure; provided, that the poles are covered with architectural cladding or coverings so they appear to be architecturally integrated.

Projection from Wall. The sign shall not project from the surface upon which it is attached more than required for construction purposes and in no case more than 18 inches.

ITEM 18.1.

Measurement of Sign Area

Collective Sign Area. The total sign area allowed herein for each sign type may be distributed among the maximum number of signs permitted for that sign type. For example, the total allowed area for wall signs for a particular establishment may be distributed amongst the maximum number of wall signs allowed for that same establishment.

Sign Area Allowance. Allowable sign area is either a set square footage per establishment or is based on a ratio of sign area to primary building frontage. Where a ratio is described, it applies up to the listed maximum sign area.

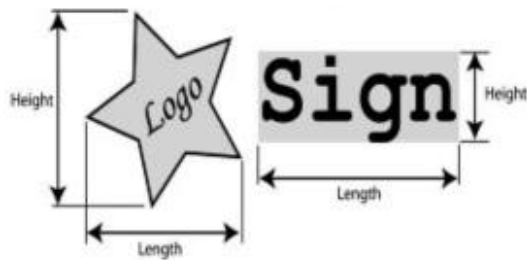
- **General:** When the sign is composed of letters applied to the building without a distinctive background (e.g., channel letters), the area of the sign may be measured by the height of the letters times the length of each line of letters and may be computed at 75 percent; otherwise, the area of the sign shall be measured to the outside perimeter of the sign, including the area of any voids within a simple bounding perimeter.
- **Awning or Canopy Signs:** Sign copy which is applied to an awning or canopy shall be computed at 100 percent of the area within a single rectangle enveloping the sign copy
- **Freestanding Signs:** Freestanding signs are to be computed as total height by the total length of the sign or signs for one side for double-faced signs, excluding framework of separate single wood post or masonry column and single wood or masonry beam. The base of a monument sign is not part of the sign.
- **Three-Dimensional Objects:** Where a sign consists of one or more three-dimensional objects (e.g., balls, cubes, clusters of objects, sculpture, or statue-like trademarks), the sign area shall be measured at their maximum projection upon a vertical plane, as viewed from a position in the public right-of-way which produces the largest visual projection. Such area contributes to the overall allowable sign area for the development type.

ITEM 18.1.

Measurement of Sign Area

The following exhibits illustrate the methods of determining maximum square footages for copy area allowances. Logo and letter heights will be determined by measuring the normal capital letter of a font exclusive of swashes, ascenders and descenders. Copy area is calculated by multiplying height (y) times width (x) of single elements. Multiple element areas are added together for a total aggregate copy area.

General Sign Area



Awning or Canopy Sign Area



Freestanding Sign Area



ITEM 18.1.

Maintenance of Signs

All transformers, equipment, programmers, and other related items shall be screened and/or painted to match the building or shall be concealed within the sign.

All permanent signs shall be constructed of quality, low-maintenance materials such as metal, concrete, natural stone, glass, and acrylics. Techniques shall be incorporated during construction to reduce fading and damage caused by exposure to sunlight or degradation due to other elements.

All signs shall be constructed in compliance with any applicable building, electrical, or other code in effect at the time of construction or maintenance, with particular respect to wind and seismic loads and overturning moment.

All freestanding signs that incorporate lighting shall have underground utility service.

Signs shall be cleaned, updated, and/or repaired as necessary to maintain an attractive appearance and to ensure safe operation of the sign. Unacceptable sign conditions include broken or missing sign faces, broken or missing letters, chipped or peeling paint, water damage, missing or inoperative lights, exposed mechanical or electrical components, and missing or broken fasteners. Failure to respond to a written request from the city to perform maintenance work shall result in revocation of the sign's permit or status as exempt from permit, subject to the appeal provisions of this code.

All temporary signs and banners shall be made of a material designed to maintain an attractive appearance for as long as the sign is displayed.

All illuminated signs shall be of such intensity or arranged in such a manner so as to avoid unreasonable glare for abutting properties or vehicular traffic.

Illumination of Signs

The artificial illumination of signs, either from an internal or external source, shall be designed to minimize negative impacts on surrounding rights-of-way and properties. The following standards shall apply to all illuminated signs:

- External light sources shall be directed and shielded to limit direct illumination of an object other than the sign.
- The light from an illuminated sign shall not be of an intensity or brightness that will create glare or other negative impact on residential properties in direct line of sight to the sign.
- Unless otherwise permitted by another provision of this chapter, signs shall not have blinking, flashing, or fluttering lights, or other illumination devices that have a changing light intensity, brightness, or color, unless otherwise allowed as an electronic message sign.
- Colored lights shall not be used in a manner so as to be confused with traffic control devices.
- Reflective type bulbs and incandescent lamps that exceed 15 watts shall not be used on the exterior surface of signs so that the face of the bulb or lamp is exposed to a public right-of-way or adjacent property.
- Light sources shall utilize energy-efficient fixtures to the greatest extent possible.

ITEM 18.1.

Sign Program

Type A: Project ID and Project Component ID Location Plan

- A. Corner Project Monument Sign
- B. Multi-Tenant Monument Signs
- C. Project Identification Monument Signs
- D. Project Identification Monument Signs

Type B: Tenant Signage

- A. Major Tenants (above 20,000 s.f.)
- B. In Line Tenants (under 20,000 s.f.)
- C. Satellite Pad Food Service Tenant with Drive-Thru Component
- D. Gasoline Station Monument Sign

Sign Type A: Project ID and Project Component ID Location Plan



- A. Corner Project Monument Sign
- B. Multi-Tenant Monument Signs
- C. Gasoline Station Monument Sign
- D. Project Identification Monument Signs
- E. Project Identification Monument Signs

ITEM 18.1.

Sign Type A: A. Corner Project Monument Sign

Configuration: Metal siding over CMU base with stone veneer.

Location: Zinfandel Drive and Bear Hollow Drive

Lighting: Mesh reflector standoffs to match each letter and internally illuminated boxes

Overall Height: 7'-0"

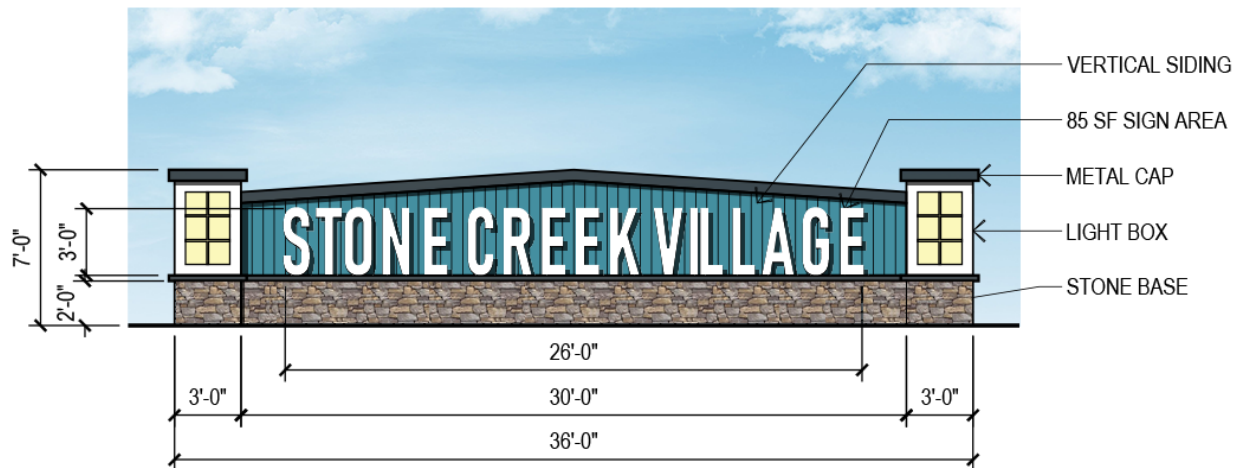
Overall Width: 36'-0"

Letters:

Height: 3'-0"

Width: 26'-0"

Quantity: 1



ITEM 18.1.

Sign Type A: B. Multi-Tenant Monument Signs

Configuration: Cultured stone base, stucco, finish wall with architectural metal panel accent.

Location: Along Zinfandel Drive and Bear Hollow Drive where shown on location plan.

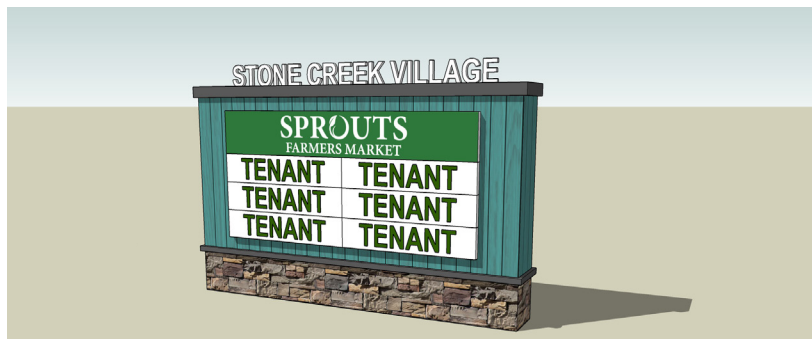
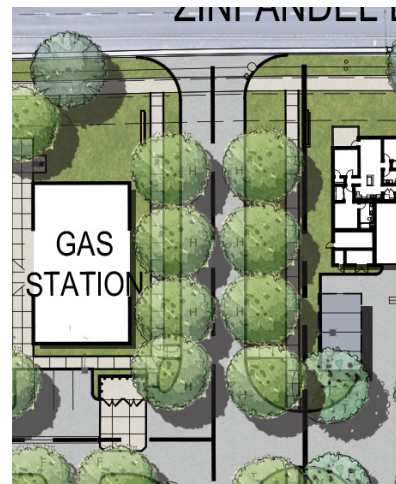
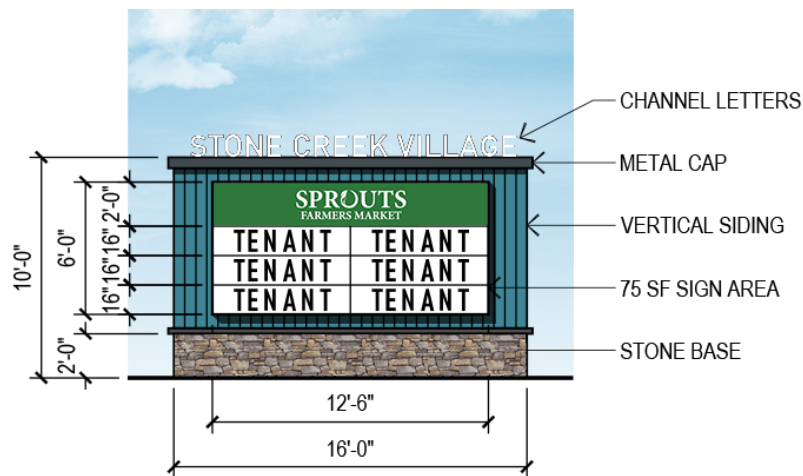
Tenant Lighting: Internally illuminated.

Overall Height: 10'-0"

Overall Width: 16'-0"

Project and Tenant Identification:

Height:	6'-0"
Width:	12'-6"
Maximum Sign Area:	25 S.F.
Maximum Letter Height:	2'-0"
Quantity:	7 EACH SIDE



ITEM 18.1.

Sign Type A: C. Gasoline Station Monument Sign

Configuration: Cultured stone base, stucco, finish wall with architectural metal panel accent.

Location: Along Zinfandel Drive where shown on location plan.

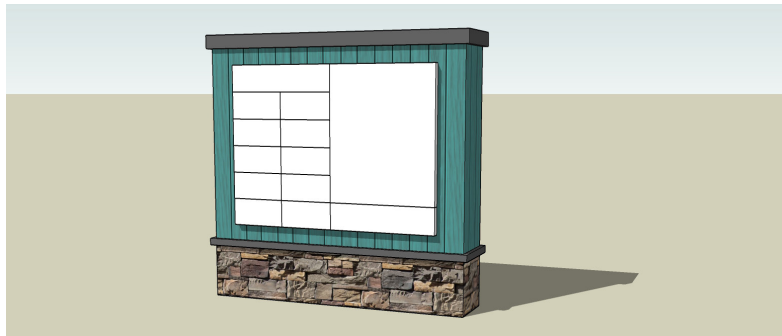
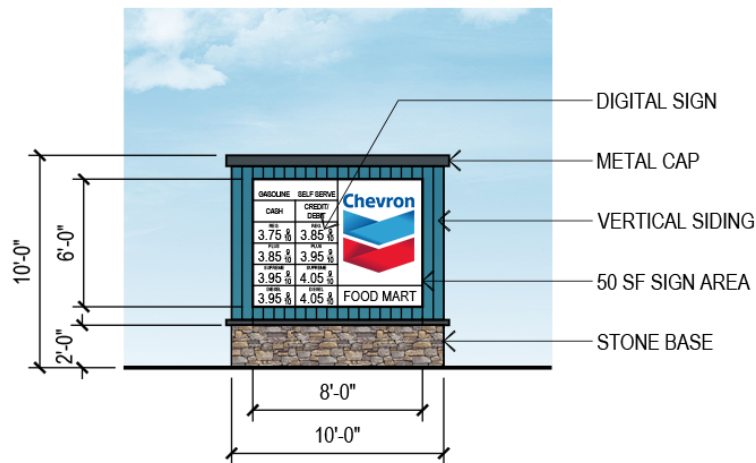
Tenant Lighting: Internally illuminated.

Overall Height: 10'-0"

Overall Width: 10'-0"

Project and Tenant Identification:

Height:	6'-0"
Width:	8'-0"
Maximum Sign Area:	25 S.F.
Maximum Digital Sign Area:	25 S.F.
Quantity:	1 EACH SIDE



ITEM 18.1.

Sign Type A: D. Project Identification Monument Signs

Configuration:

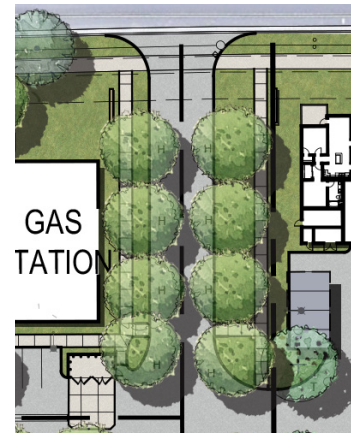
Location: Along Zinfandel Drive where shown on location plan.

Lighting:

Overall Height: 6'-0"
Overall Width: 10'-0"

Project and Tenant Identification:

Height: 6'-0"
Width: 12'-0"
Maximum Sign Area: 32 S.F.
Maximum Letter Height: 24"
Quantity: ONE EACH SIDE



STONE CREEK VILLAGE

ITEM 18.1.

Sign Type A: E. Project Identification Monument Signs

Configuration:

Location: Along Zinfandel Drive and Spoto Drive where shown on location plan.

Lighting:

Overall Height: 6'-0"
Overall Width: 10'-0"

Project and Tenant Identification:
Height: 6'-0"
Width: 12'-0"
Maximum Sign Area: 32 S.F.
Maximum Letter Height: 24"
Quantity: ONE EACH SIDE



STONE CREEK VILLAGE

Sign Type B: Tenant Signage

- A. Major Tenant Above 20,000 s.f.
- B. In-Line Tenants Under 20,000 s.f.
- C. Satellite Pad Food Service Tenant with Drive-Thru Component
- D. Gasoline Station with Canopy

ITEM 18.1.

Sign Type B: A. Major Tenant Above 20,000 s.f.

Configuration: Internally illuminated dimensional letters or logo mounted directly to the wall.

Location: Primary Tenant building façade.

Lighting: Externally/internally illuminated.

Primary Entry Sign Element: 10'-0" maximum high letters/logo with a maximum area of 350 sf.

Major Tenants above 20,000 s.f. may be permitted secondary signs not to exceed the parameters of the primary sign. Tenant shall submit separate application to the City of Rancho Cordova.



ITEM 18.1.

Sign Type B: B. In-Line Tenants Under 20,000 s.f.

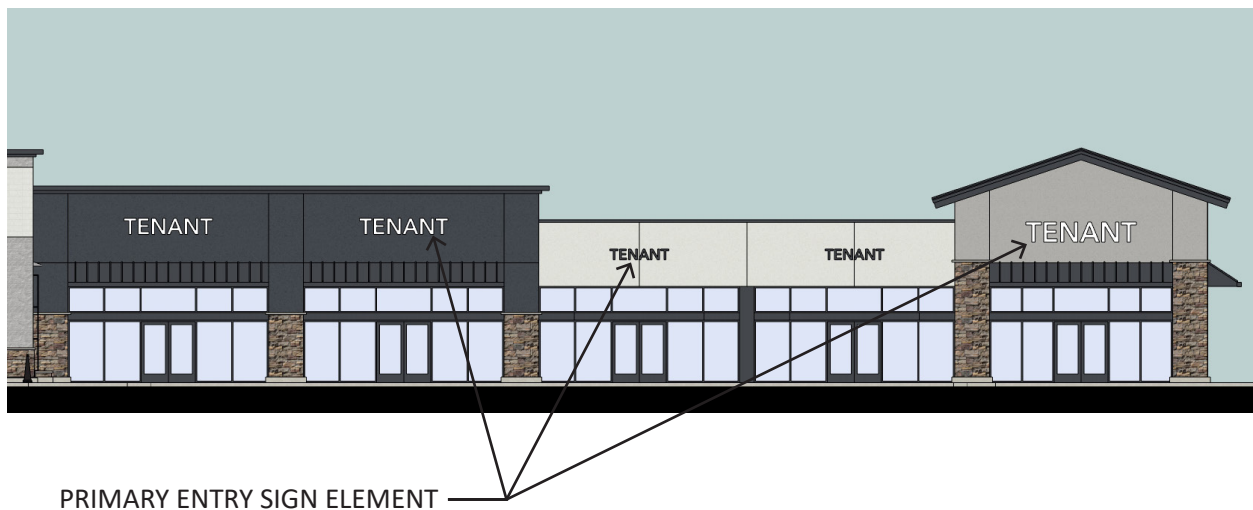
Configuration: Internally illuminated dimensional letters or logo mounted directly to the wall.

Location: Primary Tenant building façade.

Lighting: Internally illuminated.

Primary Entry Sign Element: 3'-0" maximum high letters/logo with a maximum area of 200 sf.

Secondary tenants occupying a corner location may have a second identification sign not to exceed the parameters of the primary sign.



ITEM 18.1.

Sign Type B: C. Satellite Pad Food Service Tenant with Drive-Thru Component

Configuration: Internally illuminated dimensional letters and/or logo, mounted directly to building facade.

Location: Satellite Pad building facades.

Lighting: Internally illuminated

Building Signage: 24" maximum high letters/logo. Width not to exceed 200% of the sign width with a maximum aggregate area not-to-exceed 150 s.f. per building façade. Corporate logos may exceed letter height to a maximum of 4'-0".

Quantity: 4 maximum (one per building elevation)

Secondary Sign Element: Freestanding sign. Sign area not to exceed 50 sf.

Height: 10'-0" max.

Width: 2'-0" max.

Quantity: 5 per pad

Menu Board: Internally illuminated menu board, single-faced. Menu board size is not to exceed 50 sf.

Height: 6'-0" max.

Width: 8'-0" max

Quantity: 2 max (One menu and one pre-order board)

ITEM 18.1.

Sign Type B: D. Gasoline Station With Canopy

Configuration: Internally illuminated dimensional letters and/or logo, mounted directly to building facade.

Location: Gasoline station building facade.

Lighting: Internally illuminated

Building Signage:	3'-0" maximum high letters/logo with a maximum area of 200 sf.
Quantity:	4 maximum (one per building elevation)

Canopy Signage:	3'-0" maximum high letters/logo with a maximum area of 200 sf.
Quantity:	4 maximum (one per canopy elevation)

ITEM 18.1.
Conditions of Approval

ATTACHMENT 3
Exhibit B to the Resolution

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification</u> (date & Signature)
General Conditions					
1.	The approved entitlement is for a Tentative Parcel Map (TPM), Tentative Subdivision Map (TSM), Major Design Review (DR), and Unified Sign Program (USP) for Stone Creek Village as described in the City Council staff report dated October 18, 2021 and attached project plans (<u>Exhibit A</u>) with the conditions herein, for project number DD10072.	Project Description	On-Going	Planning	
2.	The Applicant shall hold harmless the City, its Council Members, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	General	On-Going	Planning	
3.	Any future alteration to the buildings, change in use, intensification of the site, or modification to the parking and landscaped area must be reviewed by the City to ensure compliance with all local, state, and federal regulations. Minor modifications that are found to be in substantial conformance with the approved plans such as colors, plant materials, or minor lot line adjustments, may be approved administratively. Major modifications shall be approved by the applicable decision-making body.	General	On-Going	Planning/ Building /Public Works	
4.	Applicant/Developer shall not carry a negative account balance with the City for the processing of the project. If a negative account balance occurs, it will be the developer's responsibility to pay the balance due, in order to avoid delays in the processing of future permits or recordation of maps. Please email the Finance Department at billings@cityofranchocordova.org for the status of your account with the City.	General	On-Going	Finance	

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Exhibit B to the Resolution

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
5.	Applicant shall be responsible for all damage to City streets associated with construction of the project and shall repair any damage as soon as possible.	City Street Repair	On-Going – Prior to Acceptance of Improvement Plans	Public Works	
6.	SASD Design Standards and Specifications require minimum 6-inch lower laterals for non-residential properties.	Design Standards	On-Going	Sacramento Area Sewer District	
7.	SMUD has existing underground 12kV facilities along Bear Hollow Dr., Zinfandel Dr., and Spoto Dr. that will need to remain. The Applicant shall be responsible for maintaining all CalOSHA and State of California Public Utilities Commission General Order No. 128 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation.	Existing Underground Facilities	On-Going	SMUD	
8.	SMUD reserves the right to use any portion of its easements on or adjacent to the subject property that it reasonably needs and shall not be responsible for any damages to the developed property with said easement that unreasonably interferes with those needs.	SMUD Easements	On-Going	SMUD	
9.	Graffiti, when present, shall be abated by Owner within 24 hours of discovery in accordance with Rancho Cordova Municipal Code, Ch. 6.120.	Graffiti	On-Going	RCPD	
10.	Project signage shall be compliant with the approved Unified Sign Program titled “Stone Creek Village: Signage Guidelines”. All signage shall still obtain all required permits from the building and safety department.	Signage	On-Going	Planning	
11.	Future development of Pad 1 Building shall acquire a Design Review Entitlement for the building prior to construction and any applicable use permits once a tenant is determined.	Additional Entitlements	On-Going	Planning	

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		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
12.	Future development of the gas station shall acquire a Design Review Entitlement for the building and Conditional Use Permit for the use, prior to construction and any additional applicable permits required prior to operation.	Additional Entitlements	On-Going	Planning	
13.	This project shall also comply with all applicable Villages of Zinfandel Special Planning Area requirements and conditions. This includes all applicable conditions of approval, mitigation measures, and financial obligations included ZSPA and related project approval documents, as appropriate.	Villages of Zinfandel Special Planning Area	On-Going	Planning	
14.	Applicant shall add additional signage to the loading dock area to alert drivers that trucks that are loading and unloading are not able to idle and must be shut off for the duration of their deliveries.	Noise Study Requirements	On-Going	Planning	

Prior to Recordation of the Final Map

15.	The Tentative Parcel Map and Tentative Subdivision Map approval is valid for three years from the date of City Council approval, unless an extension of time is subsequently approved per Government Code Section 66452.6(e), unless extended by the terms of a Development Agreement.	Subdivision	Three years, commencing with the date of approval.	Planning/ Public Works	
16.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the project's stormwater drainage and flood protection system. This may be accomplished through annexation to the City's Stormwater Utility Fee District, or other financial mechanism as may be proposed and provided by the Property Owner for the same purpose of providing a funding mechanism to fund the operation and maintenance of the Project's stormwater drainage and flood protection system. Costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs in the amount of \$7,000 per annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition	Stormwater Drainage and Protection System	The annexation shall occur prior to the recordation of any small lot final map. The Annual fee commences when a building permit is issued	Public Works	

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		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
	of approval.				
17.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the fair share of existing and all new community places and neighborhood greens as required by the City's Open Space Standards. This annexation is only applicable to the single family portion of the project. This may be accomplished through annexation to the City's Community Facilities District No. 2018-1 (Maintenance of Community Places and Neighborhood Greens), or other financial mechanism as may be proposed and provided by the Property Owner for the same purpose of providing a financial mechanism to fund the operation and maintenance of the Project's public improvements related to community places and neighborhood greens. Costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs of the CFD annexation in the amount of \$5,000 per annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.	Community Places and Neighborhood Greens	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued.	Public Works	
18.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the fair share of existing and all new public improvements associated with the project including, but not limited to, streets, bridges/culverts, traffic signals, traffic signs, striping and legends, ITS operations, streetlights and safety lights, and public frontage and median landscape improvements. This may be accomplished through annexation to the City's Communities Facilities District No. 2008-1 (Street Lighting and Road Maintenance). All costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs of the CFD annexation in	Public Improvements	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued	Public Works	

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		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
	the amount of \$5,000 per annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.		Prior to the issuance of any building permit		
19.	The Landowner shall support the annexation of the Project into the Police Services CFD and cover Landowner's fair-share costs of the CFD annexation, not to exceed \$7,000 for the Property. City agrees that the CFD will provide that on lands designated for all residential land use categories, the base year Police Special Tax shall be \$450.00 annually per residential dwelling unit, including multi-family units. The special tax imposed by the CFD 2013-2 will be payable on a parcel within the Property only after a building permit has been issued by City for the construction of a building on that particular parcel, and there will be no undeveloped land tax imposed by the CFD. The CFD shall further provide that on each July 1 commencing July 1, 2012, the Police Special Tax shall be escalated by the increase, if any, in the City CPI Index. However, in no event shall the tax per parcel for any fiscal year be less than the amount established for the prior fiscal year. The CFD shall specify that the Police Special Tax shall commence being payable annually following the issuance of a building permit for each parcel subject to the Police Special Tax. This annexation is not applicable to the non-residential portion of the project.	Police Services CFD	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued	Finance	
20.	Developer's obligation to dedicate 0.61 acres of open space land to the City shall be satisfied by the payment of in-lieu fees based on an appraisal to be provided by property owner and approved by the City.	Open Space Dedication	Prior to recordation of Final Map	Public Works	
21.	Dedicate public utility easements, for the installation and maintenance of water, gas, sewer, drainage facilities, traffic control devices and dry utilities as shown on the tentative map.	PUE Dedication	Prior to Recordation of Final Map	Public Works	

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Exhibit B to the Resolution

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
22.	The final map shall show easements or other mapped provisions for the placement of centralized mail delivery units.	Mail Easements	Prior to Recordation of Final Map	Public Works	
23.	A note shall be placed on the final map stating that "Reciprocal access and parking between parcels shown hereon shall be granted/reserved prior to the sale and/or reconveyance of said parcels.	Reciprocal Access and Parking	Prior to Recordation of Final Map	Public Works	
24.	Enter into a Subdivision Improvement Agreement and provide a performance bond and labor and material bond.	Subdivision Improvement Agreement	Prior to Recordation of Final Map	Public Works	
25.	Provide Fire Access Agreement between all parcels connected to and served by fire access. Fire access Agreement shall be recorded with the Public Records Office having jurisdiction.	Fire Access Agreement	Prior to Recordation of the Map	Sacramento Metro Fire District	
26.	Provide Fire Access Roadway Maintenance Agreement (RMA) between all parcels connected to and served by the fire access roadway. The fire access Roadway Maintenance Agreement shall be recorded with the Public Records Office having jurisdiction. The roadway maintenance agreement shall include the following: a) Provisions for the necessary repair and maintenance of the roadway surface. b) Removal of vegetation overgrowing the roadway and infringing on the roadway clear vertical height of thirteen feet six inches (13' 6") or width of twenty feet (20'). c) Provisions for the maintenance, repair, and/or replacement of NO PARKING – FIRE LANE signage or striping. d) Provision for the necessary repair and maintenance of vehicle and pedestrian access gates and opening systems.	Fire Access Roadway Maintenance Agreement	Prior to Recordation of Map	Sacramento Metro Fire District	

ITEM 18.1.
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Exhibit B to the Resolution

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement/ Monitoring</u>	<u>Verification (date & Signature)</u>
27.	Any necessary future SMUD facilities located on the Applicant's property shall require a dedicated SMUD easement. This will be determined prior to SMUD performing work on the Applicant's property.	SMUD Easements	Prior to Approval of Final Map	SMUD	
28.	In the event the City requires an Irrevocable Offer of Dedication (IOD) for future roadway improvements, the Applicant shall dedicate a 12.5-foot public utility easement (PUE) for overhead and/or underground facilities and appurtenances adjacent to the City's IOD.	Public Utility Easement	Prior to Approval of Final Map	SMUD	
29.	The Applicant shall dedicate a 12.5-foot public utility easement for overhead and/or underground facilities and appurtenances adjacent to all public street rights-of-ways.	Utility Easement	Prior to Approval of Final Map	SMUD	
30.	The Applicant shall dedicate any private drive, ingress and egress easement, (and 10-feet adjacent thereto) as a public utility easement for (overhead and) underground facilities and appurtenances. All access roads shall meet minimum SMUD requirements for access roads.	Access Roads	Prior to Approval of Final Map	SMUD	
31.	Based on an anticipated overall population of 610 residents, the Stone Creek Village Subdivision is required to provide 3.1 acres of Quimby Parkland to the Cordova Recreation and Park District (CRPD). The Developer shall provide the Quimby Park Land as follows: In-lieu fees Pay in-lieu fees as described above and, if applicable, in accordance with the City's Municipal Code.	In-lieu Fee	Prior to Recordation of the Final Small Lot Map that contains the park parcel(s)	Community Development /CRPD	

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32.	The developer does not propose new parks or the transfer of any parcel to the Cordova Recreation and Park District in this project; therefore, a Park Development Agreement (Park DA) is not required. However, the developer does propose modification to an adjacent trail corridor. The developer shall submit trail corridor modification plans to (CRPD) for review and approval. All costs to prepare, review, approve and construct the trail corridor modifications shall be borne by the Developer. The design and improvement of all trail corridor modifications shall be prepared by a licensed landscape architect with all subconsultants found to be mutually acceptable to the District and the developer. The landscape architect of record shall be required to authorize all changes to the approved improvement plans in coordination with the District. The landscape architect of record and all appropriate subconsultants shall provide as-constructed plans and certify that the project has been constructed per the approved plans, as amended.	Park Development Agreement (Park DA)	Prior to Recordation of the First Final Large Lot Map	Public Works/ CRPD	
33.	The developer shall verify the Stone Creek Village project is within CRPD's Community Facilities District (CFD) No. 01-01 Villages of Zinfandel and is subject to the existing assessment formed under the provisions of the Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311, et seq.) for the purpose of funding developments' fair share of the cost of maintaining the neighborhood parks, adjacent street frontage Improvements, and the Community Parks utilized by the project residents.	Community Facilities District (CFD)	Prior to Recordation of the First Final Large Lot Map	Public Works/ CRPD	
34.	The District shall provide, and the developer shall deliver to City Public Works a certificate from the Cordova Recreation and Parks District stating that all fees as required by the District have been paid and CRPD's CFD No. 01-01 is assessed.	Certificate of Fees Paid	Prior to Recordation any phase of any Final Map	Public Works/ CRPD	

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Prior to Approval of Improvement Plans					
35.	Show the design for a fire access roadway of not less than 20-feet of unobstructed width, 13-feet, 6-inches of vertical clearance, and turning radii of 25 feet inside and 50 feet outside dimension on the improvement plans. The access roadway shall extend within 150 feet of all portions of the exterior walls of the first story of any proposed building. <i>The use of turf-block or grass-crete or similar alternate road surfaces is not approved for installation in fire apparatus access roadways.</i>	Fire Access Roadway	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
36.	Show the design for a minimum of 2 remote fire access roadways. Remote fire access roadways shall be spaces a distance apart that is no less than ½ the diagonal measurement of the overall project site.	Fire Access Roadway	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
37.	Show the design for aerial apparatus access. Aerial apparatus access shall conform to Sacramento Metro Fire Districts, Fire Prevention Standard #3.	Aerial Apparatus Access	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
38.	Show the design for an approved fire apparatus turnaround. The fire apparatus turnaround shall conform to Sacramento Metro Fire Districts, Fire Prevention Standard #3. The fire access turn-around shall be located within 50 feet of the end of the access roadway.	Aerial Apparatus Turnaround	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
39.	Show on the plan how Fire Lanes will be marked. Fire Lane identification shall be provided along the required fire access roadway. Fire Lane identification shall be in accordance with the Sacramento Metro Fire Districts Fire Prevention Standard #3 and the California Vehicle Code. Vehicle parking is prohibited on any street less than 28 feet in width. Vehicle parking is permitted on both sides of streets 36 feet or more in width. Roadway widths shall be measured between the gutter-line or edge of pavement on opposite sides of the road. Identification of fire apparatus access	Fire Lanes	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	

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	roadways may be required on private roads.				
40.	Provide a note on the plan that reads, "Fire apparatus access roads shall be designed and maintained to support the imposed live load of 80,000 pounds, with a maximum axle load of 31,000 pounds, and meet Public Works Standards for roadways. A report, prepared by a registered geotechnical engineer, verifying the ability of the road to bear the required minimum weight, shall be submitted with any plan indicating construction of roadway. Verification of constructed roadway shall be provided by a registered geotechnical engineer prior to final of the project."	Fire Apparatus Access Roads	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
41.	Show the location of the required fire hydrants for this project on the improvement plans. Approved fire hydrants capable of providing the required fire flow for the protection of any and all structures shall be located along the fire apparatus access roadway. The required fire hydrants shall be installed and operational prior to any construction or on-site storage of combustible materials.	Fire Hydrants	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
42.	The minimum required fire flow for the protection of commercial developments is 1,500 gallons per minute (gpm) at a pressure of 20 pounds per square inch (psi) for a two-hour duration.	Fire Hydrants	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
43.	The minimum required fire flow for the protection of residential developments with an area per building not exceeding 3,600 square feet is 1,000 gallons per minute (gpm) at a pressure of 20 pounds per square inch (psi) for a two-hour duration.	Fire Hydrants	Prior to Approval of Improvement Plans	Sacramento Metro Fire District	
44.	Drainage Study: Applicant shall prepare and submit a project specific drainage study that includes but is not limited to: a pre- and post-project drainage analysis of the project impacts, identification of offsite project impacts or required offsite improvements, and identification of proposed connections to the City's Storm Drainage System with adequate supporting	Drainage Study	Prior to Approval of Improvement Plans	Public Works	

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	calculations. The drainage study shall conform to the requirements of the Sacramento City/County Drainage Manual (Volume 2), County of Sacramento Improvement Standards (Section 9), and all other applicable City standards. The drainage study must be developed and stamped by a Professional Engineer and determined by the City to be accurate and adequate.				
45.	Stormwater Quality- Post Construction The improvement plans shall incorporate all applicable post construction stormwater quality measures; including source control (loading docks, waste management areas), treatment control, hydromodification management, low impact development, and full capture trash control measures into the site improvement plans in conformance with the most recent version of the <i>Stormwater Quality Design Manual for the Sacramento Region</i> . The applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan that includes details and sizing calculations of all the proposed post construction stormwater quality measures. In addition, a maintenance covenant is required for all proposed post construction stormwater quality measures, as detailed in Appendix B of the <i>Stormwater Quality Design Manual for the Sacramento Region</i> .	Stormwater Quality	Prior to Approval of Improvement Plans	Public Works	
46.	Stormwater Quality- During Construction: SWPPP – the applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) to be executed through all phases of grading and project construction. The SWPPP shall incorporate Best Management Practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. These measures shall be consistent with the City's Improvement Standards and Land Grading and Erosion Control Ordinance. During construction, the applicant shall implement BMPs in accordance with the SWPPP and the City's Improvement Standards.	Stormwater Quality	Prior to Approval of Improvement Plans	Public Works	

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	Advisory Condition: Construction General Permit The project applicant shall file a Notice of Intent (NOI) to obtain coverage under the <i>National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction And Land Disturbance Activities</i> (Construction General Permit). Permits are issued by the State Water Resources Control Board.				
47.	The SWPPP for the site shall include a contingency plan for the implementation of a process to remove fine clay sediments prior to discharge to the City of Rancho Cordova's storm drain system and/or Waters of the State (e.g., creeks, rivers) to the satisfaction of the City of Rancho Cordova. A polymer treatment system or comparable process shall be incorporated in the erosion and sediment control plan as part of the improvement plans submittal. This system shall be implemented by qualified professionals with training and proven experience in this field. Such treatment shall be accomplished in a manner that does not pose a toxic threat to fish and other aquatic organisms in receiving waters.	SWPPP Mitigation	Prior to Approval of Improvement Plans	Public Works	
48.	Drainage System Design: The applicant shall submit and obtain City approval of plans and specifications for the construction of public improvements and all grading. The drainage system shall be designed in accordance with the approved Drainage Study to accommodate runoff from the ultimate development and shall meet the City of Rancho Cordova's Improvement Standards, construction standards, and Floodplain Management Ordinances in effect at the time of improvement plans approval.	Drainage System	Prior to Approval of Improvement Plans	Public Works	
49.	All development within the City must comply with the City of Rancho Cordova's Floodplain Management Ordinance. All new structures shall be protected from the 100-year (1 percent) flood event. Certified pad elevations (certified by a registered Civil	Floodplain Management	Prior to Approval of Improvement Plans	Public Works	

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	Engineer or licensed Land Surveyor) shall be set at least one and two tenths foot (1.2') above all sources of 100-year flooding (see Section 9-1 of improvement standards). The overland release path must be shown on the improvement plans and the hydraulic computation must be provided to estimate the flow depths along the overland release paths. The calculations must be in conformance with Section 9-15 of the Improvement Standards.				
50.	Provide a permanent concrete stamp, or other permanently applied message to the satisfaction of the City not including paint, which reads "No Dumping-Flows to Creek" or other approved message at each storm drain inlet.	Concrete Stamps	Prior to Approval of Improvement Plans	Public Works	
51.	All storm drain facilities within private lots shall be privately maintained and shall be clearly labeled as "private" in the improvement plans.	Private Lot Drains	Prior to Approval of Improvement Plans	Public Works	
52.	Traffic control devices shall be designed where needed to the satisfaction of the City Engineer. Traffic control locations will be determined at time of improvement plan submittal.	Traffic Control	Prior to Approval of Improvement Plans	Public Works	
53.	All landscape strips, medians, etc. that contain trees shall be designed to include continuous root barriers. Tree species shall be appropriately sized in their respective planters and approved by the City.	Root Barriers	Prior to Approval of Improvement Plans	Public Works	
54.	All landscape corridor walls shall be designed of masonry construction using graffiti resistant materials. Wall design and materials shall be subject to City's approval and design standards.	Wall Design	Prior to Approval of Improvement Plans	Public Works and Planning	
55.	Civil improvement plans shall not be approved by the City until a complete submittal for accompanying landscaping has been submitted.	Landscape Plan	Prior to Approval of Improvement Plans	Public Works	

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56.	Applicant shall photo-document the condition of adjacent streets, sidewalks and infrastructure to the satisfaction of the Public Works Department.	Photo-Documentation	Prior to Approval of Improvement Plans	Public Works	
57.	Enter into a frontage agreement and bond for construction of public improvements per the approved Public Works plans to the satisfaction of the Public Works Department.	Frontage Agreement	Prior to Approval of Improvement Plans	Public Works	
58.	Number, size, and location of driveways are subject to approval by the Public Works Department.	Driveways	Prior to Approval of Improvement Plans	Public Works	
59.	To obtain sewer service, construction of SASD sewer infrastructure will be required. Current SASD Standards and Specifications apply to any offsite or onsite public sewer construction or modification. These improvements must be shown on the plans. Field modifications to new or existing precast manhole bases are not allowed.	Sewer Infrastructure	Prior to Approval of Improvement Plans	Sacramento Area Sewer District	
60.	SASD requires each building on each lot with a sewage source to have a separate connection to SASD's sewer system. If there is more than one building in any single parcel and the parcel is not proposed for split, then each building on that parcel must have a separate connection to a private onsite sewer line or a separate connection to the SASD public sewer line. These improvements must be shown on the plans.	Sewer Connections	Prior to Approval of Improvement Plans	Sacramento Area Sewer District	
61.	Lower lateral connections to the trunk line on Bear Hollow Drive is not allowed, except at manholes.	Lower Lateral Connections	Prior to Approval of Improvement Plans	Sacramento Area Sewer District	

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62.	The Applicant shall not place any building foundations within 5-feet of any SMUD trench to maintain adequate trench integrity. The Applicant shall verify specific clearance requirements for other utilities (e.g., Gas, Telephone, etc.).	Clearance Requirements	Prior to Approval of Improvement Plans	SMUD	
63.	The Applicant shall provide separate SMUD service points to each parcel to the satisfaction of SMUD.	Service Points	Prior to Approval of Improvement Plans	SMUD	
64.	The Applicant shall locate, verify, and provide a drawing to SMUD identifying all electrical utility infrastructure for the existing structures. If necessary, any existing onsite electrical infrastructure that serves existing structures shall be relocated to the satisfaction of SMUD.	Electrical Infrastructure	Prior to Approval of Improvement Plans	SMUD	
65.	The Applicant shall dedicate and provide all-weather vehicular access for service vehicles that are up to 26,000 pounds. At a minimum: (a) the drivable surface shall be 20-feet wide; and (b) all SMUD underground equipment and appurtenances shall be within 15-feet from the drivable surface.	Vehicular Access	Prior to Approval of Improvement Plans	SMUD	
66.	Applicant will include phasing of development and order of planned construction upon submitting a new service application to SMUD for the initial subdivision phase(s) and/or road improvement backbone project(s).	Phasing	Prior to Approval of Improvement Plans	SMUD	
67.	Development should be phased to start adjacent to existing electrical infrastructure to minimize temporary overhead and/or underground electrical facilities.	Phasing	Prior to Approval of Improvement Plans	SMUD	
68.	Development phases submitted for new service should include all lots fronting streets.	Phasing	Prior to Approval of Improvement Plans	SMUD	

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Prior to Issuance of Building Permit				
69.	Rancho Cordova Police Department has provided the following comments: - Any glass doors should be secured with a deadbolt lock with minimum throw of 1 inch. The outside right should be free moving. - The jamb on all aluminum frame swinging doors shall be so constructed or protected to withstand 1600lbs of pressure in both vertical distance of 3 inches and a horizontal distance of 1 inch each side of the strike, so as to prevent violation of the strike. - Overhead roll-up doors should be so secured on the inside that the lock cannot be defeated from the outside and should also be secured with a cylinder lock or padlock from the inside. - Doors with glass panel and door with glass panels adjacent to the door frame should be secured with burglary-resistant glazing or the equivalent, if double-cylinder deadbolt locks are not installed. - Windows that are capable of being opened should be secured on the inside with a locking device capable of withstanding a force of 300lbs applied in any direction. - Parking lots, driveways, circulations areas, aisles, passageways, recesses, and grounds contiguous to buildings shall be provided with high intensity discharge lighting with sufficient wattage to provide adequate illumination to make clearly visible the presence of any person on or about the premises during the hours of darkness and provide a safe, secure environment for all	Safety & Security	Prior to Issuance of Building Permits	Rancho Cordova Police Department

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	persons, property, and vehicles on site. Such lighting should be equipped with vandal resistant covers. A lighting level of .5 to 1 foot candle minimum, maintained at ground level, is required. A combination of wall and pole mounted fixtures may be used. • All exterior doors should be provided with a light source and should be adequately illuminated at all hours to make clearly visible the presence of any person on or about the premises and provide adequate illumination for persons exiting the building. • Shatter resistant glass or glazing should be used for all exterior-facing windows. • Each premises, while closed for business after dark, should be sufficiently lighted by use of interior night lights. • Wrought iron fencing with a no climb feature should be used to prevent climbing into the lot. • Additional site lights should be installed on the exterior of the building and controlled by photocell and should be left on during hours of darkness or diminished lighting to prevent dark patches for people to hide or sleep.				
70.	The Developer shall pay a Community Renovation Fee in the amount of \$1,247.02 per Single Family unit when each building permit for a residential unit is issued within the project. This fee is not applicable to the multifamily or non-residential portions of the project. The Community Renovation Fee will be adjusted on January 1, 2022 and annually thereafter by the method provided by using the City Construction Cost Index as applied by the City.	Community Renovation Fee	Prior to Issuance of each single-family building permit	Public Works	
71.	The Developer shall pay a Community Places Fee in the amount of \$1,507.70 per Single-Family unit when each building permit for a residential unit is issued within the project. This fee is not applicable to the multifamily or non-residential portions of the	Community Places Fee	Prior to Issuance of each Single-Family building	Public Works	

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	project. The Community Places Fee will be adjusted on January 1, 2022 and annually thereafter by the method provided by using the City Construction Cost Index as applied by the City.		permit.		
72.	Applicant shall submit improvement plans to the satisfaction of the Public Works Department. Improvement plans shall include but shall not be limited to, all streets, water, sewer, storm drain, recycled water, lighting, signage and striping, and other associated facilities for all streets and other public or private areas depicted on the tentative map or tentative map phase.	Improvement Plans	Prior to issuance of the first building permit in a phase	Public Works	
73.	Prior to issuance of the first building permit within a phase: All streets and improvements shown on the approved phasing plan, all streets necessary for access to the proposed homes, associated improvements included in the approved improvement plans, and other infrastructure as necessary for adequate public access and use shall be substantially complete to the satisfaction of the Public Works Department. Prior to occupancy all streets and improvements shown on the approved phasing plan shall be fully constructed and completed to the satisfaction of the Public Works Department.	Street Improvements	Prior to issuance of the first building permit	Public Works	
74.	This project shall pay its fair share for transportation facilities needed to mitigate traffic impacts resulting from the development. This shall be satisfied by payment of the City-wide Transportation Fee as set forth in the City's Transportation Fee ordinance.	Transportation Facilities	Prior to Issuance of Building Permits	Public Works	
75.	The improvement plans shall include modification to the signal configuration at the Zinfandel/Bear Hollow intersection to allow left turns from the existing through lane. The work includes, but is not limited to, modifying the existing concrete median, striping, and signal heads. The work shall be completed to the satisfaction of the Public Works Department prior to the first occupancy in a non-residential parcel.	Signal Configuration Modification	Prior to Issuance of Building Permit	Public Works	

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76.	The Owner must contact Permit Services Unit at PermitServices@sacsewer.com or by phone at (916) 876-6100 to determine if sewer impact fees are due. Fees are to be paid prior to the issuance of building permits.	Sewer Impact Fees	Prior to Issuance of Building Permits	Sacramento Area Sewer District	
77.	All projects are subject to Sacramento Metro Air District rules and regulations in effect at the time of construction.	Construction Regulations	Prior to Issuance of Building Permits	Sacramento Metro Air District	
78.	The Applicant shall meet the following: Civil Site Plans and Architectural Plans shall be submitted and approved prior to Final Building Permit being issued. Fire Sprinkler and Fire Alarm plan shall be <u>submitted</u> prior to Final Building Permit being issued. Please note: The Sacramento Metro Fire District <u>does not</u> allow deferred submittals for Fire Sprinkler or Fire Alarm plans.	Plan Submittal	Prior to Issuance of Building Permits	Sacramento Metro Fire District	
79.	Where a bridge or elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17.	Bridge Construction	Prior to Issuance of Building Permits	Sacramento Metro Fire District	
80.	Residential fire sprinkler plans shall be submitted for review and approval to the Sacramento Metropolitan Fire District for all new one- and two-family dwellings in accordance with the California Residential Code.	Residential Fire Sprinklers	Prior to Issuance of Building Permits	Sacramento Metro Fire	
81.	Certificate of Release plans shall be submitted for review and approval to the Sacramento Metropolitan Fire District for all new one and two family dwellings built on a private fire access road.	Certificate of Release	Prior to Issuance of Building Permits	Sacramento Metro Fire	
82.	Structural setbacks less than 14-feet shall require the Applicant to conduct a pre-engineering meeting with all utilities to ensure property clearances are maintained.	Setbacks	Prior to Issuance of Building Permit	SMUD	

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83.	In the event the Applicant requires the relocation or removal of existing SMUD facilities on or adjacent to the subject property, the Applicant shall coordinate with SMUD. The Applicant shall be responsible for the cost of relocation or removal.	SMUD Facilities	Prior to Issuance of Building Permit	SMUD	
84.	The Applicant shall comply with SMUD siting requirements (e.g., panel size/location, clearances from SMUD equipment, transformer location, service conductors). Information regarding SMUD siting requirements can be found at: https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services	Siting Requirements	Prior to Issuance of Building Permit	SMUD	
85.	No two identical floor plans with the same building elevations within the same master home plan series shall be located directly adjacent to each other, as required by the Rancho Cordova Design Guidelines.	Design Guidelines	Prior to Issuance of Building Permit	Planning	
86.	A concrete path will be provided from the driveway to the garage door and an additional concrete pad area shall be installed by the developer for the storage of garbage receptacles behind the fence line.	Concrete Pathway	Prior to Issuance of Building Permit	Planning	
87.	Property Owner/Developer shall record Covenants, Conditions and Restrictions (CC&Rs) in a form approved by the City that names the City as a third-party beneficiary with rights and without obligation to, enforce the CC&Rs. The CC&Rs shall contain, at a minimum, certain provisions and references to the City's Property Maintenance Code and prohibit the parking of trailers, boats or recreational vehicles in the driveway or on the public street.	Record CC&R's	Prior to 1 st Final Building Permit	Planning	
88.	In order to meet the noise ordinance (Chapter 6.68 of the Rancho Cordova Municipal Code) sound level requirements, the following items shall be constructed as part of the project as recommended in the Environmental Noise Study dated October 7, 2021: A. Noise Barrier at Loading Dock	Noise Mitigation Requirements	Prior to Issuance of Building Permit	Planning	

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	The noise barrier shall be constructed of solid material of at least 3lbs/sq.ft surface weight and located within 4 feet of the truck location along the southwest end of the loading dock. Barrier height must be at least 17 feet tall from the highest part of the loading ramp (refer to Figure 3 in study). The barrier can be a CMU wall. However, sound absorptive treatment is needed on the surface facing the development premises. This can be perforated metal panels with acoustical insulation in the cavity, attached to the CMU or the barrier can be an engineered sound wall. B. Rooftop Equipment Screening Screening should be added to the following rooftop mechanical equipment – RTU-3, RTU-4, and refrigeration CU. By adding screening at these units, RTU-1 will also be screened. RTU-2 in the front of the building will be screened by the building itself (refer to Figure 4 in the study) The length of the screen must be approximately 45 degrees off the farthest corner of the unit (refer to Figure 4 in the study) and the screen height must be at minimum, 2 feet taller than the unit.				
89.	To fund mitigation of impacts by new residents of Stone Creek Village on surrounding parks, Villages of Zinfandel trails and recreation facilities, the developer will pay a Park Development Fee in the amount of Ten Thousand Five Hundred Thirty-Five Dollars and Eighty-Two Cents (\$10,535.82) per Single Family DU and Eight Thousand Two Hundred Ninety-Eight Dollars and Eighty-Eight Cents (\$8,298.88) per multifamily unit. The Park Development Fee will be adjusted on January 1, 2022 and	Park Development Fee	Prior to Issuance of Building Permits	Community Development / CRPD	

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	annually thereafter no later than January 15th by the method provided in City Construction Cost Index (CCI) Index as follows: A “mean” index will be computed by averaging the index for 20 U.S. cities with the index for San Francisco by resort to the October issue of the Engineering News Record magazine Construction Cost Index of the year in which the calculation is being made. An adjustment factor shall be computed by dividing the “mean” index as calculated in subsection (a) of this section by the “mean” index for the previous October. The adjusted Park Development Fee shall be calculated by multiplying the adjustment factor, as calculated in subsection (b) of this Section, by the Park Development and Community Places Fees in place prior to the annual adjustment.				
Prior to Final Inspection					
90.	Approved numbers or addresses shall be placed on all new or existing buildings in such a position as to be easily read from the street or road fronting the property. The minimum size of the numbers shall not be less than six (6) inches and shall be mounted immediately adjacent to a light source and shall also contrast with their background.	Addressing	Prior to Final Occupancy	Sacramento Metro Fire District	
91.	During and upon completion of the installation of the landscaping for the project, the project landscape architect/designer shall certify that the installed landscape complies with the approved plans. Certification shall be accomplished by completion of site visits at key installation milestones. Key milestones at a minimum shall include: rough grade, soil amendment verification, Plant material inspection, irrigation coverage test underdrain installation (as applicable) and final installation. Certification shall include signed site observation reports, photographs and documentation verifying implementation of soil report recommendations. Failure to submit complete and accurate documentation to the Planning Department	Landscaping Certification	Prior to Final building inspection of the first unit	Public Works	

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	will delay final approval/occupancy of the project.				
92.	Upon completion of the installation of the landscaping, the designer shall certify that the landscape complies with all city water conserving landscape requirements. Certification shall be accomplished by completion of a certificate of compliance on a form approved by the director of the city public works department. Failure to submit a complete and accurate certificate of compliance will delay final approval of the project and/or discontinue water service per RCMC 22.180.090. Upon receipt of the certificate of compliance and site inspection from City staff, the landscaping performance bond will be released.	Water Conservation Landscape	Prior to Final Building Inspection	Public Works	
93.	Record drawings of grading and improvement plans (1 full size and 1 half size hard copy), as well as a compact disc containing said plans in AutoCAD and pdf format, and a GIS shape file, or equivalent to the satisfaction of the City Engineer shall be submitted and approved by the Public Works Department.	Drawings of Grading and Improvement Plans	Prior to Final Acceptance	Public Works	
Prior to Granting Final Occupancy					
94.	Grant the fully improved landscaped lots within the phase of construction to the City of Rancho Cordova as shown on the approved tentative map and provide a maintenance entity with an ongoing funding source. The maintenance entity shall be approved and found acceptable by City representatives. Annexation to a current Lighting and Landscape District or a Mello Roos Community Finance District may be possible and is the preferred course of action.	Landscaped Lots	Upon completion of and prior to acceptance of the improvements	Public Works	

ITEM 18.1.
Conditions of Approval

ATTACHMENT 3
Exhibit B to the Resolution

ADVISORY:

1. SMFD: Gates shall be installed in accordance with The County Emergency Access and Barriers Standard. Plan submittal is required prior to installation.
2. SMFD: The Sacramento Metropolitan Fire Districts requirements are not to be construed as abrogating more restrictive requirements by other agencies having jurisdiction. Final acceptance is subject to field approval and completion of required tests.

STONE CREEK VILLAGE

DRAFT DRAINAGE REPORT

LEVEL 4 – TENTATIVE SUBDIVISION MAP

RANCHO CORDOVA SACRAMENTO COUNTY

August 23, 2021

Planning Application Number: DD10072, PDR-2021-016-00
Watershed: Morrison Creek



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LIST OF APPENDICES:

- Appendix A: FEMA FIRM (Panel 06067C0208H & 06067C0209H), Tentative Parcel Map, Tentative Subdivision Map, Site Development Plan, Preliminary Grading Plans, Preliminary Utility Plans, Master Drainage Study Excerpts, Spoto Drive Record Drawing, and Sacramento County Drainage Manual Backup Information
- Appendix B: Drainage Watershed Map (Master Drainage Study Shed Map and Post-Development Conditions)
- Appendix C: Onsite Storm Drain Nolte Flow and 100-Year Sacramento Method Hydraulic Calculations
- Appendix D: Overland Release Map
- Appendix E: Low Impact Development Watershed Maps and Calculations

LIST OF EXHIBITS:

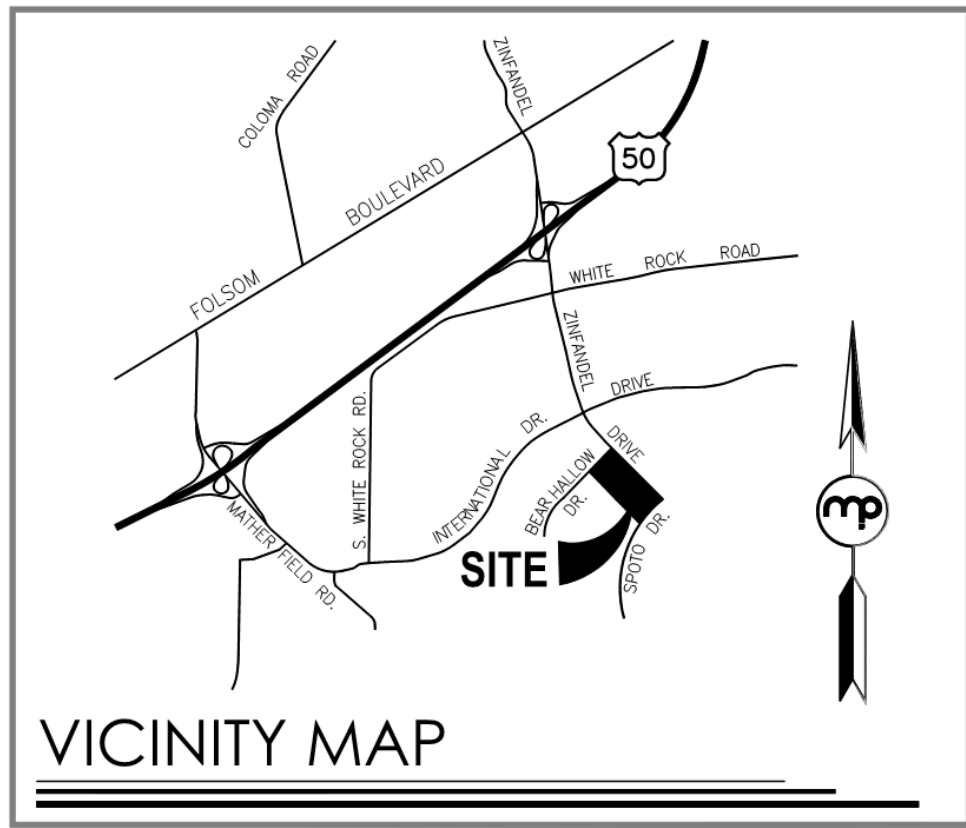
1. Vicinity Map

1. INTRODUCTION

1.1 EXISTING CONDITIONS

The project site is located southeast of Bear Hollow Drive, southwest of Zinfandel Drive, northwest of Spoto Drive, and northeast of an existing bike trail open space and two single family residential subdivisions. The project is on approximately 25.1-acres on APN 072-2360-002. A Vicinity Map is provided below:

Figure 1 – Vicinity Map



1.2 PROJECT DESCRIPTION

The proposed Stone Creek Village project (Project) will include three separate types of phases on approximately 25.1-acres; a 6.0-acre commercial phase, 6.3-acre multi-family residential (MFR) phase, and a 12.8-acre single-family residential (SFR) phase. The SFR is further broken down as 7.8-acre 128-Lots SFR, 0.4-acre Landscape Corridor, 4.0-acre Alleys, Parking, and Common, and 0.6-acre Common Area.

1.3 APPLICABLE STANDARDS

The project will be designed based on the following standards:

- Sacramento County Department of Water Resources Drainage Study Requirements, March 2020
- Section 9 of the Sacramento County Storm Drainage Design Standards

- Volume 2 of the Sacramento City/County Drainage Manual, Hydrology Standards
- Master Drainage Study for “The Villages of Zinfandel”, Wood Rodgers, revised March 2003
- Sacramento Region Stormwater Quality Design Manual, July 2018

1.4 CONDITIONS OF APPROVAL

Stone Creek Village, TPM, TSM, DR DD10072 - Draft Conditions of Approval as been issued in July 2021.

1.5 PREVIOUS STUDIES

The Project is located within the Master Drainage Study for “The Villages of Zinfandel”, prepared by Wood Rodgers, revised March 2003. Water quality and detention will be provided by a Regional Basin located south of the intersection of Bear Hollow Drive and Spoto Drive. Additional detention storage is utilized in the adjacent park and open/space. Onsite detention and water quality treatment will not be required.

1.6 OBJECTIVES OF ANALYSIS

This report presents the results of the drainage analysis for Stone Creek Village. This analysis provides the Hydraulic Grade Lines (HGL's) at each node (Manholes and Drain Inlets) of the proposed storm drain system, including; shed areas, the design flows, and pipe sizes.

The project is located within the City of Rancho Cordova, which has incorporated Sacramento County's Drainage Design Standards, as such, the information and calculations presented in this final drainage report follow the requirements of Section 9 of the Sacramento County Storm Drainage Design Standards. The main objectives of this report are:

- To determine the Nolte peak flows due to the development of the property.
- To size the onsite storm drain lines to convey the Nolte peak flows while maintaining that the hydraulic grade line shall be a minimum of one-half a foot (0.5 ft) below the elevation of all inlet grates and a minimum of one foot (1 ft) below all manhole rim elevations.
- To size the onsite storm drain lines to convey the 100-year Sacramento Method peak flows to reduce overland release requirements.
- Provide a preliminary overland release route through the project assuming the proposed storm drain system is fully plugged.

2. EXISTING CONDITIONS

2.1 HISTORICAL LAND USE

The existing site is currently undeveloped, but appears to have been mass graded to level in the past.

2.2 TOPOGRAPHIC SOURCES

An aerial survey was obtained and supplemented with a convention topographic survey prepared by Morton & Pitalo will be used for the design and analysis of the project. The survey's vertical datum is on the National Geodetic Vertical Datum of 1929 (NGVD 29).

2.3 OFFSITE DRAINAGE

The project is bounded by three existing fully improved roads. Offsite drainage does not appear to enter the project site.

2.4 ONSITE DRAINAGE

Elevations throughout the development area vary from 98 to 87 feet. The site drains to an existing ditch along the southwestern property line. The ditch conveys drainage to the southern corner of the site where it is picked up in an existing 24" CMP storm drain. The site is bounded on the southwest by an existing CMU block wall. The wall prevents drainage from leaving the southwestern property line.

Per a conventional topographic survey, there is an existing 30" storm drain located along southwestern boundary in the open space/bike trail offsite parcel. Three 18-inch storm drain lines are stubbed to the site.

See **Appendix B** for a portion of the Master Study watershed map.

2.5 HYDROLOGIC MODELING

Due to the project being located within the existing Villages of Zinfandel Master Drainage Study, existing conditions hydrologic modeling will not be required.

2.6 FLOODPLAIN

The FEMA Flood Insurance Rate Map (FIRM Panels 06067C0208H & 06067C0209H) for Sacramento County indicates the site is located in Zone X. Zone X areas are determined to be within the 500-year flood. See **Appendix A** for the FEMA FIRM panels.

3. PROPOSED CONDITIONS

3.1 PROPOSED LAND USE

The proposed Project will include three separate types of phases on approximately 25.1-acres; a 6.0-acre commercial phase, 6.3-acre multi-family residential (MFR) phase, and a 12.8-acre single-family residential (SFR) phase. The SFR is further broken down as 7.8-acre 128-Lots SFR, 0.4-acre Landscape Corridor, 4.0-acre Alleys, Parking, and Common, and 0.6-acre Common Area.

3.2 GRADING PLAN

See **Appendix A** for the Preliminary Grading Plans for the project site.

3.3 ONSITE IMPROVEMENTS

The following describes the onsite improvements for each of the three development areas:

- Commercial:
The proposed commercial development includes two points of access onto Bear Hollow Drive and one point of access (shared with the multi-family residential development) onto Zinfandel Drive. Four buildings will be constructed, along with the associated drive isles, parking, storm drain, sewer, water, and dry utility improvements.

The onsite storm drain system, ranging in size from 12” to 24”, will collect drainage from the project and convey it to the adjoining multi-family residential development to the southeast.

- Multi-family residential:

The proposed multi-family residential development includes two points of access onto Zinfandel Drive, these access points are shared with the commercial and single-family residential developments. Eight buildings will be constructed, along with the associated drive isles, parking, storm drain, sewer, water, and dry utility improvements.

The onsite storm drain system, ranging in size from 12” to 30”, will collect drainage from the project and the commercial development, and convey it to an existing 30-inch storm drain located in the adjacent open space to the southwest of the project.

- Single-family residential:

The proposed single-family residential development includes one point of access (shared with the multi-family residential development) onto Zinfandel Drive and one point of access onto Spoto Drive. One-hundred and twenty-eight single-family homes will be constructed, along with the associated drive isles, parking, storm drain, sewer, water, and dry utility improvements.

The onsite storm drain system, ranging in size from 12” to 24”, will collect drainage from the project and convey it to an existing 30-inch storm drain located in the adjacent open space to the southwest of the project.

See **Appendix A** for the Preliminary Utility Plans for the project site and **Appendix B** for the Post-Development Drainage Shed Maps in **Appendix B**.

3.4 HYDROLOGIC MODELING

The Nolte Method is used to determine runoff flow rates to size onsite drainage conveyances. This method is based on the relationship between the land use and the drainage area. The method applies to watersheds less than 160 acres. Per Figure 2-4, the residential Project is located in Nolte Zone 3. Per Figure 2-5 Design Runoff Nolte Method- Drainage Areas <50 Acres in **Appendix A**, the flow rates for commercial, multi-family, and residential land use are determined. See **Appendix C** for hydrologic results for the Nolte Method.

The Sacramento Method will be utilized to determine the 100-year peak storm event for overland release calculations.

3.5 HYDRAULIC ANALYSIS

The hydraulic analysis for the storm drain pipes was analyzed using the Hydraflow Storm Sewers Extension for Autodesk Civil 3D (version 2021) software program. The program automatically calculates internal energy losses from junctions and pipes. Since the storm drain system may utilize HDPE, RCP, or PVC pipe, a conservative Manning’s “n” coefficient of 0.015 was assumed to account for pipe minor losses.

The downstream limit of the hydraulic analysis is an existing storm drain manhole located in Spoto Drive (Sta 28+22 per Spoto Drive record drawings – see **Appendix A**). At this location per the Spoto Drive record drawings, the starting 10-year hydraulic grade line (HGL) is 82.8-feet (NGVD 29). Per Section 9-7C.5, the hydraulic grade line shall be a minimum of one-half a foot (0.5 ft) below the elevation of all inlet grates and a minimum of one foot (1 ft) below all manhole rim elevations for a system conveying Nolte Design Flows. The full flow velocity of the storm drain pipe shall be a minimum of two feet per second (2 fps), per Section 9-7C.6. Profiles of the proposed storm drain lines and supporting calculations are presented in **Appendix C**.

3.6 OVERLAND RELEASE

The following Condition of Approval (preliminary condition #27) specifies minimum pad grade elevations in relation to the 100-year floodplain:

“All development within the City must comply with the City of Rancho Cordova’s Floodplain Management Ordinance. All new structures shall be protected from the 100-year (1 percent) flood event. Certified pad elevations (certified by a registered Civil Engineer or licensed Land Surveyor) shall be set at least one and two tenths foot (1.2’) above all sources of 100-year flooding (see Section 9-1 of improvement standards). The overland release path must be shown on the improvement plans and the hydraulic computation must be provided to estimate the flow depths along the overland release paths. The calculations must be in conformance with Section 9-15 of the Improvement Standards.”

Per the Master Drainage Study for “The Villages of Zinfandel”, prepared by Wood Rodgers (2003), the peak stage in the downstream regional detention basin for a 100-year 10-day event assuming one pump failed, is 85.5 feet (NGVD 29). Minimum pad elevations for the project shall be set 1.2 foot above this regional floodplain elevation at 86.7 feet (NGVD 29).

Overland release through the project will be directed as follows:

- Commercial – The northwestern portion of the commercial site will overland release westward to Bear Hollow Drive. The southeastern portion of the commercial site will overland release to the southwest through an opening in the CMU wall to the open space/bike trail.
- Multi-family residential – The entire MFR portion of the project will overland release to the southwest through an opening in the CMU wall to the open space/bike trail.
- Single-family residential - The entire SFR portion of the project will overland release eastward to Spoto Drive.

The open space/bike trail parcel drains overland flow to the southeast to outfall onto Spoto Drive.

The proposed storm drain system has been designed to convey the 100-year peak flow through the site. The onsite storm drain pipes have been sized to convey the 100-year event. The final

drainage study (Level 4) for each development will identify drainage inlet sizes required to capture the 100-year event into the pipe system.

See **Appendix D** for overland release exhibit.

3.7 STORMWATER QUALITY

Based on the 2018 Stormwater Quality Design Manual for the Sacramento Region, the project would be required to provide stormwater quality treatment control, however, based on a phone call with Rancho Cordova staff (Dalia Fadl), treatment control will not be required because the entire site drains to an existing detention/water quality basin.

3.8 HYDROMODIFICATION

Based on the Hydromodification Map in the 2018 Sacramento Region Stormwater Quality Design Manual, the project is located an area that would require hydromodification improvements, however, based on a phone call with Rancho Cordova staff (Dalia Fadl), hydromodification will not be required because the entire site drains to an existing detention/water quality basin.

3.9 LOW IMPACT DEVELOPMENT

Based on the 2018 Stormwater Quality Design Manual for the Sacramento Region, the project would be required to provide low impact development (LID), and based on a phone call with Rancho Cordova staff (Dalia Fadl), will be required.

To achieve the required LID credits, the project proposes to utilize compost-amended soils and disconnected roof drains to improve site infiltration. To obtain the required 100 LID credit points, the Appendix D-1 (for the single-family residential portion) and D-2 (for the commercial and multi-family portions) worksheets were used to determine LID credits.

Appendix E includes water quality exhibits and Appendix D-1 and D-2 worksheets for the three portions of the project.

4. SUMMARY OF RESULTS

4.1 RESULTS – HYDROLOGIC ANALYSIS

Results of the hydrologic analysis for the Nolte and 100-year Sacramento Methods are located in **Appendix C**.

4.2 RESULTS – HYDRAULIC ANALYSIS – STORM DRAINS

Results of the hydraulic analysis for the Nolte and 100-year Sacramento Methods are located in **Appendix C**. The Nolte event remains within the pipe system with over 6 inches of freeboard from the drain inlet's grates and 12 inches of freeboard at manholes. The onsite storm drain pipes have been sized to convey the 100-year event. Calculations show that the existing 30-inch storm drain in the open space will not convey the entire 100-year event. It is anticipated that overland release will occur in this area.

The final drainage study (Level 4) for each development will identify drainage inlet sizes required to capture the 100-year event into the pipe system.

5. CONCLUSION

In order to accommodate future condition, it is recommended that the proposed on-site improvements be graded per the preliminary grading and utility plans that are a part of this project. It is also recommended that the storm drain pipe locations, sizes and inverts be constructed as shown on the same drawings. A final drainage study (Level 4) and improvement plans shall be prepared prior to construction of each of the three developments.

APPENDIX A:

FEMA FIRM (Panels 06067C0208H & 06067C0209H),
Tentative Parcel Map,
Tentative Subdivision Map,
Site Development Plan,
Preliminary Grading Plan,
Preliminary Utility Plan,
Master Drainage Study Excerpts,
Spoto Drive Record Drawing, and
Sacramento County Drainage Manual Backup Information

ITEM 18.4

NOTES TO USERS

For information regarding the National Flood Insurance Program, it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **Floodway** data have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was California State Plane Zone 10 (FIPSZONE 0402). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA/NMSS12
National Geodetic Survey
SSMCC, #5202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 73-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

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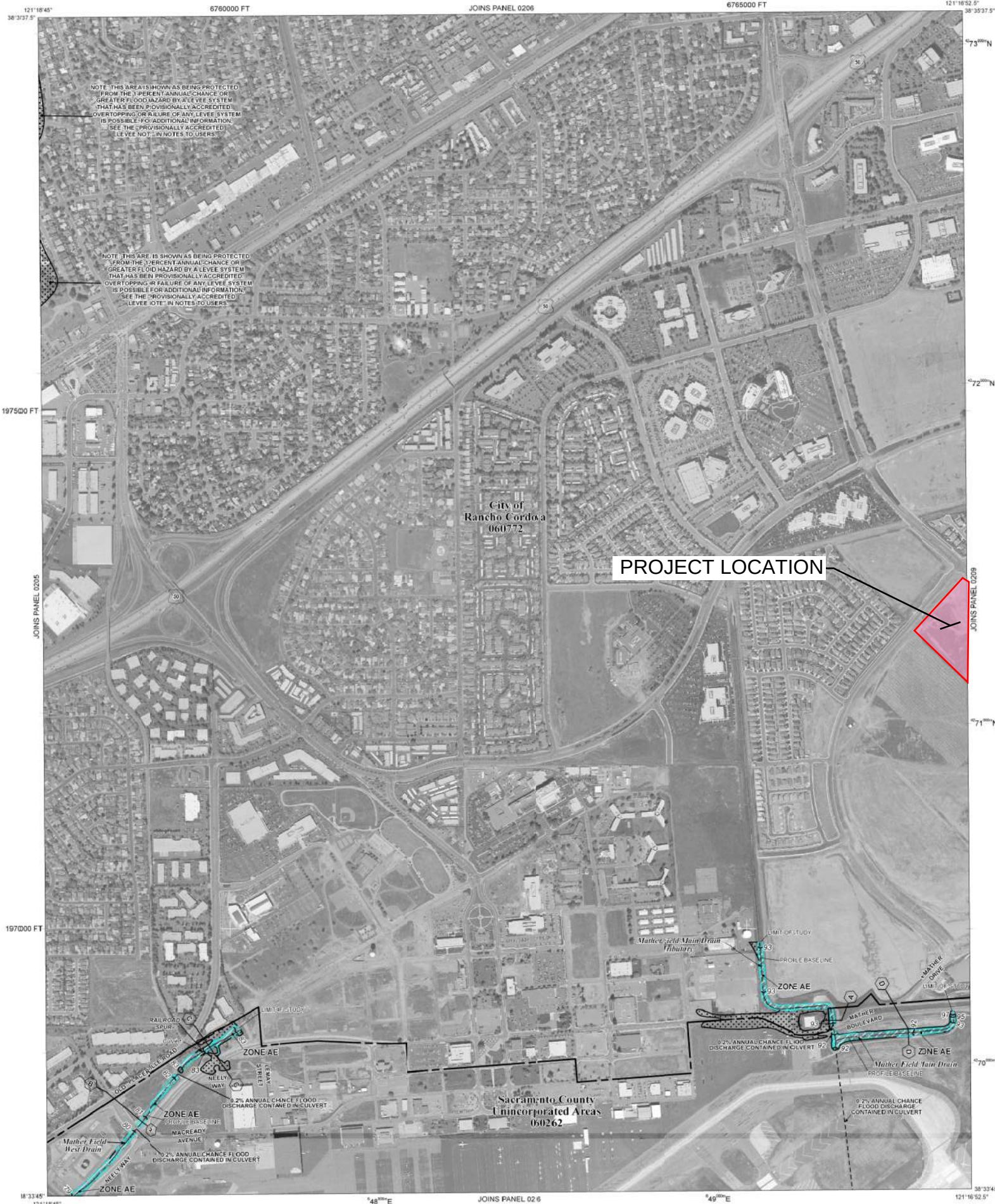
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For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at <http://msc.ems.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map**, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMX) at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/info>.

Provisionally Accredited Levee Notes to Users: Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by January 26, 2011. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and floodproofing or other protective measures. For more information on flood insurance, interested parties should visit the FEMA website at <http://www.fema.gov/business/info/index.shtml>.



LEGEND

ATTACHMENT 4

SPECIAL FLOOD HAZARD AREAS SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood) also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AV, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually shear flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently determined. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE AV Area to be protected from 1% annual chance flood by a federal flood protection system under construction; no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

Zone X Areas of 0.2% annual chance flood; area of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile and areas protected by levees from the 1% annual chance flood.

OTHER AREAS

Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHER WISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Limit of Moderate Wave Action

Base Flood Elevation line and value, elevation in feet* (EL 98')

Base Flood Elevation value where uniform within zone, elevation in feet*

* Referenced to the North American Vertical Datum of 1988

Cross section line

Traverse line

Culvert, Flume, Penstock or Aqueduct

Road or Railroad Bridge

Footbridge

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

1000-meter Universal Transverse Mercator grid values, zone 10

5000-foot grid values: California State Plane coordinate system, zone II (FIPSZONE 0402), Lambert Conformal Conic projection

Bench mark (see explanation) Notes to Users section of this FIRM panel

DX55 ft

M15

River Mile

MAP REPOSITORY

Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

AUGUST 16, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-637-6235.

MAP SCALE 1" = 50'

250 500 1000 FEET

150 0 150 300 METERS

NFIP

PANEL 0208H

FIRM

FLOOD INSURANCE RATE MAP

SACRAMENTO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 208 OF 705

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:	NUMBER:	PANEL:	SUFFIX:
COMMUNITY:	060772	0208	H
RANCHO CORDOVA, CITY OF	060262	0208	H
SACRAMENTO COUNTY			

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

06067C0208H

EFFECTIVE DATE

AUGUST 16, 2012

Federal Emergency Management Agency

ITEM 18.1

NOTES TO USERS

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NOAA/NGS12
National Geodetic Survey
SSM03, #6202
1315 East-West Highway
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LEGEND

ATTACHMENT 4

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood) also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently destroyed. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodways are the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE D Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

Limit of Moderate Wave Action

Base Flood Elevation line and value; elevation in feet* (EL 98')

Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

Cross section line

Traverse line

Culvert, Flume, Penstock or Aqueduct

Road or Railroad Bridge

Footbridge

Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

1000-meter Universal Transverse Mercator grid values, zone 10

5000-foot grid values; California State Plane coordinate system, zone II (FIPSZONE 0402), Lambert Conformal Conic projection

Bench mark (see explanation in Notes to Users section of this FIRM panel)

DX55 ft x

M15

River Mile

MAP REPOSITORY

Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTY-WIDE FLOOD INSURANCE RATE MAP

AUGUST 16, 2012

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6313.

MAP SCALE 1" = 50'

250 0 500 1000 FEET

150 0 150 300 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0209H

FIRM

FLOOD INSURANCE RATE MAP

SACRAMENTO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 209 OF 705

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
RANCHO CORDOVA, CITY OF	060772	0209	H
SACRAMENTO COUNTY	060262	0209	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

06067C0209H

EFFECTIVE DATE

AUGUST 16, 2012

Federal Emergency Management Agency

PROJECT INFORMATION

ASSESSOR PARCEL NUMBERS	072-236-002
USE:	VACANT
EXISTING SPECIFIC PLAN ZONING:	RC (ZSPA)
PROPOSED SPECIFIC PLAN ZONING:	RC (ZSPS)
EXISTING	# ACRES
EXISTING NUMBER OF PARCELS	1 25.12 ± AC
PROPOSED	# ACRES
PROPOSED NUMBER OF LOTS	1 6.01 ± AC COMMERCIAL
	1 6.33 ± AC MULTI-FAMILY RESIDENTIAL
	1 12.78 ± AC SINGLE-FAMILY RESIDENTIAL
	3 TOTAL

APPLICANT

ELLIOTT HOMES, INC.
340 PALLADIO PARKWAY, SUITE 521
FOLSOM, CA 95630
PHONE: (916) 984-1300
EMAIL: PWALKER@ELLIOTTHOMES.COM

UTILITY PROVIDERS

WATER: GOLDEN STATE WATER
SEWER: CITY OF RANCHO CORDOVA
ELECTRIC: SMUD
GAS: PG&E
TELEPHONE: SBC COMMUNICATIONS

PLANNER / ENGINEER

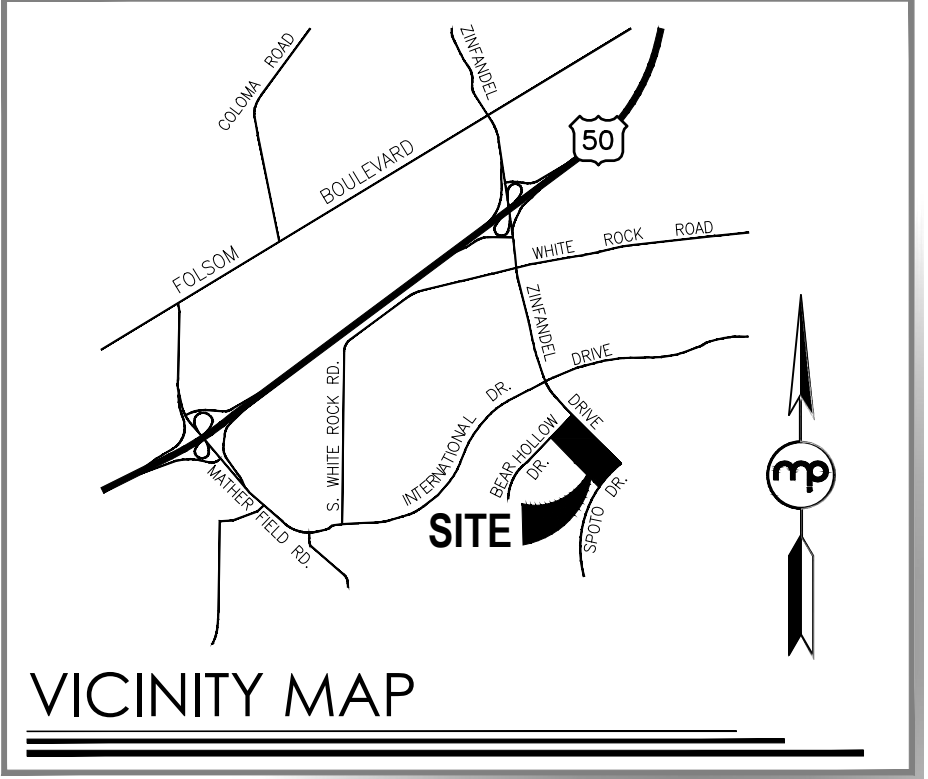
MORTON & PITALO, INC.
600 COOLIDGE DRIVE, SUITE #140
FOLSOM, CA 95630
CONTACT: KEN TOPPER / SCOTT PEDERSEN
PHONE: (916) 927-2400
EMAIL: KTOPPER@MPENGR.COM
EMAIL: SPEDERSEN@MPENGR.COM

SERVICE PROVIDERS

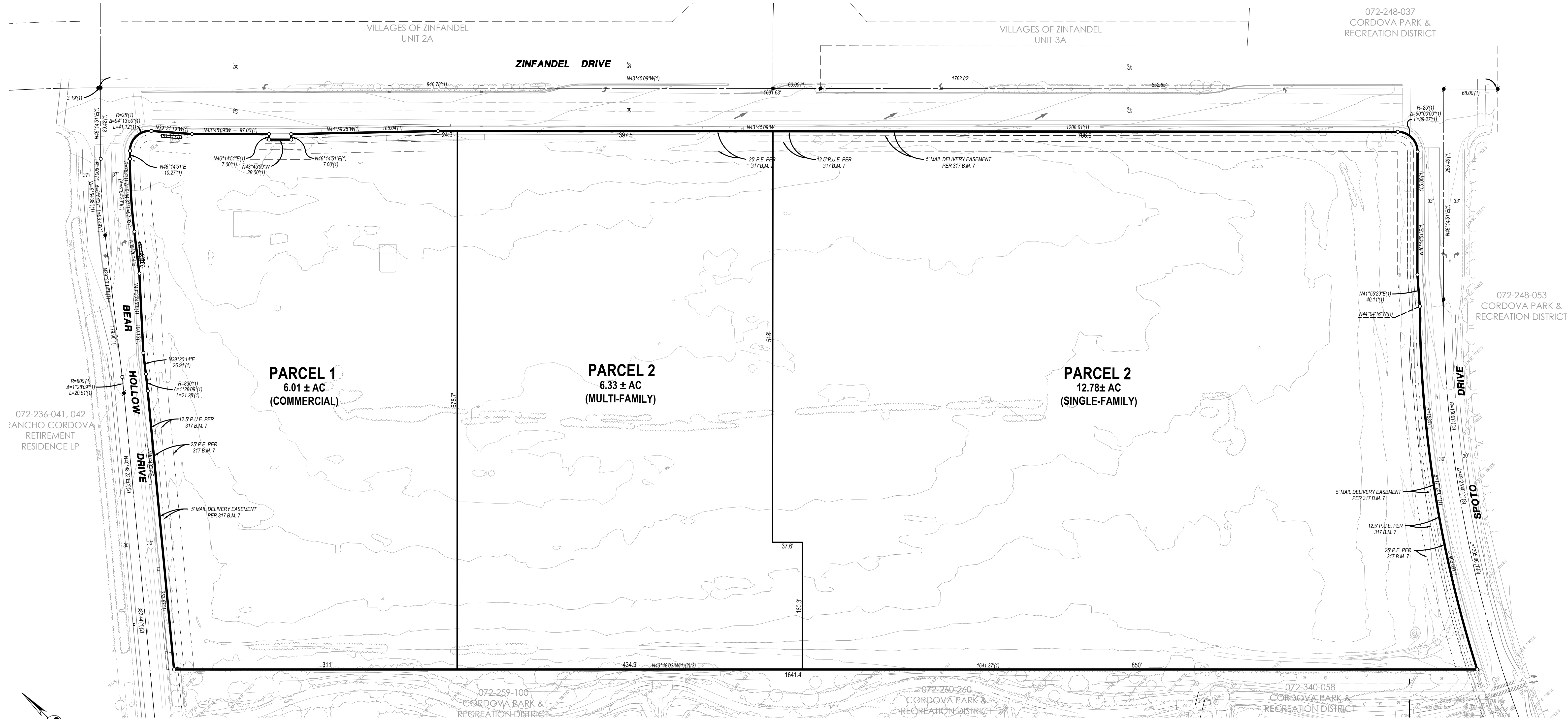
SCHOOL DISTRICT: FOLSOM CORDOVA UNIFIED
FIRE PROTECTION: SACRAMENTO METRO FIRE
POLICE PROTECTION: CITY OF RANCHO CORDOVA
PARKS & RECREATION: CORDOVA PARK DISTRICT
CITY OF RANCHO CORDOVA
STORM DRAINAGE: CITY OF RANCHO CORDOVA
SOLID WASTE: CITY OF RANCHO CORDOVA

NOTES

1. THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE TO BE VERIFIED PRIOR TO FINAL MAP.
2. MINOR MODIFICATION MAY BE MADE TO LOT LINES AT FINAL MAP.
3. FOR PRELIMINARY PLANNING PURPOSES ONLY. BOUNDARY, TOPO, EASEMENTS AND SITE CONDITIONS TO BE VERIFIED PRIOR TO FINAL MAP AND ENGINEERING.
4. PURSUANT TO GOVERNMENT CODE SECTION 66456.1 THE SUBDIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE MAP, INCLUDING THE AUTHORITY OF THE LOCAL AGENCY TO IMPOSE REASONABLE CONDITIONS RELATING TO THE FILING OF MULTIPLE FINAL MAPS.
5. TOPOGRAPHY CONTOUR INFORMATION HEREON BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WITH BENCHMARK ELEVATION OF 88.97. THE BENCHMARK ELEVATION OF NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) IS 91.32, RESULTING IN A CONVERSION OF 2.35.



PROJECT INFORMATION



DE	DRAINAGE EASEMENT
PE	PUBLIC ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT

ABBREVIATIONS

STONE CREEK VILLAGE
TENTATIVE PARCEL MAP
SHEET 1 of 1

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phone: (916) 984-7621
web: www.mpengr.com

PROJECT INFORMATION

ASSESSOR PARCEL NUMBERS	072-236-002
USE:	VACANT
EXISTING SPECIFIC PLAN ZONING:	RC (ZSPA)
PROPOSED SPECIFIC PLAN ZONING:	RC (ZSPA)
EXISTING	# ACRES
EXISTING NUMBER OF PARCELS	1 25.21 ± AC
PROPOSED	# ACRES
PROPOSED NUMBER OF LOTS	4 6.01 ± AC COMMERCIAL
	1 6.33 ± AC MULTI-FAMILY
	128 7.78 ± AC SINGLE-FAMILY RESIDENTIAL
	1 0.44 ± AC LANDSCAPE CORRIDOR (CITY)
	1 0.43 ± AC ALLEYS, PARKING, COMMON (HOA)
	5 0.62 ± AC COMMON AREA (HOA)
	140 TOTAL

APPLICANT

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SEWER: CITY OF RANCHO CORDOVA
ELECTRIC: SMUD
GAS: PG&E
TELEPHONE: SBC COMMUNICATIONS

SERVICE PROVIDERS

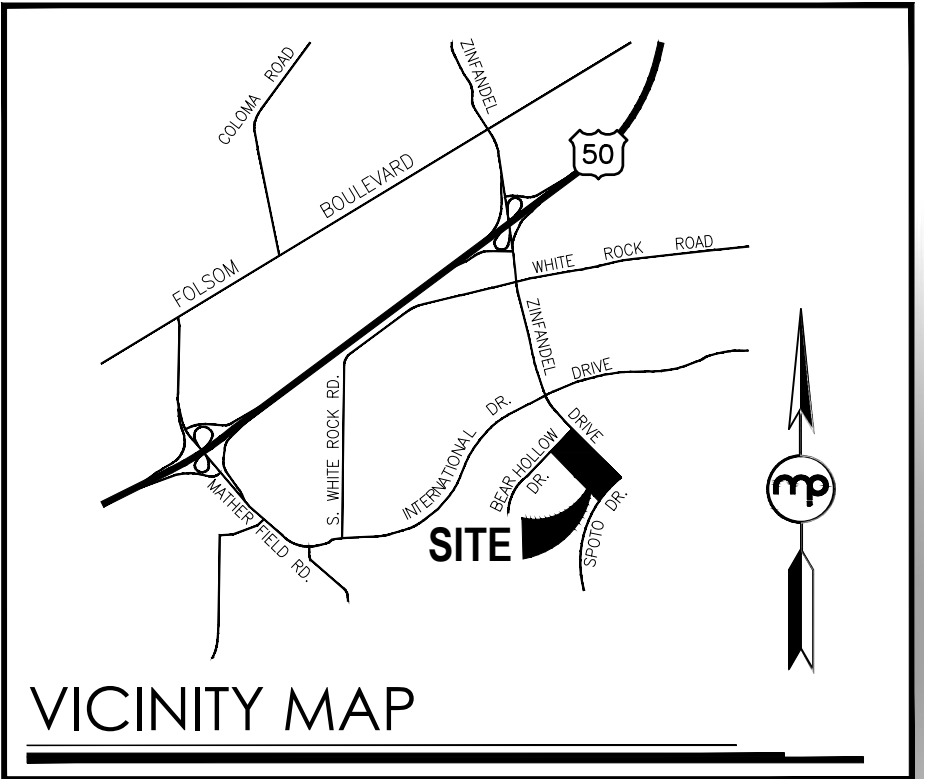
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- ALL UTILITY SYSTEMS ILLUSTRATED ON THE TENTATIVE MAP ARE SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
- GRADING SHOWN ON THIS TENTATIVE MAP ILLUSTRATES A GENERAL GRADING CONCEPT AND IS SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
- PURSUANT TO SECTION 66445 (J) OF THE GOVERNMENT CODE, THE FOLLOWING EASEMENTS ARE PROPOSED TO BE ABANDONED:
(A) 5' MAIL EASEMENT PER 317 BM 7 ALONG SPOTO DRIVE
(B) 25' PE PER 317 BM 7 ALONG SPOTO DRIVE
(C) SPOTO DRIVE RIGHT-OF-WAY, 6'
- LOT A IS A LANDSCAPE CORRIDOR LOT TO BE DEDICATED TO THE CITY AND INCLUDES A PUE
- LOTS B IS A ALLEY / PARKING / COMMON AREA LOT. TO BE DEDICATED TO THE HOA FOR ACCESS, PARKING, AND LANDSCAPE PURPOSES AND SHALL INCLUDE DE (P), EAVE, PE, PUE, PSE, & PWE.
- LOTS C-G ARE COMMON AREA LOTS TO BE DEDICATED TO THE HOA FOR LANDSCAPE PURPOSES AND SHALL INCLUDE DE (P), PE, & PUE.
- TOPOGRAPHY CONTOUR INFORMATION HEREON BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) WITH BENCHMARK ELEVATION OF 88.97'. THE BENCHMARK ELEVATION OF NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) IS 91.32, RESULTING IN A CONVERSION OF 2.35'.

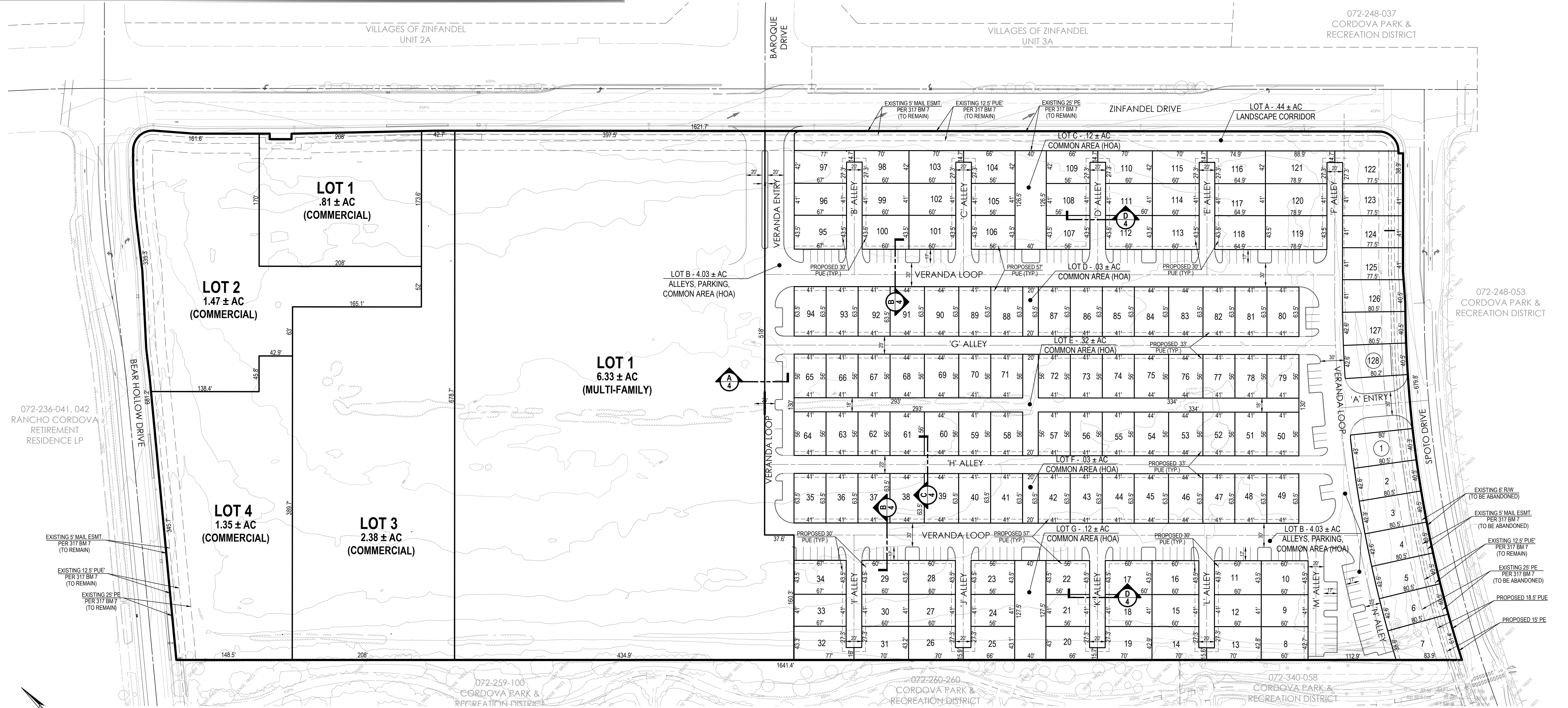
NOTES

LOTS:	AREA	LAND USE
A	0.44 ± AC (19,217 ± SF)	LANDSCAPE CORRIDOR (CITY)
B	4.03 ± AC (175,550 ± SF)	ALLEYS, PARKING, COMMON (HOA)
C	0.12 ± AC (5,060 ± SF)	COMMON AREA (HOA)
D	0.03 ± AC (1,270 ± SF)	COMMON AREA (HOA)
E	0.32 ± AC (13,886 ± SF)	COMMON AREA (HOA)
F	0.33 ± AC (1,270 ± SF)	COMMON AREA (HOA)
G	0.12 ± AC (5,100 ± SF)	COMMON AREA (HOA)
1-128	7.78 ± AC	SINGLE-FAMILY
1	6.33 ± AC	MULTI-FAMILY
1-4	6.01 ± AC	COMMERCIAL
TOTAL AREA:	25.21 ± AC	

LOTING



PROJECT INFORMATION

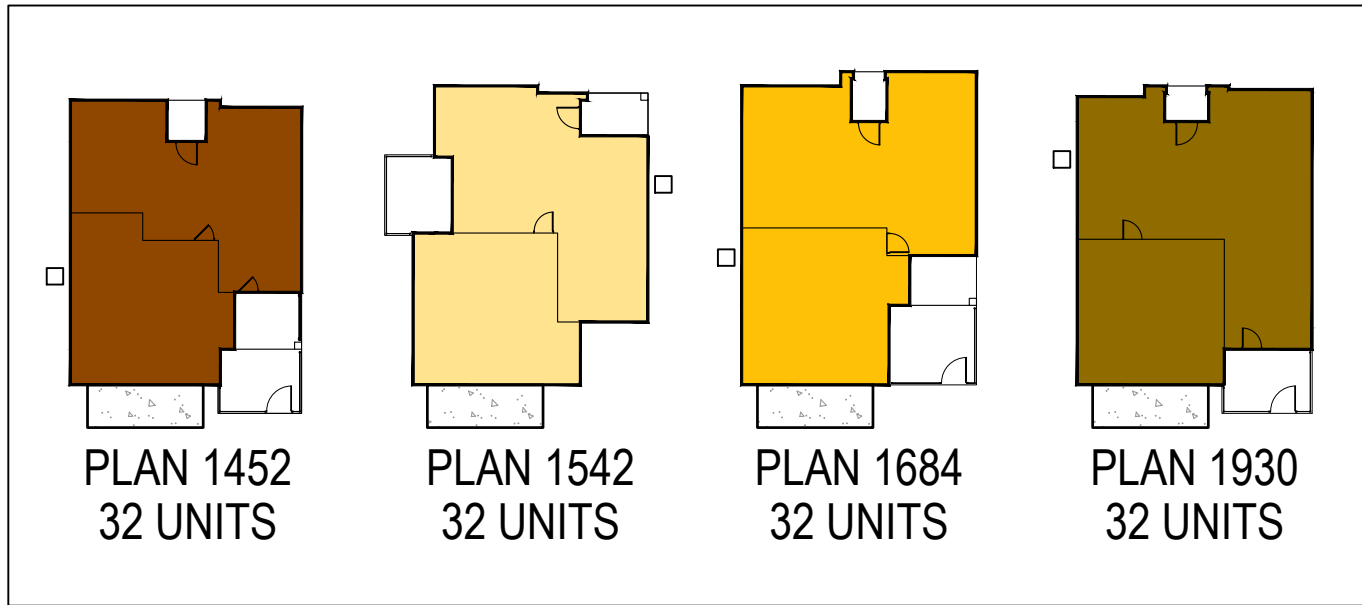
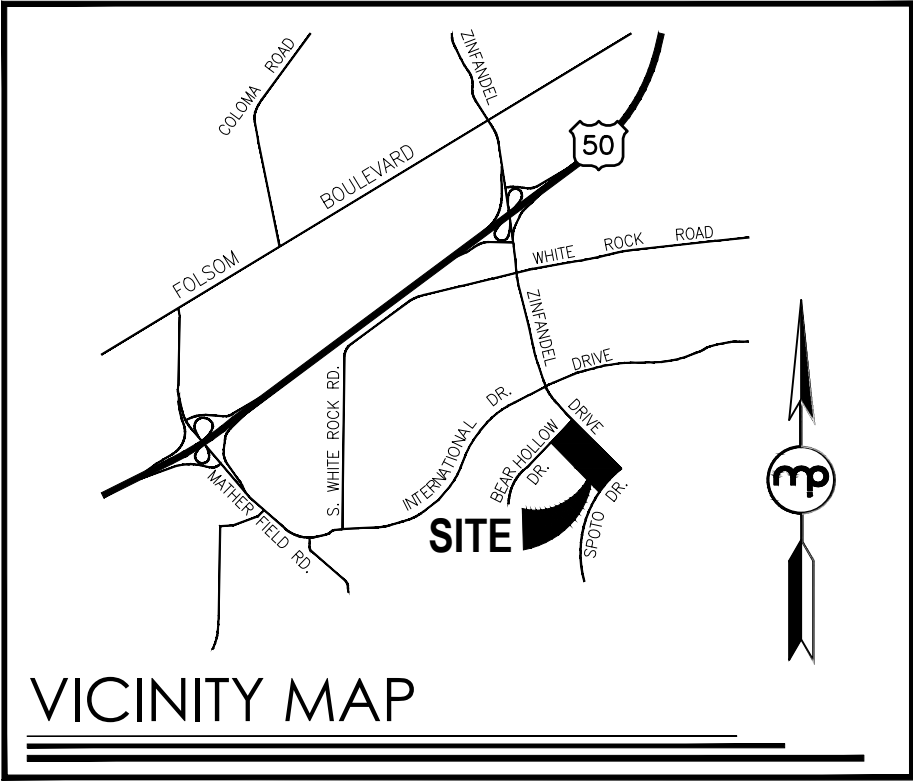


DE (P)	DRAINAGE EASEMENT (PRIVATE)
EVAE	EMERGENCY VEHICLE & ACCESS EASEMENT
PE	PUBLIC ACCESS EASEMENT
PUE	PUBLIC UTILITY EASEMENT
PSE	PUBLIC SEWER EASEMENT
PWE	PUBLIC WATER EASEMENT

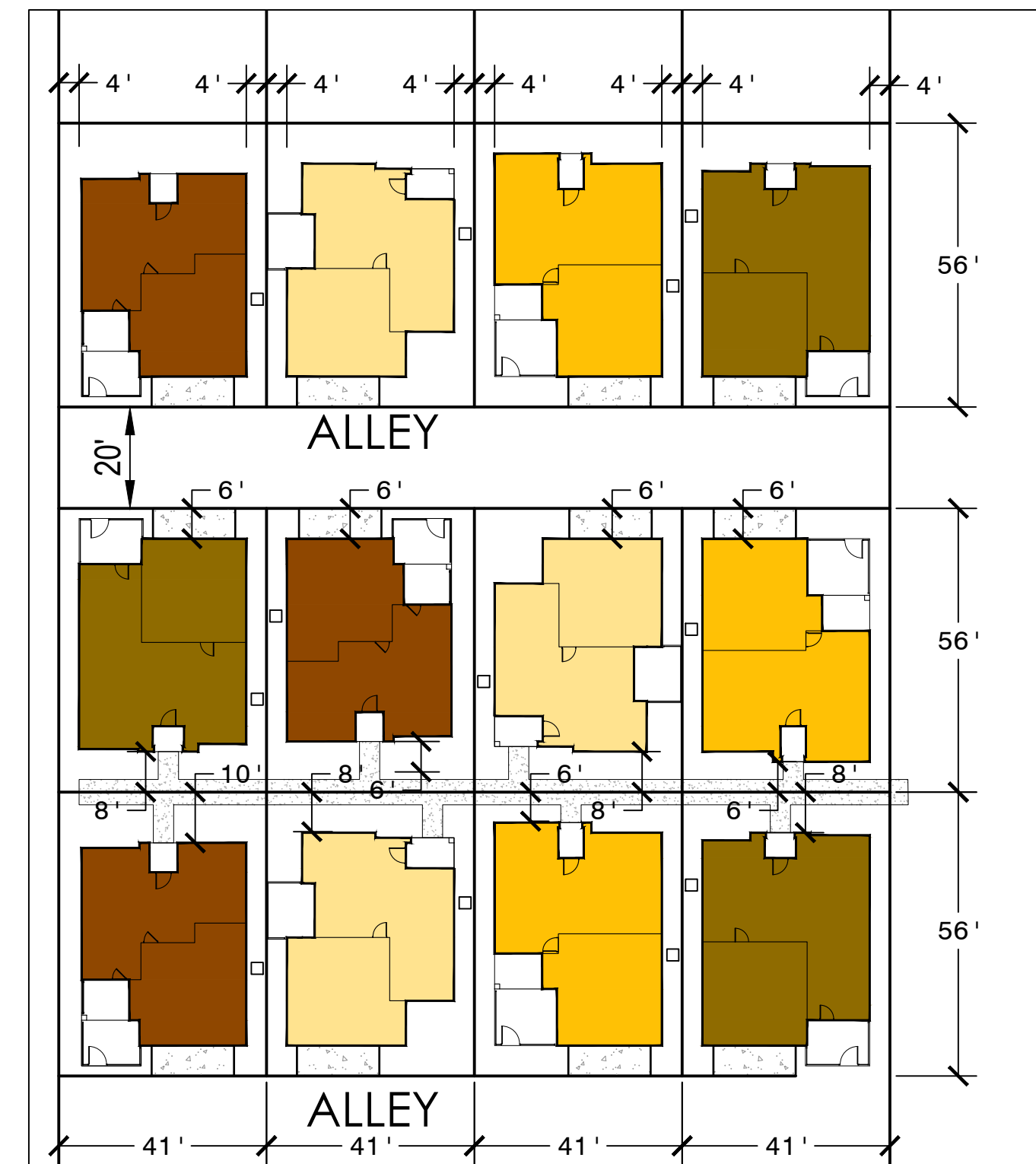
ABBREVIATIONS

STONE CREEK VILLAGE
TENTATIVE SUBDIVISION MAP
SHEET 1 of 8

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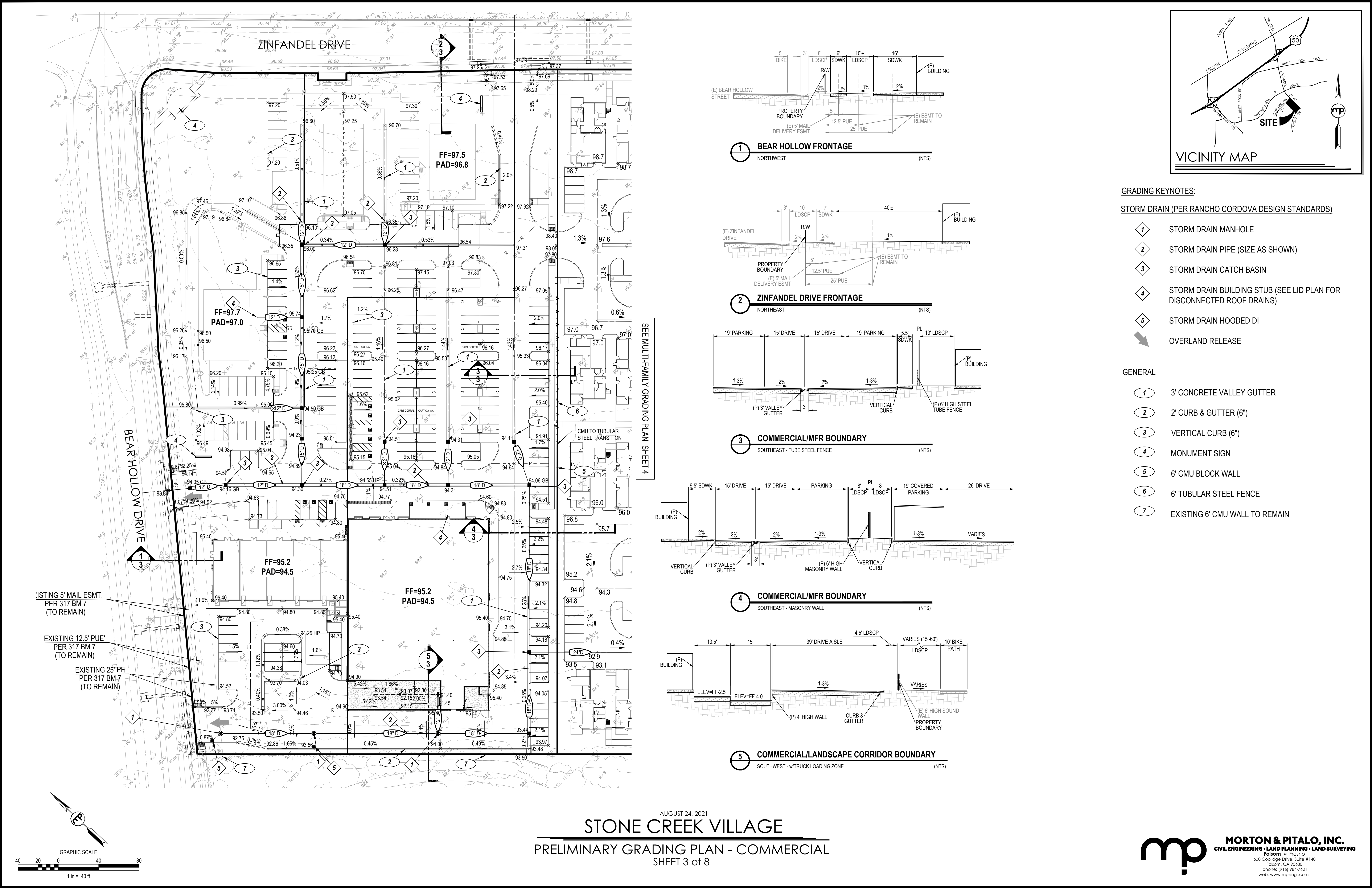
LOT MIX

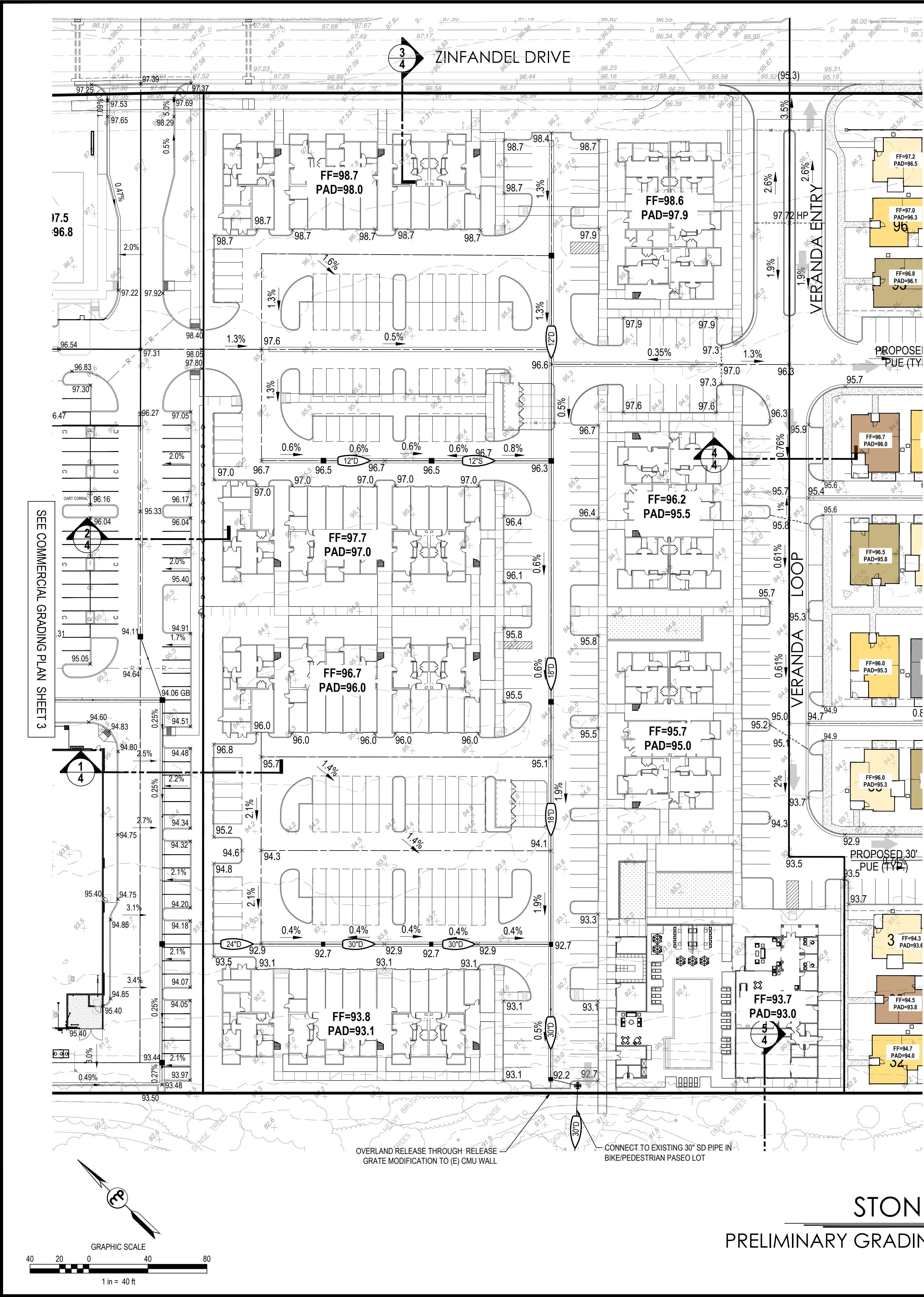


TYPICAL LOT LAYOUT (MIN.)

AUGUST 24, 2021
STONE CREEK VILLAGE
SITE DEVELOPMENT PLAN - VERANDA (SFR)
SHEET 2 of 8

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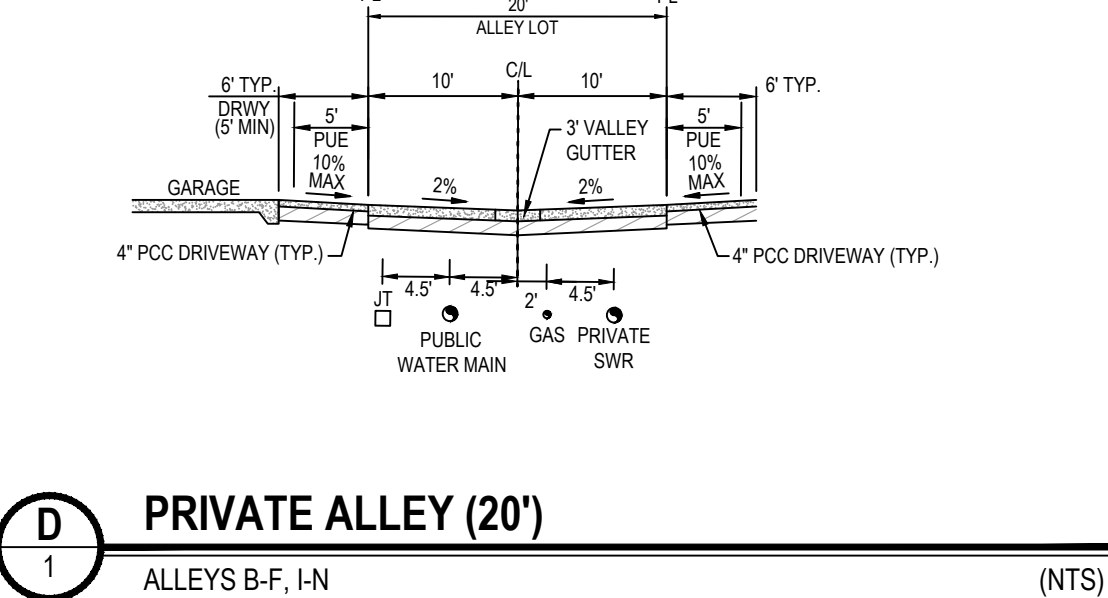
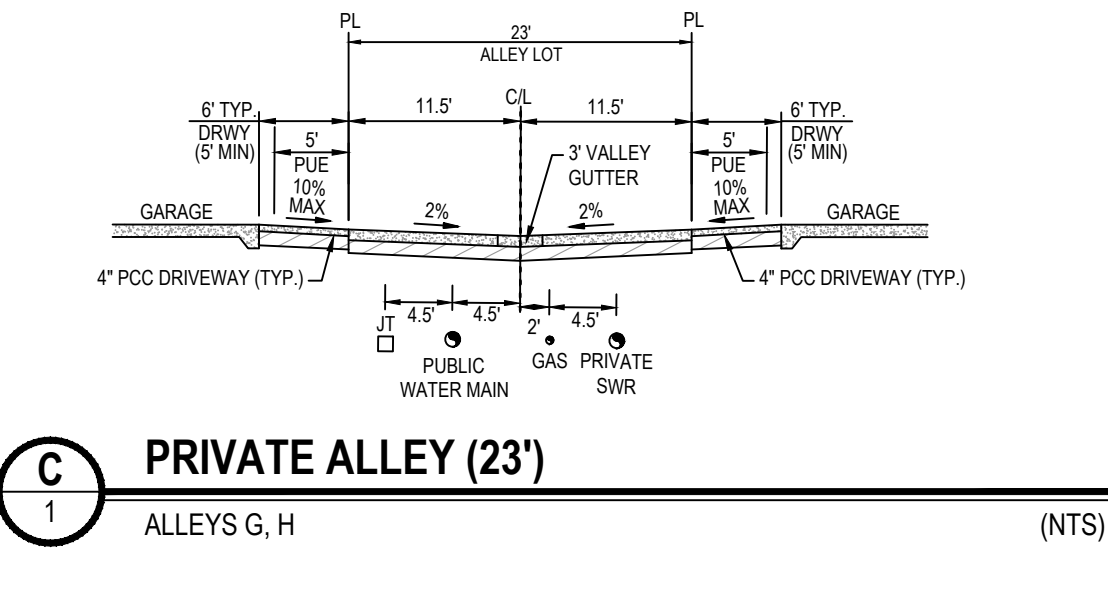
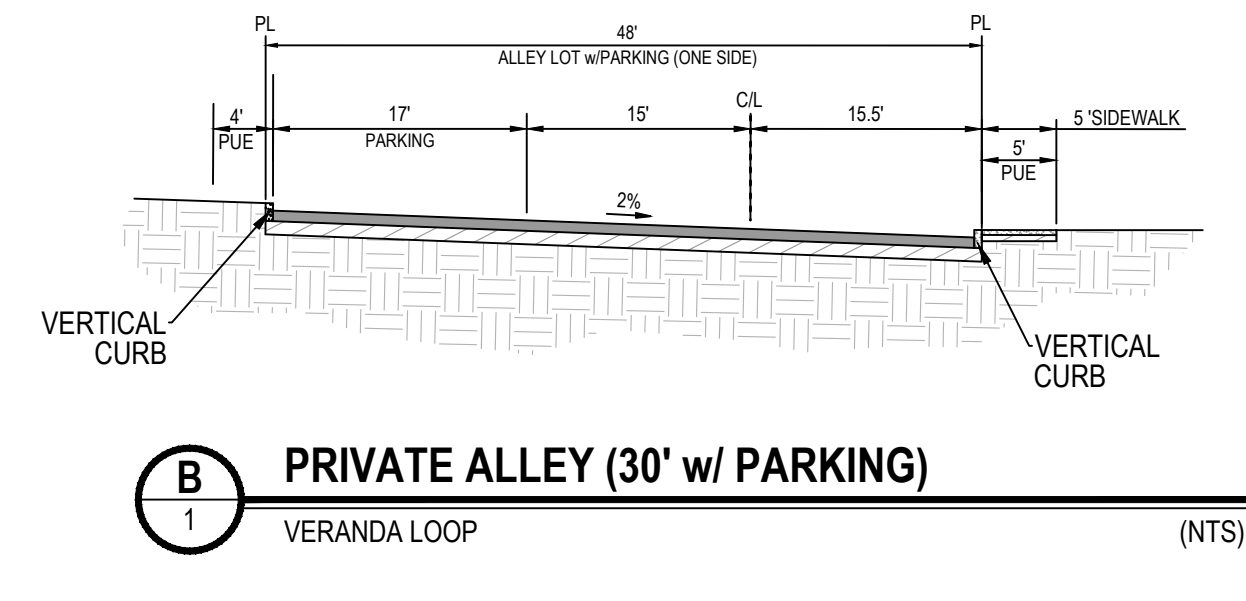
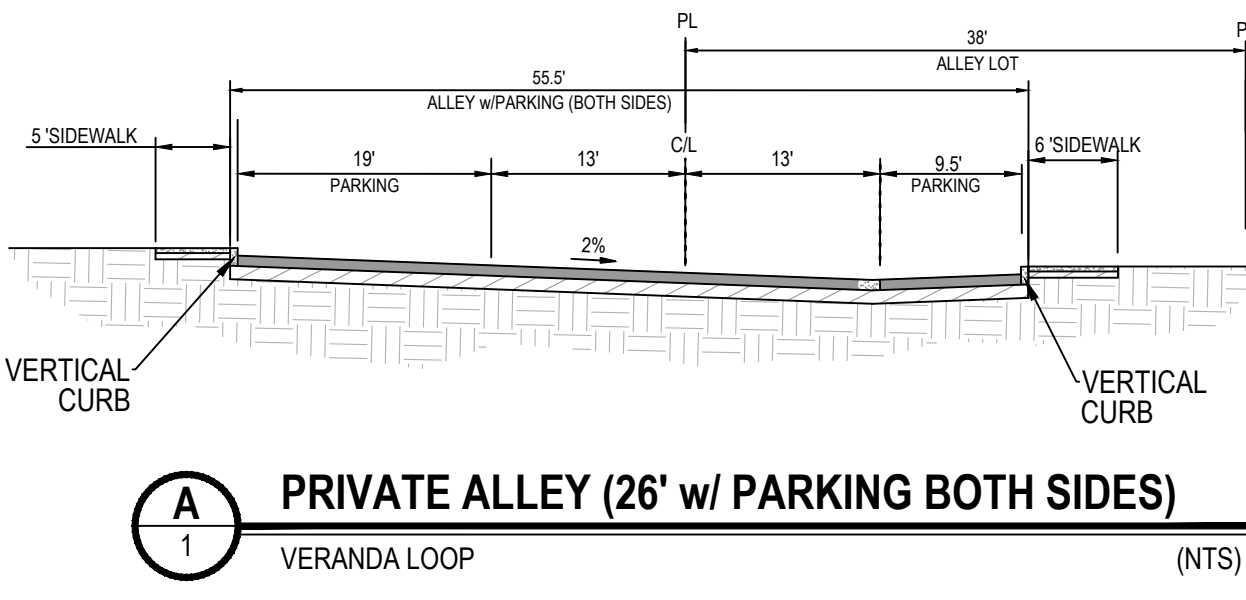
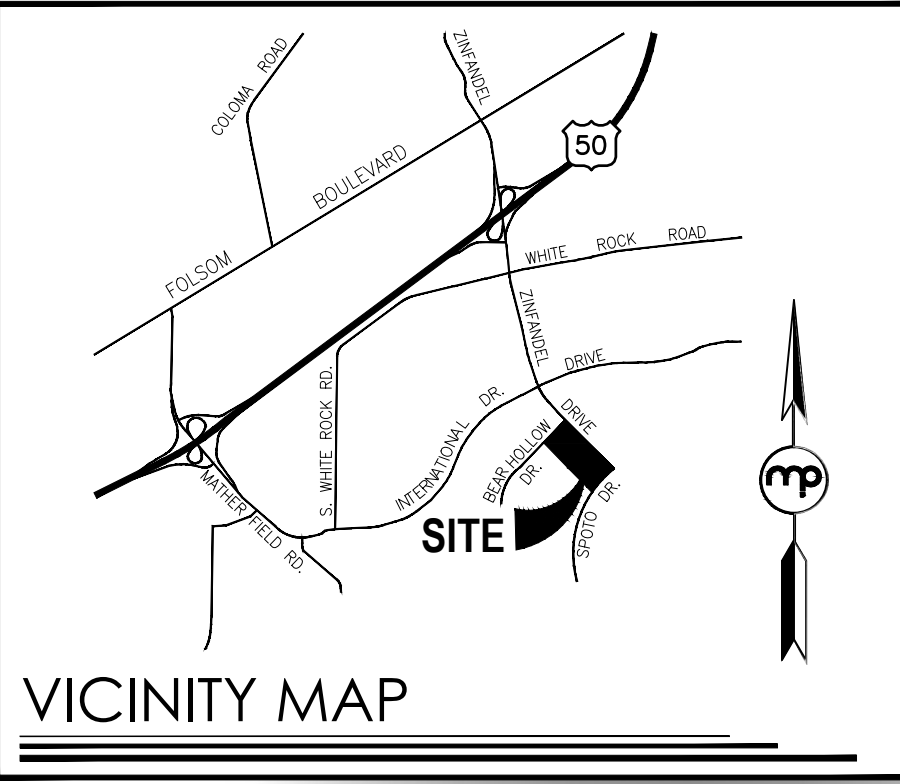
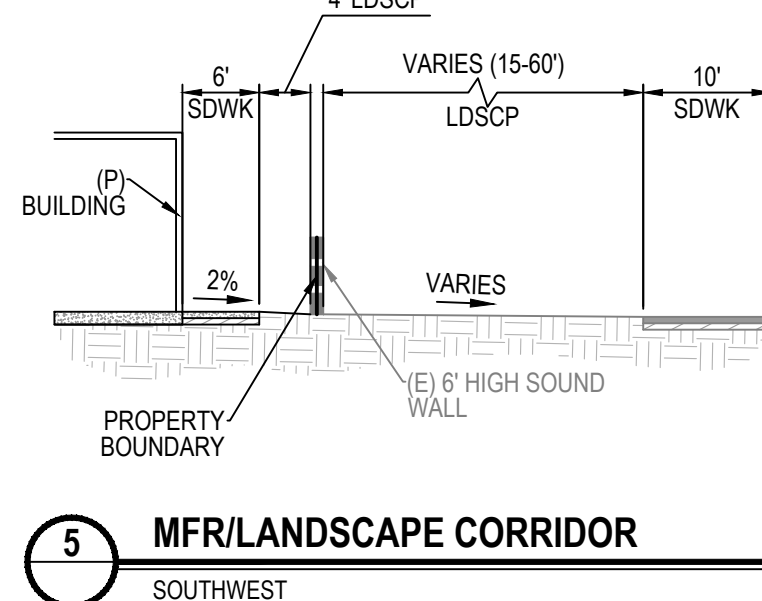
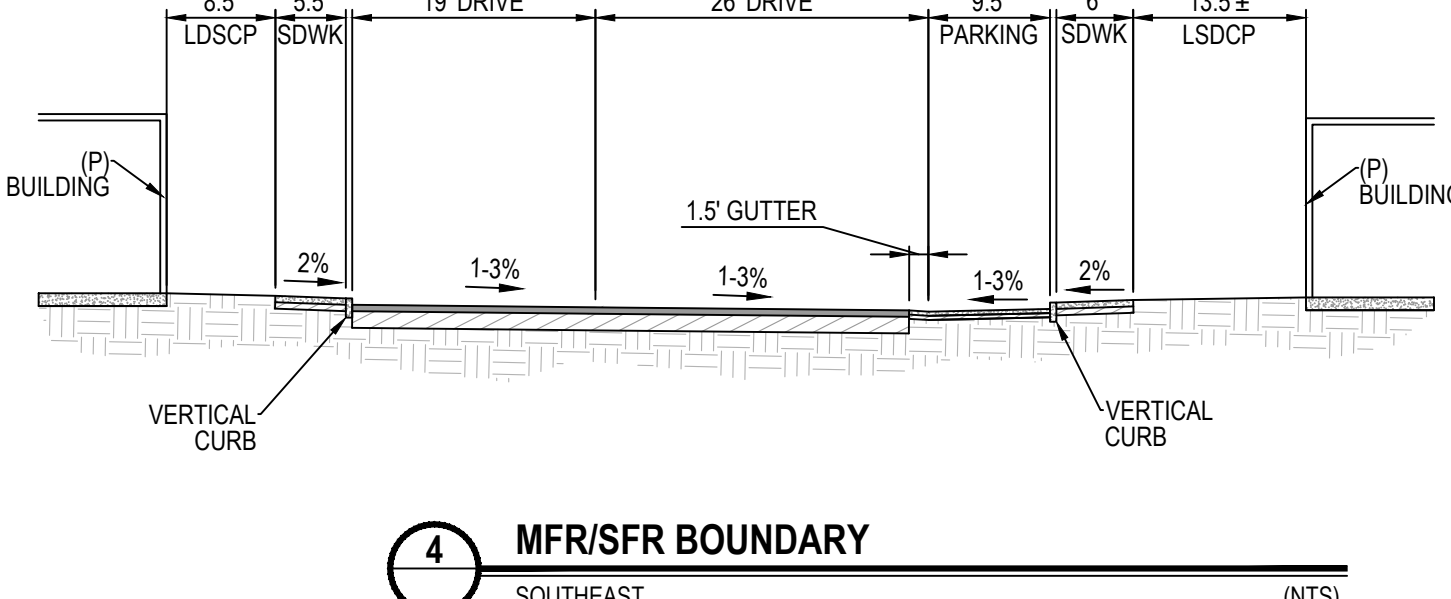
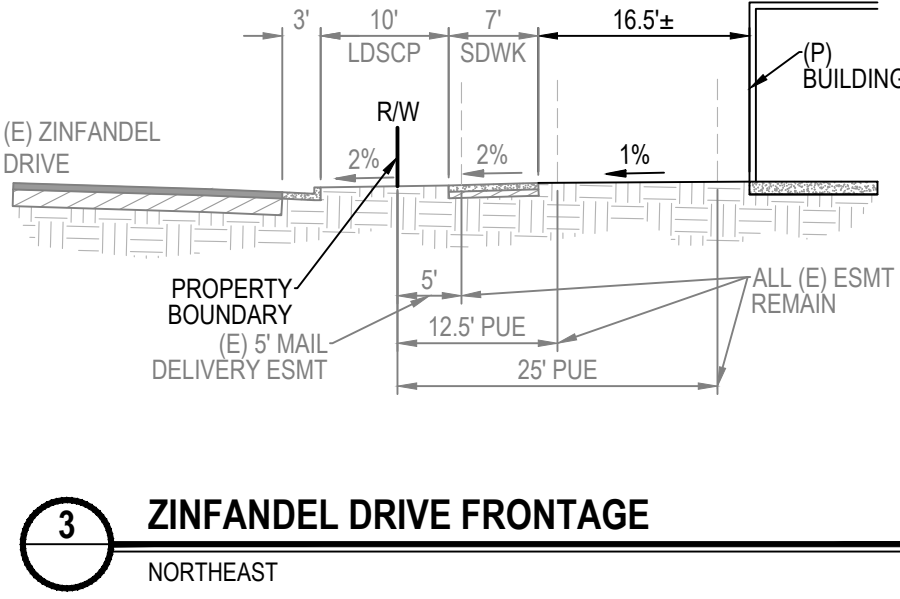
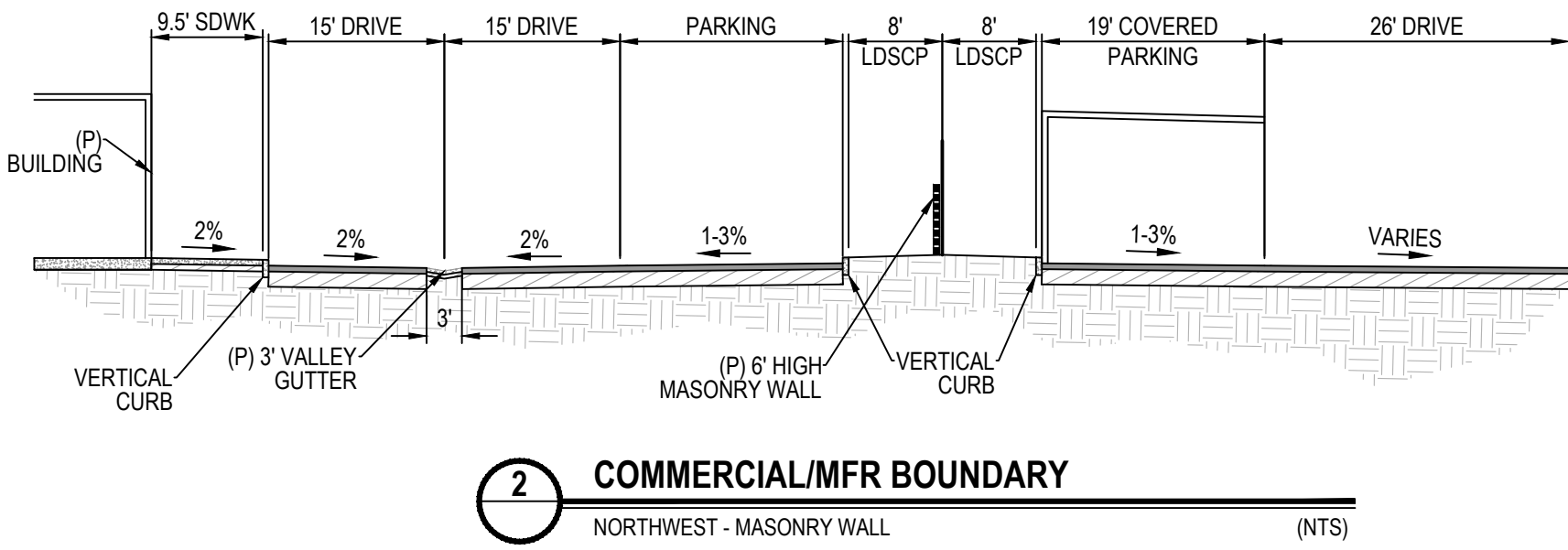
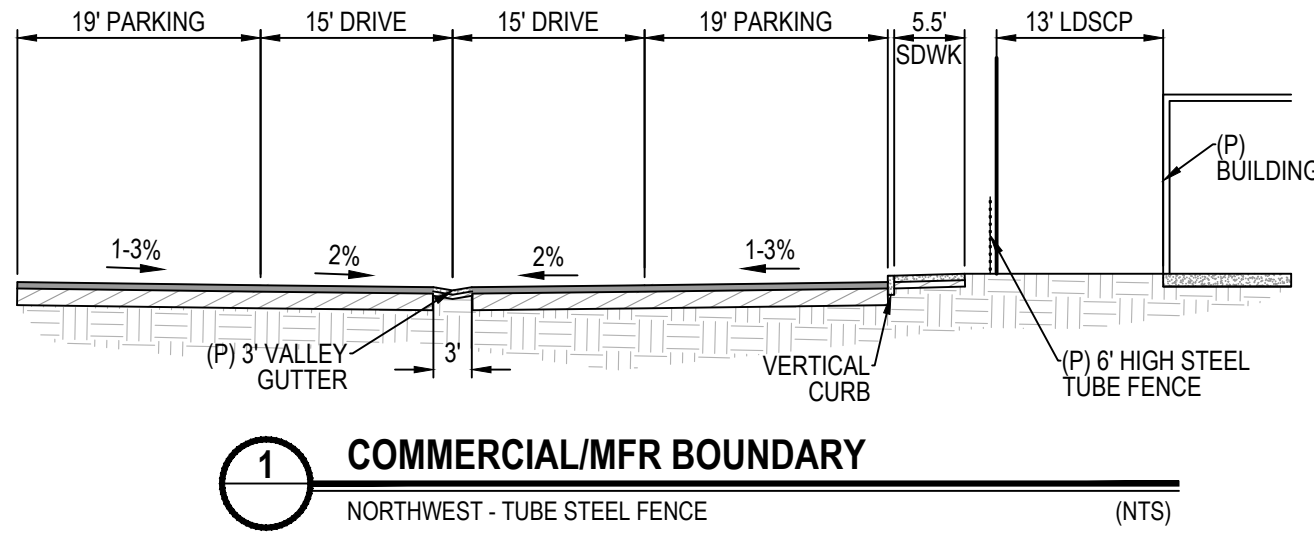
SEE SINGLE-FAMILY GRADING PLAN SHEET 5

SEE SINGLE-FAMILY GRADING PLAN SHEET 5

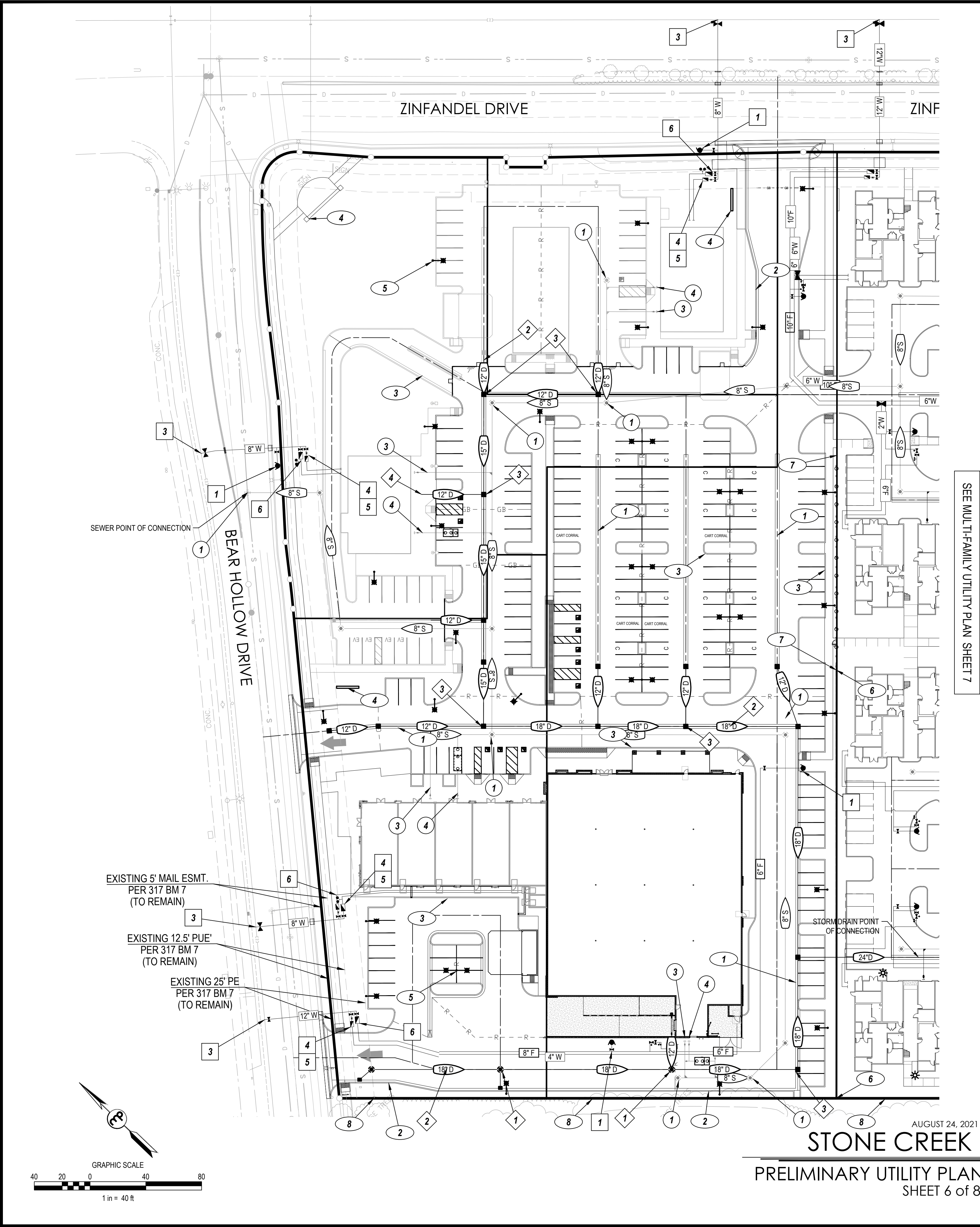
STONE CREEK VILLAGE

PRELIMINARY GRADING PLAN - MULTI-FAMILY RESIDENTIAL
SHEET 4 of 8

AUGUST 24, 2021







UTILITY KEYNOTES:

WATER (PER GOLDEN STATE STANDARD DRAWINGS REV. 1.4, Nov. 2019)

- 1 FIRE HYDRANT PER GOLDEN STATE STANDARD DETAIL (G.S.S.D.) P-8 & C-10
- 2 AIR RELEASE VALVE PER G.S.S.D. P-17
- 3 CUT-IN TEE PER G.S.S.D. P-24
- 4 WATER SERVICE CONNECTION PER G.S.S.D. P-27 & P-28 (SIZE TBD)
- 5 BACKFLOW PREVENTION ASSEMBLY FOR DOMESTIC SERVICE PER G.S.S.D. P-35A
- 6 BACKFLOW PREVENTION ASSEMBLY (WITH FDC) FOR FIRE SERVICE PER G.S.S.D. P-35B

STORM DRAIN (PER RANCHO CORDOVA DESIGN STANDARDS)

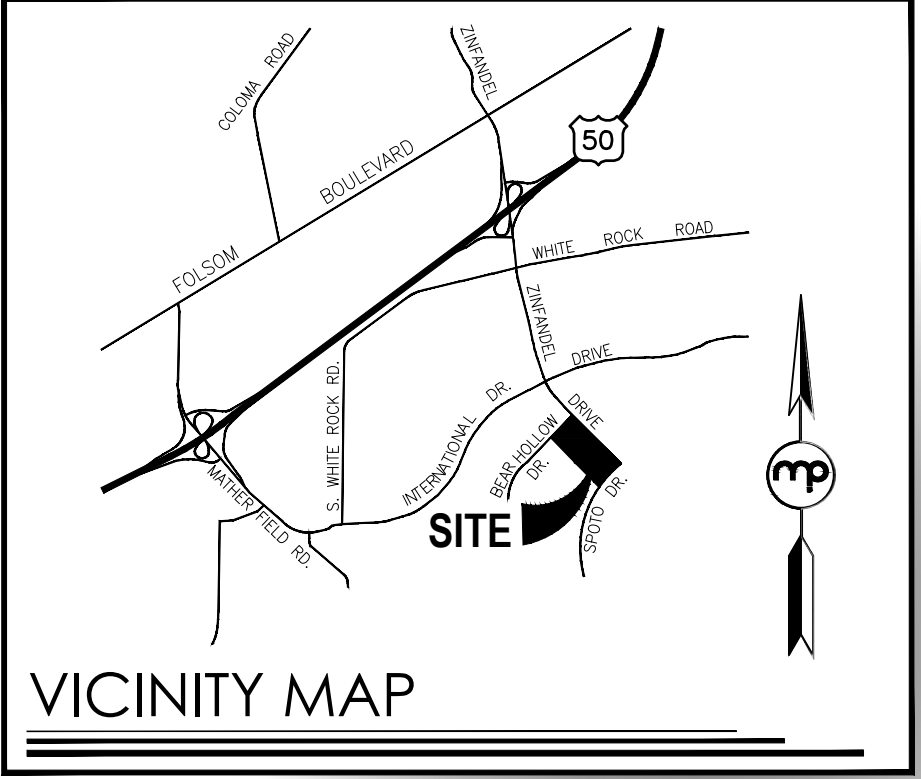
- 1 STORM DRAIN MANHOLE
- 2 STORM DRAIN PIPE (SIZE AS SHOWN)
- 3 STORM DRAIN CATCH BASIN
- 4 STORM DRAIN BUILDING STUB (SEE LID PLAN FOR DISCONNECTED ROOF DRAINS)
- OVERLAND RELEASE

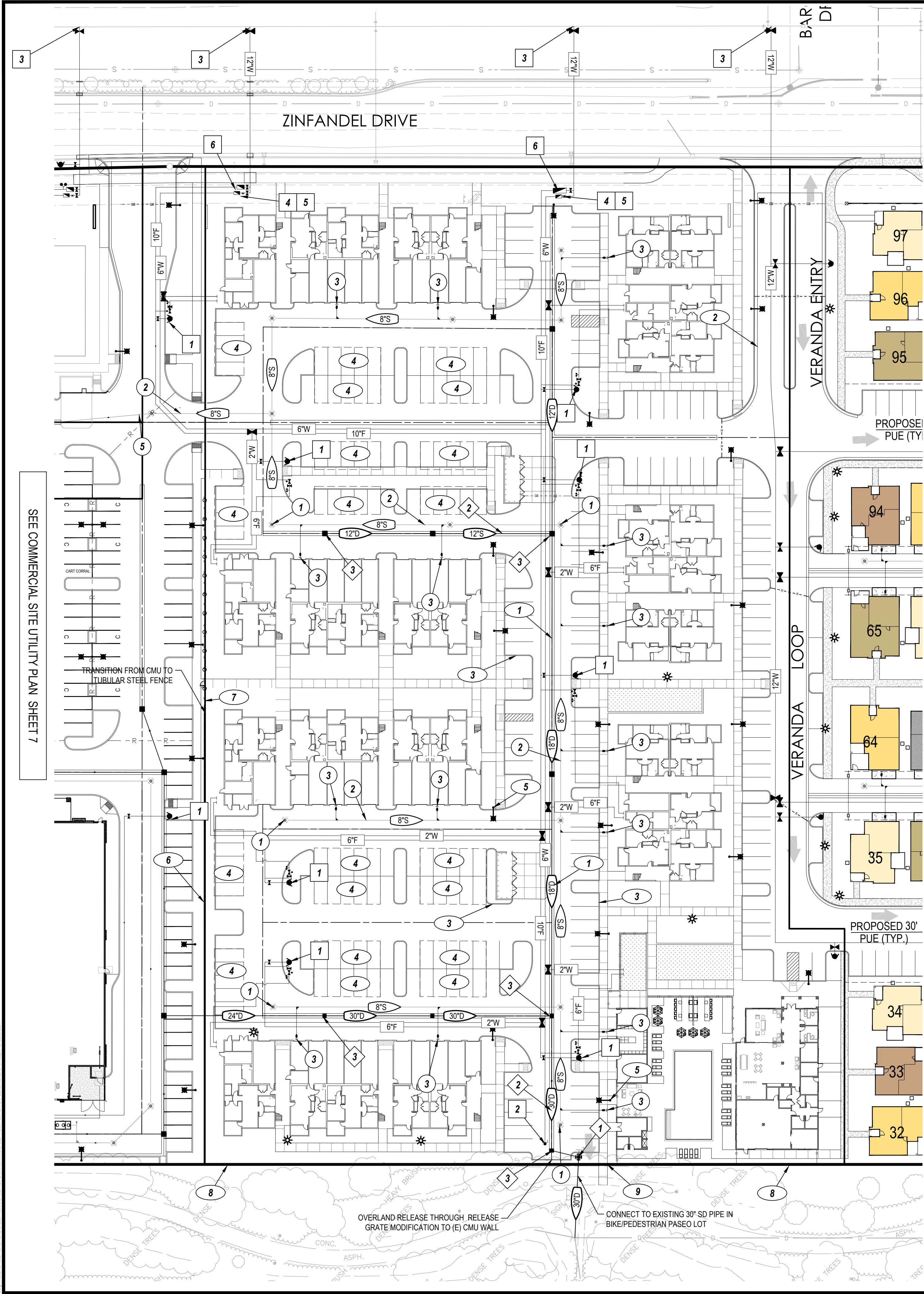
SEWER (PER SACRAMENTO AREA SEWER DISTRICT DESIGN STANDARDS)

- 1 STORM SEWER MANHOLE
- 2 STORM SEWER PIPE
- 3 STORM SEWER SERVICE LATERAL (6")
- 4 GREASE WASTE SERVICE LATERAL WITH INTERCEPTOR (SIZE TBD)

GENERAL

- 1 3' CONCRETE VALLEY GUTTER
- 2 2' CURB & GUTTER (6")
- 3 VERTICAL CURB (6")
- 4 MONUMENT SIGN
- 5 SITE LIGHT
- 6 6' CMU BLOCK WALL
- 7 6' TUBULAR STEEL FENCE
- 8 EXISTING 6' CMU WALL TO REMAIN





UTILITY KEYNOTES:

WATER (PER GOLDEN STATE STANDARD DRAWINGS REV. 1.4, Nov. 2019)

- 1 FIRE HYDRANT PER GOLDEN STATE STANDARD DETAIL (G.S.S.D.) P-8 & C-10
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- 3 CUT-IN TEE PER G.S.S.D. P-24
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- 5 BACKFLOW PREVENTION ASSEMBLY FOR DOMESTIC SERVICE PER G.S.S.D. P-35A
- 6 BACKFLOW PREVENTION ASSEMBLY (WITH FDC) FOR FIRE SERVICE PER G.S.S.D. P-35B

STORM DRAIN (PER RANCHO CORDOVA DESIGN STANDARDS)

- 1 STORM DRAIN MANHOLE
- 2 STORM DRAIN PIPE (SIZE AS SHOWN)
- 3 STORM DRAIN CATCH BASIN
- 4 STORM DRAIN BUILDING STUB (SEE LID PLAN FOR DISCONNECTED ROOF DRAINS)
- OVERLAND RELEASE

SEWER (PER SACRAMENTO AREA SEWER DISTRICT DESIGN STANDARDS)

- 1 STORM SEWER MANHOLE
- 2 STORM SEWER PIPE (SEE LAYOUT FOR SIZE)
- 3 STORM SEWER SERVICE LATERAL (6")
- 4 GREASE WASTE SERVICE LATERAL WITH INTERCEPTOR (SIZE TBD)
- 5 SEE COMMERCIAL SHEET 6 FOR SEWER ROUTING AND CONNECTION AT BEAR HOLLOW

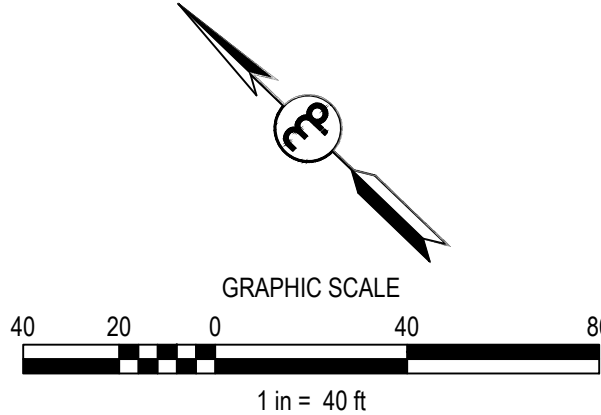
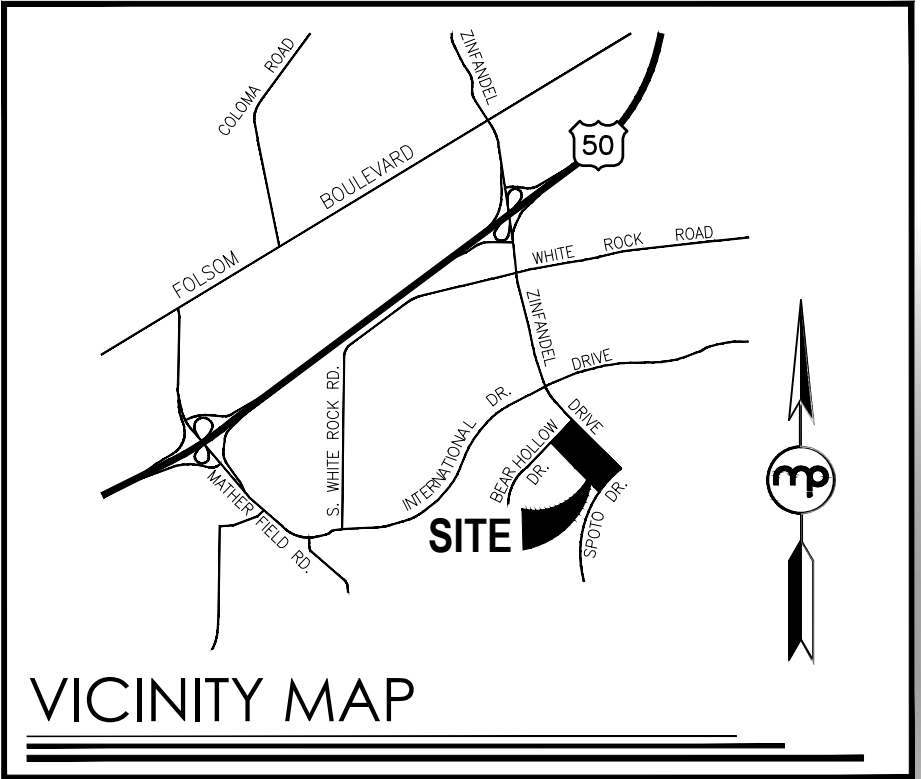
GENERAL

- 1 3' CONCRETE VALLEY GUTTER
- 2 2' CURB & GUTTER (6")
- 3 VERTICAL CURB (6")
- 4 UNDER-CANOPY LIGHTING
- 5 SITE LIGHT
- 6 6' CMU BLOCK WALL
- 7 6' TUBULAR STEEL FENCE
- 8 EXISTING 6' CMU WALL TO REMAIN
- 9 PROPOSED CONNECTION TO BIKE/PEDESTRIAN TRAIL ADJACENT

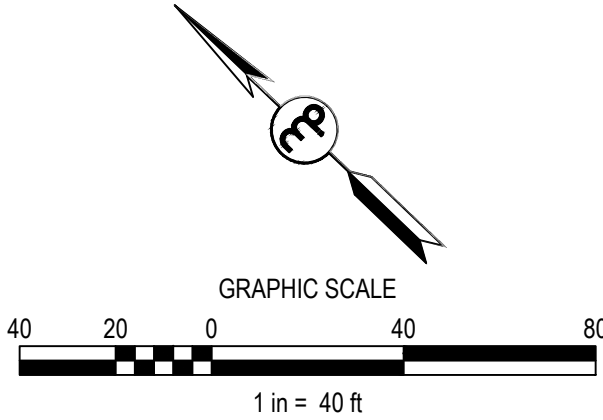
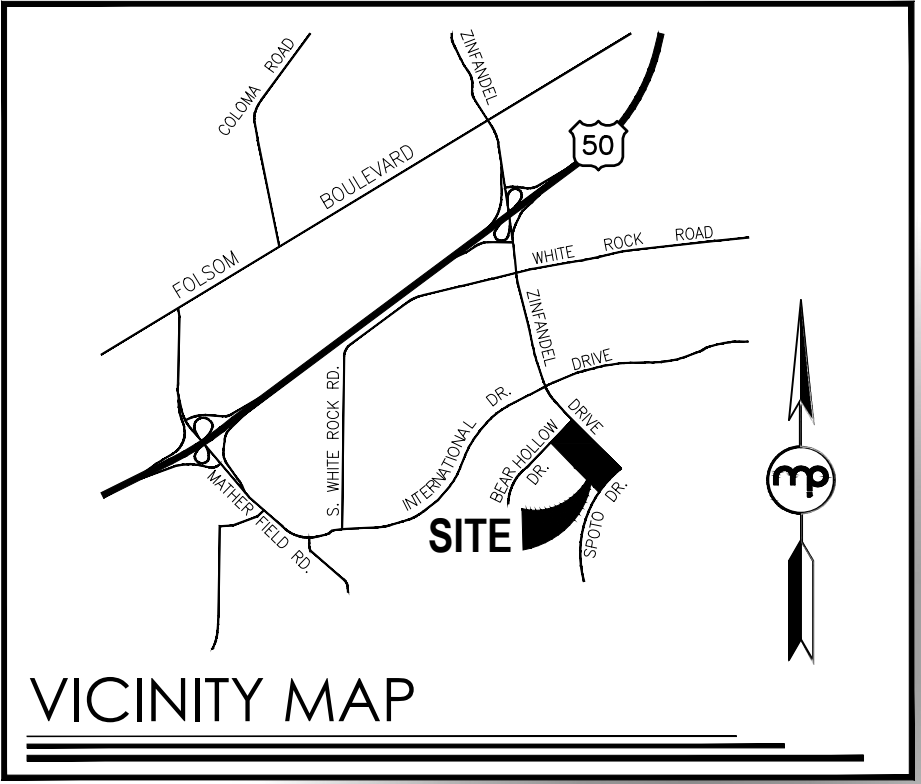
AUGUST 24, 2021

STONE CREEK VILLAGE

PRELIMINARY UTILITY PLAN - MULTI-FAMILY RESIDENTIAL
SHEET 7 of 8



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web: www.mpeinc.com



- UTILITY KEYNOTES:
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- 1 STORM DRAIN MANHOLE
 - 2 STORM DRAIN PIPE (SIZE AS SHOWN)
 - 3 STORM DRAIN CATCH BASIN
 - 4 STORM DRAIN HOODED DI
 - OVERLAND RELEASE
- SEWER (PER SACRAMENTO AREA SEWER DISTRICT DESIGN STANDARDS)
- 1 SANITARY SEWER MANHOLE
 - 2 SANITARY SEWER PIPE
 - 3 SANITARY SEWER SERVICE LATERAL (4")
- GENERAL
- 1 3' CONCRETE VALLEY GUTTER
 - 2 2' CURB & GUTTER (6")
 - 3 VERTICAL CURB (6")
 - SITE LIGHT
 - 4 EXISTING 6' CMU WALL TO REMAIN

AUGUST 24, 2021

STONE CREEK VILLAGE

PRELIMINARY UTILITY PLAN - VERANDA (SFR)

SHEET 8 of 8

mp **MORTON & PITALO, INC.**
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Master Drainage Study
for
The Villages of Zinfandel
Rancho Cordova, CA

Prepared for:
Elliott Homes



Revised:
March 2003

Prepared By:



WOOD RODGERS

ENGINEERING • PLANNING • MAPPING • SURVEYING

3301 C Street, Bldg. 100-B

Tel: 916.341.7760

Sacramento, CA 95816

Fax: 916.341.7767

Phase I (see Appendix L) dated August 2000 analyzed the current flood protection for the Phase I development and indicated additional storage will not be necessary based on the location and elevation of the development above the 500-year 10-day stage.

Phase II of the development currently under design encompasses the remainder of the project area and includes the design of the detention and park storage for the remainder of the project. Approximate ultimate grades are presented on the future condition plan included in Appendix C.

SUMMARY

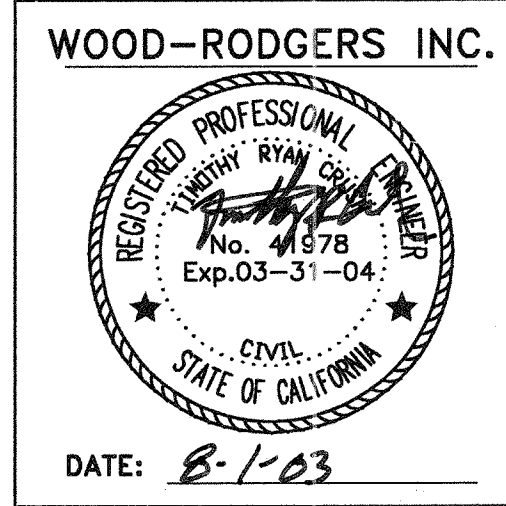
The Villages of Zinfandel is a mixed land use development located in Rancho Cordova, California. It is bounded by Mather Field, the Folsom South Canal and the Capital Center Development. Morrison Creek flows through the southeast corner of the project and the Capital Center Channel flanks the western boundary. The project site is formerly the property of Lonestar Aggregates and the entire site has been extensively mined.

Currently, runoff from the project area does not leave its boundaries. Adjacent to the southern, western and northern boundaries is high ground that rises from ten to twenty feet above the project area. Contrary to prior assumptions, the existing conditions UNET model showed that Morrison Creek and the Capital Center Channel do not spill into the site during extreme storm events. Based on the rating curve, the runway culvert at the Mather Field airstrip can convey approximately 570 cfs without being overtopped.

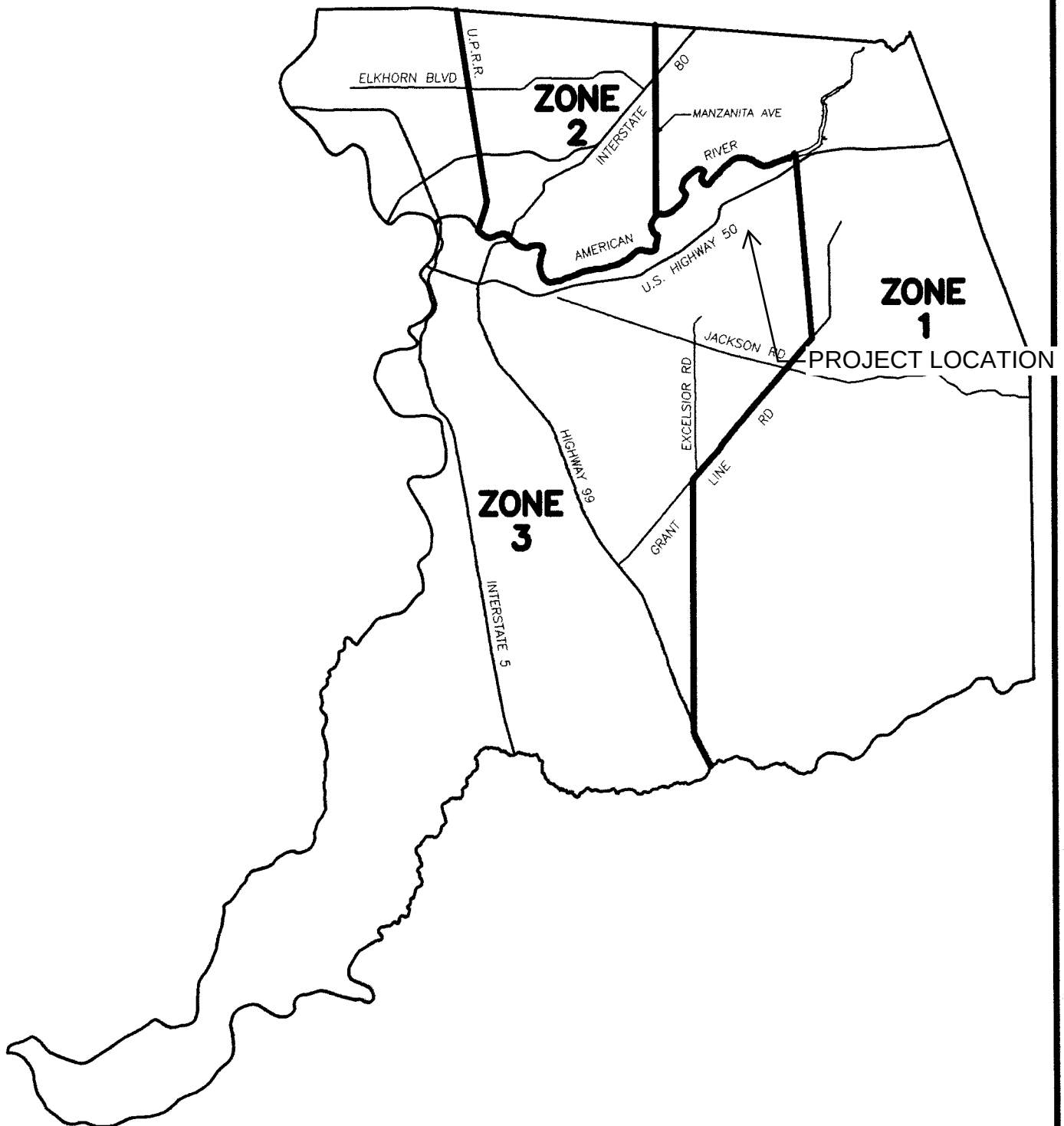
To fully develop The Villages of Zinfandel, it is necessary to build a large detention basin with a depth of ten feet and side slopes of 3:1 maximum. The land use plan has designated a parcel for on-site detention. Additional area within open space/park area located in the central portion of the project site will also be utilized for detention. This report proposes a (3-15 cfs) 45-cfs pumping station located at the southern property line adjacent to the Capital Center Channel. See Future Conditions Exhibit in Appendix C for the approximate location of these facilities.

Various storm events were modeled in order to determine how the proposed system would react to varying extreme hydraulic events. The peak stage of 85.5' in the detention basin was determined to be the 100-year 10-day event assuming 2 – 15 cfs pumps running (one pump failed) to set the adjacent industrial/commercial pad elevations. In addition, the culverts at Mather Boulevard and the culvert at the Mather Field airstrip are not significantly overtopped during

MINIMUM PAD ELEVATION IN STONE CREEK VERANDA SHALL BE 86.5 FT (1 FT FREEBOARD- FROM PEAK STAGE OF THE DETENTION BASIN) upgraded trash racks approved by



PROJECT NO. 1070.030	IMPROVEMENT PLANS FOR		VILLAGES OF ZINFANDEL - UNIT 9	SHEET 8 OF 20	
(STA 26+00 TO 36+12.19)		SPOTO DRIVE		SACRAMENTO COUNTY	
		CALIFORNIA			
 WOOD RODGERS ENGINEERING - MAPPING - SURVEYING 3301 C St. Bldg. 100-B Sacramento, CA 95816 Tel 916.341.7760 Fax 916.341.7767		DATE: _____ SCALE: H: 1"=40' V: 1"=4' DRAWN BY: MCW DESIGNED BY: MCW CHECKED BY: _____ NO. _____		DATE: _____ SCALE: _____ DRAWN BY: _____ DESIGNED BY: _____ CHECKED BY: _____ NO. _____	
		ADD NOTE 12 - MODIFIED IL RAMP		77D 11564 ENGR. NO. 86 UNIT COUNTRY APPROVED DESCRIPTION	

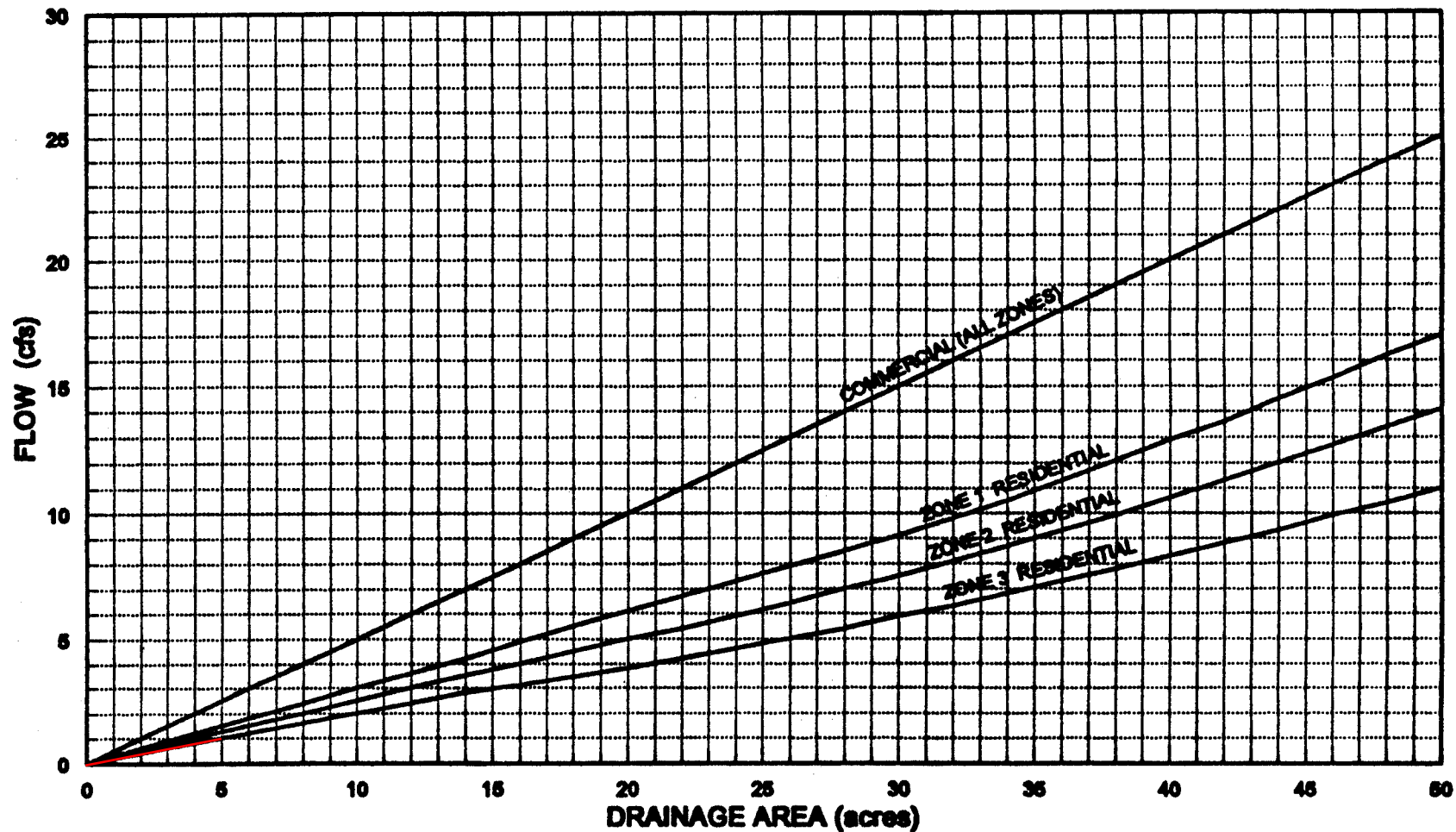


Source : County of Sacramento Master Drainage Plan,
Part 1, County-wide Hydrology, Nolte and Assoc.

Sacramento City and County Hydrologic Zones Nolte Method

Date
**December
1996**

Figure
2-4



NOTE: Design runoff for multiple family development shall be based on the following formula:

$$Q_m = Q_r + (Q_c - Q_r) (I-50)/40$$

Where:

RD- 7	I = 60
RD-10	I = 70
RD-20	I = 80
RD-30	I = 90

Source: County of Sacramento Master Drainage Plan,
Part 1, County-wide Hydrology, Nolte and Assoc.

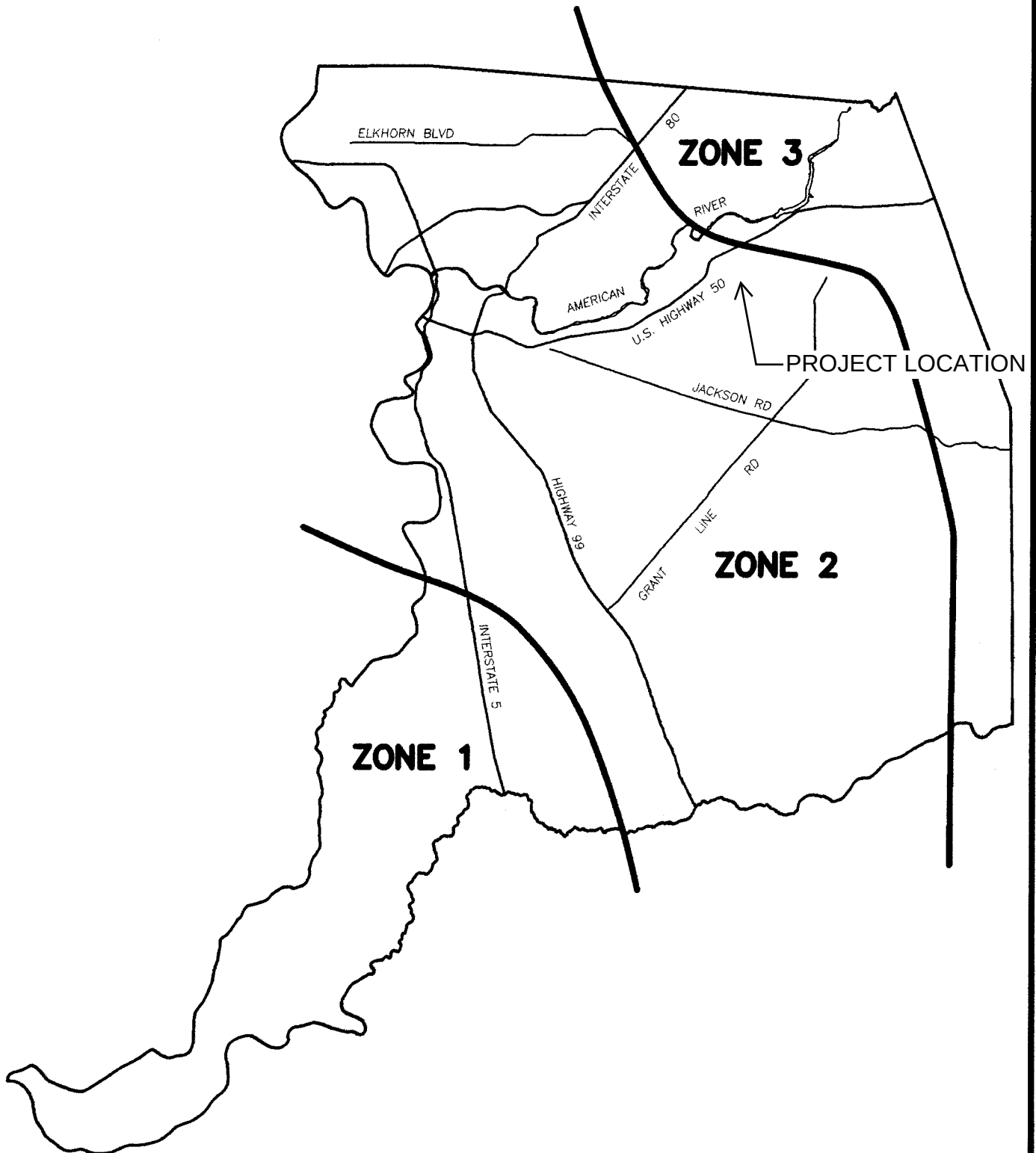
COM & MFR USE
COMMERCIAL
RUNOFF RATES

SFR
17 DU/AC
I=77

**Design Runoff
Nolte Method
Drainage Areas, <50 Acres**

Date **December 1996**

Figure
2-5

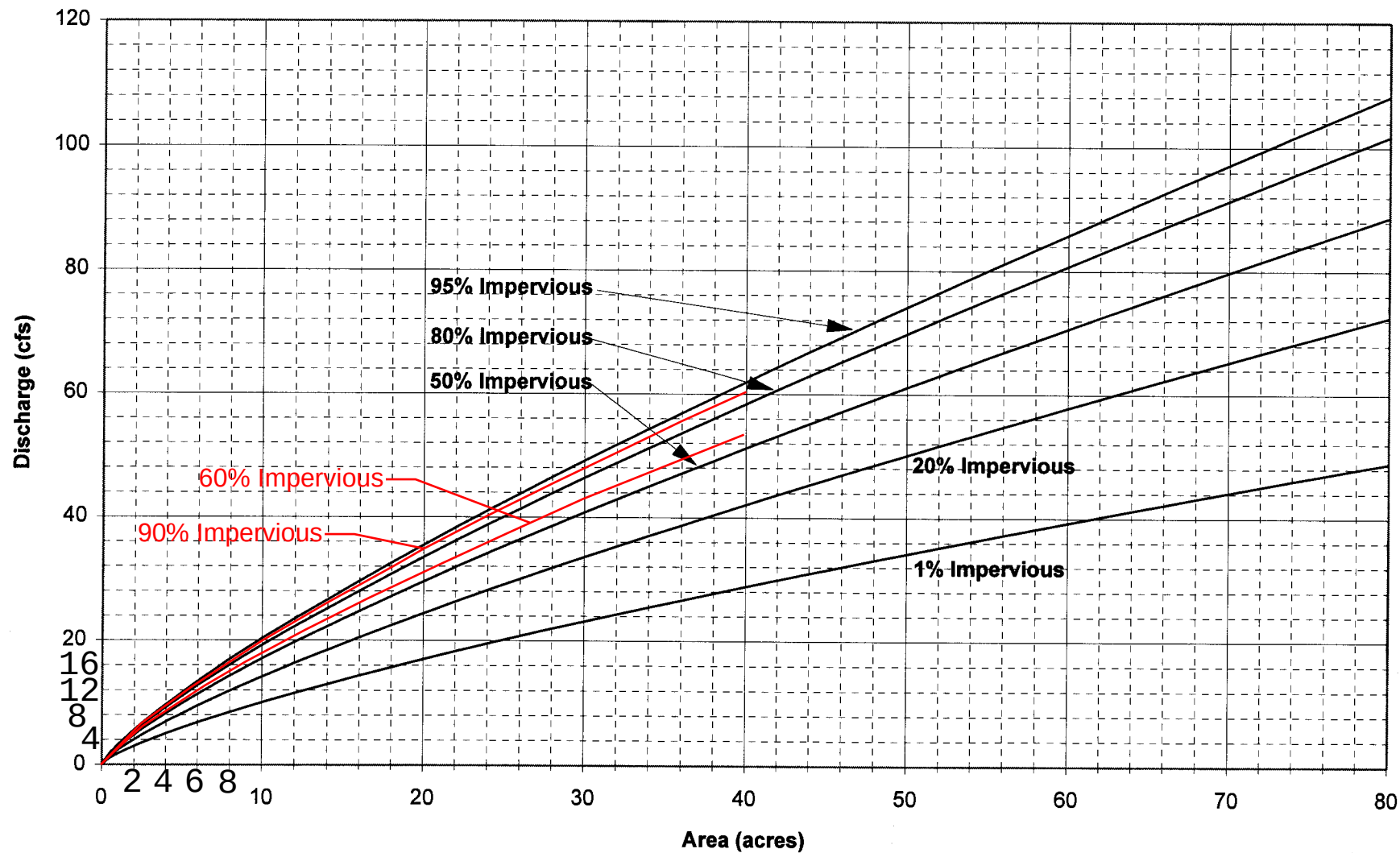


Note : See foldout map in the back of Hydrology Standards
for larger scale map of Rainfall Zones.

Sacramento City and County Rainfall Zones Sacramento Method

Date
**December
1996**

Figure
2-11



Note: Refer to accompanying disk for assumptions made in deriving this figure.

**100-Year Peak Flow
Sacramento Method
Rainfall Zone 2, <80 Acres**

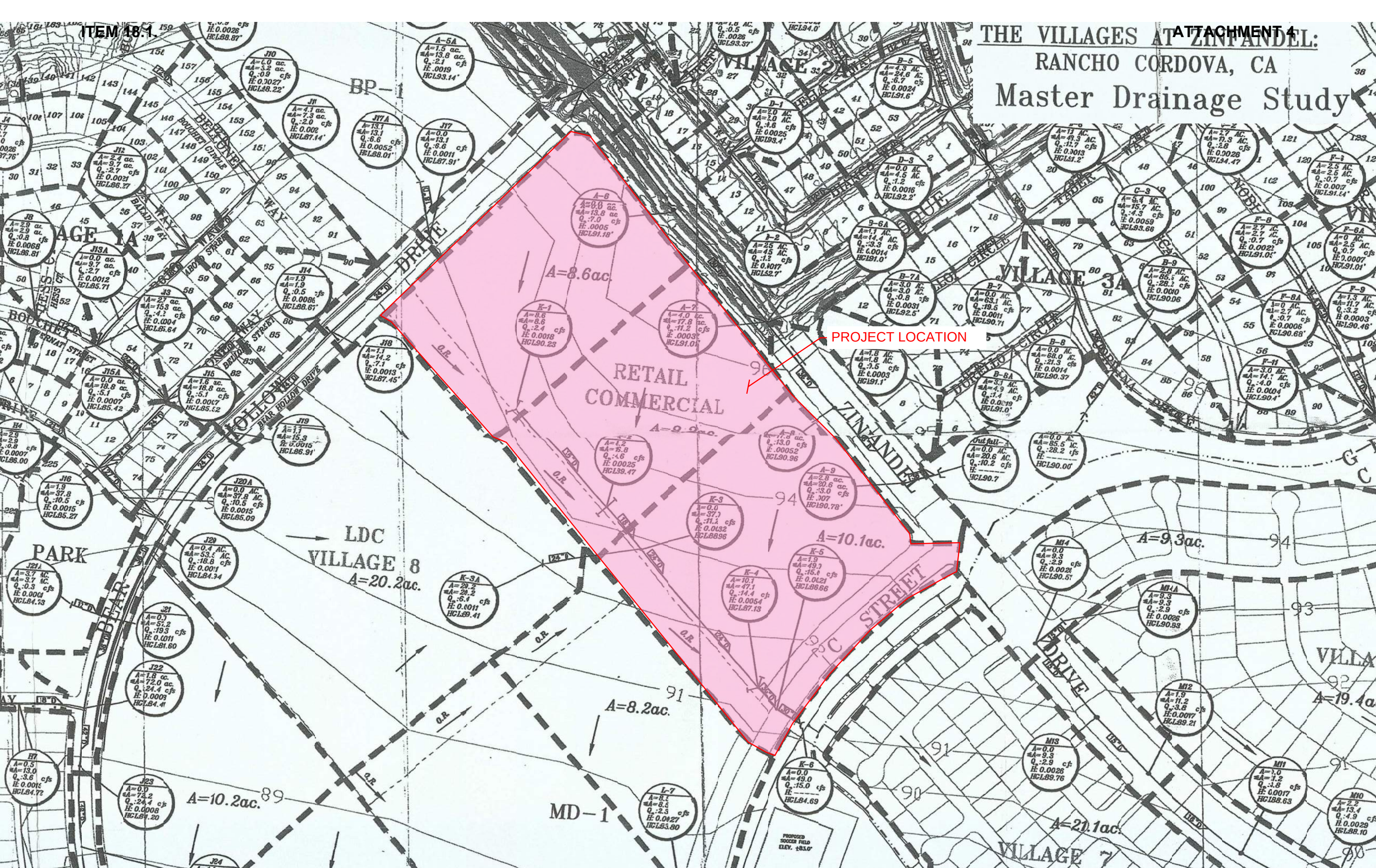
Date **December 1996**

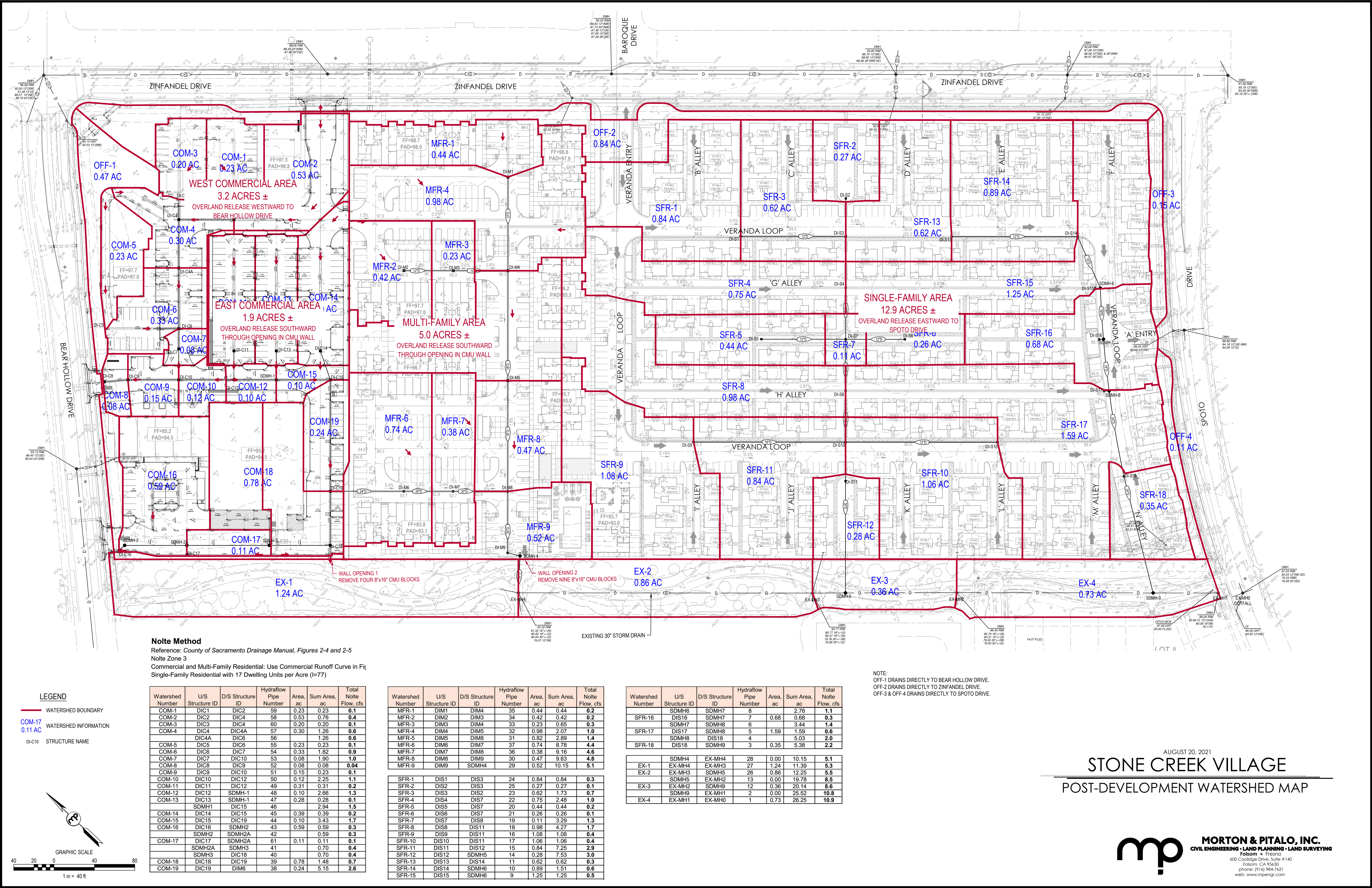
Figure **2-20**

APPENDIX B:

Drainage Watershed Map
(Master Drainage Study Shed Map and Post-Development Conditions)

THE VILLAGES AT ZINTANDEL: ATTACHMENT 4
RANCHO CORDOVA, CA
Master Drainage Study





APPENDIX C:

Onsite Storm Drain Nolte Flow Hydraulic Calculations

Nolte Method

Reference: *County of Sacramento Drainage Manual, Figures 2-4 and 2-5*

Nolte Zone 3

Commercial and Multi-Family Residential: Use Commercial Runoff Curve in Figure 2-5

Single-Family Residential with 17 Dwelling Units per Acre (I=77)

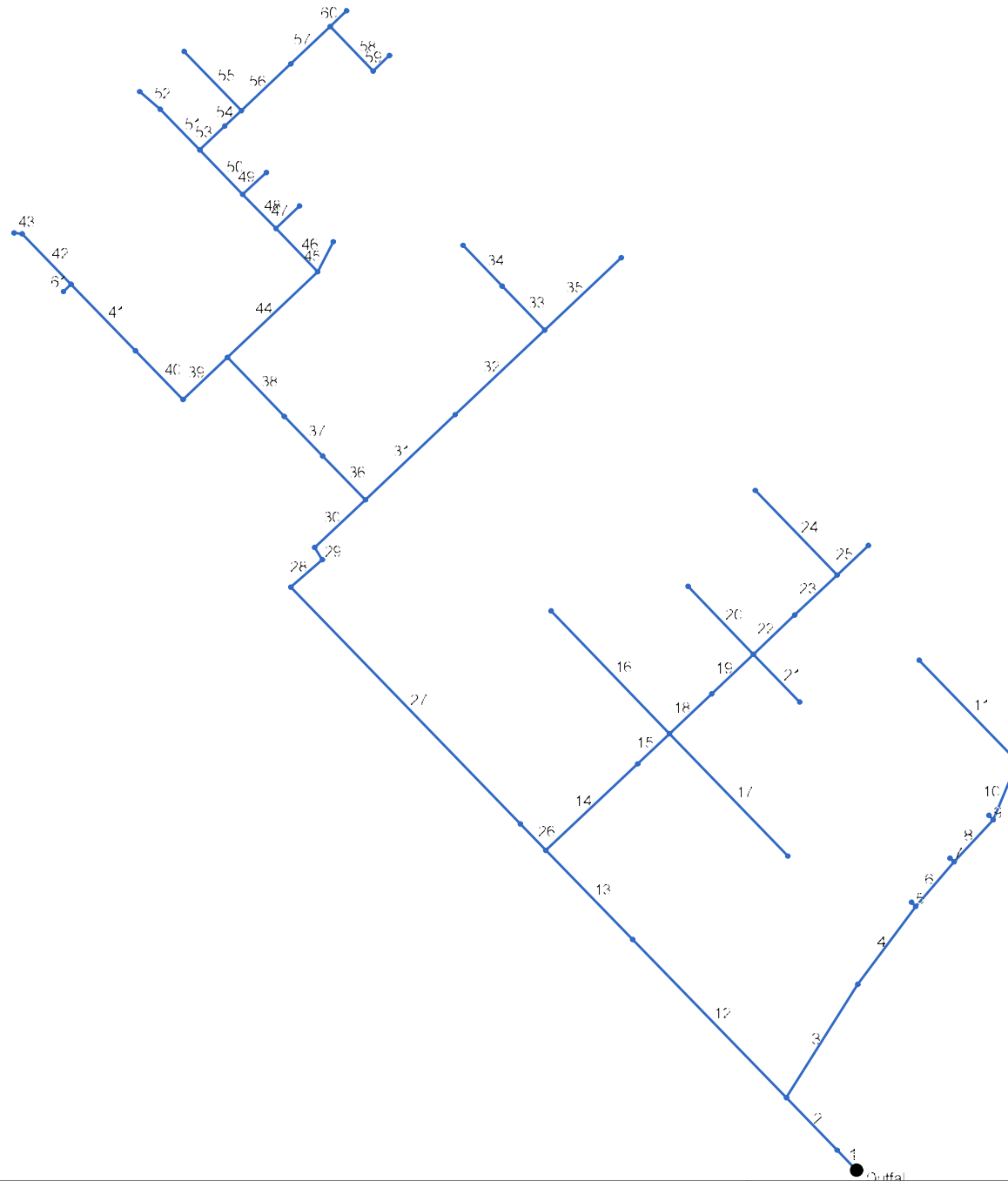
Watershed Number	U/S Structure ID	D/S Structure ID	Hydraflow Pipe Number	Area, ac	Sum Area, ac	Zone 3 Residential Nolte Flow, Qr, cfs	Commercial Nolte Flow, Qc, cfs	Zone 3 Medium Density Nolte Flow, Qm, cfs	Total Nolte Flow, cfs
COM-1	DIC1	DIC2	59	0.23	0.23		0.12		0.1
COM-2	DIC2	DIC4	58	0.53	0.76		0.38		0.4
COM-3	DIC3	DIC4	60	0.20	0.20		0.10		0.1
COM-4	DIC4	DIC4A	57	0.30	1.26		0.63		0.6
	DIC4A	DIC6	56		1.26		0.63		0.6
COM-5	DIC5	DIC6	55	0.23	0.23		0.12		0.1
COM-6	DIC6	DIC7	54	0.33	1.82		0.91		0.9
COM-7	DIC7	DIC10	53	0.08	1.90		0.95		1.0
COM-8	DIC8	DIC9	52	0.08	0.08		0.04		0.04
COM-9	DIC9	DIC10	51	0.15	0.23		0.12		0.1
COM-10	DIC10	DIC12	50	0.12	2.25		1.13		1.1
COM-11	DIC11	DIC12	49	0.31	0.31		0.16		0.2
COM-12	DIC12	SDMH-1	48	0.10	2.66		1.33		1.3
COM-13	DIC13	SDMH-1	47	0.28	0.28		0.14		0.1
	SDMH1	DIC15	46		2.94		1.47		1.5
COM-14	DIC14	DIC15	45	0.39	0.39		0.20		0.2
COM-15	DIC15	DIC19	44	0.10	3.43		1.72		1.7
COM-16	DIC16	SDMH2	43	0.59	0.59		0.30		0.3
	SDMH2	SDMH2A	42		0.59		0.30		0.3
COM-17	DIC17	SDMH2A	61	0.11	0.11		0.06		0.1
	SDMH2A	SDMH3	41		0.70		0.35		0.4
	SDMH3	DIC18	40		0.70		0.35		0.4
COM-18	DIC18	DIC19	39	0.78	1.48		0.74		0.7
COM-19	DIC19	DIM6	38	0.24	5.15		2.58		2.6

MFR-1	DIM1	DIM4	35	0.44	0.44		0.22		0.2
MFR-2	DIM2	DIM3	34	0.42	0.42		0.21		0.2
MFR-3	DIM3	DIM4	33	0.23	0.65		0.33		0.3
MFR-4	DIM4	DIM5	32	0.98	2.07		1.04		1.0
MFR-5	DIM5	DIM8	31	0.82	2.89		1.45		1.4
MFR-6	DIM6	DIM7	37	0.74	8.78		4.39		4.4
MFR-7	DIM7	DIM8	36	0.38	9.16		4.58		4.6
MFR-8	DIM8	DIM9	30	0.47	9.63		4.82		4.8
MFR-9	DIM9	SDMH4	29	0.52	10.15		5.08		5.1

SFR-1	DIS1	DIS3	24	0.84	0.84	0.17	0.42	0.34	0.3
SFR-2	DIS2	DIS3	25	0.27	0.27	0.06	0.14	0.11	0.1
SFR-3	DIS3	DIS2	23	0.62	1.73	0.35	0.87	0.70	0.7
SFR-4	DIS4	DIS7	22	0.75	2.48	0.50	1.24	1.00	1.0
SFR-5	DIS5	DIS7	20	0.44	0.44	0.09	0.22	0.18	0.2
SFR-6	DIS6	DIS7	21	0.26	0.26	0.05	0.13	0.11	0.1
SFR-7	DIS7	DIS8	19	0.11	3.29	0.66	1.65	1.33	1.3
SFR-8	DIS8	DIS11	18	0.98	4.27	0.86	2.14	1.72	1.7
SFR-9	DIS9	DIS11	16	1.08	1.08	0.22	0.54	0.44	0.4
SFR-10	DIS10	DIS11	17	1.06	1.06	0.22	0.53	0.43	0.4
SFR-11	DIS11	DIS12	15	0.84	7.25	1.45	3.63	2.92	2.9
SFR-12	DIS12	SDMH5	14	0.28	7.53	1.50	3.77	3.03	3.0
SFR-13	DIS13	DIS14	11	0.62	0.62	0.13	0.31	0.25	0.3
SFR-14	DIS14	SDMH6	10	0.89	1.51	0.31	0.76	0.61	0.6
SFR-15	DIS15	SDMH6	9	1.25	1.25	0.26	0.63	0.51	0.5
	SDMH6	SDMH7	8		2.76	0.56	1.38	1.11	1.1
SFR-16	DIS16	SDMH7	7	0.68	0.68	0.14	0.34	0.28	0.3
	SDMH7	SDMH8	6		3.44	0.69	1.72	1.39	1.4
SFR-17	DIS17	SDMH8	5	1.59	1.59	0.33	0.80	0.64	0.6
	SDMH8	DIS18	4		5.03	1.01	2.52	2.02	2.0
SFR-18	DIS18	SDMH9	3	0.35	5.38	1.07	2.69	2.17	2.2

	SDMH4	EX-MH4	28	0.00	10.15				5.1
EX-1	EX-MH4	EX-MH3	27	1.24	11.39	0.26			5.3
EX-2	EX-MH3	SDMH5	26	0.86	12.25	0.18			5.5
	SDMH5	EX-MH2	13	0.00	19.78				8.5
EX-3	EX-MH2	SDMH9	12	0.36	20.14	0.08			8.6
	SDMH9	EX-MH1	2	0.00	25.52				10.8
EX-4	EX-MH1	EX-MH0	1	0.73	26.25	0.15			10.9

HGL shall maintain a minimum of 0.5 ft freeboard below inlet grates and a minimum of 1.0 ft freeboard below all manhole rim elevations for a system conveying Nolte Design flows (SCDWR 9-7C.5)
The minimum Nolte flow velocity shall be no less than 2 fps (SCDWR 9-7C.6)



Number of lines: 61

Date: 8/18/2021

Storm Sewer Summary Report

ATTACHMENT 4

Page 1

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	EX-MH1	10.90	30	Cir	37.000	79.09	79.11	0.054	82.80*	82.83*	0.01	82.85	End	Manhole
2	SDMH-9	10.80	30	Cir	97.000	79.11	79.21	0.103	82.85*	82.94*	0.07	83.01	1	Manhole
3	DI-S18	2.20	24	Cir	178.000	79.30	80.20	0.506	83.01*	83.03*	0.00	83.03	2	Manhole
4	SDMH-8	2.00	24	Cir	129.000	80.20	80.60	0.310	83.03*	83.05*	0.01	83.05	3	Manhole
5	DI-S17	0.60	18	Cir	8.000	80.60	80.64	0.500	83.05*	83.05*	0.00	83.05	4	Manhole
6	SDMH-7	1.40	18	Cir	78.000	80.60	81.20	0.769	83.05*	83.07*	0.01	83.08	4	Manhole
7	DI-S16	0.30	12	Cir	7.000	81.20	81.24	0.571	83.08*	83.08*	0.00	83.08	6	Manhole
8	SDMH-6	1.10	18	Cir	76.000	81.20	82.70	1.974	83.08	83.15	0.10	83.24	6	Manhole
9	DI-S15	0.50	18	Cir	8.000	82.70	82.74	0.500	83.24	83.24	0.01	83.26	8	Manhole
10	DI-S14	0.60	18	Cir	84.000	82.70	84.10	1.667	83.24	84.39	n/a	84.39 j	8	Manhole
11	DI-S13	0.30	12	Cir	187.000	84.10	85.60	0.802	84.39	85.83	0.08	85.83	10	Manhole
12	EX-MH2	8.60	30	Cir	292.000	79.21	79.50	0.099	83.01*	83.18*	0.01	83.19	2	Manhole
13	SDMH-5	8.50	30	Cir	165.000	79.53	79.61	0.048	83.19*	83.28*	0.05	83.33	12	Manhole
14	DI-S12	3.00	30	Cir	167.000	83.50	83.90	0.240	84.20	84.60	0.02	84.62	13	Manhole
15	DI-S11	2.90	30	Cir	58.000	83.90	84.20	0.517	84.62	84.76	0.19	84.95	14	Manhole
16	DI-S9	0.40	18	Cir	226.000	84.20	86.30	0.929	84.95	86.53	n/a	86.53 j	15	Manhole
17	DI-S10	0.40	12	Cir	226.000	84.20	86.30	0.929	84.95	86.56	n/a	86.56 j	15	Manhole
18	DI-S8	1.70	24	Cir	77.000	84.20	84.70	0.649	84.95	85.15	n/a	85.15	15	Manhole
19	DI-S7	1.30	18	Cir	76.000	84.70	85.30	0.789	85.15	85.73	n/a	85.73 j	18	Manhole
20	DI-S5	0.20	12	Cir	125.000	85.30	86.00	0.560	85.73	86.19	0.06	86.25	19	Manhole
21	DI-S6	0.10	12	Cir	88.000	85.30	85.80	0.568	85.73	85.94	0.03	85.98	19	Manhole
22	DI-S4	1.00	18	Cir	76.000	85.30	85.70	0.526	85.73	86.08	0.02	86.10	19	Manhole
23	DI-S3	0.70	18	Cir	77.000	85.70	86.50	1.039	86.10	86.81	n/a	86.81 j	22	Manhole
24	DI-S1	0.30	12	Cir	156.000	86.50	87.44	0.603	86.81	87.67	0.08	87.67	23	Manhole

Project File: Veranda Storm Drain-Nolte.stm

Number of lines: 61

Run Date: 8/19/2021

NOTES: Known Qs only ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

ATTACHMENT 4

Page 2

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
25	DI-S2	0.10	12	Cir	57.000	86.50	87.20	1.228	86.81	87.33	n/a	87.33 j	23	Manhole
26	EX-MH3	5.50	30	Cir	49.000	79.61	79.66	0.102	83.33*	83.34*	0.00	83.34	13	Manhole
27	EX-MH4	5.30	30	Cir	437.000	79.76	80.04	0.064	83.34*	83.44*	0.02	83.46	26	Manhole
28	SDMH-4	5.10	30	Cir	55.000	82.90	83.46	1.018	83.54	84.20	n/a	84.20	27	Manhole
29	DI-M9	5.10	30	Cir	19.000	83.46	83.53	0.368	84.29	84.36	0.20	84.55	28	Manhole
30	DI-M8	4.80	30	Cir	92.000	83.53	83.85	0.348	84.55	84.69	0.17	84.86	29	Manhole
31	DI-M5	1.40	18	Cir	164.000	83.85	84.92	0.652	84.86	85.36	n/a	85.36	30	Manhole
32	DI-M4	1.00	18	Cir	163.000	84.92	85.57	0.399	85.36	85.98	0.10	86.08	31	Manhole
33	DI-M3	0.30	12	Cir	81.000	85.57	85.90	0.407	86.08	86.18	0.01	86.19	32	Manhole
34	DI-M2	0.20	12	Cir	75.000	85.90	86.16	0.347	86.19	86.37	0.04	86.41	33	Manhole
35	DI-M1	0.20	12	Cir	140.000	85.57	86.06	0.350	86.08	86.29	0.03	86.32	32	Manhole
36	DI-M7	4.60	30	Cir	81.000	83.85	84.14	0.358	84.86	84.97	0.02	85.00	30	Manhole
37	DI-M6	4.40	30	Cir	73.000	84.14	84.39	0.342	85.00	85.17	0.03	85.20	36	Manhole
38	DI-C19	2.60	24	Cir	109.000	84.39	84.83	0.404	85.20	85.43	0.17	85.60	37	Manhole
39	DI-C18	0.70	18	Cir	81.000	84.83	84.99	0.198	85.60	85.62	0.02	85.63	38	Manhole
40	SDMH-3	0.40	12	Cir	90.000	84.99	85.35	0.400	85.63	85.72	0.01	85.72	39	Manhole
41	SDMH-2A	0.40	12	Cir	123.000	85.35	85.84	0.398	85.72	86.13	0.07	86.20	40	Manhole
42	SDMH-2	0.30	12	Cir	93.000	85.84	86.31	0.505	86.20	86.54	0.05	86.59	41	Manhole
43	DI-C16	0.30	12	Cir	11.000	86.31	86.36	0.455	86.59	86.62	0.05	86.67	42	Manhole
44	DI-C15	1.70	18	Cir	165.000	84.83	86.31	0.897	85.60	86.80	n/a	86.80 j	38	Manhole
45	DI-C14	0.20	12	Cir	45.000	86.31	86.54	0.511	86.80	86.82	0.02	86.84	44	Manhole
46	SDMH-1	1.50	18	Cir	80.000	86.31	86.87	0.700	86.80	87.33	n/a	87.33 j	44	Manhole
47	DI-C13	0.10	12	Cir	43.000	86.87	87.09	0.512	87.33	87.34	0.01	87.34	46	Manhole
48	DI-C12	1.30	18	Cir	63.000	86.87	87.25	0.603	87.33	87.68	0.15	87.83	46	Manhole

Project File: Veranda Storm Drain-Nolte.stm

Number of lines: 61

Run Date: 8/19/2021

NOTES: Known Qs only ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

Storm Sewer Summary Report

ATTACHMENT 4

Page 3

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
49	DI-C11	0.20	12	Cir	43.000	87.25	87.47	0.512	87.83	87.84	0.01	87.85	48	Manhole
50	DI-C10	1.10	18	Cir	82.000	87.25	87.62	0.451	87.83	88.03	0.12	88.15	48	Manhole
51	DI-C9	0.10	12	Cir	75.000	87.62	87.96	0.453	88.15	88.18	0.00	88.18	50	Manhole
52	DI-C8	0.04	12	Cir	36.000	87.96	88.14	0.500	88.18	88.24	0.02	88.25	51	Manhole
53	DI-C7	1.00	18	Cir	46.000	87.62	87.78	0.348	88.15	88.23	0.01	88.24	50	Manhole
54	DI-C6	0.90	18	Cir	30.000	87.78	87.89	0.367	88.24	88.31	0.08	88.39	53	Manhole
55	DI-C5	0.10	12	Cir	109.000	87.89	88.27	0.349	88.39	88.46	0.01	88.48	54	Manhole
56	DI-C4A	0.60	18	Cir	90.000	87.89	88.20	0.344	88.39	88.54	0.01	88.55	54	Manhole
57	DI-C4	0.60	18	Cir	72.000	88.20	88.45	0.347	88.55	88.79	0.06	88.85	56	Manhole
58	DI-C2	0.40	12	Cir	82.000	88.45	88.86	0.500	88.85	89.13	0.09	89.21	57	Manhole
59	DI-C1	0.10	12	Cir	30.000	88.86	88.97	0.367	89.21	89.22	0.01	89.23	58	Manhole
60	DI-C3	0.10	12	Cir	30.000	88.45	88.56	0.367	88.85	88.85	0.00	88.86	57	Manhole
61	DI-C17	0.10	12	Cir	14.000	85.84	85.91	0.500	86.20	86.20	0.00	86.20	41	Manhole
Project File: Veranda Storm Drain-Nolte.stm									Number of lines: 61			Run Date: 8/19/2021		
NOTES: Known Qs only ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.														

Hydraulic Grade Line Computations

ATTACHMENT 4

Page 1

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)		
(1)	(in)	(cfs)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(ft)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(K)	(ft)
1	30	10.90	79.09	82.80	2.50	4.91	2.22	0.08	82.88	0.094	37.000	79.11	82.83	2.50	4.91	2.22	0.08	82.91	0.094	0.094	0.035	0.15	0.01
2	30	10.80	79.11	82.85	2.50	4.91	2.20	0.08	82.92	0.092	97.000	79.21	82.94	2.50	4.91	2.20	0.08	83.01	0.092	0.092	0.090	0.97	0.07
3	24	2.20	79.30	83.01	2.00	3.14	0.70	0.01	83.02	0.013	178.000	80.20	83.03	2.00	3.14	0.70	0.01	83.04	0.013	0.013	0.022	0.15	0.00
4	24	2.00	80.20	83.03	2.00	3.14	0.64	0.01	83.04	0.010	129.000	80.60	83.05	2.00	3.14	0.64	0.01	83.05	0.010	0.010	0.013	0.99	0.01
5	18	0.60	80.60	83.05	1.50	1.77	0.34	0.00	83.05	0.004	8.000	80.64	83.05	1.50	1.77	0.34	0.00	83.05	0.004	0.004	0.000	1.00	0.00
6	18	1.40	80.60	83.05	1.50	1.77	0.79	0.01	83.06	0.024	78.000	81.20	83.07	1.50	1.77	0.79	0.01	83.08	0.024	0.024	0.018	1.00	0.01
7	12	0.30	81.20	83.08	1.00	0.79	0.38	0.00	83.08	0.009	7.000	81.24	83.08	1.00	0.79	0.38	0.00	83.08	0.009	0.009	0.001	1.00	0.00
8	18	1.10	81.20	83.08	1.50	1.77	0.62	0.01	83.09	0.015	76.000	82.70	83.15	0.45	0.44	2.51	0.10	83.24	0.398	0.206	0.157	0.99	0.10
9	18	0.50	82.70	83.24	0.54	0.58	0.87	0.01	83.25	0.039	8.000	82.74	83.24	0.50	0.52	0.96	0.01	83.26	0.051	0.045	0.004	1.00	0.01
10	18	0.60	82.70	83.24	0.54	0.24	1.04	0.10	83.34	0.000	84.000	84.10	84.39 j	0.29**	0.24	2.54	0.10	84.49	0.000	0.000	n/a	0.93	0.09
11	12	0.30	84.10	84.39	0.29	0.13	1.61	0.08	84.47	0.000	187.000	85.60	85.83	0.23**	0.13	2.26	0.08	85.90	0.000	0.000	n/a	1.00	0.08
12	30	8.60	79.21	83.01	2.50	4.91	1.75	0.05	83.06	0.059	292.000	79.50	83.18	2.50	4.91	1.75	0.05	83.23	0.059	0.059	0.171	0.15	0.01
13	30	8.50	79.53	83.19	2.50	4.91	1.73	0.05	83.23	0.057	165.000	79.61	83.28	2.50	4.91	1.73	0.05	83.33	0.057	0.057	0.094	1.00	0.05
14	30	3.00	83.50	84.20	0.70*	1.13	2.65	0.11	84.31	0.239	167.000	83.90	84.60	0.70	1.13	2.65	0.11	84.71	0.240	0.239	0.399	0.15	0.02
15	30	2.90	83.90	84.62	0.72	0.82	2.48	0.10	84.71	0.205	58.000	84.20	84.76	0.56**	0.83	3.51	0.19	84.95	0.540	0.372	0.216	1.00	0.19
16	18	0.40	84.20	84.95	0.75	0.18	0.45	0.08	85.03	0.000	226.000	86.30	86.53 j	0.23**	0.18	2.28	0.08	86.61	0.000	0.000	n/a	1.00	n/a
17	12	0.40	84.20	84.95	0.75	0.16	0.63	0.09	85.05	0.000	226.000	86.30	86.56 j	0.26**	0.16	2.45	0.09	86.65	0.000	0.000	n/a	1.00	0.09
18	24	1.70	84.20	84.95	0.75	0.53	1.57	0.16	85.11	0.000	77.000	84.70	85.15	0.45**	0.53	3.20	0.16	85.31	0.000	0.000	n/a	0.15	n/a
19	18	1.30	84.70	85.15	0.45	0.41	2.90	0.15	85.30	0.000	76.000	85.30	85.73 j	0.43**	0.41	3.14	0.15	85.88	0.000	0.000	n/a	1.00	n/a
20	12	0.20	85.30	85.73	0.43	0.10	0.63	0.01	85.73	0.029	125.000	86.00	86.19	0.19**	0.10	2.00	0.06	86.25	0.750	0.390	0.487	1.00	0.06
21	12	0.10	85.30	85.73	0.43	0.32	0.31	0.00	85.73	0.007	88.000	85.80	85.94	0.14	0.07	1.46	0.03	85.98	0.548	0.278	0.244	1.00	0.03

Project File: Veranda Storm Drain-Nolte.stm

Number of lines: 61

Run Date: 8/19/2021

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

Hydraulic Grade Line Computations

ATTACHMENT 4

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Line (1)	Size (in) (2)	Q (cfs) (3)	Downstream								Len (ft) (12)	Upstream								Check		JL coeff (K) (23)	Minor loss (ft) (24)
			Invert elev (ft) (4)	HGL elev (ft) (5)	Depth (ft) (6)	Area (sqft) (7)	Vel (ft/s) (8)	Vel head (ft) (9)	EGL elev (ft) (10)	Sf (%) (11)		Invert elev (ft) (13)	HGL elev (ft) (14)	Depth (ft) (15)	Area (sqft) (16)	Vel (ft/s) (17)	Vel head (ft) (18)	EGL elev (ft) (19)	Sf (%) (20)	Ave Sf (%) (21)	Enrgy loss (ft) (22)		
22	18	1.00	85.30	85.73	0.43	0.34	2.42	0.09	85.82	0.387	76.000	85.70	86.08	0.38**	0.35	2.89	0.13	86.21	0.638	0.513	0.390	0.15	0.02
23	18	0.70	85.70	86.10	0.40	0.26	1.88	0.11	86.20	0.000	77.000	86.50	86.81 j	0.31**	0.26	2.65	0.11	86.92	0.000	0.000	n/a	1.00	0.11
24	12	0.30	86.50	86.81	0.31	0.13	1.44	0.03	86.84	0.216	156.000	87.44	87.67	0.23**	0.13	2.26	0.08	87.74	0.761	0.488	n/a	1.00	0.08
25	12	0.10	86.50	86.81	0.31	0.06	0.48	0.04	86.85	0.000	57.000	87.20	87.33 j	0.13**	0.06	1.69	0.04	87.37	0.000	0.000	n/a	1.00	0.04
26	30	5.50	79.61	83.33	2.50	4.91	1.12	0.02	83.35	0.024	49.000	79.66	83.34	2.50	4.91	1.12	0.02	83.36	0.024	0.024	0.012	0.15	0.00
27	30	5.30	79.76	83.34	2.50	4.91	1.08	0.02	83.36	0.022	437.000	80.04	83.44	2.50	4.91	1.08	0.02	83.46	0.022	0.022	0.097	1.00	0.02
28	30	5.10	82.90	83.54	0.64*	0.99	5.17	0.27	83.81	0.000	55.000	83.46	84.20	0.74**	1.23	4.16	0.27	84.47	0.000	0.000	n/a	0.98	n/a
29	30	5.10	83.46	84.29	0.83*	1.42	3.60	0.20	84.49	0.368	19.000	83.53	84.36	0.83	1.41	3.61	0.20	84.56	0.371	0.370	0.070	0.98	0.20
30	30	4.80	83.53	84.55	1.02	1.89	2.54	0.10	84.65	0.147	92.000	83.85	84.69	0.84	1.46	3.30	0.17	84.86	0.303	0.225	0.207	1.00	0.17
31	18	1.40	83.85	84.86	1.01	0.44	1.10	0.02	84.88	0.037	164.000	84.92	85.36	0.44**	0.44	3.21	0.16	85.52	0.656	0.347	n/a	0.15	n/a
32	18	1.00	84.92	85.36	0.44	0.44	2.29	0.08	85.44	0.335	163.000	85.57	85.98	0.41	0.39	2.53	0.10	86.08	0.443	0.389	0.634	1.00	0.10
33	12	0.30	85.57	86.08	0.51	0.40	0.74	0.01	86.09	0.035	81.000	85.90	86.18	0.28	0.18	1.63	0.04	86.23	0.304	0.170	0.137	0.15	0.01
34	12	0.20	85.90	86.19	0.29	0.19	1.06	0.02	86.21	0.124	75.000	86.16	86.37	0.21	0.12	1.63	0.04	86.41	0.424	0.274	0.206	1.00	0.04
35	12	0.20	85.57	86.08	0.51	0.40	0.49	0.00	86.09	0.015	140.000	86.06	86.29	0.23	0.13	1.49	0.03	86.32	0.326	0.171	0.239	1.00	0.03
36	30	4.60	83.85	84.86	1.01	1.86	2.47	0.09	84.96	0.141	81.000	84.14	84.97	0.83	1.43	3.21	0.16	85.13	0.292	0.217	0.175	0.15	0.02
37	30	4.40	84.14	85.00	0.86	1.49	2.96	0.14	85.13	0.240	73.000	84.39	85.17	0.78	1.31	3.36	0.18	85.35	0.341	0.291	0.212	0.15	0.03
38	24	2.60	84.39	85.20	0.81	1.19	2.19	0.07	85.27	0.150	109.000	84.83	85.43	0.60	0.80	3.26	0.17	85.60	0.453	0.301	0.328	1.00	0.17
39	18	0.70	84.83	85.60	0.77	0.91	0.77	0.01	85.61	0.022	81.000	84.99	85.62	0.63	0.70	0.99	0.02	85.63	0.044	0.033	0.027	1.00	0.02
40	12	0.40	84.99	85.63	0.64	0.54	0.75	0.01	85.64	0.030	90.000	85.35	85.72	0.37	0.26	1.54	0.04	85.75	0.207	0.118	0.107	0.15	0.01
41	12	0.40	85.35	85.72	0.37	0.26	1.51	0.04	85.76	0.196	123.000	85.84	86.13	0.29	0.19	2.16	0.07	86.20	0.529	0.362	0.446	1.00	0.07
42	12	0.30	85.84	86.20	0.36	0.13	1.19	0.02	86.22	0.125	93.000	86.31	86.54	0.23**	0.13	2.23	0.08	86.62	0.733	0.429	0.399	0.69	0.05

Project File: Veranda Storm Drain-Nolte.stm

Number of lines: 61

Run Date: 8/19/2021

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

Hydraulic Grade Line Computations

ATTACHMENT 4

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Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)		Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)		
(1)	(in)	(cfs)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(K)	(ft)
43	12	0.30	86.31	86.59	0.28	0.18	1.66	0.04	86.63	0.318	11.000	86.36	86.62	0.26	0.16	1.83	0.05	86.67	0.419	0.368	0.041	1.00	0.05
44	18	1.70	84.83	85.60	0.77	0.50	1.87	0.18	85.78	0.000	165.000	86.31	86.80 j	0.49**	0.50	3.39	0.18	86.98	0.000	0.000	n/a	1.00	0.18
45	12	0.20	86.31	86.80	0.49	0.38	0.52	0.00	86.80	0.018	45.000	86.54	86.82	0.28	0.18	1.10	0.02	86.84	0.139	0.079	0.035	1.00	0.02
46	18	1.50	86.31	86.80	0.49	0.46	2.99	0.17	86.97	0.000	80.000	86.87	87.33 j	0.46**	0.46	3.27	0.17	87.50	0.000	0.000	n/a	1.00	n/a
47	12	0.10	86.87	87.33	0.46	0.35	0.28	0.00	87.33	0.006	43.000	87.09	87.34	0.25	0.15	0.66	0.01	87.34	0.059	0.032	0.014	1.00	0.01
48	18	1.30	86.87	87.33	0.46	0.41	2.84	0.13	87.45	0.492	63.000	87.25	87.68	0.43**	0.42	3.11	0.15	87.83	0.635	0.564	0.355	1.00	0.15
49	12	0.20	87.25	87.83	0.58	0.47	0.42	0.00	87.83	0.010	43.000	87.47	87.84	0.37	0.26	0.77	0.01	87.85	0.051	0.031	0.013	1.00	0.01
50	18	1.10	87.25	87.83	0.58	0.63	1.74	0.05	87.88	0.146	82.000	87.62	88.03	0.41	0.40	2.77	0.12	88.15	0.525	0.335	0.275	1.00	0.12
51	12	0.10	87.62	88.15	0.53	0.43	0.23	0.00	88.15	0.003	75.000	87.96	88.18	0.22	0.13	0.77	0.01	88.19	0.091	0.047	0.035	0.15	0.00
52	12	0.04	87.96	88.18	0.22	0.13	0.31	0.00	88.18	0.014	36.000	88.14	88.24	0.10	0.04	0.98	0.02	88.25	0.391	0.202	0.073	1.00	0.02
53	18	1.00	87.62	88.15	0.53	0.56	1.78	0.05	88.20	0.164	46.000	87.78	88.23	0.45	0.45	2.22	0.08	88.31	0.307	0.236	0.108	0.15	0.01
54	18	0.90	87.78	88.24	0.46	0.47	1.93	0.06	88.30	0.226	30.000	87.89	88.31	0.42	0.40	2.23	0.08	88.39	0.338	0.282	0.085	1.00	0.08
55	12	0.10	87.89	88.39	0.50	0.39	0.26	0.00	88.39	0.004	109.000	88.27	88.46	0.19	0.11	0.94	0.01	88.48	0.158	0.081	0.089	1.00	0.01
56	18	0.60	87.89	88.39	0.50	0.51	1.18	0.02	88.41	0.078	90.000	88.20	88.54	0.34	0.30	2.01	0.06	88.60	0.347	0.213	0.191	0.15	0.01
57	18	0.60	88.20	88.55	0.35	0.31	1.93	0.06	88.61	0.311	72.000	88.45	88.79	0.34	0.30	2.03	0.06	88.85	0.360	0.336	0.242	1.00	0.06
58	12	0.40	88.45	88.85	0.40	0.16	1.36	0.03	88.88	0.148	82.000	88.86	89.13	0.27**	0.17	2.36	0.09	89.21	0.682	0.415	0.340	1.00	0.09
59	12	0.10	88.86	89.21	0.35	0.25	0.40	0.00	89.22	0.014	30.000	88.97	89.22	0.25	0.15	0.65	0.01	89.23	0.055	0.035	0.010	1.00	0.01
60	12	0.10	88.45	88.85	0.40	0.29	0.34	0.00	88.85	0.009	30.000	88.56	88.85	0.29	0.19	0.52	0.00	88.86	0.030	0.020	0.006	1.00	0.00
61	12	0.10	85.84	86.20	0.36	0.25	0.40	0.00	86.20	0.014	14.000	85.91	86.20	0.29	0.19	0.53	0.00	86.20	0.032	0.023	0.003	1.00	0.00

Project File: Veranda Storm Drain-Nolte.stm

Number of lines: 61

Run Date: 8/19/2021

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

General Procedure:

Hydraflow computes the HGL using the Bernoulli energy equation. Manning's equation is used to determine energy losses due to pipe friction. In a standard step, iterative procedure, Hydraflow assumes upstream HGLs until the energy equation balances. If the energy equation cannot balance, supercritical flow exists and critical depth is temporarily assumed at the upstream end. A supercritical flow Profile is then computed using the same procedure in a downstream direction using momentum principles.

Col. 1 The line number being computed. Calculations begin at Line 1 and proceed upstream.

Col. 2 The line size. In the case of non-circular pipes, the line rise is printed above the span.

Col. 3 Total flow rate in the line.

Col. 4 The elevation of the downstream invert.

Col. 5 Elevation of the hydraulic grade line at the downstream end. This is computed as the upstream HGL + Minor loss of this line's downstream line.

Col. 6 The downstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 7 Cross-sectional area of the flow at the downstream end.

Col. 8 The velocity of the flow at the downstream end, (Col. 3 / Col. 7).

Col. 9 Velocity head (Velocity squared / 2g).

Col. 10 The elevation of the energy grade line at the downstream end, HGL + Velocity head, (Col. 5 + Col. 9).

Col. 11 The friction slope at the downstream end (the S or Slope term in Manning's equation).

Col. 12 The line length.

Col. 13 The elevation of the upstream invert.

Col. 14 Elevation of the hydraulic grade line at the upstream end.

Col. 15 The upstream depth of flow inside the pipe (HGL - Invert elevation) but not greater than the line size.

Col. 16 Cross-sectional area of the flow at the upstream end.

Col. 17 The velocity of the flow at the upstream end, (Col. 3 / Col. 16).

Col. 18 Velocity head (Velocity squared / 2g).

Col. 19 The elevation of the energy grade line at the upstream end, HGL + Velocity head, (Col. 14 + Col. 18) .

Col. 20 The friction slope at the upstream end (the S or Slope term in Manning's equation).

Col. 21 The average of the downstream and upstream friction slopes.

Col. 22 Energy loss. Average $S_f/100 \times \text{Line Length}$ (Col. 21/100 x Col. 12). Equals (EGL upstream - EGL downstream) +/- tolerance.

Col. 23 The junction loss coefficient (K).

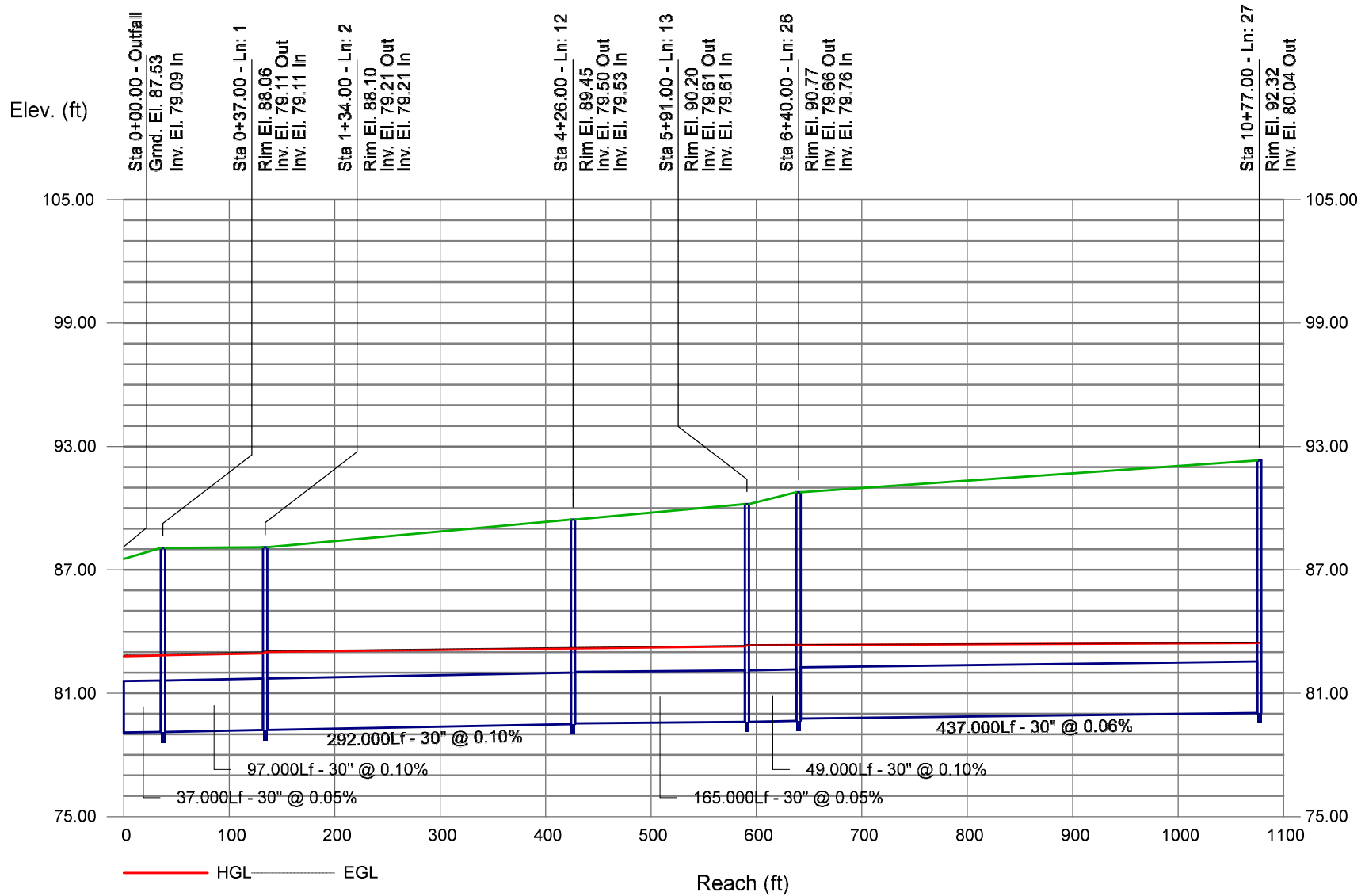
Col. 24 Minor loss. (Col. 23 x Col. 18). Is added to upstream HGL and used as the starting HGL for the next upstream line(s).

Storm Sewer Profile

ITEM 18.1.

Proj. file: Veranda Storm Drain-Nolte.stm

ATTACHMENT 4

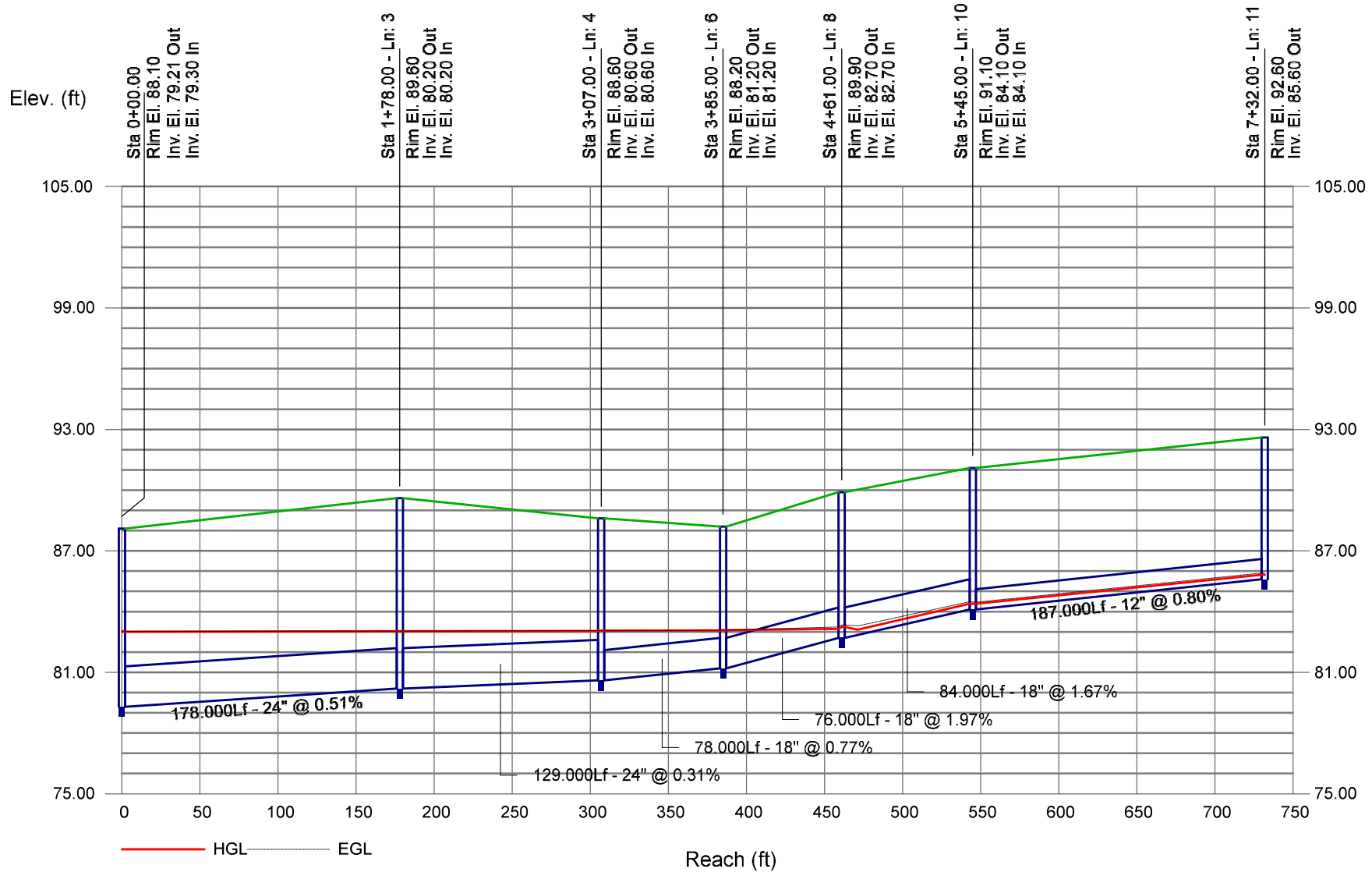


Storm Sewer Profile

ITEM 18.1.

Proj. file: Veranda Storm Drain-Nolte.stm

ATTACHMENT 4

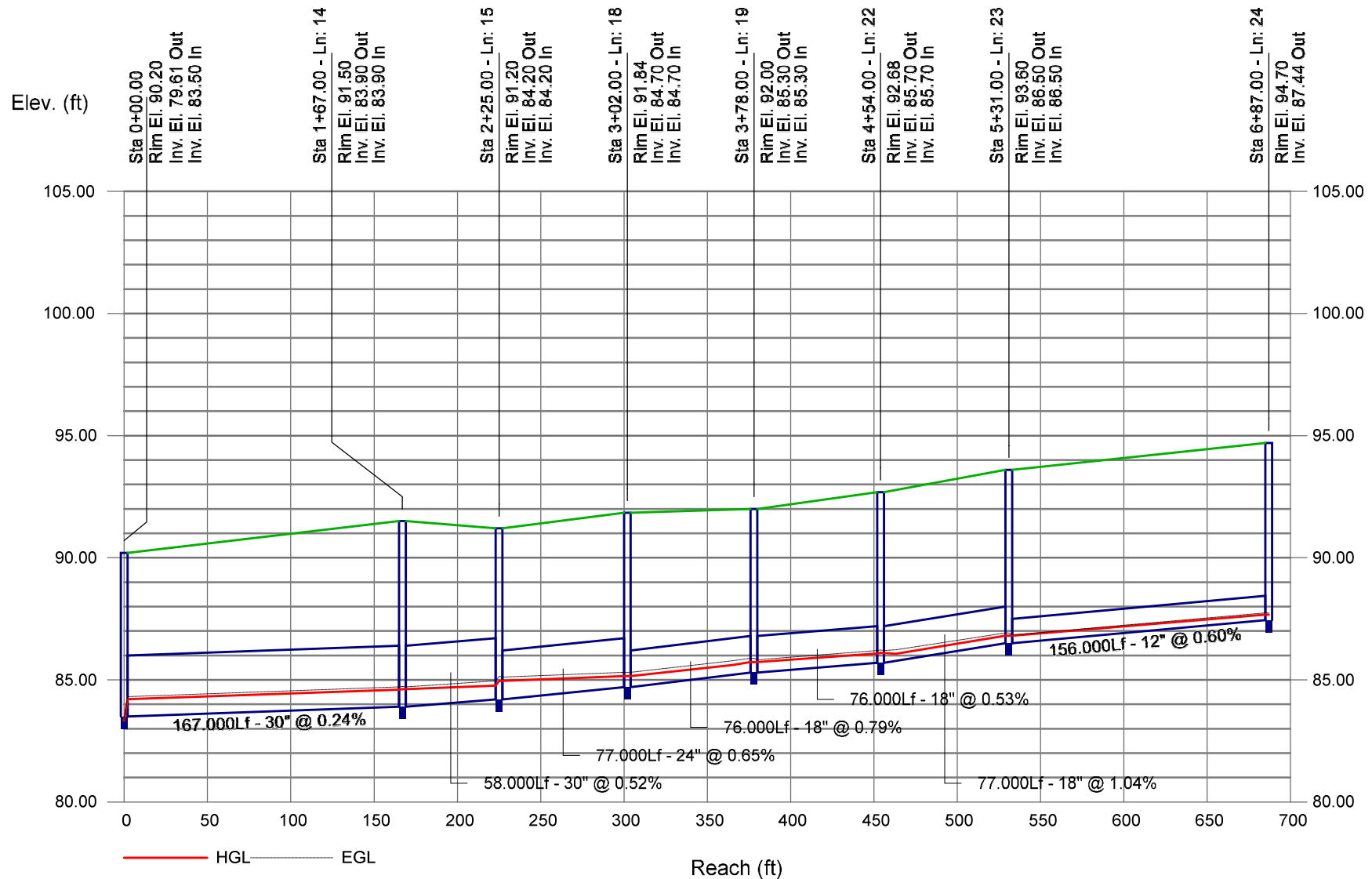


Storm Sewer Profile

Proj. file: Veranda Storm Drain-Nolte.stm

ITEM 18.1.

ATTACHMENT 4

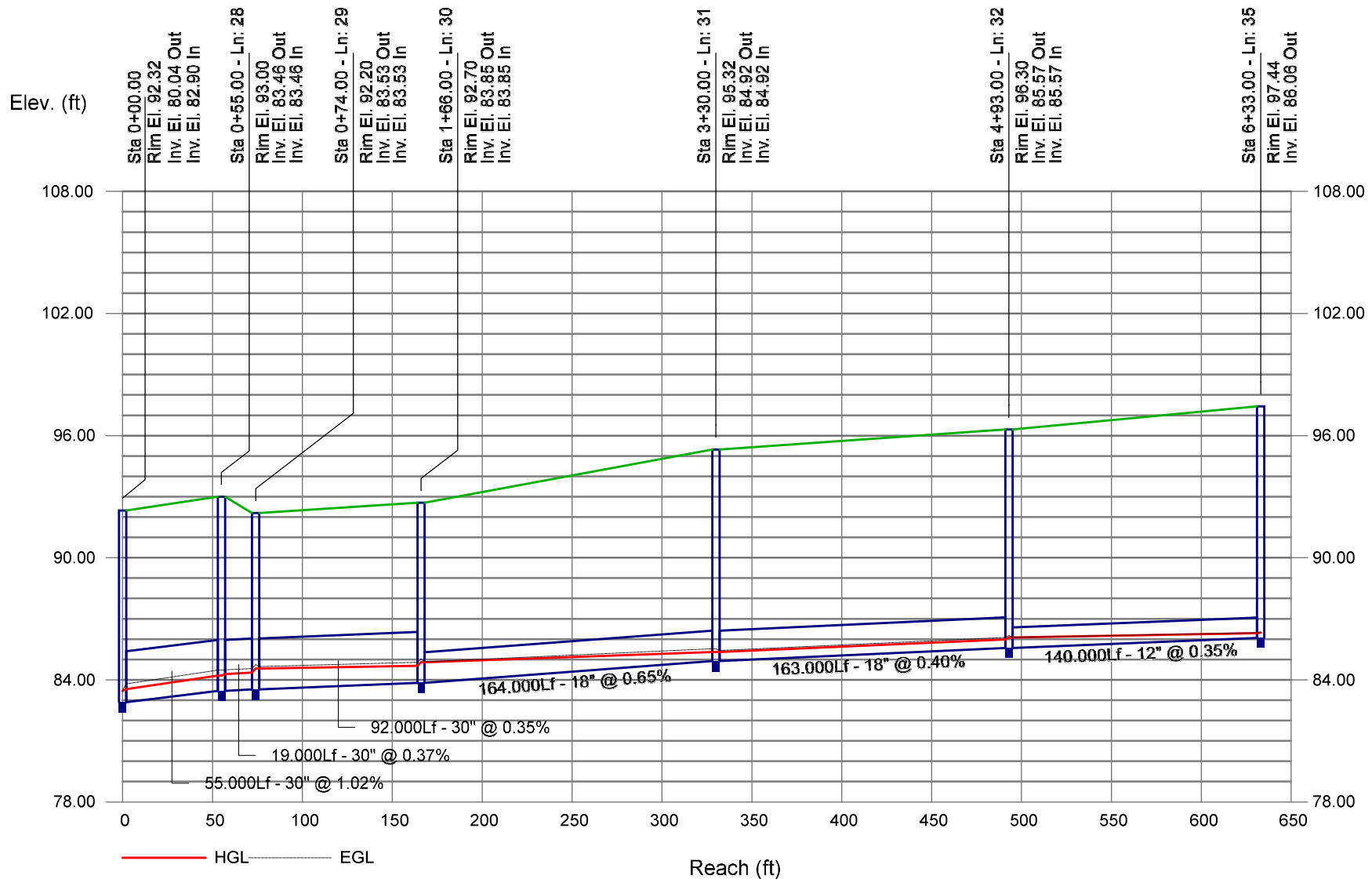


Storm Sewer Profile

ITEM 18.1.

Proj. file: Veranda Storm Drain-Nolte.stm

ATTACHMENT 4

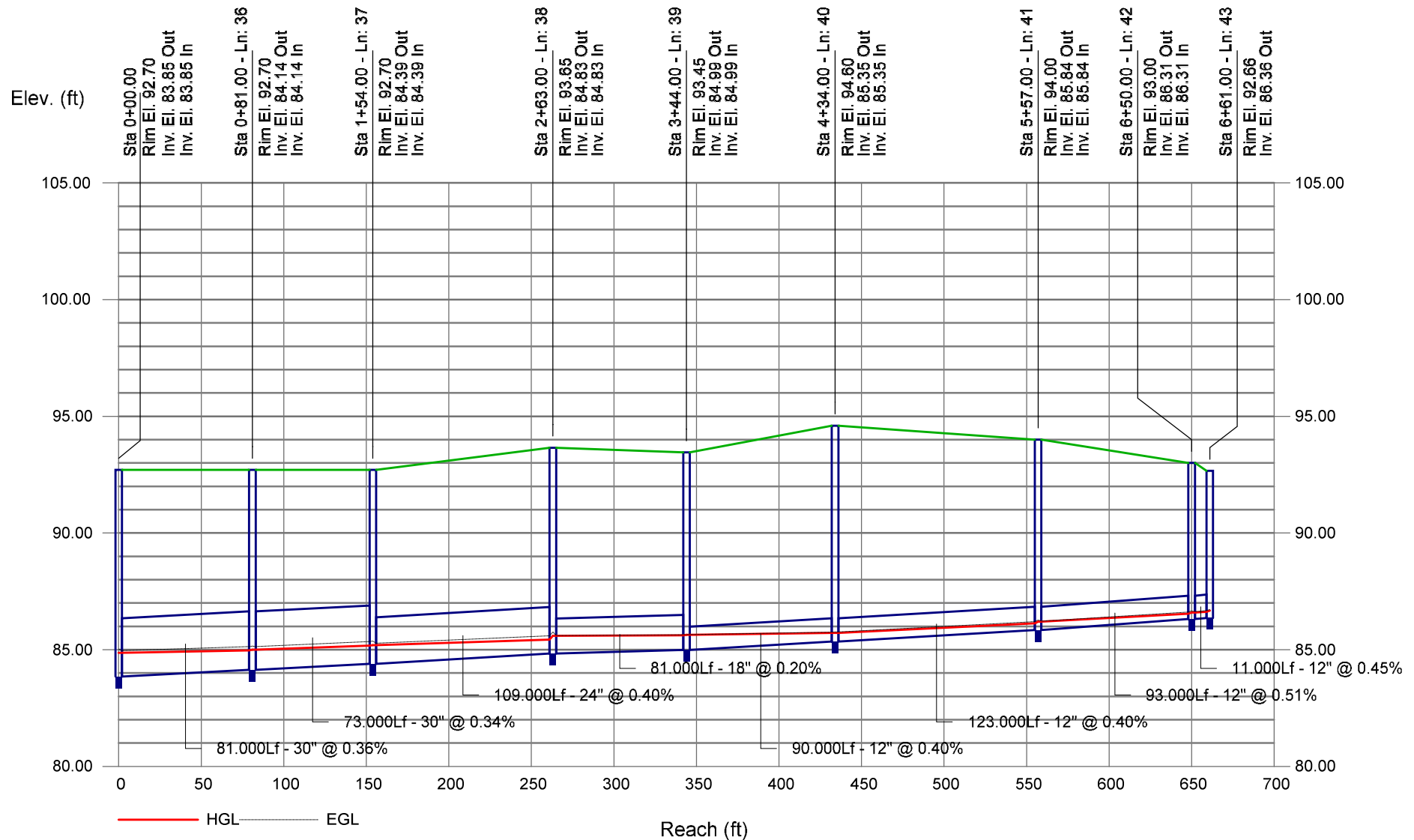


Storm Sewer Profile

Proj. file: Veranda Storm Drain-Nolte.stm

ITEM 18.1.

ATTACHMENT 4

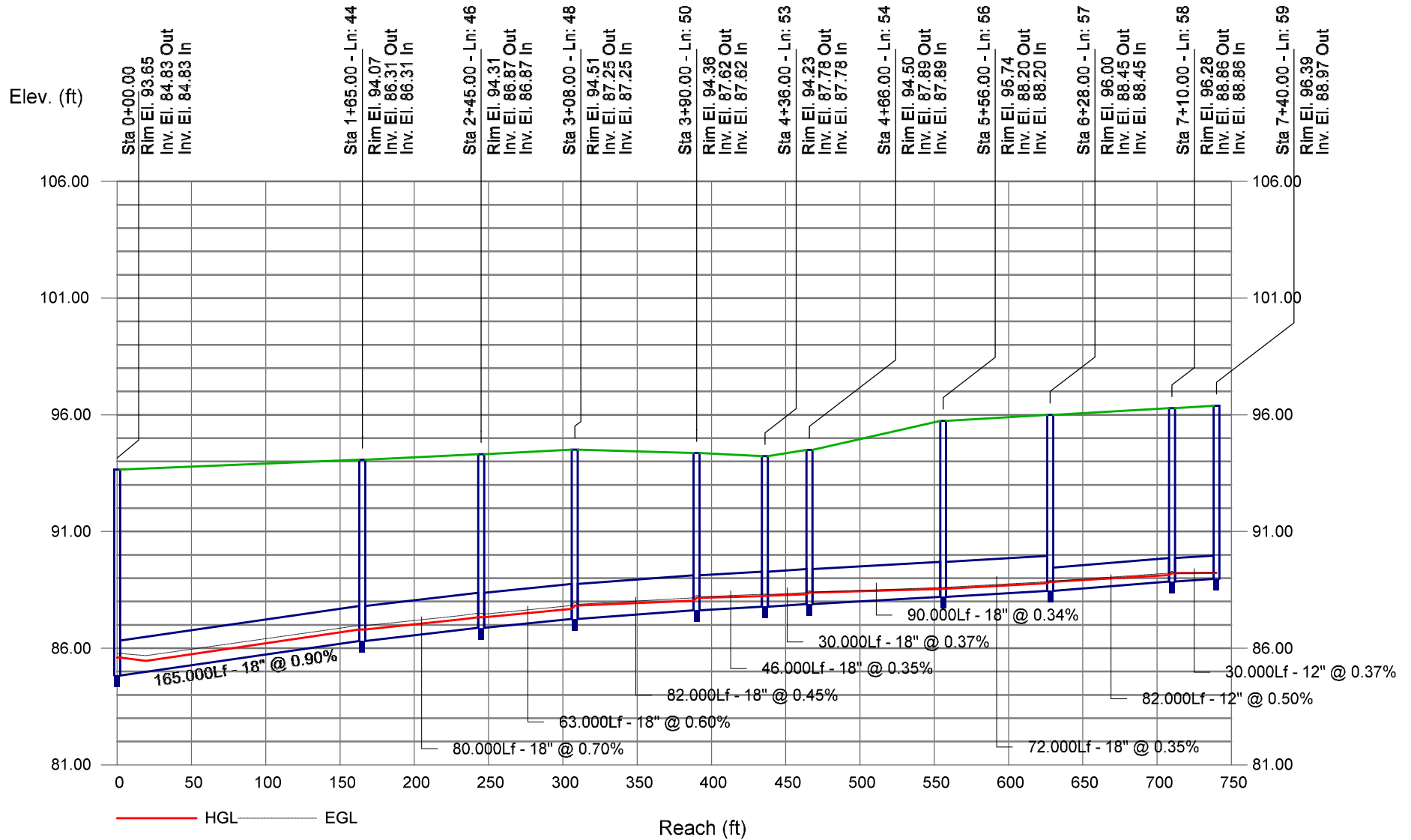


Storm Sewer Profile

ITEM 18.1.

Proj. file: Veranda Storm Drain-Nolte.stm

ATTACHMENT 4



Sacramento 100-Year Method
Reference: *County of Sacramento Drainage Manual, Figures 2-11, 2-20, and Table 5-2*
Sacramento Method Zone 2
Commercial and Multi-Family Residential: 90% Impervious
Single-Family Residential: 60% Impervious

Watershed Number	U/S Structure ID	D/S Structure ID	Hydraflow Pipe Number	Area, ac	Sum Area, ac	% Impervious	Sacramento Method 100-Year Flow, cfs	Pipe Size, in	Design Slope, ft/ft	Storm Drain Capacity, cfs	Is Storm Drain Capacity at or Greater than 100-Year Flow?
COM-1	DIC1	DIC2	59	0.23	0.23	90	0.7	12	0.0037	1.9	Yes
COM-2	DIC2	DIC4	58	0.53	0.76	90	2.2	12	0.0050	2.2	Yes
COM-3	DIC3	DIC4	60	0.20	0.20	90	0.6	12	0.0037	1.9	Yes
COM-4	DIC4	DIC4A	57	0.30	1.26	90	3.5	18	0.0035	5.4	Yes
	DIC4A	DIC6	56		1.26	90	3.5	18	0.0034	5.3	Yes
COM-5	DIC5	DIC6	55	0.23	0.23	90	0.7	12	0.0035	1.8	Yes
COM-6	DIC6	DIC7	54	0.33	1.82	90	4.9	18	0.0037	5.6	Yes
COM-7	DIC7	DIC10	53	0.08	1.90	90	5.1	18	0.0035	5.4	Yes
COM-8	DIC8	DIC9	52	0.08	0.08	90	0.2	12	0.0050	2.2	Yes
COM-9	DIC9	DIC10	51	0.15	0.23	90	0.7	12	0.0045	2.1	Yes
COM-10	DIC10	DIC12	50	0.12	2.25	90	5.9	18	0.0045	6.1	Yes
COM-11	DIC11	DIC12	49	0.31	0.31	90	0.9	12	0.0051	2.2	Yes
COM-12	DIC12	SDMH-1	48	0.10	2.66	90	6.9	18	0.0060	7.1	Yes
COM-13	DIC13	SDMH-1	47	0.28	0.28	90	0.8	12	0.0051	2.2	Yes
	SDMH1	DIC15	46		2.94	90	7.5	18	0.0070	7.6	Yes
COM-14	DIC14	DIC15	45	0.39	0.39	90	1.1	12	0.0051	2.2	Yes
COM-15	DIC15	DIC19	44	0.10	3.43	90	8.5	18	0.0090	8.7	Yes
COM-16	DIC16	SDMH2	43	0.59	0.59	90	1.7	12	0.0045	2.1	Yes
	SDMH2	SDMH2A	42		0.59	90	1.7	12	0.0051	2.2	Yes
COM-17	DIC17	SDMH2A	61	0.11	0.11	90	0.3	12	0.0050	2.2	Yes
	SDMH2A	SDMH3	41		0.70	90	2.0	12	0.0040	2.0	Yes
	SDMH3	DIC18	40		0.70	90	2.0	12	0.0040	2.0	Yes
COM-18	DIC18	DIC19	39	0.78	1.48	90	4.1	18	0.0020	4.1	Yes
COM-19	DIC19	DIM6	38	0.24	5.15	90	11.7	24	0.0040	12.4	Yes

MFR-1	DIM1	DIM4	35	0.44	0.44	90	1.3	12	0.0035	1.8	Yes
MFR-2	DIM2	DIM3	34	0.42	0.42	90	1.2	12	0.0035	1.8	Yes
MFR-3	DIM3	DIM4	33	0.23	0.65	90	1.9	12	0.0041	2.0	Yes
MFR-4	DIM4	DIM5	32	0.98	2.07	90	5.5	18	0.0040	5.8	Yes
MFR-5	DIM5	DIM8	31	0.82	2.89	90	7.4	18	0.0065	7.4	Yes
MFR-6	DIM6	DIM7	37	0.74	8.78	90	17.8	30	0.0034	20.8	Yes
MFR-7	DIM7	DIM8	36	0.38	9.16	90	18.4	30	0.0036	21.4	Yes
MFR-8	DIM8	DIM9	30	0.47	9.63	90	19.2	30	0.0035	21.1	Yes
MFR-9	DIM9	SDMH4	29	0.52	10.15	90	20.2	30	0.0037	21.7	Yes

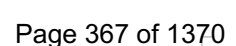
SFR-1	DIS1	DIS3	24	0.84	0.84	60	2.4	12	0.0060	2.4	Yes
SFR-2	DIS2	DIS3	25	0.27	0.27	60	0.8	12	0.0123	3.4	Yes
SFR-3	DIS3	DIS2	23	0.62	1.73	60	4.5	18	0.0104	9.3	Yes
SFR-4	DIS4	DIS7	22	0.75	2.48	60	6.0	18	0.0053	6.6	Yes
SFR-5	DIS5	DIS7	20	0.44	0.44	60	1.3	12	0.0056	2.3	Yes
SFR-6	DIS6	DIS7	21	0.26	0.26	60	0.8	12	0.0057	2.3	Yes
SFR-7	DIS7	DIS8	19	0.11	3.29	60	7.5	18	0.0079	8.1	Yes
SFR-8	DIS8	DIS11	18	0.98	4.27	60	9.2	24	0.0065	15.8	Yes
SFR-9	DIS9	DIS11	16	1.08	1.08	60	3.0	18	0.0093	8.8	Yes
SFR-10	DIS10	DIS11	17	1.06	1.06	60	2.9	12	0.0093	3.0	Yes
SFR-11	DIS11	DIS12	15	0.84	7.25	60	14.1	30	0.0052	25.7	Yes
SFR-12	DIS12	SDMH5	14	0.28	7.53	60	14.5	30	0.0024	17.5	Yes
SFR-13	DIS13	DIS14	11	0.62	0.62	60	1.8	12	0.0080	2.8	Yes
SFR-14	DIS14	SDMH6	10	0.89	1.51	60	4.0	18	0.0167	11.8	Yes
SFR-15	DIS15	SDMH6	9	1.25	1.25	60	3.4	18	0.0050	6.5	Yes
	SDMH6	SDMH7	8		2.76	60	6.5	18	0.0197	12.8	Yes
SFR-16	DIS16	SDMH7	7	0.68	0.68	60	1.9	12	0.0057	2.3	Yes
	SDMH7	SDMH8	6		3.44	60	7.8	18	0.0077	8.0	Yes
SFR-17	DIS17	SDMH8	5	1.59	1.59	60	4.2	18	0.0050	6.5	Yes
	SDMH8	DIS18	4		5.03	60	10.5	24	0.0031	10.9	Yes
SFR-18	DIS18	SDMH9	3	0.35	5.38	60	11.0	24	0.0051	14.0	Yes

	SDMH4	EX-MH4	28	0.00	10.15	90	20.2	30	0.0102	36.0	Yes
EX-1 (1)	EX-MH4	EX-MH3	27	1.24	11.39	81	21.8	30	0.0006	8.7	No (2)
EX-2 (1)	EX-MH3	SDMH5	26	0.86	12.25	76	22.0	30	0.0010	11.3	No (2)
	SDMH5	EX-MH2	13	0.00	19.78	70	30.5	30	0.0005	8.0	No (2)
EX-3 (1)	EX-MH2	SDMH9	12	0.36	20.14	69	31.0	30	0.0010	11.3	No (2)
	SDMH9	EX-MH1	2	0.00	25.52	67	38.8	30	0.0010	11.3	No (2)
EX-4 (1)	EX-MH1	EX-MH0	1	0.73	26.25	66	39.9	30	0.0005	8.0	No (2)

(1) Assume Open Space 10% Impervious
(2) Overland release is required since storm drain capacity is exceeded. This occurs in the offsite open space/bike trail and does not affect project.

APPENDIX D:

Overland Release Map



APPENDIX E:

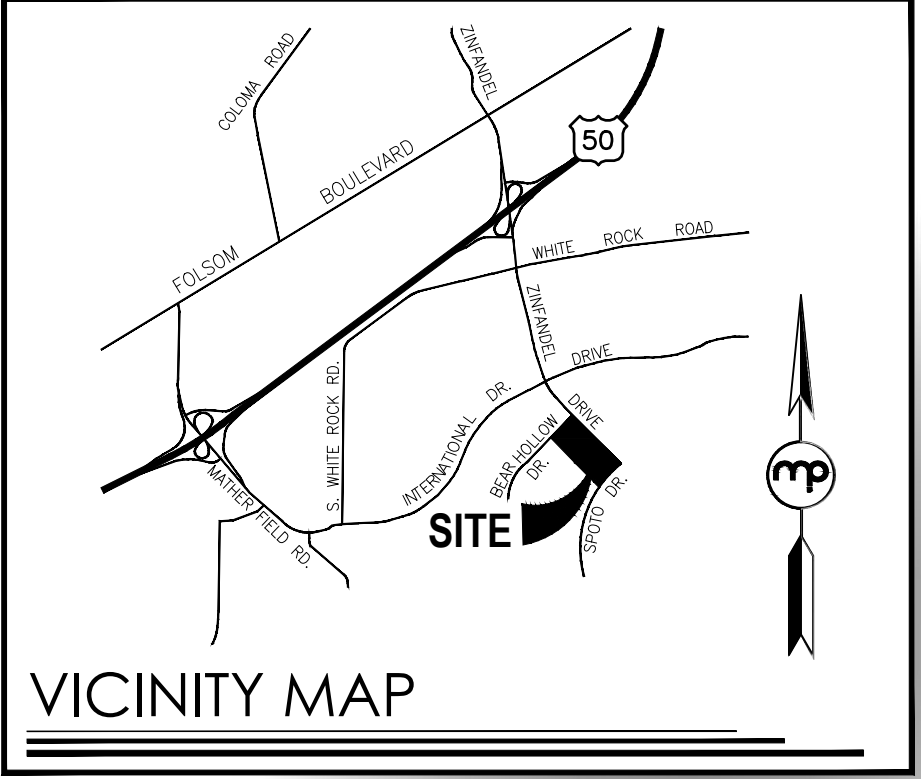
Low Impact Development Watershed Map and Calculations



COMMERCIAL LID SUMMARY	
TOTAL AREA	261,727 SF (6.01 AC)
IMPERVIOUS AREA	202,452 SF (4.65 AC)
PERVIOUS AREA	59,274 SF (1.36 AC)
DISCONNECTED ROOF AREA	0.33 AC
AMENDED SOIL AREA	17,800 SF
PERCENT IMPERVIOUS	77%
TOTAL LID CREDITS	100.0

NOTE: WATER QUALITY PROVIDED BY EXISTING WATER QUALITY/DETENTION BASIN LOCATED SOUTH OF NORTH MATHER BLVD.

- LEGEND
- DISCONNECTED ROOF
 - AMENDED SOILS - 6-INCH DEPTH (12-15% COMPOST BY VOLUME) COVERED WITH 3" OF MULCH
 - LID BOUNDARY



DATE: 8/24/2021 10:01 AM BY: JONAS / MORTON & PITALO, INC. PROJECT: 2021-08-01 STONE CREEK VILLAGE PRELIMINARY LID PLAN - COMMERCIAL SHEET 1 OF 3

AUGUST 24, 2021
STONE CREEK VILLAGE
PRELIMINARY LID PLAN - COMMERCIAL
SHEET 1 of 3

Appendix D-2: Commercial Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed:	Stone Creek Veranda-Commercial	Fill in Blue Highlighted boxes
Location of project:	Sacramento	

Step 1 - Open Space and Pervious Area Credits

Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.

1 a. Common Drainage Plan Area

	0	acres	A_{CDP}
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Common Drainage Plan Open Space (Off-project)

	0	acres	A_{OS}
a. Natural storage reservoirs and drainage corridors	0	acres	
b. Buffer zones for natural water bodies	0	acres	
c. Natural areas including existing trees, other vegetation, and soil	0	acres	
d. Common landscape area/park	0	acres	
e. Regional Flood Control/Drainage basins	0	acres	

1 b. Project Drainage Shed Area (Total)

	6.01	acres	A
--	------	-------	-----

Project-Specific Open Space (In-project, communal)**

	1.36	acres	A_{PSOS}
a. Natural storage reservoirs and drainage corridors	0.00	acres	
b. Buffer zones for natural water bodies	0.00	acres	
c. Natural areas including existing trees, other vegetation, and soil	0.00	acres	
d. Landscape area/park	1.36	acres	
e. Flood Control/Drainage basins	0.00	acres	

** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.

Area with Runoff Reduction Potential

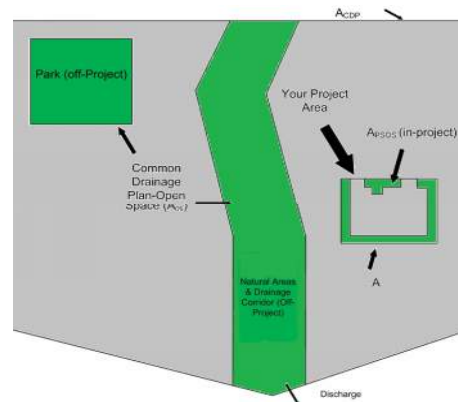
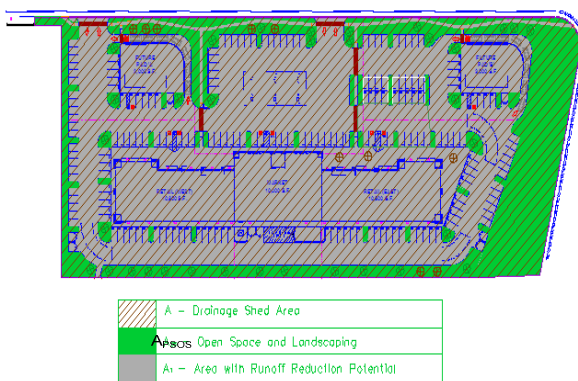
$A - A_{PSOS} =$	4.65	acres	A_T
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Assumed Initial Impervious Fraction

$A_T / A =$	0.77		I
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Open Space & Pervious Area LID Credit (Step 1)

$(A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$	23	pts
--	----	-----



Step 2 - Runoff Reduction Credits

Runoff Reduction Treatments	Impervious Area Managed	Efficiency Factor	Effective Area Managed (A_c)
Porous Pavement:			
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0 acres	x	0.000 acres
Option 2: Disconnected Pavement (see Fact Sheet, excludes porous pavement used in Option 1)	use Form D-2a for credits		0.00 acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0000 acres	=	0.00 acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.33 acres	=	0.33 acres
Ecoroof (see Fact Sheet)	0 acres	=	0.00 acres
Interceptor Trees (see Fact Sheet)	use Form D-2b for credits		0.00 acres
Total Effective Area Managed by Runoff Reduction Measures		A_c	0.33 acres
Runoff Reduction Credit (Step 2)		$(A_c / A_T) \times 100 =$	7 pts

Table D-2a

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete/Asphalt	0.60
Modular Block Pavement &	0.75
Reinforced Grass Pavement	1.00

Table D-2b

Maximum roof size	Minimum travel distance
≤ 3,500 sq ft	21 ft
≤ 5,000 sq ft	24 ft
≤ 7,500 sq ft	28 ft
≤ 10,000 sq ft	32 ft

Form D-2a: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding Disconnected Pavement credit guidelines

Effective Area Managed (A_c)**Pavement Draining to Porous Pavement**

2. Enter area draining onto Porous Pavement acres Box K1

3. Enter area of Receiving Porous Pavement acres Box K2
(excludes area entered in Step 2 under Porous Pavement)

4. Ratio of Areas (Box K1 / Box K2) Box K3

5. Select multiplier using ratio from Box K3 and enter into Box K4

Ratio (Box D)	Multiplier
Ratio is ≤ 0.5	1.00
Ratio is > 0.5 and < 1.0	0.83
Ratio is > 1.0 and < 1.5	0.71
Ratio is > 1.5 and < 2.0	0.55

Box K4

6. Enter Efficiency of Porous Pavement (see table below) Box K5

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete Asphalt Pavement	0.60
Modular Block Pavement	0.75
Porous Gravel Pavement	0.75
Reinforced Grass Pavement	1.00

7. Multiply Box K2 by Box K5 and enter into Box K6 acres Box K6

8. Multiply Boxes K1, K4, and K5 and enter the result in Box K7 acres Box K7

9. Add Box K6 to Box K7 and multiply by 60%, and enter the Result in Box K8 acres
This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-2

Form D-2b: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

New Evergreen Trees

1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1. trees Box L1

2. Multiply Box L1 by 200 and enter result in Box L2 sq. ft. Box L2

New Deciduous Trees

3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3. trees Box L3

4. Multiply Box L3 by 100 and enter result in Box L4 sq. ft. Box L4

Existing Tree Canopy

5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5. sq. ft. Box L5

6. Multiply Box L5 by 0.5 and enter the result in Box L6 sq. ft. Box L6

Total Interceptor Tree EAM Credits

Add Boxes L2, L4, and L6 and enter it into Box L7 sq. ft. Box L7

Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter result in Box L8 acres Box L8
This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-2

Step 3 - Runoff Management Credits**Capture and Use Credits****Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems**(see Fact Sheet) enter gallons, for simple rain barrels acres**Automated-Control Capture and Use System**(see Fact Sheet, then enter impervious area managed by the system) acres**Bioretention/Infiltration Credits****Impervious Area Managed by Bioretention BMPs**(see Fact Sheet) Bioretention Area sq ft
Subdrain Elevation inches
Ponding Depth, inches inches acres**Impervious Area Managed by Infiltration BMPs**(see Fact Sheet) Drawdown Time, hrs drawdown_hrs_inf
Soil Infiltration Rate, in/hr soil_inf_rateSizing Option 1: Capture Volume, acre-ft capture_vol_inf acresSizing Option 2: Infiltration BMP surface area, sq ft soil_surface_area acresBasin or trench? approximate BMP depth ft**Impervious Area Managed by Amended Soil or Mulch Beds**(see Fact Sheet) Mulched Infiltration Area, sq ft mulch_area acres**Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs** A_{LIDc}**Runoff Management Credit (Step 3)**A_{LIDc}/A_T*200 = pts**Total LID Credits (Step 1+2+3)**

LID compliant, check for treatment sizing in Step 4

Does project require hydromodification management? If yes, proceed to using SachM.

Adjusted Area for Flow-Based, Non-LID TreatmentA_T - A_C - A_{LIDc} = A_{AT}**Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment**A_{AT} / A = I_A**Further treatment is required, see choose flow-based or volume-based sizing in Step 4****Step 4a Treatment - Flow-Based (Rational Method)**

Calculate treatment flow (cfs):

Flow = Runoff Coefficient x Rainfall Intensity x Area

Look up value for i in Table D-2c (Rainfall Intensity)

 iObtain A_{AT} from Step 3 A_{AT}

Use C = 0.95

 CFlow = 0.95 * i * A_{AT} cfs**Table D-2c**

Rainfall Intensity		
Roseville	i =	0.20 in/hr
Sacramento	i =	0.18 in/hr
Folsom	i =	0.20 in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet):

WQV = Area x Maximized Detention Volume (P₀)

Obtain A from Step 1

 A hrs

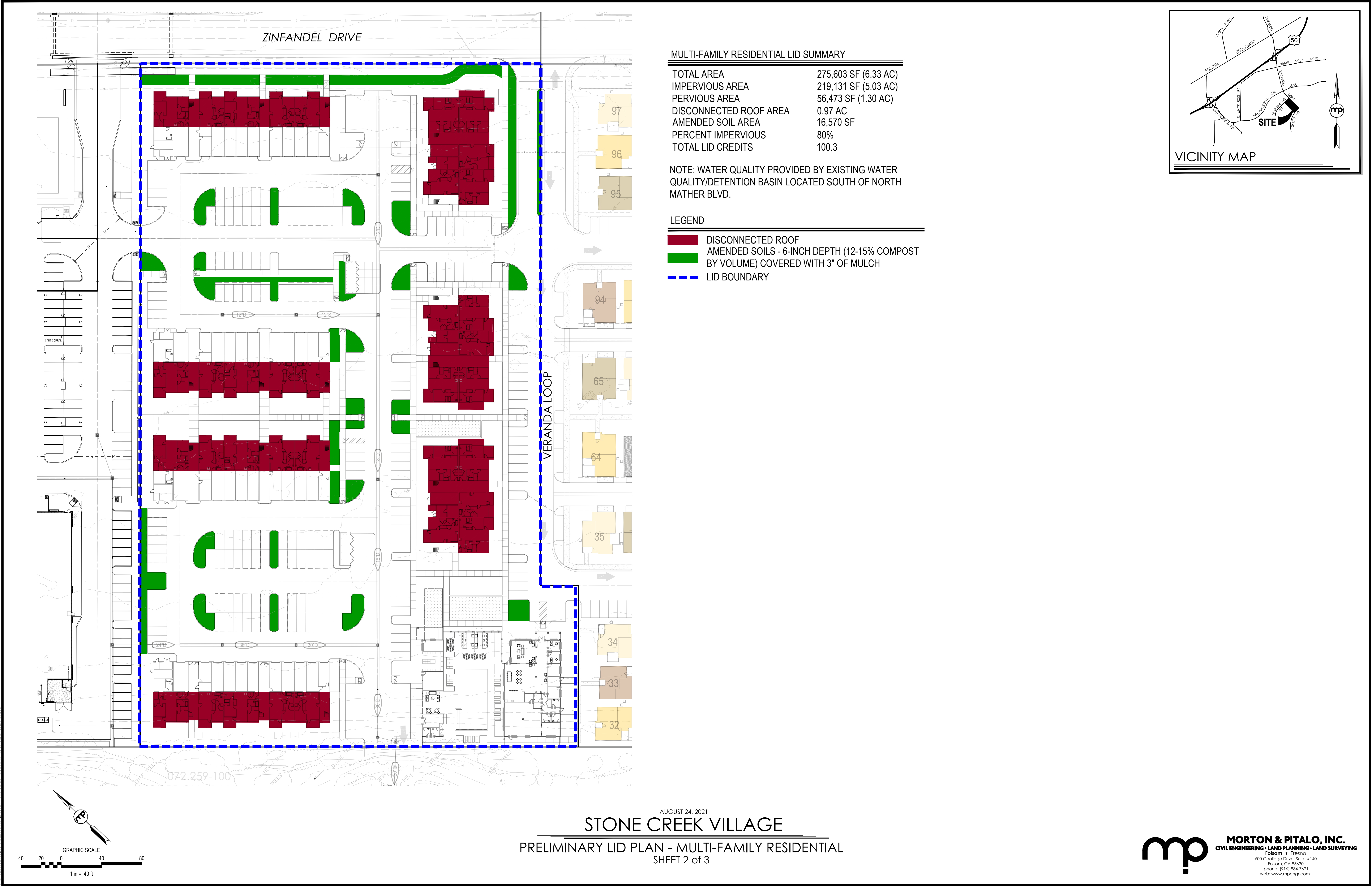
Specified Draw Down time

Obtain P₀: Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2. P₀

Calculate treatment volume (acre-ft):

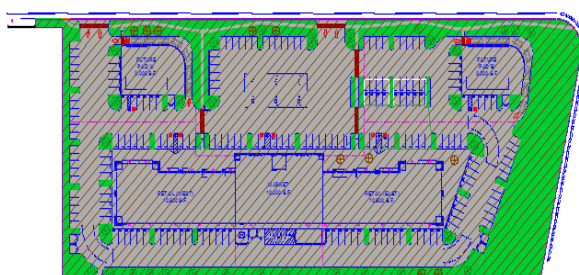
Treatment volume = A x (P₀ / 12) Acre-Feet

v06232012

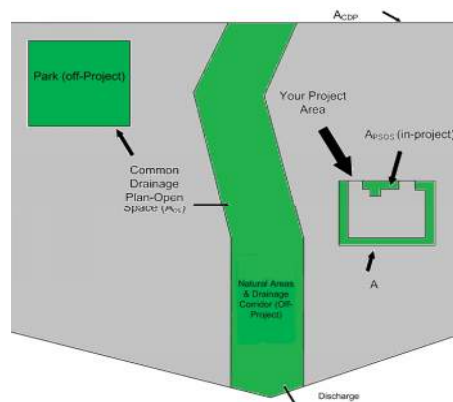


Appendix D-2: Commercial Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed: Stone Creek Veranda-MFR		Fill in Blue Highlighted boxes	
Location of project: Sacramento			
Step 1 - Open Space and Pervious Area Credits			
Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.			
1 a. Common Drainage Plan Area	0 acres	A_{CDP}	see area example below
Common Drainage Plan Open Space (Off-project)	0 acres	A_{OS}	
a. Natural storage reservoirs and drainage corridors	0 acres		
b. Buffer zones for natural water bodies	0 acres		
c. Natural areas including existing trees, other vegetation, and soil	0 acres		
d. Common landscape area/park	0 acres		
e. Regional Flood Control/Drainage basins	0 acres		
1 b. Project Drainage Shed Area (Total)	6.33 acres	A	
Project-Specific Open Space (In-project, communal**)	1.30 acres	A_{PSOS}	see area example below
a. Natural storage reservoirs and drainage corridors	0.00 acres		
b. Buffer zones for natural water bodies	0.00 acres		
c. Natural areas including existing trees, other vegetation, and soil	0.00 acres		
d. Landscape area/park	1.30 acres		
e. Flood Control/Drainage basins	0.00 acres		
** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.			
Area with Runoff Reduction Potential	$A - A_{PSOS} =$ 5.03 acres	A_T	
Assumed Initial Impervious Fraction	$A_T / A =$ 0.79	I	
Open Space & Pervious Area LID Credit (Step 1)			
$(A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$		21 pts	



	A - Drainage Shed Area
	A _{PSOS} Open Space and Landscaping
	A _T - Area with Runoff Reduction Potential

**Step 2 - Runoff Reduction Credits**

Runoff Reduction Treatments	Impervious Area Managed	Efficiency Factor	Effective Area Managed (A_c)
Porous Pavement:			
Option 1: Porous Pavement (see Fact Sheet, excludes porous pavement used in Option 2)	0 acres	x	0.000 acres
Option 2: Disconnected Pavement (see Fact Sheet, excludes porous pavement used in Option 1)	use Form D-2a for credits	→	0.00 acres
Landscaping used to Disconnect Pavement (see Fact Sheet)	0.0000 acres	=	0.00 acres
Disconnected Roof Drains (see Fact Sheet and/or Table D-2b for summary of requirements)	0.97 acres	=	0.97 acres
Ecoroof (see Fact Sheet)	0 acres	=	0.00 acres
Interceptor Trees (see Fact Sheet)	use Form D-2b for credits	→	0.00 acres
Total Effective Area Managed by Runoff Reduction Measures		A_c	0.97 acres
Runoff Reduction Credit (Step 2)			$(A_c / A_T) \times 100 =$ 19 pts

Table D-2a

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete/Asphalt	0.60
Modular Block Pavement &	0.75
Reinforced Grass Pavement	1.00

Table D-2b

Maximum roof size	Minimum travel distance
≤ 3,500 sq ft	21 ft
≤ 5,000 sq ft	24 ft
≤ 7,500 sq ft	28 ft
≤ 10,000 sq ft	32 ft

Form D-2a: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding Disconnected Pavement credit guidelines

Effective Area Managed (A_c)**Pavement Draining to Porous Pavement**

2. Enter area draining onto Porous Pavement acres Box K1

3. Enter area of Receiving Porous Pavement acres Box K2
(excludes area entered in Step 2 under Porous Pavement)

4. Ratio of Areas (Box K1 / Box K2) Box K3

5. Select multiplier using ratio from Box K3 and enter into Box K4

Ratio (Box D)	Multiplier
Ratio is ≤ 0.5	1.00
Ratio is > 0.5 and < 1.0	0.83
Ratio is > 1.0 and < 1.5	0.71
Ratio is > 1.5 and < 2.0	0.55

Box K4

6. Enter Efficiency of Porous Pavement (see table below) Box K5

Porous Pavement Type	Efficiency Multiplier
Cobblestone Block Pavement	0.40
Pervious Concrete Asphalt Pavement	0.60
Modular Block Pavement	0.75
Porous Gravel Pavement	0.75
Reinforced Grass Pavement	1.00

7. Multiply Box K2 by Box K5 and enter into Box K6 acres Box K6

8. Multiply Boxes K1, K4, and K5 and enter the result in Box K7 acres Box K7

9. Add Box K6 to Box K7 and multiply by 60%, and enter the Result in Box K8 acres
This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-2

Form D-2b: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

New Evergreen Trees

1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1. trees Box L1

2. Multiply Box L1 by 200 and enter result in Box L2 sq. ft. Box L2

New Deciduous Trees

3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3. trees Box L3

4. Multiply Box L3 by 100 and enter result in Box L4 sq. ft. Box L4

Existing Tree Canopy

5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5. sq. ft. Box L5

6. Multiply Box L5 by 0.5 and enter the result in Box L6 sq. ft. Box L6

Total Interceptor Tree EAM Credits

Add Boxes L2, L4, and L6 and enter it into Box L7 sq. ft. Box L7

Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter result in Box L8 acres Box L8
This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-2

Step 3 - Runoff Management Credits**Capture and Use Credits****Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems**(see Fact Sheet) enter gallons, for simple rain barrels acres**Automated-Control Capture and Use System**(see Fact Sheet, then enter impervious area managed by the system) acres**Bioretention/Infiltration Credits****Impervious Area Managed by Bioretention BMPs**(see Fact Sheet) Bioretention Area sq ft
Subdrain Elevation inches
Ponding Depth, inches inches acres**Impervious Area Managed by Infiltration BMPs**(see Fact Sheet) Drawdown Time, hrs drawdown_hrs_inf
Soil Infiltration Rate, in/hr soil_inf_rateSizing Option 1: Capture Volume, acre-ft capture_vol_inf acresSizing Option 2: Infiltration BMP surface area, sq ft soil_surface_area acresBasin or trench? approximate BMP depth ft**Impervious Area Managed by Amended Soil or Mulch Beds**(see Fact Sheet) Mulched Infiltration Area, sq ft mulch_area acres**Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs** A_{LIDc}**Runoff Management Credit (Step 3)**A_{LIDc}/A_T*200 = pts**Total LID Credits (Step 1+2+3)**

LID compliant, check for treatment sizing in Step 4

Does project require hydromodification management? If yes, proceed to using SachM.

Adjusted Area for Flow-Based, Non-LID TreatmentA_T - A_C - A_{LIDc} = A_{AT}**Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment**A_{AT} / A = I_A**Further treatment is required, see choose flow-based or volume-based sizing in Step 4****Step 4a Treatment - Flow-Based (Rational Method)**

Calculate treatment flow (cfs):

Flow = Runoff Coefficient x Rainfall Intensity x Area

Look up value for i in Table D-2c (Rainfall Intensity)

 iObtain A_{AT} from Step 3 A_{AT}

Use C = 0.95

 CFlow = 0.95 * i * A_{AT} cfs**Table D-2c**

Rainfall Intensity		
Roseville	i =	0.20 in/hr
Sacramento	i =	0.18 in/hr
Folsom	i =	0.20 in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet):

WQV = Area x Maximized Detention Volume (P₀)

Obtain A from Step 1

 A hrs

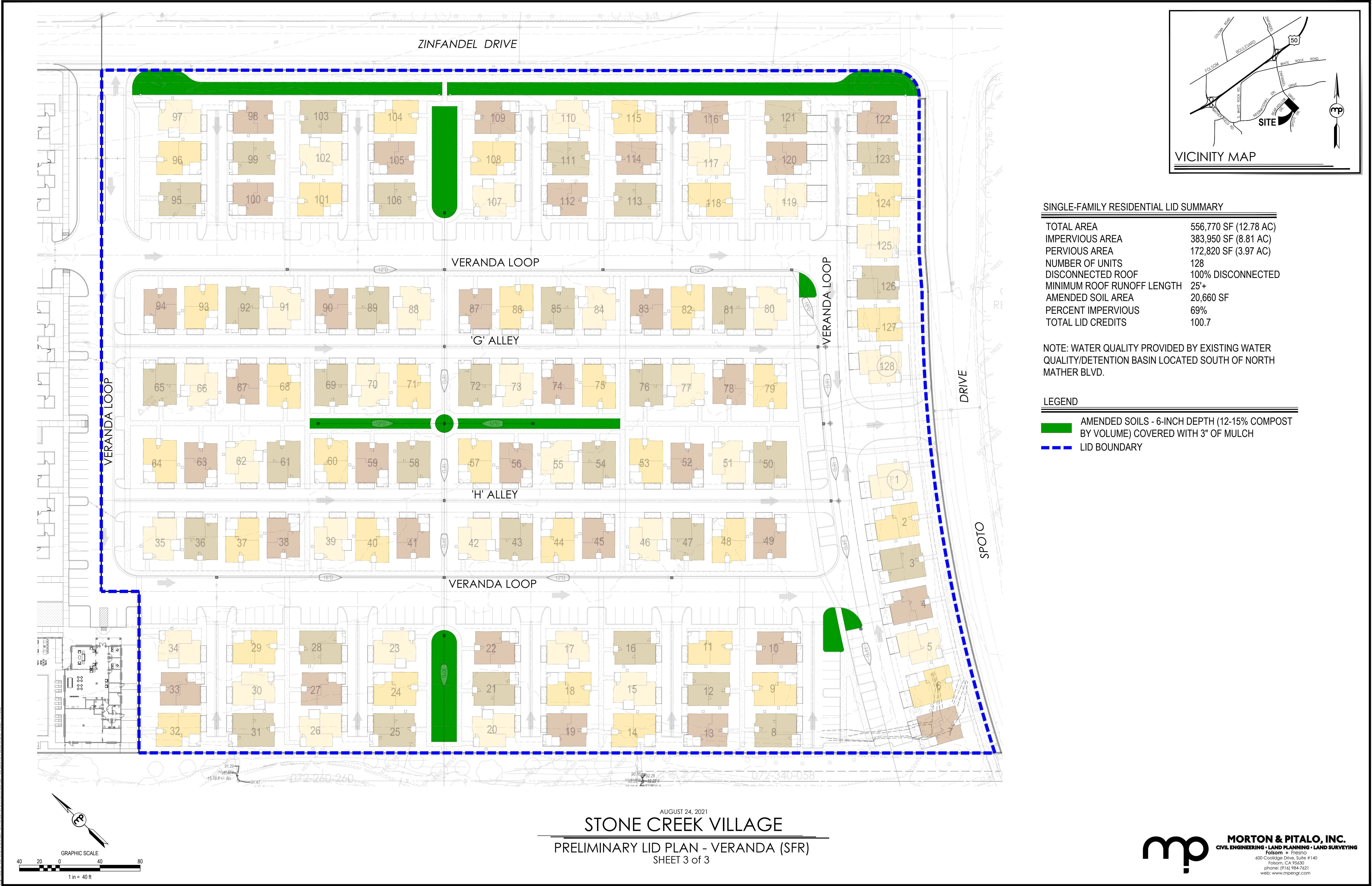
Specified Draw Down time

Obtain P₀: Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2. P₀

Calculate treatment volume (acre-ft):

Treatment volume = A x (P₀ / 12) Acre-Feet

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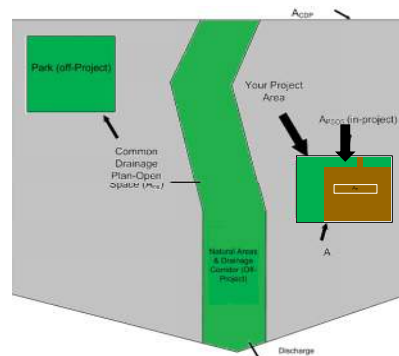
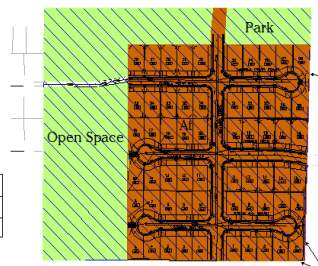


Appendix D-1: Residential Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed: Stone Creek Veranda-Single-Family Residential		Fill in Blue Highlighted boxes	
Location of project: Sacramento			
Step 1 - Open Space and Pervious Area Credits			
Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.			
1 a. Common Drainage Plan Area			A_{CDP}
Common Drainage Plan Open Space (Off-project)			A_{OS}
a. Natural storage reservoirs and drainage corridors		0 acres	see area example below
b. Buffer zones for natural water bodies		0 acres	
c. Natural areas including existing trees, other vegetation, and soil		0 acres	
d. Common landscape area/park		0 acres	
e. Regional Flood Control/Drainage basins		0 acres	
1 b. Project Drainage Shed Area (Total)		12.78 acres	A
Project-Specific Open Space (In-project, communal**)		3.97 acres	A_{PSOS}
a. Natural storage reservoirs and drainage corridors		0.00 acres	see area example below
b. Buffer zones for natural water bodies		0.00 acres	
c. Natural areas including existing trees, other vegetation, and soil		0.00 acres	
d. Landscape area/park		3.97 acres	
e. Flood Control/Drainage basins		0.00 acres	
** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.			
Area with Runoff Reduction Potential		$A - A_{PSOS} =$ 8.81 acres	A_T
Number of Units in A_T		128	
Number of units per acre in A_T		$DU/A_T =$ 15	DUA
Assumed Initial Impervious Fraction of A_T (determined using Table D-1a)		0.7	I
Open Space & Pervious Area LID Credit (Step 1)			
		$(A_{OS}/A_{CDP} + A_{PSOS}/A) \times 100 =$ 31 pts	

Table D-1a	
Dwelling units per acre	Imperviousness
1	0.17
2	0.25
3-4	0.35
5-6	0.40
7	0.50
8-9	0.55
10-14	0.60
15-20	0.70

	A - Drainage Shed Area
	A_{PSOS} Parks and Open Space
	A_T - Area with Runoff Reduction Potential



Step 2 - Runoff Reduction Credits

Runoff Reduction Measures		Effective Area Managed (A_C)	
Disconnected Roof Drains (see Fact Sheet)	use Form D-1a for credits	2.34	acres
Disconnected Pavement (see Fact Sheet)	use Form D-1b for credits	0.00	acres
Interceptor Trees (see Fact Sheet)	use Form D-1c for credits	0.00	acres
Alternative Driveway Design (see Fact Sheet)	use Form D-1d for credits	0.00	acres
Total Effective Area Managed (Credit Area)		A_C 2.34	acres EAM
Runoff Reduction Credit (Step 2)		$(A_C / A_T) \times 100 =$ 27	pts

Form D-1a: Disconnected Roof Drains Worksheet

See Fact Sheet for more information regarding Disconnected Roof Drain credit guidelines

Effective Area Managed (A_c)

1. Determine efficiency Multiplier

Runoff is directed to a dispersal trench or dry well (Type A and B soils only)	1.00
Runoff is directed across landscaping, determine setback	
25 ft +	Use multiplier of 1.00
≥ 20 and < 25 ft	Use multiplier of 0.90
≥ 15 and < 20 ft	Use multiplier of 0.70
≥ 10 and < 15 ft	Use multiplier of 0.45
≥ 5 and < 10 ft	Use multiplier of 0.25

Efficiency Multiplier

1.00

Box J1

2. Determine percentage of roof drains disconnected

100.0%

Box J2

3. Select project density in dwelling units per acre:

1	Use reduction factor of	0.08
2	Use reduction factor of	0.13
3,4	Use reduction factor of	0.19
5,6	Use reduction factor of	0.23
7	Use reduction factor of	0.29
8,9	Use reduction factor of	0.33
10-14	Use reduction factor of	0.37
15-20	Use reduction factor of	0.44

Reduction Factor

0.44

Box J3

4. Determine Area Managed

Multiply Box J3 by A_p , and enter the result in Box J4

3.9

acres

Box J4

5. Multiply Boxes J1, J2 and J4, and enter 60% of the Result in Box J

2.3

acres

Box J

This is the amount of area credit to enter into the "Disconnected Roof Drains" Box of Form D-1

Form D-1b: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding NDC Pavement credit guidelines

Effective Area Managed (A_c)**Divided Sidewalks**

1. Determine percentage of units with divided Sidewalks

Box K1

Multiply Box K1, A_p , and 0.04 and enter 60% of the result in Box K

0.00

acres

Box K

This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-1

Form D-1c: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

Effective Area Managed (A_c)**New Evergreen Trees**

1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1.

trees

Box L1

2. Multiply Box L1 by 200 and enter result in Box L2

0

sq. ft.

Box L2

New Deciduous Trees

3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3.

trees

Box L3

4. Multiply Box L3 by 100 and enter result in Box L4

0

sq. ft.

Box L4

Existing Tree Canopy

5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5.

sq. ft.

Box L5

6. Multiply Box L5 by 0.5 and enter the result in Box L6

0

sq. ft.

Box L6

Total Interceptor Tree Credits

Add Boxes L2, L4, and L6 and enter it into Box L7

0

sq. ft.

Box L7

Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter the result in Box L8

0.00

acres

Box L8

This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-1

Form D-1d: Alternative Driveway Design

See Fact Sheet for more information regarding Alternative Driveway Design credit guidelines

1. Select type of driveway

Pervious Driveway:	Multiplier:
Cobblestone Block P	0.40
Pervious Concrete/A	0.60
Modular Block	
Porous Pavement	0.75
Porous Gravel	
Not Directly-connected	1.00

Box M1

2. Determine percentage of units with Alternative Driveways:

Box M2

4. Multiply Boxes M1, M2, A_p and 0.04, and enter the result in Box M

0.00

acres

This is the amount of area credit to enter into the "Alternative Driveway Design" Box of Form D-1

Step 3 - Runoff Management Credits**Capture and Use Credits****Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems**(see Fact Sheet) enter gallons, for simple rain barrels acres**Automated-Control Capture and Use System**

(see Fact Sheet, then enter impervious area managed by the system)

 acres**Bioretention/Infiltration Credits****Impervious Area Managed by Bioretention BMPs**

(see Fact Sheet)

Bioretention Area sq ft
Subdrain Elevation inches
Ponding Depth, inches inches acres**Impervious Area Managed by Infiltration BMPs**

(see Fact Sheet)

Drawdown Time, hrs drawdown_hrs_inf
Soil Infiltration Rate, in/hr soil_inf_rate
Sizing Option 1: Capture Volume, acre-ft capture_vol_inf acres
Sizing Option 2: Infiltration BMP surface area, sq ft soil_surface_area acres
Basin or trench? approximate BMP depth ft**Impervious Area Managed by Amended Soil or Mulch Beds**

(see Fact Sheet)

Mulched Infiltration Area, sq ft mulch_area acres**Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs** A_{LIDC} **Runoff Management Credit (Step 3)** $A_{LIDC}/A_T \times 200 =$ pts**Total LID Credits (Step 1+2+3)**LID compliant, check for treatment sizing in Step 4 **Does project require hydromodification management? If yes, proceed to using SacHM.****Adjusted Area for Flow-Based, Non-LID Treatment** $A_T - A_C - A_{LIDC} =$ A_{AT} **Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment** $(A_T - A_C - A_{LIDC}) / A =$ I_A **Further treatment is required, see choose flow-based or volume-based sizing in Step 4****Step 4a Treatment - Flow-Based (Rational Method)****Form D-1e**

Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Adjusted Treatment Area

Determine C Factor using Table D-1b

 C

Determine i using Table D-1c (Rainfall Intensity)

 i A_{AT} from Step 2 A_{AT} Flow = $C \times i \times A_{AT}$ cfs**TABLE D-1b**

Development Type	Runoff Coefficient (Rational), C
Single-family areas	0.50
Multi-units, detached	0.60
Apartment dwelling areas	0.70
Multi-units, attached	0.75
User Specified	0.00

Table D-1c

Rainfall Intensity	
Roseville	i = 0.20 in/hr
Sacramento	i = 0.18 in/hr
Folsom	i = 0.20 in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet):

WQV = Area x Maximized Detention Volume (P_0)

Obtain A from Step 1

 A hrs Specified Draw Down timeObtain P_0 : Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2. P_0

Calculate treatment volume (acre-ft):

Treatment volume = $A \times (P_0 / 12)$ Acre-Feet

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Transportation Engineers

October 5, 2021

Mr. Price Walker, Vice President, Project Development
Elliott Homes, Inc.
340 Palladio Parkway, Suite 521
Folsom CA 95630-8832

**RE: TRANSPORTATION ASSESSMENT FOR STONECREEK COMMERCIAL /
RESIDENTIAL DEVELOPMENT, RANCHO CORDOVA, CALIFORNIA**

Dear Mr. Walker:

Thank you for contacting our firm regarding the **Stonecreek Commercial-Residential Project** in Rancho Cordova. The project involves commercial, multiple-family residential and single-family residential development within a 25 acre site along the west side of Zinfandel Drive between Bear Hollow Drive and Spoto Drive. The project is part of the approved Villages of Zinfandel community and residential uses are permitted under current approved commercial land use designation.

The extent to which additional analysis is required under CEQA has been considered. Because this area has been anticipated for development in previous regional traffic impact analyses, including the Villages of Zinfandel EIR, its cumulative transportation impacts have already been addressed. The City of Rancho Cordova has required a focused traffic operational study addressing the project's local off-site traffic effects and evaluating the adequacy of site access.

While not a part of the project original EIR, the need for analysis of the project's effects on Regional Vehicle Miles Traveled (VMT) was considered. Under adopted City of Rancho Cordova Transportation Analysis Guidelines the impact of "locally serving retail" uses is not significant, as these uses tend to attract customers from the surrounding community and reduce customer travel by providing closer options. Proposed residential uses are less intense trip generators than the originally approved commercial uses. The proposed uses generate 2,306 daily trips as compared to the roughly 7,800 daily trips expected to be generated by commercial uses on the same 19.15 acres. Because the residential site's trip generation and overall travel would be less than that with uses that were previously approved, overall regional VMT would be reduced. No further analysis is required.

BACKGROUND INFORMATION

Project Characteristics

The Stonecreek Commercial / Residential project is located regionally in Figure 1, while the project site plan is presented as Figure 2. That plan includes a 6 acre commercial site that is expected to include 37.3 ksf of retail / service uses. Residential uses will include 150 multi-family units on 6.4 acres and 128 single family units on 12.8 acres. Access to the project will be via two controlled access driveways on Zinfandel Drive, two full access driveways on Bear Hollow Drive and a full access driveway on Spoto Drive.

Analysis Approach

Because the uses in the Stonecreek area are part of an approved specific plan, the analysis is intended to evaluate the adequacy of site access within the context of current and future long term conditions. Available traffic data and new traffic volume counts were used to create “existing” conditions data that approximate conditions prior to COVID-19 during typical weekday a.m. and p.m. peak hours when area schools are in session. The amount of vehicular traffic associated with the project has been estimated based on trip generation rates published by the Institute of Transportation Engineers (ITE). The regional distribution of site traffic was determined based on current travel patterns, and project traffic was assigned into and out of the site via the project access driveways. Levels of Service and 95th percentile queues were then determined using procedures that are acceptable to the City.

The assessment also includes evaluation of long term traffic operations based on these sources of information.

- **Peak hour intersection volumes / geometry identified in the *Villages of Zinfandel Traffic Impact Analysis (VZTIA)*¹.** This work accompanied the original Sacramento County entitlement for the Stonecreek area.
- **City of Rancho Cordova travel demand forecasting model Year 2055 intersection traffic volume forecasts.** A.m. and p.m. peak hour forecasts were available for the Zinfandel Drive intersections at International Drive and the Douglas Road.

This report addresses these key issues relating to site design:

- Driveway throat depths
- Feasibility of inbound left turn access from Zinfandel Drive
- Need for left turn lanes at site Access on Bear Hollow Drive and Spoto Drive
- Truck Access and Circulation
- Relationship to Other Intersections and Driveways
- Internal Intersection Layouts

¹ Villages of Zinfandel Traffic Impact Analysis, DKS, 2001

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Current Traffic Conditions

Traffic Count Data. An a.m. (7:00 to 9:00 a.m.) and p.m. (4:00 to 6:00 p.m.) peak hour traffic and pedestrian volume base was established for these study area intersections:

1. Zinfandel Drive / Bear Hollow Drive
2. Zinfandel Drive / Baroque Drive
3. Zinfandel Drive / Spoto Drive

New traffic counts were collected at these locations on July 1, 2021. Because these count volumes would likely be affected by the effects of COVID-19 as well as local schools being closed for the summer it was necessary to adjust these volumes to non-Covid conditions. The adjustment was accomplished by also counting the adjoining Zinfandel Drive / International Drive intersection and comparing those Year 2021 results to Year 2016 traffic counts available from the City of Rancho Cordova. Adjustment factors based on northbound and southbound traffic south of International Drive were identified and applied to the Year 2021 counts made at other locations. Resulting “existing” traffic volumes are shown in Figure 3.

Operational Analysis. Tables 1 and 2 present information regarding existing conditions based on intersection Level of Service and 95th percentile queues. Table 2 identifies current **intersection Levels of Service** based on the HCM using SYNCHRO software. As noted, all study intersections operate at LOS D or better.

Table 3 identifies current peak period **vehicle queues** at the study locations based on SYNCHRO / SimTraffic simulation analysis. All 95th percentile queues can be accommodated by existing storage.

TABLE 1 EXISTING INTERSECTION LEVEL OF SERVICE					
Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Zinfandel Drive / Bear Hollow Drive	Signal	12	B	13	B
Zinfandel Drive / Baroque Drive	WB Stop	14	B	12	B
Westbound right turn		14	B	12	B
Southbound left turn					
Zinfandel Drive / Spoto Drive	Signal	6	A	6	A
Based on HCM, 6 th Edition and Synchro software					

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TABLE 2 EXISTING PEAK PERIOD QUEUES							
Intersection	Direction	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
				Volume (veh/hr)	95 th % Queue (feet)	Volume (vph)	95 th % Queue (feet)
Zinfandel Dr / Bear Hollow Dr	NB	Left	180	45	60	20	45
	SB	Left	180	6	<25	40	70
	EB	Left	160	40	65	130	160
	WB	Left	100	5	<25	5	<25
Zinfandel Dr / Baroque Dr	NB	Left	180	0	<25	0	<25
	SB	Left	180	35	<25	60	40
Zinfandel Dr / Spoto Dr	NB	Left	180	5	<25	10	<25
	SB	U-turn	180	0	-	0	-
	EB	Left	160	5	35	50	40
Highlighted values exceed storage by more than 20 feet. Estimates from SimTraffic simulation.							

PROJECT TRAVEL CHARACTERISTICS

The development of the project would result in vehicle traffic to and from the project site. The amount of additional traffic on a particular section of the street network is dependent upon three factors:

- Trip Generation, the number of new trips generated by the project,
- Trip Distribution, the direction of travel for the new traffic, and
- Trip Assignment, the specific routes used by the new traffic.

Trip Generation

Approach. The number of vehicle trips that are expected to be generated by development of the project has been estimated based on trip generation rates that are applicable to the nature and size of individual project land uses. Specific ITE trip generation rates were applied, and internal interaction was subsequently addressed to estimate the project's external trips.

Trip Generation Rates. The number of vehicle trips that are expected to be generated site by development have been estimated based on trip generation rates that are applicable to the nature and size of project land uses. Trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition* have been employed where available. Table 3 presents the trip generation rates used for this analysis.

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TABLE 3 TRIP GENERATION RATES									
Land Use	ITE Code	Unit	Trips per Unit						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single Family Residential	210	du	9.44	25%	75%	0.74	63%	37%	0.99
Multi-Family Residential	220	du	7.32	23%	77%	0.46	63%	37%	0.56
Retail	820	ksf	37.75	62%	38%	0.94	48%	52%	3.81
Supermarket	850	ksf	106.78	60%	40%	3.82	51%	49%	9.24
Fast-Food Restaurant with Drive-thru	934	ksf	470.95	51%	49%	40.19	52%	48%	32.67
Gasoline Station w/ Convenience Store	945	fueling position	205.36	51%	49%	12.47	51%	49%	13.99

Trip Generation Forecasts. Identified trip generation rates were applied to the project's uses as noted below.

Gross Trip Generation. Resulting gross trip generation estimates for all of the identified uses in the proposed project are presented in Table 4. These assume each is an isolated freestanding use, and the forecast is the estimate prior to accounting for internal trips between uses. As shown, the project could generate 9,763 gross daily trips, with 581 a.m. and 776 p.m. peak hour trips.

Internal Trips. A share of the trips attracted to each use are likely to be made by persons who also elect to visit another part of the project as part of the same stop. These trips may be made on foot or by automobile but either will represent trips that do not use the off-site street system. The share of each use's trips that may be internal is based on consideration of assumption made in other traffic studies as well as the characteristics of each use and the methods described in the *ITE Trip Generation Handbook*. For this analysis a very conservative approach has been taken that assumes internal trips occur between commercial and retail uses but does not assume internal trips between various commercial businesses.

External Trips. After accounting for all internal interaction, the project is expected to generate 9,300 daily external trips, with 549 trips in the a.m. peak hour and 735 trips in the p.m. peak hour.

Typically, the external trips associated with retail-service uses are divided between "**primary**" and "**pass-by**" trips. Primary or "new" trips represent those trips specifically made for the purpose of visiting the site. These trips would affect the project access as well as the local and

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regional circulation system. Pass-by trips are those made as part of another trip by patrons who simply turn into and out of the project from Zinfandel Drive. Pass-by trips would not affect the regional circulation system.

TABLE 4 PROJECT TRIP GENERATION FORECASTS									
Land Use	Unit	Quantity	Trips						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Based on Sum of Trip Estimates for Individual Uses									
Single Family Residential	du	128	1,208	24	71	95	80	47	127
Internal Trips to Commercial		10%	<122>	<2>	<7>	<9>	<8>	<4>	<12>
External Trips			1,087	22	64	86	72	43	115
Primary Trips		90%	1,087	22	64	86	72	43	115
Multi-Family Residential	du	150	1,098	16	53	69	53	31	84
Internal Trips to Commercial		10%	<110>	<2>	<5>	<7>	<5>	<3>	<8>
External Trips			988	14	48	62	48	28	76
Primary Trips		90%	988	14	48	62	48	28	76
Supermarket	ksf	23.0	2,456	53	35	88	108	105	213
Internal Trips to Residential			<81>	<5>	<1>	<6>	<3>	<4>	<7>
External Trips			2,375	48	34	82	105	101	206
Pass-by Trips		36%	855	15	15	30	37	37	74
Primary Trips		62%	1,520	33	19	52	68	64	132
Fast Food Restaurant with Drive-Thru	ksf	3.0	1,413	61	60	121	51	47	98
Internal to Residential			<46>	<2>	<1>	<3>	<1>	<3>	<4>
External Trips			1,367	59	59	118	50	44	94
Pass-by Trip		50%	683	27	27	54	24	24	48
Primary Trips		48%	684	32	32	64	26	20	46
ksf = 1,000 square feet									

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TABLE 4 (continued) PROJECT TRIP GENERATION FORECASTS									
Land Use	Unit	Quantity	Trips Daily	Trips					
				AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Retail	ksf	3.2	302	5	3	8	14	16	30
<i>Internal to Residential</i>			<10>	<0>	<0>	<0>	<1>	<0>	<1>
External Trips			292	5	3	8	13	16	29
Pass-by Trips			34%	99	2	1	3	5	10
Primary Trips			198	3	2	5	8	11	19
Gas W/ Convenience Store	Fueling position	16	3,286	102	98	200	114	110	224
<i>Internal to Residential</i>			<94>	<5>	<2>	<7>	<3>	<6>	<9>
External Trips			3,502	97	96	193	111	104	215
Pass-by Trips			x% ¹	1,751	60	60	120	60	120
Primary Trips			1,751	37	36	73	51	54	105
Project Gross Total			9,763	261	320	581	420	356	776
<i>Internal Trips</i>			<463>	<16>	<16>	<32>	<21>	<20>	<41>
External Trips			9,300	245	304	549	399	336	735
Pass-by Trips			3,388	104	103	207	126	126	252
Primary Trips			5,912	141	201	342	278	210	483
ksf = 1,000 square feet.									
¹ pass-by and diverted assumed to be 50% on a daily basis, 62% in am peak hour and 56% in pm peak hour									

Pass-By Trips. The number of “pass-by” trips is estimated based on data from the ITE Trip Generation Handbook for each use. As is indicated in Table 4 pass-by trips can comprise more than half of the external trips associated with “convenience” oriented use like gas stations and fast-food restaurants. More than 1/3 of the total external daily trip generation would be pass-by trips to and from commercial uses.

Primary Uses. The remaining external trips that are specifically made to visit the site are “primary” trips. As indicated, the project could generate 5,912 daily primary trips, with 342 primary trips in the a.m. peak hour and 483 primary trips in the p.m. peak hour.

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Trip Distribution

The directional distribution of the project's trips will vary based on the trip type.

Primary Trips. Primary residential trips will likely reflect regional commute destinations and the locations of access to the regional highway system, as well as the locations of shopping and schools. The distribution of primary commercial trips would generally reflect the locations of residences within the trade area of the businesses in the project, which could be 1 to 2 miles. As indicated in Table 5, this analysis assumes that the majority of the project's primary trips are oriented to the north.

Pass-by Trips. Pass-by trips will be drawn in proportion to the peak hour traffic volume along Zinfandel Drive along the site.

TABLE 5 DIRECTIONAL TRIP DISTRIBUTION ASSUMPTIONS					
Direction	Route	Share of Primary Trips		Pass-By Trips	
		Residential	Commercial	AM	PM
North	Zinfandel Drive	50%	50%		
West	Mather Blvd	15%	10%		
South	Zinfandel Drive	30%	15%		
East	Baroque Dr (N) & (S) / Frogs Leap Dr	5%	25%		
	Total	100.00%	100.00%		
Northbound Zinfandel Drive				65%	35%
Southbound Zinfandel Drive				35%	65%
Total				1	1

Trip Assignment. The assignment of project trips to its access points will reflect the trip distribution assumptions, the internal travel time through the site to each driveway for individual users and the traffic controls in place at each driveway. Figure 4 identifies "project only" trips assuming access as proposed.

Existing Plus Project Traffic Volumes. Figure 5 presents the sum of existing background traffic and project trips.

LONG TERM TRAFFIC VOLUMES

The adequacy of site access is also considered within the contexts of long term traffic conditions estimated from available data.

Analysis Approach

Traffic Volumes. The assessment of long term traffic operations in this area of Rancho Cordova makes use of three sources of information.

- **Peak hour intersection volumes / geometry identified in the *Villages of Zinfandel Traffic Impact Analysis (VZTIA)*².** This work accompanied the original Sacramento County entitlement for the Stonecreek area.
- **City of Rancho Cordova travel demand forecasting model Year 2055 intersection traffic volume forecasts.** A.m. and p.m. peak hour forecasts were available for the Zinfandel Drive intersections at International Drive and the Douglas Road.
- **Current development plans for another known project along the east side of Zinfandel Drive south of the Mather Blvd / Baroque Drive intersection (Stonecreek Industrial Center).**

The approach taken to develop future traffic volume is as follows:

- A. Future turning movement forecasts from the VZTIA we compared to the traffic model projections for Zinfandel Drive south of International Drive. That review indicated that northbound traffic volume in the a.m. peak hour was similar but the traffic model forecasts for the southbound direction were less than half of the VZTIA projections. Similarly, in the p.m. peak hour the two sources were similar in the southbound direction, but the traffic model's northbound volume was about half of the VZTIA volumes.
- B. Local trip generation / distribution and assignment analysis was conducted for the development project at Zinfandel Drive / Mather Blvd / Baroque Drive.
- C. VZTIA forecast were manually factored to reflect the traffic model relationships and the volume of traffic produced by the Stonecreek Commercial / Residential development and the project at Mather Blvd.

Resulting future a.m. and p.m. peak hour traffic volume forecasts assuming the Stonecreek projects proceed are presented in Figure 6.

Future Circulation System Improvements. The analysis of future traffic operations assumes implementation of the long term improvements assumed in the VZTIA. As shown in the traffic volume figures, these improvements include:

² Villages of Zinfandel Traffic Impact Analysis, DKS, 2001

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- Completion of 6-lane Zinfandel Drive south to Douglas Road.
- At the Zinfandel Drive / Baroque Drive / Mather Blvd intersection:
 - Dual northbound left turn lanes on Zinfandel Drive
 - Right turn lanes on Zinfandel Drive
 - Dual eastbound right turn lanes on Mather Blvd
 - Westbound left turn lane on Baroque Drive

TRAFFIC OPERATIONAL ANALYSIS**Short Term Conditions**

Intersection Level of Service. Table 6 compares current peak hour intersection Levels of Service with conditions occurring with implementation of the proposed project. As indicated, all locations would still satisfy the City of Rancho Cordova's minimum LOS D standard.

Intersection Queues. Table 7 compares the 95th percentile queues anticipated at the study intersections with occupancy of the Stonecreek Commercial / Industrial project. As indicated, anticipated queues on public streets can be accommodated within available storage

TABLE 6 EXISTING PLUS STONECREEK COMMERCIAL / RESIDENTIAL PROJECT INTERSECTION LEVEL OF SERVICE					
Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Zinfandel Drive / Bear Hollow Drive	Signal	15	B	19	B
Zinfandel Drive / Commercial Access Eastbound right turn	EB Stop	12	B	19	C
Zinfandel Drive / Baroque Drive	WB Stop	15	C	12	B
Westbound right turn		11	B	14	B
Eastbound right turn		16	C	13	B
Southbound left turn		11	B	17	C
Zinfandel Drive / Spoto Drive	Signal	6	A	7	A
Bear Hollow Dr / Main Commercial Access	NB Stop	8	A	8	A
Westbound left turn		11	B	12	B
Northbound left+right turn	SB Stop	7	A	8	A
Spoto Drive / Residential Access		10	A	10	B
Eastbound left turn					
Southbound approach					
Based on HCM, 6 th Edition and Synchro software					

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TABLE 7 EXISTING PLUS STONECREEK COMMERCIAL / RESIDENTIAL PROJECT PEAK PERIOD QUEUES							
Intersection	Direction	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
				Volume (veh/hr)	95 th % Queue (feet)	Volume (vph)	95 th % Queue (feet)
Zinfandel Dr / Bear Hollow Dr	NB	Left	180	153	95	121	95
	SB	Left	180	6	<25	40	55
	EB	Left	160	168	115	237	170
	WB	Left	100	5	<25	5	<25
Zinfandel Dr / Commercial Access	EB	Right	145	57	45	88	40
Zinfandel Dr / Baroque Dr	NB	Left	180	7	<25	23	30
	SB	Left	180	67	45	102	45
	EB	Right	170	17	35	10	25
Zinfandel Dr / Spoto Dr	NB	Left	180	11	25	29	45
	SB	U-turn	180	0	-	0	-
	EB	Left	160	87	60	75	60
Bear Hollow Dr / Main Commercial Dwy	WB	Left	-	125	60	174	70
	NB	Left+right	¹	162	70	192	75
Spoto Dr / Residential Access	EB	Left	5	5	<25	18	<25
	SB	Left+right	65	68	50	45	50
Highlighted values exceed storage by more than 20 feet. ¹ Distance to first parking spaces. 110 feet to first aisle							

Long Term Conditions

Intersection Level of Service. Table 8 identifies peak hour intersection Levels of Service occurring with implementation of the project under long term conditions. As indicated, under long term conditions the LOS for stop controlled turns onto Zinfandel Drive and for uncontrolled left turn across three lanes of traffic become poor under HCM methods. As shown LOS F is shown for left turns across traffic in the peak commute direction, and LOS E is forecast at the new access. The conditions could exceed the City of Rancho Cordova's minimum LOS D standard.

To a great degree these results are created by some very conservative assumptions incorporated into the HCM methods. For example, the calculation of side street stop delays account for the "per lane" traffic flow rate along Zinfandel Drive. The calculation for a four-lane roadway divides the total directional volume by two lanes. However, the calculation for a six-lane road continues to divide the total directional volume by two rather than by three lanes. As a result, the HCM calculation is worse with a four-lane road than with a six-lane facility.

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SimTraffic simulation accounts for use of each through lane on Zinfandel Drive, and for comparison, the length of delays for these movements identified from simulation were identified and reported. As shown, all are much shorter than those estimated from the HCM. As a practical matter, the City of Rancho Cordova will want to monitor the use of unsignalized left turn lanes as the community continues to grow and determine whether there becomes a need to close of left turn lanes on response to actual safety conditions.

Intersection Queues. Table 9 identifies the 95th percentile queues anticipated at study intersections based on simulation of long-term conditions. As indicated, two locations have been identified on public streets where the projected queue lengths exceed the available storage. This occurs at the Bear Hollow Drive / Zinfandel Drive intersection in the eastbound left turn lane on Bear Hollow Drive and in the northbound left turn lane on Zinfandel Drive. On Bear Hollow Drive the lane may be made longer by restriping the street to eliminate the areas now devoted to on-street parking. On Zinfandel Drive the raised median would need to be modified to create a longer left turn lane.

On-site queues are discussed later in this report in the Access and Circulation Assessment.

TABLE 8 FUTURE PLUS STONECREEK COMMERCIAL / RESIDENTIAL PROJECT INTERSECTION LEVEL OF SERVICE					
Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Zinfandel Drive / Bear Hollow Drive	Signal	20	B	25	C
Zinfandel Drive / Commercial Access Eastbound right turn	EB Stop	15	B	48	E ¹
Zinfandel Drive / Baroque Drive	WB Stop				
Westbound right turn		37	E ²	16	B
Eastbound right turn		13	B	26	D ³
Southbound left turn		59	F ⁴	22	C
Northbound left turn		14	B	50	F ⁵
Zinfandel Drive / Spoto Drive	Signal	7	A	11	B
Bear Hollow Dr / Main Commercial Access	NB Stop				
Westbound left turn		9	A	8	A
Northbound left+right turn		14	B	14	B
Spoto Drive / Residential Access	SB Stop				
Eastbound left turn		8	A	8	A
Southbound approach		11	B	12	B
Based on HCM, 6 th edition and Synchro software					
¹ HCM, 6 th edition result. SimTraffic simulation reports					
² HCM, 6 th edition result. SimTraffic simulation reports 11 seconds					
³ HCM, 6 th edition result. SimTraffic simulation reports 8 seconds					
⁴ HCM, 6 th edition result. SimTraffic simulation reports 12 seconds					
⁵ HCM, 6 th edition result. SimTraffic simulation reports 28 seconds					

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TABLE 9 FUTURE PLUS STONECREEK COMMERCIAL / RESIDENTIAL PROJECT PEAK PERIOD QUEUES							
Intersection	Direction	Lane	Storage (feet)	AM Peak Hour		PM Peak Hour	
				Volume (veh/hr)	95 th % Queue (feet)	Volume (vph)	95 th % Queue (feet)
Zinfandel Dr / Bear Hollow Dr	NB	Left	180	145	90	200	230
	SB	Left	180	10	25	50	130
	EB	Left	160	320	175	290	225
	WB	Left	100	5	<25	40	80
Zinfandel Dr / Commercial Access	EB	Right	145	60	45	80	65
Zinfandel Dr / Baroque Dr	NB	Left	180	10	<25	30	45
	SB	Left	180	70	65	110	45
	EB	Right	170	20	40	20	40
Zinfandel Dr / Spoto Dr	NB	Left	180	130	85	80	85
	SB	U-turn	180	0	-	0	-
	EB	Left	160	90	70	100	80
Bear Hollow Dr / Main Commercial Dwy	WB	Left	-	130	70	180	100
		Left ¹	-	-	-	180	65 ¹
	NB	Left+right	55 ²	165	80	195	95
		Left+right ¹	-	-	-		80 ¹
Spoto Dr / Residential Access	EB	Left	5	10	<25	20	<25
	SB	Left+right	65	75	50	50	50
Highlighted values exceed storage by more than 20 feet. ¹ with WB left turn lane ² Distance to first parking spaces. 110 feet to first aisle							

ACCESS / CIRCULATION ASSESSMENT

This report section addresses the issues of:

- Driveway throat depths
- Feasibility of inbound left turn access from Zinfandel Drive
- Need for left turn lanes at site Access on Bear Hollow Drive and Spoto Drive
- Truck Access and Circulation
- Relationship to Other Intersections and Driveways
- Internal Intersection Layouts

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Driveway Throat Depths

Zinfandel Drive Driveways. The areas around driveways need to provide space for the queue of outbound vehicles waiting to exit without blocking the path of arriving vehicles. In this case the throat depths at driveways on Zinfandel Drive are relatively long (i.e., 145 feet in the commercial area and 170 feet in residential area opposite Baroque Drive) and these distances greatly exceed the projected queues under both near term and long term conditions shown in Table 9.

Spoto Drive Driveway. The throat depths at other driveways are shorter, and the 95th percentile queues come closer to the available storage area. At the Spoto Drive access the 65-foot throat depth exceeds the 50-foot queue length, and this location is adequate from that standpoint.

Bear Hollow Drive Driveways. At the main commercial access driveway the throat depth to the first parking space is 55 feet, while the distance to the first connecting north-south aisle is 110 feet. Review of projected queue lengths indicates that the 95th percentile queues will range from 70 to 95 feet, suggesting that use of those parking spaces could occasionally result in inbound vehicles stopped by parking maneuvers. While it would be possible to address this issue by simply eliminating parking on the driveway throat, the effects of other improvements on queuing have been assessed. As indicated in Table 9, the driveway queue length would be reduced with the creation of a separate westbound left turn lane on Bear Hollow Drive but would still reach into the area of three eastside spaces. These three spaces should be eliminated from the plan.

The secondary commercial area driveway at the west end of Bear Hollow Drive would primarily provide access to the rear of the Major 1 building and shops. This access would carry limited traffic as it would likely be used to reach employee parking and for deliveries. The throat is about 40 feet and is adequate for this location.

Feasibility of Left Turns from Zinfandel Drive

Left turns across three lanes of travel cause design requirements to ensure safety. In addition to the need for adequate sight distance from the left turn lane itself, the driveway's receiving area need to provide deceleration space for turning vehicles.

The American Association of State Highway and Transportation Officials (AASHTO) publication *Policy on the Design of Highways and Streets* Table 9-17 outlines the distance at which a southbound vehicle would need to be seen by a motorist waiting to turn left into the project. For a 60 mph design across three lane of traffic that distance is 660 feet. Zinfandel Drive is straight and level in this area and the median landscaping that begins about 300 feet beyond the driveway is intentionally low, the sight distance recommendation will be satisfied.

To make left turns motors will accelerate from a stop across three travels and into the driveway. It is important that the driveway design allow that entry at the probable turning speed and provide subsequent deceleration space. In this way entering vehicles will not need to slow in Zinfandel Drive itself when making the turn. Assuming that a driver reaches a speed of 25 mph when completing the turn, AASHTO Figure 2-34 suggests that another 120 feet is needed to

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come to a comfortable stop. As the driveway throat depth is 170 feet, there is ample room to accommodate decelerating traffic, and left turns should be feasible.

Left Turn Lanes at Access Driveways

Bear Hollow Drive Access. The need to widen Bear Hollow Drive to provide a separate westbound left turn lane at the main commercial access was considered. AASHTO includes guidelines for left turn lanes based on benefit/cost evaluation (section 9.7.3.1) for various combinations of major street and turning volume, but that guidance also notes that “these volume-based guidelines indicate situations where a left turn lane may be desirable but not necessarily situations when a left turn lane is definitely need”. In this case the combination of left turns and through traffic on Bear Hollow Drive would reach the level that justified a left turn lane.

The need for left turn lane is also evidenced by the length of the westbound queue anticipated at the driveway. Under long term condition a 95th percentile queue of 100 feet is projected. Queuing could also be an important issue during the periods before and after the school day at Navigator ES located just to the west on Bear Hollow Drive. While the presence of bike lanes and on-street parking could provide space for through traffic to “bypass” the lane in an emergency, a westbound left turn lane is recommended.

While a left turn lane could be created by widening Bear Hollow Drive, it may also be possible to develop the turn lane by eliminating on-street parking and placing the Class 2 bike lane along the curb. This treatment would be consistent with the previous suggestion for lengthening the eastbound left turn lane at Zinfandel Drive. Practically, creating a continuous Two-Way Left-Turn (TWLT) lane would allow the street to accommodate the combination of eastbound queue (225 feet) and westbound queue (65 feet) within the 320 feet of storage between the two locations.

A separate left turn lane is not needed at the low volume secondary access on Bear Hollow Drive.

Spoto Drive Residential Access. Because this driveway carries less traffic, peak period queuing is not appreciable, and a separate left turn lane on Spoto Drive is not needed.

Truck Access and Circulation

The businesses within the commercial area will be visited by delivery trucks of various sizes. Although truck traffic would be a relatively minor part of the area’s overall trip generation, the turning requirements of full size trucks need to be accommodated at the project’s driveways without encroaching into the paths of opposing vehicles. Because deliveries typically occur during off peak hours when parking areas are less used, on-site circulation can allow internal truck turns to occasionally take up the full aisle width. Because no truck routes through the site have been identified, this issue will need to be reviewed when improvement plans are prepared.

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Relationship to Other Intersections and Driveways

Secondary Bear Hollow Drive Access. With one exception the project's driveways are not located in areas where the proximity of other intersections of driveways presents an issue. The secondary commercial driveway at that west end of Bear Hollow Drive is offset from an existing driveway on the north side of the street. Measured centerline to centerline that offset is about 15 feet. The two driveways are positioned such that path of outbound left turns could coincide, but inbound left turns would not overlap. Normally driveways would be expected to align or be at least 150 feet apart.

The offset is created because the location of the project parcel's western boundary does not extend as far from Zinfandel Drive as does that of the northern parcel. Two options exist to achieve alignment. The project would need to acquire right of way from the 80 foot wide trail that runs along the project's western boundary. With acquisition the driveways could be made to align. Alternatively, since the northern site is vacant, when that area develops the driveway could be moved to the east to align with the proposed project's secondary driveway.

Because the project's secondary driveway would add relatively little traffic at this location, the extent to which relocation is needed has been considered. The existing driveway is one of two serving a 316± space satellite parking lot for the offices at Zinfandel Drive / International Drive. The driveway could also serve future development on the 8-acre remainder of the site zone BP. Current traffic associated with the driveway is likely focused on peak employee commute hours, and future BP development could have similar characteristics.

Because the volume of traffic using the secondary driveway would be low no appreciable safety issues would be created with the anticipated offset. When the north parcel develops, the City should review its development plan and consider whether the current interim access should be relocated to align with the Stonecreek Commercial / Residential center's secondary driveway.

Internal Intersection Layouts

The layout of internal intersections was considered with regards to the need for traffic controls or other modifications.

Spoto Drive Connection. The internal intersection off of the Spoto Drive driveway is relatively close to Spoto Drive. To use the intersection safely, entering and existing traffic at both locations will need to have adequate sight distance to see and adjust to conflicting traffic. Stop signs are recommended on the east-west side approaches, but the entry lane from Spoto Drive should not be controlled. The layout of the driveway and its landscaping should be configured to provide sight distance from the stop-controlled locations that satisfies the minimum requirement for 25 mph travel (i.e., 150 feet).

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Access Recommendations Summary

Commercial Access to Zinfandel Drive. The throat depth at this location is adequate, and left turns into the site are feasible. While truck turning requirements may need to be reviewed when final plans are prepared, no other changes are needed.

Residential Access to Zinfandel Drive opposite Spoto Drive. The throat depth at this location is adequate, and left turns into the site are feasible. No changes are needed.

Main Commercial Access to Bear Hollow Drive. A *westbound left turn lane* should be created at the driveway, and its design should be coordinated with the extension of the eastbound Bear Hollow Drive left turn lane at Zinfandel Drive. If accepted by the City, that design may be compatible with the existing 47-foot width of Bear Hollow Drive. To address driveway throat issues the three eastside parking spaces should be eliminated. The adequacy of truck access will need to be confirmed when plans are prepared.

Secondary Commercial Access. No changes to the layout of this connection are needed, but the adequacy of truck access will need to be confirmed.

Spoto Drive Driveway. The throat depth is adequate. Stop signs are recommended on the east-west side approaches, but the entry lane from Spoto Drive should not be controlled. The layout of the driveway and its landscaping should be configured to provide sight distance from the stop-controlled locations that satisfies the minimum requirement for 25 mph travel (i.e., 150 feet).

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

Sincerely,

KD Anderson & Associates, Inc.



Kenneth D. Anderson, P.E.
President

Attachments: Figures, Traffic counts, LOS/queue calculation worksheets, and
Villages at Zinfandel Traffic Study Appendix



VICINITY MAP



LPAS
Architecture + Design

Elliott Homes
A Tradition of Quality since 1914

COLOR SITE PLAN

STONE CREEK 13

RANCHO CORDOVA, CA

A01

PROJECT NO. 835-0005

04-14-2021

KD Anderson & Associates, Inc.
Transportation Engineers

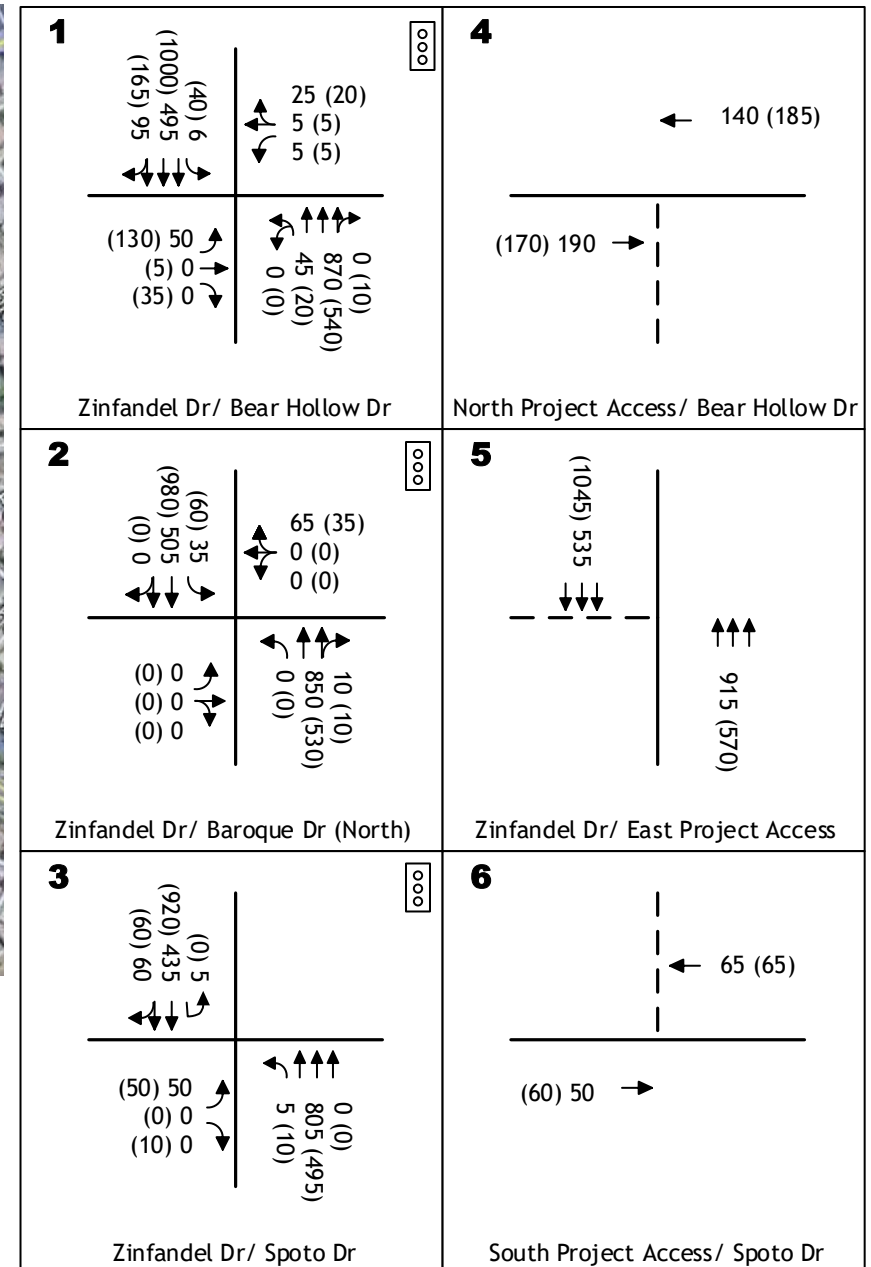
2890-01 RA 8/23/2021

SITE PLAN

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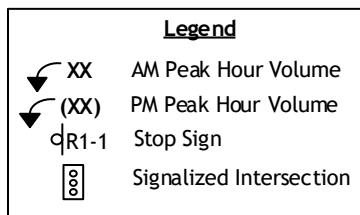
EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

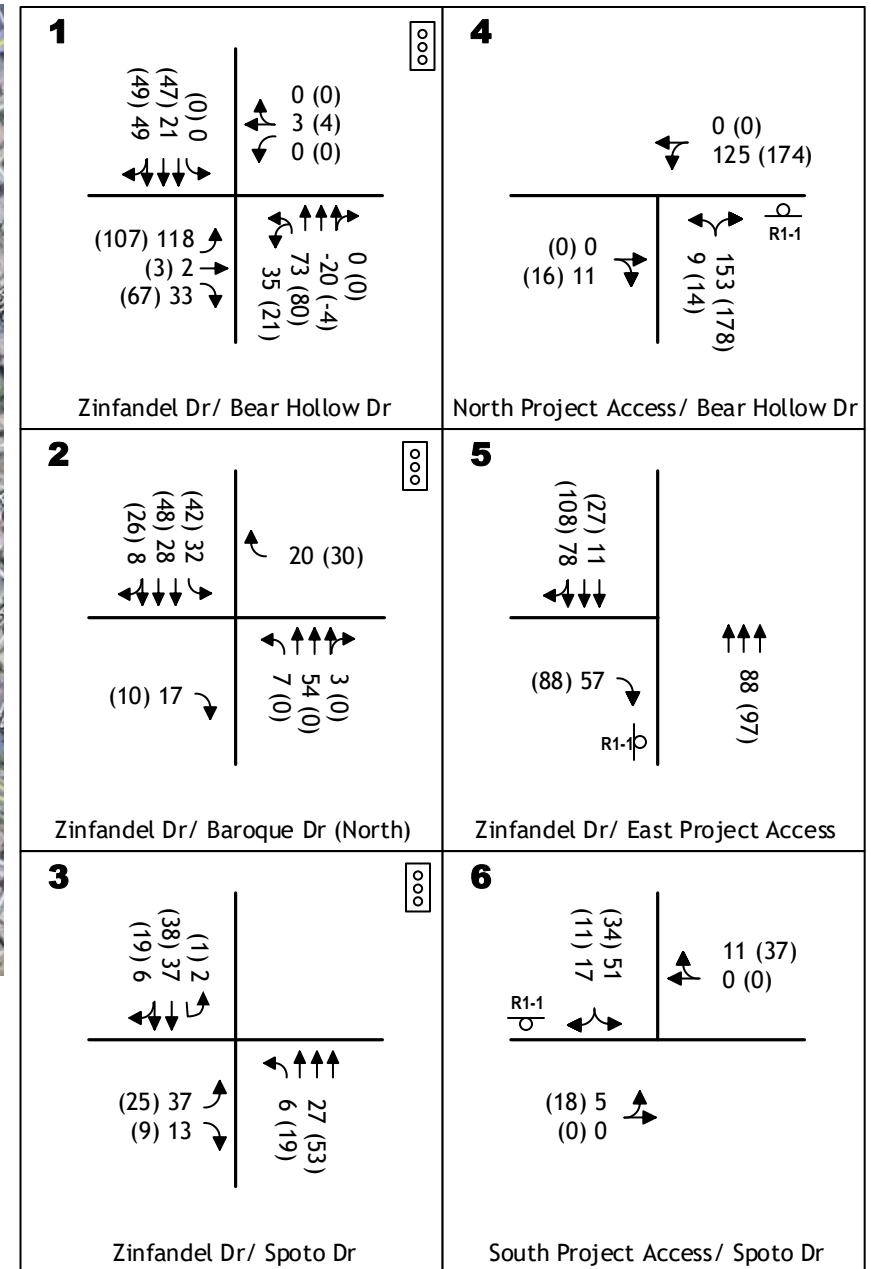
2890-01 RA 8/23/2021

figure 3

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PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

figure 4

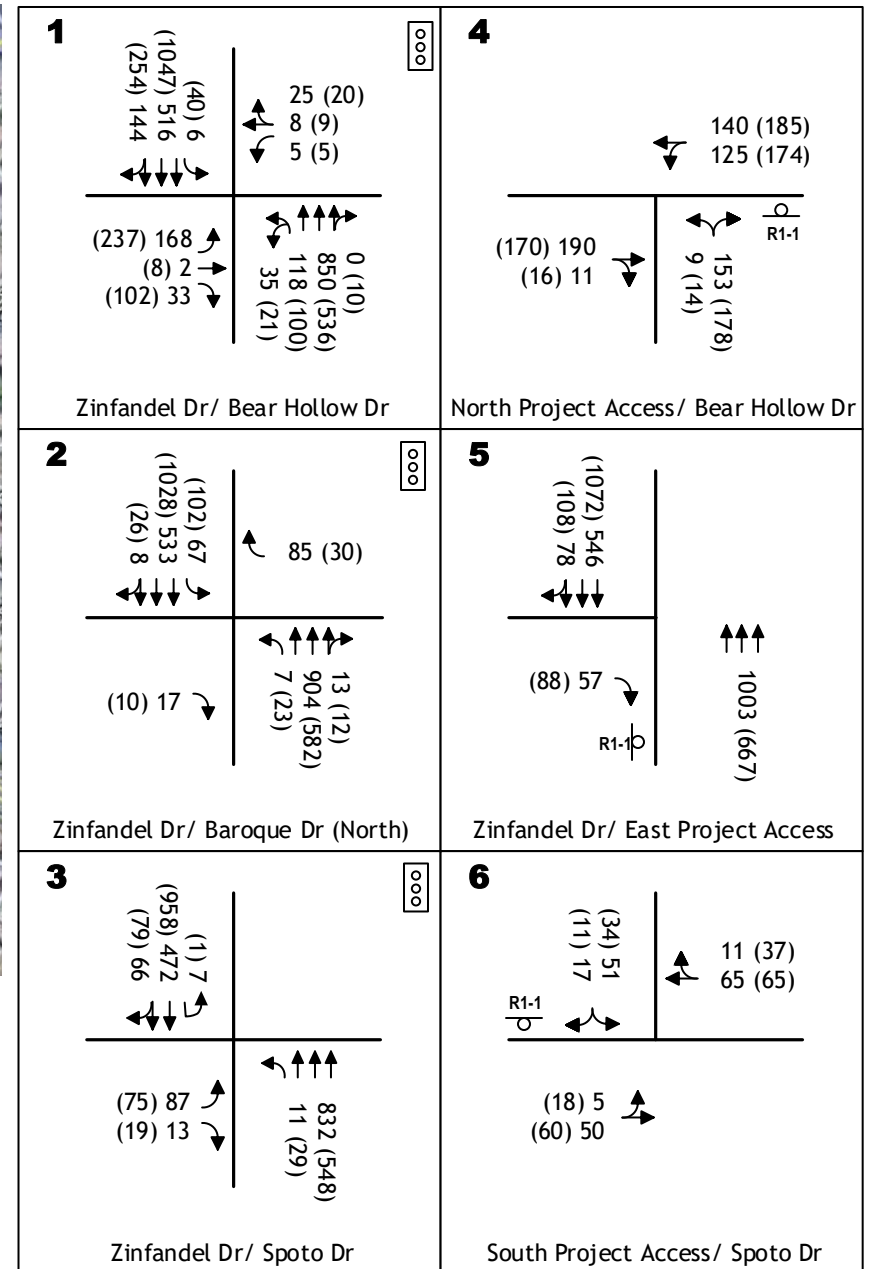
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Legend	
	AM Peak Hour Volume
	PM Peak Hour Volume
	Stop Sign
	Signalized Intersection



ATTACHMENT 5



ITEM 18.1.



Legend

XX AM Peak Hour Volume

(XX) PM Peak Hour Volume

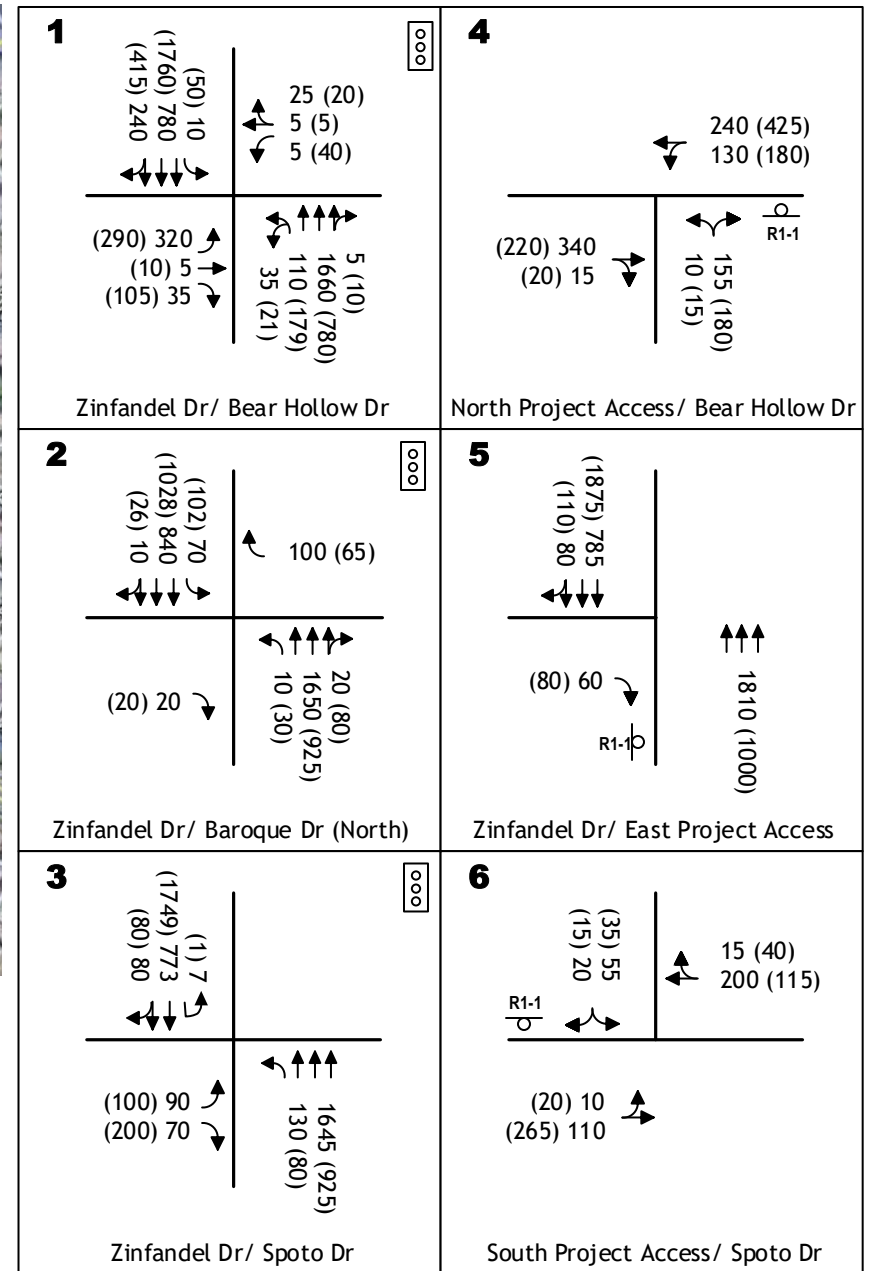
◻ R1-1 Stop Sign

◻ Signalized Intersection

NORTH

N.T.S.

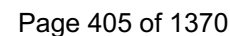
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Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr

Peak Hour Turning Movement Count

Day: Thursday
Date: 7/1/2021



ITEM 18.1.

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National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-002
 Date: 7/1/2021

Data - Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Bear Hollow Dr/Frogs Leap Dr				Bear Hollow Dr/Frogs Leap Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	120	0	0	1	56	6	1	16	0	1	0	1	0	6	0	210
7:15 AM	6	123	0	1	1	75	8	0	19	0	4	0	1	1	4	0	243
7:30 AM	9	166	0	0	0	66	16	0	22	0	3	0	2	0	4	0	288
7:45 AM	7	180	0	1	1	90	15	0	37	0	7	0	0	1	5	0	344
8:00 AM	5	145	0	1	1	88	16	0	31	1	7	0	0	0	6	0	301
8:15 AM	8	149	0	1	1	88	15	0	22	0	3	0	2	0	2	0	291
8:30 AM	7	126	0	0	1	66	10	0	24	0	5	0	0	0	8	0	247
8:45 AM	6	128	1	1	5	87	13	0	28	0	5	0	0	0	3	0	277
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	50	1137	1	5	11	616	99	1	199	1	35	0	6	2	38	0	2201
	4.19%	95.31%	0.08%	0.42%	1.51%	84.73%	13.62%	0.14%	84.68%	0.43%	14.89%	0.00%	13.04%	4.35%	82.61%	0.00%	
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	29	640	0	3	3	332	62	0	112	1	20	0	4	1	17	0	1224
PEAK HR FACTOR:	0.806	0.889	0.000	0.750	0.750	0.922	0.969	0.000	0.757	0.250	0.714	0.000	0.500	0.250	0.708	0.000	0.890
				0.894			0.936				0.756				0.917		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	4	124	2	1	3	160	22	3	19	0	5	0	1	0	5	0	349
4:15 PM	9	132	1	0	6	199	28	0	23	0	9	0	2	0	2	0	411
4:30 PM	7	125	0	1	8	197	32	2	31	0	7	0	0	0	6	0	416
4:45 PM	8	117	2	0	8	159	31	3	23	0	11	0	2	0	4	0	368
5:00 PM	3	135	1	1	3	207	37	2	29	0	7	0	0	0	3	0	428
5:15 PM	3	130	4	1	3	193	34	2	30	1	6	0	0	1	5	0	413
5:30 PM	6	127	0	1	7	194	31	0	22	2	10	0	3	0	2	0	405
5:45 PM	1	146	3	1	8	178	25	1	30	0	2	0	1	0	6	0	402
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	41	1036	13	6	46	1487	240	13	207	3	57	0	9	1	33	0	3192
	3.74%	94.53%	1.19%	0.55%	2.58%	83.26%	13.44%	0.73%	77.53%	1.12%	21.35%	0.00%	20.93%	2.33%	76.74%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	13	538	8	4	21	772	127	5	111	3	25	0	4	1	16	0	1648
PEAK HR FACTOR:	0.542	0.921	0.500	1.000	0.656	0.932	0.858	0.625	0.925	0.375	0.625	0.000	0.333	0.250	0.667	0.000	0.963
				0.932			0.929				0.939				0.750		

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National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-002
 Date: 7/1/2021

Data - Cars

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Bear Hollow Dr/Frogs Leap Dr				Bear Hollow Dr/Frogs Leap Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205
7:15 AM	2	117	0	0	1	54	6	1	16	0	1	0	1	0	6	0	236
7:30 AM	6	119	0	1	1	72	8	0	19	0	4	0	1	1	4	0	281
7:45 AM	9	165	0	0	0	61	15	0	22	0	3	0	2	0	4	0	341
8:00 AM	7	179	0	1	1	89	15	0	36	0	7	0	0	1	5	0	300
8:15 AM	5	144	0	1	1	88	16	0	31	1	7	0	0	0	6	0	288
8:30 AM	8	147	0	1	1	87	15	0	22	0	3	0	2	0	2	0	243
8:45 AM	7	124	0	0	1	65	10	0	24	0	4	0	0	0	8	0	269
	6	125	1	1	5	83	12	0	28	0	5	0	0	0	3	0	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	50	1120	1	5	11	599	97	1	198	1	34	0	6	2	38	0	2163
	4.25%	95.24%	0.09%	0.43%	1.55%	84.60%	13.70%	0.14%	84.98%	0.43%	14.59%	0.00%	13.04%	4.35%	82.61%	0.00%	
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	29	635	0	3	3	325	61	0	111	1	20	0	4	1	17	0	1210
PEAK HR FACTOR:	0.806	0.887	0.000	0.750	0.750	0.913	0.953	0.000	0.771	0.250	0.714	0.000	0.500	0.250	0.708	0.000	0.887
	0.892				0.926				0.767				0.917				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345
4:15 PM	4	124	2	1	3	156	22	3	19	0	5	0	1	0	5	0	409
4:30 PM	9	131	1	0	6	198	28	0	23	0	9	0	2	0	2	0	412
4:45 PM	7	125	0	1	8	193	32	2	31	0	7	0	0	0	6	0	364
5:00 PM	8	115	2	0	8	157	31	3	23	0	11	0	2	0	4	0	422
5:15 PM	3	131	1	1	3	205	37	2	29	0	7	0	0	0	3	0	409
5:30 PM	3	128	4	1	3	191	34	2	30	1	6	0	0	1	5	0	400
5:45 PM	6	124	0	1	7	193	31	0	21	2	10	0	3	0	2	0	394
	1	143	3	1	7	174	25	1	30	0	2	0	1	0	6	0	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	41	1021	13	6	45	1467	240	13	206	3	57	0	9	1	33	0	3155
	3.79%	94.45%	1.20%	0.56%	2.55%	83.12%	13.60%	0.74%	77.44%	1.13%	21.43%	0.00%	20.93%	2.33%	76.74%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	13	526	8	4	20	763	127	5	110	3	25	0	4	1	16	0	1625
PEAK HR FACTOR:	0.542	0.920	0.500	1.000	0.714	0.930	0.858	0.625	0.917	0.375	0.625	0.000	0.333	0.250	0.667	0.000	0.963
	0.931				0.926				0.932				0.750				

ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-002
 Date: 7/1/2021

Data - HT

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Bear Hollow Dr/Frogs Leap Dr				Bear Hollow Dr/Frogs Leap Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	7:00 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5
	7:15 AM	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
	7:30 AM	0	1	0	0	0	5	1	0	0	0	0	0	0	0	0	7
	7:45 AM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	3
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3
	8:30 AM	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	4
8:45 AM	0	3	0	0	0	4	1	0	0	0	0	0	0	0	0	8	
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 17	NR 0	NU 0	SL 0	ST 17	SR 2	SU 0	EL 1	ET 0	ER 1	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 38
0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	89.47%	10.53%	0.00%	50.00%	0.00%	50.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	5	0	0	0	7	1	0	1	0	0	0	0	0	0	0	14
PEAK HR FACTOR :	0.000	0.625	0.000	0.000	0.000	0.350	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.625				0.333				0.250								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
	4:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	4:30 PM	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
	4:45 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	5:00 PM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
	5:15 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4
	5:30 PM	0	3	0	0	0	1	0	0	1	0	0	0	0	0	0	5
5:45 PM	0	3	0	0	1	4	0	0	0	0	0	0	0	0	0	8	
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 15	NR 0	NU 0	SL 1	ST 20	SR 0	SU 0	EL 1	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 37
0.00%	100.00%	0.00%	0.00%	4.76%	95.24%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%						
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	12	0	0	1	9	0	0	1	0	0	0	0	0	0	0	23
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.250	0.563	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.719
	0.750				0.500				0.250								

ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-002
 Date: 7/1/2021

Data - Bikes

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Bear Hollow Dr/Frogs Leap Dr				Bear Hollow Dr/Frogs Leap Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR:	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
5:00 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	8	0	0	0	4	0	0	1	1	0	0	0	0	1	0	15
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	0	4	0	0	0	2	0	0	1	0	0	0	0	0	0	0	7
PEAK HR FACTOR:	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.875

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Bear Hollow Dr/Frogs Leap Dr
City: Rancho Cordova

Project ID: 21-070099-002
Date: 7/1/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Zinfandel Dr		Zinfandel Dr		Bear Hollow Dr/Frogs Leap Dr		Bear Hollow Dr/Frogs Leap Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	1
7:30 AM	2	0	0	0	2	0	0	0	4
7:45 AM	0	0	0	0	2	3	0	0	5
8:00 AM	0	0	0	0	2	0	0	0	2
8:15 AM	0	2	0	0	0	4	0	0	6
8:30 AM	0	0	0	0	2	0	0	0	2
8:45 AM	0	0	0	0	3	0	0	0	3
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	2	2	0	0	12	7	0	0	23
	50.00%	50.00%			63.16%	36.84%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	2	2	0	0	6	7	0	0	17
PEAK HR FACTOR :	0.250	0.250			0.750	0.438			0.708
	0.500				0.650				
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	1	0	0	0	1
					100.00%	0.00%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250				0.250
					0.250				

Prepared by National Data & Surveying Services

Zinfandel Dr & Spoto Dr

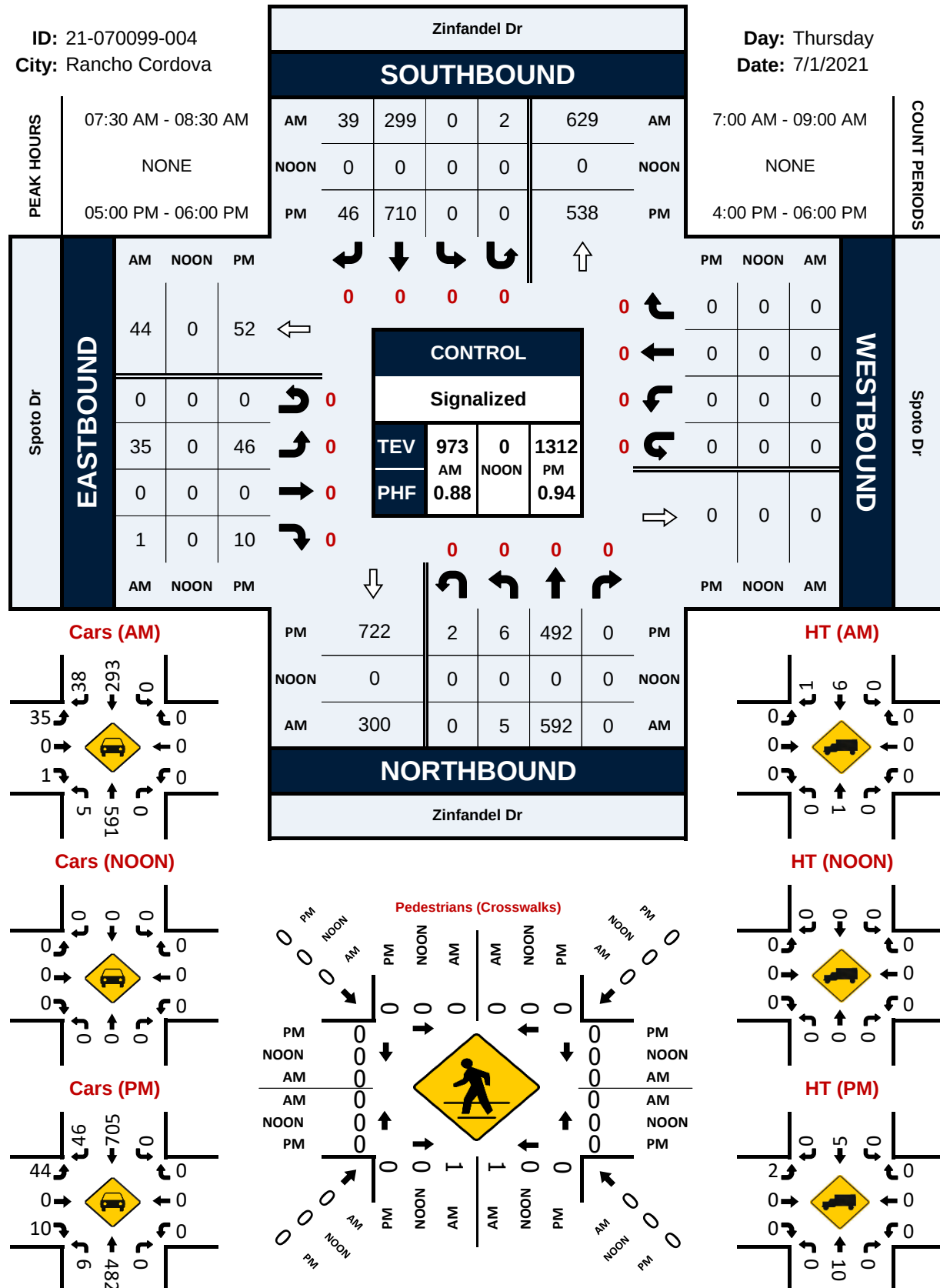
Peak Hour Turning Movement Count

ID: 21-070099-004

City: Rancho Cordova

Day: Thursday

Date: 7/1/2021



ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Spoto Dr
City: Rancho Cordova
Control: Signalized

Project ID: 21-070099-004
Date: 7/1/2021

Data - Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Spoto Dr				Spoto Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	108	0	0	0	52	9	0	4	0	1	0	0	0	0	0	176
7:15 AM	1	121	0	0	0	61	9	0	5	0	0	0	0	0	0	0	197
7:30 AM	1	156	0	0	0	65	12	0	8	0	0	0	0	0	0	0	242
7:45 AM	2	174	0	0	0	78	13	0	10	0	0	0	0	0	0	0	277
8:00 AM	1	126	0	0	0	80	8	0	8	0	0	0	0	0	0	0	223
8:15 AM	1	136	0	0	0	76	6	2	9	0	1	0	0	0	0	0	231
8:30 AM	1	115	0	0	0	62	3	0	15	0	2	0	0	0	0	0	198
8:45 AM	1	114	0	0	0	82	7	0	9	0	1	0	0	0	0	0	214
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0.94%	99.06%	0.00%	0.00%	0.00%	88.96%	10.72%	0.32%	93.15%	0.00%	6.85%	0.00%	0	0	0	0	1758
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	5	592	0	0	0	299	39	2	35	0	1	0	0	0	0	0	973
PEAK HR FACTOR:	0.625	0.851	0.000	0.000	0.000	0.934	0.750	0.250	0.875	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.878
	0.848				0.934				0.900								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	1	100	0	0	0	143	15	0	17	0	2	0	0	0	0	0	278
4:15 PM	1	125	0	1	0	175	12	1	14	0	4	0	0	0	0	0	333
4:30 PM	1	110	0	0	0	188	18	0	10	0	0	0	0	0	0	0	327
4:45 PM	2	106	0	0	0	149	6	0	14	0	1	0	0	0	0	0	278
5:00 PM	1	117	0	0	0	197	14	0	17	0	4	0	0	0	0	0	350
5:15 PM	3	121	0	1	0	162	12	0	14	0	2	0	0	0	0	0	315
5:30 PM	1	120	0	1	0	198	11	0	7	0	3	0	0	0	0	0	341
5:45 PM	1	134	0	0	0	153	9	0	8	0	1	0	0	0	0	0	306
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	1.16%	98.52%	0.00%	0.32%	0.00%	93.30%	6.63%	0.07%	85.59%	0.00%	14.41%	0.00%	0	0	0	0	2528
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	6	492	0	2	0	710	46	0	46	0	10	0	0	0	0	0	1312
PEAK HR FACTOR:	0.500	0.918	0.000	0.500	0.000	0.896	0.821	0.000	0.676	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.937
	0.926				0.896				0.667								

ATTACHMENT 5

Location: Zinfandel Dr & Spoto Dr
City: Rancho Cordova
Control: Signalized

Project ID: 21-070099-004
Date: 7/1/2021

NS/EW Streets:

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ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Spoto Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-004
 Date: 7/1/2021

Data - HT

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Spoto Dr				Spoto Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
7:15 AM	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	6
7:30 AM	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	5
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	4
8:45 AM	0	1	0	0	0	4	0	0	1	0	0	0	0	0	0	0	6
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0.00%	100.00%	0.00%	0.00%	0.00%	84.21%	15.79%	0.00%	50.00%	0.00%	50.00%	0.00%	0	0	0	0	29
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	0	1	0	0	0	6	1	0	0	0	0	0	0	0	0	0	8
PEAK HR FACTOR:	0.000	0.250	0.000	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400
			0.250				0.350										
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
5:30 PM	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4
5:45 PM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0	0	0	0	26
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	0	10	0	0	0	5	0	0	2	0	0	0	0	0	0	0	17
PEAK HR FACTOR:	0.000	0.625	0.000	0.000	0.000	0.625	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.850
			0.625				0.625				0.500						

ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Spoto Dr
 City: Rancho Cordova
 Control: Signalized

Project ID: 21-070099-004
 Date: 7/1/2021

Data - Bikes

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Spoto Dr				Spoto Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
8:00 AM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	1	1	0	0	0	0	0	0	1	0	3	0	0	0	0	0	6
PEAK HR:	07:30 AM - 08:30 AM								25.00% 0.00% 75.00% 0.00%								TOTAL
PEAK HR VOL:	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	4
PEAK HR FACTOR:	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.500
	0.250								0.375								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	8	0	0	0	2	2	0	0	0	0	0	0	0	0	0	12
PEAK HR:	05:00 PM - 06:00 PM				0.00% 100.00% 0.00% 0.00%				0.00% 50.00% 50.00% 0.00%								TOTAL
PEAK HR VOL:	0	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	7
PEAK HR FACTOR:	0.000	0.625	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438
	0.625				0.250												

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Spoto Dr
City: Rancho Cordova

Project ID: 21-070099-004
Date: 7/1/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Zinfandel Dr		Zinfandel Dr		Spoto Dr		Spoto Dr		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	2	0	0	0	0	3
			33.33%	66.67%					
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	1	1	0	0	0	0	2
PEAK HR FACTOR :			0.250	0.250					0.500
			0.500						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	1	2
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	0	0	0	0	1	2
			100.00%	0.00%			0.00%	100.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

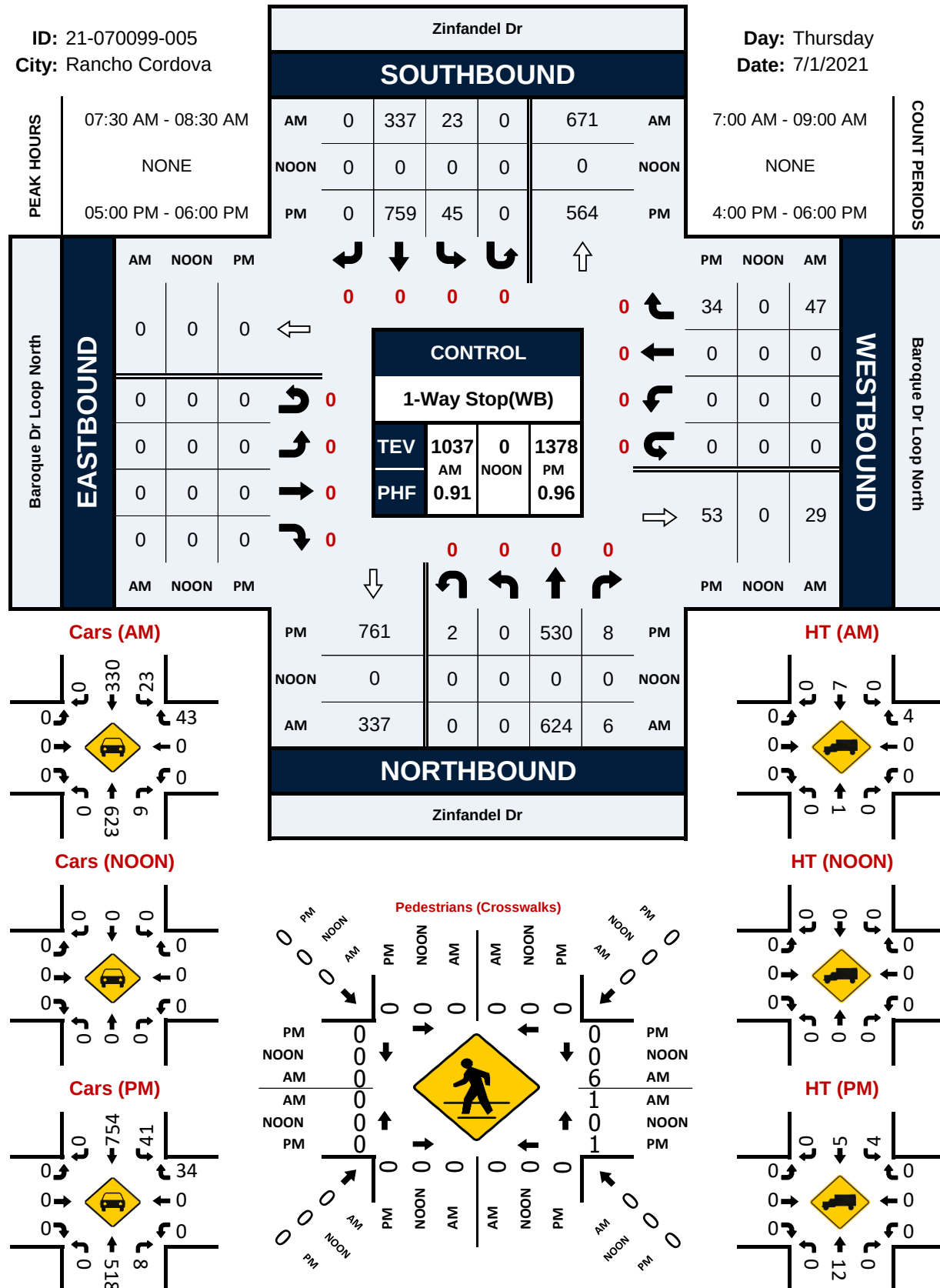
Prepared by National Data & Surveying Services

Zinfandel Dr & Baroque Dr Loop North

Peak Hour Turning Movement Count

ID: 21-070099-005
City: Rancho Cordova

Day: Thursday
Date: 7/1/2021



ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Baroque Dr Loop North
 City: Rancho Cordova
 Control: 1-Way Stop(WB)

Project ID: 21-070099-005
 Date: 7/1/2021

Data - Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Baroque Dr Loop North				Baroque Dr Loop North				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	111	1	0	1	57	0	0	0	0	0	0	0	0	10	0	180
7:15 AM	0	122	0	0	5	72	0	0	0	0	0	0	0	0	7	0	206
7:30 AM	0	165	1	0	2	74	0	0	0	0	0	0	0	0	10	0	252
7:45 AM	0	174	3	0	5	91	0	0	0	0	0	0	0	0	13	0	286
8:00 AM	0	139	1	0	8	90	0	0	0	0	0	0	0	0	13	0	251
8:15 AM	0	146	1	0	8	82	0	0	0	0	0	0	0	0	11	0	248
8:30 AM	0	121	2	0	5	70	0	0	0	0	0	0	0	0	13	0	211
8:45 AM	0	126	3	0	6	86	0	0	0	0	0	0	0	0	9	0	230
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	1104	12	0	40	622	0	0	0	0	0	0	0	0	86	0	1864
	0.00%	98.92%	1.08%	0.00%	6.04%	93.96%	0.00%	0.00%	0	0	0	0	0.00%	0.00%	100.00%	0.00%	
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	0	624	6	0	23	337	0	0	0	0	0	0	0	0	47	0	1037
PEAK HR FACTOR:	0.000	0.897	0.500	0.000	0.719	0.926	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.904	0.000	0.906
	0.890				0.918								0.904				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	113	1	0	13	156	0	0	0	0	0	0	0	0	11	0	294
4:15 PM	0	142	1	0	11	192	0	0	0	0	0	0	0	0	3	0	349
4:30 PM	0	114	2	0	10	202	0	0	0	0	0	0	0	0	16	0	344
4:45 PM	0	120	2	0	10	158	0	1	0	0	0	0	0	0	7	0	298
5:00 PM	0	126	3	0	9	208	0	0	0	0	0	0	0	0	13	0	359
5:15 PM	0	138	3	1	16	182	0	0	0	0	0	0	0	0	5	0	345
5:30 PM	0	124	1	0	8	202	0	0	0	0	0	0	0	0	7	0	342
5:45 PM	0	142	1	1	12	167	0	0	0	0	0	0	0	0	9	0	332
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	1019	14	2	89	1467	0	1	0	0	0	0	0	0	71	0	2663
	0.00%	98.45%	1.35%	0.19%	5.72%	94.22%	0.00%	0.06%	0	0	0	0	0.00%	0.00%	100.00%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	0	530	8	2	45	759	0	0	0	0	0	0	0	0	34	0	1378
PEAK HR FACTOR:	0.000	0.933	0.667	0.500	0.703	0.912	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.654	0.000	0.960
	0.938				0.926								0.654				

ATTACHMENT 5

Location: Zinfandel Dr & Baroque Dr Loop North
City: Rancho Cordova
Control: 1-Way Stop(WB)

Project ID: 21-070099-005
Date: 7/1/2021

NS/EW Streets:		Zinfandel Dr				Zinfandel Dr				Baroque Dr Loop North				Baroque Dr Loop North				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	O NL	O NT	O NR	O NU	O SL	O ST	O SR	O SU	O EL	O ET	O ER	O EU	O WL	O WT	O WR	O WU	TOTAL	
	7:00 AM	0	109	1	0	5	55	0	0	0	0	0	0	0	0	9	0	175
	7:15 AM	0	119	0	0	1	69	0	0	0	0	0	0	0	0	9	0	199
	7:30 AM	0	165	1	0	2	69	0	0	0	0	0	0	0	0	9	0	246
	7:45 AM	0	174	3	0	5	174	0	0	0	0	0	0	0	0	12	0	284
	8:00 AM	0	139	1	0	8	90	0	0	0	0	0	0	0	0	12	0	250
	8:15 AM	0	145	1	0	8	81	0	0	0	0	0	0	0	0	10	0	245
	8:30 AM	0	120	2	0	5	68	0	0	0	0	0	0	0	0	12	0	207
8:45 AM	0	124	3	0	6	82	0	0	0	0	0	0	0	0	8	0	223	
TOTAL VOLUMES: APPROACH %'s :		NL 0	NT 1095	NR 12	NU 0	SL 40	ST 604	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 78	WU 0	TOTAL 1829
		0.00%	98.92%	1.08%	0.00%	6.21%	93.79%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :		07:30 AM - 08:30 AM				23	330	0	0	0	0	0	0	0	0	43	0	TOTAL 1025
		0.000	0.895	0.500	0.000	0.719	0.917	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.896	0.000	0.902
		0.888				0.901								0.896				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND					
	O NL	O NT	O NR	O NU	O SL	O ST	O SR	O SU	O EL	O ET	O ER	O EU	O WL	O WT	O WR	O WU	TOTAL	
	4:00 PM	0	113	1	0	11	154	0	0	0	0	0	0	0	0	11	0	290
	4:15 PM	0	141	1	0	10	192	0	0	0	0	0	0	0	0	3	0	347
	4:30 PM	0	114	2	0	9	199	0	0	0	0	0	0	0	0	16	0	340
	4:45 PM	0	118	2	0	9	157	0	1	0	0	0	0	0	0	7	0	294
	5:00 PM	0	122	3	0	9	207	0	0	0	0	0	0	0	0	13	0	354
	5:15 PM	0	136	3	1	14	181	0	0	0	0	0	0	0	0	5	0	340
	5:30 PM	0	121	1	0	8	201	0	0	0	0	0	0	0	0	7	0	338
5:45 PM	0	139	1	1	10	165	0	0	0	0	0	0	0	0	9	0	325	
TOTAL VOLUMES: APPROACH %'s :		NL 0	NT 1004	NR 14	NU 2	SL 80	ST 1456	SR 0	SU 1	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 71	WU 0	TOTAL 2628
		0.00%	98.43%	1.37%	0.20%	5.20%	94.73%	0.00%	0.07%					0.00%	0.00%	100.00%	0.00%	
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :		05:00 PM - 06:00 PM				41	754	0	0	0	0	0	0	0	0	34	0	TOTAL 1357
		0.000	0.932	0.667	0.500	0.732	0.911	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.654	0.000	0.958
		0.936				0.920								0.654				

ATTACHMENT 5

Location: Zinfandel Dr & Baroque Dr Loop North
City: Rancho Cordova
Control: 1-Way Stop(WB)

Project ID: 21-070099-005
Date: 7/1/2021

NS/EW Streets:		Zinfandel Dr				Zinfandel Dr				Baroque Dr Loop North				Baroque Dr Loop North				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	7:00 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	5
	7:15 AM	0	3	0	0	0	3	0	0	0	0	0	0	0	0	1	0	7
	7:30 AM	0	3	0	0	0	5	0	0	0	0	0	0	0	0	1	0	6
	7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	8:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	3
	8:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	4
8:45 AM	0	2	0	0	0	4	0	0	0	0	0	0	0	0	1	0	7	
TOTAL VOLUMES:		0	9	0	0	0	18	0	0	0	0	0	0	0	0	8	0	35
APPROACH %'s:		0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	0.00%	100.00%	0.00%	
PEAK HR:		07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:		0	1	0	0	0	7	0	0	0	0	0	0	0	0	4	0	12
PEAK HR FACTOR:		0.000	0.250	0.000	0.000	0.000	0.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.500
		0.250				0.350								1.000				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	4:00 PM	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	4:30 PM	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
	4:45 PM	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
	5:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
	5:15 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0	5
	5:30 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	3	0	0	2	2	0	0	0	0	0	0	0	0	0	0	7	
TOTAL VOLUMES:		0	15	0	0	9	11	0	0	0	0	0	0	0	0	0	0	35
APPROACH %'s:		0.00%	100.00%	0.00%	0.00%	45.00%	55.00%	0.00%	0.00%	0	0	0	0	0	0	0	0	
PEAK HR:		05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:		0	12	0	0	4	5	0	0	0	0	0	0	0	0	0	0	21
PEAK HR FACTOR:		0.000	0.750	0.000	0.000	0.500	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
		0.750				0.563												

ITEM 18.1.

ATTACHMENT 5

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Baroque Dr Loop North
 City: Rancho Cordova
 Control: 1-Way Stop(WB)

Project ID: 21-070099-005
 Date: 7/1/2021

Data - Bikes

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Baroque Dr Loop North				Baroque Dr Loop North				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
PEAK HR FACTOR:	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250																
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	0	6	0	0	0	4	0	0	0	0	0	0	0	0	1	0	11
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	0	3	0	0	0	2	0	0	0	0	0	0	0	0	1	0	6
PEAK HR FACTOR:	0.000	0.750	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500
	0.750				0.250								0.250				

National Data & Surveying Services Intersection Turning Movement Count

Location: Zinfandel Dr & Baroque Dr Loop North
City: Rancho Cordova

Project ID: 21-070099-005
Date: 7/1/2021

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Zinfandel Dr		Zinfandel Dr		Baroque Dr Loop North		Baroque Dr Loop North		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	2	0	0	2
8:15 AM	0	0	0	0	0	4	0	0	4
8:30 AM	0	0	0	0	1	0	0	0	1
8:45 AM	0	0	0	0	2	0	0	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	4	6	0	0	10
					40.00%	60.00%			
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	1	6	0	0	7
PEAK HR FACTOR :					0.250	0.375			0.438
						0.438			
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	1	0	0	0	1
					100.00%	0.00%			
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250				0.250
						0.250			

ITEM 18.1.

ATTACHMENT 5

Queues

AM EXISTING

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

08/13/2021



Lane Group	SEL	SET	NWL	NWT	NEL	SWL	SWT
Lane Group Flow (vph)	7	641	49	946	54	5	32
v/c Ratio	0.02	0.24	0.13	0.28	0.15	0.02	0.08
Control Delay	29.3	14.4	25.3	11.0	25.1	29.6	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	14.4	25.3	11.0	25.1	29.6	10.4
Queue Length 50th (ft)	1	34	8	28	9	1	1
Queue Length 95th (ft)	17	145	58	211	63	14	21
Internal Link Dist (ft)		1281		322			333
Turn Bay Length (ft)	180		180		170		
Base Capacity (vph)	1249	4789	1249	4905	1249	1249	1458
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.13	0.04	0.19	0.04	0.00	0.02
Intersection Summary							

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

AM EXISTING

08/13/2021

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	495	95	45	870	0	50	0	0	5	5	25
Future Volume (veh/h)	6	495	95	45	870	0	50	0	0	5	5	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	538	103	49	946	0	54	0	0	5	5	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	916	172	133	1468	0	64	108	92	7	7	36
Arrive On Green	0.01	0.21	0.21	0.07	0.29	0.00	0.04	0.00	0.00	0.00	0.03	0.03
Sat Flow, veh/h	1781	4318	811	1781	5274	0	1781	1870	1585	1781	254	1370
Grp Volume(v), veh/h	7	422	219	49	946	0	54	0	0	5	0	32
Grp Sat Flow(s),veh/h/ln	1781	1702	1724	1781	1702	0	1781	1870	1585	1781	0	1624
Q Serve(g_s), s	0.1	3.6	3.7	0.8	5.2	0.0	1.0	0.0	0.0	0.1	0.0	0.6
Cycle Q Clear(g_c), s	0.1	3.6	3.7	0.8	5.2	0.0	1.0	0.0	0.0	0.1	0.0	0.6
Prop In Lane	1.00		0.47	1.00		0.00	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	10	722	366	133	1468	0	64	108	92	7	0	43
V/C Ratio(X)	0.69	0.58	0.60	0.37	0.64	0.00	0.85	0.00	0.00	0.69	0.00	0.75
Avail Cap(c_a), veh/h	1394	7458	3778	1394	11187	0	1394	2342	1984	1394	0	2287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	11.3	11.4	14.1	10.0	0.0	15.3	0.0	0.0	15.9	0.0	15.5
Incr Delay (d2), s/veh	27.2	0.3	0.6	0.6	0.2	0.0	10.9	0.0	0.0	35.1	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.8	0.2	0.9	0.0	0.5	0.0	0.0	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	11.6	11.9	14.7	10.1	0.0	26.2	0.0	0.0	51.0	0.0	24.8
LnGrp LOS	D	B	B	B	B	A	C	A	A	D	A	C
Approach Vol, veh/h	648			995			54			37		
Approach Delay, s/veh	12.1			10.4			26.2			28.3		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	11.8	6.6	6.1	5.0	14.2	5.6	7.2				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	25.0	* 70	25.0	* 45	* 25	70.0	25.0	* 40				
Max Q Clear Time (g_c+I1), s	2.8	5.7	3.0	2.6	2.1	7.2	2.1	0.0				
Green Ext Time (p_c), s	0.0	1.1	0.0	0.1	0.0	2.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	11.9											
HCM 6th LOS	B											
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.
HCM 6th TWSC
2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5
AM EXISTING
08/13/2021

Intersection												
Int Delay, s/veh	1											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↵ ↑↑↑			↵ ↑↑↑					↵			↵
Traffic Vol, veh/h	35	505	0	0	850	10	0	0	0	0	0	65
Future Vol, veh/h	35	505	0	0	850	10	0	0	0	0	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	549	0	0	924	11	0	0	0	0	0	71
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	935	0	0	549	0	0	-	-	275	-	-	468
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	421	-	-	642	-	-	0	0	616	0	0	463
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	421	-	-	642	-	-	-	-	616	-	-	463
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	0.9			0			0			14.2		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	-	642	-	-	421	-	-	463				
HCM Lane V/C Ratio	-	-	-	-	0.09	-	-	0.153				
HCM Control Delay (s)	0	0	-	-	14.4	-	-	14.2				
HCM Lane LOS	A	A	-	-	B	-	-	B				
HCM 95th %tile O(veh)	-	0	-	-	0.3	-	-	0.5				

ITEM 18.1.

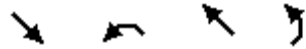
Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

AM EXISTING

08/13/2021



Lane Group	SET	NWL	NWT	NEL
Lane Group Flow (vph)	543	5	875	54
v/c Ratio	0.20	0.01	0.21	0.10
Control Delay	3.1	12.2	1.5	9.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.1	12.2	1.5	9.7
Queue Length 50th (ft)	0	0	0	1
Queue Length 95th (ft)	71	8	42	35
Internal Link Dist (ft)	767		752	324
Turn Bay Length (ft)		185		
Base Capacity (vph)	3476	1623	5085	1747
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.00	0.17	0.03
Intersection Summary				

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HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

AM EXISTING

08/13/2021



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑		↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	440	60	5	805	50	0
Future Volume (veh/h)	440	60	5	805	50	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	478	65	5	875	54	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	822	111	8	2398	68	61
Arrive On Green	0.26	0.26	0.00	0.47	0.04	0.00
Sat Flow, veh/h	3238	426	1781	5274	1781	1585
Grp Volume(v), veh/h	269	274	5	875	54	0
Grp Sat Flow(s),veh/h/ln	1777	1794	1781	1702	1781	1585
Q Serve(g_s), s	2.8	2.9	0.1	2.4	0.6	0.0
Cycle Q Clear(g_c), s	2.8	2.9	0.1	2.4	0.6	0.0
Prop In Lane		0.24	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	464	469	8	2398	68	61
V/C Ratio(X)	0.58	0.58	0.60	0.36	0.79	0.00
Avail Cap(c_a), veh/h	5773	5828	2067	16589	3307	2943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.9	6.9	10.7	3.7	10.3	0.0
Incr Delay (d2), s/veh	0.4	0.4	23.5	0.0	7.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.1	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.4	7.4	34.2	3.7	17.5	0.0
LnGrp LOS	A	A	C	A	B	A
Approach Vol, veh/h	543			880	54	
Approach Delay, s/veh	7.4			3.9	17.5	
Approach LOS	A			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.5	10.7			15.2	6.3
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 25	* 70			* 70	40.0
Max Q Clear Time (g_c+I1), s	2.1	4.9			4.4	2.6
Green Ext Time (p_c), s	0.0	0.8			1.8	0.0

Intersection Summary

HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.

ATTACHMENT 5

Queues

PM EXISTING

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

08/13/2021



Lane Group	SEL	SET	NWL	NWT	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	43	1266	22	598	141	5	38	5	27
v/c Ratio	0.21	0.65	0.13	0.35	0.40	0.01	0.07	0.03	0.12
Control Delay	37.5	18.7	39.6	18.0	32.1	18.6	0.2	41.0	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	18.7	39.6	18.0	32.1	18.6	0.2	41.0	17.2
Queue Length 50th (ft)	12	99	6	58	37	1	0	1	1
Queue Length 95th (ft)	67	343	42	155	159	11	0	17	26
Internal Link Dist (ft)		1281		322		485			333
Turn Bay Length (ft)	180		180		170		165		
Base Capacity (vph)	1018	4601	1018	4684	1082	1473	1273	1082	1298
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.28	0.02	0.13	0.13	0.00	0.03	0.00	0.02
Intersection Summary									

ITEM 18.1.

ATTACHMENT 5

HCM 6th Signalized Intersection Summary

PM EXISTING

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

08/13/2021

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	1000	165	20	540	10	130	5	35	5	5	20
Future Volume (veh/h)	40	1000	165	20	540	10	130	5	35	5	5	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	1087	179	22	587	11	141	5	38	5	5	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	1452	239	29	1659	31	181	262	222	7	13	56
Arrive On Green	0.03	0.33	0.33	0.02	0.32	0.32	0.10	0.14	0.14	0.00	0.04	0.04
Sat Flow, veh/h	1781	4417	727	1781	5161	96	1781	1870	1585	1781	302	1329
Grp Volume(v), veh/h	43	837	429	22	387	211	141	5	38	5	0	27
Grp Sat Flow(s),veh/h/ln	1781	1702	1740	1781	1702	1853	1781	1870	1585	1781	0	1631
Q Serve(g_s), s	1.0	8.9	8.9	0.5	3.5	3.6	3.1	0.1	0.6	0.1	0.0	0.7
Cycle Q Clear(g_c), s	1.0	8.9	8.9	0.5	3.5	3.6	3.1	0.1	0.6	0.1	0.0	0.7
Prop In Lane	1.00		0.42	1.00		0.05	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	51	1119	572	29	1094	596	181	262	222	7	0	69
V/C Ratio(X)	0.85	0.75	0.75	0.76	0.35	0.35	0.78	0.02	0.17	0.69	0.00	0.39
Avail Cap(c_a), veh/h	1094	5856	2993	1094	5856	3188	1094	1839	1558	1094	0	1804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	12.2	12.2	19.9	10.6	10.6	17.8	15.1	7.3	20.2	0.0	19.0
Incr Delay (d2), s/veh	13.5	0.4	0.7	14.0	0.1	0.1	2.7	0.0	0.1	35.8	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	2.2	0.3	0.8	0.9	1.2	0.0	0.3	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	12.5	12.9	34.0	10.6	10.7	20.5	15.1	7.4	56.0	0.0	20.3
LnGrp LOS	C	B	B	C	B	B	C	B	A	E	A	C
Approach Vol, veh/h		1309			620			184			32	
Approach Delay, s/veh		13.3			11.5			17.7			25.9	
Approach LOS		B			B			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	18.4	9.6	7.0	6.0	18.1	5.7	11.0				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	25.0	* 70	25.0	* 45	* 25	70.0	25.0	* 40				
Max Q Clear Time (g_c+I1), s	2.5	10.9	5.1	2.7	3.0	5.6	2.1	2.6				
Green Ext Time (p_c), s	0.0	2.4	0.1	0.0	0.0	1.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 13.4

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.

HCM 6th TWSC

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5

PM EXISTING

08/13/2021

Intersection												
Int Delay, s/veh	0.7											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↵ ↑↑↑			↵ ↑↑↑					↵			↵
Traffic Vol, veh/h	60	980	0	0	530	10	0	0	0	0	0	35
Future Vol, veh/h	60	980	0	0	530	10	0	0	0	0	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	65	1065	0	0	576	11	0	0	0	0	0	38
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	587	0	0	1065	0	0	-	-	533	-	-	294
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	616	-	-	364	-	-	0	0	421	0	0	599
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	616	-	-	364	-	-	-	-	421	-	-	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE		NW			NE			SW			
HCM Control Delay, s	0.7		0			0			11.4			
HCM LOS						A			B			
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	-	364	-	-	616	-	-	599				
HCM Lane V/C Ratio	-	-	-	-	0.106	-	-	0.064				
HCM Control Delay (s)	0	0	-	-	11.5	-	-	11.4				
HCM Lane LOS	A	A	-	-	B	-	-	B				
HCM 95th %tile O(veh)	-	0	-	-	0.4	-	-	0.2				

ITEM 18.1.

Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM EXISTING

08/13/2021



Lane Group	SET	NWL	NWT	NEL	NER
Lane Group Flow (vph)	1065	11	538	54	11
v/c Ratio	0.44	0.03	0.15	0.13	0.03
Control Delay	6.5	17.7	3.4	15.4	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.5	17.7	3.4	15.4	10.3
Queue Length 50th (ft)	52	1	15	6	0
Queue Length 95th (ft)	174	15	28	39	11
Internal Link Dist (ft)	767		752	324	
Turn Bay Length (ft)		185			156
Base Capacity (vph)	3507	1452	5085	1695	1517
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.01	0.11	0.03	0.01
Intersection Summary					

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM EXISTING

08/13/2021



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑		↵	↑↑↑	↵	↵
Traffic Volume (veh/h)	920	60	10	495	50	10
Future Volume (veh/h)	920	60	10	495	50	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1000	65	11	538	54	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1323	86	16	2874	76	68
Arrive On Green	0.39	0.39	0.01	0.56	0.04	0.04
Sat Flow, veh/h	3481	220	1781	5274	1781	1585
Grp Volume(v), veh/h	524	541	11	538	54	11
Grp Sat Flow(s),veh/h/ln	1777	1831	1781	1702	1781	1585
Q Serve(g_s), s	6.9	6.9	0.2	1.4	0.8	0.2
Cycle Q Clear(g_c), s	6.9	6.9	0.2	1.4	0.8	0.2
Prop In Lane		0.12	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	694	715	16	2874	76	68
V/C Ratio(X)	0.76	0.76	0.70	0.19	0.71	0.16
Avail Cap(c_a), veh/h	4625	4765	1656	13291	2650	2358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.1	7.1	13.3	2.9	12.7	12.4
Incr Delay (d2), s/veh	0.6	0.6	18.9	0.0	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.1	0.0	0.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.7	7.7	32.2	2.9	17.1	12.8
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	1065			549	65	
Approach Delay, s/veh	7.7			3.5	16.4	
Approach LOS	A			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.6	15.6			20.2	6.7
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 25	* 70			* 70	40.0
Max Q Clear Time (g_c+I1), s	2.2	8.9			3.4	2.8
Green Ext Time (p_c), s	0.0	1.6			1.1	0.0

Intersection Summary

HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.

ATTACHMENT 5

Queues

AM EX PLUS PROJ

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

08/16/2021



Lane Group	SEL	SET	NWL	NWT	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	7	718	166	924	183	2	36	5	36
v/c Ratio	0.06	0.59	0.53	0.38	0.52	0.00	0.07	0.04	0.18
Control Delay	42.8	25.9	36.7	14.7	34.9	18.0	0.2	43.0	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	25.9	36.7	14.7	34.9	18.0	0.2	43.0	18.2
Queue Length 50th (ft)	3	82	58	73	63	1	0	2	3
Queue Length 95th (ft)	21	211	183	241	196	6	0	17	32
Internal Link Dist (ft)		1281		322		485			333
Turn Bay Length (ft)	180		180		170		165		
Base Capacity (vph)	771	4540	771	4692	771	1383	1201	771	1235
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.16	0.22	0.20	0.24	0.00	0.03	0.01	0.03
Intersection Summary									

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

AM EX PLUS PROJ

08/16/2021

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	6	516	144	153	850	0	168	2	33	5	8	25
Future Volume (veh/h)	6	516	144	153	850	0	168	2	33	5	8	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	561	157	166	924	0	183	2	36	5	9	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	10	841	230	212	1682	0	234	318	270	7	18	53
Arrive On Green	0.01	0.21	0.21	0.12	0.33	0.00	0.13	0.17	0.17	0.00	0.04	0.04
Sat Flow, veh/h	1781	3988	1090	1781	5274	0	1781	1870	1585	1781	412	1236
Grp Volume(v), veh/h	7	477	241	166	924	0	183	2	36	5	0	36
Grp Sat Flow(s),veh/h/ln	1781	1702	1674	1781	1702	0	1781	1870	1585	1781	0	1648
Q Serve(g_s), s	0.2	5.4	5.6	3.8	6.2	0.0	4.2	0.0	0.5	0.1	0.0	0.9
Cycle Q Clear(g_c), s	0.2	5.4	5.6	3.8	6.2	0.0	4.2	0.0	0.5	0.1	0.0	0.9
Prop In Lane	1.00		0.65	1.00		0.00	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	10	718	353	212	1682	0	234	318	270	7	0	71
V/C Ratio(X)	0.70	0.66	0.68	0.78	0.55	0.00	0.78	0.01	0.13	0.69	0.00	0.51
Avail Cap(c_a), veh/h	1061	5678	2792	1061	8516	0	1061	1783	1511	1061	0	1767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.8	15.2	15.3	18.0	11.5	0.0	17.7	14.5	4.6	20.9	0.0	19.6
Incr Delay (d2), s/veh	28.1	0.4	0.9	2.4	0.1	0.0	2.2	0.0	0.1	35.9	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.5	1.5	1.3	1.4	0.0	1.6	0.0	0.3	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	15.6	16.1	20.3	11.6	0.0	19.8	14.5	4.7	56.7	0.0	21.7
LnGrp LOS	D	B	B	C	B	A	B	B	A	E	A	C
Approach Vol, veh/h		725			1090			221			41	
Approach Delay, s/veh		16.1			13.0			17.3			26.0	
Approach LOS		B			B			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	13.9	11.0	7.1	5.0	18.8	5.7	12.4				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	25.0	* 70	25.0	* 45	* 25	70.0	25.0	* 40				
Max Q Clear Time (g_c+I1), s	5.8	7.6	6.2	2.9	2.2	8.2	2.1	2.5				
Green Ext Time (p_c), s	0.0	1.3	0.1	0.1	0.0	2.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

ITEM 18.1.
HCM 6th TWSC
2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5
AM EX PLUS PROJ
08/16/2021

Intersection												
Int Delay, s/veh	1.6											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↵ ↑↑↑↵			↵ ↑↑↑↵					↵			↵
Traffic Vol, veh/h	67	533	8	7	904	13	0	0	17	0	0	85
Future Vol, veh/h	67	533	8	7	904	13	0	0	17	0	0	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	579	9	8	983	14	0	0	18	0	0	92
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	997	0	0	588	0	0	-	-	294	-	-	499
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	393	-	-	616	-	-	0	0	599	0	0	442
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	393	-	-	616	-	-	-	-	599	-	-	442
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	1.8			0.1			11.2			15.3		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	599	616	-	-	393	-	- 442					
HCM Lane V/C Ratio	0.031	0.012	-	-	0.185	-	- 0.209					
HCM Control Delay (s)	11.2	10.9	-	-	16.2	-	- 15.3					
HCM Lane LOS	B	B	-	-	C	-	- C					
HCM 95th %tile O(veh)	0.1	0	-	-	0.7	-	- 0.8					

ITEM 18.1.

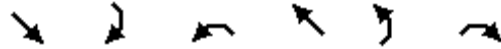
Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

AM EX PLUS PROJ

08/16/2021



Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Group Flow (vph)	521	72	12	904	95	14
v/c Ratio	0.24	0.07	0.03	0.27	0.20	0.03
Control Delay	6.2	2.9	14.7	4.5	12.3	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.2	2.9	14.7	4.5	12.3	7.9
Queue Length 50th (ft)	21	0	1	27	9	0
Queue Length 95th (ft)	76	17	14	50	52	11
Internal Link Dist (ft)	767			752	324	
Turn Bay Length (ft)		200	185			156
Base Capacity (vph)	3539	1583	1590	5085	1735	1552
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.05	0.01	0.18	0.05	0.01
Intersection Summary						

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

AM EX PLUS PROJ

08/16/2021

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑	↑	↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	479	66	11	832	87	13
Future Volume (veh/h)	479	66	11	832	87	13
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	521	72	12	904	95	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	918	410	17	2359	126	112
Arrive On Green	0.26	0.26	0.01	0.46	0.07	0.07
Sat Flow, veh/h	3647	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	521	72	12	904	95	14
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1702	1781	1585
Q Serve(g_s), s	2.9	0.8	0.2	2.6	1.2	0.2
Cycle Q Clear(g_c), s	2.9	0.8	0.2	2.6	1.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	918	410	17	2359	126	112
V/C Ratio(X)	0.57	0.18	0.70	0.38	0.75	0.12
Avail Cap(c_a), veh/h	10966	4891	1963	15756	3141	2795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	6.5	11.2	4.0	10.3	9.9
Incr Delay (d2), s/veh	0.2	0.1	17.3	0.0	3.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.1	0.0	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.5	6.6	28.5	4.0	13.7	10.1
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	593			916	109	
Approach Delay, s/veh	7.4			4.3	13.3	
Approach LOS	A			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.6	11.0			15.6	7.1
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 25	* 70			* 70	40.0
Max Q Clear Time (g_c+I1), s	2.2	4.9			4.6	3.2
Green Ext Time (p_c), s	0.0	1.0			1.9	0.0
Intersection Summary						
HCM 6th Ctrl Delay			6.1			
HCM 6th LOS			A			
Notes						

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.
HCM 6th TWSC
4: BEAR HOLLOW DR & NORTH PROJECT DWY

ATTACHMENT 5
AM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	4.4					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	9	153	190	11	125	140
Future Vol, veh/h	9	153	190	11	125	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	166	207	12	136	152
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	637	213	0	0	219	0
Stage 1	213	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	441	827	-	-	1350	-
Stage 1	823	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	392	827	-	-	1350	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	11	0	3.8			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	779	1350	-	
HCM Lane V/C Ratio	-	-	0.226	0.101	-	
HCM Control Delay (s)	-	-	11	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.9	0.3	-	

ITEM 18.1.
HCM 6th TWSC
5: EAST PROJECT DWY & ZINFANDEL DR

ATTACHMENT 5
AM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	0.4					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑↱			↑↑↑↑		↱
Traffic Vol, veh/h	546	78	0	1003	0	57
Future Vol, veh/h	546	78	0	1003	0	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	593	85	0	1090	0	62
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	339
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	561
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	561
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE		NW		NE	
HCM Control Delay, s	0		0		12.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER		
Capacity (veh/h)	561	-	-	-		
HCM Lane V/C Ratio	0.11	-	-	-		
HCM Control Delay (s)	12.2	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile O(veh)	0.4	-	-	-		

ITEM 18.1.
HCM 6th TWSC
6: SPOTO DR & SOUTH PROJECT DWY

ATTACHMENT 5
AM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	3.4					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	51	17	5	50	65	11
Future Vol, veh/h	51	17	5	50	65	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	18	5	54	71	12
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	141	77	83	0	-	0
Stage 1	77	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	852	984	1514	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	849	984	1514	-	-	-
Mov Cap-2 Maneuver	849	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	9.5	0.7		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1514	-	879	-	-	
HCM Lane V/C Ratio	0.004	-	0.084	-	-	
HCM Control Delay (s)	7.4	0	9.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	15.2	6.8	8.8	11.5	10.0

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.5	3.2	3.2	6.4	2.7

3: SPOTO DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.4	6.6	9.1	5.6

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.1
Total Del/Veh (s)	4.6	0.9	2.4	2.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.7	0.9	3.0	2.0

6: SPOTO DR & SOUTH PROJECT DWY Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	4.4	0.3	0.3	1.6

Total Zone Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	163.5

ITEM 18.1.Queuing and Blocking Report
Baseline**ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE	NE	SW
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	24	85	135	198	126	103	93	81	138	17	59	31
Average Queue (ft)	3	15	46	83	51	37	31	24	67	1	18	4
95th Queue (ft)	16	48	99	158	96	82	72	60	116	11	46	20
Link Distance (ft)		1255	1255	1255	328	328	328	328		479		344
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180								170		165	
Storage Blk Time (%)									0			
Queuing Penalty (veh)									0			

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SW
Directions Served	TR
Maximum Queue (ft)	58
Average Queue (ft)	22
95th Queue (ft)	49
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NW	NE	SW
Directions Served	L	L	TR	R	R
Maximum Queue (ft)	63	20	3	30	79
Average Queue (ft)	19	2	0	10	36
95th Queue (ft)	46	12	2	32	62
Link Distance (ft)	378	776	776	647	1886
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	61	73	43	27	18	64	126	71	23
Average Queue (ft)	14	25	14	7	1	13	57	31	6
95th Queue (ft)	42	63	38	26	9	42	111	59	21
Link Distance (ft)	776	776			762	762	762	309	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	185				156	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	88	2	63
Average Queue (ft)	44	0	23
95th Queue (ft)	71	2	57
Link Distance (ft)	422	1582	479
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	NE
Directions Served	TR	R
Maximum Queue (ft)	5	52
Average Queue (ft)	0	24
95th Queue (ft)	3	43
Link Distance (ft)	328	239
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	50	8
Average Queue (ft)	28	0
95th Queue (ft)	47	6
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR	All
Denied Del/Veh (s)	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	19.9	16.1	11.9	15.5	5.3	16.4	0.5	4.3	24.4	21.7	6.5	10.0

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NER	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.9	1.0	0.6	3.4	3.2	2.2	3.2	6.4	2.7

3: SPOTO DR & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NET	NER	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.7	1.6	7.2	6.6	10.1	0.5	3.7	5.6

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by movement

Movement	NWL	NWR	NET	NER	SWL	SWT	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.3	0.0	0.0	0.1
Total Del/Veh (s)	8.6	4.4	0.9	0.7	3.5	1.6	2.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWT	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.9	2.4	0.9	3.0	2.0

6: SPOTO DR & SOUTH PROJECT DWY Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Total Del/Veh (s)	5.0	2.8	1.9	0.1	0.3	0.3	1.6

Total Zone Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	163.5

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE	NE	SW
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	24	85	135	198	126	103	93	81	138	17	59	31
Average Queue (ft)	3	15	46	83	51	37	31	24	67	1	18	4
95th Queue (ft)	16	48	99	158	96	82	72	60	116	11	46	20
Link Distance (ft)		1255	1255	1255	328	328	328	328		479		344
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180								170		165	
Storage Blk Time (%)									0			
Queuing Penalty (veh)									0			

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SW
Directions Served	TR
Maximum Queue (ft)	58
Average Queue (ft)	22
95th Queue (ft)	49
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NW	NE	SW
Directions Served	L	L	TR	R	R
Maximum Queue (ft)	63	20	3	30	79
Average Queue (ft)	19	2	0	10	36
95th Queue (ft)	46	12	2	32	62
Link Distance (ft)	378	776	776	647	1886
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	61	73	43	27	18	64	126	71	23
Average Queue (ft)	14	25	14	7	1	13	57	31	6
95th Queue (ft)	42	63	38	26	9	42	111	59	21
Link Distance (ft)	776	776			762	762	762	309	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	185				156	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	88	2	63
Average Queue (ft)	44	0	23
95th Queue (ft)	71	2	57
Link Distance (ft)	422	1582	479
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	NE
Directions Served	TR	R
Maximum Queue (ft)	5	52
Average Queue (ft)	0	24
95th Queue (ft)	3	43
Link Distance (ft)	328	239
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM EX PL PROJ

08/16/2021

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	50	8
Average Queue (ft)	28	0
95th Queue (ft)	47	6
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

ITEM 18.1.

ATTACHMENT 5

Queues

PM EX PLUS PROJ

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

08/16/2021



Lane Group	SEL	SET	NWL	NWT	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	43	1414	132	594	258	9	111	5	32
v/c Ratio	0.36	0.82	0.59	0.27	0.53	0.01	0.18	0.07	0.22
Control Delay	60.1	34.1	56.2	19.9	40.9	27.1	6.5	59.4	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	34.1	56.2	19.9	40.9	27.1	6.5	59.4	27.9
Queue Length 50th (ft)	25	271	74	84	130	3	0	3	6
Queue Length 95th (ft)	82	493	191	164	#394	20	44	20	39
Internal Link Dist (ft)		1281		322		485			333
Turn Bay Length (ft)	180		180		170		165		
Base Capacity (vph)	487	3791	487	3884	487	929	845	487	840
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.37	0.27	0.15	0.53	0.01	0.13	0.01	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

PM EX PLUS PROJ

08/16/2021

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	1047	254	121	536	10	237	8	102	5	9	20
Future Volume (veh/h)	40	1047	254	121	536	10	237	8	102	5	9	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	1138	276	132	583	11	258	9	111	5	10	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	52	1380	335	169	2089	39	308	407	345	7	26	56
Arrive On Green	0.03	0.34	0.34	0.09	0.40	0.40	0.17	0.22	0.22	0.00	0.05	0.05
Sat Flow, veh/h	1781	4101	995	1781	5160	97	1781	1870	1585	1781	520	1144
Grp Volume(v), veh/h	43	945	469	132	384	210	258	9	111	5	0	32
Grp Sat Flow(s),veh/h/ln	1781	1702	1691	1781	1702	1853	1781	1870	1585	1781	0	1664
Q Serve(g_s), s	1.4	15.3	15.3	4.3	4.5	4.6	8.4	0.2	2.3	0.2	0.0	1.1
Cycle Q Clear(g_c), s	1.4	15.3	15.3	4.3	4.5	4.6	8.4	0.2	2.3	0.2	0.0	1.1
Prop In Lane	1.00		0.59	1.00		0.05	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	52	1145	569	169	1378	750	308	407	345	7	0	82
V/C Ratio(X)	0.82	0.82	0.82	0.78	0.28	0.28	0.84	0.02	0.32	0.70	0.00	0.39
Avail Cap(c_a), veh/h	743	3977	1976	743	3977	2165	743	1249	1058	743	0	1250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.9	18.3	18.3	26.5	12.0	12.0	24.0	18.4	8.6	29.8	0.0	27.6
Incr Delay (d2), s/veh	11.1	0.6	1.2	3.0	0.0	0.1	2.4	0.0	0.2	37.3	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	4.7	4.7	1.7	1.3	1.4	3.5	0.1	1.2	0.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	18.8	19.4	29.5	12.0	12.0	26.3	18.4	8.8	67.1	0.0	28.8
LnGrp LOS	D	B	B	C	B	B	C	B	A	E	A	C
Approach Vol, veh/h		1457			726			378			37	
Approach Delay, s/veh		19.7			15.2			21.0			33.9	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	25.2	15.9	8.2	6.6	29.3	5.7	18.4				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	25.0	* 70	25.0	* 45	* 25	70.0	25.0	* 40				
Max Q Clear Time (g_c+I1), s	6.3	17.3	10.4	3.1	3.4	6.6	2.2	4.3				
Green Ext Time (p_c), s	0.0	2.9	0.1	0.1	0.0	1.0	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 18.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.
HCM 6th TWSC
2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5
PM EX PLUS PROJ
08/16/2021

Intersection													
Int Delay, s/veh	1.2												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	↵ ↑↑↑↵			↵ ↑↑↑↵					↵			↵	
Traffic Vol, veh/h	102	1028	26	23	582	12	0	0	10	0	0	30	
Future Vol, veh/h	102	1028	26	23	582	12	0	0	10	0	0	30	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	111	1117	28	25	633	13	0	0	11	0	0	33	
Major/Minor	Major1		Major2			Minor1			Minor2				
Conflicting Flow All	646	0	0	1145	0	0	-	-	573	-	-	323	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92	
Pot Cap-1 Maneuver	578	-	-	333	-	-	0	0	396	0	0	574	
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-	
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	578	-	-	333	-	-	-	-	396	-	-	574	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	
Approach	SE		NW			NE			SW				
HCM Control Delay, s	1.1		0.6			14.3			11.6				
HCM LOS						B			B				
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1						
Capacity (veh/h)	396	333	-	-	578	-	-	574					
HCM Lane V/C Ratio	0.027	0.075	-	-	0.192	-	-	0.057					
HCM Control Delay (s)	14.3	16.7	-	-	12.7	-	-	11.6					
HCM Lane LOS	B	C	-	-	B	-	-	B					
HCM 95th %tile O(veh)	0.1	0.2	-	-	0.7	-	-	0.2					

ITEM 18.1.

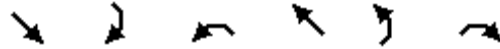
Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM EX PLUS PROJ

08/16/2021



Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Group Flow (vph)	1042	86	32	596	82	21
v/c Ratio	0.53	0.09	0.12	0.19	0.23	0.06
Control Delay	9.7	4.1	20.9	4.2	19.0	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.7	4.1	20.9	4.2	19.0	10.3
Queue Length 50th (ft)	57	2	5	19	13	0
Queue Length 95th (ft)	193	23	31	36	57	15
Internal Link Dist (ft)	767			752	324	
Turn Bay Length (ft)		200	185			156
Base Capacity (vph)	3539	1583	1293	5085	1604	1437
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.05	0.02	0.12	0.05	0.01
Intersection Summary						

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM EX PLUS PROJ

08/16/2021



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑	↑	↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	959	79	29	548	75	19
Future Volume (veh/h)	959	79	29	548	75	19
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1042	86	32	596	82	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1404	626	42	2910	116	103
Arrive On Green	0.39	0.39	0.02	0.57	0.07	0.07
Sat Flow, veh/h	3647	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1042	86	32	596	82	21
Grp Sat Flow(s),veh/h/ln	1777	1585	1781	1702	1781	1585
Q Serve(g_s), s	7.3	1.0	0.5	1.7	1.3	0.4
Cycle Q Clear(g_c), s	7.3	1.0	0.5	1.7	1.3	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1404	626	42	2910	116	103
V/C Ratio(X)	0.74	0.14	0.76	0.20	0.71	0.20
Avail Cap(c_a), veh/h	8564	3820	1533	12305	2453	2183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.5	5.6	14.1	3.0	13.3	12.9
Incr Delay (d2), s/veh	0.3	0.0	10.2	0.0	2.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.2	0.2	0.0	0.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.8	5.7	24.3	3.1	16.2	13.2
LnGrp LOS	A	A	C	A	B	B
Approach Vol, veh/h	1128			628	103	
Approach Delay, s/veh	7.7			4.1	15.6	
Approach LOS	A			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.1	16.6			21.7	7.4
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 25	* 70			* 70	40.0
Max Q Clear Time (g_c+I1), s	2.5	9.3			3.7	3.3
Green Ext Time (p_c), s	0.0	2.2			1.2	0.0

Intersection Summary

HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.
HCM 6th TWSC
4: BEAR HOLLOW DR & NORTH PROJECT DWY

ATTACHMENT 5
PM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	4.9					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	14	178	170	16	174	185
Future Vol, veh/h	14	178	170	16	174	185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	193	185	17	189	201
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	773	194	0	0	202	0
Stage 1	194	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	367	847	-	-	1370	-
Stage 1	839	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	310	847	-	-	1370	-
Mov Cap-2 Maneuver	310	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	11.6	0	3.9			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	752	1370	-	
HCM Lane V/C Ratio	-	-	0.278	0.138	-	
HCM Control Delay (s)	-	-	11.6	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.1	0.5	-	

ITEM 18.1.
HCM 6th TWSC
5: EAST PROJECT DWY & ZINFANDEL DR

ATTACHMENT 5
PM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	0.9					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑↱			↑↑↑↑		↱
Traffic Vol, veh/h	1072	108	0	667	0	88
Future Vol, veh/h	1072	108	0	667	0	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1165	117	0	725	0	96
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	641
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	358
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	358
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE		NW		NE	
HCM Control Delay, s	0		0		18.7	
HCM LOS					C	
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER		
Capacity (veh/h)	358	-	-	-		
HCM Lane V/C Ratio	0.267	-	-	-		
HCM Control Delay (s)	18.7	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile O(veh)	1.1	-	-	-		

ITEM 18.1.
HCM 6th TWSC
6: SPOTO DR & SOUTH PROJECT DWY

ATTACHMENT 5
PM EX PLUS PROJ
08/16/2021

Intersection						
Int Delay, s/veh	2.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	34	11	18	60	65	37
Future Vol, veh/h	34	11	18	60	65	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	12	20	65	71	40
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	196	91	111	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	793	967	1479	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	782	967	1479	-	-	-
Mov Cap-2 Maneuver	782	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	9.7	1.7		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1479	-	820	-	-	
HCM Lane V/C Ratio	0.013	-	0.06	-	-	
HCM Control Delay (s)	7.5	0	9.7	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.2	-	-	

ITEM 18.1.

SimTraffic Performance Report

1:41 pm 06/10/2021

ATTACHMENT 5

PM EX PLUS PROJECT

08/16/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.1	0.1
Total Del/Veh (s)	21.4	12.6	20.9	19.5	18.8

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.9	2.6	8.3	3.9	2.2

3: SPOTO DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	7.1	4.8	9.8	6.5

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.1
Total Del/Veh (s)	5.1	0.9	2.6	2.8

5: EAST PROJECT DWY & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.0	0.8	4.3	3.5

6: SPOTO DR & SOUTH PROJECT DWY Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.1
Total Del/Veh (s)	4.4	0.8	0.5	1.4

Total Zone Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	753.4

ITEM 18.1.

Queuing and Blocking Report

1:41 pm 06/10/2021

ATTACHMENT 5

PM EX PLUS PROJECT

08/16/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE	NE	SW
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	66	212	292	351	146	113	106	113	188	131	82	31
Average Queue (ft)	24	63	123	178	61	42	36	30	108	8	39	4
95th Queue (ft)	53	150	224	290	119	92	83	76	171	53	70	21
Link Distance (ft)		1255	1255	1255	328	328	328	328		479		344
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180								170		165	
Storage Blk Time (%)		0							2			
Queuing Penalty (veh)		0							2			

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SW
Directions Served	TR
Maximum Queue (ft)	62
Average Queue (ft)	21
95th Queue (ft)	51
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NE	SW
Directions Served	L	L	R	R
Maximum Queue (ft)	70	43	33	49
Average Queue (ft)	24	9	6	19
95th Queue (ft)	55	29	25	45
Link Distance (ft)	378	776	647	1886
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

ITEM 18.1.**Queuing and Blocking Report**

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Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	136	157	59	54	21	59	102	73	28
Average Queue (ft)	40	65	19	16	1	8	38	33	9
95th Queue (ft)	97	125	47	42	10	33	86	61	25
Link Distance (ft)	776	776			762	762	762	309	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	185				156	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	91	3	86
Average Queue (ft)	45	0	27
95th Queue (ft)	74	2	67
Link Distance (ft)	422	1582	479
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	NE
Directions Served	T	TR	R
Maximum Queue (ft)	6	31	70
Average Queue (ft)	0	1	32
95th Queue (ft)	6	15	55
Link Distance (ft)	328	328	239
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

ITEM 18.1.

Queuing and Blocking Report

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Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	50	33
Average Queue (ft)	25	2
95th Queue (ft)	48	16
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 2

ITEM 18.1.

SimTraffic Performance Report

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PM EX PLUS PROJECT

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1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Denied Del/Veh (s)	1.2	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Del/Veh (s)	30.9	21.5	19.2	28.0	9.3	5.0	26.8	13.0	8.2	28.3	34.2	8.3

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	18.8

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NER	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	4.2	1.7	0.8	9.6	2.3	1.8	8.3	3.9	2.2

3: SPOTO DR & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NET	NER	All
Denied Del/Veh (s)	0.0	0.0	1.0	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.4	4.2	9.6	4.6	11.0	1.1	5.5	6.5

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by movement

Movement	NWL	NWR	NET	NER	SWL	SWT	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.0	0.0	0.1
Total Del/Veh (s)	10.3	4.7	0.9	0.5	3.6	1.9	2.8

5: EAST PROJECT DWY & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWT	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.2	3.4	0.8	4.3	3.5

6: SPOTO DR & SOUTH PROJECT DWY Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.2	0.0	0.0	0.1
Total Del/Veh (s)	5.0	2.7	2.2	0.4	0.6	0.4	1.4

Total Zone Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	753.4

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Queuing and Blocking Report

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Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE	NE	SW
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	66	212	292	351	146	113	106	113	188	131	82	31
Average Queue (ft)	24	63	123	178	61	42	36	30	108	8	39	4
95th Queue (ft)	53	150	224	290	119	92	83	76	171	53	70	21
Link Distance (ft)		1255	1255	1255	328	328	328	328		479		344
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180								170		165	
Storage Blk Time (%)		0							2			
Queuing Penalty (veh)		0							2			

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SW
Directions Served	TR
Maximum Queue (ft)	62
Average Queue (ft)	21
95th Queue (ft)	51
Link Distance (ft)	344
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NE	SW
Directions Served	L	L	R	R
Maximum Queue (ft)	70	43	33	49
Average Queue (ft)	24	9	6	19
95th Queue (ft)	55	29	25	45
Link Distance (ft)	378	776	647	1886
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

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Queuing and Blocking Report

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Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	136	157	59	54	21	59	102	73	28
Average Queue (ft)	40	65	19	16	1	8	38	33	9
95th Queue (ft)	97	125	47	42	10	33	86	61	25
Link Distance (ft)	776	776			762	762	762	309	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			200	185				156	
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	91	3	86
Average Queue (ft)	45	0	27
95th Queue (ft)	74	2	67
Link Distance (ft)	422	1582	479
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	NE
Directions Served	T	TR	R
Maximum Queue (ft)	6	31	70
Average Queue (ft)	0	1	32
95th Queue (ft)	6	15	55
Link Distance (ft)	328	328	239
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

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Queuing and Blocking Report

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Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	50	33
Average Queue (ft)	25	2
95th Queue (ft)	48	16
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 2

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

08/20/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.0
Total Del/Veh (s)	17.2	9.0	11.9	13.9	12.4

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	2.3	4.1	4.1	10.5	3.7

3: SPOTO DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	5.9	10.9	8.9	8.9

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.2
Total Del/Veh (s)	6.1	1.4	2.6	2.8

5: EAST PROJECT DWY & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	4.9	1.6	4.1	2.9

6: SPOTO DR & SOUTH PROJECT DWY Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	5.3	0.5	0.8	1.6

Total Zone Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	272.2

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

08/20/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	37	120	180	207	155	105	166	152	141	11	187	180
Average Queue (ft)	8	34	82	92	39	46	67	57	50	1	107	9
95th Queue (ft)	27	87	153	167	91	90	132	118	105	5	174	80
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)		0		0	0				0		1	
Queuing Penalty (veh)		0		1	0				0		1	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	45	33	53
Average Queue (ft)	13	5	17
95th Queue (ft)	34	23	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NW	NE	SW
Directions Served	L	L	TR	R	R
Maximum Queue (ft)	91	24	10	41	97
Average Queue (ft)	28	3	0	14	40
95th Queue (ft)	64	14	5	37	72
Link Distance (ft)	378	776	776	647	1886
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

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Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	117	106	90	59	109	32	141	246	91	55
Average Queue (ft)	46	38	30	19	45	2	30	108	35	19
95th Queue (ft)	97	83	70	49	85	16	98	203	68	41
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185				156	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	94	5	95
Average Queue (ft)	46	0	30
95th Queue (ft)	77	3	70
Link Distance (ft)	422	1582	469
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	NE
Directions Served	T	TR	R
Maximum Queue (ft)	11	18	53
Average Queue (ft)	0	1	25
95th Queue (ft)	7	9	45
Link Distance (ft)	328	328	239
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

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Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	54	27
Average Queue (ft)	31	1
95th Queue (ft)	51	12
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

08/20/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Denied Del/Veh (s)	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Del/Veh (s)	23.2	19.4	9.6	20.7	8.0	2.3	17.7	1.1	5.8	25.1	28.8	8.8

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	12.4

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NER	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	11.6	1.6	0.6	6.2	4.1	2.9	4.1	10.6	3.7

3: SPOTO DR & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NET	NER	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.3	2.6	12.8	10.8	12.6	0.7	4.9	8.9

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by movement

Movement	NWL	NWR	NET	NER	SWL	SWT	All
Denied Del/Veh (s)	0.2	0.2	0.3	0.3	0.0	0.0	0.2
Total Del/Veh (s)	11.8	5.7	1.4	1.3	4.3	1.8	2.8

5: EAST PROJECT DWY & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWT	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	5.2	2.9	1.6	4.1	2.9

6: SPOTO DR & SOUTH PROJECT DWY Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.2	0.1	0.1	0.1	0.0	0.0	0.1
Total Del/Veh (s)	6.1	3.3	2.6	0.3	0.8	0.6	1.6

Total Zone Performance

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	272.2

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

08/20/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	37	120	180	207	155	105	166	152	141	11	187	180
Average Queue (ft)	8	34	82	92	39	46	67	57	50	1	107	9
95th Queue (ft)	27	87	153	167	91	90	132	118	105	5	174	80
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)		0		0	0				0		1	
Queuing Penalty (veh)		0		1	0				0		1	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	45	33	53
Average Queue (ft)	13	5	17
95th Queue (ft)	34	23	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	NW	NW	NE	SW
Directions Served	L	L	TR	R	R
Maximum Queue (ft)	91	24	10	41	97
Average Queue (ft)	28	3	0	14	40
95th Queue (ft)	64	14	5	37	72
Link Distance (ft)	378	776	776	647	1886
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

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Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	117	106	90	59	109	32	141	246	91	55
Average Queue (ft)	46	38	30	19	45	2	30	108	35	19
95th Queue (ft)	97	83	70	49	85	16	98	203	68	41
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185				156	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	94	5	95
Average Queue (ft)	46	0	30
95th Queue (ft)	77	3	70
Link Distance (ft)	422	1582	469
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	NE
Directions Served	T	TR	R
Maximum Queue (ft)	11	18	53
Average Queue (ft)	0	1	25
95th Queue (ft)	7	9	45
Link Distance (ft)	328	328	239
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

AM CUM PLUS PROJ

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Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	54	27
Average Queue (ft)	31	1
95th Queue (ft)	51	12
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 1

ITEM 18.1.

ATTACHMENT 5

Queues

AM CUM PL PROJ

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	11	848	261	158	1804	5	348	5	38	5	32
v/c Ratio	0.12	0.62	0.43	0.50	0.74	0.01	0.69	0.01	0.06	0.07	0.22
Control Delay	69.1	38.5	9.1	47.5	26.8	0.0	44.9	26.6	0.2	71.6	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	38.5	9.1	47.5	26.8	0.0	44.9	26.6	0.2	71.6	28.2
Queue Length 50th (ft)	6	141	5	79	268	0	160	2	0	3	3
Queue Length 95th (ft)	39	402	97	240	763	0	512	14	0	23	41
Internal Link Dist (ft)		1281			322			485			333
Turn Bay Length (ft)	180		200	180		200	170		165		
Base Capacity (vph)	468	4079	1319	642	4255	1342	1144	1295	1132	72	202
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.21	0.20	0.25	0.42	0.00	0.30	0.00	0.03	0.07	0.16
Intersection Summary											

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

AM CUM PL PROJ

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	780	240	145	1660	5	320	5	35	5	5	25
Future Volume (veh/h)	10	780	240	145	1660	5	320	5	35	5	5	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	848	261	158	1804	5	348	5	38	5	5	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1094	340	375	2142	665	394	478	405	7	10	52
Arrive On Green	0.01	0.21	0.21	0.21	0.42	0.42	0.22	0.26	0.26	0.00	0.04	0.04
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	254	1370
Grp Volume(v), veh/h	11	848	261	158	1804	5	348	5	38	5	0	32
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	0	1624
Q Serve(g_s), s	0.4	10.3	5.3	5.1	20.9	0.1	12.5	0.1	0.6	0.2	0.0	1.3
Cycle Q Clear(g_c), s	0.4	10.3	5.3	5.1	20.9	0.1	12.5	0.1	0.6	0.2	0.0	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.84
Lane Grp Cap(c), veh/h	15	1094	340	375	2142	665	394	478	405	7	0	62
V/C Ratio(X)	0.74	0.77	0.77	0.42	0.84	0.01	0.88	0.01	0.09	0.70	0.00	0.51
Avail Cap(c_a), veh/h	578	5928	1840	757	6439	1999	1446	1621	1373	89	0	172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.6	24.4	6.5	22.5	17.2	11.1	24.8	18.3	4.8	32.8	0.0	31.1
Incr Delay (d2), s/veh	23.5	0.5	1.4	0.3	0.4	0.0	2.6	0.0	0.0	37.8	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.6	3.4	1.8	6.2	0.0	5.2	0.1	0.4	0.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.1	24.8	7.9	22.8	17.5	11.1	27.5	18.3	4.9	70.5	0.0	33.5
LnGrp LOS	E	C	A	C	B	B	C	B	A	E	A	C
Approach Vol, veh/h	1120		1967				391		37			
Approach Delay, s/veh	21.2		17.9				25.1		38.5			
Approach LOS	C		B				C		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.9	19.1	20.1	7.8	5.3	32.6	5.8	22.1				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	28.0	* 77	53.5	* 7	* 21	83.1	3.3	* 57				
Max Q Clear Time (g_c+I1), s	7.1	12.3	14.5	3.3	2.4	22.9	2.2	2.6				
Green Ext Time (p_c), s	0.0	1.8	0.1	0.0	0.0	4.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			B									
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

ITEM 18.1.

HCM 6th TWSC

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5

AM CUM PL PROJ

Intersection													
Int Delay, s/veh	3												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations	↵ ↑↑↑			↵ ↑↑↑					↵			↵	
Traffic Vol, veh/h	70	840	10	10	1650	20	0	0	20	0	0	100	
Future Vol, veh/h	70	840	10	10	1650	20	0	0	20	0	0	100	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	80	955	11	11	1875	23	0	0	23	0	0	114	
Major/Minor	Major1		Major2		Minor1		Minor2						
Conflicting Flow All	1898	0	0	966	0	0	-	-	483	-	-	949	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92	
Pot Cap-1 Maneuver	141	-	-	406	-	-	0	0	453	0	0	224	
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-	
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	141	-	-	406	-	-	-	-	453	-	-	224	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	
Approach	SE		NW		NE		SW						
HCM Control Delay, s	4.5		0.1		13.4		36.5						
HCM LOS					B		E						
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1						
Capacity (veh/h)	453	406	-	-	141	-	-	224					
HCM Lane V/C Ratio	0.05	0.028	-	-	0.564	-	-	0.507					
HCM Control Delay (s)	13.4	14.1	-	-	59.3	-	-	36.5					
HCM Lane LOS	B	B	-	-	F	-	-	E					
HCM 95th %tile O(veh)	0.2	0.1	-	-	2.8	-	-	2.6					

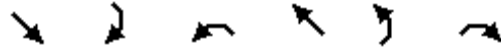
ITEM 18.1.

Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

AM CUM PL PROJ



Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Group Flow (vph)	886	91	148	1869	102	80
v/c Ratio	0.59	0.17	0.44	0.63	0.36	0.25
Control Delay	15.0	4.6	21.3	6.9	21.8	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	4.6	21.3	6.9	21.8	8.0
Queue Length 50th (ft)	63	0	31	84	22	0
Queue Length 95th (ft)	114	23	84	139	65	28
Internal Link Dist (ft)	767			752	324	
Turn Bay Length (ft)		200	185			156
Base Capacity (vph)	5085	1583	1554	5085	1260	1150
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.06	0.10	0.37	0.08	0.07
Intersection Summary						

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5 AM CUM PL PROJ

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	780	80	130	1645	90	70
Future Volume (veh/h)	780	80	130	1645	90	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	886	91	148	1869	102	80
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1446	449	188	2755	173	154
Arrive On Green	0.28	0.28	0.11	0.54	0.10	0.10
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	886	91	148	1869	102	80
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	4.4	1.3	2.4	7.8	1.6	1.4
Cycle Q Clear(g_c), s	4.4	1.3	2.4	7.8	1.6	1.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1446	449	188	2755	173	154
V/C Ratio(X)	0.61	0.20	0.79	0.68	0.59	0.52
Avail Cap(c_a), veh/h	11881	3688	2295	19177	1801	1602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	8.0	12.7	4.9	12.6	12.5
Incr Delay (d2), s/veh	0.2	0.1	2.7	0.1	1.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.7	0.0	0.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.2	8.0	15.5	5.0	13.8	13.5
LnGrp LOS	A	A	B	A	B	B
Approach Vol, veh/h	977			2017	182	
Approach Delay, s/veh	9.1			5.8	13.7	
Approach LOS	A			A	B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	13.4			20.8	8.3
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 38	* 68			* 1.1E2	29.5
Max Q Clear Time (g_c+l1), s	4.4	6.4			9.8	3.6
Green Ext Time (p_c), s	0.0	1.9			5.0	0.1
Intersection Summary						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			
Notes						

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.

HCM 6th TWSC

4: BEAR HOLLOW DR & NORTH PROJECT DWY

ATTACHMENT 5

AM CUM PL PROJ

Intersection						
Int Delay, s/veh	3.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	10	155	340	15	130	240
Future Vol, veh/h	10	155	340	15	130	240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	176	386	17	148	273
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	964	395	0	0	403	0
Stage 1	395	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	283	654	-	-	1156	-
Stage 1	681	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	240	654	-	-	1156	-
Mov Cap-2 Maneuver	240	-	-	-	-	-
Stage 1	681	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	13.9	0	3			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	592	1156	-	
HCM Lane V/C Ratio	-	-	0.317	0.128	-	
HCM Control Delay (s)	-	-	13.9	8.6	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.4	0.4	-	

ITEM 18.1.
HCM 6th TWSC
5: EAST PROJECT DWY & ZINFANDEL DR

ATTACHMENT 5
AM CUM PL PROJ

Intersection						
Int Delay, s/veh	0.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Vol, veh/h	785	80	0	1810	0	60
Future Vol, veh/h	785	80	0	1810	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	892	91	0	2057	0	68
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	492
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	447
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	447
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE		NW		NE	
HCM Control Delay, s	0		0		14.5	
HCM LOS					B	
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER		
Capacity (veh/h)	447		-	-	-	
HCM Lane V/C Ratio	0.153		-	-	-	
HCM Control Delay (s)	14.5		-	-	-	
HCM Lane LOS	B		-	-	-	
HCM 95th %tile O(veh)	0.5		-	-	-	

ITEM 18.1.
HCM 6th TWSC
6: SPOTO DR & SOUTH PROJECT DWY

ATTACHMENT 5
AM CUM PL PROJ

Intersection						
Int Delay, s/veh	2.2					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	55	20	10	110	200	15
Future Vol, veh/h	55	20	10	110	200	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	23	11	125	227	17
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	383	236	244	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	620	803	1322	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	614	803	1322	-	-	-
Mov Cap-2 Maneuver	614	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	11.3	0.6		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1322	-	655	-	-	
HCM Lane V/C Ratio	0.009	-	0.13	-	-	
HCM Control Delay (s)	7.7	0	11.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.4	-	-	

ITEM 18.1.
HCM 6th TWSC
2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5
AM CUM PL PROJ

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↵ ↑↑↑↵			↵ ↑↑↵					↵ ↗			↗ ↵
Traffic Vol, veh/h	70	840	10	10	1650	20	0	0	20	0	0	100
Future Vol, veh/h	70	840	10	10	1650	20	0	0	20	0	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	955	11	11	1875	23	0	0	23	0	0	114
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1898	0	0	966	0	0	-	-	483	-	-	949
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	5.34	-	-	-	-	7.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	3.12	-	-	-	-	3.92	-	-	3.32
Pot Cap-1 Maneuver	310	-	-	406	-	-	0	0	453	0	0	261
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	310	-	-	406	-	-	-	-	453	-	-	261
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	1.6			0.1			13.4			29		
HCM LOS							B			D		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	453	406	-	-	310	-	- 261					
HCM Lane V/C Ratio	0.05	0.028	-	-	0.257	-	- 0.435					
HCM Control Delay (s)	13.4	14.1	-	-	20.6	-	- 29					
HCM Lane LOS	B	B	-	-	C	-	- D					
HCM 95th %tile O(veh)	0.2	0.1	-	-	1	-	- 2.1					

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.0	0.2	0.1	0.1
Total Del/Veh (s)	41.5	19.2	45.7	40.6	36.2

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	3.9	3.8	8.4	6.3	4.0

3: SPOTO DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	12.0	7.9	12.8	10.9

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.1
Total Del/Veh (s)	7.2	1.3	3.1	3.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.1	0.0	0.1	0.1
Total Del/Veh (s)	10.1	1.2	9.4	7.2

6: SPOTO DR & SOUTH PROJECT DWY Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.1
Total Del/Veh (s)	5.4	0.7	0.9	1.3

Total Zone Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	1084.3

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	182	623	691	698	225	262	181	148	145	14	194	448
Average Queue (ft)	50	252	319	374	166	133	70	57	54	2	162	143
95th Queue (ft)	129	514	584	666	301	229	143	119	123	9	226	407
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)		0										0
Queuing Penalty (veh)		0										2
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)		9		19	0						20	
Queuing Penalty (veh)		4		77	2						23	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	108	95	57
Average Queue (ft)	47	34	16
95th Queue (ft)	94	78	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	SE	NW	NW	NE	SW
Directions Served	L	TR	L	TR	R	R
Maximum Queue (ft)	105	7	60	20	41	62
Average Queue (ft)	35	0	14	1	14	32
95th Queue (ft)	77	6	42	9	37	56
Link Distance (ft)	378	378	776	776	647	1886
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

ITEM 18.1.Queuing and Blocking Report
Baseline**ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	238	242	213	83	109	47	98	183	101	134
Average Queue (ft)	94	126	95	22	43	5	22	76	42	55
95th Queue (ft)	180	214	176	58	86	26	65	150	81	103
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185					156
Storage Blk Time (%)			0	0					0	
Queuing Penalty (veh)			0	0					0	

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	120	31	133
Average Queue (ft)	51	2	42
95th Queue (ft)	93	20	100
Link Distance (ft)	422	1582	469
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	SE	NE
Directions Served	T	T	TR	R
Maximum Queue (ft)	105	322	288	88
Average Queue (ft)	5	37	31	34
95th Queue (ft)	69	198	172	65
Link Distance (ft)	328	328	328	239
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	1	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	58	48
Average Queue (ft)	25	3
95th Queue (ft)	49	22
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 109

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Denied Del/Veh (s)	0.3	0.1	0.4	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	74.5	43.0	31.2	51.7	11.1	1.7	52.3	40.5	28.0	52.9	53.9	9.7

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	36.2

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NER	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.3	3.6	1.8	27.7	3.2	2.2	8.4	6.4	4.0

3: SPOTO DR & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NET	NER	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	12.4	5.1	18.9	7.0	17.2	0.8	10.8	10.9

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by movement

Movement	NWL	NWR	NET	NER	SWL	SWT	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.0	0.0	0.1
Total Del/Veh (s)	17.1	6.5	1.3	1.0	4.3	2.6	3.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWT	NER	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.1	0.1
Total Del/Veh (s)	10.2	7.4	1.2	9.5	7.2

6: SPOTO DR & SOUTH PROJECT DWY Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.3	0.2	0.0	0.0	0.1
Total Del/Veh (s)	6.4	3.0	2.7	0.5	1.0	0.7	1.3

Total Zone Performance

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	1084.3

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	182	623	691	698	225	262	181	148	145	14	194	448
Average Queue (ft)	50	252	319	374	166	133	70	57	54	2	162	143
95th Queue (ft)	129	514	584	666	301	229	143	119	123	9	226	407
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)		0										0
Queuing Penalty (veh)		0										2
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)		9		19	0						20	
Queuing Penalty (veh)		4		77	2						23	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	108	95	57
Average Queue (ft)	47	34	16
95th Queue (ft)	94	78	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	SE	NW	NW	NE	SW
Directions Served	L	TR	L	TR	R	R
Maximum Queue (ft)	105	7	60	20	41	62
Average Queue (ft)	35	0	14	1	14	32
95th Queue (ft)	77	6	42	9	37	56
Link Distance (ft)	378	378	776	776	647	1886
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	238	242	213	83	109	47	98	183	101	134
Average Queue (ft)	94	126	95	22	43	5	22	76	42	55
95th Queue (ft)	180	214	176	58	86	26	65	150	81	103
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185					156
Storage Blk Time (%)			0	0						0
Queuing Penalty (veh)			0	0						0

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (ft)	120	31	133
Average Queue (ft)	51	2	42
95th Queue (ft)	93	20	100
Link Distance (ft)	422	1582	469
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	SE	NE
Directions Served	T	T	TR	R
Maximum Queue (ft)	105	322	288	88
Average Queue (ft)	5	37	31	34
95th Queue (ft)	69	198	172	65
Link Distance (ft)	328	328	328	239
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	1	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

08/20/2021

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	58	48
Average Queue (ft)	25	3
95th Queue (ft)	49	22
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 109

ITEM 18.1.

ATTACHMENT 5

Queues

PM CUM PL PROJ

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	54	1913	451	217	848	11	315	11	114	43	27
v/c Ratio	0.50	0.88	0.58	0.76	0.30	0.01	0.78	0.03	0.26	0.91	0.25
Control Delay	91.5	44.2	22.6	77.7	20.9	0.0	68.1	43.0	8.4	179.9	37.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.5	44.2	22.6	77.7	20.9	0.0	68.1	43.0	8.4	179.9	37.2
Queue Length 50th (ft)	48	568	173	187	149	0	269	8	0	~41	5
Queue Length 95th (ft)	128	#1060	432	#460	317	0	518	27	48	#180	42
Internal Link Dist (ft)		1281			322			485			333
Turn Bay Length (ft)	180		200	180		200	170		165		
Base Capacity (vph)	304	3126	1046	398	3406	1095	761	888	814	47	146
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.61	0.43	0.55	0.25	0.01	0.41	0.01	0.14	0.91	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	1760	415	200	780	10	290	10	105	40	5	20
Future Volume (veh/h)	50	1760	415	200	780	10	290	10	105	40	5	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1913	451	217	848	11	315	11	114	43	5	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	2150	668	249	2675	830	346	374	317	55	11	48
Arrive On Green	0.04	0.42	0.42	0.14	0.52	0.52	0.19	0.20	0.20	0.03	0.04	0.04
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	302	1329
Grp Volume(v), veh/h	54	1913	451	217	848	11	315	11	114	43	0	27
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	0	1631
Q Serve(g_s), s	3.0	34.6	11.1	11.9	9.5	0.3	17.3	0.5	4.3	2.4	0.0	1.6
Cycle Q Clear(g_c), s	3.0	34.6	11.1	11.9	9.5	0.3	17.3	0.5	4.3	2.4	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	69	2150	668	249	2675	830	346	374	317	55	0	59
V/C Ratio(X)	0.78	0.89	0.68	0.87	0.32	0.01	0.91	0.03	0.36	0.79	0.00	0.46
Avail Cap(c_a), veh/h	382	3917	1216	500	4254	1321	956	1071	907	59	0	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.5	26.7	5.4	42.0	13.6	11.4	39.3	32.1	16.7	48.0	0.0	47.1
Incr Delay (d2), s/veh	6.8	0.5	0.4	3.7	0.0	0.0	3.8	0.0	0.3	42.5	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.4	3.1	5.2	3.1	0.1	7.8	0.2	2.3	1.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	27.3	5.9	45.7	13.6	11.4	43.1	32.1	16.9	90.5	0.0	49.1
LnGrp LOS	D	C	A	D	B	B	D	C	B	F	A	D
Approach Vol, veh/h	2418				1076				440			
Approach Delay, s/veh	23.9				20.0				36.1			
Approach LOS	C				C				D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.9	47.0	24.9	8.9	8.7	57.2	8.6	25.2				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	28.0	* 77	53.5	* 7	* 21	83.1	3.3	* 57				
Max Q Clear Time (g_c+I1), s	13.9	36.6	19.3	3.6	5.0	11.5	4.4	6.3				
Green Ext Time (p_c), s	0.1	5.4	0.1	0.0	0.0	1.8	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay	25.1											
HCM 6th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

ITEM 18.1.
HCM 6th TWSC
2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5
PM CUM PL PROJ

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↰ ↱ ↱ ↱			↰ ↱ ↱ ↱					↱			↱
Traffic Vol, veh/h	110	1815	30	30	925	80	0	0	20	0	0	65
Future Vol, veh/h	110	1815	30	30	925	80	0	0	20	0	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	125	2063	34	34	1051	91	0	0	23	0	0	74
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1142	0	0	2097	0	0	-	-	1049	-	-	571
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	334	-	-	112	-	-	0	0	192	0	0	397
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	334	-	-	112	-	-	-	-	192	-	-	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE			NW			NE			SW		
HCM Control Delay, s	1.2			1.5			26.3			16.1		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	192	112	-	-	334	-	-	397				
HCM Lane V/C Ratio	0.118	0.304	-	-	0.374	-	-	0.186				
HCM Control Delay (s)	26.3	50.6	-	-	22.1	-	-	16.1				
HCM Lane LOS	D	F	-	-	C	-	-	C				
HCM 95th %tile O(veh)	0.4	1.2	-	-	1.7	-	-	0.7				

ITEM 18.1.

Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ



Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Group Flow (vph)	1902	87	87	1005	109	217
v/c Ratio	0.75	0.11	0.37	0.30	0.41	0.51
Control Delay	15.5	5.7	32.6	4.5	31.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	5.7	32.6	4.5	31.8	9.6
Queue Length 50th (ft)	196	7	29	43	36	0
Queue Length 95th (ft)	333	32	85	76	99	58
Internal Link Dist (ft)	767			752	324	
Turn Bay Length (ft)		200	185			156
Base Capacity (vph)	4872	1519	1183	5085	953	952
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.06	0.07	0.20	0.11	0.23
Intersection Summary						

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5 PM CUM PL PROJ

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	1750	80	80	925	100	200
Future Volume (veh/h)	1750	80	80	925	100	200
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1902	87	87	1005	109	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2365	734	111	3135	308	274
Arrive On Green	0.46	0.46	0.06	0.61	0.17	0.17
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1902	87	87	1005	109	217
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	15.8	1.5	2.4	4.7	2.7	6.5
Cycle Q Clear(g_c), s	15.8	1.5	2.4	4.7	2.7	6.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2365	734	111	3135	308	274
V/C Ratio(X)	0.80	0.12	0.79	0.32	0.35	0.79
Avail Cap(c_a), veh/h	6976	2165	1348	11260	1057	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	7.6	23.0	4.6	18.1	19.7
Incr Delay (d2), s/veh	0.2	0.0	4.6	0.0	0.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.4	1.0	0.5	1.0	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	7.6	27.5	4.6	18.4	21.7
LnGrp LOS	B	A	C	A	B	C
Approach Vol, veh/h	1989			1092	326	
Approach Delay, s/veh	11.5			6.5	20.6	
Approach LOS	B			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	28.1			35.6	14.1
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 38	* 68			* 1.1E2	29.5
Max Q Clear Time (g_c+l1), s	4.4	17.8			6.7	8.5
Green Ext Time (p_c), s	0.0	5.2			2.2	0.2
Intersection Summary						
HCM 6th Ctrl Delay			10.7			
HCM 6th LOS			B			
Notes						

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.
HCM 6th TWSC
4: BEAR HOLLOW DR & NORTH PROJECT DWY

ATTACHMENT 5
PM CUM PL PROJ

Intersection						
Int Delay, s/veh	4.1					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	15	180	220	20	180	425
Future Vol, veh/h	15	180	220	20	180	425
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	205	250	23	205	483
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1155	262	0	0	273	0
Stage 1	262	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	218	777	-	-	1290	-
Stage 1	782	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	171	777	-	-	1290	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Approach	NW	NE	SW			
HCM Control Delay, s	14.2	0	2.5			
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	611	1290	-	
HCM Lane V/C Ratio	-	-	0.363	0.159	-	
HCM Control Delay (s)	-	-	14.2	8.3	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	1.7	0.6	-	

ITEM 18.1.
HCM 6th TWSC
5: EAST PROJECT DWY & ZINFANDEL DR

ATTACHMENT 5
PM CUM PL PROJ

Intersection						
Int Delay, s/veh	1.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑↓			↑↑↑↑		↗
Traffic Vol, veh/h	1875	110	0	1000	0	80
Future Vol, veh/h	1875	110	0	1000	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2131	125	0	1136	0	91
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1128
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	170
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	170
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE		NW		NE	
HCM Control Delay, s	0		0		48.2	
HCM LOS					E	
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER		
Capacity (veh/h)	170		-	-	-	
HCM Lane V/C Ratio	0.535		-	-	-	
HCM Control Delay (s)	48.2		-	-	-	
HCM Lane LOS	E		-	-	-	
HCM 95th %tile O(veh)	2.7		-	-	-	

ITEM 18.1.
HCM 6th TWSC
6: SPOTO DR & SOUTH PROJECT DWY

ATTACHMENT 5
PM CUM PL PROJ

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	35	15	20	265	115	40
Future Vol, veh/h	35	15	20	265	115	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	17	23	301	131	45
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	501	154	176	0	-	0
Stage 1	154	-	-	-	-	-
Stage 2	347	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	530	892	1400	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	519	892	1400	-	-	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	11.7	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1400	-	593	-	-	
HCM Lane V/C Ratio	0.016	-	0.096	-	-	
HCM Control Delay (s)	7.6	0	11.7	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.0	0.1	0.1	0.1
Total Del/Veh (s)	38.0	18.4	42.6	42.5	33.5

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	3.8	3.9	8.7	6.2	3.9

3: SPOTO DR & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	13.9	8.1	13.9	12.1

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.2	0.0	0.1
Total Del/Veh (s)	5.8	1.2	2.0	2.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.1
Total Del/Veh (s)	9.8	1.2	9.0	7.0

6: SPOTO DR & SOUTH PROJECT DWY Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.2
Total Del/Veh (s)	5.6	0.8	0.9	1.3

Total Zone Performance

Denied Del/Veh (s)	0.8
Total Del/Veh (s)	1089.8

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	195	604	864	676	225	252	184	154	136	14	194	432
Average Queue (ft)	51	227	304	334	156	131	68	60	51	1	159	115
95th Queue (ft)	134	498	607	620	298	217	143	123	113	8	224	361
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)		0				0						0
Queuing Penalty (veh)		0				0						1
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)	0	7		15	0						16	
Queuing Penalty (veh)	0	4		63	1						19	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	123	102	47
Average Queue (ft)	51	35	17
95th Queue (ft)	102	80	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	SE	NW	NW	NE	SW
Directions Served	L	TR	L	TR	R	R
Maximum Queue (ft)	91	6	63	25	36	71
Average Queue (ft)	33	0	17	2	13	30
95th Queue (ft)	71	5	45	13	36	57
Link Distance (ft)	378	378	776	776	647	1886
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	277	310	237	98	95	38	90	211	118	137
Average Queue (ft)	106	139	99	22	43	4	25	80	43	62
95th Queue (ft)	219	253	195	75	83	22	68	161	96	115
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185					156
Storage Blk Time (%)				2						1
Queuing Penalty (veh)				1						1

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	L
Maximum Queue (ft)	105	16	74
Average Queue (ft)	47	1	28
95th Queue (ft)	80	10	62
Link Distance (ft)	422	1582	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	SE	NE
Directions Served	T	T	TR	R
Maximum Queue (ft)	131	347	346	87
Average Queue (ft)	5	35	35	35
95th Queue (ft)	71	198	187	67
Link Distance (ft)	328	328	328	239
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	1	1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	59	50
Average Queue (ft)	26	5
95th Queue (ft)	51	28
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 92

ITEM 18.1.**SimTraffic Performance Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Denied Del/Veh (s)	0.3	0.1	0.6	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.1	0.1
Total Del/Veh (s)	74.7	39.1	28.5	49.9	10.6	1.5	47.6	40.5	28.6	56.0	62.7	7.7

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	33.5

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR Performance by movement

Movement	SEL	SET	SER	NWL	NWT	NWR	NER	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.5	3.6	2.0	29.1	3.2	2.2	8.7	6.2	3.9

3: SPOTO DR & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NET	NER	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	14.3	5.6	21.8	6.9	16.9	0.7	12.7	12.1

4: BEAR HOLLOW DR & NORTH PROJECT DWY Performance by movement

Movement	NWL	NWR	NET	NER	SWL	SWT	All
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.0	0.0	0.1
Total Del/Veh (s)	13.1	5.3	1.2	0.9	3.9	1.1	2.5

5: EAST PROJECT DWY & ZINFANDEL DR Performance by movement

Movement	SET	SER	NWT	NER	All
Denied Del/Veh (s)	0.1	0.3	0.0	0.2	0.1
Total Del/Veh (s)	9.9	7.3	1.2	9.0	7.0

6: SPOTO DR & SOUTH PROJECT DWY Performance by movement

Movement	SEL	SER	NEL	NET	SWT	SWR	All
Denied Del/Veh (s)	0.1	0.1	0.2	0.3	0.0	0.0	0.2
Total Del/Veh (s)	6.6	3.4	2.7	0.7	0.9	0.7	1.3

Total Zone Performance

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	1089.8

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	SE	NW	NW	NW	NW	NW	NE	NE
Directions Served	L	T	T	T	R	L	T	T	T	R	L	T
Maximum Queue (ft)	195	604	864	676	225	252	184	154	136	14	194	432
Average Queue (ft)	51	227	304	334	156	131	68	60	51	1	159	115
95th Queue (ft)	134	498	607	620	298	217	143	123	113	8	224	361
Link Distance (ft)		1255	1255	1255		328	328	328	328			469
Upstream Blk Time (%)		0				0						0
Queuing Penalty (veh)		0				0						1
Storage Bay Dist (ft)	180				200					200	170	
Storage Blk Time (%)	0	7		15	0						16	
Queuing Penalty (veh)	0	4		63	1						19	

Intersection: 1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

Movement	NE	SW	SW
Directions Served	R	L	TR
Maximum Queue (ft)	123	102	47
Average Queue (ft)	51	35	17
95th Queue (ft)	102	80	41
Link Distance (ft)		338	338
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

Movement	SE	SE	NW	NW	NE	SW
Directions Served	L	TR	L	TR	R	R
Maximum Queue (ft)	91	6	63	25	36	71
Average Queue (ft)	33	0	17	2	13	30
95th Queue (ft)	71	5	45	13	36	57
Link Distance (ft)	378	378	776	776	647	1886
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 3: SPOTO DR & ZINFANDEL DR

Movement	SE	SE	SE	SE	NW	NW	NW	NW	NE	NE
Directions Served	T	T	T	R	L	T	T	T	L	R
Maximum Queue (ft)	277	310	237	98	95	38	90	211	118	137
Average Queue (ft)	106	139	99	22	43	4	25	80	43	62
95th Queue (ft)	219	253	195	75	83	22	68	161	96	115
Link Distance (ft)	776	776	776			762	762	762	296	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				200	185					156
Storage Blk Time (%)				2						1
Queuing Penalty (veh)				1						1

Intersection: 4: BEAR HOLLOW DR & NORTH PROJECT DWY

Movement	NW	NE	SW
Directions Served	LR	TR	L
Maximum Queue (ft)	105	16	74
Average Queue (ft)	47	1	28
95th Queue (ft)	80	10	62
Link Distance (ft)	422	1582	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 5: EAST PROJECT DWY & ZINFANDEL DR

Movement	SE	SE	SE	NE
Directions Served	T	T	TR	R
Maximum Queue (ft)	131	347	346	87
Average Queue (ft)	5	35	35	35
95th Queue (ft)	71	198	187	67
Link Distance (ft)	328	328	328	239
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	1	1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

ITEM 18.1.**Queuing and Blocking Report
Baseline****ATTACHMENT 5**

PM CUM PLUS PROJ

mitigated

Intersection: 6: SPOTO DR & SOUTH PROJECT DWY

Movement	SE	NE
Directions Served	LR	LT
Maximum Queue (ft)	59	50
Average Queue (ft)	26	5
95th Queue (ft)	51	28
Link Distance (ft)	405	936
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 92

ITEM 18.1.

ATTACHMENT 5

Queues

PM CUM PL PROJ

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

mitigated



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT
Lane Group Flow (vph)	54	1913	451	217	848	11	315	11	114	43	27
v/c Ratio	0.50	0.88	0.58	0.76	0.30	0.01	0.78	0.03	0.26	0.91	0.25
Control Delay	91.5	44.2	22.6	77.7	20.9	0.0	68.1	43.0	8.4	179.9	37.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	91.5	44.2	22.6	77.7	20.9	0.0	68.1	43.0	8.4	179.9	37.2
Queue Length 50th (ft)	48	568	173	187	149	0	269	8	0	~41	5
Queue Length 95th (ft)	128	#1060	432	#460	317	0	518	27	48	#180	42
Internal Link Dist (ft)		1281			322			485			333
Turn Bay Length (ft)	180		200	180		200	170		165		
Base Capacity (vph)	304	3126	1046	398	3406	1095	761	888	814	47	146
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.61	0.43	0.55	0.25	0.01	0.41	0.01	0.14	0.91	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

ITEM 18.1.

HCM 6th Signalized Intersection Summary

1: BEAR HOLLOW DR/FROGS LEAP DR & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ

mitigated

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	50	1760	415	200	780	10	290	10	105	40	5	20
Future Volume (veh/h)	50	1760	415	200	780	10	290	10	105	40	5	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1913	451	217	848	11	315	11	114	43	5	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	2150	668	249	2675	830	346	374	317	55	11	48
Arrive On Green	0.04	0.42	0.42	0.14	0.52	0.52	0.19	0.20	0.20	0.03	0.04	0.04
Sat Flow, veh/h	1781	5106	1585	1781	5106	1585	1781	1870	1585	1781	302	1329
Grp Volume(v), veh/h	54	1913	451	217	848	11	315	11	114	43	0	27
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1585	1781	1870	1585	1781	0	1631
Q Serve(g_s), s	3.0	34.6	11.1	11.9	9.5	0.3	17.3	0.5	4.3	2.4	0.0	1.6
Cycle Q Clear(g_c), s	3.0	34.6	11.1	11.9	9.5	0.3	17.3	0.5	4.3	2.4	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	69	2150	668	249	2675	830	346	374	317	55	0	59
V/C Ratio(X)	0.78	0.89	0.68	0.87	0.32	0.01	0.91	0.03	0.36	0.79	0.00	0.46
Avail Cap(c_a), veh/h	382	3917	1216	500	4254	1321	956	1071	907	59	0	114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.5	26.7	5.4	42.0	13.6	11.4	39.3	32.1	16.7	48.0	0.0	47.1
Incr Delay (d2), s/veh	6.8	0.5	0.4	3.7	0.0	0.0	3.8	0.0	0.3	42.5	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	12.4	3.1	5.2	3.1	0.1	7.8	0.2	2.3	1.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	27.3	5.9	45.7	13.6	11.4	43.1	32.1	16.9	90.5	0.0	49.1
LnGrp LOS	D	C	A	D	B	B	D	C	B	F	A	D
Approach Vol, veh/h		2418			1076			440			70	
Approach Delay, s/veh		23.9			20.0			36.1			74.5	
Approach LOS		C			C			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.9	47.0	24.9	8.9	8.7	57.2	8.6	25.2				
Change Period (Y+Rc), s	5.0	* 5	5.5	* 5.3	* 4.8	5.0	5.5	* 5.3				
Max Green Setting (Gmax), s	28.0	* 77	53.5	* 7	* 21	83.1	3.3	* 57				
Max Q Clear Time (g_c+I1), s	13.9	36.6	19.3	3.6	5.0	11.5	4.4	6.3				
Green Ext Time (p_c), s	0.1	5.4	0.1	0.0	0.0	1.8	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay 25.1

HCM 6th LOS C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

ITEM 18.1.

HCM 6th TWSC

2: PROJECT ACCESS/BAROQUE DR (NO) & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ

mitigated

Intersection												
Int Delay, s/veh	1.8											
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↵ ↑↑↑			↵ ↑↑↑					↵			↵
Traffic Vol, veh/h	110	1815	30	30	925	80	0	0	20	0	0	65
Future Vol, veh/h	110	1815	30	30	925	80	0	0	20	0	0	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	125	2063	34	34	1051	91	0	0	23	0	0	74
Major/Minor	Major1		Major2			Minor1			Minor2			
Conflicting Flow All	1142	0	0	2097	0	0	-	-	1049	-	-	571
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	334	-	-	112	-	-	0	0	192	0	0	397
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	334	-	-	112	-	-	-	-	192	-	-	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	SE		NW			NE			SW			
HCM Control Delay, s	1.2		1.5			26.3			16.1			
HCM LOS						D			C			
Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SERSWLn1					
Capacity (veh/h)	192	112	-	-	334	-	-	397				
HCM Lane V/C Ratio	0.118	0.304	-	-	0.374	-	-	0.186				
HCM Control Delay (s)	26.3	50.6	-	-	22.1	-	-	16.1				
HCM Lane LOS	D	F	-	-	C	-	-	C				
HCM 95th %tile O(veh)	0.4	1.2	-	-	1.7	-	-	0.7				

ITEM 18.1.

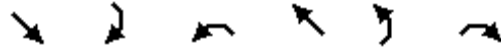
Queues

3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ

mitigated



Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Group Flow (vph)	1902	87	87	1005	109	217
v/c Ratio	0.75	0.11	0.37	0.30	0.41	0.51
Control Delay	15.5	5.7	32.6	4.5	31.8	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	5.7	32.6	4.5	31.8	9.6
Queue Length 50th (ft)	196	7	29	43	36	0
Queue Length 95th (ft)	333	32	85	76	99	58
Internal Link Dist (ft)	767			752	324	
Turn Bay Length (ft)		200	185			156
Base Capacity (vph)	4872	1519	1183	5085	953	952
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.06	0.07	0.20	0.11	0.23
Intersection Summary						

ITEM 18.1.

HCM 6th Signalized Intersection Summary 3: SPOTO DR & ZINFANDEL DR

ATTACHMENT 5

PM CUM PL PROJ

mitigated

						
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	1750	80	80	925	100	200
Future Volume (veh/h)	1750	80	80	925	100	200
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1902	87	87	1005	109	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2365	734	111	3135	308	274
Arrive On Green	0.46	0.46	0.06	0.61	0.17	0.17
Sat Flow, veh/h	5274	1585	1781	5274	1781	1585
Grp Volume(v), veh/h	1902	87	87	1005	109	217
Grp Sat Flow(s),veh/h/ln	1702	1585	1781	1702	1781	1585
Q Serve(g_s), s	15.8	1.5	2.4	4.7	2.7	6.5
Cycle Q Clear(g_c), s	15.8	1.5	2.4	4.7	2.7	6.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2365	734	111	3135	308	274
V/C Ratio(X)	0.80	0.12	0.79	0.32	0.35	0.79
Avail Cap(c_a), veh/h	6976	2165	1348	11260	1057	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	7.6	23.0	4.6	18.1	19.7
Incr Delay (d2), s/veh	0.2	0.0	4.6	0.0	0.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.4	1.0	0.5	1.0	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	7.6	27.5	4.6	18.4	21.7
LnGrp LOS	B	A	C	A	B	C
Approach Vol, veh/h	1989			1092	326	
Approach Delay, s/veh	11.5			6.5	20.6	
Approach LOS	B			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	28.1			35.6	14.1
Change Period (Y+Rc), s	* 4.4	* 5.1			* 5.1	5.5
Max Green Setting (Gmax), s	* 38	* 68			* 1.1E2	29.5
Max Q Clear Time (g_c+l1), s	4.4	17.8			6.7	8.5
Green Ext Time (p_c), s	0.0	5.2			2.2	0.2
Intersection Summary						
HCM 6th Ctrl Delay			10.7			
HCM 6th LOS			B			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

ITEM 18.1.
HCM 6th TWSC
4: BEAR HOLLOW DR & NORTH PROJECT DWY

ATTACHMENT 5
PM CUM PL PROJ
mitigated

Intersection						
Int Delay, s/veh	4.1					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	15	180	220	20	180	425
Future Vol, veh/h	15	180	220	20	180	425
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	205	250	23	205	483
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1155	262	0	0	273	0
Stage 1	262	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	218	777	-	-	1290	-
Stage 1	782	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	183	777	-	-	1290	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Approach	NW	NE		SW		
HCM Control Delay, s	14	0		2.5		
HCM LOS	B					
Minor Lane/Major Mvmt	NET	NERNWLn1	SWL	SWT		
Capacity (veh/h)	-	-	622	1290	-	
HCM Lane V/C Ratio	-	-	0.356	0.159	-	
HCM Control Delay (s)	-	-	14	8.3	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile O(veh)	-	-	1.6	0.6	-	

ITEM 18.1.
HCM 6th TWSC
5: EAST PROJECT DWY & ZINFANDEL DR

ATTACHMENT 5
PM CUM PL PROJ
mitigated

Intersection						
Int Delay, s/veh	1.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	↑↑↑↓			↑↑↑↑		↗
Traffic Vol, veh/h	1875	110	0	1000	0	80
Future Vol, veh/h	1875	110	0	1000	0	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2131	125	0	1136	0	91
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1128
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	170
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	170
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	SE		NW		NE	
HCM Control Delay, s	0		0		48.2	
HCM LOS					E	
Minor Lane/Major Mvmt	NELn1	NWT	SET	SER		
Capacity (veh/h)	170		-	-	-	
HCM Lane V/C Ratio	0.535		-	-	-	
HCM Control Delay (s)	48.2		-	-	-	
HCM Lane LOS	E		-	-	-	
HCM 95th %tile O(veh)	2.7		-	-	-	

ITEM 18.1.
HCM 6th TWSC
6: SPOTO DR & SOUTH PROJECT DWY

ATTACHMENT 5
PM CUM PL PROJ
mitigated

Intersection						
Int Delay, s/veh	1.5					
Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	35	15	20	265	115	40
Future Vol, veh/h	35	15	20	265	115	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	17	23	301	131	45
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	501	154	176	0	-	0
Stage 1	154	-	-	-	-	-
Stage 2	347	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	530	892	1400	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	519	892	1400	-	-	-
Mov Cap-2 Maneuver	519	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Approach	SE	NE		SW		
HCM Control Delay, s	11.7	0.5		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR	
Capacity (veh/h)	1400	-	593	-	-	
HCM Lane V/C Ratio	0.016	-	0.096	-	-	
HCM Control Delay (s)	7.6	0	11.7	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

TRANSPORTATION ANALYSIS

Villages of Zinfandel General Plan Amendment and Zoning Ordinance Amendment

prepared for
Sacramento County
Department of Environmental Review and Assessment

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DKS Associates

1. INTRODUCTION

DKS Associates have undertaken an assessment of the transportation impacts of the Villages of Zinfandel Project. The assessment has been prepared for the Sacramento County Department of Environmental Review and Assessment. This report summarizes the methodology, analyses, and conclusions of the assessment.

As illustrated in Figure 1, the Villages of Zinfandel Project occupies a site located in Rancho Cordova adjacent to Mather Field. The site contains approximately 823 acres. The proposed project consists of a mixed-use development. The Villages of Zinfandel project was the subject of earlier environmental and transportation studies. The County Board of Supervisors approved a mixed-use development for this site, which is referred to in this document as the “Approved Project.”

At this time, the project applicant has proposed changes to land use and circulation on the site. This document addresses the transportation impacts of these proposed changes (the “Proposed Project”), as well as a similar plan with a modified transportation plan (“Alternative 1”). For comparative purposes, this document addresses the following analysis scenarios:

- Existing Conditions (Without Project)
- Existing Conditions Plus Approved Project
- Existing Conditions Plus Proposed Project
- Existing Conditions Plus Alternative 1
- Future Conditions (Without Project)
- Future Conditions Plus Approved Project
- Future Conditions Plus Proposed Project
- Future Conditions Plus Alternative 1

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Figure 1

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2. SETTING

The transportation system serving the Villages of Zinfandel includes the roadway system and the transit system. Information on the existing transportation system was gathered from field observations, surveys, previous environmental impact reports, and available information from the County, Caltrans, the Sacramento Area Council of Governments (SACOG), and Regional Transit. The roadway system is illustrated on Figures 1 and 2.

EXISTING ROADWAYS

Regional access to the Villages of Zinfandel is provided by U.S. Highway 50 (U.S. 50) and State Highway 16 (Jackson Road). U.S. 50 is a four- to eight-lane facility in the vicinity of the Project. U.S. 50 is located to the north of the Villages of Zinfandel and extends from the City of Sacramento to the west through the State of Nevada to the east. Local freeway interchanges on U.S. 50 include Mather Field Road, Zinfandel Drive, Sunrise Boulevard, and Hazel Avenue. State Highway 16 is a two-lane roadway with at-grade intersections. It connects the City of Sacramento with the Sierra foothills.

Other roadways providing access to the Project include Mather Field Road, International Drive, Sunrise Boulevard, Douglas Road, Zinfandel Drive, Folsom Boulevard, White Rock Road, and Eagles Nest Road.

Mather Field Road is a four- to six-lane divided arterial extending from Folsom Boulevard and U.S. 50 to Mather Field. It connects with International Drive just west of the Project.

International Drive is presently a four-lane roadway connecting Mather Field Road at Mather Field to the Project. International Drive extends to approximately one-quarter mile west of Sunrise Boulevard, where it terminates at Kilgore Road.

Sunrise Boulevard is a north-south roadway that extends from near I-80 in Roseville to Grant Line Road. Near the Project, Sunrise Boulevard is a four to six-lane divided arterial north of Douglas Road and two-lane roadway south of Douglas Road. The land uses along this roadway include open space south of Douglas Road and light industrial and surface mining operations from Douglas Road to White Rock Road. Commercial uses line Sunrise Boulevard near its intersection with White Rock Road and to the north.

Douglas Road is a two-lane, east-west road that accesses Mather Field. It extends from Mather Boulevard across Sunrise Boulevard to Grant Line Road.

Zinfandel Drive extends from Sunrise Boulevard in Rancho Cordova north of U.S. 50 to the office park area north of the Project. As it crosses U.S. 50, Zinfandel Drive it has three through lanes in the northbound direction and two through lanes in the southbound direction.

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Figure 2

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Folsom Boulevard extends in a southwest-northeast direction from downtown Sacramento to Folsom. Near the Project, it has four lanes and is lined with commercial uses. Southern Pacific Transportation Company (now merged with Union Pacific) railroad tracks parallel this facility on its southern side, and provide right-of-way for the proposed Regional Transit light rail extension along the Folsom Corridor.

White Rock Road is a two to six lane east-west roadway that provides access to the office parks / light industrial uses north of the Project. It begins at International Drive and continues easterly into El Dorado County.

Eagles Nest Road is a rural two-lane north-south road that extends from Douglas Road on Mather Field to Grant Line Road. Eagles Nest Road is not open to public traffic from about one mile south of Douglas Road to Kiefer Boulevard.

Hazel Avenue is a two- to four-lane north-south arterial that provides a crossing of the American River. It extends from Folsom Boulevard just south of U.S. 50 to the Placer County line. In Placer County, it continues northerly as Sierra College Boulevard.

The Mather Field “downtown” area, south of Mather Field Road, consists of a system of grid roadways. They generally operate as two-way roadways with one lane of travel in each direction. Von Karman Street and Whitehead Street are north-south, one-way, two-lane roadways that form a couplet. This couplet provides access to Mather Field Road. Mather Boulevard and Norden Avenue are east-west, one-way, two-lane roadways that form a couplet in the downtown area of Mather Field.

Mather Boulevard continues east of the downtown area as a two-lane road to Douglas Road. From that intersection, Mather Boulevard continues southwesterly to the former housing area, where the roadway is closed to the public.

EXISTING TRANSIT SYSTEM

Sacramento Regional Transit District (RT) provides transit service in the vicinity of the site. RT operates a system of bus and light rail routes. Light rail trains operate every 15 minutes during the day and every 30 minutes during the evening from the Watt / I-80 station in the northeast to the Mather Field / Mills station in the southeast. The closest light rail station to the Project is the Mather Field / Mills station located at Folsom Boulevard and Mather Field Road, about 1.5 miles northwest of the Project.

Route 74, International, is a Regional Transit bus route that serves the project site. This route connects the Mather Field / Mills light rail station, the Mather Field downtown area, and the office park area north of the project site. Route 74 operates along International Drive near the project site. Service is operated at a 60-minute frequency in each direction on weekdays. No evening, weekend, or holiday service is provided.

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PLANNED TRANSPORTATION IMPROVEMENTS

Figure 3 illustrates planned transportation improvements in the project vicinity. These improvements include the following facilities:

- Zinfandel Drive - 4 lanes across the project site from International Drive to Douglas Road.
- Douglas Road - 6 lanes from Zinfandel Drive to Sunrise Boulevard.
- Mather Boulevard - 4 lanes from Zinfandel Drive to Kiefer Boulevard.
- Eagles Nest Road - 4 lanes from Douglas Road to Kiefer Boulevard.
- Kiefer Boulevard - 4 lanes from Routier Road to Sunrise Boulevard.
- Femoyer Street – 2-lane extension from Mather Field to International Drive.

The future transportation plan also includes high-occupancy vehicle (HOV) lanes along U.S. 50, improvements to the U.S. 50 / Sunrise Boulevard interchange, and a light rail extension along the Folsom Corridor to the City of Folsom.

PROJECT ROADWAY SYSTEM

Figures 4, 5, and 6 illustrate the major roadway system of the Approved Project, Proposed Project, and Alternative 1. In all cases, Zinfandel Drive would extend through the site from International Drive to Douglas Road, and International Drive would be extended across the Folsom South Canal to Sunrise Boulevard.

As illustrated on Figure 4, the Approved Project includes Airpark Drive, which would extend from Femoyer Street to Zinfandel Drive. Prospect Park Drive and Kilgore Road would be extended into the site. Mather Boulevard would be closed to through traffic east of C Street.

As illustrated on Figure 5, the Proposed Project includes Airpark Drive, which would extend from Femoyer Street to A Street. Prospect Park Drive and Kilgore Road would be extended into the site. Mather Boulevard would be extended along the southern boundary of the site, and then enter the site and connect to Zinfandel Drive. The remainder of the existing Mather Boulevard would be closed to through traffic.

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Figure 3

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Figure 4

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Figure 5

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Figure 6

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As illustrated on Figure 6, Alternative 1 is similar to the Proposed Project. The primary difference is that Mather Boulevard enters the site near the southwestern corner, rather than following the southern boundary of the site. The remainder of the existing Mather Boulevard would be closed to through traffic.

STUDY AREA

In conjunction with the County Transportation Division, the study area for this environmental document was defined. It includes the following facilities, illustrated in Figure 7:

- Intersections
 1. Sunrise Boulevard and Jackson Road
 2. Sunrise Boulevard and Douglas Road
 3. Sunrise Boulevard and Monier Circle / International Drive
 4. Sunrise Boulevard and White Rock Road
 5. Sunrise Boulevard and Folsom Boulevard
 6. Sunrise Boulevard and Zinfandel Drive
 7. Zinfandel Drive and Douglas Road
 8. Zinfandel Drive and Airpark Drive
 9. Zinfandel Drive and C Street
 10. Zinfandel Drive and B Street (south)
 11. Zinfandel Drive and International Drive
 12. Zinfandel Drive and B Street (north)
 13. Zinfandel Drive and White Rock Road
 14. Zinfandel Drive and U.S. 50 Eastbound Ramps / Gold Center Drive
 15. Zinfandel Drive and U.S. 50 Westbound Ramps
 16. Mather Field Road and International Drive
 17. Mather Field Road and Rockingham Drive
 18. Mather Field Road and U.S. 50 Eastbound Ramps
 19. Mather Field Road and U.S. 50 Westbound Ramps
 20. Mather Field Road / Paseo Drive and Folsom Boulevard
 21. Von Karman Street and Mather Boulevard
 22. Whitehead Street and Mather Boulevard
 23. C Street and Airpark Drive
 24. Zinfandel Drive and A Street
 25. Von Karman Street and Norden Avenue
 26. Whitehead Street and Norden Avenue
 27. A Street and Airpark Drive
 28. Capital Center Drive and International Drive
 29. Prospect Park Drive and International Drive
 30. Kilgore Road and International Drive
- Figure 7

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- 31. Femoyer Street and International Drive
- 32. Hazel Avenue and U.S. 50 Eastbound Ramps
- 33. Hazel Avenue and U.S. 50 Westbound Ramps / Tributary Point Drive
- 34. Kilgore Road and White Rock Road
- 35. Prospect Park Drive and White Rock Road
- 36. Prospect Park Drive and B Street
- 37. Kilgore Drive and B Street
- 38. B Street and Airpark Drive
- 40. C Street and A Street
- 41. Zinfandel Drive and Mather Boulevard
- 42. A Street and Mather Boulevard

- Interchanges

- U.S. 50 and Mather Field Road
- U.S. 50 and Zinfandel Road
- U.S. 50 and Sunrise Boulevard
- U.S. 50 and Hazel Avenue

- Roadway Segments

- A Street – Airpark Drive to Zinfandel Drive
- B Street – Airpark Drive to Zinfandel Drive
- C Street – Mather Boulevard to Zinfandel Drive
- Airpark Drive – Femoyer Street to Zinfandel Drive
- Douglas Road – Zinfandel Drive to Grant Line Road
- Eagles Nest Road – Douglas Road to Florin Road
- East-West Couplet (Mather Boulevard / Norden Avenue)
- Excelsior Road – Jackson Road to Kiefer Boulevard
- Femoyer Street – Mather Boulevard to International Drive
- Folsom Boulevard – Bradshaw Road to U.S. 50
- Hazel Avenue – Winding Way to Folsom Boulevard
- International Drive – Mather Field Road to Sunrise Boulevard
- Jackson Road – Bradshaw Road to Grant Line Road
- Kilgore Road – Folsom Boulevard to B Street
- Mather Field Road – Folsom Boulevard to North-South Couplet
- Mather Boulevard – Femoyer Street to Kiefer Boulevard
- North-South Couplet (Von Karman Street / Whitehead Street)
- Prospect Park Drive – White Rock Road to B Street
- Sunrise Boulevard – Fair Oaks Boulevard to Jackson Road
- U.S. 50 – Bradshaw Road to Hazel Avenue

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- White Rock Road – International Drive to Grant Line Road
- Zinfandel Drive – Sunrise Boulevard to Douglas Road

EXISTING ROADWAY OPERATING CONDITIONS

Determination of roadway operating condition is based upon comparison of traffic volumes to roadway capacity. “Levels of service” describe roadway operating conditions. Level of service is a qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of Service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced conditions. Table 1 presents the level of service definitions. Sacramento County utilizes a LOS “E” standard for urban conditions, and a LOS “D” standard for rural conditions.

In this traffic assessment, capacity analyses were conducted for roadway segments, intersections, and freeway interchanges in accordance with County practice. The following summarizes the analysis types:

- Intersection-based capacity analyses are conducted utilizing a.m. peak commuter hour and p.m. peak commuter hour traffic volumes. These analyses evaluate the ability of intersections to accommodate traffic volumes during peak travel periods.
- Segment-based capacity analyses are conducted utilizing daily traffic volumes. These analyses evaluate the adequacy of the number of roadway lanes between major intersections.
- Freeway interchange merge / diverge analyses are conducted utilizing a.m. peak commuter hour and p.m. peak commuter hour traffic volumes. These analyses evaluated the ability of vehicles to enter and leave the freeway during peak travel periods.

For intersection-based capacity analyses, different analysis methodologies are utilized depending upon whether an intersection is controlled by a traffic signal, two-way stop sign control, or all-way stop sign control. Tables 2 and 3 apply the level of service definitions to signalized and unsignalized intersections, respectively.

Level of service analyses were conducted for roadway segments in the study area based upon daily traffic volumes, number of traffic lanes between intersections, and roadway characteristics. These

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TABLE 1
LEVEL OF SERVICE DEFINITIONS

Level of Service A represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

Level of Service B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

Level of Service C is in the range of stable flow, but marks the beginning of the range of flow in which the operations of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

Level of Service D represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

Level of Service E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

Level of Service F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service "F" is used to describe the operating conditions within the queue, as well as the point of the breakdown.

SOURCE: *Highway Capacity Manual*, Transportation Research Board, Special Report No. 209, Washington, D.C., 1985.

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TABLE 2
LEVEL OF SERVICE DEFINITIONS
SIGNALIZED INTERSECTIONS

Level of Service (LOS)	Sum of Critical Lane Volumes by Signal Phasing (vehicles / critical lane / hour)		
	2-Phase	3-Phase	4 or more Phase
A	0-990	0-930	0-900
B	991-1155	931-1085	901-1050
C	1156-1320	1086-1240	1051-1200
D	1321-1485	1241-1395	1201-1350
E	1486-1650	1396-1550	1351-1500
F	>1650	>1550	>1500
SOURCE: <i>Interim Materials on Highway Capacity</i> , Transportation Research Board, Circular 212, Washington, D.C., 1980. County of Sacramento, Transportation Division.			

TABLE 3
LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTIONS

Level of Service (LOS)	Total Delay Per Vehicle (seconds)
A	≤ 5
B	> 5 and ≤ 10
C	> 10 and ≤ 20
D	> 20 and ≤ 30
E	> 30 and ≤ 45
F	> 45
SOURCE: <i>Highway Capacity Manual</i> , Transportation Research Board, Special Report No. 209, Washington, D.C., 1994.	

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analyses were conducted utilizing the methodology employed in the analysis of the Sacramento County General Plan. In this methodology, the major roadway network of the County was divided into five “capacity class” categories for level of service determination, as shown in Table 4.

The capacity class categories are based upon the nature of traffic flow along the facility, including number of interruptions due to intersection control and “side-friction” due to driveways and local streets. For each capacity class shown in Table 4, relationships were developed between daily traffic volumes and roadway level of service. Table 5 summarizes the maximum daily traffic volumes for each capacity class / level of service combination. The segment-based level of service represents peak hour conditions, although it is calculated based upon daily traffic volumes and capacity estimates.

For freeway interchange capacity analyses, level of service is based upon traffic density. Table 6 applies the level of service definitions to ramp-freeway junction areas.

Existing intersection lane geometry is illustrated in Figure 8. Existing A.M. and P.M. peak hour traffic volumes at 26 key intersections in the project vicinity are illustrated in Figures 9 and 10, respectively. Daily traffic volumes on the study area roadway segments are illustrated in Figure 11.

Table 7 summarizes A.M. and P.M. peak hour operating conditions at 26 key intersections in the project vicinity. During both the A.M. and P.M. peak hours, all of the intersections meet the LOS “E” standard with the following exceptions:

- Sunrise Boulevard and Jackson Road – a.m. peak hour
- Sunrise Boulevard and Zinfandel Drive – a.m. and p.m. peak hours
- Zinfandel Drive and U.S. 50 Eastbound Ramps – a.m. and p.m. peak hours
- Mather Field Road and Folsom Boulevard – p.m. peak hour

In addition, northbound queuing during the p.m. peak hour along Sunrise Boulevard often results in unacceptable operating conditions at the intersection of Sunrise Boulevard and Folsom Boulevard.

In addition to the A.M. and P.M. peak hour intersection analysis, level of service analyses were also conducted for roadway segments in the vicinity of the project based upon daily traffic volumes, number of traffic lanes between intersections, and roadway characteristics. These analyses were conducted utilizing methodologies employed in the analysis of the Sacramento General Plan. Table 8 summarizes the roadway levels of service.

DKS Associates**TABLE 4
ROADWAY CAPACITY CLASSES**

Capacity Class	General Criteria			
	Stops per Mile	Driveways	Speed Range	Lanes
Freeway - Full Access Control	0	None	55 - 65	4 +
Expressway - High Access Control	1 - 2	None	45 - 55	4 +
Arterial - Moderate Access Control	2 - 4	Limited	35 - 45	2 +
Arterial - Low Access Control	4 +	High	25 - 35	2 +
Rural Highway	< 0.5	Limited	45 - 55	2
SOURCE: <i>Sacramento County General Plan Update, Draft Environmental Impact Report, 1992.</i>				

**TABLE 5
ROADWAY SEGMENT EVALUATION CRITERIA FOR LEVEL OF SERVICE**

Capacity Class	Maximum Daily Traffic Volume Per Lane				
	Level of Service				
	A	B	C	D	E
Freeway - Full Access Control	7,000	10,800	15,400	18,600	20,000
Expressway - High Access Control	6,000	7,000	8,000	9,000	10,000
Arterial - Moderate Access Control	5,400	6,300	7,200	8,100	9,000
Arterial - Low Access Control	4,500	5,250	6,000	6,750	7,500
Rural Highway	1,200	2,400	3,950	6,750	11,450
SOURCE: <i>Sacramento County General Plan Update, Draft Environmental Impact Report, 1992.</i>					

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TABLE 6
LEVEL OF SERVICE CRITERIA
RAMP - FREEWAY JUNCTIONS

Level of Service (LOS)	Maximum Density (Primary Measure) (Passenger Cars Per Mile Per Lane)	Minimum Speed (Secondary Measure) (Miles Per Hour)
A	10	58
B	20	56
C	28	52
D	35	46
E	>35	42
F	Demand flows exceed capacity.	
SOURCE: <i>Highway Capacity Manual, Transportation Research Board, Special Report No. 209, Washington, D.C., 1997.</i>		

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Figure 8

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Figure 9

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Figure 10

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Figure 11

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TABLE 7 EXISTING PEAK HOUR INTERSECTION OPERATING CONDITIONS				
Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Criteria¹	LOS	Criteria¹	LOS
1. Sunrise Boulevard and Jackson Road	1.01 V/C	F	0.92 V/C	E
2. Sunrise Boulevard and Douglas Road	0.49 V/C	A	0.59 V/C	A
3. Sunrise Blvd. and Monier Circle / International Dr.	1.7 sec.	A	3.3 sec.	A
4. Sunrise Boulevard and White Rock Road	0.71 V/C	C	0.72 V/C	C
5. Sunrise Boulevard and Folsom Boulevard	0.83 V/C	D	0.98 V/C	E
6. Sunrise Boulevard and Zinfandel Drive	1.21 V/C	F	1.10 V/C	F
11. Zinfandel Drive and International Drive	5.3 sec.	B	3.8 sec.	A
13. Zinfandel Drive and White Rock Road	0.64 V/C	B	0.98 V/C	E
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.01 V/C	F	1.08 V/C	F
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.50 V/C	A	0.55 V/C	A
16. Mather Field Road and International Drive	0.31 V/C	A	0.39 V/C	A
17. Mather Field Road and Rockingham Drive	0.74 V/C	C	0.79 V/C	C
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.61 V/C	B	0.57 V/C	A
19. Mather Field Road and U.S. 50 Westbound Ramps	0.44 V/C	A	0.56 V/C	A
20. Mather Field Road and Folsom Boulevard	0.60 V/C	A	1.07 V/C	F
21. Von Karman Street and Mather Boulevard	1.3 sec.	A	1.3 sec.	A
22. Whitehead Street and Mather Boulevard	1.2 sec	A	1.4 sec.	A
25. Von Karman Street and Norden Avenue	1.3 sec.	A	1.2 sec.	A
26. Whitehead Street and Norden Avenue	1.2 sec.	A	1.3 sec.	A
28. Capital Center Drive and International Drive	0.6 sec.	A	0.7 sec.	A
29. Prospect Park Drive and International Drive	1.1 sec.	A	1.2 sec.	A
30. Kilgore Road and International Drive	2.2 sec.	A	3.9 sec.	A
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.49 V/C	A	0.68 V/C	B
33. Hazel Avenue and U.S. 50 Westbound Ramps	0.93 V/C	E	0.98 V/C	E
34. Kilgore Road and White Rock Road	0.36 V/C	A	0.64 V/C	B

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TABLE 7 EXISTING PEAK HOUR INTERSECTION OPERATING CONDITIONS				
Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Criteria¹	LOS	Criteria ¹	LOS
35. Prospect Park Drive and White Rock Road	0.33 V/C	A	0.44 V/C	A
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)				

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TABLE 8 EXISTING ROADWAY SEGMENT LEVEL OF SERVICE						
Roadway Name	Segment		AADT	Lanes	V/C	LOS
	From	To				
Douglas Road	Zinfandel Drive	Sunrise Boulevard	2,130	2	0.12	A
Douglas Road	East of Sunrise Boulevard		2,240	2	0.10	A
Douglas Road	West of Grant Line Road		2,240	2	0.10	A
Eagles Nest Road	Douglas Road	Kiefer Boulevard	500	2	0.03	A
Eagles Nest Road	Kiefer Boulevard	Jackson Road	400	2	0.02	A
Eagles Nest Road	Jackson Road	Florin Road	310	2	0.01	A
East / West Couplet	West of North / South Couplet		1,030	4	0.03	A
East / West Couplet	East of North / South Couplet		1,330	4	0.04	A
Excelsior Road	Jackson Road	Kiefer Boulevard	770	2	0.03	A
Folsom Boulevard	Bradshaw Road	Routier Road	27,610	4	0.77	C
Folsom Boulevard	Routier Road	Mather Field Road	29,020	4	0.81	D
Folsom Boulevard	Mather Field Road	Coloma Road	28,030	4	0.78	C
Folsom Boulevard	Coloma Road	Zinfandel Drive	18,990	4	0.53	A
Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,570	4	0.57	A
Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	15,040	2	0.84	D
Folsom Boulevard	Hazel Avenue	U.S. 50	13,840	2	0.77	C
Hazel Avenue	Winding Way	Gold Country Blvd.	54,940	4	1.53	F
Hazel Avenue	Gold Country Blvd.	U.S. 50	43,220	6	0.80	D
Hazel Avenue	U.S. 50	Folsom Boulevard	14,660	4	0.41	A
International Drive	Mather Field Road	White Rock Road	10,300	6	0.19	A
International Drive	White Rock Road	Femoyer Street	7,530	4	0.21	A
International Drive	Femoyer Street	Capital Center Dr.	7,530	4	0.21	A
International Drive	Capital Center Dr.	Zinfandel Drive	5,510	4	0.15	A
International Drive	Zinfandel Drive	Prospect Park Dr.	4,900	4	0.14	A

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TABLE 8 EXISTING ROADWAY SEGMENT LEVEL OF SERVICE						
Roadway Name	Segment		AADT	Lanes	V/C	LOS
	From	To				
International Drive	Prospect Park Dr.	Kilgore Road	2,420	4	0.07	A
Jackson Road	Bradshaw Road	Excelsior Road	10,600	2	0.59	A
Jackson Road	Excelsior Road	Eagles Nest Road	7,700	2	0.34	C
Jackson Road	Eagles Nest Road	Sunrise Boulevard	7,700	2	0.34	C
Jackson Road	Sunrise Boulevard	Grant Line Road	11,700	2	0.51	D
Kilgore Road	Folsom Boulevard	White Rock Road	9,870	2	0.55	A
Kilgore Road	White Rock Road	International Drive	6,600	4	0.18	A
Mather Field Road	Folsom Boulevard	U.S. 50	19,610	4	0.54	A
Mather Field Road	U.S. 50	Rockingham Drive	30,250	6	0.50	A
Mather Field Road	Rockingham Drive	International Drive	20,670	6	0.38	A
Mather Field Road	South of International Drive		6,900	4	0.19	A
Mather Boulevard	Macready Avenue	East / West Couplet	1,030	4	0.03	A
Mather Boulevard	Femoyer Street	Douglas Road	2,160	2	0.09	A
Mather Boulevard	Kiefer Boulevard	Zinfandel Drive	1,080	2	0.06	A
North / South Cplt.	North of East / West Couplet		6,900	4	0.23	A
Prospect Park Dr.	White Rock Road	International Drive	5,290	2	0.29	A
Sunrise Boulevard	Fair Oaks Blvd.	Coloma Road	95,440	6	1.77	F
Sunrise Boulevard	Coloma Road	Zinfandel Drive	86,910	6	1.61	F
Sunrise Boulevard	Zinfandel Drive	U.S. 50	79,020	6	1.46	F
Sunrise Boulevard	U.S. 50	Folsom Boulevard	69,680	6	1.29	F
Sunrise Boulevard	Folsom Boulevard	White Rock Road	56,640	6	1.05	F
Sunrise Boulevard	White Rock Road	International Drive	19,490	4	0.54	A
Sunrise Boulevard	International Drive	Douglas Road	19,310	4	0.54	A
Sunrise Boulevard	Douglas Road	Kiefer Boulevard	11,400	2	0.50	D
Sunrise Boulevard	Kiefer Boulevard	Jackson Road	11,280	2	0.49	D

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TABLE 8 EXISTING ROADWAY SEGMENT LEVEL OF SERVICE						
Roadway Name	Segment		AADT	Lanes	V/C	LOS
	From	To				
U.S. 50	Bradshaw Road	Mather Field Road	157,000	8	0.98	E
U.S. 50	Mather Field Road	Zinfandel Drive	144,000	8	0.90	D
U.S. 50	Zinfandel Drive	Sunrise Boulevard	127,000	8	0.79	D
U.S. 50	Sunrise Boulevard	Hazel Avenue	98,000	6	0.82	D
White Rock Road	International Drive	Rockingham Drive	13,400	2	0.74	C
White Rock Road	Rockingham Drive	Capital Center Dr.	13,400	2	0.74	C
White Rock Road	Capital Center Dr.	Zinfandel Drive	13,400	2	0.74	C
White Rock Road	Zinfandel Drive	Prospect Park Drive	18,220	6	0.34	A
White Rock Road	Prospect Park Drive	Kilgore Road	18,220	6	0.34	A
White Rock Road	Kilgore Road	Sunrise Boulevard	22,080	5	0.61	B
White Rock Road	East of Sunrise Boulevard		8,200	2	0.46	A
White Rock Road	West of Grant Line Road		3,030	2	0.13	B
Zinfandel Drive	Sunrise Boulevard	Folsom Boulevard	14,110	4	0.39	A
Zinfandel Drive	Folsom Boulevard	U.S. 50	23,400	4	0.65	B
Zinfandel Drive	U.S. 50	White Rock Road	40,570	6	0.75	C
Zinfandel Drive	White Rock Road	International Drive	12,200	6	0.23	A

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The following roadway segments violate the County level of service policy:

- Hazel Avenue - Winding Way to Gold Country Boulevard
- Sunrise Boulevard - Fair Oaks Boulevard to White Rock Road

Table 9 summarizes A.M. and P.M. peak hour operating conditions at four freeway interchanges in the Project vicinity. The following freeway ramp junctions violate the County level of service policy:

- Mather Field Road Eastbound Exit – a.m. and p.m. peak hours
- Mather Field Road Westbound Exit – a.m. peak hour
- Mather Field Road Westbound Slip Entrance – a.m. peak hour
- Zinfandel Drive Westbound Exit – a.m. peak hour
- Sunrise Boulevard Eastbound Entrance – p.m. peak hour
- Sunrise Boulevard Westbound Exit – a.m. peak hour
- Sunrise Boulevard Westbound Entrance – a.m. and p.m. peak hours
- Hazel Avenue Eastbound Exit – p.m. peak hour
- Hazel Avenue Eastbound Entrance – p.m. peak hour
- Hazel Avenue Westbound Exit – a.m. peak hour
- Hazel Avenue Westbound Loop Entrance – a.m. peak hour
- Hazel Avenue Westbound Slip Entrance – a.m. peak hour

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TABLE 9
PEAK HOUR U.S. 50 FREEWAY RAMP JUNCTION OPERATING CONDITIONS
EXISTING CONDITIONS

Interchange	Ramp	A.M. Peak Hour		P.M. Peak Hour	
		Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	34.18	F	37.15	F
	Eastbound Loop Entrance	26.05	C	31.58	D
	Eastbound Slip Entrance	26.96	C	32.47	D
	Westbound Exit	34.82	F	17.99	B
	Westbound Loop Entrance	32.67	D	19.57	B
	Westbound Slip Entrance	33.53	F	21.04	C
Zinfandel Drive	Eastbound Exit	27.85	C	26.21	C
	Eastbound Loop Entrance	18.03	B	28.44	D
	Eastbound Slip Entrance	18.96	B	28.99	D
	Westbound Exit	38.80	F	10.94	B
	Westbound Loop Entrance	32.57	D	18.49	B
	Westbound Slip Entrance	33.96	D	19.42	B
Sunrise Boulevard	Eastbound Exit	22.79	C	35.45	E
	Eastbound Entrance	19.33	B	35.19	F
	Westbound Exit	35.14	F	7.71	A
	Westbound Entrance	- ²	F	- ²	F
Hazel Avenue	Eastbound Exit	- ²	C	- ²	F
	Eastbound Entrance	29.80	D	46.37	F
	Westbound Exit	43.99	F	13.52	B
	Westbound Loop Entrance	46.08	F	9.11	A
	Westbound Slip Entrance	- ²	F	- ²	C

1. Passenger cars per mile per lane.

2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.

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3. PROJECT CHARACTERISTICS

CIRCULATION SYSTEM

Figures 4, 5, and 6 illustrate the proposed circulation system of the Approved Project, Proposed Project, and Alternative 1. The following are descriptions of the major facilities within the Project site:

- Approved Project
 - A Street – A Street is a two-lane collector that extends from Airpark Drive to Zinfandel Drive.
 - B Street – B Street is a four-lane arterial in a semi-circle pattern from Zinfandel Drive to Zinfandel Drive. It also extends as a two-lane collector from Zinfandel Drive to Airpark Drive.
 - C Street – C Street extends from Femoyer Street to Zinfandel Drive as a four-lane arterial.
 - Airpark Drive - Airpark Drive is proposed as a four-lane east-west arterial from A Street to Zinfandel Drive. It begins at Femoyer Street as a two-lane collector.
 - Kilgore Road – Kilgore Road continues southerly from International Drive into the site. This segment of Kilgore Road is proposed to be four lanes wide.
 - Prospect Park Drive - Prospect Park Drive continues southerly from International Drive into the site. This segment of Prospect Park Drive is proposed to be four lanes wide.
 - Zinfandel Drive - As currently included in the County General Plan, Zinfandel Drive is extended to cross the site. It is proposed to be six lanes wide through the project site. Initially, Zinfandel Drive would be extended southerly to Douglas Road as a two-lane facility. In the future, this extension of Zinfandel Drive would become six lanes wide.
- Proposed Project
 - A Street – A Street is proposed in a semi-circle pattern from Zinfandel Drive to Zinfandel Drive. It would be a two-lane collector north of Airpark Drive, and a four-lane arterial south of Airpark Drive.

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- B Street – B Street is a two-lane collector in a semi-circle pattern from Zinfandel Drive to Zinfandel Drive.
 - C Street – C Street extends from A Street to Zinfandel Drive as a two-lane collector.
 - Airpark Drive - Airpark Drive is proposed as a four-lane east-west arterial. It begins at Femoyer Street as a two-lane collector, and extends to A Street.
 - Kilgore Road – Kilgore Road continues southerly from International Drive into the site. This segment of Kilgore Road is proposed to be four lanes wide.
 - Mather Boulevard – Mather Boulevard would parallel the southern boundary of the site before entering the site and extending to Zinfandel Drive. It is proposed to be four lanes wide through the project site.
 - Prospect Park Drive - Prospect Park Drive continues southerly from International Drive into the site. This segment of Prospect Park Drive is proposed to be four lanes wide.
 - Zinfandel Drive - As currently included in the County General Plan, Zinfandel Drive is extended to cross the site. It is proposed to be six lanes wide through the project site. Initially, Zinfandel Drive would be extended southerly to Douglas Road as a two-lane facility. In the future, this extension of Zinfandel Drive would become six lanes wide.
- Alternative 1
 - A Street – A Street is proposed to extend from Zinfandel Drive to Mather Boulevard. It would be a two-lane collector north of Airpark Drive, and a 70-foot collector (3 lane) south of Airpark Drive.
 - B Street – B Street is a two-lane collector in a semi-circle pattern from Zinfandel Drive to Zinfandel Drive.
 - C Street – C Street extends from Mather Boulevard to Zinfandel Drive as a two-lane collector.
 - Airpark Drive - Airpark Drive is proposed as a two-lane collector, extending from Femoyer Street to A Street.
 - Kilgore Road – Kilgore Road continues southerly from International Drive into the site. This segment of Kilgore Road is proposed to be four lanes wide.

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- Mather Boulevard – Mather Boulevard would enter the southwestern corner of the site and extend to Zinfandel Drive. It is proposed to be four lanes wide through the project site.
- Prospect Park Drive - Prospect Park Drive continues southerly from International Drive into the site. This segment of Prospect Park Drive is proposed to be four lanes wide.
- Zinfandel Drive - As currently included in the County General Plan, Zinfandel Drive is extended to cross the site. It is proposed to be six lanes wide through the project site. Initially, Zinfandel Drive would be extended southerly to Douglas Road as a two-lane facility. In the future, this extension of Zinfandel Drive would become six lanes wide.

PROJECT TRIP GENERATION

Trip generation of the project was calculated based upon available information concerning the land uses associated with the Project and trip generation rate data compiled by recognized sources, such as the Institute of Transportation Engineers. Table 10 summarizes the trip generation volumes of the Approved Project, while Table 11 summarized the trip generation volumes of the Proposed Project and Alternative 1 (which are assumed to have the same land use components). These trip generation values do not assume any substantial reductions in trip generation on-site due to special efforts, such as Project-based shuttles, trip reduction requirements, transportation management associations, *etc.* This provides a conservative analysis of the proposed Project's impacts. These volumes are based upon the ultimate uses of the Project. It is assumed that interim uses that may occur, such as continuation of aggregate mining, would exist at an earlier phase of development of the Project, and that the total trip generation at that time would be less than at the ultimate buildout of the proposed Project. On a daily basis, about 75,630 vehicle trips are associated with the land use of the Approved Project. The vehicle trips during the a.m. and p.m. peak hours are about 7,440 and 8,987, respectively. The Proposed Project (and Alternative 1) has a slightly lower trip generation, with an estimated 67,721 daily vehicle trips. The vehicle trips during the a.m. and p.m. peak hours are about 6,694 and 8,263, respectively.

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TABLE 10 APPROVED PROJECT TRIP GENERATION						
Land Use	Number	Vehicle Trips				
		Daily	A.M. Peak Hour		P.M. Peak Hour	
			Entering	Exiting	Entering	Exiting
Single Family Residential	2,330 Dwelling Units	22,068	429	1,287	1,432	806
Shopping Center	324,800 s.f.	14,539	197	126	656	710
Churches	26,100 s.f.	488	21	18	19	16
Office Buildings	2,224,700 s.f.	22,027	2,823	385	518	2,531
Light Industrial	2,341,100 s.f.	16,317	1,895	258	275	2,019
County Parks	83.9 acres	191	1	0	2	3
Total		75,630	5,366	2,074	2,902	6,085
Total – Existing M-2 Zoning		12,368	3,469	736	680	3,442
SOURCE: Based upon Institute of Transportation Engineers' <i>Trip Generation, Sixth Edition</i> , 1997, and floor area ratios from the Sacramento County General Plan.						

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TABLE 11 PROPOSED PROJECT TRIP GENERATION						
Land Use	Number	Vehicle Trips				
		Daily	A.M. Peak Hour		P.M. Peak Hour	
			Entering	Exiting	Entering	Exiting
Single Family Residential	1,393 Dwelling Units	13,855	265	796	909	512
Multi-Family Residential	341 Dwelling Units	2,180	28	145	136	67
Shopping Center	348,500 s.f.	15,212	205	131	687	744
Office Buildings	2,221,000 s.f.	19,394	2,525	344	477	2,330
Light Industrial	2,450,400 s.f.	17,080	1,984	271	288	2,113
Total		67,721	5,007	1,687	2,497	5,766
SOURCE: Based upon Institute of Transportation Engineers' <i>Trip Generation, Sixth Edition</i> , 1997, and floor area ratios from the Sacramento County General Plan.						

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4. ANALYSIS METHODOLOGY

STANDARDS OF SIGNIFICANCE

According to CEQA Guidelines, a project that would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the roadway system is considered to have a significant adverse impact on the environment. For the purposes of this EIR, the impact thresholds of the County of Sacramento are utilized:

Off-site facilities: An impact is considered significant for roadways and intersections when the project causes the facility to change from LOS “E” to LOS “F” for urban areas of the County and from LOS “D” to LOS “E” for rural areas. For facilities that are, or will be (cumulative condition), operating at unacceptable levels of service without the project, an impact is considered significant if the project:

- 1) increases the average delay at unsignalized intersections by more than 5 seconds, or
- 2) increases the V/C ratio by 0.05 or more on a roadway or at a signalized intersection.

Freeway ramps: An impact is considered significant when the project causes the facility to change from an acceptable to unacceptable LOS according to the LOS threshold defined in the Caltrans Route Concept Report for the facility.

Freeway segments: An impact is considered significant when the project causes the facility to change from an acceptable to unacceptable LOS according to the LOS threshold defined in the Caltrans Route Concept Report for the facility.

An additional standard of significance for the transportation analysis is roadway safety. Safety significance criteria are based upon conformity with accepted design standards and guidelines, as promulgated by responsible agencies such as Sacramento County, the State of California, and the Federal Government. In particular, the conformity with the County of Sacramento Department of Public Works Improvement Standards is a major consideration in the determination of roadway safety impacts.

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FORECASTING METHODOLOGY AND ASSUMPTIONS

ANALYSIS SCENARIOS

Analyses of the impacts associated with the proposed project are based upon the following scenarios:

- Existing Conditions (Without Project)
- Existing Conditions Plus Approved Project
- Existing Conditions Plus Proposed Project
- Existing Conditions Plus Alternative 1
- Future Conditions (Without Project)
- Future Conditions Plus Approved Project
- Future Conditions Plus Proposed Project
- Future Conditions Plus Alternative 1

Forecasts of roadway traffic volumes and transit ridership were developed through the utilization of a regional travel forecasting model. The model that was utilized is based upon SACOG's SACMET-1996 travel forecasting model. The following changes were made to the model:

- To refine the model's accuracy in the study area, a number of traffic analysis zones were disaggregated in the study area. These zone splits and centroid connector refinements were implemented to improve the assignment capabilities of the model in the study area.
- Future regional forecasts are based upon the regional year 2020 forecasts adopted by SACOG.
- In the immediate vicinity of the project, land use forecasts were increased beyond year 2020 levels to reflect buildout of nearby development. Table 12 compares the land use assumptions utilized in the travel modeling with the SACOG year 2020 projections.

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TABLE 12 CUMULATIVE LAND USE ASSUMPTIONS						
Area	Cumulative Land Use			SACOG Year 2020 Projections		
	Dwelling Units	Employment		Dwelling Units	Employment	
		Retail	Non-Retail		Retail	Non-Retail
Rancho Cordova Office Park Area ¹	4,494	4,660	30,486	3,646	621	24,363
Mather Field	1,760	1,592	27,217	1,580	866	10,184
Rio Del Oro and Sunrise-Douglas Area ²	35,561	4,929	15,605	22,216	1,990	13,046
1. Bordered by U.S. 50, Sunrise Boulevard, Mather Field Road, and Douglas Road. Includes project development.						
2. Bordered by White Rock Road, Grant Line Road, Jackson Road, and Sunrise Boulevard.						

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5. TRANSPORTATION ANALYSIS OF EXISTING SCENARIOS

This section of the report presents the results of the transportation analysis of Existing conditions and the “Existing plus project” scenarios.

EXISTING DEFICIENCIES

INTERSECTION ANALYSIS

As discussed previously in Section 2, the following intersections do not meet the County’s level of service goal:

- Sunrise Boulevard and Jackson Road – a.m. peak hour
- Sunrise Boulevard and Zinfandel Drive – a.m. and p.m. peak hours
- Zinfandel Drive and U.S. 50 Eastbound Ramps – a.m. and p.m. peak hours
- Mather Field Road and Folsom Boulevard – p.m. peak hour

ROADWAY SEGMENT ANALYSIS

As discussed previously in Section 2, the following roadway segments do not meet the County’s level of service goal:

- Hazel Avenue - Winding Way to Gold Country Boulevard
- Sunrise Boulevard - Fair Oaks Boulevard to White Rock Road

FREEWAY INTERCHANGE ANALYSIS

As discussed previously in Section 2, the following freeway ramp junctions do not meet the County’s level of service goal:

- Mather Field Road Eastbound Exit – a.m. and p.m. peak hours
- Mather Field Road Westbound Exit – a.m. peak hour
- Mather Field Road Westbound Slip Entrance – a.m. peak hour
- Zinfandel Drive Westbound Exit – a.m. peak hour
- Sunrise Boulevard Eastbound Entrance – p.m. peak hour
- Sunrise Boulevard Westbound Exit – a.m. peak hour
- Sunrise Boulevard Westbound Entrance – a.m. and p.m. peak hours
- Hazel Avenue Eastbound Exit – p.m. peak hour
- Hazel Avenue Eastbound Entrance – p.m. peak hour
- Hazel Avenue Westbound Exit – a.m. peak hour

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- Hazel Avenue Westbound Loop Entrance – a.m. peak hour
- Hazel Avenue Westbound Slip Entrance – a.m. peak hour

EXISTING PLUS PROJECT SCENARIOS ROADWAY SYSTEM

Analysis of operating conditions for the Existing plus Approved Project, Existing plus Proposed Project, and Existing Plus Alternative 1 scenarios is based upon full development of the site, including the associated roadway systems. Outside the project site, other roadway changes were assumed to occur in conjunction with project development:

- Femoyer Street - Femoyer Street is extended as a two-lane collector from the downtown area of Mather Field to International Drive. This roadway would intersect International Drive opposite the western driveway of the Kaiser Permanente facility. A traffic signal would be installed at this location.
- International Drive - International Drive would be extended as a four-lane arterial across the Folsom South Canal between Kilgore Road and Sunrise Boulevard. This facility would intersect Sunrise Boulevard opposite the northern intersection of Monier Circle. A traffic signal would be installed at this location.
- Mather Boulevard – Mather Boulevard would be closed to through traffic between north of Douglas Road, in accordance with the specific transportation plan associated with each scenario.
- Intersection geometric changes and signalization – As illustrated in Figures 12, 13, and 14, changes in intersection lane configurations and traffic control would occur at the following locations:
 - Sunrise Boulevard and International Drive / Monier Circle
 - Zinfandel Drive / Eagles Nest Road and Douglas Road
 - Zinfandel Drive and International Drive
 - Capital Center Drive and International Drive
 - Prospect Park Drive and International Drive
 - Kilgore Road and International Drive

For new roadways associated with the project, the roadway and intersection geometry and traffic controls are based upon County practice. All intersections of four and six lane facilities were assumed to be signalized. At new intersections, double left turn lanes and single (or double) right turn lanes were assumed on each intersection approach.

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Figure 12

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Figure 13

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Figure 14

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INTERSECTION ANALYSIS

Existing Plus Approved Project, Existing Plus Proposed Project, and Existing Plus Alternative 1 A.M. and P.M. peak hour traffic volumes at key intersections in the Project vicinity are illustrated in Figures 15 through 20.

Tables 13 and 14 summarize a.m. and p.m. peak hour operating conditions at the study area intersections.

ROADWAY SEGMENT ANALYSIS

Table 15 summarizes the roadway segment analysis, which is based upon daily traffic volume levels. Figures 21 through 23 illustrate daily traffic volumes on selected roadways in the study area.

FREEWAY INTERCHANGE ANALYSIS

Tables 16 and 17 summarize a.m. and p.m. peak hour operating conditions at the study area freeway interchanges.

IMPACTS

Table 18 summarizes the significant impacts associated with the Existing Plus Approved Project, Existing Plus Proposed Project, and Existing Plus Alternative 1 scenarios.

EXISTING PLUS APPROVED PROJECT SCENARIO

Impacts associated with the Existing Plus Approved Project Scenario were identified in earlier environmental documentation. These impacts are repeated here for reference purposes. In accordance with the County Standards of Significance, these impacts were determined by comparing roadway operating conditions associated with the project to the “no project” condition. As summarized in Table 18, the Existing Plus Approved Project scenario results in significant impacts at four intersections and on four roadway segments.

EXISTING PLUS PROPOSED PROJECT SCENARIO

Impacts associated with the Existing Plus Proposed Project Scenario were determined by comparing roadway-operating conditions associated with the Proposed Project to the “no project” condition. As summarized in Table 18, the Existing Plus Proposed Project scenario results in significant impacts at five intersections and on four roadway segments.

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Figure 15

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Figure 16

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Figure 17

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Figure 18

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Figure 19

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Figure 20

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TABLE 13 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	1.01 V/C	F	1.01 V/C	F	1.01 V/C	F	1.02 V/C	F
2. Sunrise Boulevard and Douglas Road	0.49 V/C	A	0.47 V/C	A	0.47 V/C	A	0.47 V/C	A
3. Sunrise Blvd. and Monier Circle / International Dr.	1.7 sec.	A	0.56 V/C	A	0.57 V/C	A	0.55 V/C	A
4. Sunrise Boulevard and White Rock Road	0.71 V/C	C	0.67 V/C	B	0.67 V/C	B	0.66 V/C	B
5. Sunrise Boulevard and Folsom Boulevard	0.83 V/C	D	0.84 V/C	D	0.84 V/C	D	0.85 V/C	D
6. Sunrise Boulevard and Zinfandel Drive	1.21 V/C	F	1.23 V/C	F	1.24 V/C	F	1.24 V/C	F
7. Zinfandel Drive and Douglas Road	-	-	3.7 sec.	A	3.3 sec.	A	3.7 sec.	A
8. Zinfandel Drive and Airpark Drive	-	-	0.34 V/C	A	-	-	-	-
9. Zinfandel Drive and C Street	-	-	0.49 V/C	A	0.31 V/C	A	0.30 V/C	A
10. Zinfandel Drive and B Street (south)	-	-	0.28 V/C	A	0.34 V/C	A	0.33 V/C	A
11. Zinfandel Drive and International Drive	5.3 sec.	B	0.80 V/C	D	0.76 V/C	C	0.79 V/C	C
12. Zinfandel Drive and B Street (north)	-	-	0.39 V/C	A	0.37 V/C	A	0.38 V/C	A
13. Zinfandel Drive and White Rock Road	0.64 V/C	B	0.69 V/C	B	0.68 V/C	B	0.68 V/C	B
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.01 V/C	F	1.29 V/C	F	1.28 V/C	F	1.29 V/C	F

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TABLE 13 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.50 V/C	A	0.81 V/C	D	0.81 V/C	D	0.81 V/C	D
16. Mather Field Road and International Drive	0.31 V/C	A	0.59 V/C	A	0.60 V/C	A	0.59 V/C	A
17. Mather Field Road and Rockingham Drive	0.74 V/C	C	1.05 V/C	F	1.06 V/C	F	1.04 V/C	F
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.61 V/C	B	0.98 V/C	E	0.98 V/C	E	0.98 V/C	E
19. Mather Field Road and U.S. 50 Westbound Ramps	0.44 V/C	A	0.48 V/C	A	0.49 V/C	A	0.49 V/C	A
20. Mather Field Road and Folsom Boulevard	0.60 V/C	A	0.64 V/C	B	0.59 V/C	A	0.60 V/C	A
21. Von Karman Street and Mather Boulevard	1.3 sec.	A	1.3 sec.	A	1.3 sec.	A	1.3 sec.	A
22. Whitehead Street and Mather Boulevard	1.2 sec	A	1.2 sec.	A	1.2 sec.	A	1.2 sec.	A
23. C Street and Airpark Drive	-	-	0.36 V/C	A	-	-	-	-
24. Zinfandel Drive and A Street	-	-	0.46 V/C	A	0.53 V/C	A	0.51 V/C	A
25. Von Karman Street and Norden Avenue	1.3 sec.	A	1.7 sec	A	1.5 sec	A	1.7 sec	A
26. Whitehead Street and Norden Avenue	1.2 sec.	A	1.3 sec.	A	1.2 sec.	A	1.3 sec.	A
27. A Street and Airpark Drive	-	-	2.7 sec.	A	0.60 V/C	A	0.29 V/C	A
28. Capital Center Drive and International Drive	0.6 sec.	A	0.54 V/C	A	0.52 V/C	A	0.53 V/C	A

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TABLE 13 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
29. Prospect Park Drive and International Drive	1.1 sec.	A	0.32 V/C	A	0.33 V/C	A	0.32 V/C	A
30. Kilgore Road and International Drive	2.2 sec.	A	0.40 V/C	A	0.35 V/C	A	0.35 V/C	A
31. Femoyer Street and International Drive	-	-	0.55 V/C	A	0.52 V/C	A	0.49 V/C	A
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.49 V/C	A	0.50 V/C	A	0.50 V/C	A	0.50 V/C	A
33. Hazel Avenue and U.S. 50 Westbound Ramps	0.93 V/C	E	0.92 V/C	E	0.93 V/C	E	0.93 V/C	E
34. Kilgore Road and White Rock Road	0.36 V/C	A	0.38 V/C	A	0.37 V/C	A	0.38 V/C	A
35. Prospect Park Drive and White Rock Road	0.33 V/C	A	0.28 V/C	A	0.28 V/C	A	0.28 V/C	A
36. Prospect Park Drive and B Street	-	-	0.17 V/C	A	0.21 V/C	A	0.21 V/C	A
37. Kilgore Drive and B Street	-	-	0.19 V/C	A	0.22 V/C	A	0.22 V/C	A
38. B Street and Airpark Drive	-	-	1.3 sec.	A	-	-	-	-
40. C Street and A Street (Mather Boulevard)	-	-	-	-	0.51 V/C	A	0.48 V/C	A
41. Zinfandel Drive and Mather Boulevard	-	-	-	-	0.33 V/C	A	-	-
42. A Street and Mather Boulevard	-	-	-	-	-	-	0.60 V/C	A

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TABLE 13 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)								

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TABLE 14 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	0.92 V/C	E	0.94 V/C	E	0.93 V/C	E	0.92 V/C	E
2. Sunrise Boulevard and Douglas Road	0.59 V/C	A	0.67 V/C	B	0.66 V/C	B	0.67 V/C	B
3. Sunrise Blvd. and Monier Circle / International Dr.	3.3 sec.	A	0.89 V/C	D	0.84 V/C	D	0.84 V/C	D
4. Sunrise Boulevard and White Rock Road	0.72 V/C	C	0.60 V/C	A	0.59 V/C	A	0.58 V/C	A
5. Sunrise Boulevard and Folsom Boulevard	0.98 V/C	E	0.99 V/C	E	0.99 V/C	E	1.00 V/C	E
6. Sunrise Boulevard and Zinfandel Drive	1.10 V/C	F	1.15 V/C	F	1.16 V/C	F	1.14 V/C	F
7. Zinfandel Drive and Douglas Road	-	-	25.6 sec.	D	4.9 sec.	A	2.9 sec.	A
8. Zinfandel Drive and Airpark Drive	-	-	0.42 V/C	A	-	-	-	-
9. Zinfandel Drive and C Street	-	-	0.94 V/C	E	0.34 V/C	A	0.34 V/C	A
10. Zinfandel Drive and B Street (south)	-	-	0.27 V/C	A	0.33 V/C	A	0.3.0 V/C	A
11. Zinfandel Drive and International Drive	3.8 sec.	A	1.00 V/C	E	1.00 V/C	F	1.01 V/C	F
12. Zinfandel Drive and B Street (north)	-	-	0.43 V/C	A	0.43 V/C	A	0.41 V/C	A
13. Zinfandel Drive and White Rock Road	0.98 V/C	E	1.02 V/C	F	1.03 V/C	F	1.03 V/C	F

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TABLE 14 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.08 V/C	F	1.21 V/C	F	1.21 V/C	F	1.21 V/C	F
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.55 V/C	A	0.67 V/C	B	0.67 V/C	B	0.66 V/C	B
16. Mather Field Road and International Drive	0.39 V/C	A	0.61 V/C	B	0.61 V/C	B	0.61 V/C	B
17. Mather Field Road and Rockingham Drive	0.79 V/C	C	0.94 V/C	E	1.00 V/C	E	0.94 V/C	E
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.57 V/C	A	0.82 V/C	D	0.85 V/C	D	0.85 V/C	D
19. Mather Field Road and U.S. 50 Westbound Ramps	0.56 V/C	A	0.49 V/C	A	0.50 V/C	A	0.49 V/C	A
20. Mather Field Road and Folsom Boulevard	1.07 V/C	F	1.07 V/C	F	1.06 V/C	F	1.06 V/C	F
21. Von Karman Street and Mather Boulevard	1.3 sec.	A	2.1 sec.	A	2.0 sec.	A	2.3 sec.	A
22. Whitehead Street and Mather Boulevard	1.4 sec.	A	2.3 sec.	A	2.1 sec.	A	2.4 sec.	A
23. C Street and Airpark Drive	-	-	0.34 V/C	A	-	-	-	-
24. Zinfandel Drive and A Street	-	-	0.58 V/C	A	0.73 V/C	C	0.73 V/C	C
25. Von Karman Street and Norden Avenue	1.2 sec.	A	1.2 sec.	A	1.1 sec.	A	1.2 sec.	A
26. Whitehead Street and Norden Avenue	1.3 sec.	A	1.2 sec.	A	1.2 sec.	A	1.3 sec.	A
27. A Street and Airpark Drive	-	-	4.8 sec.	A	0.73 V/C	C	0.39 V/C	A

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TABLE 14 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
28. Capital Center Drive and International Drive	0.7 sec.	A	0.59 V/C	A	0.59 V/C	A	0.60 V/C	A
29. Prospect Park Drive and International Drive	1.2 sec.	A	0.38 V/C	A	0.37 V/C	A	0.37 V/C	A
30. Kilgore Road and International Drive	3.9 sec.	A	0.57 V/C	A	0.52 V/C	A	0.53 V/C	A
31. Femoyer Street and International Drive	-	-	0.80 V/C	C	0.80 V/C	C	0.80 V/C	C
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.68 V/C	B	0.72 V/C	C	0.72 V/C	C	0.71 V/C	C
33. Hazel Avenue and U.S. 50 Westbound Ramps	0.98 V/C	E	0.99 V/C	E	0.99 V/C	E	0.99 V/C	E
34. Kilgore Road and White Rock Road	0.64 V/C	B	0.55 V/C	A	0.56 V/C	A	0.54 V/C	A
35. Prospect Park Drive and White Rock Road	0.44 V/C	A	0.31 V/C	A	0.31 V/C	A	0.31 V/C	A
36. Prospect Park Drive and B Street	-	-	0.17 V/C	A	0.21 V/C	A	0.20 V/C	A
37. Kilgore Drive and B Street	-	-	0.30 V/C	A	0.31 V/C	A	0.32 V/C	A
38. B Street and Airpark Drive	-	-	1.3 sec.	A	-	-	-	-
40. C Street and A Street (Mather Boulevard)	-	-	-	-	0.55 V/C	A	0.55 V/C	A
41. Zinfandel Drive and Mather Boulevard	-	-	-	-	0.44 V/C	A	-	-
42. A Street and Mather Boulevard	-	-	-	-	-	-	0.61 V/C	B

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TABLE 14 EXISTING PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Existing Without Project		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)								

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TABLE 15 EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
A Street	Airpark Drive	Zinfandel Drive	-	-	-	-	7,590	2	0.42	A	12,650	2	0.70	C	12,680	2	0.70	C
A Street	Airpark Drive	C Street	-	-	-	-	-	-	-	-	15,020	4	0.42	A	-	-	-	-
A Street	C Street	Zinfandel Drive	-	-	-	-	-	-	-	-	6,420	4	0.18	A	-	-	-	-
A Street	Airpark Drive	Mather Blvd.	-	-	-	-	-	-	-	-	-	-	-	-	11,770	2	0.59	A
B Street	Zinfandel Drive	Prospect Park Dr	-	-	-	-	4,190	4	0.12	A	3,720	2	0.21	A	3,900	2	0.22	A
B Street	Prospect Park Dr	Kilgore Road	-	-	-	-	560	4	0.02	A	1,840	2	0.10	A	1,810	2	0.10	A
B Street	Kilgore Road	Zinfandel Drive	-	-	-	-	3,980	4	0.11	A	5,090	2	0.28	A	5,070	2	0.28	A
B Street	Airpark Drive	Zinfandel Drive	-	-	-	-	3,620	2	0.20	A	-	-	-	-	-	-	-	-
C Street	Mather Blvd	Airpark Drive	-	-	-	-	3,020	4	0.08	A	-	-	-	-	-	-	-	-
C Street	Airpark Drive	Zinfandel Drive	-	-	-	-	3,720	4	0.10	A	-	-	-	-	-	-	-	-
C Street	A St / Mather Bl	Zinfandel Drive	-	-	-	-	-	-	-	-	9,030	2	0.50	A	8,820	2	0.49	A
Airpark Drive	Femoyer Street	A Street	-	-	-	-	17,060	2	0.85	D	16,580	2	0.83	D	13,330	2	0.67	B
Airpark Drive	A Street	C Street	-	-	-	-	14,400	4	0.40	A	-	-	-	-	-	-	-	-
Airpark Drive	C Street	B Street	-	-	-	-	14,760	4	0.41	A	-	-	-	-	-	-	-	-

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**TABLE 15
EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE**

Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Airpark Drive	B Street	Zinfandel Drive	-	-	-	-	7,570	4	0.21	A	-	-	-	-	-	-	-	-
Douglas Road	Zinfandel Drive	Sunrise Blvd	2,130	2	0.12	A	2,200	2	0.12	A	1,930	2	0.11	A	1,920	2	0.11	A
Douglas Road	East of Sunrise Boulevard		2,240	2	0.10	A	2,330	2	0.10	A	2,340	2	0.10	A	2,350	2	0.10	A
Douglas Road	West of Grant Line Road		2,240	2	0.10	A	2,350	2	0.10	A	2,350	2	0.10	A	2,350	2	0.10	A
Eagles Nest Road	Douglas Road	Kiefer Blvd.	500	2	0.03	A	500	2	0.03	A	500	2	0.03	A	500	2	0.03	A
Eagles Nest Road	Kiefer Blvd.	Jackson Road	400	2	0.02	A	470	2	0.02	A	520	2	0.02	A	530	2	0.02	A
Eagles Nest Road	Jackson Road	Florin Road	310	2	0.01	A	380	2	0.02	A	430	2	0.02	A	460	2	0.02	A
East /West Couplet	West of North / South Couplet		1,030	4	0.03	A	3,380	4	0.11	A	3,090	4	0.10	A	3,520	4	0.12	A
East /West Couplet	East of North / South Couplet		1,330	4	0.04	A	4,050	4	0.14	A	3,590	4	0.12	A	4,020	4	0.13	A
Excelsior Road	Jackson Road	Kiefer Blvd.	770	2	0.03	A	760	2	0.03	A	750	2	0.03	A	780	2	0.03	A
Femoyer Street	Airpark Drive	International Dr.	-	-	-	-	16,900	2	0.85	D	15,630	2	0.78	C	12,930	2	0.65	B
Folsom Boulevard	Bradshaw Road	Routier Road	27,610	4	0.77	C	28,780	4	0.80	C	28,750	4	0.80	C	28,640	4	0.80	C
Folsom Boulevard	Routier Road	Mather Field Rd	29,020	4	0.81	D	30,790	4	0.86	D	30,760	4	0.85	D	30,620	4	0.85	D
Folsom Boulevard	Mather Field Rd	Coloma Road	28,030	4	0.78	C	27,750	4	0.77	C	27,610	4	0.77	C	27,630	4	0.77	C
Folsom Boulevard	Coloma Road	Zinfandel Drive	18,990	4	0.53	A	17,530	4	0.49	A	17,530	4	0.49	A	17,560	4	0.49	A

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TABLE 15
EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Folsom Boulevard	Zinfandel Drive	Sunrise Blvd.	20,570	4	0.57	A	19,570	4	0.54	A	19,840	4	0.55	A	19,980	4	0.56	A
Folsom Boulevard	Sunrise Blvd	Hazel Avenue	15,040	2	0.84	D	14,580	2	0.81	D	14,770	2	0.82	D	14,810	2	0.82	D
Folsom Boulevard	Hazel Avenue	U.S. 50	13,840	2	0.77	C	13,900	2	0.77	C	14,010	2	0.78	C	14,070	2	0.78	C
Hazel Avenue	Winding Way	Gold Cntry Blvd	54,940	4	1.53	F	56,380	4	1.57	F	56,370	4	1.57	F	56,210	4	1.56	F
Hazel Avenue	Gold Cntry Blvd	U.S. 50	43,220	6	0.80	D	44,580	6	0.83	D	44,600	6	0.83	D	44,470	6	0.82	D
Hazel Avenue	U.S. 50	Folsom Blvd	14,660	4	0.41	A	14,360	4	0.40	A	14,720	4	0.41	A	14,730	4	0.41	A
International Drive	Mather Field Rd	White Rock Rd	10,300	6	0.19	A	36,420	6	0.67	B	35,740	6	0.66	B	35,520	6	0.66	B
International Drive	White Rock Rd	Femoyer Street	7,530	4	0.21	A	34,060	4	0.95	E	33,360	4	0.93	E	33,130	4	0.92	E
International Drive	Femoyer Street	Capital Ctr Dr.	7,530	4	0.21	A	18,700	4	0.52	A	19,270	4	0.54	A	21,800	4	0.61	B
International Drive	Capital Ctr Dr.	Zinfandel Drive	5,510	4	0.15	A	20,250	4	0.56	A	20,540	4	0.57	A	23,020	4	0.64	B
International Drive	Zinfandel Drive	Prospect Park Dr	4,900	4	0.14	A	12,330	4	0.34	A	11,280	4	0.31	A	11,300	4	0.31	A
International Drive	Prospect Park Dr	Kilgore Road	2,420	4	0.07	A	9,500	4	0.26	A	8,640	4	0.24	A	8,620	4	0.24	A
International Drive	Kilgore Road	Sunrise Blvd	-	-	-	-	9,530	4	0.24	A	8,610	4	0.22	A	8,670	4	0.22	A
Jackson Road	Bradshaw Road	Excelsior Road	10,600	2	0.59	A	10,500	2	0.58	A	10,500	2	0.58	A	10,440	2	0.58	A
Jackson Road	Excelsior Road	Eagles Nest Rd	7,700	2	0.34	C	5,680	2	0.25	C	5,690	2	0.25	C	5,630	2	0.25	C

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TABLE 15 EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Jackson Road	Eagles Nest Rd	Sunrise Blvd	7,700	2	0.34	C	7,710	2	0.34	C	7,700	2	0.34	C	7,640	2	0.33	C
Jackson Road	Sunrise Blvd	Grant Line Road	11,700	2	0.51	D	11,920	2	0.52	D	12,020	2	0.52	D	11,950	2	0.52	D
Kilgore Road	Folsom Blvd	White Rock Rd	9,870	2	0.55	A	11,280	2	0.63	B	10,980	2	0.61	B	11,080	2	0.62	B
Kilgore Road	White Rock Rd	International Dr	6,600	4	0.18	A	8,110	4	0.23	A	7,980	4	0.22	A	7,910	4	0.22	A
Kilgore Road	International Dr	B Street	-	-	-	-	7,280	4	0.20	A	4,410	4	0.12	A	4,450	4	0.12	A
Mather Field Road	Folsom Blvd	U.S. 50	19,610	4	0.54	A	19,430	4	0.54	A	25,160	4	0.70	B	19,270	4	0.54	A
Mather Field Road	U.S. 50	Rockingham Dr	30,250	6	0.50	A	49,180	6	0.82	D	48,460	6	0.81	D	49,520	6	0.83	D
Mather Field Road	Rockingham Dr	International Dr	20,670	6	0.38	A	43,420	6	0.80	D	42,790	6	0.79	C	42,550	6	0.79	C
Mather Field Road	South of International Drive		6,900	4	0.19	A	6,610	4	0.18	A	6,700	4	0.19	A	6,680	4	0.19	A
Mather Boulevard	Macready Ave	East/West Cplt	1,030	4	0.03	A	3,380	4	0.11	A	3,090	4	0.10	A	3,520	4	0.12	A
Mather Boulevard	Femoyer Street	Douglas Road	2,160	2	0.09	A	-	-	-	-	-	-	-	-	-	-	-	-
Mather Boulevard	Femoyer Street	Zinfandel Drive	-	-	-	-	-	-	-	-	4,000	2	0.22	A	-	-	-	-
Mather Boulevard	Femoyer Street	A Street	-	-	-	-	-	-	-	-	-	-	-	-	4,550	2	0.25	A
Mather Boulevard	A Street	C Street	-	-	-	-	-	-	-	-	-	-	-	-	13,640	4	0.38	A
Mather Boulevard	C Street	Zinfandel Drive	-	-	-	-	-	-	-	-	-	-	-	-	5,340	4	0.15	A

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TABLE 15 EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Mather Boulevard	Kiefer Blvd	Zinfandel Drive	1,080	2	0.06	A	1,080	2	0.06	A	1,080	2	0.06	A	1,080	2	0.06	A
North /South Cplt.	North of East / West Couplet		6,900	4	0.23	A	6,610	4	0.22	A	6,700	4	0.22	A	6,680	4	0.22	A
Prospect Park Dr.	White Rock Rd.	International Dr.	5,290	2	0.29	A	4,010	2	0.22	A	4,060	2	0.23	A	4,090	2	0.23	A
Prospect Park Dr.	International Dr	B Street	-	-	-	-	5,320	4	0.15	A	5,820	4	0.16	A	5,790	4	0.16	A
Sunrise Boulevard	Fair Oaks Blvd.	Coloma Road	95,440	6	1.77	F	97,170	6	1.80	F	96,990	6	1.80	F	96,920	6	1.79	F
Sunrise Boulevard	Coloma Road	Zinfandel Drive	86,910	6	1.61	F	89,720	6	1.66	F	89,400	6	1.66	F	89,310	6	1.65	F
Sunrise Boulevard	Zinfandel Drive	U.S. 50	79,020	6	1.46	F	81,760	6	1.51	F	81,350	6	1.51	F	81,280	6	1.51	F
Sunrise Boulevard	U.S. 50	Folsom Blvd	69,680	6	1.29	F	66,760	6	1.24	F	66,550	6	1.23	F	66,680	6	1.23	F
Sunrise Boulevard	Folsom Blvd	White Rock Rd	56,640	6	1.05	F	56,960	6	1.05	F	56,210	6	1.04	F	56,370	6	1.04	F
Sunrise Boulevard	White Rock Rd	International Dr	19,490	4	0.54	A	15,080	4	0.42	A	14,410	4	0.40	A	14,530	4	0.40	A
Sunrise Boulevard	International Dr	Douglas Road	19,310	4	0.54	A	17,020	4	0.47	A	17,030	4	0.47	A	17,090	4	0.47	A
Sunrise Boulevard	Douglas Road	Kiefer Blvd	11,400	2	0.50	D	13,000	2	0.57	D	12,950	2	0.57	D	12,950	2	0.57	D
Sunrise Boulevard	Kiefer Blvd	Jackson Road	11,280	2	0.49	D	12,670	2	0.55	D	12,620	2	0.55	D	12,620	2	0.55	D
U.S. 50	Bradshaw Road	Mather Field Rd	157,000	8	0.98	E	163,750	8	1.02	F	163,680	8	1.02	F	163,830	8	1.02	F
U.S. 50	Mather Field Rd	Zinfandel Drive	144,000	8	0.90	D	136,940	8	0.86	D	137,320	8	0.86	D	137,420	8	0.86	D

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TABLE 15
EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
U.S. 50	Zinfandel Drive	Sunrise Blvd	127,000	8	0.79	D	135,520	8	0.85	D	135,490	8	0.85	D	135,460	8	0.85	D
U.S. 50	Sunrise Blvd	Hazel Avenue	98,000	6	0.82	D	101,470	6	0.85	D	101,310	6	0.84	D	101,430	6	0.85	D
White Rock Road	International Dr	Rockingham Dr	13,400	2	0.74	C	13,760	2	0.76	C	13,780	2	0.77	C	13,760	2	0.76	C
White Rock Road	Rockingham Dr	Capital Ctr Dr.	13,400	2	0.74	C	12,310	2	0.68	B	12,310	2	0.68	B	12,310	2	0.68	B
White Rock Road	Capital Ctr Dr.	Zinfandel Drive	13,400	2	0.74	C	11,420	2	0.63	B	11,450	2	0.64	B	11,440	2	0.64	B
White Rock Road	Zinfandel Drive	Prospect Park Dr	18,220	6	0.34	A	12,260	6	0.23	A	12,340	6	0.23	A	12,510	6	0.23	A
White Rock Road	Prospect Park Dr	Kilgore Road	18,220	6	0.34	A	12,880	6	0.24	A	12,880	6	0.24	A	13,060	6	0.24	A
White Rock Road	Kilgore Road	Sunrise Blvd	22,080	5	0.61	B	15,830	5	0.44	A	15,940	4	0.44	A	16,040	4	0.45	A
White Rock Road	East of Sunrise Boulevard		8,200	2	0.46	A	7,370	2	0.41	A	7,360	2	0.41	A	7,430	2	0.41	A
White Rock Road	West of Grant Line Road		3,030	2	0.13	B	2,980	2	0.13	B	3,000	2	0.13	B	3,010	2	0.13	B
Zinfandel Drive	Sunrise Blvd	Folsom Blvd	14,110	4	0.39	A	14,910	4	0.41	A	14,810	4	0.41	A	14,840	4	0.41	A
Zinfandel Drive	Folsom Blvd	U.S. 50	23,400	4	0.65	B	28,200	4	0.78	C	28,040	4	0.78	C	27,820	4	0.77	C
Zinfandel Drive	U.S. 50	White Rock Rd	40,570	6	0.75	C	56,210	6	1.04	F	55,560	6	1.03	F	55,540	6	1.03	F
Zinfandel Drive	White Rock Rd	International Dr	12,200	6	0.23	A	32,860	6	0.61	B	32,140	6	0.60	A	31,950	6	0.59	A
Zinfandel Drive	International Dr	A Street	-	-	-	-	34,120	6	0.63	B	33,790	6	0.63	B	36,060	6	0.67	B

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**TABLE 15
EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE**

Roadway Name	Segment		Existing				Existing Plus Approved Project				Existing Plus Proposed Project				Existing Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Zinfandel Drive	A Street	B Street (north)	-	-	-	-	27,870	6	0.52	A	20,820	6	0.39	A	23,010	6	0.43	A
Zinfandel Drive	B Street (north)	C Street	-	-	-	-	29,160	6	0.54	A	21,610	6	0.40	A	23,980	6	0.44	A
Zinfandel Drive	C Street	B Street (south)	-	-	-	-	16,070	6	0.30	A	19,740	6	0.37	A	22,280	6	0.41	A
Zinfandel Drive	B Street (south)	Airpark Drive	-	-	-	-	15,480	6	0.29	A	-	-	-	-	-	-	-	-
Zinfandel Drive	B Street (south)	Mather Blvd	-	-	-	-	-	-	-	-	22,090	6	0.41	A	-	-	-	-
Zinfandel Drive	Mather Blvd.	Douglas Road	-	-	-	-	-	-	-	-	10,990	2	0.61	B	-	-	-	-
Zinfandel Drive	Airpark Drive	Douglas Road	-	-	-	-	11,340	2	0.63	B	-	-	-	-	23,250	6	0.43	A

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Figure 21

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Figure 22

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Figure 23

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TABLE 16 A.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS EXISTING PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Existing		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	34.18	F	39.74	F	39.90	F	39.85	F
	Eastbound Loop Entrance	26.05	C	25.91	C	26.01	C	25.88	C
	Eastbound Slip Entrance	26.96	C	26.65	C	26.74	C	26.59	C
	Westbound Exit	34.82	F	34.00	F	34.06	F	33.93	F
	Westbound Loop Entrance	32.67	D	31.85	D	31.68	D	31.62	D
	Westbound Slip Entrance	33.53	F	33.43	D	33.13	D	33.02	D
Zinfandel Drive	Eastbound Exit	27.85	C	27.39	C	27.56	C	27.30	C
	Eastbound Loop Entrance	18.03	B	17.83	B	17.82	B	17.76	B
	Eastbound Slip Entrance	18.96	B	19.56	B	19.51	B	19.44	B
	Westbound Exit	38.80	F	43.93	F	44.11	F	43.79	F
	Westbound Loop Entrance	32.57	D	31.46	D	31.42	D	31.39	D
	Westbound Slip Entrance	33.96	D	33.28	D	33.10	D	33.15	D

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TABLE 16 A.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS EXISTING PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Existing		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Sunrise Boulevard	Eastbound Exit	22.79	C	23.87	C	23.79	C	23.69	C
	Eastbound Entrance	19.33	B	19.29	B	19.44	B	19.29	B
	Westbound Exit	35.14	F	35.70	F	35.59	F	35.60	F
	Westbound Entrance	_ ²	F	_ ²	F	_ ²	F	_ ²	F
Hazel Avenue	Eastbound Exit	_ ²	C	_ ²	C	_ ²	C	_ ²	C
	Eastbound Entrance	29.80	D	29.36	D	29.46	D	29.36	D
	Westbound Exit	43.99	F	44.45	F	43.76	F	44.71	F
	Westbound Loop Entrance	46.08	F	47.04	F	46.99	F	46.98	F
	Westbound Slip Entrance	_ ²	F	_ ²	F	_ ²	F	_ ²	F
1. Passenger cars per mile per lane. 2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.									

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TABLE 17 P.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS EXISTING PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Existing		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	37.15	F	37.43	F	37.08	F	36.94	F
	Eastbound Loop Entrance	31.58	D	30.70	D	30.75	D	30.67	D
	Eastbound Slip Entrance	32.47	D	31.45	D	31.52	D	31.42	D
	Westbound Exit	17.99	B	17.35	B	17.51	B	17.35	B
	Westbound Loop Entrance	19.57	B	21.14	C	21.18	C	21.02	C
	Westbound Slip Entrance	21.04	C	23.08	C	23.12	C	22.91	C
Zinfandel Drive	Eastbound Exit	26.21	C	25.19	C	25.20	C	25.27	C
	Eastbound Loop Entrance	28.44	D	27.36	C	27.45	D	27.33	C
	Eastbound Slip Entrance	28.99	D	27.96	C	27.93	D	27.81	C
	Westbound Exit	10.94	B	13.85	B	13.90	B	13.70	B
	Westbound Loop Entrance	18.49	B	17.27	B	17.35	B	17.21	B
	Westbound Slip Entrance	19.42	B	18.68	B	18.78	B	18.68	B

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TABLE 17 P.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS EXISTING PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Existing		Existing Plus Approved Project		Existing Plus Proposed Project		Existing Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Sunrise Boulevard	Eastbound Exit	35.45	E	36.93	E	37.05	E	36.82	E
	Eastbound Entrance	35.19	F	36.01	F	36.10	F	36.22	F
	Westbound Exit	7.71	A	8.05	A	8.38	A	8.07	A
	Westbound Entrance	_ ²	F	_ ²	F	_ ²	F	_ ²	F
Hazel Avenue	Eastbound Exit	_ ²	F	_ ²	F	_ ²	F	_ ²	F
	Eastbound Entrance	46.37	F	46.93	F	46.89	F	46.83	F
	Westbound Exit	13.52	B	13.27	B	13.42	B	13.21	B
	Westbound Loop Entrance	9.11	A	9.33	A	9.54	A	9.28	A
	Westbound Slip Entrance	_ ²	C	_ ²	C	_ ²	C	_ ²	C
1. Passenger cars per mile per lane. 2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.									

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TABLE 18 EXISTING SCENARIOS SIGNIFICANT IMPACTS				
Facility Type	Name	Time Period of Significant Impact		
		Existing Plus Approved Project	Existing Plus Proposed Project	Existing Plus Alternative 1
Intersections	6. Sunrise Boulevard and Zinfandel Drive	P.M.	P.M.	
	11. Zinfandel Drive and International Drive		P.M.	P.M.
	13. Zinfandel Drive and White Rock Road	P.M.	P.M.	P.M.
	14. Zinfandel Drive and U.S. 50 Eastbound Ramps	A.M., P.M.	A.M., P.M.	A.M., P.M.
	17. Mather Field Road and Rockingham Drive	A.M.	A.M.	A.M.
Roadway Segments	Sunrise Boulevard – Coloma Road to Zinfandel Drive	Daily	Daily	
	Sunrise Boulevard – Zinfandel Drive to U.S. 50	Daily	Daily	Daily
	U.S. 50 – Bradshaw Road to Mather Field Road	Daily	Daily	Daily
	Zinfandel Drive – U.S. 50 to White Rock Road	Daily	Daily	Daily

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Compared to the Existing Plus Approved Project scenario, the impacts at one additional intersection (Zinfandel Drive and International Drive) are significant.

EXISTING PLUS ALTERNATIVE 1 SCENARIO

Impacts associated with the Existing Plus Alternative 1 Scenario were determined by comparing roadway-operating conditions associated with Alternative 1 to the “no project” condition. As summarized in Table 18, the Existing Plus Alternative 1 scenario results in significant impacts at four intersections and on three roadway segments.

Compared to the Existing Plus Approved Project scenario:

- the impacts at one additional intersection (Zinfandel Drive and International Drive) are significant.
- the impacts at one additional intersection (Sunrise Boulevard and Zinfandel Drive) are less-than-significant.
- the impacts on one additional roadway segment (Sunrise Boulevard – Coloma Road to Zinfandel Drive) are less-than-significant.

IMPROVEMENT RECOMMENDATIONS FOR EXISTING DEFICIENCIES

The following roadway improvement recommendations have been developed for Existing conditions.

INTERSECTIONS

Sunrise Boulevard and Jackson Road – Planned widening of Sunrise Boulevard and Jackson Road would add additional capacity to the intersection, and would eliminate the LOS “F” condition during the a.m. peak hour. Sunrise Boulevard is planned for widening through this intersection from two to four lanes in the year 2009.

Sunrise Boulevard and Zinfandel Drive – Due to right-of-way constraints and Existing development, no feasible improvements have been identified for this location.

Zinfandel Drive and U.S. 50 Eastbound Ramps – No feasible improvements have been identified for this location.

Mather Field Road and Folsom Boulevard - Due to right-of-way constraints, the Existing railroad crossing, and existing development, no feasible improvements have been identified for this location.

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ROADWAY SEGMENTS

Hazel Avenue – Winding Way to Gold Country Boulevard – Potential widening from four to six lanes would improve operating conditions, but would not eliminate LOS “F” conditions. The County is currently studying improvements to Hazel Avenue.

Sunrise Boulevard – Fair Oaks Boulevard to White Rock Road - Widening of this segment of Sunrise Boulevard is deemed infeasible, as the roadway is six lanes wide, which is the typical County maximum for a thoroughfare.

U.S. 50 FREEWAY INTERCHANGES

Mather Field Road Eastbound Exit – This ramp could be widened to provide two exit lanes. LOS “C” would result in the a.m. peak hour. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the p.m. peak hour.

Mather Field Road Westbound Exit - This ramp could be widened to provide two exit lanes. This improvement would provide LOS “C” conditions during the a.m. peak hour.

Mather Field Road Westbound Slip Entrance – No feasible improvement has been identified for this location.

Zinfandel Drive Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Sunrise Boulevard Eastbound Entrance - No feasible improvement has been identified for this location.

Sunrise Boulevard Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Sunrise Boulevard Westbound Entrance - No feasible improvement has been identified for this location.

Hazel Avenue Eastbound Exit - No feasible improvement has been identified for this location.

Hazel Avenue Eastbound Entrance - No feasible improvement has been identified for this location.

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Hazel Avenue Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Hazel Avenue Westbound Loop Entrance - No feasible improvement has been identified for this location.

Hazel Avenue Westbound Slip Entrance - No feasible improvement has been identified for this location.

MITIGATION MEASURES

EXISTING PLUS APPROVED PROJECT SCENARIO

The following discussion is repeated from the previous analysis of the Approved Project Scenario, for reference purposes.

The impacts of the Approved Project detailed in this section are based upon the analysis methodology described in this report. In accordance with County Transportation Division guidelines, the impact of Transportation Management Plans has not been included in the impact analysis. This provides a conservative analysis. As not all impacts can be mitigated, a Transportation Management Plan shall be developed to reduce the magnitude of impacts. This plan shall include the provision of transit service / shuttles to serve the site, operated by Regional Transit and / or others. The project shall also make a “fair-share” contribution to the implementation of HOV lanes along U.S. 50 between Bradshaw Road and Sunrise Boulevard.

The following roadway improvement mitigation measures have been developed for the Existing Plus Approved Project Scenario.

Intersections

Sunrise Boulevard and Zinfandel Drive - No feasible mitigation has been identified at this location.

Zinfandel Drive and White Rock Road - On the northbound approach, convert the right turn lane to a combined through and right turn lane. Although four lanes are greater than the usual County standard, four lanes are already provided north of the intersection on Zinfandel Drive. This will improve the level of service to “D” during the p.m. peak hour, eliminating the level of service violation.

Zinfandel Drive and U.S. 50 Eastbound Ramps - No feasible mitigation has been identified at this location.

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Mather Field Road and Rockingham Drive – No feasible mitigation has been identified at this location.

Roadway Segments

Sunrise Boulevard – Coloma Road to U.S. 50 - Widening of this segment of Sunrise Boulevard is deemed infeasible, as the roadway is six lanes wide, which is the typical County maximum for a thoroughfare.

U.S. 50 – Bradshaw Road to Mather Field Road – Widening of U.S. 50 to provide HOV lanes would improve the operating conditions in this segment to better than LOS “F” conditions.

Zinfandel Drive – U.S. 50 to White Rock Road - Widening of this segment of Zinfandel Drive is deemed infeasible. The roadway is more than six (through) lanes wide, which is the typical County maximum for a thoroughfare.

EXISTING PLUS PROPOSED PROJECT SCENARIO

The improvements to address existing deficiencies and the mitigation measures for the Existing plus Approved Project scenario are appropriate for implementation. In addition, the following mitigation measure has been developed:

Intersections

Zinfandel Drive and International Drive – On the northbound approach, provide a double left turn lane. This will improve the level of service during the p.m. peak hour to “D.”

EXISTING PLUS ALTERNATIVE 1 SCENARIO

The improvements to address existing deficiencies, the mitigation measures for the Existing plus Approved Project scenario, and the additional mitigation measure for the Existing Plus Proposed Project scenario are appropriate for implementation.

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6. TRANSPORTATION ANALYSIS OF FUTURE SCENARIOS

This section of the report presents the results of the transportation analysis of future conditions, without and with the project.

FUTURE WITHOUT PROJECT SCENARIO ROADWAY SYSTEM

Analysis of operating conditions for the future without project scenario is based upon the future transportation network, which includes several improvements in the study area. Figure 3 illustrates transportation improvements in the project vicinity. These improvements include the following facilities:

- Zinfandel Drive - 4 lanes across the project site from International Drive to Douglas Road.
- Douglas Road - 6 lanes from Zinfandel Drive to Sunrise Boulevard.
- Mather Boulevard - 4 lanes from Zinfandel Drive to Kiefer Boulevard.
- Eagles Nest Road - 4 lanes from Douglas Road to Kiefer Boulevard.
- Kiefer Boulevard - 4 lanes from Routier Road to Sunrise Boulevard.
- Femoyer Street – 2-lane extension from Mather Field to International Drive.
- U.S. 50 interchange at Sunrise Boulevard – The full cloverleaf interchange will be converted to a partial cloverleaf interchange, with new signalized Sunrise Boulevard interchanges with the eastbound and westbound exit ramps.
- Intersection geometric changes and signalization – As illustrated in Figure 24, changes in intersection lane configurations and traffic control would occur at the following locations:
 - Sunrise Boulevard and Jackson Road
 - Sunrise Boulevard and Douglas Road
 - Sunrise Boulevard and Monier Circle
 - Zinfandel Drive and Douglas Road
 - Zinfandel Drive and International Drive
 - Capital Center Drive and International Drive
 - Prospect Park Drive and International Drive

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Figure 24

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- Kilgore Road and International Drive
- Femoyer Street and International Drive

The future transportation plan also includes high-occupancy vehicle (HOV) lanes along U.S. 50, and a light rail extension along the Folsom Corridor to the City of Folsom.

INTERSECTION ANALYSIS

Future Without Project A.M. and P.M. peak hour traffic volumes at key intersections in the Project vicinity are illustrated in Figures 25 and 26, respectively.

Tables 19 and 20 summarize a.m. and p.m. peak hour operating conditions at the study area intersections.

ROADWAY SEGMENT ANALYSIS

Table 21 summarizes the roadway segment analysis, which is based upon daily traffic volume levels. Figure 27 illustrates daily traffic volumes on selected roadways in the study area.

FREEWAY INTERCHANGE ANALYSIS

Tables 22 and 23 summarize a.m. and p.m. peak hour operating conditions at the study area freeway interchanges.

FUTURE CONDITION DEFICIENCIES (NO PROJECT)

Under future conditions (no project), the following intersections, roadway segments and freeway interchanges exceed the Sacramento County level of service standard:

- Intersections
 - Sunrise Boulevard and Douglas Road – p.m. peak hour
 - Sunrise Boulevard and Monier Circle – a.m. and p.m. peak hours
 - Sunrise Boulevard and White Rock Road – a.m. and p.m. peak hours
 - Sunrise Boulevard and Folsom Boulevard – a.m. peak hour
 - Sunrise Boulevard and Zinfandel Drive – a.m. and p.m. peak hours
 - Zinfandel Drive and White Rock Road – a.m. and p.m. peak hours
 - Zinfandel Drive and U.S. 50 Eastbound Ramps – a.m. and p.m. peak hours
 - Zinfandel Drive and U.S. 50 Westbound Ramps – a.m. peak hour
 - Mather Field Road and Rockingham Drive – a.m. and p.m. peak hours
 - Mather Field Road and Folsom Boulevard – p.m. peak hour

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Figure 25

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Figure 26

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TABLE 19
FUTURE WITHOUT PROJECT INTERSECTION OPERATING CONDITIONS
A.M. PEAK HOUR

Intersection	Existing Without Project		Future Without Project	
	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	1.01 V/C	F	0.90 V/C	E
2. Sunrise Boulevard and Douglas Road	0.49 V/C	A	0.96 V/C	E
3. Sunrise Blvd. and Monier Circle / International Dr.	1.7 sec.	A	>180 sec.	F
4. Sunrise Boulevard and White Rock Road	0.71 V/C	C	1.25 V/C	F
5. Sunrise Boulevard and Folsom Boulevard	0.83 V/C	D	1.11 V/C	F
6. Sunrise Boulevard and Zinfandel Drive	1.21 V/C	F	1.39 V/C	F
7. Zinfandel Drive and Douglas Road	-	-	0.96 V/C	E
11. Zinfandel Drive and International Drive	5.3 sec.	B	0.63 V/C	B
13. Zinfandel Drive and White Rock Road	0.64 V/C	B	1.45 V/C	F
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.01 V/C	F	1.56 V/C	F
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.50 V/C	A	1.02 V/C	F
16. Mather Field Road and International Drive	0.31 V/C	A	0.52 V/C	A
17. Mather Field Road and Rockingham Drive	0.74 V/C	C	1.02 V/C	F
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.61 V/C	B	0.89 V/C	D
19. Mather Field Road and U.S. 50 Westbound Ramps	0.44 V/C	A	0.57 V/C	A
20. Mather Field Road and Folsom Boulevard	0.60 V/C	A	0.80 V/C	C
21. Von Karman Street and Mather Boulevard	1.3 sec.	A	1.6 sec.	A
22. Whitehead Street and Mather Boulevard	1.2 sec	A	2.2 sec.	A
25. Von Karman Street and Norden Avenue	1.3 sec.	A	1.4 sec.	A
26. Whitehead Street and Norden Avenue	1.2 sec.	A	1.2 sec.	A
28. Capital Center Drive and International Drive	0.6 sec.	A	0.36 V/C	A
29. Prospect Park Drive and International Drive	1.1 sec.	A	0.31 V/C	A
30. Kilgore Road and International Drive	2.2 sec.	A	0.30 V/C	A

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TABLE 19 FUTURE WITHOUT PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR				
Intersection	Existing Without Project		Future Without Project	
	Criteria ¹	LOS	Criteria ¹	LOS
31. Femoyer Street and International Drive	-	-	0.89 V/C	D
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.49 V/C	A	0.95 V/C	E
33. Hazel Avenue and U.S. 50 Westbound Ramps	0.93 V/C	E	1.30 V/C	F
34. Kilgore Road and White Rock Road	0.36 V/C	A	0.86 V/C	D
35. Prospect Park Drive and White Rock Road	0.33 V/C	A	0.78 V/C	C
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)				

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TABLE 20 FUTURE WITHOUT PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR				
Intersection	Existing Without Project		Future Without Project	
	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	0.92 V/C	E	0.82 V/C	D
2. Sunrise Boulevard and Douglas Road	0.59 V/C	A	1.11 V/C	F
3. Sunrise Blvd. and Monier Circle / International Dr.	3.3 sec.	A	>180 sec.	F
4. Sunrise Boulevard and White Rock Road	0.72 V/C	C	1.25 V/C	F
5. Sunrise Boulevard and Folsom Boulevard	0.98 V/C	E	0.96 V/C	E
6. Sunrise Boulevard and Zinfandel Drive	1.10 V/C	F	1.44 V/C	F
7. Zinfandel Drive and Douglas Road	-	-	0.87 V/C	D
11. Zinfandel Drive and International Drive	3.8 sec.	A	0.94 V/C	E
13. Zinfandel Drive and White Rock Road	0.98 V/C	E	1.49 V/C	F
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.08 V/C	F	1.34 V/C	F
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.55 V/C	A	0.79 V/C	C
16. Mather Field Road and International Drive	0.39 V/C	A	0.46 V/C	A
17. Mather Field Road and Rockingham Drive	0.79 V/C	C	1.46 V/C	F
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.57 V/C	A	0.77 V/C	C
19. Mather Field Road and U.S. 50 Westbound Ramps	0.56 V/C	A	0.50 V/C	A
20. Mather Field Road and Folsom Boulevard	1.07 V/C	F	1.19 V/C	F
21. Von Karman Street and Mather Boulevard	1.3 sec.	A	3.4 sec.	A
22. Whitehead Street and Mather Boulevard	1.4 sec.	A	2.2 sec.	A
25. Von Karman Street and Norden Avenue	1.2 sec.	A	2.9 sec.	A
26. Whitehead Street and Norden Avenue	1.3 sec.	A	1.6 sec.	A
28. Capital Center Drive and International Drive	0.7 sec.	A	0.61 V/C	B
29. Prospect Park Drive and International Drive	1.2 sec.	A	0.48 V/C	A
30. Kilgore Road and International Drive	3.9 sec.	A	0.41 V/C	A

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TABLE 20 FUTURE WITHOUT PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR				
Intersection	Existing Without Project		Future Without Project	
	Criteria ¹	LOS	Criteria ¹	LOS
31. Femoyer Street and International Drive	-	-	0.91 V/C	E
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.68 V/C	B	0.76 V/C	C
33. Hazel Avenue and U.S. 50 Westbound Ramps	0.98 V/C	E	1.35 V/C	F
34. Kilgore Road and White Rock Road	0.64 V/C	B	1.09 V/C	F
35. Prospect Park Drive and White Rock Road	0.44 V/C	A	0.67 V/C	B
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)				

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TABLE 21 FUTURE WITHOUT PROJECT ROADWAY SEGMENT LEVEL OF SERVICE										
Roadway Name	Segment		Existing				Future Without Project			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Douglas Road	Zinfandel Drive	Sunrise Boulevard	2,130	2	0.12	A	54,510	6	1.01	F
Douglas Road	East of Sunrise Boulevard		2,240	2	0.10	A	37,950	4	1.05	F
Douglas Road	West of Grant Line Road		2,240	2	0.10	A	6,120	4	0.17	A
Eagles Nest Road	Douglas Road	Kiefer Boulevard	500	2	0.03	A	13,590	4	0.38	A
Eagles Nest Road	Kiefer Boulevard	Jackson Road	400	2	0.02	A	10,060	4	0.28	A
Eagles Nest Road	Jackson Road	Florin Road	310	2	0.01	A	8,080	2	0.35	D
East / West Couplet	West of North / South Couplet		1,030	4	0.03	A	3,860	4	0.13	A
East / West Couplet	East of North / South Couplet		1,330	4	0.04	A	4,290	4	0.14	A
Excelsior Road	Jackson Road	Kiefer Boulevard	770	2	0.03	A	18,760	4	0.52	A
Femoyer Street	Airpark Drive	International Drive	-	-	-	-	16,090	2	0.80	D
Folsom Boulevard	Bradshaw Road	Routier Road	27,610	4	0.77	C	36,070	4	1.00	F
Folsom Boulevard	Routier Road	Mather Field Road	29,020	4	0.81	D	39,580	4	1.10	F
Folsom Boulevard	Mather Field Road	Coloma Road	28,030	4	0.78	C	37,080	6	0.69	B
Folsom Boulevard	Coloma Road	Zinfandel Drive	18,990	4	0.53	A	23,000	4	0.64	B
Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	20,570	4	0.57	A	26,890	4	0.75	C
Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	15,040	2	0.84	D	26,320	4	0.73	C

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TABLE 21 FUTURE WITHOUT PROJECT ROADWAY SEGMENT LEVEL OF SERVICE										
Roadway Name	Segment		Existing				Future Without Project			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Folsom Boulevard	Hazel Avenue	U.S. 50	13,840	2	0.77	C	32,220	4	0.90	D
Hazel Avenue	Winding Way	Gold Country Blvd.	54,940	4	1.53	F	78,820	6	1.46	F
Hazel Avenue	Gold Country Blvd.	U.S. 50	43,220	6	0.80	D	70,120	6	1.30	F
Hazel Avenue	U.S. 50	Folsom Boulevard	14,660	4	0.41	A	34,170	4	0.95	E
International Drive	Mather Field Road	White Rock Road	10,300	4	0.29	A	35,000	6	0.65	B
International Drive	White Rock Road	Femoyer Street	7,530	4	0.21	A	34,200	6	0.63	B
International Drive	Femoyer Street	Capital Center Dr.	7,530	4	0.21	A	23,160	6	0.43	A
International Drive	Capital Center Dr.	Zinfandel Drive	5,510	4	0.15	A	19,230	6	0.36	A
International Drive	Zinfandel Drive	Prospect Park Dr.	4,900	4	0.14	A	11,300	6	0.21	A
International Drive	Prospect Park Dr.	Kilgore Road	2,420	4	0.07	A	4,510	6	0.08	A
Jackson Road	Bradshaw Road	Excelsior Road	10,600	2	0.59	A	19,720	4	0.55	A
Jackson Road	Excelsior Road	Eagles Nest Road	7,700	2	0.34	C	15,430	4	0.43	A
Jackson Road	Eagles Nest Road	Sunrise Boulevard	7,700	2	0.34	C	17,090	4	0.47	A
Jackson Road	Sunrise Boulevard	Grant Line Road	11,700	2	0.51	D	20,010	4	0.56	A
Kilgore Road	Folsom Boulevard	White Rock Road	9,870	2	0.55	A	16,280	2	0.90	E
Kilgore Road	White Rock Road	International Drive	6,600	4	0.18	A	12,320	4	0.34	A

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TABLE 21 FUTURE WITHOUT PROJECT ROADWAY SEGMENT LEVEL OF SERVICE										
Roadway Name	Segment		Existing				Future Without Project			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Mather Field Road	Folsom Boulevard	U.S. 50	19,610	4	0.54	A	20,970	4	0.58	A
Mather Field Road	U.S. 50	Rockingham Drive	30,250	6	0.50	A	57,580	6	0.96	E
Mather Field Road	Rockingham Drive	International Drive	20,670	6	0.38	A	46,400	6	0.86	D
Mather Field Road	South of International Drive		6,900	4	0.19	A	12,550	4	0.35	A
Mather Boulevard	Macready Avenue	East / West Couplet	1,030	4	0.03	A	3,980	4	0.13	A
Mather Boulevard	Femoyer Street	Douglas Road	2,160	2	0.09	A	19,870	4	0.43	D
Mather Boulevard	Kiefer Boulevard	Zinfandel Drive	1,080	2	0.06	A	49,140	4	1.37	F
North / South Cplt.	North of East / West Couplet		6,900	4	0.23	A	7,800	4	0.26	A
Prospect Park Dr.	White Rock Road	International Drive	5,290	2	0.29	A	11,950	2	0.66	B
Sunrise Boulevard	Fair Oaks Blvd.	Coloma Road	95,440	6	1.77	F	120,650	6	2.23	F
Sunrise Boulevard	Coloma Road	Zinfandel Drive	86,910	6	1.61	F	108,630	6	2.01	F
Sunrise Boulevard	Zinfandel Drive	U.S. 50	79,020	6	1.46	F	100,200	6	1.86	F
Sunrise Boulevard	U.S. 50	Folsom Boulevard	69,680	6	1.29	F	99,020	6	1.83	F
Sunrise Boulevard	Folsom Boulevard	White Rock Road	56,640	6	1.05	F	97,070	6	1.80	F
Sunrise Boulevard	White Rock Road	International Drive	19,490	4	0.54	A	59,100	6	1.09	F
Sunrise Boulevard	International Drive	Douglas Road	19,310	4	0.54	A	59,750	6	1.11	F

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TABLE 21 FUTURE WITHOUT PROJECT ROADWAY SEGMENT LEVEL OF SERVICE										
Roadway Name	Segment		Existing				Future Without Project			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Sunrise Boulevard	Douglas Road	Kiefer Boulevard	11,400	2	0.50	D	42,030	6	0.78	C
Sunrise Boulevard	Kiefer Boulevard	Jackson Road	11,280	2	0.49	D	29,400	6	0.54	A
U.S. 50	Bradshaw Road	Mather Field Road	157,000	8	0.98	E	204,460	8	1.28	F
U.S. 50	Mather Field Road	Zinfandel Drive	144,000	8	0.90	D	184,480	8	1.15	F
U.S. 50	Zinfandel Drive	Sunrise Boulevard	127,000	8	0.79	D	178,470	8	1.12	F
U.S. 50	Sunrise Boulevard	Hazel Avenue	98,000	6	0.82	D	149,790	6	1.25	F
White Rock Road	International Drive	Rockingham Drive	13,400	2	0.74	C	15,420	2	0.86	D
White Rock Road	Rockingham Drive	Capital Center Dr.	13,400	2	0.74	C	13,910	2	0.77	C
White Rock Road	Capital Center Dr.	Zinfandel Drive	13,400	2	0.74	C	17,020	2	0.95	E
White Rock Road	Zinfandel Drive	Prospect Park Dr.	18,220	6	0.34	A	34,210	6	0.63	B
White Rock Road	Prospect Park Dr.	Kilgore Road	18,220	6	0.34	A	35,940	6	0.67	B
White Rock Road	Kilgore Road	Sunrise Boulevard	22,080	5	0.61	B	49,090	5	1.36	F
White Rock Road	East of Sunrise Boulevard		8,200	2	0.46	A	41,050	4	1.14	F
White Rock Road	West of Grant Line Road		3,030	2	0.13	B	7,690	4	0.21	A
Zinfandel Drive	Sunrise Boulevard	Folsom Boulevard	14,110	4	0.39	A	15,880	4	0.44	A
Zinfandel Drive	Folsom Boulevard	U.S. 50	23,400	4	0.65	B	32,310	4	0.90	D

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TABLE 21 FUTURE WITHOUT PROJECT ROADWAY SEGMENT LEVEL OF SERVICE										
Roadway Name	Segment		Existing				Future Without Project			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Zinfandel Drive	U.S. 50	White Rock Road	40,570	6	0.75	C	82,700	6	1.53	F
Zinfandel Drive	White Rock Road	International Drive	12,200	6	0.23	A	41,080	6	0.76	C
Zinfandel Drive	International Drive	Douglas Road	-	-	-	-	29,690	4	0.74	C

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Figure 27

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TABLE 22
A.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS
FUTURE WITHOUT PROJECT CONDITIONS

U.S. 50 Interchange	Ramp	Existing Without Project		Future Without Project	
		Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	34.18	F	46.30	F
	Eastbound Loop Entrance	26.05	C	31.81	D
	Eastbound Slip Entrance	26.96	C	32.68	D
	Westbound Exit	34.82	F	43.83	F
	Westbound Loop Entrance	32.67	D	38.04	F
	Westbound Slip Entrance	33.53	F	39.65	F
Zinfandel Drive	Eastbound Exit	27.85	C	35.80	F
	Eastbound Loop Entrance	18.03	B	22.33	C
	Eastbound Slip Entrance	18.96	B	24.45	C
	Westbound Exit	38.80	F	53.01	F
	Westbound Loop Entrance	32.57	D	33.47	F
	Westbound Slip Entrance	33.96	D	41.09	F
Sunrise Boulevard	Eastbound Exit	22.79	C	31.56	D
	Eastbound Entrance	19.33	B	31.28	D
	Westbound Exit	35.14	F	41.39	F
	Westbound Entrance	- ²	F	- ²	F
Hazel Avenue	Eastbound Exit	- ²	C	- ²	E
	Eastbound Entrance	29.80	D	41.35	F
	Westbound Exit	43.99	F	66.69	F
	Westbound Loop Entrance	46.08	F	65.40	F
	Westbound Slip Entrance	- ²	F	- ²	E

1. Passenger cars per mile per lane.

2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.

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TABLE 23
P.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS
FUTURE WITHOUT PROJECT CONDITIONS

U.S. 50 Interchange	Ramp	Existing Without Project		Future Without Project	
		Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	37.15	F	45.17	F
	Eastbound Loop Entrance	31.58	D	36.46	F
	Eastbound Slip Entrance	32.47	D	35.31	F
	Westbound Exit	17.99	B	25.06	C
	Westbound Loop Entrance	19.57	B	25.25	C
	Westbound Slip Entrance	21.04	C	28.54	D
Zinfandel Drive	Eastbound Exit	26.21	C	31.59	F
	Eastbound Loop Entrance	28.44	D	33.46	D
	Eastbound Slip Entrance	28.99	D	31.10	F
	Westbound Exit	10.94	B	24.74	C
	Westbound Loop Entrance	18.49	B	22.53	C
	Westbound Slip Entrance	19.42	B	24.84	C
Sunrise Boulevard	Eastbound Exit	35.45	E	49.20	F
	Eastbound Entrance	35.19	F	47.15	F
	Westbound Exit	7.71	A	20.89	C
	Westbound Entrance	- ²	F	- ²	F
Hazel Avenue	Eastbound Exit	- ²	F	- ²	F
	Eastbound Entrance	46.37	F	70.72	F
	Westbound Exit	13.52	B	31.61	D
	Westbound Loop Entrance	9.11	A	23.85	C
	Westbound Slip Entrance	- ²	C	- ²	C

1. Passenger cars per mile per lane.

2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.

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- Hazel Avenue and U.S. 50 Westbound Ramps – a.m. and p.m. peak hours
- Kilgore Road and White Rock Road – p.m. peak hour
- Roadway Segments
 - Douglas Road – Zinfandel Drive to east of Sunrise Boulevard
 - Folsom Boulevard – Bradshaw Road to Mather Field Road
 - Hazel Avenue – Winding Way to U.S. 50
 - Mather Boulevard – Kiefer Boulevard to Zinfandel Drive
 - Sunrise Boulevard – Fair Oaks Boulevard to Douglas Road
 - U.S. 50 – Bradshaw Road to Hazel Avenue
 - White Rock Road – Kilgore Road to east of Sunrise Boulevard
 - Zinfandel Drive – U.S. 50 to White Rock Road
- U.S. 50 Freeway Interchanges
 - Mather Field Road Eastbound Exit – a.m. and p.m. peak hours
 - Mather Field Road Eastbound Loop Entrance - p.m. peak hour
 - Mather Field Road Eastbound Slip Entrance - p.m. peak hour
 - Mather Field Road Westbound Exit - a.m. peak hour
 - Mather Field Road Westbound Loop Entrance - a.m. peak hour
 - Mather Field Road Westbound Slip Entrance - a.m. peak hour
 - Zinfandel Drive Eastbound Exit – a.m. and p.m. peak hours
 - Zinfandel Drive Eastbound Slip Entrance - p.m. peak hour
 - Zinfandel Drive Westbound Exit - a.m. peak hour
 - Zinfandel Drive Westbound Loop Entrance - a.m. peak hour
 - Zinfandel Drive Westbound Slip Entrance - a.m. peak hour
 - Sunrise Boulevard Eastbound Exit - p.m. peak hour
 - Sunrise Boulevard Eastbound Entrance - p.m. peak hour
 - Sunrise Boulevard Westbound Exit - a.m. peak hour
 - Sunrise Boulevard Westbound Entrance - a.m. and p.m. peak hours
 - Hazel Avenue Eastbound Exit – p.m. peak hour
 - Hazel Avenue Eastbound Entrance – a.m. and p.m. peak hours
 - Hazel Avenue Westbound Exit – a.m. peak hour
 - Hazel Avenue Westbound Loop Entrance – a.m. peak hour

FUTURE WITH PROJECT SCENARIOS ROADWAY SYSTEM

Analysis of operating conditions for the future with project scenarios is based upon the future without project transportation networks and full development of the project's transportation

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system. In addition, the following off-site transportation system improvements have been assumed:

- International Drive – 4-lane extension from Kilgore Road to Sunrise Boulevard
- Zinfandel Drive - 6 lanes from the project site to Douglas Road.
- Mather Boulevard – Closed to through traffic in accordance with the transportation plans of each alternative.
- Intersection geometric changes and signalization – As illustrated in Figures 28, 29, and 30, changes in intersection lane configurations and traffic control would occur at the following locations:
 - Sunrise Boulevard and International Drive / Monier Circle
 - Zinfandel Drive and International Drive
 - Prospect Park Drive and International Drive
 - Kilgore Road and International Drive

INTERSECTION ANALYSIS

Future With Approved Project, Future With Proposed Project, and Future With Alternative 1 A.M. and P.M. peak hour traffic volumes at key intersections in the Project vicinity are illustrated in Figures 31 through 36.

Tables 24 and 25 summarize a.m. and p.m. peak hour operating conditions at the study area intersections.

ROADWAY SEGMENT ANALYSIS

Table 26 summarizes the roadway segment analysis, which is based upon daily traffic volume levels. Figures 37, 38, and 39 illustrate daily traffic volumes on selected roadways in the study area.

FREEWAY INTERCHANGE ANALYSIS

Tables 27 and 28 summarize a.m. and p.m. peak hour operating conditions at the study area freeway interchanges.

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Figure 28

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Figure 29

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Figure 30

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Figure 31

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Figure 32

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Figure 33

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Figure 34

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Figure 35

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Figure 36

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TABLE 24
FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS
A.M. PEAK HOUR

Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	0.90 V/C	E	0.89 V/C	D	0.87 V/C	D	0.85 V/C	D
2. Sunrise Boulevard and Douglas Road	0.96 V/C	E	0.92 V/C	E	0.85 V/C	D	0.84 V/C	D
3. Sunrise Blvd. and Monier Circle / International Dr.	>180 sec.	F	0.87 V/C	D	0.76 V/C	C	0.77 V/C	D
4. Sunrise Boulevard and White Rock Road	1.25 V/C	F	1.02 V/C	F	1.06 V/C	F	1.06 V/C	F
5. Sunrise Boulevard and Folsom Boulevard	1.11 V/C	F	1.11 V/C	F	1.08 V/C	F	1.09 V/C	F
6. Sunrise Boulevard and Zinfandel Drive	1.39 V/C	F	1.43 V/C	F	1.45 V/C	F	1.45 V/C	F
7. Zinfandel Drive and Douglas Road	0.96 V/C	E	0.90 V/C	D	0.85 V/C	D	0.85 V/C	D
8. Zinfandel Drive and Airpark Drive	-	-	0.69 V/C	B	-	-	-	-
9. Zinfandel Drive and C Street	-	-	0.65 V/C	B	0.42 V/C	A	0.43 V/C	A
10. Zinfandel Drive and B Street (south)	-	-	0.62 V/C	B	0.66 V/C	B	0.80 V/C	C
11. Zinfandel Drive and International Drive	0.63 V/C	B	0.71 V/C	C	0.73 V/C	C	0.70 V/C	C
12. Zinfandel Drive and B Street (north)	-	-	0.48 V/C	A	0.45 V/C	A	0.45 V/C	A
13. Zinfandel Drive and White Rock Road	1.45 V/C	F	1.58 V/C	F	1.45 V/C	F	1.48 V/C	F
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.56 V/C	F	1.75 V/C	F	1.72 V/C	F	1.76 V/C	F

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TABLE 24 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
15. Zinfandel Drive and U.S. 50 Westbound Ramps	1.02 V/C	F	1.04 V/C	F	0.95 V/C	E	0.98 V/C	E
16. Mather Field Road and International Drive	0.52 V/C	A	0.53 V/C	A	0.52 V/C	A	0.50 V/C	A
17. Mather Field Road and Rockingham Drive	1.02 V/C	F	1.07 V/C	F	1.08 V/C	F	0.98 V/C	E
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.89 V/C	D	0.95 V/C	E	0.91 V/C	E	0.90 V/C	D
19. Mather Field Road and U.S. 50 Westbound Ramps	0.57 V/C	A	0.53 V/C	A	0.55 V/C	A	0.56 V/C	A
20. Mather Field Road and Folsom Boulevard	0.80 V/C	C	0.80 V/C	C	0.80 V/C	C	0.81 V/C	D
21. Von Karman Street and Mather Boulevard	1.6 sec.	A	1.6 sec.	A	1.5 sec.	A	1.5 sec.	A
22. Whitehead Street and Mather Boulevard	2.2 sec.	A	1.6 sec.	A	1.5 sec.	A	1.4 sec.	A
23. C Street and Airpark Drive	-	-	0.65 V/C	B	-	-	-	-
24. Zinfandel Drive and A Street	-	-	0.56 V/C	A	0.62 V/C	B	0.64 V/C	B
25. Von Karman Street and Norden Avenue	1.4 sec.	A	5.0 sec.	B	3.4 sec.	A	4.6 sec.	A
26. Whitehead Street and Norden Avenue	1.2 sec.	A	2.9 sec.	A	2.3 sec.	A	2.8 sec.	A
27. A Street and Airpark Drive	-	-	4.6 sec.	A	0.63 V/C	B	0.60 V/C	A
28. Capital Center Drive and International Drive	0.36 V/C	A	0.44 V/C	A	0.47 V/C	A	0.50 V/C	A

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TABLE 24 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
29. Prospect Park Drive and International Drive	0.31 V/C	A	0.41 V/C	A	0.45 V/C	A	0.47 V/C	A
30. Kilgore Road and International Drive	0.30 V/C	A	0.52 V/C	A	0.59 V/C	A	0.63 V/C	B
31. Femoyer Street and International Drive	0.89 V/C	D	0.86 V/C	D	0.73 V/C	C	0.70 V/C	B
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.95 V/C	E	0.97 V/C	E	0.93 V/C	E	0.94 V/C	E
33. Hazel Avenue and U.S. 50 Westbound Ramps	1.30 V/C	F	1.30 V/C	F	1.27 V/C	F	1.30 V/C	F
34. Kilgore Road and White Rock Road	0.86 V/C	D	0.82 V/C	D	0.85 V/C	D	0.90 V/C	D
35. Prospect Park Drive and White Rock Road	0.78 V/C	C	0.68 V/C	B	0.65 V/C	B	0.66 V/C	B
36. Prospect Park Drive and B Street	-	-	0.22 V/C	A	0.30 V/C	A	0.30 V/C	A
37. Kilgore Drive and B Street	-	-	0.42 V/C	A	0.51 V/C	A	0.53 V/C	A
38. B Street and Airpark Drive	-	-	1.5 sec.	A	-	-	-	-
40. C Street and A Street (Mather Boulevard)	-	-	-	-	0.30 V/C	A	0.40 V/C	A
41. Zinfandel Drive and Mather Boulevard	-	-	-	-	0.72 V/C	C	-	-
42. A Street and Mather Boulevard	-	-	-	-	-	-	0.79 V/C	C

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TABLE 24 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS A.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)								

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TABLE 25 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Sunrise Boulevard and Jackson Road	0.82 V/C	D	0.82 V/C	D	0.79 V/C	C	0.80 V/C	D
2. Sunrise Boulevard and Douglas Road	1.11 V/C	F	1.02 V/C	F	1.04 V/C	F	1.02 V/C	F
3. Sunrise Blvd. and Monier Circle / International Dr.	>180 sec.	F	0.99 V/C	E	0.99 V/C	E	0.98 V/C	E
4. Sunrise Boulevard and White Rock Road	1.25 V/C	F	1.25 V/C	F	1.18 V/C	F	1.18 V/C	F
5. Sunrise Boulevard and Folsom Boulevard	0.96 V/C	E	0.95 V/C	E	0.97 V/C	E	0.96 V/C	E
6. Sunrise Boulevard and Zinfandel Drive	1.44 V/C	F	1.46 V/C	F	1.45 V/C	F	1.45 V/C	F
7. Zinfandel Drive and Douglas Road	0.87 V/C	D	1.10 V/C	F	1.01 V/C	F	1.00 V/C	E
8. Zinfandel Drive and Airpark Drive	-	-	0.95 V/C	E	-	-	-	-
9. Zinfandel Drive and C Street	-	-	0.97 V/C	E	0.65 V/C	B	0.63 V/C	B
10. Zinfandel Drive and B Street (south)	-	-	0.94 V/C	E	0.93 V/C	E	0.94 V/C	E
11. Zinfandel Drive and International Drive	0.94 V/C	E	0.83 V/C	D	0.82 V/C	D	0.81 V/C	D
12. Zinfandel Drive and B Street (north)	-	-	0.67 V/C	B	0.63 V/C	B	0.64 V/C	B
13. Zinfandel Drive and White Rock Road	1.49 V/C	F	1.61 V/C	F	1.52 V/C	F	1.54 V/C	F

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TABLE 25 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
14. Zinfandel Drive and U.S. 50 Eastbound Ramps	1.34 V/C	F	1.44 V/C	F	1.40 V/C	F	1.41 V/C	F
15. Zinfandel Drive and U.S. 50 Westbound Ramps	0.79 V/C	C	0.89 V/C	D	0.84 V/C	D	0.84 V/C	D
16. Mather Field Road and International Drive	0.46 V/C	A	0.51 V/C	A	0.49 V/C	A	0.48 V/C	A
17. Mather Field Road and Rockingham Drive	1.46 V/C	F	1.52 V/C	F	1.50 V/C	F	1.47 V/C	F
18. Mather Field Road and U.S. 50 Eastbound Ramps	0.77 V/C	C	0.86 V/C	D	0.95 V/C	E	0.94 V/C	E
19. Mather Field Road and U.S. 50 Westbound Ramps	0.50 V/C	A	0.47 V/C	A	0.47 V/C	A	0.45 V/C	A
20. Mather Field Road and Folsom Boulevard	1.19 V/C	F	1.17 V/C	F	1.21 V/C	F	1.22 V/C	F
21. Von Karman Street and Mather Boulevard	3.4 sec.	A	4.6 sec.	A	4.3 sec.	A	4.8 sec.	A
22. Whitehead Street and Mather Boulevard	2.2 sec.	A	6.4 sec.	B	5.8 sec.	B	6.8 sec.	B
23. C Street and Airpark Drive	-	-	0.70 V/C	C	-	-	-	-
24. Zinfandel Drive and A Street	-	-	0.68 V/C	B	0.85 V/C	D	0.84 V/C	D
25. Von Karman Street and Norden Avenue	2.9 sec.	A	1.9 sec.	A	1.9 sec.	A	1.8 sec.	A
26. Whitehead Street and Norden Avenue	1.6 sec.	A	2.1 sec.	A	2.0 sec.	A	2.0 sec.	A
27. A Street and Airpark Drive	-	-	5.8 sec	B	0.66 V/C	B	0.62 V/C	B

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TABLE 25 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
28. Capital Center Drive and International Drive	0.61 V/C	B	0.69 V/C	B	0.69 V/C	B	0.71 V/C	C
29. Prospect Park Drive and International Drive	0.48 V/C	A	0.49 V/C	A	0.48 V/C	A	0.50 V/C	A
30. Kilgore Road and International Drive	0.41 V/C	A	0.87 V/C	D	0.89 V/C	D	0.86 V/C	D
31. Femoyer Street and International Drive	0.91 V/C	E	0.89 V/C	D	0.87 V/C	D	0.85 V/C	D
32. Hazel Avenue and U.S. 50 Eastbound Ramps	0.76 V/C	C	0.80 V/C	D	0.71 V/C	C	0.71 V/C	C
33. Hazel Avenue and U.S. 50 Westbound Ramps	1.35 V/C	F	1.34 V/C	F	1.32 V/C	F	1.33 V/C	F
34. Kilgore Road and White Rock Road	1.09 V/C	F	0.91 V/C	E	0.95 V/C	E	0.95 V/C	E
35. Prospect Park Drive and White Rock Road	0.67 V/C	B	0.56 V/C	A	0.58 V/C	A	0.59 V/C	A
36. Prospect Park Drive and B Street	-	-	0.20 V/C	A	0.26 V/C	A	0.27 V/C	A
37. Kilgore Drive and B Street	-	-	0.65 V/C	B	0.78 V/C	C	0.68 V/C	B
38. B Street and Airpark Drive	-	-	1.6 sec.	A	-	-	-	-
40. C Street and A Street (Mather Boulevard)	-	-	-	-	0.30 V/C	A	0.51 V/C	A
41. Zinfandel Drive and Mather Boulevard	-	-	-	-	0.97 V/C	E	-	-
42. A Street and Mather Boulevard	-	-	-	-	-	-	0.81 V/C	D

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TABLE 25 FUTURE PLUS PROJECT INTERSECTION OPERATING CONDITIONS P.M. PEAK HOUR								
Intersection	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS	Criteria ¹	LOS
1. Signalized intersection - Volume/Capacity Ratio (V/C) Unsignalized intersection - Delay Per Vehicle (Seconds)								

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TABLE 26 FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
A Street	Airpark Drive	Zinfandel Drive	-	-	-	-	9,240	2	0.51	A	15,030	2	0.84	D	16,220	2	0.90	E
A Street	Airpark Drive	C Street	-	-	-	-	-	-	-	-	14,910	4	0.41	A	-	-	-	-
A Street	C Street	Zinfandel Drive	-	-	-	-	-	-	-	-	13,520	4	0.38	A	-	-	-	-
A Street	Airpark Drive	Mather Blvd.	-	-	-	-	-	-	-	-	-	-	-	-	14,620	2	0.73	C
B Street	Zinfandel Drive	Prospect Park Dr	-	-	-	-	5,380	4	0.15	A	4,960	2	0.28	A	5,150	2	0.29	A
B Street	Prospect Park Dr	Kilgore Road	-	-	-	-	2,360	4	0.07	A	3,270	2	0.18	A	3,440	2	0.19	A
B Street	Kilgore Road	Zinfandel Drive	-	-	-	-	10,380	4	0.29	A	8,370	2	0.47	A	8,420	2	0.47	A
B Street	Airpark Drive	Zinfandel Drive	-	-	-	-	4,750	2	0.26	A	-	-	-	-	-	-	-	-
C Street	Mather Blvd	Airpark Drive	-	-	-	-	7,030	4	0.20	A	-	-	-	-	-	-	-	-
C Street	Airpark Drive	Zinfandel Drive	-	-	-	-	5,180	4	0.14	A	-	-	-	-	-	-	-	-
C Street	A St / Mather Bl	Zinfandel Drive	-	-	-	-	-	-	-	-	6,990	2	0.39	A	6,460	2	0.36	A
Airpark Drive	Femoyer Street	A Street	-	-	-	-	23,210	2	1.16	F	18,940	2	0.95	E	18,340	2	0.92	E
Airpark Drive	A Street	C Street	-	-	-	-	20,550	4	0.57	A	-	-	-	-	-	-	-	-
Airpark Drive	C Street	B Street	-	-	-	-	25,690	4	0.71	C	-	-	-	-	-	-	-	-
Airpark Drive	B Street	Zinfandel Drive	-	-	-	-	21,400	4	0.59	A	-	-	-	-	-	-	-	-

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TABLE 26
FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Douglas Road	Zinfandel Drive	Sunrise Blvd	54,510	6	1.01	F	52,830	6	0.98	E	49,670	6	0.92	E	49,630	6	0.92	E
Douglas Road	East of Sunrise Boulevard		37,950	4	1.05	F	38,010	4	1.06	F	37,630	4	1.05	F	37,620	4	1.05	F
Douglas Road	West of Grant Line Road		6,120	4	0.17	A	6,170	4	0.17	A	6,140	4	0.17	A	6,170	4	0.17	A
Eagles Nest Road	Douglas Road	Kiefer Blvd.	13,590	4	0.38	A	15,210	4	0.42	A	15,360	4	0.43	A	15,370	4	0.43	A
Eagles Nest Road	Kiefer Blvd.	Jackson Road	10,060	4	0.28	A	10,980	4	0.31	A	11,060	4	0.31	A	11,150	4	0.31	A
Eagles Nest Road	Jackson Road	Florin Road	8,080	2	0.35	D	8,680	2	0.38	D	8,620	2	0.38	D	8,520	2	0.37	D
East /West Couplet	West of North / South Couplet		3,860	4	0.13	A	7,020	4	0.23	A	6,460	4	0.22	A	6,650	4	0.22	A
East /West Couplet	East of North / South Couplet		4,290	4	0.14	A	7,130	4	0.24	A	6,310	4	0.21	A	6,650	4	0.22	A
Excelsior Road	Jackson Road	Kiefer Blvd.	18,760	4	0.52	A	20,150	4	0.56	A	20,330	4	0.56	A	20,140	4	0.56	A
Femoyer Street	Airpark Drive	International Dr.	16,090	2	0.80	D	19,720	2	0.99	E	15,900	2	0.80	C	14,280	2	0.71	C
Folsom Boulevard	Bradshaw Road	Routier Road	36,070	4	1.00	F	37,450	4	1.04	F	37,470	4	1.04	F	37,400	4	1.04	F
Folsom Boulevard	Routier Road	Mather Field Rd	39,580	4	1.10	F	41,590	4	1.16	F	41,520	4	1.15	F	41,570	4	1.15	F
Folsom Boulevard	Mather Field Rd	Coloma Road	37,080	6	0.69	B	36,440	6	0.67	B	36,990	6	0.69	B	36,990	6	0.69	B
Folsom Boulevard	Coloma Road	Zinfandel Drive	23,000	4	0.64	B	22,380	4	0.62	B	22,480	4	0.62	B	22,440	4	0.62	B
Folsom Boulevard	Zinfandel Drive	Sunrise Blvd.	26,890	4	0.75	C	26,760	4	0.74	C	27,050	4	0.75	C	27,120	4	0.75	C

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TABLE 26
FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Folsom Boulevard	Sunrise Blvd	Hazel Avenue	26,320	4	0.73	C	26,430	4	0.73	C	26,100	4	0.73	C	26,300	4	0.73	C
Folsom Boulevard	Hazel Avenue	U.S. 50	32,220	4	0.90	D	32,400	4	0.90	D	31,850	4	0.88	D	32,130	4	0.89	D
Hazel Avenue	Winding Way	Gold Cntry Blvd	78,820	6	1.46	F	79,730	6	1.48	F	79,390	6	1.47	F	79,390	6	1.47	F
Hazel Avenue	Gold Cntry Blvd	U.S. 50	70,120	6	1.30	F	70,510	6	1.31	F	70,300	6	1.30	F	70,310	6	1.30	F
Hazel Avenue	U.S. 50	Folsom Blvd	34,170	4	0.95	E	33,810	4	0.94	E	33,030	4	0.92	E	33,400	4	0.93	E
International Drive	Mather Field Rd	White Rock Rd	35,000	6	0.65	B	45,430	6	0.84	D	45,430	6	0.84	D	45,170	6	0.84	D
International Drive	White Rock Rd	Femoyer Street	34,200	6	0.63	B	45,450	6	0.84	D	45,390	6	0.84	D	45,190	6	0.84	D
International Drive	Femoyer Street	Capital Ctr Dr.	23,160	6	0.43	A	27,940	6	0.52	A	32,430	6	0.60	B	33,900	6	0.63	B
International Drive	Capital Ctr Dr.	Zinfandel Drive	19,230	6	0.36	A	29,090	6	0.54	A	32,430	6	0.60	B	34,030	6	0.63	B
International Drive	Zinfandel Drive	Prospect Park Dr	11,300	6	0.21	A	20,380	6	0.38	A	22,790	6	0.42	A	22,770	6	0.42	A
International Drive	Prospect Park Dr	Kilgore Road	4,510	6	0.08	A	20,830	6	0.39	A	22,180	6	0.41	A	22,380	6	0.41	A
International Drive	Kilgore Road	Sunrise Blvd	-	-	-	-	28,990	4	0.72	C	29,620	4	0.74	C	29,720	4	0.74	C
Jackson Road	Bradshaw Road	Excelsior Road	19,720	4	0.55	A	19,820	4	0.55	A	19,670	4	0.55	A	19,810	4	0.55	A
Jackson Road	Excelsior Road	Eagles Nest Rd	15,430	4	0.43	A	15,160	4	0.42	A	14,360	4	0.40	A	15,110	4	0.42	A
Jackson Road	Eagles Nest Rd	Sunrise Blvd	17,090	4	0.47	A	17,160	4	0.48	A	17,220	4	0.48	A	17,330	4	0.48	A

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TABLE 26 FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Jackson Road	Sunrise Blvd	Grant Line Road	20,010	4	0.56	A	20,260	4	0.56	A	20,400	4	0.57	A	20,220	4	0.56	A
Kilgore Road	Folsom Blvd	White Rock Rd	16,280	2	0.90	E	16,820	2	0.93	E	16,610	2	0.92	E	16,980	2	0.94	E
Kilgore Road	White Rock Rd	International Dr	12,320	4	0.34	A	11,070	4	0.31	A	11,230	4	0.31	A	11,330	4	0.31	A
Kilgore Road	International Dr	B Street	-	-	-	-	12,160	4	0.34	A	8,850	4	0.25	A	9,040	4	0.25	A
Mather Field Road	Folsom Blvd	U.S. 50	20,970	4	0.58	A	19,910	4	0.55	A	20,570	4	0.57	A	20,480	4	0.57	A
Mather Field Road	U.S. 50	Rockingham Dr	57,580	6	0.96	E	65,440	6	1.09	F	65,800	6	1.10	F	65,640	6	1.09	F
Mather Field Road	Rockingham Dr	International Dr	46,400	6	0.86	D	56,170	6	1.04	F	56,150	6	1.04	F	56,080	6	1.04	F
Mather Field Road	South of International Drive		12,550	4	0.35	A	11,770	4	0.33	A	11,770	4	0.33	A	11,510	4	0.32	A
Mather Boulevard	Macready Ave	East/West Cplt	3,980	4	0.13	A	7,050	4	0.24	A	6,510	4	0.22	A	6,670	4	0.22	A
Mather Boulevard	Femoyer Street	Douglas Road	19,870	4	0.43	D	-	-	-	-	-	-	-	-	-	-	-	-
Mather Boulevard	Femoyer Street	Zinfandel Drive	-	-	-	-	-	-	-	-	6,240	4	0.17	A	-	-	-	-
Mather Boulevard	Femoyer Street	A Street	-	-	-	-	-	-	-	-	-	-	-	-	6,420	4	0.18	A
Mather Boulevard	A Street	C Street	-	-	-	-	-	-	-	-	-	-	-	-	18,950	4	0.53	A
Mather Boulevard	C Street	Zinfandel Drive	-	-	-	-	-	-	-	-	-	-	-	-	16,750	4	0.47	A
Mather Boulevard	Kiefer Blvd	Zinfandel Drive	49,140	4	1.37	F	39,170	4	1.09	F	38,920	4	1.08	F	38,840	4	1.08	F

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TABLE 26
FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
North /South Cplt.	North of East / West Couplet		7,800	4	0.26	A	6,980	4	0.23	A	7,100	4	0.24	A	6,970	4	0.23	A
Prospect Park Dr.	White Rock Rd.	International Dr.	11,950	2	0.66	B	9,840	2	0.55	A	9,340	2	0.52	A	9,260	2	0.51	A
Prospect Park Dr.	International Dr	B Street	-	-	-	-	5,040	4	0.14	A	5,280	4	0.15	A	5,310	4	0.15	A
Sunrise Boulevard	Fair Oaks Blvd.	Coloma Road	120,650	6	2.23	F	121,170	6	2.24	F	121,010	6	2.24	F	121,240	6	2.25	F
Sunrise Boulevard	Coloma Road	Zinfandel Drive	108,630	6	2.01	F	110,170	6	2.04	F	109,610	6	2.03	F	109,610	6	2.03	F
Sunrise Boulevard	Zinfandel Drive	U.S. 50	100,200	6	1.86	F	101,540	6	1.88	F	101,040	6	1.87	F	101,030	6	1.87	F
Sunrise Boulevard	U.S. 50	Folsom Blvd	99,020	6	1.83	F	98,230	6	1.82	F	97,720	6	1.81	F	97,860	6	1.81	F
Sunrise Boulevard	Folsom Blvd	White Rock Rd	97,070	6	1.80	F	98,280	6	1.82	F	97,290	6	1.80	F	97,390	6	1.80	F
Sunrise Boulevard	White Rock Rd	International Dr	59,100	6	1.09	F	53,660	6	0.99	E	56,390	6	1.04	F	56,080	6	1.04	F
Sunrise Boulevard	International Dr	Douglas Road	59,750	6	1.11	F	66,210	6	1.23	F	67,640	6	1.25	F	67,720	6	1.25	F
Sunrise Boulevard	Douglas Road	Kiefer Blvd	42,030	6	0.78	C	43,500	6	0.81	D	42,540	6	0.79	C	42,600	6	0.79	C
Sunrise Boulevard	Kiefer Blvd	Jackson Road	29,400	6	0.54	A	29,950	6	0.55	A	29,440	6	0.55	A	29,720	6	0.55	A
U.S. 50	Bradshaw Road	Mather Field Rd	204,460	8	1.28	F	207,500	8	1.30	F	207,260	8	1.30	F	207,230	8	1.30	F
U.S. 50	Mather Field Rd	Zinfandel Drive	184,480	8	1.15	F	180,730	8	1.13	F	180,430	8	1.13	F	180,410	8	1.13	F
U.S. 50	Zinfandel Drive	Sunrise Blvd	178,470	8	1.12	F	182,340	8	1.14	F	181,930	8	1.14	F	182,040	8	1.14	F

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TABLE 26
FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE

Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
U.S. 50	Sunrise Blvd	Hazel Avenue	149,790	6	1.25	F	152,640	6	1.27	F	151,710	6	1.26	F	151,940	6	1.27	F
White Rock Road	International Dr	Rockingham Dr	15,420	2	0.86	D	16,260	2	0.90	E	16,240	2	0.90	E	16,230	2	0.90	E
White Rock Road	Rockingham Dr	Capital Ctr Dr.	13,910	2	0.77	C	13,770	2	0.77	C	13,610	2	0.76	C	13,670	2	0.76	C
White Rock Road	Capital Ctr Dr.	Zinfandel Drive	17,020	2	0.95	E	16,030	2	0.89	D	16,270	2	0.90	E	16,080	2	0.89	D
White Rock Road	Zinfandel Drive	Prospect Park Dr	34,210	6	0.63	B	29,740	6	0.55	A	30,220	6	0.56	A	30,560	6	0.57	A
White Rock Road	Prospect Park Dr	Kilgore Road	35,940	6	0.67	B	28,510	6	0.53	A	29,420	6	0.54	A	29,610	6	0.55	A
White Rock Road	Kilgore Road	Sunrise Blvd	49,090	4	1.36	F	37,170	4	1.03	F	37,990	4	1.06	F	38,260	4	1.06	F
White Rock Road	East of Sunrise Boulevard		41,050	4	1.14	F	40,530	4	1.13	F	40,610	4	1.13	F	40,630	4	1.13	F
White Rock Road	West of Grant Line Road		7,690	4	0.21	A	7,760	4	0.22	A	7,810	4	0.22	A	7,810	4	0.22	A
Zinfandel Drive	Sunrise Blvd	Folsom Blvd	15,880	4	0.44	A	16,440	4	0.46	A	16,290	4	0.45	A	16,390	4	0.46	A
Zinfandel Drive	Folsom Blvd	U.S. 50	32,310	4	0.90	D	33,850	4	0.94	E	32,730	4	0.91	E	32,400	4	0.90	D
Zinfandel Drive	U.S. 50	White Rock Rd	82,700	6	1.53	F	89,480	6	1.66	F	89,260	6	1.65	F	89,360	6	1.65	F
Zinfandel Drive	White Rock Rd	International Dr	41,080	6	0.76	C	50,150	6	0.93	E	48,710	6	0.90	E	48,660	6	0.90	E
Zinfandel Drive	International Dr	A Street	29,690	4	0.74	C	44,540	6	0.82	D	46,980	6	0.87	D	48,180	6	0.89	D
Zinfandel Drive	A Street	B Street (north)	29,690	4	0.74	C	37,330	6	0.69	B	32,250	6	0.60	A	33,330	6	0.62	B

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TABLE 26 FUTURE PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE																		
Roadway Name	Segment		Future Without Project				Future Plus Approved Project				Future Plus Proposed Project				Future Plus Alternative 1			
	From	To	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS	AADT	Lanes	V/C	LOS
Zinfandel Drive	B Street (north)	C Street	29,690	4	0.74	C	40,910	6	0.76	C	35,660	6	0.66	B	36,980	6	0.68	B
Zinfandel Drive	C Street	B Street (south)	29,690	4	0.74	C	31,540	6	0.58	A	37,760	6	0.70	B	39,520	6	0.73	C
Zinfandel Drive	B Street (south)	Airpark Drive	29,690	4	0.74	C	38,310	6	0.71	C	-	-	-	-	-	-	-	-
Zinfandel Drive	B Street (south)	Mather Blvd	-	-	-	-	-	-	-	-	57,060	6	1.06	F	-	-	-	-
Zinfandel Drive	Mather Blvd.	Douglas Road	-	-	-	-	-	-	-	-	58,210	6	1.08	F	55,170	6	1.02	F
Zinfandel Drive	Airpark Drive	Douglas Road	29,690	4	0.74	C	54,450	6	1.01	F	-	-	-	-	-	-	-	-

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Figure 37

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Figure 38

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Figure 39

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TABLE 27 A.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS FUTURE PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	46.30	F	47.88	F	47.98	F	48.10	F
	Eastbound Loop Entrance	31.81	D	32.11	D	32.19	D	32.31	D
	Eastbound Slip Entrance	32.68	D	33.01	D	32.98	D	33.18	D
	Westbound Exit	43.83	F	42.76	F	43.17	F	43.04	F
	Westbound Loop Entrance	38.04	F	37.33	F	38.06	F	38.03	F
	Westbound Slip Entrance	39.65	F	39.06	F	39.37	F	39.41	F
Zinfandel Drive	Eastbound Exit	35.80	F	36.95	F	37.29	F	37.63	F
	Eastbound Loop Entrance	22.33	C	21.65	C	21.73	C	21.78	C
	Eastbound Slip Entrance	24.45	C	23.92	C	23.90	C	23.95	C
	Westbound Exit	53.01	F	55.55	F	55.80	F	55.68	F
	Westbound Loop Entrance	33.47	F	33.11	F	32.81	F	32.78	F
	Westbound Slip Entrance	41.09	F	40.06	F	40.02	F	40.52	F

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TABLE 27 A.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS FUTURE PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Sunrise Boulevard	Eastbound Exit	31.56	D	30.98	D	30.88	D	31.00	D
	Eastbound Entrance	31.28	D	31.74	D	31.25	D	31.78	D
	Westbound Exit	41.39	F	41.73	F	41.81	F	42.00	F
	Westbound Entrance	_ ²	F	_ ²	F	_ ²	F	_ ²	F
Hazel Avenue	Eastbound Exit	_ ²	E	_ ²	E	_ ²	E	_ ²	E
	Eastbound Entrance	41.35	F	41.21	F	40.46	F	41.28	F
	Westbound Exit	66.69	F	67.11	F	66.60	F	66.95	F
	Westbound Loop Entrance	65.40	F	65.82	F	65.91	F	65.99	F
	Westbound Slip Entrance	_ ²	E	_ ²	F	_ ²	F	_ ²	F
1. Passenger cars per mile per lane. 2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.									

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TABLE 28 P.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS FUTURE PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Mather Field Road	Eastbound Exit	45.17	F	45.31	F	45.50	F	45.92	F
	Eastbound Loop Entrance	36.46	F	35.63	F	35.81	F	36.03	F
	Eastbound Slip Entrance	35.31	F	35.01	F	35.12	F	35.29	F
	Westbound Exit	25.06	C	24.80	C	24.92	C	24.72	C
	Westbound Loop Entrance	25.25	C	25.60	C	25.64	C	25.71	C
	Westbound Slip Entrance	28.54	D	29.73	D	29.75	D	29.79	D
Zinfandel Drive	Eastbound Exit	31.59	F	30.59	F	30.80	F	31.04	F
	Eastbound Loop Entrance	33.46	D	32.68	D	32.71	D	32.99	D
	Eastbound Slip Entrance	31.10	F	30.16	F	30.20	F	30.18	F
	Westbound Exit	24.74	C	25.99	C	25.77	C	26.04	C
	Westbound Loop Entrance	22.53	C	22.54	C	22.63	C	22.65	C
	Westbound Slip Entrance	24.84	C	24.72	C	24.86	C	24.86	C

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TABLE 28 P.M. PEAK HOUR FREEWAY RAMP JUNCTION OPERATING CONDITIONS FUTURE PLUS PROJECT CONDITIONS									
U.S. 50 Interchange	Ramp	Future Without Project		Future Plus Approved Project		Future Plus Proposed Project		Future Plus Alternative 1	
		Density ¹	LOS	Density ¹	LOS	Density ¹	LOS	Density ¹	LOS
Sunrise Boulevard	Eastbound Exit	49.20	F	49.68	F	49.70	F	50.24	F
	Eastbound Entrance	47.15	F	48.24	F	47.96	F	48.17	F
	Westbound Exit	20.89	C	21.12	C	20.73	C	20.85	C
	Westbound Entrance	_ ²	F	_ ²	F	_ ²	F	_ ²	F
Hazel Avenue	Eastbound Exit	_ ²	F	_ ²	F	_ ²	F	_ ²	F
	Eastbound Entrance	70.72	F	70.92	F	71.33	F	71.25	F
	Westbound Exit	31.61	D	31.48	D	31.34	D	31.65	D
	Westbound Loop Entrance	23.85	C	24.53	C	23.99	C	24.23	C
	Westbound Slip Entrance	_ ²	C	_ ²	C	_ ²	C	_ ²	C
1. Passenger cars per mile per lane. 2. Traffic enters / exits its own lane. Level of service based upon total ramp demand volume.									

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IMPACTS

Table 29 summarizes the significant impacts associated with the Future Plus Approved Project, Future Plus Proposed Project, and Future Plus Alternative 1 scenarios.

FUTURE PLUS APPROVED PROJECT SCENARIO

Impacts associated with the Future Plus Approved Project Scenario were identified in earlier environmental documentation. These impacts are repeated here for reference purposes. In accordance with the County Standards of Significance, these impacts were determined by comparing roadway operating conditions associated with the Future Plus Approved Project scenario to the Future Without Project condition. As summarized in Table 29, the Future Plus Approved Project scenario results in significant impacts at four intersections, on six roadway segments, and at one freeway ramp junction.

FUTURE PLUS PROPOSED PROJECT SCENARIO

Impacts associated with the Future Plus Proposed Project Scenario were determined by comparing roadway-operating conditions associated with the Proposed Project to the Future Without Project condition. As summarized in Table 29, the Future Plus Proposed Project scenario results in significant impacts at four intersections, on six roadway segments, and at one freeway ramp junction.

Compared to the Future Plus Approved Project scenario:

- the impacts at one additional intersection (Sunrise Boulevard and Zinfandel Drive) are significant.
- the impacts at one additional intersection (Zinfandel Drive and White Rock Road) are less-than-significant.
- the impacts on one additional roadway segment (Zinfandel Drive – B Street [south] to Douglas Road) are significant.
- the impacts on two additional roadway segments (Airpark Drive – Femoyer Street to A Street; Zinfandel Drive – Airpark Drive to Douglas Road) are less-than-significant.

FUTURE PLUS ALTERNATIVE 1 SCENARIO

Impacts associated with the Future Plus Alternative 1 Scenario were determined by comparing roadway-operating conditions associated with the Proposed Project to the Future Without Project

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TABLE 29 FUTURE SCENARIOS SIGNIFICANT IMPACTS				
Facility Type	Name	Time Period of Significant Impact		
		Future Plus Approved Project	Future Plus Proposed Project	Future Plus Alternative 1
Intersections	6. Sunrise Boulevard and Zinfandel Drive		A.M.	A.M.
	7. Zinfandel Drive and Douglas Road	P.M.	P.M.	
	13. Zinfandel Drive and White Rock Road	A.M., P.M.		P.M.
	14. Zinfandel Drive and U.S. 50 Eastbound Ramps	A.M., P.M.	A.M., P.M.	A.M., P.M.
	17. Mather Field Road and Rockingham Drive	A.M., P.M.	A.M.	
Roadway Segments	Airpark Drive – Femoyer Street to A Street	Daily		
	Folsom Boulevard – Routier Road to Mather Field Road	Daily	Daily	Daily
	Mather Field Road – U.S. 50 to International Drive	Daily	Daily	Daily
	Sunrise Boulevard – International Drive to Douglas Road	Daily	Daily	Daily
	Zinfandel Drive – U.S. 50 to White Rock Road	Daily	Daily	Daily
	Zinfandel Drive – B Street (south) to Mather Boulevard		Daily	
	Zinfandel Drive – Mather Boulevard to Douglas Road		Daily	Daily
	Zinfandel Drive – Airpark Drive to Douglas Road	Daily		
Freeway Ramp Junction	U.S. 50 at Hazel Avenue – Westbound Slip Ramp	A.M.	A.M.	A.M.

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condition. As summarized in Table 29, the Future Plus Proposed Project scenario results in significant impacts at three intersections, on five roadway segments, and at one freeway ramp junction.

Compared to the Future Plus Approved Project scenario:

- the impacts at one additional intersection (Sunrise Boulevard and Zinfandel Drive) are significant.
- the impacts at two additional intersection (Zinfandel Drive and Douglas Road; Mather Field Road and Rockingham Drive) are less-than-significant.
- the impacts on one additional roadway segment (Zinfandel Drive – Mather Boulevard to Douglas Road) are significant.
- the impacts on two additional roadway segments (Airpark Drive – Femoyer Street to A Street; Zinfandel Drive – Airpark Drive to Douglas Road) are less-than-significant.

IMPROVEMENT RECOMMENDATIONS FOR FUTURE DEFICIENCIES (NO PROJECT)

The following roadway improvement recommendations have been developed for future conditions (no project).

INTERSECTIONS

Sunrise Boulevard and Douglas Road – No feasible improvements have been identified for this location. The intersection is already assumed to be constructed to the full County intersection design.

Sunrise Boulevard and Monier Circle – The stop sign controlled intersection operates at LOS “F” due to the lack of gaps in the Sunrise Boulevard traffic stream. A traffic signal at this location would improve the intersection operations to LOS “D” during the a.m. peak hour and LOS “B” during the p.m. peak hour. This intersection meets the peak hour traffic signal warrant.

Sunrise Boulevard and White Rock Road – Due to right-of-way constraints and Future development, no feasible improvements have been identified for this location.

Sunrise Boulevard and Folsom Boulevard - Due to right-of-way constraints and Future development, no feasible improvements have been identified for this location.

Sunrise Boulevard and Zinfandel Drive - Due to right-of-way constraints and Future development, no feasible improvements have been identified for this location.

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Zinfandel Drive and White Rock Road - On the northbound approach, convert the right turn lane to a combined through and right turn lane. Although four lanes are greater than the usual County standard, four lanes are already provided north of the intersection on Zinfandel Drive. This conversion will improve the intersection operating conditions, but they will remain at LOS "F" during the a.m. and p.m. peak hours.

Zinfandel Drive and U.S. 50 Eastbound Ramps – No feasible improvements have been identified for this location.

Zinfandel Drive and U.S. 50 Westbound Ramps – No feasible improvements have been identified for this location.

Mather Field Road and Rockingham Drive - Due to right-of-way constraints and Future development, no feasible improvements have been identified for this location.

Mather Field Road and Folsom Boulevard - Due to right-of-way constraints, the Future railroad crossing, and Future development, no feasible improvements have been identified for this location.

Hazel Avenue and U.S. 50 Westbound Ramps – No feasible improvements have been identified for this location.

Kilgore Road and White Rock Road - Due to right-of-way constraints and Future development, no feasible improvements have been identified for this location.

ROADWAY SEGMENTS

Douglas Road – Zinfandel Drive to Sunrise Boulevard – Widening of this segment of Douglas Road is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

Douglas Road – East of Sunrise Boulevard – Widening of Douglas Road east of Sunrise Boulevard from four to six lanes would improve the operating conditions to LOS "C."

Folsom Boulevard – Bradshaw Road to Mather Field Road – Widening from four to six lanes would improve the operating conditions to LOS "B" west of Routier Road, and LOS "C" east of Routier Road.

Hazel Avenue – Winding Way to U.S. 50 - Widening of this segment of Hazel Avenue is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

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Mather Boulevard – Kiefer Boulevard to Zinfandel Drive - Widening of Mather Boulevard from four to six lanes would improve the operating conditions to LOS “E.”

Sunrise Boulevard – Fair Oaks Boulevard to Douglas Road - Widening of this segment of Sunrise Boulevard is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

U.S. 50 – Bradshaw Road to Hazel Avenue – Widening of U.S. 50 beyond the Future number of lanes plus HOV lanes is deemed infeasible.

White Rock Road – Kilgore Road to Sunrise Boulevard – Widening of this segment of White Rock Road is deemed infeasible, due to the constraints of Future development.

White Rock Road – East of Sunrise Boulevard – Widening of White Rock Road east of Sunrise Boulevard from four to six lanes would improve the operating conditions to LOS “C.”

Zinfandel Drive – U.S. 50 to White Rock Road - Widening of this segment of Zinfandel Drive is deemed infeasible. The roadway is more than six (through) lanes wide, which is the typical County maximum for a thoroughfare.

U.S. 50 FREEWAY INTERCHANGES

Mather Field Road Eastbound Exit – This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. and p.m. peak hours.

Mather Field Road Eastbound Loop Entrance - No feasible improvement has been identified for this location.

Mather Field Road Eastbound Slip Entrance - No feasible improvement has been identified for this location.

Mather Field Road Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Mather Field Road Westbound Loop Entrance – No feasible improvement has been identified for this location.

Mather Field Road Westbound Slip Entrance – No feasible improvement has been identified for this location.

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Zinfandel Drive Eastbound Exit – No feasible improvement has been identified for this location.

Zinfandel Drive Eastbound Slip Entrance – No feasible improvement has been identified for this location.

Zinfandel Drive Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Zinfandel Drive Westbound Loop Entrance - No feasible improvement has been identified for this location.

Zinfandel Drive Westbound Slip Entrance - No feasible improvement has been identified for this location.

Sunrise Boulevard Eastbound Exit - No feasible improvement has been identified for this location.

Sunrise Boulevard Eastbound Entrance - No feasible improvement has been identified for this location.

Sunrise Boulevard Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Sunrise Boulevard Westbound Entrance - No feasible improvement has been identified for this location.

Hazel Avenue Eastbound Exit - No feasible improvement has been identified for this location.

Hazel Avenue Eastbound Entrance - No feasible improvement has been identified for this location.

Hazel Avenue Westbound Exit - This ramp could be widened to provide two exit lanes. However, due to heavy mainline volumes, LOS “F” conditions would still be expected in the a.m. peak hour.

Hazel Avenue Westbound Loop Entrance - No feasible improvement has been identified for this location.

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MITIGATION MEASURES

If a project causes a significant cumulative impact to an off-site facility, then the project will pay a fair share toward the mitigation recommended for that facility. The project is responsible for 100 percent of the improvements required to the on-site facilities.

FUTURE PLUS APPROVED PROJECT SCENARIO

The following discussion is repeated from the previous analysis of the Approved Project Scenario, for reference purposes.

Based upon this analysis and the 1993 General Plan Analyses, it is unlikely that all level of service violations will ever be able to be remedied. Many roadways in the vicinity of the project have already been assumed to be six lanes wide, which is the maximum typical County roadway segment. Similarly, fully improved intersections have been assumed in most cases. Thus, substantial improvements to the roadway system, beyond the improvements already assumed to be in place under future conditions, are not possible. The impact would remain significant and unavoidable.

The impacts of the project detailed in this section are based upon the analysis methodology described in this report. In accordance with County Transportation Division guidelines, the impact of Transportation Management Plans has not been included in the impact analysis. This provides a conservative analysis. As not all impacts can be mitigated, a Transportation Management Plan shall be developed to reduce the magnitude of impacts. This Plan shall include the provision of transit service / shuttles to serve the site, operated by Regional Transit and / or others.

The following roadway improvement mitigation measures have been developed for the Future Plus Approved Project Scenario.

Intersections

Zinfandel Drive and Douglas Road – No feasible improvements have been identified for this location. The intersection is already assumed to be constructed to the full County intersection design.

Zinfandel Drive and White Rock Road - On the northbound approach, convert the right turn lane to a combined through and right turn lane. Although four lanes are greater than the usual County standard, four lanes are already provided north of the intersection on Zinfandel Drive. This conversion will improve the intersection operating conditions, but they will remain at LOS “F” during the a.m. and p.m. peak hours. However, the conversion will improve the v/c

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ratios at the intersection to an extent to reduce the project impact to a less-than-significant level. This mitigation measure was also included in the Future plus project scenario.

Zinfandel Drive and U.S. 50 Eastbound Ramps – No feasible improvements have been identified for this location.

Mather Field Road and Rockingham Drive - Due to right-of-way constraints and existing development, no feasible improvements have been identified for this location.

Roadway Segments

Airpark Drive – Femoyer Street to A Street - Widening from two to four lanes would improve the operating conditions to LOS “B.”

Folsom Boulevard – Routier Road to Mather Field Road – Widening from four to six lanes would improve the operating conditions to LOS “C.”

Mather Field Road - U.S. 50 to International Drive - Widening of this roadway is deemed infeasible, as the roadway is already six lanes wide, which is the typical County maximum for a thoroughfare.

Sunrise Boulevard – International Drive to Douglas Road - Widening of this segment of Sunrise Boulevard is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

Zinfandel Drive – U.S. 50 to White Rock Road - Widening of this segment of Zinfandel Drive is deemed infeasible. The roadway is more than six (through) lanes wide, which is the typical County maximum for a thoroughfare.

Zinfandel Drive – Airpark Drive to Douglas Road - Widening of this segment of Zinfandel Drive is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

U.S. 50 Freeway Interchanges

Hazel Avenue Westbound Slip Entrance - No feasible improvement has been identified for this location.

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FUTURE PLUS PROPOSED PROJECT SCENARIO

The improvements to address future deficiencies and the mitigation measures for the Future plus Approved Project scenario are appropriate for implementation. However, the widening of Airpark Drive to four lanes is not required under this scenario.

Roadway Segments

Zinfandel Drive – B Street to Douglas Road - Widening of this segment of Zinfandel Drive is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

FUTURE PLUS ALTERNATIVE 1 SCENARIO

The improvements to address future deficiencies and the mitigation measures for the Future plus Approved Project scenario are appropriate for implementation. However, the widening of Airpark Drive to four lanes is not required under this scenario.

Roadway Segments

Zinfandel Drive – Mather Boulevard to Douglas Road - Widening of this segment of Zinfandel Drive is deemed infeasible, as the roadway is already planned to be six lanes wide, which is the typical County maximum for a thoroughfare.

PROJECT SHARE OF ROADWAY TRAFFIC

Analyses were undertaken to establish the percentage of daily traffic on the study area network that is associated with the project. These analyses are based upon future conditions. Table 30 summarizes the percentages.

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TABLE 30 PROJECT SHARE OF FUTURE DAILY TRAFFIC				
Roadway Name	Segment		Percentage of Daily Traffic	
	From	To	Approved Project	Proposed Project
A Street	Airpark Drive	Zinfandel Drive	99%	98%
A Street	Airpark Drive	C Street	-	67%
A Street	C Street	Zinfandel Drive	-	66%
B Street	Zinfandel Drive	Prospect Park Dr.	66%	70%
B Street	Prospect Park Dr.	Kilgore Road	90%	98%
B Street	Kilgore Road	Zinfandel Drive	60%	46%
B Street	Airpark Drive	Zinfandel Drive	100%	-
C Street	Mather Boulevard	Airpark Drive	62%	-
C Street	Airpark Drive	Zinfandel Drive	83%	-
C Street	A Street	Zinfandel Drive	-	99%
Airpark Drive	Femoyer Street	A Street	41%	74%
Airpark Drive	A Street	C Street	34%	-
Airpark Drive	C Street	B Street	39%	-
Airpark Drive	B Street	Zinfandel Drive	28%	-
Douglas Road	Zinfandel Drive	Sunrise Boulevard	16%	16%
Douglas Road	East of Sunrise Boulevard		9%	8%
Douglas Road	West of Grant Line Road		<1%	<1%
Eagles Nest Road	Douglas Road	Kiefer Boulevard	21%	19%
Eagles Nest Road	Kiefer Boulevard	Jackson Road	15%	13%
Eagles Nest Road	Jackson Road	Florin Road	15%	14%
East / West Couplet	West of North / South Couplet		58%	50%
East / West Couplet	East of North / South Couplet		62%	53%
Excelsior Road	Jackson Road	Kiefer Boulevard	10%	9%

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TABLE 30 PROJECT SHARE OF FUTURE DAILY TRAFFIC				
Roadway Name	Segment		Percentage of Daily Traffic	
	From	To	Approved Project	Proposed Project
Femoyer Street	Airpark Drive	International Drive	39%	55%
Folsom Boulevard	Bradshaw Road	Routier Road	1%	1%
Folsom Boulevard	Routier Road	Mather Field Road	2%	2%
Folsom Boulevard	Mather Field Road	Coloma Road	1%	1%
Folsom Boulevard	Coloma Road	Zinfandel Drive	2%	2%
Folsom Boulevard	Zinfandel Drive	Sunrise Boulevard	1%	1%
Folsom Boulevard	Sunrise Boulevard	Hazel Avenue	2%	2%
Folsom Boulevard	Hazel Avenue	U.S. 50	1%	1%
Hazel Avenue	Winding Way	Gold Country Blvd.	2%	2%
Hazel Avenue	Gold Country Blvd.	U.S. 50	2%	2%
Hazel Avenue	U.S. 50	Folsom Boulevard	1%	1%
International Drive	Mather Field Road	White Rock Road	26%	27%
International Drive	White Rock Road	Femoyer Street	26%	27%
International Drive	Femoyer Street	Capital Center Dr.	25%	16%
International Drive	Capital Center Dr.	Zinfandel Drive	28%	20%
International Drive	Zinfandel Drive	Prospect Park Dr.	23%	17%
International Drive	Prospect Park Dr.	Kilgore Road	13%	7%
International Drive	Kilgore Road	Sunrise Boulevard	21%	18%
Jackson Road	Bradshaw Road	Excelsior Road	<1%	<1%
Jackson Road	Excelsior Road	Eagles Nest Road	<1%	<1%
Jackson Road	Eagles Nest Road	Sunrise Boulevard	1%	1%
Jackson Road	Sunrise Boulevard	Grant Line Road	2%	2%
Kilgore Road	Folsom Boulevard	White Rock Road	9%	8%
Kilgore Road	White Rock Road	International Drive	24%	19%

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TABLE 30 PROJECT SHARE OF FUTURE DAILY TRAFFIC				
Roadway Name	Segment		Percentage of Daily Traffic	
	From	To	Approved Project	Proposed Project
Kilgore Road	International Drive	B Street	71%	66%
Mather Field Road	Folsom Boulevard	U.S. 50	6%	6%
Mather Field Road	U.S. 50	Rockingham Drive	19%	20%
Mather Field Road	Rockingham Drive	International Drive	24%	25%
Mather Field Road	South of International Drive		5%	2%
Mather Boulevard	Macready Avenue	East / West Couplet	53%	45%
Mather Boulevard	Femoyer Street	Zinfandel Drive	-	21%
Mather Boulevard	Kiefer Boulevard	Zinfandel Drive	11%	10%
North / South Cplt.	North of East / West Couplet		21%	3%
Prospect Park Dr.	White Rock Road	International Drive	11%	9%
Prospect Park Dr.	International Drive	B Street	71%	67%
Sunrise Boulevard	Fair Oaks Blvd.	Coloma Road	5%	5%
Sunrise Boulevard	Coloma Road	Zinfandel Drive	5%	5%
Sunrise Boulevard	Zinfandel Drive	U.S. 50	5%	5%
Sunrise Boulevard	U.S. 50	Folsom Boulevard	1%	1%
Sunrise Boulevard	Folsom Boulevard	White Rock Road	3%	2%
Sunrise Boulevard	White Rock Road	International Drive	7%	5%
Sunrise Boulevard	International Drive	Douglas Road	2%	2%
Sunrise Boulevard	Douglas Road	Kiefer Boulevard	5%	5%
Sunrise Boulevard	Kiefer Boulevard	Jackson Road	2%	2%
U.S. 50	Bradshaw Road	Mather Field Road	5%	5%
U.S. 50	Mather Field Road	Zinfandel Drive	<1%	<1%
U.S. 50	Zinfandel Drive	Sunrise Boulevard	6%	6%
U.S. 50	Sunrise Boulevard	Hazel Avenue	4%	4%

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TABLE 30 PROJECT SHARE OF FUTURE DAILY TRAFFIC				
Roadway Name	Segment		Percentage of Daily Traffic	
	From	To	Approved Project	Proposed Project
White Rock Road	International Drive	Rockingham Drive	27%	26%
White Rock Road	Rockingham Drive	Capital Center Dr.	<1%	<1%
White Rock Road	Capital Center Dr.	Zinfandel Drive	<1%	<1%
White Rock Road	Zinfandel Drive	Prospect Park Drive	1%	<1%
White Rock Road	Prospect Park Drive	Kilgore Road	<1%	<1%
White Rock Road	Kilgore Road	Sunrise Boulevard	1%	1%
White Rock Road	East of Sunrise Boulevard		3%	3%
White Rock Road	West of Grant Line Road		1%	1%
Zinfandel Drive	Sunrise Boulevard	Folsom Boulevard	7%	8%
Zinfandel Drive	Folsom Boulevard	U.S. 50	7%	7%
Zinfandel Drive	U.S. 50	White Rock Road	13%	12%
Zinfandel Drive	White Rock Road	International Drive	32%	30%
Zinfandel Drive	International Drive	A Street	48%	45%
Zinfandel Drive	A Street	B Street (north)	41%	28%
Zinfandel Drive	B Street (north)	C Street	42%	29%
Zinfandel Drive	C Street	B Street (south)	28%	31%
Zinfandel Drive	B Street (south)	Airpark Drive	35%	-
Zinfandel Drive	B Street (south)	Mather Boulevard	-	32%
Zinfandel Drive	Mather Boulevard	Douglas Road	-	24%
Zinfandel Drive	Airpark Drive	Douglas Road	26%	-

TECHNICAL APPENDICES

**1. INTERSECTION CAPACITY ANALYSIS
EXISTING CONDITIONS
A.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	7		567	8		90	302	51	282	133	8	50
202	Sunrise Blvd.	53		1207	5		45	353	72	29	10	6	3
203	Sunrise Blvd.	0		1363	9		137	924	0	0	0	0	3
204	Sunrise Blvd.	541		773	33		235	943	568	143	163	280	91
205	Sunrise Blvd.	100		900	110		350	2440	350	200	150	120	550
206	Sunrise Blvd.	170		1880	10		40	4250	130	130	10	330	40
211	Zinfandel Dri	4		3	6		74	100	160	154	277	28	30
213	Zinfandel Dri	7		299	21		822	1038	760	229	145	14	63
214	Zinfandel Dri	0		761	0		0	1473	0	338	847	1147	0
215	Zinfandel Dri	0		567	0		0	626	0	0	0	0	934
216	Mather Field	123		0	39		0	0	0	0	918	0	108
217	Mather Field	174		355	6		55	998	0	303	66	424	11
218	Mather Field	0		645	0		0	885	0	372	0	1023	0
219	Mather Field	0		701	0		0	679	0	0	0	0	442
220	Mather Field	231		60	424		18	147	22	14	518	198	700
221	Mather Blvd.	0		0	0		0	80	9	0	0	0	7
222	Mather Blvd.	2		52	0		0	0	0	0	0	0	0
225	Von Karman St	0		0	0		32	55	0	0	32	2	0
226	Norden Avenue	0		27	6		0	0	0	23	40	0	0
228	International	0		0	0		14	0	27	99	685	0	0
229	International	4		1	4		2	0	12	146	201	3	4
230	International	2		6	1		8	8	220	151	7	2	2
232	Hazel Avenue	0		0	0		0	1090	0	473	0	186	0
233	Hazel Avenue	107		584	0		0	3494	54	0	0	156	36
234	White Rock Ro	3		34	119		50	59	80	97	428	2	244
235	White Rock Ro	24		26	13		20	19	13	138	499	88	246

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.008
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 1 0 1 0 1 0 1 0 1

Volume Module:

Base Vol:	7	567	8	90	302	51	282	133	8	50	565	381
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:	7	567	8	90	302	51	282	133	8	50	565	381
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:	7	567	8	90	302	51	282	133	8	50	565	381
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	567	8	90	302	51	282	133	8	50	565	381
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 Vol.:	7	567	8	90	302	51	282	133	8	50	565	381

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1479	21	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.38	0.38	0.06	0.20	0.03	0.19	0.09	0.01	0.03	0.38	0.25
Crit Vol:	575			90			282			565		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 66 Critical Vol./Cap. (X): 0.487
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	53	1207	5	45	353	72	29	10	6	3	32	49
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:	53	1207	5	45	353	72	29	10	6	3	32	49
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:	53	1207	5	45	353	72	29	10	6	3	32	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1207	5	45	353	72	29	10	6	3	32	49
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 Vol.:	53	1207	5	45	353	72	29	10	6	3	32	49

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.66	0.34	0.65	0.22	0.13	0.09	0.91	1.00
Final Sat.:	1500	2988	12	1500	2492	508	967	333	200	129	1371	1500

Capacity Analysis Module:

Vol/Sat:	0.04	0.40	0.40	0.03	0.14	0.14	0.03	0.03	0.03	0.02	0.02	0.03
Crit Vol:	606			45			45			35		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl
*****Average Delay (sec/veh): 1.7 Worst Case Level Of Service: D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0

Volume Module:

Base Vol:	0 1363	9 137 924	0 0 0 0	3 0 40
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 1363	9 137 924	0 0 0 0	3 0 40
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 1363	9 137 924	0 0 0 0	3 0 40
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	0 1363	9 137 924	0 0 0 0	3 0 40

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
% Truck/Comb:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
PCE Adj:	1.10 1.00 1.00	1.10 1.00 1.00	1.10 1.10 1.10	1.10 1.10 1.10
Cycl/Car PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Trck/Cmb PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Adj Vol.:	0 1363	9 151 924	0 0 0 0	3 0 44

Critical Gap Module:

MoveUp Time:	xxxxx xxxxx	2.1 xxxxx	xxxxx xxxxx	3.4 xxxxx	2.6
Critical Gp:	xxxxx xxxxx	5.5 xxxxx	xxxxx xxxxx	7.0 xxxxx	5.5

Capacity Module:

Cnflct Vol:	xxxx xxxxx	1372 xxxxx	xxxx xxxxx	2429 xxxxx	686
Potent Cap.:	xxxx xxxxx	314 xxxxx	xxxx xxxxx	30 xxxxx	622
Adj Cap:	xxxx xxxxx	1.00 xxxxx	xxxx xxxxx	0.52 xxxxx	1.00
Move Cap.:	xxxx xxxxx	314 xxxxx	xxxx xxxxx	15 xxxxx	622

Level Of Service Module:

Stopped Del:	xxxxx xxxxx	20.2 xxxxx	xxxxx xxxxx	287.3 xxxxx	6.2
LOS by Move:	* * *	D *	* * *	* *	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx xxxxx	xxxx xxxxx	xxxx xxxxx	xxxx 166 xxxxx	
Shrd StpDel:	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxx 25.8 xxxxx	
Shared LOS:	* *	* *	* *	* D *	
ApproachDel:	0.0	2.8	0.0	25.8	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 116 Critical Vol./Cap. (X): 0.706

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 116 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	541	773	33	235	943	568	143	163	280	91	581	120
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:	541	773	33	235	943	568	143	163	280	91	581	120
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:	541	773	33	235	943	568	143	163	280	91	581	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	541	773	33	235	943	568	143	163	280	91	581	120
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	595	773	33	259	943	568	157	163	280	100	581	120

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.20	0.17	0.02	0.09	0.21	0.38	0.05	0.05	0.19	0.03	0.13	0.08
Crit Vol:	298					568	0			194		
Crit Moves:	****					****	****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.831

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	100	900	110	350	2440	350	200	150	120	550	470	190
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:	100	900	110	350	2440	350	200	150	120	550	470	190
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:	100	900	110	350	2440	350	200	150	120	550	470	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	900	110	350	2440	350	200	150	120	550	470	190
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	110	900	110	385	2440	350	220	150	120	605	470	209

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.04	0.15	0.07	0.13	0.54	0.23	0.07	0.05	0.08	0.20	0.16	0.14
Crit Vol:	55			813			75			303		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.212
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 0 0 1! 0 1 1 0 1! 0 0

Volume Module:

Base Vol:	170	1880	10	40	4250	130	130	10	330	40	15	40
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:	170	1880	10	40	4250	130	130	10	330	40	15	40
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:	170	1880	10	40	4250	130	130	10	330	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1880	10	40	4250	130	130	10	330	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	187	1880	10	40	4250	130	130	10	363	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	0.52	0.04	1.44	1.00	0.19	0.81
Final Sat.:	3000	4476	24	1500	4500	1500	775	60	2165	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.06	0.42	0.42	0.03	0.94	0.09	0.17	0.17	0.17	0.03	0.05	0.03
Crit Vol:	94			1417			252			55		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 1 Critical Vol./Cap. (X): 0.821

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 5.3

Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0	1	0	1	1	1	0	2	0	1	1

Volume Module:

Base Vol:	4	3	6	74	100	160	154	277	28	30	124	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:	4	3	6	74	100	160	154	277	28	30	124	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:	4	3	6	74	100	160	154	277	28	30	124	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	3	6	74	100	160	154	277	28	30	124	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 Vol.:	4	3	6	74	100	160	154	277	28	30	124	13

Saturation Flow Module:

Sat/Lane:	171	171	171	195	195	195	310	310	310	263	263	263
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	171	171	171	195	195	195	310	620	310	263	526	263

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.04	0.38	0.51	0.82	0.50	0.45	0.09	0.11	0.24	0.05
Crit Moves:			****			****	****				****	
ApproachV/S:	0.03			0.57			0.37			0.16		

Level Of Service Module:

Delay/Veh:	1.1	1.1	1.1	4.2	7.0	22.6	6.6	5.5	1.4	1.5	2.4	1.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.1	1.1	1.1	4.2	7.0	22.6	6.6	5.5	1.4	1.5	2.4	1.2
LOS by Move:	A	A	A	A	B	D	B	B	A	A	A	A
ApproachDel:	1.1			8.8			4.1			1.8		
LOS by Appr:	A			B			A			A		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 94 Critical Vol./Cap. (X): 0.639
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 94 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	7	299	21	822	1038	760	229	145	14	63	163	353
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:	7	299	21	822	1038	760	229	145	14	63	163	353
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:	7	299	21	822	1038	760	229	145	14	63	163	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	299	21	822	1038	760	229	145	14	63	163	353
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	8	299	21	904	1038	760	252	145	14	69	163	388

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.74	0.26	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4104	396	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.01	0.30	0.23	0.51	0.08	0.04	0.04	0.02	0.11	0.13
Crit Vol:	4					760	0					194
Crit Moves:	****					****	****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.010

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	761	0	0	1473	0	338	847	1147	0	0	126
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	761	0	0	1473	0	338	847	1147	0	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	761	0	0	1473	0	338	847	1147	0	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	761	0	0	1473	0	338	847	1147	0	0	126
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	761	0	0	1473	0	372	847	1262	0	0	126

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1550	3100	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.00	0.00	0.48	0.00	0.24	0.55	0.41	0.00	0.00	0.08
Crit Vol:	0				737			703				126
Crit Moves:	****				****			****				****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.501

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	567	0	0	626	0	0	0	0	934	0	217
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	567	0	0	626	0	0	0	0	934	0	217
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	567	0	0	626	0	0	0	0	934	0	217
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	567	0	0	626	0	0	0	0	934	0	217
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	1.10	1.00	1.00
Final Vol.:	0	567	0	0	626	0	0	0	0	1027	0	217

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.31	0.00	0.13
Crit Vol:	0				313			0		514		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 39 Critical Vol./Cap. (X): 0.311
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 39 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Permitted Permitted Protected Protected
 Rights: Ovl Include Ignore Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 0 0 1 0 0 0 0 0 0 3 0 1 1 0 3 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	123	0	39	0	0	0	0	918	518	108	427	0
Growth 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
Initial Bse:	123	0	39	0	0	0	0	918	0	108	427	0
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:	123	0	39	0	0	0	0	918	0	108	427	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	0	39	0	0	0	0	918	0	108	427	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	135	0	39	0	0	0	0	918	0	108	427	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.00	0.03	0.00	0.00	0.00	0.00	0.20	0.00	0.07	0.09	0.00
Crit Vol:	68				0			306		108		
Crit Moves:	****							****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.740

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	174	355	6	55	998	827	303	66	424	11	47	113
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	174	355	6	55	998	0	303	66	424	11	47	113
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	174	355	6	55	998	0	303	66	424	11	47	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	355	6	55	998	0	303	66	424	11	47	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	174	355	6	55	998	0	333	66	424	11	47	113

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.95	0.05	1.00	3.00	1.00	1.00	0.01	0.99	0.13	0.87	1.00
Final Sat.:	1500	4425	75	1500	4500	1500	1500	15	1485	193	1307	1500

Capacity Analysis Module:

Vol/Sat:	0.12	0.08	0.08	0.04	0.22	0.00	0.22	4.40	0.29	0.06	0.04	0.08
Crit Vol:	174			333			490					113
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 51 Critical Vol./Cap. (X): 0.609
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 51 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 3 0 0 0 0 2 0 0 1 0 1! 0 1 0 0 0 0 0

Volume Module:
 Base Vol: 0 645 0 0 885 0 372 0 1023 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 645 0 0 885 0 372 0 1023 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 645 0 0 885 0 372 0 1023 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 645 0 0 885 0 372 0 1023 0 0 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 1.10 1.00 1.10 1.00 1.00 1.00
 Final Vol.: 0 645 0 0 885 0 409 0 1125 0 0 0

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 3.00 0.00 0.00 2.00 0.00 1.00 0.00 2.00 0.00 0.00 0.00
 Final Sat.: 0 4950 0 0 3300 0 1650 0 3300 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.00 0.13 0.00 0.00 0.27 0.00 0.25 0.00 0.34 0.00 0.00 0.00
 Crit Vol: 0 443 563 0
 Crit Moves: ****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 36 Critical Vol./Cap. (X): 0.438

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 36 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	701	0	0	679	0	0	0	0	442	0	280
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	701	0	0	679	0	0	0	0	442	0	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	701	0	0	679	0	0	0	0	442	0	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	701	0	0	679	0	0	0	0	442	0	280
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	1.10	1.00	1.00
Final Vol.:	0	701	0	0	679	0	0	0	0	486	0	280

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.27	0.00	0.73
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2094	0	1206

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.23	0.00	0.23
Crit Vol:	0				340			0		383		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 75 Critical Vol./Cap. (X): 0.597

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 75 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	231	60	424	18	147	22	14	518	198	700	966	8
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:	231	60	424	18	147	22	14	518	198	700	966	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:	231	60	424	18	147	22	14	518	198	700	966	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	231	60	424	18	147	22	14	518	198	700	966	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	254	60	424	18	147	22	14	518	198	770	966	8

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.62	0.38	1.00	0.19	1.57	0.24	1.00	2.00	1.00	2.00	1.98	0.02
Final Sat.:	2427	573	1500	289	2358	353	1500	3000	1500	3000	2975	25

Capacity Analysis Module:

Vol/Sat:	0.10	0.10	0.28	0.06	0.06	0.06	0.01	0.17	0.13	0.26	0.32	0.32
Crit Vol:	157			94			259			385		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.082
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3
 Optimal Cycle: 0 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 1 1 0 0

Volume Module:
 Base Vol: 0 0 0 0 80 9 0 0 0 7 22 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 0 80 9 0 0 0 7 22 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 0 80 9 0 0 0 7 22 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 0 80 9 0 0 0 7 22 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 Vol.: 0 0 0 0 80 9 0 0 0 7 22 0

Saturation Flow Module:
 Sat/Lane: 0 0 0 541 541 541 0 0 0 338 338 338
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 0.00 1.80 0.20 0.00 0.00 0.00 0.48 1.52 0.00
 Final Sat.: 0 0 0 0 973 109 0 0 0 163 513 0

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.00 0.08 0.08 0.00 0.00 0.00 0.04 0.04 0.00
 Crit Moves: **** *
 ApproachV/S: xxxxx 0.08 xxxxx 0.04

Level Of Service Module:
 Delay/Veh: 0.0 0.0 0.0 0.0 1.4 1.4 0.0 0.0 0.0 1.2 1.2 0.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 0.0 1.4 1.4 0.0 0.0 0.0 1.2 1.2 0.0
 LOS by Move: * * * A A * A A *
 ApproachDel: xxxxxx 1.4 xxxxxx 1.2
 LOS by Appr: F A F A

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.053

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	2	52	0	0	0	0	0	0	0	0	32	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:	2	52	0	0	0	0	0	0	0	0	32	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:	2	52	0	0	0	0	0	0	0	0	32	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	52	0	0	0	0	0	0	0	0	32	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 Vol.:	2	52	0	0	0	0	0	0	0	0	32	12

Saturation Flow Module:

Sat/Lane:	516	516	516	0	0	0	0	0	0	419	419	419
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	0.55
Final Sat.:	38	994	0	0	0	0	0	0	0	0	609	229

Capacity Analysis Module:

Vol/Sat:	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
Crit Moves:	****			****			****			****		
ApproachV/S:	0.05			xxxxx			xxxxx			0.05		

Level Of Service Module:

Delay/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.2			xxxxxx			xxxxxx			1.2		
LOS by Appr:	A			F			F			A		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.077
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	32	55	0	0	32	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	32	55	0	0	32	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	32	55	0	0	32	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	32	55	0	0	32	2	0	0	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 Vol.:	0	0	0	32	55	0	0	32	2	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	0	0	0	568	568	568	285	285	285	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.74	1.26	0.00	0.00	1.88	0.12	0.00	0.00	0.00
Final Sat.:	0	0	0	418	718	0	0	536	34	0	0	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.08			0.06			xxxxx		

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
Delay/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	1.3	1.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	1.3	1.3	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.3			1.3			xxxxxx		
LOS by Appr:	F			A			A			F		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.057
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	27	6	0	0	0	23	40	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	27	6	0	0	0	23	40	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	27	6	0	0	0	23	40	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	27	6	0	0	0	23	40	0	0	0	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 Vol.:	0	27	6	0	0	0	23	40	0	0	0	0

Saturation Flow Module:

Sat/Lane:	317	317	317	0	0	0	555	555	555	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.64	0.36	0.00	0.00	0.00	0.73	1.27	0.00	0.00	0.00	0.00
Final Sat.:	0	519	115	0	0	0	405	705	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00
Crit Moves:			****			****		****				****
ApproachV/S:	0.05			xxxxx			0.06			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.2			xxxxxx			1.2			xxxxxx		
LOS by Appr:	A			F			A			F		

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive
*****Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	1 0 1 1 0

Volume Module:

Base Vol:	0	0	0	14	0	27	99	685	0	0	196	8
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	14	0	27	99	685	0	0	196	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:	0	0	0	14	0	27	99	685	0	0	196	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	14	0	27	99	685	0	0	196	8

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	15

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	984	xxxx	102	204	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	249	xxxx	1229	1332	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.92	xxxx	1.00	1.00	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	228	xxxx	1229	1332	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	16.8	xxxx	3.0	2.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0	7.7	0.4	0.0								

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive
*****Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled			
Rights:	Include			Include			Include			Include			
Lanes:	1	0	0	1	0	0	1	0	1	1	0	1	0

Volume Module:

Base Vol:	4	1	4	2	0	12	146	201	3	4	139	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	1	4	2	0	12	146	201	3	4	139	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	1	4	2	0	12	146	201	3	4	139	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	1	4	2	0	12	146	201	3	4	139	6

Adjusted Volume Module:

Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	4	1	4	2	0	13	161	201	3	4	139	6

Critical Gap Module:

MoveUp Time:	3.4	3.3	2.6	3.4	xxxx	2.6	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx
Critical Gp:	7.0	6.5	5.5	7.0	xxxx	5.5	5.5	xxxx	xxxxxx	5.5	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	492	498	102	494	xxxx	73	145	xxxx	xxxxxx	204	xxxx	xxxxxx
Potent Cap.:	514	558	1229	512	xxxx	1272	1433	xxxx	xxxxxx	1332	xxxx	xxxxxx
Adj Cap:	0.90	0.88	1.00	0.91	xxxx	1.00	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx
Move Cap.:	463	494	1229	464	xxxx	1272	1433	xxxx	xxxxxx	1332	xxxx	xxxxxx

Level Of Service Module:

Stopped Del:	7.8	7.3	2.9	7.8	xxxx	2.9	2.8	xxxx	xxxxxx	2.7	xxxx	xxxxxx
LOS by Move:	B	*	*	B	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	947	xxxx	xxxx	1272	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxx	xxxx	3.8	xxxxx	xxxx	2.9	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shared LOS:	*	*	A	*	*	A	*	*	*	*	*	*
ApproachDel:	5.6			3.6			1.2			0.1		

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road
*****Average Delay (sec/veh): 2.2 Worst Case Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1! 0 0	0 1 0 1 0	1 0 1 0 1	0 0 1! 0 0

Volume Module:

Base Vol:	2	6	1	8	8	220	151	7	2	2	6	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	6	1	8	8	220	151	7	2	2	6	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	6	1	8	8	220	151	7	2	2	6	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	6	1	8	8	220	151	7	2	2	6	9

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.00	1.00	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	2	6	1	9

Critical Gap Module:

MoveUp Time:	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx	3.4	3.3	2.6	3.4	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxxx	5.0	xxxx	xxxxxx	6.5	6.0	5.5	6.5	6.0	5.5

Capacity Module:

Cnflct Vol:	228	xxxx	xxxxxx	7	xxxx	xxxxxx	142	135	114	28	245	7
Potent Cap.:	1335	xxxx	xxxxxx	1701	xxxx	xxxxxx	876	927	1212	1020	812	1374
Adj Cap:	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx	0.98	0.99	1.00	0.99	0.99	1.00
Move Cap.:	1335	xxxx	xxxxxx	1701	xxxx	xxxxxx	859	920	1212	1006	806	1374

Level Of Service Module:

Stopped Del:	2.7	xxxx	xxxxxx	2.1	xxxx	xxxxxx	5.1	3.9	3.0	3.6	4.5	2.6
LOS by Move:	A	*	*	A	*	*	B	A	A	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	1063	xxxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	3.4	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	A	*
ApproachDel:	0.6			0.1			5.0			3.4		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.488

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	1090	0	473	0	186	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1090	0	473	0	186	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1090	0	473	0	186	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1090	0	473	0	186	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1090	0	520	0	205	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.33	0.00	0.16	0.00	0.12	0.00	0.00	0.00
Crit Vol:	0				545		260			0		
Crit Moves:					****		****					

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.932

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	584	0	0	3494	54	0	0	156	36	48	186
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:	107	584	0	0	3494	54	0	0	156	36	48	186
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:	107	584	0	0	3494	54	0	0	156	36	48	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	584	0	0	3494	54	0	0	156	36	48	186
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	1.10
Final Vol.:	107	584	0	0	3494	54	0	0	156	36	48	205

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.38	1.62
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	569	2431

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.00	0.00	0.78	0.04	0.00	0.00	0.10	0.02	0.08	0.08
Crit Vol:	107				1165		0			127		
Crit Moves:	****				****		****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 53 Critical Vol./Cap. (X): 0.361

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	3	34	119	50	59	80	97	428	2	244	938	156
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	34	119	50	59	80	97	428	2	244	938	156
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	34	119	50	59	80	97	428	2	244	938	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	34	119	50	59	80	97	428	2	244	938	156
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 Vol.:	3	34	119	50	59	80	97	428	2	244	938	156

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.57	0.43
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	3858	642

Capacity Analysis Module:

Vol/Sat:	0.00	0.02	0.08	0.03	0.04	0.05	0.06	0.14	0.00	0.16	0.24	0.24
Crit Vol:	34			50			214			244		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.325

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	24	26	13	20	19	13	138	499	88	246	550	211
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:	24	26	13	20	19	13	138	499	88	246	550	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	26	13	20	19	13	138	499	88	246	550	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	26	13	20	19	13	138	499	88	246	550	211
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	24	26	13	22	19	13	138	499	88	246	550	211

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.07	0.93	1.00	1.00	2.55	0.45	1.00	2.17	0.83
Final Sat.:	1500	1500	1500	1610	1390	1500	1500	3825	675	1500	3252	1248

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.01	0.01	0.01	0.01	0.09	0.13	0.13	0.16	0.17	0.17
Crit Vol:	26			21			196			246		
Crit Moves:	****			****			****			****		

Default Scenario

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Lane Geometry Report

Number of approach lanes: (L) (LT) (T) (RT) (R) (LTR)

Node Intersection	NB	SB	EB	WB
201 Jackson Road & Sunrise Blvd.	100100	101010	101010	101010
202 Sunrise Blvd. & Douglas Road	101100	101100	000001	010010
203 Sunrise Blvd. & International Drive	001100	102000	000000	000001
204 Sunrise Blvd. & White Rock Road	203010	203010	202010	203010
205 Sunrise Blvd. & Folsom Blvd.	204010	203010	202010	201110
206 Sunrise Blvd. & Zinfandel Drive	202100	103010	000011	100001
211 Zinfandel Drive & International Dri	101010	101010	102010	102010
213 Zinfandel Drive & White Rock Road	203010	203010	202100	201110
214 Zinfandel Drive & US50 EB Ramps	003100	002000	110110	000010
215 Zinfandel Drive & US50 WB Ramps	003000	002000	000000	200010
216 Mather Field Road & International D	200010	000000	003010	103000
217 Mather Field Road & Rockingham Driv	102100	103010	100001	010100
218 Mather Field Road & US50 EB Ramps	003000	002000	100011	000000
219 Mather Field Road & US50 WB Ramps	002000	002000	000000	100001
220 Mather Field Road & Folsom Blvd.	110010	010100	102010	201100
221 Mather Blvd. & Von Karman Street	000000	001100	000000	011000
222 Mather Blvd. & Whitehead Street	011000	000000	000000	001100
225 Von Karman Street & Norden Avenue	000000	011000	001100	000000
226 Norden Avenue & Whitehead Street	001100	000000	011000	000000
228 International Drive & Capital Cente	000000	100010	102000	101100
229 International Drive & Prospect Park	100100	100100	101100	101100
230 International Drive & Kilgore Road	000001	010100	101010	000001
232 Hazel Avenue & US50 EB Ramps	002000	002000	100011	000000
233 Hazel Avenue & US50 WB Ramps	103000	003010	000010	100110
234 White Rock Road & Kilgore Road	101010	101100	102010	102100
235 White Rock Road & Prospect Park Dri	101010	110010	102100	102100

**2. INTERSECTION CAPACITY ANALYSIS
EXISTING CONDITIONS
P.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	3	260	67	337	781	112	55	576	2	18	134	91
202	Sunrise Blvd.	11	473	7	49	1336	33	73	53	44	5	13	36
203	Sunrise Blvd.	0	965	14	49	1480	0	0	0	0	17	0	126
204	Sunrise Blvd.	329	774	29	295	1110	292	431	603	641	122	263	279
205	Sunrise Blvd.	150	2635	400	440	1380	170	710	550	160	180	210	300
206	Sunrise Blvd.	140	3710	5	80	2710	180	240	10	140	20	20	60
211	Zinfandel Dri	33	66	22	19	13	202	259	179	0	4	266	49
213	Zinfandel Dri	31	1202	31	436	222	269	601	123	0	48	268	902
214	Zinfandel Dri	0	2452	0	0	570	0	977	166	358	0	0	528
215	Zinfandel Dri	0	2015	0	0	481	0	0	0	0	234	0	230
216	Mather Field	536	0	98	0	0	0	0	398	0	114	913	0
217	Mather Field	395	1034	14	133	407	0	793	59	170	7	117	84
218	Mather Field	0	1591	0	0	551	0	694	0	404	0	0	0
219	Mather Field	0	1324	0	0	636	0	0	0	0	191	0	263
220	Mather Field	674	208	868	42	75	8	8	1361	177	503	1042	16
221	Mather Blvd.	0	0	0	0	50	22	0	0	0	4	49	0
222	Mather Blvd.	3	69	0	0	0	0	0	0	0	0	48	36
225	Von Karman St	0	0	0	26	24	0	0	26	2	0	0	0
226	Norden Avenue	0	60	1	0	0	0	14	38	0	0	0	0
228	International	0	0	0	9	0	113	25	330	0	0	756	8
229	International	7	1	7	6	0	142	20	196	1	11	209	4
230	International	2	7	0	2	4	146	307	1	5	0	1	4
232	Hazel Avenue	0	0	0	0	291	0	1788	0	73	0	0	0
233	Hazel Avenue	102	3022	0	0	1339	38	0	0	133	53	153	701
234	White Rock Ro	1	85	220	233	58	150	149	1017	6	106	849	180
235	White Rock Ro	158	34	133	199	45	85	53	706	18	42	923	17

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.919

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	3	260	67	337	781	112	55	576	2	18	134	91
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	260	67	337	781	112	55	576	2	18	134	91
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	260	67	337	781	112	55	576	2	18	134	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	260	67	337	781	112	55	576	2	18	134	91
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 Vol.:	3	260	67	337	781	112	55	576	2	18	134	91

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.80	0.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1193	307	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.22	0.22	0.52	0.07	0.04	0.38	0.00	0.01	0.09	0.06
Crit Vol:	3				781			576		18		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 83 Critical Vol./Cap. (X): 0.589

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	11	473	7	49	1336	33	73	53	44	5	13	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:	11	473	7	49	1336	33	73	53	44	5	13	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:	11	473	7	49	1336	33	73	53	44	5	13	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	473	7	49	1336	33	73	53	44	5	13	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 Vol.:	11	473	7	49	1336	33	73	53	44	5	13	36

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.97	0.03	1.00	1.95	0.05	0.43	0.31	0.26	0.28	0.72	1.00
Final Sat.:	1500	2956	44	1500	2928	72	644	468	388	417	1083	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.16	0.16	0.03	0.46	0.46	0.11	0.11	0.11	0.01	0.01	0.02
Crit Vol:	11			685			170			18		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl
*****Average Delay (sec/veh): 3.3 Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0

Volume Module:

Base Vol:	0 965 14	49 1480 0	0 0 0	17 0 126
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:	0 965 14	49 1480 0	0 0 0	17 0 126
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 965 14	49 1480 0	0 0 0	17 0 126
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	0 965 14	49 1480 0	0 0 0	17 0 126

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
% Truck/Comb:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
PCE Adj:	1.10 1.00 1.00	1.10 1.00 1.00	1.10 1.10 1.10	1.10 1.10 1.10
Cycl/Car PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Trck/Cmb PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Adj Vol.:	0 965 14	54 1480 0	0 0 0	19 0 139

Critical Gap Module:

MoveUp Time:	xxxxx xxxx xxxxx	2.1 xxxx xxxxx	xxxxx xxxx xxxxx	3.4 xxxx 2.6
Critical Gp:	xxxxx xxxx xxxxx	5.5 xxxx xxxxx	xxxxx xxxx xxxxx	7.0 xxxx 5.5

Capacity Module:

Cnflct Vol:	xxxx xxxx xxxxx	979 xxxx xxxxx	xxxx xxxx xxxxx	2501 xxxx 490
Potent Cap.:	xxxx xxxx xxxxx	511 xxxx xxxxx	xxxx xxxx xxxxx	27 xxxx 782
Adj Cap:	xxxx xxxx xxxxx	1.00 xxxx xxxxx	xxxx xxxx xxxxx	0.89 xxxx 1.00
Move Cap.:	xxxx xxxx xxxxx	511 xxxx xxxxx	xxxx xxxx xxxxx	24 xxxx 782

Level Of Service Module:

Stopped Del:	xxxxx xxxx xxxxx	7.8 xxxx xxxxx	xxxxx xxxx xxxxx	403.1 xxxx 5.5
LOS by Move:	* * *	B * *	* * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx 164 xxxxx
Shrd StpDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 52.8 xxxxx
Shared LOS:	* * *	* * *	* * *	* F *
ApproachDel:	0.0	0.3	0.0	52.8

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 121 Critical Vol./Cap. (X): 0.719
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 121 Level Of Service: C

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 2 0 1 2 0 3 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	329	774	29	295	1110	292	431	603	641	122	263	279
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:	329	774	29	295	1110	292	431	603	641	122	263	279
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:	329	774	29	295	1110	292	431	603	641	122	263	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	329	774	29	295	1110	292	431	603	641	122	263	279
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	362	774	29	325	1110	292	474	603	641	134	263	279

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.12	0.17	0.02	0.11	0.25	0.19	0.16	0.20	0.43	0.04	0.06	0.19
Crit Vol:	0			370			641		67			
Crit Moves:	****			****			****		****			

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.981

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	150	2635	400	440	1380	170	710	550	160	180	210	300
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:	150	2635	400	440	1380	170	710	550	160	180	210	300
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:	150	2635	400	440	1380	170	710	550	160	180	210	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	2635	400	440	1380	170	710	550	160	180	210	300
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	165	2635	400	484	1380	170	781	550	160	198	210	330

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.17	1.83
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	1750	2750

Capacity Analysis Module:

Vol/Sat:	0.06	0.44	0.27	0.16	0.31	0.11	0.26	0.18	0.11	0.07	0.12	0.12
Crit Vol:	659			242			391			180		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.099
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 0 0 1! 0 1 1 0 1! 0 0

Volume Module:

Base Vol:	140	3710	5	80	2710	180	240	10	140	20	20	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:	140	3710	5	80	2710	180	240	10	140	20	20	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:	140	3710	5	80	2710	180	240	10	140	20	20	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	3710	5	80	2710	180	240	10	140	20	20	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	154	3710	5	80	2710	180	240	10	154	22	20	60

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.99	0.01	1.00	1.00	0.01	0.99
Final Sat.:	3000	4494	6	1500	4500	1500	1485	15	1500	1500	15	1485

Capacity Analysis Module:

Vol/Sat:	0.05	0.83	0.83	0.05	0.60	0.12	0.16	0.67	0.10	0.01	1.33	0.04
Crit Vol:	1238			80			250			80		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 1 Critical Vol./Cap. (X): 1.329
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.8
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0	1	0	1	0	1	1	0	2	0	1

Volume Module:

Base Vol:	33	66	22	19	13	202	259	179	0	4	266	49
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:	33	66	22	19	13	202	259	179	0	4	266	49
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:	33	66	22	19	13	202	259	179	0	4	266	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	66	22	19	13	202	259	179	0	4	266	49
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 Vol.:	33	66	22	19	13	202	259	179	0	4	266	49

Saturation Flow Module:

Sat/Lane:	207	207	207	152	152	152	356	356	356	277	277	277
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	207	207	207	152	152	152	356	712	356	277	554	277

Capacity Analysis Module:

Vol/Sat:	0.16	0.32	0.11	0.13	0.09	1.33	0.73	0.25	0.00	0.01	0.48	0.18
Crit Moves:	****			****			****			****		
ApproachV/S:	0.19			0.51			0.31			0.29		

Level Of Service Module:

Delay/Veh:	1.8	3.4	1.5	1.6	1.4	156.0	15.9	2.6	0.0	1.1	6.2	2.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.8	3.4	1.5	1.6	1.4	156.0	15.9	2.6	0.0	1.1	6.2	2.0
LOS by Move:	A	A	A	A	A	F	C	A	*	A	B	A
ApproachDel:	2.1			7.0			3.2			3.0		
LOS by Appr:	A			B			A			A		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.978

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	
	2	0	2	1	0		2	0	1	1	1	

Volume Module:

Base Vol:	31	1202	31	436	222	269	601	123	0	48	268	902
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	1202	31	436	222	269	601	123	0	48	268	902
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:	31	1202	31	436	222	269	601	123	0	48	268	902
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	1202	31	436	222	269	601	123	0	48	268	902
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	34	1202	31	480	222	269	661	123	0	53	268	992

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	0.00	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	0	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.27	0.02	0.16	0.05	0.18	0.22	0.03	0.00	0.02	0.18	0.33
Crit Vol:	401			240			331					496
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.083

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Split Phase			Split Phase					
Rights:	Include			Include			Include			Ovl					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	0	0	1

Volume Module:

Base Vol:	0	2452	0	0	570	0	977	166	358	0	0	528
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	2452	0	0	570	0	977	166	358	0	0	528
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2452	0	0	570	0	977	166	358	0	0	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2452	0	0	570	0	977	166	358	0	0	528
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2452	0	0	570	0	1075	166	394	0	0	528

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.59	1.41	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	919	2181	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.40	0.00	0.00	0.18	0.00	0.35	0.18	0.18	0.00	0.00	0.34
Crit Vol:	613			0			538					528
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 44 Critical Vol./Cap. (X): 0.546

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 44 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2015	0	0	481	0	0	0	0	234	0	230
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	2015	0	0	481	0	0	0	0	234	0	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2015	0	0	481	0	0	0	0	234	0	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2015	0	0	481	0	0	0	0	234	0	230
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	1.10	1.00	1.00
Final Vol.:	0	2015	0	0	481	0	0	0	0	257	0	230

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.08	0.00	0.14
Crit Vol:	672			0			0					230
Crit Moves:	****			****								****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 44 Critical Vol./Cap. (X): 0.387
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 44 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Ovl Include Ignore Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 0 0 1 0 0 0 0 0 0 3 0 1 1 0 3 0 0

Volume Module:

Base Vol:	536	0	98	0	0	0	0	398	133	114	913	0
Growth 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
Initial Bse:	536	0	98	0	0	0	0	398	0	114	913	0
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:	536	0	98	0	0	0	0	398	0	114	913	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	536	0	98	0	0	0	0	398	0	114	913	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	590	0	98	0	0	0	0	398	0	114	913	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.19	0.00	0.06	0.00	0.00	0.00	0.00	0.09	0.00	0.07	0.20	0.00
Crit Vol:	295				0		0				304	
Crit Moves:	****						****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 124 Critical Vol./Cap. (X): 0.791

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 124 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	395	1034	14	133	407	361	793	59	170	7	117	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	395	1034	14	133	407	0	793	59	170	7	117	84
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	395	1034	14	133	407	0	793	59	170	7	117	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	395	1034	14	133	407	0	793	59	170	7	117	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	395	1034	14	133	407	0	872	59	170	7	117	84

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.96	0.04	1.00	3.00	1.00	1.58	0.11	0.31	0.07	1.12	0.81
Final Sat.:	1500	4440	60	1500	4500	1500	2376	161	463	101	1688	1212

Capacity Analysis Module:

Vol/Sat:	0.26	0.23	0.23	0.09	0.09	0.00	0.37	0.37	0.37	0.07	0.07	0.07
Crit Vol:	395			136			551			104		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 46 Critical Vol./Cap. (X): 0.565

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	0	0	1	0	1	0

Volume Module:

Base Vol:	0	1591	0	0	551	0	694	0	404	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1591	0	0	551	0	694	0	404	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1591	0	0	551	0	694	0	404	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1591	0	0	551	0	694	0	404	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1591	0	0	551	0	763	0	444	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.90	xxxx	1.10	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	3129	-0	1821	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.32	0.00	0.00	0.17	0.00	0.24	0.00	0.24	0.00	0.00	0.00
Crit Vol:	530			0			402			0		
Crit Moves:	****			****			****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 46 Critical Vol./Cap. (X): 0.561
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 46 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 2 0 0 0 0 2 0 0 0 0 1 0 1! 0 0

Volume Module:
 Base Vol: 0 1324 0 0 636 0 0 0 0 191 0 263
 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 1324 0 0 636 0 0 0 0 191 0 263
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 1324 0 0 636 0 0 0 0 191 0 263
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 1324 0 0 636 0 0 0 0 191 0 263
 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 1.10 1.00 1.00
 Final Vol.: 0 1324 0 0 636 0 0 0 0 210 0 263

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 2.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Final Sat.: 0 3300 0 0 3300 0 0 0 0 1650 0 1650

Capacity Analysis Module:
 Vol/Sat: 0.00 0.40 0.00 0.00 0.19 0.00 0.00 0.00 0.00 0.13 0.00 0.16
 Crit Vol: 662 0 0 263
 Crit Moves: ****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.074
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Split Phase Split Phase Protected Protected
 Rights: Ovl Include Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 1 0 0 1 0 1 0 1 0 2 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	674	208	868	42	75	8	8	1361	177	503	1042	16
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:	674	208	868	42	75	8	8	1361	177	503	1042	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:	674	208	868	42	75	8	8	1361	177	503	1042	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	674	208	868	42	75	8	8	1361	177	503	1042	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	741	208	868	42	75	8	8	1361	177	553	1042	16

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.56	0.44	1.00	0.67	1.20	0.13	1.00	2.00	1.00	2.00	1.97	0.03
Final Sat.:	2342	658	1500	1008	1800	192	1500	3000	1500	3000	2955	45

Capacity Analysis Module:

Vol/Sat:	0.32	0.32	0.58	0.04	0.04	0.04	0.01	0.45	0.12	0.18	0.35	0.35
Crit Vol:			868			63			681		0	
Crit Moves:			****			****			****		****	

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.075
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	50	22	0	0	0	4	49	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	50	22	0	0	0	4	49	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	50	22	0	0	0	4	49	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	50	22	0	0	0	4	49	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 Vol.:	0	0	0	0	50	22	0	0	0	4	49	0

Saturation Flow Module:

Sat/Lane:	0	0	0	477	477	477	0	0	0	458	458	458
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.39	0.61	0.00	0.00	0.00	0.15	1.85	0.00
Final Sat.:	0	0	0	0	663	292	0	0	0	69	847	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.06	0.06	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.08			xxxxx			0.06		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.3			xxxxxx			1.2		
LOS by Appr:	F			A			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.091
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.4
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	3	69	0	0	0	0	0	0	0	0	48	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:	3	69	0	0	0	0	0	0	0	0	48	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:	3	69	0	0	0	0	0	0	0	0	48	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	69	0	0	0	0	0	0	0	0	48	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 Vol.:	3	69	0	0	0	0	0	0	0	0	48	36

Saturation Flow Module:

Sat/Lane:	495	495	495	0	0	0	0	0	0	463	463	463
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	1.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.86
Final Sat.:	41	949	0	0	0	0	0	0	0	0	529	397

Capacity Analysis Module:

Vol/Sat:	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
Crit Moves:	****					****			****		****	
ApproachV/S:	0.07			xxxxx			xxxxx				0.09	

Level Of Service Module:

Delay/Veh:	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
LOS by Move:	A	A	*		*		*		*		A	A
ApproachDel:	1.3			xxxxxx			xxxxxx				1.4	
LOS by Appr:	A			F			F				A	

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.049

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	0	0	26	24	0	0	26	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	24	0	0	26	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	24	0	0	26	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	26	24	0	0	26	2	0	0	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 Vol.:	0	0	0	26	24	0	0	26	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	531	531	531	301	301	301	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.86	0.14	0.00	0.00	0.00
Final Sat.:	0	0	0	531	531	0	0	559	43	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.05	0.05	0.00	0.00	0.00
Crit Moves:			****	****					****			****
ApproachV/S:	xxxxx			0.05			0.05			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.2	1.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.2	1.2	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.2			1.2			xxxxxx		
LOS by Appr:	F			A			A			F		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.071
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	60	1	0	0	0	14	38	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	60	1	0	0	0	14	38	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	60	1	0	0	0	14	38	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	60	1	0	0	0	14	38	0	0	0	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 Vol.:	0	60	1	0	0	0	14	38	0	0	0	0

Saturation Flow Module:

Sat/Lane:	430	430	430	0	0	0	433	433	433	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.97	0.03	0.00	0.00	0.00	0.54	1.46	0.00	0.00	0.00	0.00
Final Sat.:	0	846	14	0	0	0	233	633	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.07			xxxxx			0.06			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			1.3			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive
*****Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	1 0 1 1 0

Volume Module:

Base Vol:	0	0	0	9	0	113	25	330	0	0	756	8
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	9	0	113	25	330	0	0	756	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:	0	0	0	9	0	113	25	330	0	0	756	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	9	0	113	25	330	0	0	756	8

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	10

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	1115	xxxx	382	764	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	205	xxxx	887	667	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	197	xxxx	887	667	xxxx	xxxxx	xxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	19.2	xxxx	4.7	5.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	A	B	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0	5.7	0.4	0.0								

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive
*****Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 1 0	1 0 1 1 0

Volume Module:

Base Vol:	7	1	7	6	0	142	20	196	1	11	209	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	1	7	6	0	142	20	196	1	11	209	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	1	7	6	0	142	20	196	1	11	209	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	7	1	7	6	0	142	20	196	1	11	209	4

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	8	1	8	7

Critical Gap Module:

MoveUp Time:	3.4	3.3	2.6	3.4	xxxx	2.6	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx
Critical Gp:	7.0	6.5	5.5	7.0	xxxx	5.5	5.5	xxxx	xxxxxx	5.5	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	437	441	99	439	xxxx	107	213	xxxx	xxxxxx	197	xxxx	xxxxxx
Potent Cap.:	557	603	1234	555	xxxx	1223	1317	xxxx	xxxxxx	1344	xxxx	xxxxxx
Adj Cap:	0.86	0.97	1.00	0.97	xxxx	1.00	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx
Move Cap.:	476	587	1234	540	xxxx	1223	1317	xxxx	xxxxxx	1344	xxxx	xxxxxx

Level Of Service Module:

Stopped Del:	7.7	6.1	2.9	6.7	xxxx	3.3	2.8	xxxx	xxxxxx	2.7	xxxx	xxxxxx
LOS by Move:	B	*	*	B	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	1085	xxxx	xxxx	1223	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shared LOS:	*	*	A	*	*	A	*	*	*	*	*	*
ApproachDel:	5.4			3.5			0.3			0.1		

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road
*****Average Delay (sec/veh): 3.9 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	1	0	1	0	1	0	0	1

Volume Module:

Base Vol:	2	7	0	2	4	146	307	1	5	0	1	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	7	0	2	4	146	307	1	5	0	1	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	7	0	2	4	146	307	1	5	0	1	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	2	7	0	2	4	146	307	1	5	0	1	4

Adjusted Volume Module:

Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	2	7	0	2	4	146	338	1	6	0	1	4

Critical Gap Module:

MoveUp Time:	2.1	xxxx	xxxxxx	2.1	xxxx	xxxxxx	3.4	3.3	2.6	xxxxxx	3.3	2.6
Critical Gp:	5.0	xxxx	xxxxxx	5.0	xxxx	xxxxxx	6.5	6.0	5.5	xxxxxx	6.0	5.5

Capacity Module:

Cnflct Vol:	150	xxxx	xxxxxx	7	xxxx	xxxxxx	91	88	75	xxxx	161	7
Potent Cap.:	1454	xxxx	xxxxxx	1701	xxxx	xxxxxx	938	981	1269	xxxx	898	1373
Adj Cap:	1.00	xxxx	xxxxxx	1.00	xxxx	xxxxxx	0.99	1.00	1.00	xxxx	1.00	1.00
Move Cap.:	1454	xxxx	xxxxxx	1701	xxxx	xxxxxx	932	978	1269	xxxx	895	1373

Level Of Service Module:

Stopped Del:	2.5	xxxx	xxxxxx	2.1	xxxx	xxxxxx	5.8	3.7	2.8	xxxxxx	4.0	2.6
LOS by Move:	A	*	*	A	*	*	B	A	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	1241
Shrd StpDel:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	2.9
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	A
ApproachDel:	0.6			0.0			5.7			2.9		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 63 Critical Vol./Cap. (X): 0.684

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 63 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	291	0	1788	0	73	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	291	0	1788	0	73	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	291	0	1788	0	73	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	291	0	1788	0	73	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	291	0	1967	0	80	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.00	0.60	0.00	0.05	0.00	0.00	0.00
Crit Vol:	0				146		984			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.980

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	102	3022	0	0	1339	38	0	0	133	53	153	701
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:	102	3022	0	0	1339	38	0	0	133	53	153	701
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:	102	3022	0	0	1339	38	0	0	133	53	153	701
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	3022	0	0	1339	38	0	0	133	53	153	701
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	1.10
Final Vol.:	102	3022	0	0	1339	38	0	0	133	53	153	771

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.33	1.67
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	497	2503

Capacity Analysis Module:

Vol/Sat:	0.07	0.67	0.00	0.00	0.30	0.03	0.00	0.00	0.09	0.04	0.31	0.31
Crit Vol:	1007	0	0	0	0	0	0	0	0	462	0	0
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 95 Critical Vol./Cap. (X): 0.641

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 95 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	1	85	220	233	58	150	149	1017	6	106	849	180
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:	1	85	220	233	58	150	149	1017	6	106	849	180
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:	1	85	220	233	58	150	149	1017	6	106	849	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	85	220	233	58	150	149	1017	6	106	849	180
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 Vol.:	1	85	220	233	58	150	149	1017	6	106	849	180

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.48	0.52
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	3713	787

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.15	0.16	0.04	0.10	0.10	0.34	0.00	0.07	0.23	0.23
Crit Vol:			220	233				509		0		
Crit Moves:			****	****				****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 60 Critical Vol./Cap. (X): 0.438

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 60 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	158	34	133	199	45	85	53	706	18	42	923	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	34	133	199	45	85	53	706	18	42	923	17
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:	158	34	133	199	45	85	53	706	18	42	923	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	34	133	199	45	85	53	706	18	42	923	17
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	158	34	133	219	45	85	53	706	18	42	923	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.66	0.34	1.00	1.00	2.93	0.07	1.00	2.95	0.05
Final Sat.:	1500	1500	1500	2489	511	1500	1500	4388	112	1500	4419	81

Capacity Analysis Module:

Vol/Sat:	0.11	0.02	0.09	0.09	0.09	0.06	0.04	0.16	0.16	0.03	0.21	0.21
Crit Vol:	158				132		53				313	
Crit Moves:	****				****		****				****	

Default Scenario

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 Lane Geometry Report

Number of approach lanes: (L) (LT) (T) (RT) (R) (LTR)

Node Intersection	NB	SB	EB	WB
201 Jackson Road & Sunrise Blvd.	100100	101010	101010	101010
202 Sunrise Blvd. & Douglas Road	101100	101100	000001	010010
203 Sunrise Blvd. & International Drive	001100	102000	000000	000001
204 Sunrise Blvd. & White Rock Road	203010	203010	202010	203010
205 Sunrise Blvd. & Folsom Blvd.	204010	203010	202010	201110
206 Sunrise Blvd. & Zinfandel Drive	202100	103010	000011	100001
211 Zinfandel Drive & International Dri	101010	101010	102010	102010
213 Zinfandel Drive & White Rock Road	203010	203010	202100	201110
214 Zinfandel Drive & US50 EB Ramps	003100	002000	110110	000010
215 Zinfandel Drive & US50 WB Ramps	003000	002000	000000	200010
216 Mather Field Road & International D	200010	000000	003010	103000
217 Mather Field Road & Rockingham Driv	102100	103010	100001	010100
218 Mather Field Road & US50 EB Ramps	003000	002000	100011	000000
219 Mather Field Road & US50 WB Ramps	002000	002000	000000	100001
220 Mather Field Road & Folsom Blvd.	110010	010100	102010	201100
221 Mather Blvd. & Von Karman Street	000000	001100	000000	011000
222 Mather Blvd. & Whitehead Street	011000	000000	000000	001100
225 Von Karman Street & Norden Avenue	000000	011000	001100	000000
226 Norden Avenue & Whitehead Street	001100	000000	011000	000000
228 International Drive & Capital Cente	000000	100010	102000	101100
229 International Drive & Prospect Park	100100	100100	101100	101100
230 International Drive & Kilgore Road	010000	010100	101010	000100
232 Hazel Avenue & US50 EB Ramps	002000	002000	100011	000000
233 Hazel Avenue & US50 WB Ramps	103000	003010	000010	100110
234 White Rock Road & Kilgore Road	101010	101100	102010	102100
235 White Rock Road & Prospect Park Dri	101010	110010	102100	102100

**3. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH APPROVED PROJECT
CONDITIONS
A.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	6		603	6		79	306	51	283	115	10	53
202	Sunrise Blvd.	222	1129		4		45	314	32	12	0	36	3
203	Sunrise Blvd.	157	1031		9		137	624	147	144	0	301	3
204	Sunrise Blvd.	357	766		36		231	971	607	122	97	68	121
205	Sunrise Blvd.	87	834	123	349	2381	331	200	145	128	635	479	177
206	Sunrise Blvd.	148	2006		10		40	4363	165	128	10	330	40
207	Zinfandel Dri	5		5	5		54	10	34	17	7	5	10
208	Zinfandel Dri	367	371		0		268	128	84	13	115	82	0
209	Zinfandel Dri	33	433		0		361	964	178	42	12	17	0
210	Zinfandel Dri	45	372		40		0	658	125	25	10	70	75
211	Zinfandel Dri	160	637		45		86	1315	157	143	508	663	49
212	Zinfandel Dri	0	573		77		22	1429	0	0	31	0	74
213	Zinfandel Dri	7	880		12		582	2250	644	210	66	14	50
214	Zinfandel Dri	0	1273		0		0	2395	0	367	847	1081	0
215	Zinfandel Dri	0	779		0		0	862	0	0	0	0	1654
216	Mather Field	123		0	12		0	0	0	0	2246	0	100
217	Mather Field	224	677		38		100	2116	0	300	49	522	22
218	Mather Field	0	935		0		0	1198	0	154	0	1845	0
219	Mather Field	0	563		0		0	837	0	0	0	0	464
220	Mather Field	272	60	247	18	147	22	14	603	322	693	987	8
221	Mather Blvd.	0		0	0		80	9	0	0	0	0	7
222	Mather Blvd.	2	40		0		0	0	0	0	0	0	43
223	C Street & Ai	0	31	149	5	31	49	57	564	0	109	410	1
224	A Street & Zi	18	613		0		0	1421	448	216	0	30	0
225	Von Karman St	0		0	0		32	24	0	0	158	2	0
226	Norden Avenue	0	15		6		0	0	0	23	89	0	0
227	A Street & Ai	16	17		0		3	93	82	30	618	91	0
228	International	0		0	0		108	0	21	49	1446	0	0
229	International	141	53		71		10	28	11	103	478	50	53
230	International	77	103		152		20	36	235	194	290	28	121
231	International	527	8		0		0	25	309	268	969	709	0
232	Hazel Avenue	0		0	0		0	1113	0	474	0	196	0
233	Hazel Avenue	107	604		0		0	3527	54	0	0	156	27
234	White Rock Ro	3	153		101		42	96	74	52	155	2	211
235	White Rock Ro	15	26		12		20	19	13	138	183	76	230
236	B Street & Pr	18	125		0		8	48	68	114	3	8	0
237	B Street & Ki	0	100		0		100	28	10	19	0	0	0
238	B Street & Ai	0		0	0		2	0	175	120	241	0	0

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.006

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	6	603	6	79	306	51	283	115	10	53	538	410
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:	6	603	6	79	306	51	283	115	10	53	538	410
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:	6	603	6	79	306	51	283	115	10	53	538	410
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	603	6	79	306	51	283	115	10	53	538	410
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 Vol.:	6	603	6	79	306	51	283	115	10	53	538	410

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1485	15	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.41	0.05	0.20	0.03	0.19	0.08	0.01	0.04	0.36	0.27
Crit Vol:	609			79			283			538		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 64 Critical Vol./Cap. (X): 0.468
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	222	1129	4	45	314	32	12	0	36	3	40	74
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:	222	1129	4	45	314	32	12	0	36	3	40	74
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:	222	1129	4	45	314	32	12	0	36	3	40	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1129	4	45	314	32	12	0	36	3	40	74
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 Vol.:	222	1129	4	45	314	32	12	0	36	3	40	74

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.82	0.18	0.25	0.00	0.75	0.07	0.93	1.00
Final Sat.:	1500	2989	11	1500	2723	277	375	0	1125	105	1395	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.38	0.38	0.03	0.12	0.12	0.03	0.00	0.03	0.03	0.03	0.05
Crit Vol:	567			45			48			43		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 77 Critical Vol./Cap. (X): 0.560
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 77 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Ovl Ovl Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 1 1 0 2 0 1 0 1 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	157	1031	9	137	624	147	144	0	301	3	0	40
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:	157	1031	9	137	624	147	144	0	301	3	0	40
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:	157	1031	9	137	624	147	144	0	301	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1031	9	137	624	147	144	0	301	3	0	40
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 Vol.:	157	1031	9	137	624	147	144	0	301	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.07	0.00	0.93
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.10	0.34	0.01	0.09	0.21	0.10	0.10	0.00	0.20	0.03	0.00	0.03
Crit Vol:	516			137			144					43
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 102 Critical Vol./Cap. (X): 0.666

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 102 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	357	766	36	231	971	607	122	97	68	121	588	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:	357	766	36	231	971	607	122	97	68	121	588	113
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:	357	766	36	231	971	607	122	97	68	121	588	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	766	36	231	971	607	122	97	68	121	588	113
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	393	766	36	254	971	607	134	97	68	133	588	113

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.13	0.17	0.02	0.08	0.22	0.40	0.04	0.03	0.05	0.04	0.13	0.08
Crit Vol:	197					607	0			196		
Crit Moves:	****					****	****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.842

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	87	834	123	349	2381	331	200	145	128	635	479	177
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:	87	834	123	349	2381	331	200	145	128	635	479	177
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:	87	834	123	349	2381	331	200	145	128	635	479	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	834	123	349	2381	331	200	145	128	635	479	177
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	96	834	123	384	2381	331	220	145	128	699	479	195

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.14	0.08	0.13	0.53	0.22	0.07	0.05	0.09	0.23	0.16	0.13
Crit Vol:	48			794			73			350		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.228
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 0 0 1! 0 1 1 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	148	2006	10	40	4363	165	128	10	330	40	15	40
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:	148	2006	10	40	4363	165	128	10	330	40	15	40
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:	148	2006	10	40	4363	165	128	10	330	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	2006	10	40	4363	165	128	10	330	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	163	2006	10	40	4363	165	128	10	363	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.51	0.04	1.45	1.00	0.19	0.81
Final Sat.:	3000	4478	22	1500	4500	1500	766	60	2174	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.05	0.45	0.45	0.03	0.97	0.11	0.17	0.17	0.17	0.03	0.05	0.03
Crit Vol:	82			1454			251			55		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 0.415
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.7
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	5	5	54	10	34	17	7	5	10	38	197
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:	5	5	5	54	10	34	17	7	5	10	38	197
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:	5	5	5	54	10	34	17	7	5	10	38	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	5	5	54	10	34	17	7	5	10	38	197
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 Vol.:	5	5	5	54	10	34	17	7	5	10	38	197

Saturation Flow Module:

Sat/Lane:	412	412	412	539	539	539	714	714	714	591	591	591
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.33	0.33	0.55	0.10	0.35	0.59	0.24	0.17	0.04	0.16	0.80
Final Sat.:	137	137	137	297	55	187	419	172	123	24	92	475

Capacity Analysis Module:

Vol/Sat:	0.04	0.04	0.04	0.18	0.18	0.18	0.04	0.04	0.04	0.41	0.41	0.41
Crit Moves:	****			****			****			****		
ApproachV/S:	0.04			0.18			0.04			0.41		

Level Of Service Module:

Delay/Veh:	1.1	1.1	1.1	2.0	2.0	2.0	1.2	1.2	1.2	4.8	4.8	4.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.1	1.1	1.1	2.0	2.0	2.0	1.2	1.2	1.2	4.8	4.8	4.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	1.1			2.0			1.2			4.8		
LOS by Appr:	A			A			A			A		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #208 Zinfandel Drive & Airpark Drive

Cycle (sec): 51 Critical Vol./Cap. (X): 0.338

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	367	371	0	268	128	84	13	115	82	0	27	49
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:	367	371	0	268	128	84	13	115	82	0	27	49
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:	367	371	0	268	128	84	13	115	82	0	27	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	367	371	0	268	128	84	13	115	82	0	27	49
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	404	371	0	268	128	84	13	115	82	0	27	49

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.36	0.64
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	533	967

Capacity Analysis Module:

Vol/Sat:	0.13	0.08	0.00	0.18	0.03	0.06	0.01	0.08	0.05	0.00	0.05	0.05
Crit Vol:	124			268			115			0		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 67 Critical Vol./Cap. (X): 0.492
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 67 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	33	433	0	361	964	178	42	12	17	0	16	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:	33	433	0	361	964	178	42	12	17	0	16	175
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:	33	433	0	361	964	178	42	12	17	0	16	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	433	0	361	964	178	42	12	17	0	16	175
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	36	433	0	361	964	178	42	12	17	0	16	175

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.08	0.92
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	126	1374

Capacity Analysis Module:

Vol/Sat:	0.01	0.10	0.00	0.24	0.21	0.12	0.03	0.01	0.01	0.00	0.13	0.13
Crit Vol:	144			361			42			191		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 47 Critical Vol./Cap. (X): 0.280

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Ovl			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	2	0	3	0	1	1	0	1

Volume Module:

Base Vol:	45	372	40	0	658	125	25	10	70	75	36	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:	45	372	40	0	658	125	25	10	70	75	36	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:	45	372	40	0	658	125	25	10	70	75	36	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	372	40	0	658	125	25	10	70	75	36	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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	45	372	40	0	658	125	25	10	70	75	36	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	0.12	0.88	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	188	1313	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.08	0.03	0.00	0.15	0.08	0.02	0.05	0.05	0.05	0.02	0.00
Crit Vol:	45				219			80		75		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 172 Critical Vol./Cap. (X): 0.802

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 172 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Include			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	2	1	0	2	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	160	637	45	86	1315	157	143	508	663	49	313	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:	160	637	45	86	1315	157	143	508	663	49	313	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:	160	637	45	86	1315	157	143	508	663	49	313	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	637	45	86	1315	157	143	508	663	49	313	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 Vol.:	160	637	45	86	1315	157	143	508	663	49	313	108

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.80	0.20	1.00	2.68	0.32	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4203	297	1500	4020	480	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.11	0.15	0.15	0.06	0.33	0.33	0.10	0.17	0.44	0.03	0.10	0.07
Crit Vol:	0			491			663		49			
Crit Moves:	****			****			****		****			

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 56 Critical Vol./Cap. (X): 0.388
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 56 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Include Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 3 0 1 2 0 3 0 1 1 0 0 1 0 1 0 1 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	0	573	77	22	1429	0	0	31	0	74	29	57
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	573	77	22	1429	0	0	31	0	74	29	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	573	77	22	1429	0	0	31	0	74	29	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	573	77	22	1429	0	0	31	0	74	29	57
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	573	77	24	1429	0	0	31	0	74	29	57

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	1500	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.13	0.05	0.01	0.32	0.00	0.00	0.02	0.00	0.05	0.02	0.04
Crit Vol:	0				476			31		74		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 108 Critical Vol./Cap. (X): 0.686

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 108 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	7	880	12	582	2250	644	210	66	14	50	159	303
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:	7	880	12	582	2250	644	210	66	14	50	159	303
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:	7	880	12	582	2250	644	210	66	14	50	159	303
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	880	12	582	2250	644	210	66	14	50	159	303
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	8	880	12	640	2250	644	231	66	14	55	159	333

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.48	0.52	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3713	788	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.01	0.21	0.50	0.43	0.08	0.02	0.02	0.02	0.11	0.11
Crit Vol:	4			750			116			159		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.292

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	1273	0	0	2395	0	367	847	1081	0	0	126
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	1273	0	0	2395	0	367	847	1081	0	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1273	0	0	2395	0	367	847	1081	0	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1273	0	0	2395	0	367	847	1081	0	0	126
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1273	0	0	2395	0	404	847	1189	0	0	126

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.04	1.96	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1615	3035	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.77	0.00	0.26	0.52	0.39	0.00	0.00	0.08
Crit Vol:	0				1198			679				126
Crit Moves:	****				****			****				****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 107 Critical Vol./Cap. (X): 0.812

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 107 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	779	0	0	862	0	0	0	0	1654	0	161
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	779	0	0	862	0	0	0	0	1654	0	161
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	779	0	0	862	0	0	0	0	1654	0	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	779	0	0	862	0	0	0	0	1654	0	161
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	1.10	1.00	1.00
Final Vol.:	0	779	0	0	862	0	0	0	0	1819	0	161

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.55	0.00	0.10
Crit Vol:	0				431			0		910		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 66 Critical Vol./Cap. (X): 0.591

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	123	0	12	0	0	0	0	2246	418	100	1174	0
Growth 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
Initial Bse:	123	0	12	0	0	0	0	2246	0	100	1174	0
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:	123	0	12	0	0	0	0	2246	0	100	1174	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	0	12	0	0	0	0	2246	0	100	1174	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	135	0	12	0	0	0	0	2246	0	100	1174	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.48	0.00	0.06	0.25	0.00
Crit Vol:	68				0			749		100		
Crit Moves:	****							****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.053
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Ignore Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 1 0 0 0 1 0

Volume Module:

Base Vol:	224	677	38	100	2116	799	300	49	522	22	46	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	224	677	38	100	2116	0	300	49	522	22	46	80
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	224	677	38	100	2116	0	300	49	522	22	46	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	677	38	100	2116	0	300	49	522	22	46	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	224	677	38	100	2116	0	330	49	522	22	46	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	3.00	1.00	1.00	0.01	0.99	0.30	0.70	1.00
Final Sat.:	1500	4261	239	1500	4500	1500	1500	15	1485	446	1054	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.16	0.16	0.07	0.47	0.00	0.22	3.27	0.35	0.05	0.04	0.05
Crit Vol:	224			705			571			80		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.978
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 3 0 0 0 0 2 0 0 1 0 1! 0 1 0 0 0 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol: 0 935 0 0 1198 0 154 0 1845 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 935 0 0 1198 0 154 0 1845 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 935 0 0 1198 0 154 0 1845 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 935 0 0 1198 0 154 0 1845 0 0 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 1.10 1.00 1.10 1.00 1.00 1.00
 Final Vol.: 0 935 0 0 1198 0 169 0 2030 0 0 0
 -----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 3.00 0.00 0.00 2.00 0.00 1.00 0.00 2.00 0.00 0.00 0.00
 Final Sat.: 0 4950 0 0 3300 0 1650 0 3300 0 0 0
 -----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.00 0.19 0.00 0.00 0.36 0.00 0.10 0.00 0.62 0.00 0.00 0.00
 Crit Vol: 0 599 1015 0
 Crit Moves: ****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.483

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	563	0	0	837	0	0	0	0	464	0	248
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	563	0	0	837	0	0	0	0	464	0	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	563	0	0	837	0	0	0	0	464	0	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	563	0	0	837	0	0	0	0	464	0	248
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	1.10	1.00	1.00
Final Vol.:	0	563	0	0	837	0	0	0	0	510	0	248

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.35	0.00	0.65
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2220	0	1080

Capacity Analysis Module:

Vol/Sat:	0.00	0.17	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.23	0.00	0.23
Crit Vol:	0				419			0		379		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 82 Critical Vol./Cap. (X): 0.638

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 82 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	272	60	247	18	147	22	14	603	322	693	987	8
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	60	247	18	147	22	14	603	322	693	987	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:	272	60	247	18	147	22	14	603	322	693	987	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	272	60	247	18	147	22	14	603	322	693	987	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	299	60	247	18	147	22	14	603	322	762	987	8

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.67	0.33	1.00	0.19	1.57	0.24	1.00	2.00	1.00	2.00	1.98	0.02
Final Sat.:	2499	501	1500	289	2358	353	1500	3000	1500	3000	2976	24

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.16	0.06	0.06	0.06	0.01	0.20	0.21	0.25	0.33	0.33
Crit Vol:	180			94			302			381		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.086
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	80	9	0	0	0	7	33	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	80	9	0	0	0	7	33	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	80	9	0	0	0	7	33	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	80	9	0	0	0	7	33	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 Vol.:	0	0	0	0	80	9	0	0	0	7	33	0

Saturation Flow Module:

Sat/Lane:	0	0	0	519	519	519	0	0	0	370	370	370
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.80	0.20	0.00	0.00	0.00	0.35	1.65	0.00
Final Sat.:	0	0	0	0	933	105	0	0	0	130	611	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.05	0.05	0.00
Crit Moves:			****		****				****		****	
ApproachV/S:	xxxxx			0.09			xxxxx			0.05		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.4			xxxxxx			1.2		
LOS by Appr:	F			A			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.058
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	2	40	0	0	0	0	0	0	0	0	43	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:	2	40	0	0	0	0	0	0	0	0	43	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:	2	40	0	0	0	0	0	0	0	0	43	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	40	0	0	0	0	0	0	0	0	43	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 Vol.:	2	40	0	0	0	0	0	0	0	0	43	12

Saturation Flow Module:

Sat/Lane:	449	449	449	0	0	0	0	0	0	476	476	476
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.44
Final Sat.:	43	855	0	0	0	0	0	0	0	0	744	208

Capacity Analysis Module:

Vol/Sat:	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06
Crit Moves:	****			****			****			****		
ApproachV/S:	0.05			xxxxx			xxxxx			0.06		

Level Of Service Module:

Delay/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.2			xxxxxx			xxxxxx			1.2		
LOS by Appr:	A			F			F			A		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #223 C Street & Airpark Drive

Cycle (sec): 53 Critical Vol./Cap. (X): 0.363

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	0	31	149	5	31	49	57	564	0	109	410	1
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	31	149	5	31	49	57	564	0	109	410	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	31	149	5	31	49	57	564	0	109	410	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	31	149	5	31	49	57	564	0	109	410	1
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 Vol.:	0	31	149	5	31	49	57	564	0	109	410	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	0.00	1.00	1.99	0.01
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	0	1500	2993	7

Capacity Analysis Module:

Vol/Sat:	0.00	0.02	0.10	0.00	0.02	0.03	0.04	0.19	0.00	0.07	0.14	0.14
Crit Vol:			149			5					282	109
Crit Moves:			****			****					****	****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.457

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	1	0	0	0

Volume Module:

Base Vol:	18	613	0	0	1421	448	216	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	613	0	0	1421	448	216	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	18	613	0	0	1421	448	216	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	613	0	0	1421	448	216	0	30	0	0	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 Vol.:	18	613	0	0	1421	448	216	0	30	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	1550	0	1550	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.01	0.13	0.00	0.00	0.31	0.29	0.14	0.00	0.02	0.00	0.00	0.00
Crit Vol:	18				474		216			0		
Crit Moves:	****				****		****					

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.165

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.7

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	0	0	32	24	0	0	158	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	32	24	0	0	158	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	32	24	0	0	158	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	32	24	0	0	158	2	0	0	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 Vol.:	0	0	0	32	24	0	0	158	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	332	332	332	485	485	485	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.98	0.02	0.00	0.00	0.00
Final Sat.:	0	0	0	332	332	0	0	958	12	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.10	0.07	0.00	0.00	0.16	0.16	0.00	0.00	0.00
Crit Moves:			****	****					****			****
ApproachV/S:	xxxxx			0.08			0.16			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	1.4	1.3	0.0	0.0	1.9	1.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.4	1.3	0.0	0.0	1.9	1.9	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.4			1.9			xxxxxx		
LOS by Appr:	F			A			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.084

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	15	6	0	0	0	23	89	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	15	6	0	0	0	23	89	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	15	6	0	0	0	23	89	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	15	6	0	0	0	23	89	0	0	0	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 Vol.:	0	15	6	0	0	0	23	89	0	0	0	0

Saturation Flow Module:

Sat/Lane:	248	248	248	0	0	0	664	664	664	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.43	0.57	0.00	0.00	0.00	0.41	1.59	0.00	0.00	0.00	0.00
Final Sat.:	0	354	142	0	0	0	273	1055	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.04	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.00
Crit Moves:			****			****		****				****
ApproachV/S:	0.04			xxxxx			0.08			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.2			xxxxxx			1.4			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #227 A Street & Airpark Drive
*****Average Delay (sec/veh): 2.7 Worst Case Level Of Service: E

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1

Volume Module:

Base Vol:	16	17	0	3	93	82	30	618	91	0	459	1
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:	16	17	0	3	93	82	30	618	91	0	459	1
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:	16	17	0	3	93	82	30	618	91	0	459	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	16	17	0	3	93	82	30	618	91	0	459	1

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	18	19	0	3

Critical Gap Module:

MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Critical Gp:	6.5	6.0	xxxxx	6.5	6.0	5.5	5.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	1240	1154	xxxxxx	1161	1198	459	460	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Potent Cap.:	203	271	xxxxxx	225	257	811	1035	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Adj Cap:	0.59	0.97	xxxxxx	0.92	0.97	1.00	1.00	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Move Cap.:	119	262	xxxxxx	208	248	811	1035	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx

Level Of Service Module:

Stopped Del:	34.8	14.7	xxxxxx	17.6	23.1	4.9	3.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	E	*	*	C	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	262	xxxx	xxxx	368	xxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd StpDel:	xxxxxx	xxxx	14.7	xxxxxx	xxxx	14.6	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	C	*	*	C	*	*	*	*	*	*
ApproachDel:	24.4			14.6			0.2				0.0	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 58 Critical Vol./Cap. (X): 0.536

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	108	0	21	49	1446	0	0	477	69
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	108	0	21	49	1446	0	0	477	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	108	0	21	49	1446	0	0	477	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	108	0	21	49	1446	0	0	477	69
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 Vol.:	0	0	0	108	0	21	49	1446	0	0	477	69

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.75	0.25
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2708	392

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.01	0.03	0.47	0.00	0.00	0.18	0.18
Crit Vol:	0			108				723		0		
Crit Moves:				****				****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.315
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 50 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Include Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 0 0 1 0 1 0 2 0 1 1 0 2 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	141	53	71	10	28	11	103	478	50	53	307	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	53	71	10	28	11	103	478	50	53	307	17
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:	141	53	71	10	28	11	103	478	50	53	307	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	53	71	10	28	11	103	478	50	53	307	17
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 Vol.:	141	53	71	10	28	11	103	478	50	53	307	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.72	0.28	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	1077	423	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.09	0.04	0.05	0.01	0.03	0.03	0.07	0.16	0.03	0.04	0.10	0.01
Crit Vol:	141				39			239		53		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 57 Critical Vol./Cap. (X): 0.404

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1	0

Volume Module:

Base Vol:	77	103	152	20	36	235	194	290	28	121	144	57
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:	77	103	152	20	36	235	194	290	28	121	144	57
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:	77	103	152	20	36	235	194	290	28	121	144	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	103	152	20	36	235	194	290	28	121	144	57
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 Vol.:	77	103	152	20	36	235	194	290	28	121	144	57

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.43	0.57
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2149	851

Capacity Analysis Module:

Vol/Sat:	0.05	0.07	0.10	0.01	0.02	0.16	0.13	0.10	0.02	0.08	0.07	0.07
Crit Vol:	77					235	194				101	
Crit Moves:	****					****	****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 75 Critical Vol./Cap. (X): 0.546

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 75 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1

Volume Module:

Base Vol:	527	8	0	0	25	309	268	969	709	0	304	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:	527	8	0	0	25	309	268	969	709	0	304	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:	527	8	0	0	25	309	268	969	709	0	304	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	527	8	0	0	25	309	268	969	709	0	304	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	580	8	0	0	25	309	268	969	709	0	304	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.97	0.03	0.00	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2959	41	0	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.20	0.20	0.00	0.00	0.02	0.21	0.18	0.32	0.47	0.00	0.10	0.00
Crit Vol:	294			309			485			0		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.495
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	1113	0	474	0	196	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1113	0	474	0	196	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1113	0	474	0	196	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1113	0	474	0	196	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1113	0	521	0	216	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.34	0.00	0.16	0.00	0.13	0.00	0.00	0.00
Crit Vol:	0				557		261			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.918

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	604	0	0	3527	54	0	0	156	27	48	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:	107	604	0	0	3527	54	0	0	156	27	48	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:	107	604	0	0	3527	54	0	0	156	27	48	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	604	0	0	3527	54	0	0	156	27	48	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	1.10
Final Vol.:	107	604	0	0	3527	54	0	0	156	27	48	140

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.51	1.49
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	766	2234

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.00	0.00	0.78	0.04	0.00	0.00	0.10	0.02	0.06	0.06
Crit Vol:	107				1176		0				94	
Crit Moves:	****				****		****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 55 Critical Vol./Cap. (X): 0.384
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 55 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Include Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 0 1 0 2 0 1 1 0 2 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	3	153	101	42	96	74	52	155	2	211	870	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	153	101	42	96	74	52	155	2	211	870	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	153	101	42	96	74	52	155	2	211	870	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	153	101	42	96	74	52	155	2	211	870	118
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 Vol.:	3	153	101	42	96	74	52	155	2	211	870	118

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.13	0.87	1.00	2.00	1.00	1.00	2.64	0.36
Final Sat.:	1500	1500	1500	1500	1694	1306	1500	3000	1500	1500	3963	537

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.07	0.03	0.06	0.06	0.03	0.05	0.00	0.14	0.22	0.22
Crit Vol:	153			42			52			329		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 47 Critical Vol./Cap. (X): 0.279

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	15	26	12	20	19	13	138	183	76	230	492	211
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:	15	26	12	20	19	13	138	183	76	230	492	211
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:	15	26	12	20	19	13	138	183	76	230	492	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	26	12	20	19	13	138	183	76	230	492	211
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	15	26	12	22	19	13	138	183	76	230	492	211

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.07	0.93	1.00	1.00	2.12	0.88	1.00	2.10	0.90
Final Sat.:	1500	1500	1500	1610	1390	1500	1500	3180	1320	1500	3149	1351

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.01	0.01	0.01	0.01	0.09	0.06	0.06	0.15	0.16	0.16
Crit Vol:	26			21			138			234		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 41 Critical Vol./Cap. (X): 0.173
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1	0

Volume Module:

Base Vol:	18	125	0	8	48	68	114	3	8	0	12	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	125	0	8	48	68	114	3	8	0	12	17
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:	18	125	0	8	48	68	114	3	8	0	12	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	125	0	8	48	68	114	3	8	0	12	17
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 Vol.:	18	125	0	8	48	68	114	3	8	0	12	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.08	0.00	0.01	0.03	0.05	0.08	0.00	0.01	0.00	0.01	0.01
Crit Vol:	125			8			114				12	
Crit Moves:	****			****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #237 B Street & Kilgore Road

Cycle (sec): 42 Critical Vol./Cap. (X): 0.190

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1	0

Volume Module:

Base Vol:	0	100	0	100	28	10	19	0	0	0	0	66
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	100	0	100	28	10	19	0	0	0	0	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:	0	100	0	100	28	10	19	0	0	0	0	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	100	0	100	28	10	19	0	0	0	0	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 Vol.:	0	100	0	100	28	10	19	0	0	0	0	66

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	3000	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.00	0.07	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.04
Crit Vol:	100	100		100			19					66
Crit Moves:	****	****		****			****					****

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #238 B Street & Airpark Drive

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0

Volume Module:

Base Vol:	0	0	0	2	0	175	120	241	0	0	411	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	2	0	175	120	241	0	0	411	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	2	0	175	120	241	0	0	411	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	2	0	175	120	241	0	0	411	0

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	2

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	772	xxxx	206	411	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	340	xxxx	1089	1031	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.87	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	296	xxxx	1089	1031	xxxx	xxxxx	xxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	12.2	xxxx	3.9	3.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0	4.0	1.4	0.0								

Default Scenario

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Lane Geometry Report

Number of approach lanes: (L) (LT) (T) (RT) (R) (LTR)

Node	Intersection	NB	SB	EB	WB
201	Jackson Road & Sunrise Blvd.	100100	101010	101010	101010
202	Sunrise Blvd. & Douglas Road	101100	101100	000001	010010
203	Sunrise Blvd. & International Drive	102010	102010	010010	000001
204	Sunrise Blvd. & White Rock Road	203010	203010	202010	203010
205	Sunrise Blvd. & Folsom Blvd.	204010	203010	202010	201110
206	Sunrise Blvd. & Zinfandel Drive	202100	103010	000011	100001
207	Zinfandel Drive & Douglas Road	000001	000001	000001	000001
208	Zinfandel Drive & Airpark Drive	203010	103010	101010	100100
209	Zinfandel Drive & C Street	203010	103010	101010	100100
210	Zinfandel Drive & B Street (south)	103010	203010	100100	101010
211	Zinfandel Drive & International Dri	102100	102100	102010	102010
212	Zinfandel Drive & B Street (north)	103010	203010	100100	101010
213	Zinfandel Drive & White Rock Road	203010	203010	202100	201110
214	Zinfandel Drive & US50 EB Ramps	003100	002000	110110	000010
215	Zinfandel Drive & US50 WB Ramps	003000	002000	000000	200010
216	Mather Field Road & International D	200010	000000	003010	103000
217	Mather Field Road & Rockingham Driv	102100	103010	100001	010100
218	Mather Field Road & US50 EB Ramps	003000	002000	100011	000000
219	Mather Field Road & US50 WB Ramps	002000	002000	000000	100001
220	Mather Field Road & Folsom Blvd.	110010	010100	102010	201100
221	Mather Blvd. & Von Karman Street	000000	001100	000000	011000
222	Mather Blvd. & Whitehead Street	011000	000000	000000	001100
223	C Street & Airpark Drive	101100	101010	101100	101100
224	A Street & Zinfandel Drive	103000	003010	100010	000000
225	Von Karman Street & Norden Avenue	000000	011000	001100	000000
226	Norden Avenue & Whitehead Street	001100	000000	011000	000000
227	A Street & Airpark Drive	100100	100100	100100	101010
228	International Drive & Capital Cente	000000	100010	102000	101100
229	International Drive & Prospect Park	101010	100100	102010	102010
230	International Drive & Kilgore Road	101100	101100	102010	101100
231	International Drive & Femoyer Stree	100001	010010	102010	102010
232	Hazel Avenue & US50 EB Ramps	002000	002000	100011	000000
233	Hazel Avenue & US50 WB Ramps	103000	003010	000010	100110
234	White Rock Road & Kilgore Road	101010	101100	102010	102100
235	White Rock Road & Prospect Park Dri	101010	110010	102100	102100
236	B Street & Prospect Park Drive	100100	101010	101100	101100
237	B Street & Kilgore Road	100100	101010	101100	101100
238	B Street & Airpark Drive	000000	100010	102000	001100

**4. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH APPROVED PROJECT
CONDITIONS
P.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

Fri Aug 6, 1999 14:25:29

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	6	290	63	337	803	113	55	565	1	29	133	99
202	Sunrise Blvd.	85	441	4	106	1200	12	9	70	228	4	4	36
203	Sunrise Blvd.	319	619	14	49	1077	162	329	0	239	17	0	126
204	Sunrise Blvd.	78	976	61	280	1117	143	436	563	388	128	224	278
205	Sunrise Blvd.	172	2744	427	416	1312	161	660	617	142	190	307	274
206	Sunrise Blvd.	129	3908	5	80	2797	173	265	10	144	20	20	60
207	Zinfandel Dri	5	10	10	211	5	11	27	29	5	5	9	66
208	Zinfandel Dri	93	186	0	95	370	34	78	58	274	0	139	245
209	Zinfandel Dri	20	841	0	417	519	66	160	27	34	0	58	493
210	Zinfandel Dri	68	590	158	0	468	47	98	56	57	68	14	0
211	Zinfandel Dri	647	1225	51	103	796	198	253	406	378	47	528	73
212	Zinfandel Dri	0	1384	109	52	893	0	0	39	0	109	38	27
213	Zinfandel Dri	30	2341	9	304	896	196	566	96	0	29	212	497
214	Zinfandel Dri	0	3151	0	0	1113	0	1009	166	283	0	0	528
215	Zinfandel Dri	0	2347	0	0	638	0	0	0	0	591	0	222
216	Mather Field	458	0	82	0	0	0	0	1378	0	88	2089	0
217	Mather Field	482	2027	30	128	1062	0	757	52	229	21	99	59
218	Mather Field	0	2548	0	0	721	0	324	0	904	0	0	0
219	Mather Field	0	1097	0	0	715	0	0	0	0	236	0	259
220	Mather Field	752	208	671	42	75	8	8	1546	217	460	1066	16
221	Mather Blvd.	0	0	0	0	50	22	0	0	0	4	263	0
222	Mather Blvd.	3	55	0	0	0	0	0	0	0	0	262	36
223	C Street & Ai	0	27	86	2	72	65	69	476	2	181	559	6
224	A Street & Zi	43	1368	0	0	913	291	435	0	32	0	0	0
225	Von Karman St	0	0	0	26	7	0	0	43	2	0	0	0
226	Norden Avenue	0	46	1	0	0	0	14	38	0	0	0	0
227	A Street & Ai	88	86	0	4	31	26	21	542	30	0	621	3
228	International	0	0	0	100	0	30	3	837	0	0	1514	122
229	International	75	55	82	27	69	117	7	420	129	93	495	18
230	International	40	66	299	62	137	201	335	210	88	169	290	27
231	International	695	31	1	0	8	315	339	588	585	2	904	0
232	Hazel Avenue	0	0	0	0	284	0	1908	0	24	0	0	0
233	Hazel Avenue	102	3127	0	0	1349	38	0	0	133	44	153	659
234	White Rock Ro	1	154	160	202	213	103	150	820	6	63	461	172
235	White Rock Ro	106	34	112	199	45	85	53	531	11	34	496	17
236	B Street & Pr	7	66	0	15	118	146	119	17	15	0	7	11
237	B Street & Ki	0	53	0	119	94	21	14	0	0	0	0	266
238	B Street & Ai	0	0	0	1	0	148	186	358	0	0	293	2

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.935

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	6	290	63	337	803	113	55	565	1	29	133	99
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:	6	290	63	337	803	113	55	565	1	29	133	99
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:	6	290	63	337	803	113	55	565	1	29	133	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	290	63	337	803	113	55	565	1	29	133	99
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 Vol.:	6	290	63	337	803	113	55	565	1	29	133	99

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1232	268	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.24	0.24	0.22	0.54	0.08	0.04	0.38	0.00	0.02	0.09	0.07
Crit Vol:	6			803				565		29		
Crit Moves:	****			****				****		****		

Default Scenario

Fri Aug 6, 1999 14:25:30

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 103 Critical Vol./Cap. (X): 0.671
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 103 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 0 1

Volume Module:

Base Vol:	85	441	4	106	1200	12	9	70	228	4	4	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:	85	441	4	106	1200	12	9	70	228	4	4	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:	85	441	4	106	1200	12	9	70	228	4	4	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	441	4	106	1200	12	9	70	228	4	4	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 Vol.:	85	441	4	106	1200	12	9	70	228	4	4	36

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.98	0.02	1.00	1.98	0.02	0.03	0.23	0.74	0.50	0.50	1.00
Final Sat.:	1500	2973	27	1500	2970	30	44	342	1114	750	750	1500

Capacity Analysis Module:

Vol/Sat:	0.06	0.15	0.15	0.07	0.40	0.40	0.20	0.20	0.20	0.01	0.01	0.02
Crit Vol:	85			606			307			8		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.886

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	319	619	14	49	1077	162	329	0	239	17	0	126
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:	319	619	14	49	1077	162	329	0	239	17	0	126
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:	319	619	14	49	1077	162	329	0	239	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	319	619	14	49	1077	162	329	0	239	17	0	126
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 Vol.:	319	619	14	49	1077	162	329	0	239	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.12	0.00	0.88
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.21	0.21	0.01	0.03	0.36	0.11	0.22	0.00	0.16	0.10	0.00	0.10
Crit Vol:	319				539		329					143
Crit Moves:	****				****		****					****

Default Scenario

Fri Aug 6, 1999 14:25:30

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 84 Critical Vol./Cap. (X): 0.597

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 84 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	78	976	61	280	1117	143	436	563	388	128	224	278
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	976	61	280	1117	143	436	563	388	128	224	278
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:	78	976	61	280	1117	143	436	563	388	128	224	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	976	61	280	1117	143	436	563	388	128	224	278
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	86	976	61	308	1117	143	480	563	388	141	224	278

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.22	0.04	0.10	0.25	0.10	0.16	0.19	0.26	0.05	0.05	0.19
Crit Vol:	325			154			388			71		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.987

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	172	2744	427	416	1312	161	660	617	142	190	307	274
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:	172	2744	427	416	1312	161	660	617	142	190	307	274
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:	172	2744	427	416	1312	161	660	617	142	190	307	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	2744	427	416	1312	161	660	617	142	190	307	274
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	189	2744	427	458	1312	161	726	617	142	209	307	301

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.51	1.49
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2272	2228

Capacity Analysis Module:

Vol/Sat:	0.06	0.46	0.28	0.15	0.29	0.11	0.24	0.21	0.09	0.07	0.14	0.14
Crit Vol:	686			229			363			203		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.153
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 0 0 1! 0 1 1 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	129	3908	5	80	2797	173	265	10	144	20	20	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:	129	3908	5	80	2797	173	265	10	144	20	20	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:	129	3908	5	80	2797	173	265	10	144	20	20	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	3908	5	80	2797	173	265	10	144	20	20	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	142	3908	5	80	2797	173	265	10	158	22	20	60

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.99	0.01	1.00	1.00	0.01	0.99
Final Sat.:	3000	4494	6	1500	4500	1500	1485	15	1500	1500	15	1485

Capacity Analysis Module:

Vol/Sat:	0.05	0.87	0.87	0.05	0.62	0.12	0.18	0.67	0.11	0.01	1.33	0.04
Crit Vol:	1304			80			265			80		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 1.250

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 25.6

Optimal Cycle: 0 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	10	10	211	5	11	27	29	5	5	9	66
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:	5	10	10	211	5	11	27	29	5	5	9	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:	5	10	10	211	5	11	27	29	5	5	9	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	10	10	211	5	11	27	29	5	5	9	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 Vol.:	5	10	10	211	5	11	27	29	5	5	9	66

Saturation Flow Module:

Sat/Lane:	382	382	382	825	825	825	312	312	312	64	64	64
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.40	0.40	0.93	0.02	0.05	0.44	0.48	0.08	0.06	0.11	0.83
Final Sat.:	76	153	153	767	18	40	138	148	26	4	7	53

Capacity Analysis Module:

Vol/Sat:	0.07	0.07	0.07	0.28	0.28	0.28	0.20	0.20	0.20	1.25	1.25	1.25
Crit Moves:	****			****			****			****		
ApproachV/S:	0.07			0.28			0.20			1.25		

Level Of Service Module:

Delay/Veh:	1.3	1.3	1.3	2.8	2.8	2.8	2.1	2.1	2.1	115.6	116	115.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.3	1.3	1.3	2.8	2.8	2.8	2.1	2.1	2.1	115.6	116	115.6
LOS by Move:	A	A	A	A	A	A	A	A	A	F	F	F
ApproachDel:	1.3			2.8			2.1			115.6		
LOS by Appr:	A			A			A			F		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #208 Zinfandel Drive & Airpark Drive

Cycle (sec): 59 Critical Vol./Cap. (X): 0.424

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1	0	1	0	1		1	0	1	0	1	

Volume Module:

Base Vol:	93	186	0	95	370	34	78	58	274	0	139	245
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:	93	186	0	95	370	34	78	58	274	0	139	245
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:	93	186	0	95	370	34	78	58	274	0	139	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	186	0	95	370	34	78	58	274	0	139	245
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	186	0	95	370	34	78	58	274	0	139	245

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.36	0.64
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	543	957

Capacity Analysis Module:

Vol/Sat:	0.03	0.04	0.00	0.06	0.08	0.02	0.05	0.04	0.18	0.00	0.26	0.26
Crit Vol:	51			123			78			384		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.939

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1	0	1	0	1		1	0	1	0	1	0

Volume Module:

Base Vol:	20	841	0	417	519	66	160	27	34	0	58	493
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	841	0	417	519	66	160	27	34	0	58	493
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	841	0	417	519	66	160	27	34	0	58	493
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	841	0	417	519	66	160	27	34	0	58	493
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	22	841	0	417	519	66	160	27	34	0	58	493

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.11	0.89
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	158	1342

Capacity Analysis Module:

Vol/Sat:	0.01	0.19	0.00	0.28	0.12	0.04	0.11	0.02	0.02	0.00	0.37	0.37
Crit Vol:	280			417			160			551		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 47 Critical Vol./Cap. (X): 0.270

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Ovl			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	2	0	3	0	1	1	0	1

Volume Module:

Base Vol:	68	590	158	0	468	47	98	56	57	68	14	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:	68	590	158	0	468	47	98	56	57	68	14	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:	68	590	158	0	468	47	98	56	57	68	14	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	590	158	0	468	47	98	56	57	68	14	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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	68	590	158	0	468	47	98	56	57	68	14	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	0.50	0.50	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	743	757	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.13	0.11	0.00	0.10	0.03	0.07	0.08	0.08	0.05	0.01	0.00
Crit Vol:	68			156			113			68		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.997

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Include			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	2	1	0	2	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	647	1225	51	103	796	198	253	406	378	47	528	73
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:	647	1225	51	103	796	198	253	406	378	47	528	73
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:	647	1225	51	103	796	198	253	406	378	47	528	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	647	1225	51	103	796	198	253	406	378	47	528	73
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 Vol.:	647	1225	51	103	796	198	253	406	378	47	528	73

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.40	0.60	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4320	180	1500	3604	896	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.43	0.28	0.28	0.07	0.22	0.22	0.17	0.14	0.25	0.03	0.18	0.05
Crit Vol:	647			331			253			264		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 59 Critical Vol./Cap. (X): 0.425

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1	2	0	3	0	1	1	0	0	1	0	1	0	1	0	1

Volume Module:

Base Vol:	0	1384	109	52	893	0	0	39	0	109	38	27
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	1384	109	52	893	0	0	39	0	109	38	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1384	109	52	893	0	0	39	0	109	38	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1384	109	52	893	0	0	39	0	109	38	27
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1384	109	57	893	0	0	39	0	109	38	27

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	1500	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.07	0.02	0.20	0.00	0.00	0.03	0.00	0.07	0.03	0.02
Crit Vol:	461			29			39			109		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.022

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	30	2341	9	304	896	196	566	96	0	29	212	497
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2341	9	304	896	196	566	96	0	29	212	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:	30	2341	9	304	896	196	566	96	0	29	212	497
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2341	9	304	896	196	566	96	0	29	212	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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	33	2341	9	334	896	196	623	96	0	32	212	547

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	0.00	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	0	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.52	0.01	0.11	0.20	0.13	0.21	0.02	0.00	0.01	0.14	0.18
Crit Vol:	780			167			312			274		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.207

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	3151	0	0	1113	0	1009	166	283	0	0	528
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	3151	0	0	1113	0	1009	166	283	0	0	528
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3151	0	0	1113	0	1009	166	283	0	0	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3151	0	0	1113	0	1009	166	283	0	0	528
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	3151	0	0	1113	0	1110	166	311	0	0	528

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.70	1.30	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	1079	2021	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	0.36	0.00	0.36	0.15	0.15	0.00	0.00	0.34
Crit Vol:	788			0			555					528
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 61 Critical Vol./Cap. (X): 0.671

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 61 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	0	0	1

Volume Module:

Base Vol:	0	2347	0	0	638	0	0	0	0	591	0	222
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	2347	0	0	638	0	0	0	0	591	0	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2347	0	0	638	0	0	0	0	591	0	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2347	0	0	638	0	0	0	0	591	0	222
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	1.10	1.00	1.00
Final Vol.:	0	2347	0	0	638	0	0	0	0	650	0	222

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.47	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.20	0.00	0.13
Crit Vol:	782			0			0			325		
Crit Moves:	****			****						****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 70 Critical Vol./Cap. (X): 0.612

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 70 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Protected			Protected			
Rights:	Ovl			Include			Ignore			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0

Volume Module:

Base Vol:	458	0	82	0	0	0	0	1378	133	88	2089	0
Growth 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
Initial Bse:	458	0	82	0	0	0	0	1378	0	88	2089	0
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:	458	0	82	0	0	0	0	1378	0	88	2089	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	458	0	82	0	0	0	0	1378	0	88	2089	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	504	0	82	0	0	0	0	1378	0	88	2089	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.05	0.00	0.00	0.00	0.00	0.30	0.00	0.06	0.45	0.00
Crit Vol:	252				0		0				696	
Crit Moves:	****						****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.943

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	482	2027	30	128	1062	381	757	52	229	21	99	59
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	482	2027	30	128	1062	0	757	52	229	21	99	59
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	482	2027	30	128	1062	0	757	52	229	21	99	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	482	2027	30	128	1062	0	757	52	229	21	99	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	482	2027	30	128	1062	0	833	52	229	21	99	59

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.96	0.04	1.00	3.00	1.00	1.50	0.09	0.41	0.23	1.11	0.66
Final Sat.:	1500	4434	66	1500	4500	1500	2243	140	617	352	1659	989

Capacity Analysis Module:

Vol/Sat:	0.32	0.46	0.46	0.09	0.24	0.00	0.37	0.37	0.37	0.06	0.06	0.06
Crit Vol:	482			354			557			21		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 109 Critical Vol./Cap. (X): 0.816

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 109 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	2548	0	0	721	0	324	0	904	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2548	0	0	721	0	324	0	904	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2548	0	0	721	0	324	0	904	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2548	0	0	721	0	324	0	904	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2548	0	0	721	0	356	0	994	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	0.22	0.00	0.22	0.00	0.30	0.00	0.00	0.00
Crit Vol:	849		0		497		0					
Crit Moves:	****		****		****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.490

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	1097	0	0	715	0	0	0	0	236	0	259
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	1097	0	0	715	0	0	0	0	236	0	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1097	0	0	715	0	0	0	0	236	0	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1097	0	0	715	0	0	0	0	236	0	259
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	1.10	1.00	1.00
Final Vol.:	0	1097	0	0	715	0	0	0	0	260	0	259

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3300	0	0	3300	0	0	0	0	1653	0	1647

Capacity Analysis Module:

Vol/Sat:	0.00	0.33	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Crit Vol:	549			0			0			260		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.071

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	752	208	671	42	75	8	8	1546	217	460	1066	16
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:	752	208	671	42	75	8	8	1546	217	460	1066	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:	752	208	671	42	75	8	8	1546	217	460	1066	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	752	208	671	42	75	8	8	1546	217	460	1066	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	827	208	671	42	75	8	8	1546	217	506	1066	16

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.60	0.40	1.00	0.67	1.20	0.13	1.00	2.00	1.00	2.00	1.97	0.03
Final Sat.:	2397	603	1500	1008	1800	192	1500	3000	1500	3000	2956	44

Capacity Analysis Module:

Vol/Sat:	0.35	0.35	0.45	0.04	0.04	0.04	0.01	0.52	0.14	0.17	0.36	0.36
Crit Vol:	518			63			773			253		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.209

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.1

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	50	22	0	0	0	4	263	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	50	22	0	0	0	4	263	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	50	22	0	0	0	4	263	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	50	22	0	0	0	4	263	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 Vol.:	0	0	0	0	50	22	0	0	0	4	263	0

Saturation Flow Module:

Sat/Lane:	0	0	0	304	304	304	0	0	0	640	640	640
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.39	0.61	0.00	0.00	0.00	0.03	1.97	0.00
Final Sat.:	0	0	0	0	422	186	0	0	0	19	1261	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.21	0.21	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.12			xxxxx			0.21		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	2.2	2.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	2.2	2.2	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.6			xxxxxx			2.2		
LOS by Appr:	F			A			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.244
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.3
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	3	55	0	0	0	0	0	0	0	0	262	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:	3	55	0	0	0	0	0	0	0	0	262	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:	3	55	0	0	0	0	0	0	0	0	262	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	55	0	0	0	0	0	0	0	0	262	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 Vol.:	3	55	0	0	0	0	0	0	0	0	262	36

Saturation Flow Module:

Sat/Lane:	300	300	300	0	0	0	0	0	0	611	611	611
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	0.24
Final Sat.:	31	569	0	0	0	0	0	0	0	0	1074	148

Capacity Analysis Module:

Vol/Sat:	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
Crit Moves:	****					****			****		****	
ApproachV/S:	0.10			xxxxx			xxxxx				0.24	

Level Of Service Module:

Delay/Veh:	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5
LOS by Move:	A	A	*		*		*		*		A	A
ApproachDel:	1.4			xxxxxx			xxxxxx				2.5	
LOS by Appr:	A			F			F				A	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #223 C Street & Airpark Drive

Cycle (sec): 51 Critical Vol./Cap. (X): 0.339

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	1	1	0	1	1	0	1	0	1	1	0

Volume Module:

Base Vol:	0	27	86	2	72	65	69	476	2	181	559	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	27	86	2	72	65	69	476	2	181	559	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	27	86	2	72	65	69	476	2	181	559	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	27	86	2	72	65	69	476	2	181	559	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	27	86	2	72	65	69	476	2	181	559	6

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.99	0.01	1.00	1.98	0.02
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	2987	13	1500	2968	32

Capacity Analysis Module:

Vol/Sat:	0.00	0.02	0.06	0.00	0.05	0.04	0.05	0.16	0.16	0.12	0.19	0.19
Crit Vol:	86			2			239			181		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 64 Critical Vol./Cap. (X): 0.575

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	1	0	0	0

Volume Module:

Base Vol:	43	1368	0	0	913	291	435	0	32	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	43	1368	0	0	913	291	435	0	32	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	43	1368	0	0	913	291	435	0	32	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	1368	0	0	913	291	435	0	32	0	0	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 Vol.:	43	1368	0	0	913	291	435	0	32	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	1550	0	1550	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.03	0.29	0.00	0.00	0.20	0.19	0.28	0.00	0.02	0.00	0.00	0.00
Crit Vol:	456			0			435			0		
Crit Moves:	****			****			****					

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.062

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	0	0	26	7	0	0	43	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	7	0	0	43	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	7	0	0	43	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	26	7	0	0	43	2	0	0	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 Vol.:	0	0	0	26	7	0	0	43	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	418	418	418	370	370	370	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.91	0.09	0.00	0.00	0.00
Final Sat.:	0	0	0	418	418	0	0	707	33	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.02	0.00	0.00	0.06	0.06	0.00	0.00	0.00
Crit Moves:			****	****					****			****
ApproachV/S:	xxxxx			0.04			0.06			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	1.3	1.1	0.0	0.0	1.3	1.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.3	1.1	0.0	0.0	1.3	1.3	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.2			1.3			xxxxxx		
LOS by Appr:	F			A			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.059

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	46	1	0	0	0	14	38	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	46	1	0	0	0	14	38	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	46	1	0	0	0	14	38	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	46	1	0	0	0	14	38	0	0	0	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 Vol.:	0	46	1	0	0	0	14	38	0	0	0	0

Saturation Flow Module:

Sat/Lane:	397	397	397	0	0	0	466	466	466	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.96	0.04	0.00	0.00	0.00	0.54	1.46	0.00	0.00	0.00	0.00
Final Sat.:	0	777	17	0	0	0	251	681	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.06			xxxxx			0.06			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			1.2			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #227 A Street & Airpark Drive

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1	0	0	1	0	0	1	0	0	1	0	1

Volume Module:

Base Vol:	88	86	0	4	31	26	21	542	30	0	621	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	86	0	4	31	26	21	542	30	0	621	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:	88	86	0	4	31	26	21	542	30	0	621	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	88	86	0	4	31	26	21	542	30	0	621	3

Adjusted Volume Module:

Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	97	95	0	4	34	29	23	542	30	0	621	3

Critical Gap Module:

MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	6.5	6.0	xxxxx	6.5	6.0	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1228	1202	xxxxx	1242	1214	621	624	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	206	255	xxxxx	202	252	671	864	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Adj Cap:	0.84	0.97	xxxxx	0.69	0.97	1.00	1.00	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Move Cap.:	173	248	xxxxx	140	245	671	864	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	42.0	22.1	xxxxx	26.6	16.8	5.6	4.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	E	*	*	D	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	248	xxxx	xxxx	345	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	22.1	xxxxx	xxxx	11.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	D	*	*	C	*	*	*	*	*	*
ApproachDel:	32.2			12.7			0.2			0.0		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 67 Critical Vol./Cap. (X): 0.594
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 67 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 2 0 0 1 0 1 1 0

Volume Module:

Base Vol:	0	0	0	100	0	30	3	837	0	0	1514	122
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	100	0	30	3	837	0	0	1514	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	100	0	30	3	837	0	0	1514	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	100	0	30	3	837	0	0	1514	122
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 Vol.:	0	0	0	100	0	30	3	837	0	0	1514	122

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.85	0.15
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2869	231

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.02	0.00	0.27	0.00	0.00	0.53	0.53
Crit Vol:	0			100			3				818	
Crit Moves:				****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 54 Critical Vol./Cap. (X): 0.376

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	75	55	82	27	69	117	7	420	129	93	495	18
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:	75	55	82	27	69	117	7	420	129	93	495	18
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:	75	55	82	27	69	117	7	420	129	93	495	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	55	82	27	69	117	7	420	129	93	495	18
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 Vol.:	75	55	82	27	69	117	7	420	129	93	495	18

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.37	0.63	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	556	944	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.04	0.05	0.02	0.12	0.12	0.00	0.14	0.09	0.06	0.17	0.01
Crit Vol:	75			186			210			93		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 79 Critical Vol./Cap. (X): 0.570
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 79 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Include Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module:

Base Vol:	40	66	299	62	137	201	335	210	88	169	290	27
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:	40	66	299	62	137	201	335	210	88	169	290	27
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:	40	66	299	62	137	201	335	210	88	169	290	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	66	299	62	137	201	335	210	88	169	290	27
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 Vol.:	40	66	299	62	137	201	335	210	88	169	290	27

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2744	256

Capacity Analysis Module:

Vol/Sat:	0.03	0.04	0.20	0.04	0.09	0.13	0.22	0.07	0.06	0.11	0.11	0.11
Crit Vol:	299	62	335	159	159	159	159	159	159	159	159	159
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 169 Critical Vol./Cap. (X): 0.798
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 169 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1

Volume Module:

Base Vol:	695	31	1	0	8	315	339	588	585	2	904	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:	695	31	1	0	8	315	339	588	585	2	904	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:	695	31	1	0	8	315	339	588	585	2	904	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	695	31	1	0	8	315	339	588	585	2	904	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	765	31	1	0	8	315	339	588	585	2	904	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.92	0.07	0.01	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2880	117	4	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.27	0.27	0.27	0.00	0.01	0.21	0.23	0.20	0.39	0.00	0.30	0.00
Crit Vol:	399			8			339			452		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 72 Critical Vol./Cap. (X): 0.722
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 72 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	284	0	1908	0	24	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	284	0	1908	0	24	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	284	0	1908	0	24	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	284	0	1908	0	24	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	284	0	2099	0	26	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.00	0.64	0.00	0.02	0.00	0.00	0.00
Crit Vol:	0				142		1050				0	
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.988

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	0	0	0	1	1

Volume Module:

Base Vol:	102	3127	0	0	1349	38	0	0	133	44	153	659
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:	102	3127	0	0	1349	38	0	0	133	44	153	659
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:	102	3127	0	0	1349	38	0	0	133	44	153	659
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	3127	0	0	1349	38	0	0	133	44	153	659
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	1.10
Final Vol.:	102	3127	0	0	1349	38	0	0	133	44	153	725

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.35	1.65
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	523	2477

Capacity Analysis Module:

Vol/Sat:	0.07	0.69	0.00	0.00	0.30	0.03	0.00	0.00	0.09	0.03	0.29	0.29
Crit Vol:	1042			0			0			439		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 76 Critical Vol./Cap. (X): 0.553
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 76 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Include Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 0 1 0 2 0 1 1 0 2 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	1	154	160	202	213	103	150	820	6	63	461	172
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:	1	154	160	202	213	103	150	820	6	63	461	172
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:	1	154	160	202	213	103	150	820	6	63	461	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	154	160	202	213	103	150	820	6	63	461	172
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 Vol.:	1	154	160	202	213	103	150	820	6	63	461	172

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.35	0.65	1.00	2.00	1.00	1.00	2.18	0.82
Final Sat.:	1500	1500	1500	1500	2022	978	1500	3000	1500	1500	3277	1223

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.11	0.13	0.11	0.11	0.10	0.27	0.00	0.04	0.14	0.14
Crit Vol:	154	202	410	63								
Crit Moves:	****	****	****	****								

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.308
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	1	0	2	1	0

Volume Module:

Base Vol:	106	34	112	199	45	85	53	531	11	34	496	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	34	112	199	45	85	53	531	11	34	496	17
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:	106	34	112	199	45	85	53	531	11	34	496	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	34	112	199	45	85	53	531	11	34	496	17
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	106	34	112	219	45	85	53	531	11	34	496	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.66	0.34	1.00	1.00	2.94	0.06	1.00	2.90	0.10
Final Sat.:	1500	1500	1500	2489	511	1500	1500	4409	91	1500	4351	149

Capacity Analysis Module:

Vol/Sat:	0.07	0.02	0.07	0.09	0.09	0.06	0.04	0.12	0.12	0.02	0.11	0.11
Crit Vol:	106			132			53			171		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 41 Critical Vol./Cap. (X): 0.170
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 41 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 1 0 1 0 1 0 1 0 0

Volume Module:

Base Vol:	7	66	0	15	118	146	119	17	15	0	7	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:	7	66	0	15	118	146	119	17	15	0	7	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:	7	66	0	15	118	146	119	17	15	0	7	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	66	0	15	118	146	119	17	15	0	7	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 Vol.:	7	66	0	15	118	146	119	17	15	0	7	11

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.06	0.94	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1594	1406	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.00	0.01	0.08	0.10	0.08	0.01	0.01	0.00	0.00	0.01
Crit Vol:	7			118			119					11
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #237 B Street & Kilgore Road

Cycle (sec): 49 Critical Vol./Cap. (X): 0.301

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1	0

Volume Module:

Base Vol:	0	53	0	119	94	21	14	0	0	0	0	266
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	53	0	119	94	21	14	0	0	0	0	266
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	53	0	119	94	21	14	0	0	0	0	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	53	0	119	94	21	14	0	0	0	0	266
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 Vol.:	0	53	0	119	94	21	14	0	0	0	0	266

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	3000	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.00	0.08	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.18
Crit Vol:	53			119			14			266		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #238 B Street & Airpark Drive

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0

Volume Module:

Base Vol:	0	0	0	1	0	148	186	358	0	0	293	2
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	1	0	148	186	358	0	0	293	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	1	0	148	186	358	0	0	293	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	1	0	148	186	358	0	0	293	2

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	1

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	838	xxxx	148	295	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	308	xxxx	1166	1190	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.83	xxxx	1.00	1.00	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	255	xxxx	1166	1190	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	14.2	xxxx	3.5	3.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0	3.6	1.3	0.0								

Default Scenario

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 Lane Geometry Report

Number of approach lanes: (L) (LT) (T) (RT) (R) (LTR)

Node	Intersection	NB	SB	EB	WB
201	Jackson Road & Sunrise Blvd.	100100	101010	101010	101010
202	Sunrise Blvd. & Douglas Road	101100	101100	000001	010010
203	Sunrise Blvd. & International Drive	102010	102010	010010	000001
204	Sunrise Blvd. & White Rock Road	203010	203010	202010	203010
205	Sunrise Blvd. & Folsom Blvd.	204010	203010	202010	201110
206	Sunrise Blvd. & Zinfandel Drive	202100	103010	000011	100001
207	Zinfandel Drive & Douglas Road	000001	000001	000001	000001
208	Zinfandel Drive & Airpark Drive	203010	103010	101010	100100
209	Zinfandel Drive & C Street	203010	103010	101010	100100
210	Zinfandel Drive & B Street (south)	103010	203010	100100	101010
211	Zinfandel Drive & International Dri	102100	102100	102010	102010
212	Zinfandel Drive & B Street (north)	103010	203010	100100	101010
213	Zinfandel Drive & White Rock Road	203010	203010	202100	201110
214	Zinfandel Drive & US50 EB Ramps	003100	002000	110110	000010
215	Zinfandel Drive & US50 WB Ramps	003000	002000	000000	200010
216	Mather Field Road & International D	200010	000000	003010	103000
217	Mather Field Road & Rockingham Driv	102100	103010	100001	010100
218	Mather Field Road & US50 EB Ramps	003000	002000	100011	000000
219	Mather Field Road & US50 WB Ramps	002000	002000	000000	100001
220	Mather Field Road & Folsom Blvd.	110010	010100	102010	201100
221	Mather Blvd. & Von Karman Street	000000	001100	000000	011000
222	Mather Blvd. & Whitehead Street	011000	000000	000000	001100
223	C Street & Airpark Drive	101100	101010	101100	101100
224	A Street & Zinfandel Drive	103000	003010	100010	000000
225	Von Karman Street & Norden Avenue	000000	011000	001100	000000
226	Norden Avenue & Whitehead Street	001100	000000	011000	000000
227	A Street & Airpark Drive	100100	100100	100100	101010
228	International Drive & Capital Cente	000000	100010	102000	101100
229	International Drive & Prospect Park	101010	100100	102010	102010
230	International Drive & Kilgore Road	101100	101100	102010	101100
231	International Drive & Femoyer Stree	100001	010010	102010	102010
232	Hazel Avenue & US50 EB Ramps	002000	002000	100011	000000
233	Hazel Avenue & US50 WB Ramps	103000	003010	000010	100110
234	White Rock Road & Kilgore Road	101010	101100	102010	102100
235	White Rock Road & Prospect Park Dri	101010	110010	102100	102100
236	B Street & Prospect Park Drive	100100	101010	101100	101100
237	B Street & Kilgore Road	100100	101010	101100	101100
238	B Street & Airpark Drive	000000	100010	102000	001100

**5. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH PROPOSED PROJECT
CONDITIONS
A.M. PEAK HOUR**

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	9		605	4		81	301	51	283	100	7	61
202	Sunrise Blvd.	218	1126	0	45	315	31	14	1	31	2	43	91
203	Sunrise Blvd.	156	1038	9	137	627	124	116	0	313	3	0	40
204	Sunrise Blvd.	353	743	41	228	965	608	119	82	65	112	591	116
205	Sunrise Blvd.	87	827	119	350	2361	317	199	144	130	642	486	176
206	Sunrise Blvd.	152	1948	10	40	4365	158	125	10	327	40	15	40
207	Zinfandel Dri	5	5	5	49	10	29	14	11	5	10	36	197
209	Zinfandel Dri	56	572	0	0	928	402	29	0	37	0	0	0
210	Zinfandel Dri	238	504	47	0	821	115	14	5	158	85	32	4
211	Zinfandel Dri	311	578	30	84	1278	158	142	516	621	45	280	80
212	Zinfandel Dri	0	560	40	1	1264	0	0	62	0	66	50	2
213	Zinfandel Dri	8	812	12	565	2232	652	213	64	14	49	161	300
214	Zinfandel Dri	0	1205	0	0	2373	0	392	847	1075	0	0	126
215	Zinfandel Dri	0	775	0	0	861	0	0	0	0	1631	0	210
216	Mather Field	129	0	13	0	0	0	0	2249	417	102	1094	0
217	Mather Field	217	621	28	121	2098	806	308	54	541	23	46	81
218	Mather Field	0	1072	0	0	1215	0	169	0	1837	0	0	0
219	Mather Field	0	565	0	0	825	0	0	0	0	493	0	250
220	Mather Field	266	60	258	18	147	22	14	622	321	688	983	8
221	Mather Blvd.	0	0	0	0	81	9	0	0	0	7	24	0
222	Mather Blvd.	2	48	0	0	0	0	0	0	0	0	34	12
224	A Street & Zi	13	550	0	17	1257	513	302	0	8	0	1	54
225	Von Karman St	0	0	0	12	45	0	0	119	2	0	0	0
226	Norden Avenue	0	23	6	0	0	0	23	30	0	0	0	0
227	A Street & Ai	280	4	0	32	6	49	76	200	557	0	31	0
228	International	0	0	0	99	0	23	33	1421	0	0	604	61
229	International	152	48	76	5	25	11	100	471	51	65	230	20
230	International	2	91	114	16	33	236	189	314	2	91	156	50
231	International	311	9	1	0	27	316	281	926	746	0	432	0
232	Hazel Avenue	0	0	0	0	1104	0	487	0	203	0	0	0
233	Hazel Avenue	107	596	0	0	3527	54	0	0	156	22	48	164
234	White Rock Ro	3	138	105	42	94	76	53	129	2	218	865	116
235	White Rock Ro	14	26	14	20	19	13	138	156	83	231	489	211
236	B Street & Pr	15	62	0	30	23	80	113	2	5	0	10	92
237	B Street & Ki	0	0	0	99	0	0	0	30	0	0	89	140
240	C Street and	0	0	0	9	0	500	124	287	0	0	268	3
241	Zinfandel Dri	0	682	50	74	180	379	77	3	0	18	16	28

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	F	xxxxx	1.012	F	xxxxx	1.012	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	A	xxxxx	0.467	A	xxxxx	0.467	+ 0.000 V/C
#203 Sunrise Blvd. & International	A	xxxxx	0.571	A	xxxxx	0.571	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	B	xxxxx	0.666	B	xxxxx	0.666	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	D	xxxxx	0.840	D	xxxxx	0.840	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.243	F	xxxxx	1.243	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	A	3.3	0.381	A	3.3	0.381	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.314	A	xxxxx	0.314	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	A	xxxxx	0.344	A	xxxxx	0.344	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	C	xxxxx	0.763	C	xxxxx	0.763	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.366	A	xxxxx	0.366	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	B	xxxxx	0.684	B	xxxxx	0.684	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.277	F	xxxxx	1.277	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	D	xxxxx	0.805	D	xxxxx	0.805	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.595	A	xxxxx	0.595	+ 0.000 V/C
#217 Mather Field Road & Rockingham	F	xxxxx	1.062	F	xxxxx	1.062	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	E	xxxxx	0.981	E	xxxxx	0.981	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.490	A	xxxxx	0.490	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	A	xxxxx	0.589	A	xxxxx	0.589	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	1.3	0.084	A	1.3	0.084	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	1.2	0.053	A	1.2	0.053	+ 0.000 V/C
#224 A Street & Zinfandel Drive	A	xxxxx	0.526	A	xxxxx	0.526	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.5	0.119	A	1.5	0.119	+ 0.000 V/C

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	1.2	0.048	A	1.2	0.048	+ 0.000 V/C
#227 A Street & Airpark Drive	A	xxxxx	0.595	A	xxxxx	0.595	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.522	A	xxxxx	0.522	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.326	A	xxxxx	0.326	+ 0.000 V/C
#230 International Drive & Kilgore	A	xxxxx	0.353	A	xxxxx	0.353	+ 0.000 V/C
#231 International Drive & Femoyer	A	xxxxx	0.521	A	xxxxx	0.521	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	A	xxxxx	0.497	A	xxxxx	0.497	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	E	xxxxx	0.931	E	xxxxx	0.931	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	A	xxxxx	0.373	A	xxxxx	0.373	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.279	A	xxxxx	0.279	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.205	A	xxxxx	0.205	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.219	A	xxxxx	0.219	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.505	A	xxxxx	0.505	+ 0.000 V/C
#241 Zinfandel Drive and Mather Bou	A	xxxxx	0.333	A	xxxxx	0.333	+ 0.000 V/C

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.012

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	9	605	4	81	301	51	283	100	7	61	545	385
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:	9	605	4	81	301	51	283	100	7	61	545	385
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:	9	605	4	81	301	51	283	100	7	61	545	385
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	605	4	81	301	51	283	100	7	61	545	385
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 Vol.:	9	605	4	81	301	51	283	100	7	61	545	385

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1490	10	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.41	0.41	0.05	0.20	0.03	0.19	0.07	0.00	0.04	0.36	0.26
Crit Vol:	609			81			283			545		
Crit Moves:	****			****			****			****		

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 64 Critical Vol./Cap. (X): 0.467

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	218	1126	0	45	315	31	14	1	31	2	43	91
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:	218	1126	0	45	315	31	14	1	31	2	43	91
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:	218	1126	0	45	315	31	14	1	31	2	43	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	218	1126	0	45	315	31	14	1	31	2	43	91
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 Vol.:	218	1126	0	45	315	31	14	1	31	2	43	91

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.82	0.18	0.30	0.02	0.68	0.04	0.96	1.00
Final Sat.:	1500	3000	0	1500	2731	269	457	33	1011	67	1433	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.38	0.00	0.03	0.12	0.12	0.03	0.03	0.03	0.03	0.03	0.06
Crit Vol:	563			0			46					91
Crit Moves:	****			****			****					****

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 79 Critical Vol./Cap. (X): 0.571
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 79 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	156	1038	9	137	627	124	116	0	313	3	0	40
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:	156	1038	9	137	627	124	116	0	313	3	0	40
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:	156	1038	9	137	627	124	116	0	313	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	1038	9	137	627	124	116	0	313	3	0	40
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 Vol.:	156	1038	9	137	627	124	116	0	313	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.07	0.00	0.93
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.10	0.35	0.01	0.09	0.21	0.08	0.08	0.00	0.21	0.03	0.00	0.03
Crit Vol:	519			137			313			43		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 102 Critical Vol./Cap. (X): 0.666

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 102 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	353	743	41	228	965	608	119	82	65	112	591	116
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:	353	743	41	228	965	608	119	82	65	112	591	116
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:	353	743	41	228	965	608	119	82	65	112	591	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	353	743	41	228	965	608	119	82	65	112	591	116
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	388	743	41	251	965	608	131	82	65	123	591	116

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.13	0.17	0.03	0.08	0.21	0.41	0.04	0.03	0.04	0.04	0.13	0.08
Crit Vol:	194					608	0				197	
Crit Moves:	****					****	****				****	

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.840

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	87	827	119	350	2361	317	199	144	130	642	486	176
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:	87	827	119	350	2361	317	199	144	130	642	486	176
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:	87	827	119	350	2361	317	199	144	130	642	486	176
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	827	119	350	2361	317	199	144	130	642	486	176
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	96	827	119	385	2361	317	219	144	130	706	486	194

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.14	0.08	0.13	0.52	0.21	0.07	0.05	0.09	0.24	0.16	0.13
Crit Vol:	48			787			72			353		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.243

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	152	1948	10	40	4365	158	125	10	327	40	15	40
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:	152	1948	10	40	4365	158	125	10	327	40	15	40
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:	152	1948	10	40	4365	158	125	10	327	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	1948	10	40	4365	158	125	10	327	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	167	1948	10	40	4365	158	125	10	360	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	0.51	0.04	1.45	1.00	0.19	0.81
Final Sat.:	3000	4477	23	1500	4500	1500	758	61	2182	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.06	0.44	0.44	0.03	0.97	0.11	0.16	0.17	0.16	0.03	0.05	0.03
Crit Vol:	84			1455			248			78		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 0.381

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	5	5	49	10	29	14	11	5	10	36	197
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:	5	5	5	49	10	29	14	11	5	10	36	197
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:	5	5	5	49	10	29	14	11	5	10	36	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	5	5	49	10	29	14	11	5	10	36	197
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 Vol.:	5	5	5	49	10	29	14	11	5	10	36	197

Saturation Flow Module:

Sat/Lane:	398	398	398	524	524	524	724	724	724	637	637	637
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.33	0.33	0.56	0.11	0.33	0.46	0.37	0.17	0.04	0.15	0.81
Final Sat.:	133	133	133	292	60	173	338	265	121	26	94	516

Capacity Analysis Module:

Vol/Sat:	0.04	0.04	0.04	0.17	0.17	0.17	0.04	0.04	0.04	0.38	0.38	0.38
Crit Moves:	****			****			****			****		
ApproachV/S:	0.04			0.17			0.04			0.38		
Delay/Veh:	1.2	1.2	1.2	1.9	1.9	1.9	1.2	1.2	1.2	4.3	4.3	4.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	1.2	1.9	1.9	1.9	1.2	1.2	1.2	4.3	4.3	4.3
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	1.2			1.9			1.2			4.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	1.2			1.9			1.2			4.3		
LOS by Appr:	A			A			A			A		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 50 Critical Vol./Cap. (X): 0.314

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	0	0	0	1	0	0	0

Volume Module:

Base Vol:	56	572	0	0	928	402	29	0	37	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	572	0	0	928	402	29	0	37	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	56	572	0	0	928	402	29	0	37	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	572	0	0	928	402	29	0	37	0	0	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 Vol.:	56	572	0	0	928	402	29	0	37	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.44	0.00	0.56	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	681	0	869	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.12	0.00	0.00	0.20	0.26	0.04	0.00	0.04	0.00	0.00	0.00
Crit Vol:	56					402	29				0	
Crit Moves:	****					****	****					

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 52 Critical Vol./Cap. (X): 0.344

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 52 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	238	504	47	0	821	115	14	5	158	85	32	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	238	504	47	0	821	115	14	5	158	85	32	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	504	47	0	821	115	14	5	158	85	32	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	504	47	0	821	115	14	5	158	85	32	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	262	504	47	0	821	115	14	5	158	85	32	4

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.89	0.11
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1333	167

Capacity Analysis Module:

Vol/Sat:	0.09	0.11	0.03	0.00	0.18	0.08	0.01	0.00	0.11	0.06	0.02	0.02
Crit Vol:	0				274				158	85		
Crit Moves:	****				****				****	****		

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 144 Critical Vol./Cap. (X): 0.763

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 144 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Include			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	2	1	0	2	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	311	578	30	84	1278	158	142	516	621	45	280	80
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:	311	578	30	84	1278	158	142	516	621	45	280	80
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:	311	578	30	84	1278	158	142	516	621	45	280	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	578	30	84	1278	158	142	516	621	45	280	80
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 Vol.:	311	578	30	84	1278	158	142	516	621	45	280	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.67	0.33	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4278	222	1500	4005	495	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.21	0.14	0.14	0.06	0.32	0.32	0.09	0.17	0.41	0.03	0.09	0.05
Crit Vol:	0			479			621		45			
Crit Moves:	****			****			****		****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 54 Critical Vol./Cap. (X): 0.366
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Ovl			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	1	0	3	0	1	0	1	0

Volume Module:

Base Vol:	0	560	40	1	1264	0	0	62	0	66	50	2
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	560	40	1	1264	0	0	62	0	66	50	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	560	40	1	1264	0	0	62	0	66	50	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	560	40	1	1264	0	0	62	0	66	50	2
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 Vol.:	0	560	40	1	1264	0	0	62	0	66	50	2

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.96	0.04
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1442	58

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.03	0.00	0.28	0.00	0.00	0.04	0.00	0.04	0.03	0.03
Crit Vol:	0			421			62			66		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 108 Critical Vol./Cap. (X): 0.684

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 108 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	8	812	12	565	2232	652	213	64	14	49	161	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	812	12	565	2232	652	213	64	14	49	161	300
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:	8	812	12	565	2232	652	213	64	14	49	161	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	812	12	565	2232	652	213	64	14	49	161	300
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	9	812	12	622	2232	652	234	64	14	54	161	330

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.46	0.54	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3692	808	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.01	0.21	0.50	0.43	0.08	0.02	0.02	0.02	0.11	0.11
Crit Vol:	5			744			117			161		
Crit Moves:	****			****			****			****		

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Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.277

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	1	1	0	1
	0	0	3	1	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	1205	0	0	2373	0	392	847	1075	0	0	126
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	1205	0	0	2373	0	392	847	1075	0	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1205	0	0	2373	0	392	847	1075	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1205	0	0	2373	0	392	847	1075	0	0	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.10	1.00	1.00	0.00
Final Vol.:	0	1205	0	0	2373	0	431	847	1183	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.07	1.93	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1657	2993	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.00	0.00	0.77	0.00	0.28	0.51	0.40	0.00	0.00	0.00
Crit Vol:	0				1187			792			0	
Crit Moves:	****				****			****				

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 102 Critical Vol./Cap. (X): 0.805

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 102 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	775	0	0	861	0	0	0	0	1631	0	210
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	775	0	0	861	0	0	0	0	1631	0	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	775	0	0	861	0	0	0	0	1631	0	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	775	0	0	861	0	0	0	0	1631	0	210
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	1.10	1.00	1.00
Final Vol.:	0	775	0	0	861	0	0	0	0	1794	0	210

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.54	0.00	0.13
Crit Vol:	0				431			0		897		
Crit Moves:	****				****					****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 67 Critical Vol./Cap. (X): 0.595

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 67 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	129	0	13	0	0	0	0	2249	417	102	1094	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:	129	0	13	0	0	0	0	2249	417	102	1094	0
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:	129	0	13	0	0	0	0	2249	0	102	1094	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	0	13	0	0	0	0	2249	0	102	1094	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	142	0	13	0	0	0	0	2249	0	102	1094	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.48	0.00	0.07	0.24	0.00
Crit Vol:	71				0			750		102		
Crit Moves:	****							****		****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.062

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	0	1	0	0	1	0	1	0

Volume Module:

Base Vol:	217	621	28	121	2098	806	308	54	541	23	46	81
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:	217	621	28	121	2098	806	308	54	541	23	46	81
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	217	621	28	121	2098	0	308	54	541	23	46	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	621	28	121	2098	0	308	54	541	23	46	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	217	621	28	121	2098	0	308	54	541	23	46	81

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	3.00	1.00	1.00	0.09	0.91	0.31	0.69	1.00
Final Sat.:	1500	4306	194	1500	4500	1500	1500	136	1364	460	1040	1500

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.14	0.08	0.47	0.00	0.21	0.40	0.40	0.05	0.04	0.05
Crit Vol:	217			699			595			81		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.981

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1072	0	0	1215	0	169	0	1837	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1072	0	0	1215	0	169	0	1837	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1072	0	0	1215	0	169	0	1837	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1072	0	0	1215	0	169	0	1837	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1072	0	0	1215	0	186	0	2021	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.00	0.00	0.37	0.00	0.11	0.00	0.61	0.00	0.00	0.00
Crit Vol:	0				608				1011	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.490

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	565	0	0	825	0	0	0	0	493	0	250
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	565	0	0	825	0	0	0	0	493	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	565	0	0	825	0	0	0	0	493	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	565	0	0	825	0	0	0	0	493	0	250
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	1.10	1.00	1.00
Final Vol.:	0	565	0	0	825	0	0	0	0	542	0	250

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.37	0.00	0.63
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2258	0	1042

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.17	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.24	0.00	0.24
Crit Vol:	0			413			0			396		
Crit Moves:	****			****						****		

Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 83 Critical Vol./Cap. (X): 0.589

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	1	2	0	1

Volume Module:

Base Vol:	266	60	258	18	147	22	14	622	321	688	983	8
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:	266	60	258	18	147	22	14	622	321	688	983	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:	266	60	258	18	147	22	14	622	321	688	983	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	266	60	258	18	147	22	14	622	321	688	983	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	293	60	258	18	147	22	14	622	321	757	983	8

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.66	0.34	1.00	0.19	1.57	0.24	1.00	2.00	1.00	2.00	1.98	0.02
Final Sat.:	2490	510	1500	289	2358	353	1500	3000	1500	3000	2976	24

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.17	0.06	0.06	0.06	0.01	0.21	0.21	0.25	0.33	0.33
Crit Vol:	177			18			311			379		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.084

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	81	9	0	0	0	7	24	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	81	9	0	0	0	7	24	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	81	9	0	0	0	7	24	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	81	9	0	0	0	7	24	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 Vol.:	0	0	0	0	81	9	0	0	0	7	24	0

Saturation Flow Module:

Sat/Lane:	0	0	0	538	538	538	0	0	0	343	343	343
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.80	0.20	0.00	0.00	0.00	0.45	1.55	0.00
Final Sat.:	0	0	0	0	968	108	0	0	0	155	531	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.05	0.05	0.00
Crit Moves:			****			****			****			****
ApproachV/S:	xxxxxx			0.08			xxxxxx			0.05		
Delay/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.4			xxxxxx			1.2		
Delay Adj:	xxxxxx			1.00			xxxxxx			1.00		
ApprAdjDel:	xxxxxx			1.4			xxxxxx			1.2		
LOS by Appr:	F			A			F			A		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.053

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	2	48	0	0	0	0	0	0	0	0	34	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:	2	48	0	0	0	0	0	0	0	0	34	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:	2	48	0	0	0	0	0	0	0	0	34	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	48	0	0	0	0	0	0	0	0	34	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 Vol.:	2	48	0	0	0	0	0	0	0	0	34	12

Saturation Flow Module:

Sat/Lane:	500	500	500	0	0	0	0	0	0	434	434	434
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	1.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	0.52
Final Sat.:	40	960	0	0	0	0	0	0	0	0	642	226

Capacity Analysis Module:

Vol/Sat:	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
Crit Moves:	****			****			****			****		
ApproachV/S:	0.05			xxxxx			xxxxx			0.05		
Delay/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.2			xxxxxx			xxxxxx			1.2		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.2			xxxxxx			xxxxxx			1.2		
LOS by Appr:	A			F			F			A		

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 57 Critical Vol./Cap. (X): 0.526

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	1	0	3	0	1	1	0	0

Volume Module:

Base Vol:	13	550	0	17	1257	513	302	0	8	0	1	54
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:	13	550	0	17	1257	513	302	0	8	0	1	54
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:	13	550	0	17	1257	513	302	0	8	0	1	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	550	0	17	1257	513	302	0	8	0	1	54
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 Vol.:	13	550	0	17	1257	513	302	0	8	0	1	54

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.02	0.98
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	0	1500	1500	27	1473

Capacity Analysis Module:

Vol/Sat:	0.01	0.12	0.00	0.01	0.28	0.34	0.20	0.00	0.01	0.00	0.04	0.04
Crit Vol:	13			419			302				55	
Crit Moves:	****			****			****				****	

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Villages of Zinfandel
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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.119

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.5

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	12	45	0	0	119	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	12	45	0	0	119	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	12	45	0	0	119	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	12	45	0	0	119	2	0	0	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 Vol.:	0	0	0	12	45	0	0	119	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	363	363	363	508	508	508	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.42	1.58	0.00	0.00	1.97	0.03	0.00	0.00	0.00
Final Sat.:	0	0	0	153	573	0	0	999	17	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.12	0.12	0.00	0.00	0.00
Crit Moves:			****		****				****			****
ApproachV/S:	xxxxx			0.08			0.12			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	1.6	1.6	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	1.6	1.6	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.3			1.6			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.3			1.6			xxxxxx		
LOS by Appr:	F			A			A			F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.048

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	23	6	0	0	0	23	30	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	23	6	0	0	0	23	30	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	23	6	0	0	0	23	30	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	23	6	0	0	0	23	30	0	0	0	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 Vol.:	0	23	6	0	0	0	23	30	0	0	0	0

Saturation Flow Module:

Sat/Lane:	312	312	312	0	0	0	554	554	554	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.59	0.41	0.00	0.00	0.00	0.87	1.13	0.00	0.00	0.00	0.00
Final Sat.:	0	495	129	0	0	0	481	627	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00
Crit Moves:			****			****		****				****
ApproachV/S:	0.05			xxxxx			0.05			xxxxx		
Delay/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.2			xxxxxx			1.2			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.2			xxxxxx			1.2			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.595

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	280	4	0	32	6	49	76	200	557	0	31	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:	280	4	0	32	6	49	76	200	557	0	31	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:	280	4	0	32	6	49	76	200	557	0	31	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	4	0	32	6	49	76	200	557	0	31	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 Vol.:	280	4	0	32	6	49	76	200	557	0	31	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.11	0.89	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	164	1336	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.19	0.00	0.00	0.02	0.04	0.04	0.05	0.13	0.37	0.00	0.02	0.00
Crit Vol:	280			55					557	0		
Crit Moves:	****			****					****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 57 Critical Vol./Cap. (X): 0.522

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	99	0	23	33	1421	0	0	604	61
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	99	0	23	33	1421	0	0	604	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	99	0	23	33	1421	0	0	604	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	99	0	23	33	1421	0	0	604	61
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 Vol.:	0	0	0	99	0	23	33	1421	0	0	604	61

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.82	0.18
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2816	284

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.01	0.02	0.46	0.00	0.00	0.21	0.21
Crit Vol:	0			99				711		0		
Crit Moves:				****				****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.326

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	152	48	76	5	25	11	100	471	51	65	230	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:	152	48	76	5	25	11	100	471	51	65	230	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:	152	48	76	5	25	11	100	471	51	65	230	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	48	76	5	25	11	100	471	51	65	230	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 Vol.:	152	48	76	5	25	11	100	471	51	65	230	20

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	1042	458	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.10	0.03	0.05	0.00	0.02	0.02	0.07	0.16	0.03	0.04	0.08	0.01
Crit Vol:	152				36			236		65		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 53 Critical Vol./Cap. (X): 0.353

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	2	0	1	1	0

Volume Module:

Base Vol:	2	91	114	16	33	236	189	314	2	91	156	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	91	114	16	33	236	189	314	2	91	156	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	91	114	16	33	236	189	314	2	91	156	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	91	114	16	33	236	189	314	2	91	156	50
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 Vol.:	2	91	114	16	33	236	189	314	2	91	156	50

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.51	0.49
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2272	728

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.08	0.01	0.02	0.16	0.13	0.10	0.00	0.06	0.07	0.07
Crit Vol:	2					236	189				103	
Crit Moves:	****					****	****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 71 Critical Vol./Cap. (X): 0.521

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 71 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1

Volume Module:

Base Vol:	311	9	1	0	27	316	281	926	746	0	432	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:	311	9	1	0	27	316	281	926	746	0	432	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:	311	9	1	0	27	316	281	926	746	0	432	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	9	1	0	27	316	281	926	746	0	432	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	342	9	1	0	27	316	281	926	746	0	432	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.94	0.05	0.01	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2915	77	9	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.12	0.00	0.02	0.21	0.19	0.31	0.50	0.00	0.14	0.00
Crit Vol:	0					316			746	0		
Crit Moves:	****					****			****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.497

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:												
Base Vol:	0	0	0	0	1104	0	487	0	203	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1104	0	487	0	203	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1104	0	487	0	203	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1104	0	487	0	203	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1104	0	536	0	223	0	0	0

Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.33	0.00	0.16	0.00	0.14	0.00	0.00	0.00
Crit Vol:	0				552		268			0		
Crit Moves:					****		****					

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.931

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1
	1	0	0	1	1	0	0	1	1	0	0	1

Volume Module:

Base Vol:	107	596	0	0	3527	54	0	0	156	22	48	164
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:	107	596	0	0	3527	54	0	0	156	22	48	164
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:	107	596	0	0	3527	54	0	0	156	22	48	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	596	0	0	3527	54	0	0	156	22	48	164
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	1.10
Final Vol.:	107	596	0	0	3527	54	0	0	156	22	48	180

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.42	1.58
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	632	2368

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.00	0.00	0.78	0.04	0.00	0.00	0.10	0.01	0.08	0.08
Crit Vol:	107				1176		0				114	
Crit Moves:	****				****		****				****	

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 54 Critical Vol./Cap. (X): 0.373

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0

Volume Module:

Base Vol:	3	138	105	42	94	76	53	129	2	218	865	116
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	138	105	42	94	76	53	129	2	218	865	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	138	105	42	94	76	53	129	2	218	865	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	138	105	42	94	76	53	129	2	218	865	116
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 Vol.:	3	138	105	42	94	76	53	129	2	218	865	116

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.11	0.89	1.00	2.00	1.00	1.00	2.65	0.35
Final Sat.:	1500	1500	1500	1500	1659	1341	1500	3000	1500	1500	3968	532

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.07	0.03	0.06	0.06	0.04	0.04	0.00	0.15	0.22	0.22
Crit Vol:	138			42			53			327		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 47 Critical Vol./Cap. (X): 0.279

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	14	26	14	20	19	13	138	156	83	231	489	211
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	26	14	20	19	13	138	156	83	231	489	211
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	26	14	20	19	13	138	156	83	231	489	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	26	14	20	19	13	138	156	83	231	489	211
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	14	26	14	22	19	13	138	156	83	231	489	211

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.07	0.93	1.00	1.00	2.00	1.00	1.00	2.10	0.90
Final Sat.:	1500	1500	1500	1610	1390	1500	1500	3000	1500	1500	3144	1356

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.01	0.01	0.01	0.01	0.09	0.05	0.06	0.15	0.16	0.16
Crit Vol:	26			21			138			233		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 43 Critical Vol./Cap. (X): 0.205

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	15	62	0	30	23	80	113	2	5	0	10	92
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:	15	62	0	30	23	80	113	2	5	0	10	92
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:	15	62	0	30	23	80	113	2	5	0	10	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	62	0	30	23	80	113	2	5	0	10	92
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 Vol.:	15	62	0	30	23	80	113	2	5	0	10	92

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.29	0.71	1.00	0.10	0.90
Final Sat.:	1500	1500	0	1500	1500	1500	1500	429	1071	1500	147	1353

Capacity Analysis Module:

Vol/Sat:	0.01	0.04	0.00	0.02	0.02	0.05	0.08	0.00	0.00	0.00	0.07	0.07
Crit Vol:	62			30			113				102	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 44 Critical Vol./Cap. (X): 0.219

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 44 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	99	0	0	0	30	0	0	89	140
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	99	0	0	0	30	0	0	89	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	99	0	0	0	30	0	0	89	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	99	0	0	0	30	0	0	89	140
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 Vol.:	0	0	0	99	0	0	0	30	0	0	89	140

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.39	0.61
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	583	917

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.02	0.00	0.00	0.15	0.15
Crit Vol:	0			99			0				229	
Crit Moves:				****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.505

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	9	0	500	124	287	0	0	268	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	500	124	287	0	0	268	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:	0	0	0	9	0	500	124	287	0	0	268	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	9	0	500	124	287	0	0	268	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 Vol.:	0	0	0	9	0	500	124	287	0	0	268	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.33	0.08	0.10	0.00	0.00	0.09	0.00
Crit Vol:	0					500	124				134	
Crit Moves:						****	****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
AM Peak Hour

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

Intersection #241 Zinfandel Drive and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.333

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 34 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	0	682	50	74	180	379	77	3	0	18	16	28
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	682	50	74	180	379	77	3	0	18	16	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	682	50	74	180	379	77	3	0	18	16	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	682	50	74	180	379	77	3	0	18	16	28
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	682	50	74	180	379	77	3	0	18	16	28

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.36	0.64
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	545	955

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.03	0.05	0.04	0.25	0.05	0.00	0.00	0.01	0.03	0.03
Crit Vol:	0					379	77				44	
Crit Moves:	****					****	****				****	

**6. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH PROPOSED PROJECT
CONDITIONS
P.M. PEAK HOUR**

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	5		286	52		349	806	113		55	557	2
202	Sunrise Blvd.	76		434	17		109	1222	3		13	67	217
203	Sunrise Blvd.	315		626	14		49	1085	117		259	0	257
204	Sunrise Blvd.	71		927	56		290	1080	144		442	568	389
205	Sunrise Blvd.	171		2699	440		430	1317	176		675	615	137
206	Sunrise Blvd.	133		3888	5		80	2797	169		278	0	153
207	Zinfandel Dri	5		10	10		196	5	13		20	35	5
209	Zinfandel Dri	84		848	0		0	659	129		200	0	104
210	Zinfandel Dri	129		785	185		5	639	27		87	42	202
211	Zinfandel Dri	664		1231	57		83	773	200		254	383	422
212	Zinfandel Dri	0		971	77		2	716	0		213	86	0
213	Zinfandel Dri	29		2368	9		315	864	190		557	94	0
214	Zinfandel Dri	0		3173	0		0	1096	0		1014	166	274
215	Zinfandel Dri	0		2323	0		0	591	0		0	0	0
216	Mather Field	437		0	83		0	0	0		0	1355	136
217	Mather Field	497		2006	20		142	1009	353		759	50	262
218	Mather Field	0		2799	0		0	703	0		332	0	854
219	Mather Field	0		1102	0		0	708	0		0	0	0
220	Mather Field	740		208	692		42	75	8		8	1517	202
221	Mather Blvd.	0		0	0		0	54	22		0	0	0
222	Mather Blvd.	3		55	0		0	0	0		0	0	0
224	A Street & Zi	12		1177	0		52	711	439		626	1	7
225	Von Karman St	0		0	0		26	11	0		0	4	2
226	Norden Avenue	0		46	1		0	0	0		14	10	0
227	A Street & Ai	565		9	0		3	17	92		46	81	417
228	International	0		0	0		90	0	30		5	869	0
229	International	72		56	91		23	67	114		6	373	140
230	International	2		64	216		62	111	204		343	242	5
231	International	684		26	1		0	10	329		340	622	527
232	Hazel Avenue	0		0	0		0	271	0		1911	0	24
233	Hazel Avenue	102		3127	0		0	1344	38		0	0	133
234	White Rock Ro	1		160	168		203	193	107		147	824	6
235	White Rock Ro	109		34	112		199	45	85		53	532	20
236	B Street & Pr	10		34	0		90	55	170		125	15	16
237	B Street & Ki	0		0	0		162	0	0		0	93	0
240	C Street and	0		0	0		5	0	273		414	263	0
241	Zinfandel Dri	0		260	8		57	618	160		381	25	0

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	E	xxxxx	0.925	E	xxxxx	0.925	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	B	xxxxx	0.658	B	xxxxx	0.658	+ 0.000 V/C
#203 Sunrise Blvd. & International	D	xxxxx	0.840	D	xxxxx	0.840	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	A	xxxxx	0.592	A	xxxxx	0.592	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	E	xxxxx	0.992	E	xxxxx	0.992	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.157	F	xxxxx	1.157	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	A	4.9	0.717	A	4.9	0.717	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.338	A	xxxxx	0.338	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	A	xxxxx	0.325	A	xxxxx	0.325	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	F	xxxxx	1.000	F	xxxxx	1.000	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.430	A	xxxxx	0.430	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.030	F	xxxxx	1.030	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.212	F	xxxxx	1.212	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	B	xxxxx	0.667	B	xxxxx	0.667	+ 0.000 V/C
#216 Mather Field Road & Internatio	B	xxxxx	0.605	B	xxxxx	0.605	+ 0.000 V/C
#217 Mather Field Road & Rockingham	E	xxxxx	1.000	E	xxxxx	1.000	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	D	xxxxx	0.850	D	xxxxx	0.850	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.496	A	xxxxx	0.496	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	F	xxxxx	1.056	F	xxxxx	1.056	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	2.0	0.198	A	2.0	0.198	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	2.1	0.215	A	2.1	0.215	+ 0.000 V/C
#224 A Street & Zinfandel Drive	C	xxxxx	0.733	C	xxxxx	0.733	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.1	0.038	A	1.1	0.038	+ 0.000 V/C

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	1.2	0.053	A	1.2	0.053	+ 0.000 V/C
#227 A Street & Airpark Drive	C	xxxxx	0.727	C	xxxxx	0.727	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.592	A	xxxxx	0.592	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.373	A	xxxxx	0.373	+ 0.000 V/C
#230 International Drive & Kilgore	A	xxxxx	0.524	A	xxxxx	0.524	+ 0.000 V/C
#231 International Drive & Femoyer	C	xxxxx	0.798	C	xxxxx	0.798	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	C	xxxxx	0.719	C	xxxxx	0.719	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	E	xxxxx	0.985	E	xxxxx	0.985	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	A	xxxxx	0.558	A	xxxxx	0.558	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.312	A	xxxxx	0.312	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.205	A	xxxxx	0.205	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.305	A	xxxxx	0.305	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.551	A	xxxxx	0.551	+ 0.000 V/C
#241 Zinfandel Drive and Mather Bou	A	xxxxx	0.444	A	xxxxx	0.444	+ 0.000 V/C

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.925
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	5	286	52	349	806	113	55	557	2	20	136	102
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:	5	286	52	349	806	113	55	557	2	20	136	102
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:	5	286	52	349	806	113	55	557	2	20	136	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	286	52	349	806	113	55	557	2	20	136	102
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 Vol.:	5	286	52	349	806	113	55	557	2	20	136	102

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.85	0.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1269	231	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.23	0.23	0.54	0.08	0.04	0.37	0.00	0.01	0.09	0.07
Crit Vol:	5				806			557		20		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.658

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	76	434	17	109	1222	3	13	67	217	0	2	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:	76	434	17	109	1222	3	13	67	217	0	2	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:	76	434	17	109	1222	3	13	67	217	0	2	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	434	17	109	1222	3	13	67	217	0	2	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 Vol.:	76	434	17	109	1222	3	13	67	217	0	2	36

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.99	0.01	0.04	0.23	0.73	0.00	1.00	1.00
Final Sat.:	1500	2887	113	1500	2993	7	66	338	1096	0	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.15	0.15	0.07	0.41	0.41	0.20	0.20	0.20	0.00	0.00	0.02
Crit Vol:	76			613			297			2		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.840
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	315	626	14	49	1085	117	259	0	257	17	0	126
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:	315	626	14	49	1085	117	259	0	257	17	0	126
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:	315	626	14	49	1085	117	259	0	257	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	626	14	49	1085	117	259	0	257	17	0	126
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 Vol.:	315	626	14	49	1085	117	259	0	257	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.12	0.00	0.88
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.21	0.21	0.01	0.03	0.36	0.08	0.17	0.00	0.17	0.10	0.00	0.10
Crit Vol:	315				543		259					143
Crit Moves:	****				****		****					****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 83 Critical Vol./Cap. (X): 0.592

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	71	927	56	290	1080	144	442	568	389	125	231	269
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:	71	927	56	290	1080	144	442	568	389	125	231	269
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:	71	927	56	290	1080	144	442	568	389	125	231	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	927	56	290	1080	144	442	568	389	125	231	269
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	78	927	56	319	1080	144	486	568	389	138	231	269

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.21	0.04	0.11	0.24	0.10	0.16	0.19	0.26	0.05	0.05	0.18
Crit Vol:	309			160			389			69		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.992

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	171	2699	440	430	1317	176	675	615	137	191	312	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:	171	2699	440	430	1317	176	675	615	137	191	312	277
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:	171	2699	440	430	1317	176	675	615	137	191	312	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	2699	440	430	1317	176	675	615	137	191	312	277
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	188	2699	440	473	1317	176	743	615	137	210	312	305

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.52	1.48
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2276	2224

Capacity Analysis Module:

Vol/Sat:	0.06	0.45	0.29	0.16	0.29	0.12	0.25	0.20	0.09	0.07	0.14	0.14
Crit Vol:	675			237			372			206		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.157

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	3	0	1	0

Volume Module:

Base Vol:	133	3888	5	80	2797	169	278	0	153	20	0	80
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	3888	5	80	2797	169	278	0	153	20	0	80
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	3888	5	80	2797	169	278	0	153	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	3888	5	80	2797	169	278	0	153	20	0	80
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	146	3888	5	80	2797	169	278	0	168	22	0	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3000	4494	6	1500	4500	1500	1500	0	1500	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.87	0.87	0.05	0.62	0.11	0.19	0.00	0.11	0.01	0.00	0.05
Crit Vol:	1298			80			278					80
Crit Moves:	****			****			****					****

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 0.717

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.9

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	10	10	196	5	13	20	35	5	5	5	61
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:	5	10	10	196	5	13	20	35	5	5	5	61
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:	5	10	10	196	5	13	20	35	5	5	5	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	10	10	196	5	13	20	35	5	5	5	61
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 Vol.:	5	10	10	196	5	13	20	35	5	5	5	61

Saturation Flow Module:

Sat/Lane:	404	404	404	840	840	840	324	324	324	99	99	99
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.40	0.40	0.92	0.02	0.06	0.33	0.59	0.08	0.07	0.07	0.86
Final Sat.:	81	162	162	769	20	51	108	189	27	7	7	85

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.06	0.25	0.25	0.25	0.19	0.19	0.19	0.72	0.72	0.72
Crit Moves:	****			****			****			****		
ApproachV/S:	0.06			0.25			0.19			0.72		
Delay/Veh:	1.3	1.3	1.3	2.6	2.6	2.6	2.0	2.0	2.0	15.3	15.3	15.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.3	1.3	1.3	2.6	2.6	2.6	2.0	2.0	2.0	15.3	15.3	15.3
LOS by Move:	A	A	A	A	A	A	A	A	A	C	C	C
ApproachDel:	1.3			2.6			2.0			15.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	1.3			2.6			2.0			15.3		
LOS by Appr:	A			A			A			C		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 51 Critical Vol./Cap. (X): 0.338

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	0

Volume Module:

Base Vol:	84	848	0	0	659	129	200	0	104	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	848	0	0	659	129	200	0	104	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	84	848	0	0	659	129	200	0	104	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	848	0	0	659	129	200	0	104	0	0	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 Vol.:	84	848	0	0	659	129	200	0	104	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.66	0.00	0.34	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	1020	0	530	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.18	0.00	0.00	0.14	0.08	0.20	0.00	0.20	0.00	0.00	0.00
Crit Vol:	0				220				304	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 50 Critical Vol./Cap. (X): 0.325
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	129	785	185	5	639	27	87	42	202	73	7	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	785	185	5	639	27	87	42	202	73	7	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:	129	785	185	5	639	27	87	42	202	73	7	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	785	185	5	639	27	87	42	202	73	7	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	142	785	185	5	639	27	87	42	202	73	7	5

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.58	0.42
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	875	625

Capacity Analysis Module:

Vol/Sat:	0.05	0.17	0.12	0.00	0.14	0.02	0.06	0.03	0.13	0.05	0.01	0.01
Crit Vol:	0				213				202	73		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.000

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	664	1231	57	83	773	200	254	383	422	23	516	62
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:	664	1231	57	83	773	200	254	383	422	23	516	62
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:	664	1231	57	83	773	200	254	383	422	23	516	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	664	1231	57	83	773	200	254	383	422	23	516	62
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 Vol.:	664	1231	57	83	773	200	254	383	422	23	516	62

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.38	0.62	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4301	199	1500	3575	925	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.44	0.29	0.29	0.06	0.22	0.22	0.17	0.13	0.28	0.02	0.17	0.04
Crit Vol:	664			324			254			258		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 60 Critical Vol./Cap. (X): 0.430
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 60 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Ovl			Include			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	1	0	3	0	1	1	0	3

Volume Module:

Base Vol:	0	971	77	2	716	0	213	86	0	72	102	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	971	77	2	716	0	213	86	0	72	102	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	971	77	2	716	0	213	86	0	72	102	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	971	77	2	716	0	213	86	0	72	102	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	971	77	2	716	0	213	86	0	72	102	4

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.96	0.04
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1443	57

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.05	0.00	0.16	0.00	0.14	0.06	0.00	0.05	0.07	0.07
Crit Vol:	324			2			213			106		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.030

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	29	2368	9	315	864	190	557	94	0	32	216	501
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:	29	2368	9	315	864	190	557	94	0	32	216	501
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:	29	2368	9	315	864	190	557	94	0	32	216	501
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	2368	9	315	864	190	557	94	0	32	216	501
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	32	2368	9	347	864	190	613	94	0	35	216	551

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	0.00	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	0	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.53	0.01	0.12	0.19	0.13	0.20	0.02	0.00	0.01	0.14	0.18
Crit Vol:	789			174			307					276
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.212
Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Split Phase			Split Phase					
Rights:	Include			Include			Include			Ovl					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	0	0	1

Volume Module:

Base Vol:	0	3173	0	0	1096	0	1014	166	274	0	0	528
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	3173	0	0	1096	0	1014	166	274	0	0	528
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3173	0	0	1096	0	1014	166	274	0	0	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3173	0	0	1096	0	1014	166	274	0	0	528
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	3173	0	0	1096	0	1115	166	301	0	0	528

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.71	1.29	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	1102	1998	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	0.35	0.00	0.36	0.15	0.15	0.00	0.00	0.34
Crit Vol:	793			0			558					528
Crit Moves:	****			****			****					****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 60 Critical Vol./Cap. (X): 0.667

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 60 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2323	0	0	591	0	0	0	0	593	0	221
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	2323	0	0	591	0	0	0	0	593	0	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2323	0	0	591	0	0	0	0	593	0	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2323	0	0	591	0	0	0	0	593	0	221
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	1.10	1.00	1.00
Final Vol.:	0	2323	0	0	591	0	0	0	0	652	0	221

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.47	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.20	0.00	0.13
Crit Vol:	774			0			0			326		
Crit Moves:	****			****						****		

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 68 Critical Vol./Cap. (X): 0.605

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	437	0	83	0	0	0	0	1355	136	89	2093	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:	437	0	83	0	0	0	0	1355	136	89	2093	0
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:	437	0	83	0	0	0	0	1355	0	89	2093	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	437	0	83	0	0	0	0	1355	0	89	2093	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	481	0	83	0	0	0	0	1355	0	89	2093	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.05	0.00	0.00	0.00	0.00	0.29	0.00	0.06	0.45	0.00
Crit Vol:	241			0			0			698		
Crit Moves:	****						****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.000

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	497	2006	20	142	1009	353	759	50	262	22	101	62
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:	497	2006	20	142	1009	353	759	50	262	22	101	62
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	497	2006	20	142	1009	0	759	50	262	22	101	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	497	2006	20	142	1009	0	759	50	262	22	101	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	497	2006	20	142	1009	0	835	50	262	22	101	62

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	1.45	0.09	0.46	0.24	1.09	0.67
Final Sat.:	1500	4456	44	1500	4500	1500	2184	131	685	357	1638	1005

Capacity Analysis Module:

Vol/Sat:	0.33	0.45	0.45	0.09	0.22	0.00	0.38	0.38	0.38	0.06	0.06	0.06
Crit Vol:	497			336			574			93		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 133 Critical Vol./Cap. (X): 0.850

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 133 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	2799	0	0	703	0	332	0	854	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2799	0	0	703	0	332	0	854	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2799	0	0	703	0	332	0	854	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2799	0	0	703	0	332	0	854	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2799	0	0	703	0	365	0	939	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.57	0.00	0.00	0.21	0.00	0.22	0.00	0.28	0.00	0.00	0.00
Crit Vol:	933			0			470			0		
Crit Moves:	****			****			****					

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.496

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	1102	0	0	708	0	0	0	0	231	0	268
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	1102	0	0	708	0	0	0	0	231	0	268
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1102	0	0	708	0	0	0	0	231	0	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1102	0	0	708	0	0	0	0	231	0	268
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	1.10	1.00	1.00
Final Vol.:	0	1102	0	0	708	0	0	0	0	254	0	268

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3300	0	0	3300	0	0	0	0	1650	0	1650

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.33	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.15	0.00	0.16
Crit Vol:	551			0			0					268
Crit Moves:	****			****								****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.056

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	1	2	0	1

Volume Module:

Base Vol:	740	208	692	42	75	8	8	1517	202	459	1080	16
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:	740	208	692	42	75	8	8	1517	202	459	1080	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:	740	208	692	42	75	8	8	1517	202	459	1080	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	740	208	692	42	75	8	8	1517	202	459	1080	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	814	208	692	42	75	8	8	1517	202	505	1080	16

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.59	0.41	1.00	0.67	1.20	0.13	1.00	2.00	1.00	2.00	1.97	0.03
Final Sat.:	2389	611	1500	1008	1800	192	1500	3000	1500	3000	2956	44

Capacity Analysis Module:

Vol/Sat:	0.34	0.34	0.46	0.04	0.04	0.04	0.01	0.51	0.13	0.17	0.37	0.37
Crit Vol:	511			63			759			253		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.198

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.0

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	54	22	0	0	0	4	244	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	54	22	0	0	0	4	244	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	54	22	0	0	0	4	244	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	54	22	0	0	0	4	244	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 Vol.:	0	0	0	0	54	22	0	0	0	4	244	0

Saturation Flow Module:

Sat/Lane:	0	0	0	315	315	315	0	0	0	626	626	626
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.42	0.58	0.00	0.00	0.00	0.03	1.97	0.00
Final Sat.:	0	0	0	0	448	182	0	0	0	20	1232	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.20	0.20	0.00
Crit Moves:			****		****				****	****		
ApproachV/S:	xxxxx			0.12			xxxxx			0.20		
Delay/Veh:	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	2.1	2.1	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	2.1	2.1	0.0
LOS by Move:	*	*	*	A	A		*	*	*	A	A	*
ApproachDel:	xxxxxx			1.6			xxxxxx			2.1		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			1.6			xxxxxx			2.1		
LOS by Appr:	F			A			F			A		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.215

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.1

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	3	55	0	0	0	0	0	0	0	0	243	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	55	0	0	0	0	0	0	0	0	243	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:	3	55	0	0	0	0	0	0	0	0	243	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	55	0	0	0	0	0	0	0	0	243	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 Vol.:	3	55	0	0	0	0	0	0	0	0	243	16

Saturation Flow Module:

Sat/Lane:	301	301	301	0	0	0	0	0	0	601	601	601
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.12
Final Sat.:	31	571	0	0	0	0	0	0	0	0	1128	74

Capacity Analysis Module:

Vol/Sat:	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Crit Moves:	****			****			****			****		
ApproachV/S:	0.10			xxxxx			xxxxx			0.22		
Delay/Veh:	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.4			xxxxxx			xxxxxx			2.3		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.4			xxxxxx			xxxxxx			2.3		
LOS by Appr:	A			F			F			A		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 101 Critical Vol./Cap. (X): 0.733

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	1	0	3	0	1	0	1	0

Volume Module:

Base Vol:	12	1177	0	52	711	439	626	1	7	0	0	29
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	1177	0	52	711	439	626	1	7	0	0	29
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	1177	0	52	711	439	626	1	7	0	0	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	1177	0	52	711	439	626	1	7	0	0	29
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 Vol.:	12	1177	0	52	711	439	626	1	7	0	0	29

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.12	0.88	1.00	0.00	1.00
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	188	1313	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.26	0.00	0.03	0.16	0.29	0.42	0.01	0.01	0.00	0.00	0.02
Crit Vol:	392			52			626					29
Crit Moves:	****			****			****					****

ITEM 18.1.

Default Scenario

Fri Jun 22, 2001 09:05:37

ATTACHMENT 5

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.038

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.1

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	26	11	0	0	4	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	11	0	0	4	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	11	0	0	4	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	26	11	0	0	4	2	0	0	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 Vol.:	0	0	0	26	11	0	0	4	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	680	680	680	164	164	164	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.33	0.67	0.00	0.00	0.00
Final Sat.:	0	0	0	680	680	0	0	219	109	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.02	0.00	0.00	0.02	0.02	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx				0.03			0.02		xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.2	1.1	0.0	0.0	1.1	1.1	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.2	1.1	0.0	0.0	1.1	1.1	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx				1.1			1.1		xxxxxx		
Delay Adj:	xxxxx				1.00			1.00		xxxxx		
ApprAdjDel:	xxxxxx				1.1			1.1		xxxxxx		
LOS by Appr:	F				A			A		F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.053

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	46	1	0	0	0	14	10	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	46	1	0	0	0	14	10	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	46	1	0	0	0	14	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	46	1	0	0	0	14	10	0	0	0	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 Vol.:	0	46	1	0	0	0	14	10	0	0	0	0

Saturation Flow Module:

Sat/Lane:	443	443	443	0	0	0	372	372	372	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.96	0.04	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00
Final Sat.:	0	867	19	0	0	0	372	372	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.05			xxxxx			0.03			xxxxx		
Delay/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.1	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.2	1.1	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.2			xxxxxx			1.1			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.2			xxxxxx			1.1			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.727

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 84 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	565	9	0	3	17	92	46	81	417	0	196	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:	565	9	0	3	17	92	46	81	417	0	196	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:	565	9	0	3	17	92	46	81	417	0	196	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	565	9	0	3	17	92	46	81	417	0	196	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 Vol.:	565	9	0	3	17	92	46	81	417	0	196	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.16	0.84	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	234	1266	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.38	0.01	0.00	0.00	0.07	0.07	0.03	0.05	0.28	0.00	0.13	0.00
Crit Vol:	565				109				417	0		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 66 Critical Vol./Cap. (X): 0.592

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	90	0	30	5	869	0	0	1525	119
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	90	0	30	5	869	0	0	1525	119
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	90	0	30	5	869	0	0	1525	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	90	0	30	5	869	0	0	1525	119
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 Vol.:	0	0	0	90	0	30	5	869	0	0	1525	119

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.86	0.14
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2876	224

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.02	0.00	0.28	0.00	0.00	0.53	0.53
Crit Vol:	0			90			5				822	
Crit Moves:				****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 54 Critical Vol./Cap. (X): 0.373

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	72	56	91	23	67	114	6	373	140	120	454	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	72	56	91	23	67	114	6	373	140	120	454	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	56	91	23	67	114	6	373	140	120	454	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	56	91	23	67	114	6	373	140	120	454	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	72	56	91	23	67	114	6	373	140	120	454	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.37	0.63	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	555	945	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.04	0.06	0.02	0.12	0.12	0.00	0.12	0.09	0.08	0.15	0.01
Crit Vol:	72				181			187		120		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 71 Critical Vol./Cap. (X): 0.524

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 71 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1	0

Volume Module:

Base Vol:	2	64	216	62	111	204	343	242	5	105	301	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	64	216	62	111	204	343	242	5	105	301	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	64	216	62	111	204	343	242	5	105	301	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	64	216	62	111	204	343	242	5	105	301	30
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 Vol.:	2	64	216	62	111	204	343	242	5	105	301	30

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2728	272

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.14	0.04	0.07	0.14	0.23	0.08	0.00	0.07	0.11	0.11
Crit Vol:			216		62		343				166	
Crit Moves:			****		****		****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 168 Critical Vol./Cap. (X): 0.798

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 168 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1

Volume Module:

Base Vol:	684	26	1	0	10	329	340	622	527	2	915	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:	684	26	1	0	10	329	340	622	527	2	915	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:	684	26	1	0	10	329	340	622	527	2	915	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	684	26	1	0	10	329	340	622	527	2	915	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	752	26	1	0	10	329	340	622	527	2	915	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.93	0.06	0.01	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2896	100	4	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.26	0.26	0.26	0.00	0.01	0.22	0.23	0.21	0.35	0.00	0.30	0.00
Crit Vol:	390				10		340				458	
Crit Moves:	****				****		****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 71 Critical Vol./Cap. (X): 0.719

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 71 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	0	271	0	1911	0	24	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	271	0	1911	0	24	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	271	0	1911	0	24	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	271	0	1911	0	24	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	271	0	2102	0	26	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.00	0.08	0.00	0.64	0.00	0.02	0.00	0.00	0.00
Crit Vol:	0			136			1051			0		
Crit Moves:				****			****					

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.985

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	0	1	1	1

Volume Module:

Base Vol:	102	3127	0	0	1344	38	0	0	133	42	153	653
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:	102	3127	0	0	1344	38	0	0	133	42	153	653
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:	102	3127	0	0	1344	38	0	0	133	42	153	653
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	3127	0	0	1344	38	0	0	133	42	153	653
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	1.10
Final Vol.:	102	3127	0	0	1344	38	0	0	133	42	153	718

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.35	1.65
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	527	2473

Capacity Analysis Module:

Vol/Sat:	0.07	0.69	0.00	0.00	0.30	0.03	0.00	0.00	0.09	0.03	0.29	0.29
Crit Vol:	1042			0			0			436		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 77 Critical Vol./Cap. (X): 0.558

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 77 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	1	160	168	203	193	107	147	824	6	62	465	169
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:	1	160	168	203	193	107	147	824	6	62	465	169
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:	1	160	168	203	193	107	147	824	6	62	465	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	160	168	203	193	107	147	824	6	62	465	169
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 Vol.:	1	160	168	203	193	107	147	824	6	62	465	169

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.29	0.71	1.00	2.00	1.00	1.00	2.20	0.80
Final Sat.:	1500	1500	1500	1500	1930	1070	1500	3000	1500	1500	3300	1200

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.11	0.14	0.10	0.10	0.10	0.27	0.00	0.04	0.14	0.14
Crit Vol:	160			203				412		62		
Crit Moves:	****			****				****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.312

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	109	34	112	199	45	85	53	532	20	35	503	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	109	34	112	199	45	85	53	532	20	35	503	17
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:	109	34	112	199	45	85	53	532	20	35	503	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	34	112	199	45	85	53	532	20	35	503	17
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	34	112	219	45	85	53	532	20	35	503	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.66	0.34	1.00	1.00	2.89	0.11	1.00	2.90	0.10
Final Sat.:	1500	1500	1500	2489	511	1500	1500	4337	163	1500	4353	147

Capacity Analysis Module:

Vol/Sat:	0.07	0.02	0.07	0.09	0.09	0.06	0.04	0.12	0.12	0.02	0.12	0.12
Crit Vol:	109			132			53			173		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 43 Critical Vol./Cap. (X): 0.205

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	1	0	0	1	0	0

Volume Module:

Base Vol:	10	34	0	90	55	170	125	15	16	0	12	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	34	0	90	55	170	125	15	16	0	12	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:	10	34	0	90	55	170	125	15	16	0	12	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	34	0	90	55	170	125	15	16	0	12	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 Vol.:	10	34	0	90	55	170	125	15	16	0	12	46

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.48	0.52	1.00	0.21	0.79
Final Sat.:	1500	1500	0	1500	1500	1500	1500	726	774	1500	310	1190

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.00	0.06	0.04	0.11	0.08	0.02	0.02	0.00	0.04	0.04
Crit Vol:	34			90			125			58		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 49 Critical Vol./Cap. (X): 0.305

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	162	0	0	0	93	0	0	51	245
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	162	0	0	0	93	0	0	51	245
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	162	0	0	0	93	0	0	51	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	162	0	0	0	93	0	0	51	245
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 Vol.:	0	0	0	162	0	0	0	93	0	0	51	245

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.17	0.83
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	258	1242

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.06	0.00	0.00	0.20	0.20
Crit Vol:	0			162			0			296		
Crit Moves:				****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.551

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	5	0	273	414	263	0	0	278	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	5	0	273	414	263	0	0	278	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:	0	0	0	5	0	273	414	263	0	0	278	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	5	0	273	414	263	0	0	278	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
Final Vol.:	0	0	0	5	0	273	414	263	0	0	278	15

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.18	0.28	0.09	0.00	0.00	0.09	0.01
Crit Vol:	0					273	414				139	
Crit Moves:						****	****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project
PM Peak Hour

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

Intersection #241 Zinfandel Drive and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.444

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 41 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	0	260	8	57	618	160	381	25	0	16	5	74
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	260	8	57	618	160	381	25	0	16	5	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	260	8	57	618	160	381	25	0	16	5	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	260	8	57	618	160	381	25	0	16	5	74
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	260	8	57	618	160	381	25	0	16	5	74

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.06	0.94
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	95	1405

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.01	0.04	0.14	0.11	0.25	0.02	0.00	0.01	0.05	0.05
Crit Vol:	0				206		381				79	
Crit Moves:	****				****		****				****	

**7. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH ALTERNATIVE 1
CONDITIONS
A.M. PEAK HOUR**

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Scenario Report

Scenario: Default Scenario

Command: Default Command
Volume: Default Volume
Geometry: Default Geometry
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: Default Configuration

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	7		598	6		101	298	51	283	119	12	59
202	Sunrise Blvd.	224		1119	3		45	323	31	11	1	38	2
203	Sunrise Blvd.	155		1013	9		137	640	132	111	0	287	3
204	Sunrise Blvd.	357		716	34		216	980	601	123	86	68	114
205	Sunrise Blvd.	87		811	116		353	2367	335	199	150	131	635
206	Sunrise Blvd.	151		1942	10		40	4361	168	125	10	329	40
207	Zinfandel Dri	5		5	5		56	10	44	17	7	5	10
209	Zinfandel Dri	68		716	0		0	1079	319	34	0	36	0
210	Zinfandel Dri	143		659	47		2	986	98	11	7	66	83
211	Zinfandel Dri	417		575	27		84	1276	158	142	498	658	41
212	Zinfandel Dri	0		710	40		0	1331	0	0	63	0	66
213	Zinfandel Dri	7		817	13		602	2208	653	208	62	14	49
214	Zinfandel Dri	0		1208	0		0	2381	0	360	847	1083	0
215	Zinfandel Dri	0		742	0		0	860	0	0	0	0	1641
216	Mather Field	128		0	12		0	0	0	0	2244	417	101
217	Mather Field	207		624	30		113	2112	796	291	49	522	23
218	Mather Field	0		1058	0		0	1211	0	177	0	1838	0
219	Mather Field	0		566	0		0	821	0	0	0	0	490
220	Mather Field	270		60	261		18	147	22	14	623	310	705
221	Mather Blvd.	0		0	0		0	80	9	0	0	0	7
222	Mather Blvd.	2		45	0		0	0	0	0	0	0	0
224	A Street & Zi	14		699	0		19	1323	476	253	0	8	0
225	Von Karman St	0		0	0		15	41	0	0	156	2	0
226	Norden Avenue	0		20	6		0	0	0	23	70	0	0
227	A Street & Ai	121		4	0		22	19	49	95	190	242	0
228	International	0		0	0		94	0	20	45	1444	0	0
229	International	153		50	73		5	25	10	101	444	56	66
230	International	2		90	111		17	31	236	187	287	2	101
231	International	209		11	0		0	36	313	289	964	694	0
232	Hazel Avenue	0		0	0		0	1114	0	485	0	200	0
233	Hazel Avenue	107		591	0		0	3521	54	0	0	156	24
234	White Rock Ro	3		136	103		43	93	74	56	140	2	207
235	White Rock Ro	18		26	10		20	19	13	138	175	101	229
236	B Street & Pr	14		63	0		35	23	82	113	3	2	0
237	B Street & Ki	0		0	0		102	0	0	0	35	0	0
240	C Street and	0		0	0		9	0	464	160	250	0	0
242	A Street and	0		0	0		307	0	5	40	103	0	0

ITEM 18.1.

Default Scenario

Wed Jul 11, 2001 11:48:45

ATTACHMENT 5

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	F	xxxxx	1.023	F	xxxxx	1.023	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	A	xxxxx	0.466	A	xxxxx	0.466	+ 0.000 V/C
#203 Sunrise Blvd. & International	A	xxxxx	0.546	A	xxxxx	0.546	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	D	xxxxx	0.846	D	xxxxx	0.846	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.242	F	xxxxx	1.242	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	A	3.7	0.415	A	3.7	0.415	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.298	A	xxxxx	0.298	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	A	xxxxx	0.331	A	xxxxx	0.331	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	C	xxxxx	0.790	C	xxxxx	0.790	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.382	A	xxxxx	0.382	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	B	xxxxx	0.676	B	xxxxx	0.676	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.293	F	xxxxx	1.293	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	D	xxxxx	0.808	D	xxxxx	0.808	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.593	A	xxxxx	0.593	+ 0.000 V/C
#217 Mather Field Road & Rockingham	F	xxxxx	1.043	F	xxxxx	1.043	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	E	xxxxx	0.980	E	xxxxx	0.980	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.486	A	xxxxx	0.486	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	1.3	0.085	A	1.3	0.085	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	1.2	0.057	A	1.2	0.057	+ 0.000 V/C
#224 A Street & Zinfandel Drive	A	xxxxx	0.509	A	xxxxx	0.509	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.7	0.149	A	1.7	0.149	+ 0.000 V/C

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	1.3	0.074	A	1.3	0.074	+ 0.000 V/C
#227 A Street & Airpark Drive	A	xxxxx	0.287	A	xxxxx	0.287	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.526	A	xxxxx	0.526	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.317	A	xxxxx	0.317	+ 0.000 V/C
#230 International Drive & Kilgore	A	xxxxx	0.351	A	xxxxx	0.351	+ 0.000 V/C
#231 International Drive & Femoyer	A	xxxxx	0.487	A	xxxxx	0.487	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	E	xxxxx	0.927	E	xxxxx	0.927	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	A	xxxxx	0.375	A	xxxxx	0.375	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.278	A	xxxxx	0.278	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.207	A	xxxxx	0.207	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.218	A	xxxxx	0.218	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.476	A	xxxxx	0.476	+ 0.000 V/C
#242 A Street and Mather Boulevard	A	xxxxx	0.596	A	xxxxx	0.596	+ 0.000 V/C

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.023
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	7	598	6	101	298	51	283	119	12	59	546	405
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:	7	598	6	101	298	51	283	119	12	59	546	405
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:	7	598	6	101	298	51	283	119	12	59	546	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	598	6	101	298	51	283	119	12	59	546	405
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 Vol.:	7	598	6	101	298	51	283	119	12	59	546	405

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.99	0.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1485	15	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.40	0.40	0.07	0.20	0.03	0.19	0.08	0.01	0.04	0.36	0.27
Crit Vol:	604			101			283				546	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 64 Critical Vol./Cap. (X): 0.466

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	224	1119	3	45	323	31	11	1	38	2	41	71
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:	224	1119	3	45	323	31	11	1	38	2	41	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:	224	1119	3	45	323	31	11	1	38	2	41	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	1119	3	45	323	31	11	1	38	2	41	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
Final Vol.:	224	1119	3	45	323	31	11	1	38	2	41	71

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.82	0.18	0.22	0.02	0.76	0.05	0.95	1.00
Final Sat.:	1500	2992	8	1500	2737	263	330	30	1140	70	1430	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.37	0.03	0.03	0.12	0.12	0.03	0.03	0.03	0.03	0.03	0.05
Crit Vol:	561		45				50			43		
Crit Moves:	****		****				****			****		

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Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 75 Critical Vol./Cap. (X): 0.546

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 75 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	155	1013	9	137	640	132	111	0	287	3	0	40
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	1013	9	137	640	132	111	0	287	3	0	40
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	1013	9	137	640	132	111	0	287	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	1013	9	137	640	132	111	0	287	3	0	40
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 Vol.:	155	1013	9	137	640	132	111	0	287	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.07	0.00	0.93
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.10	0.34	0.01	0.09	0.21	0.09	0.07	0.00	0.19	0.03	0.00	0.03
Crit Vol:	507			137			287			43		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 100 Critical Vol./Cap. (X): 0.662

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	357	716	34	216	980	601	123	86	68	114	585	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:	357	716	34	216	980	601	123	86	68	114	585	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:	357	716	34	216	980	601	123	86	68	114	585	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	716	34	216	980	601	123	86	68	114	585	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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	393	716	34	238	980	601	135	86	68	125	585	121

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.13	0.16	0.02	0.08	0.22	0.40	0.05	0.03	0.05	0.04	0.13	0.08
Crit Vol:	197					601	0				195	
Crit Moves:	****					****	****				****	

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.846
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	87	811	116	353	2367	335	199	150	131	635	488	178
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:	87	811	116	353	2367	335	199	150	131	635	488	178
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:	87	811	116	353	2367	335	199	150	131	635	488	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	811	116	353	2367	335	199	150	131	635	488	178
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	96	811	116	388	2367	335	219	150	131	699	488	196

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.14	0.08	0.13	0.53	0.22	0.07	0.05	0.09	0.23	0.16	0.13
Crit Vol:	0			789			131			350		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.242

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	1	0	0	1	0	1	0

Volume Module:

Base Vol:	151	1942	10	40	4361	168	125	10	329	40	15	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	1942	10	40	4361	168	125	10	329	40	15	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	1942	10	40	4361	168	125	10	329	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	1942	10	40	4361	168	125	10	329	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	166	1942	10	40	4361	168	125	10	362	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	0.50	0.04	1.46	1.00	0.19	0.81
Final Sat.:	3000	4477	23	1500	4500	1500	755	60	2185	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.06	0.43	0.43	0.03	0.97	0.11	0.17	0.17	0.17	0.03	0.05	0.03
Crit Vol:	83			1454			248			78		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 0.415

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.7

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	5	5	56	10	44	17	7	5	10	43	195
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:	5	5	5	56	10	44	17	7	5	10	43	195
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:	5	5	5	56	10	44	17	7	5	10	43	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	5	5	56	10	44	17	7	5	10	43	195
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 Vol.:	5	5	5	56	10	44	17	7	5	10	43	195

Saturation Flow Module:

Sat/Lane:	443	443	443	554	554	554	720	720	720	597	597	597
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.33	0.33	0.51	0.09	0.40	0.59	0.24	0.17	0.04	0.17	0.79
Final Sat.:	148	148	148	282	50	222	422	174	124	24	104	469

Capacity Analysis Module:

Vol/Sat:	0.03	0.03	0.03	0.20	0.20	0.20	0.04	0.04	0.04	0.42	0.42	0.42
Crit Moves:	****			****			****			****		
ApproachV/S:	0.03			0.20			0.04			0.42		
Delay/Veh:	1.1	1.1	1.1	2.1	2.1	2.1	1.2	1.2	1.2	4.8	4.8	4.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.1	1.1	1.1	2.1	2.1	2.1	1.2	1.2	1.2	4.8	4.8	4.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	1.1			2.1			1.2			4.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	1.1			2.1			1.2			4.8		
LOS by Appr:	A			A			A			A		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 48 Critical Vol./Cap. (X): 0.298

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 48 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	0	0	0	1	0	0	0

Volume Module:

Base Vol:	68	716	0	0	1079	319	34	0	36	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	68	716	0	0	1079	319	34	0	36	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	68	716	0	0	1079	319	34	0	36	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	716	0	0	1079	319	34	0	36	0	0	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 Vol.:	68	716	0	0	1079	319	34	0	36	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.49	0.00	0.51	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	753	0	797	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.04	0.15	0.00	0.00	0.23	0.21	0.05	0.00	0.05	0.00	0.00	0.00
Crit Vol:	68				360		34				0	
Crit Moves:	****				****		****					

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 51 Critical Vol./Cap. (X): 0.331

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	143	659	47	2	986	98	11	7	66	83	34	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	659	47	2	986	98	11	7	66	83	34	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:	143	659	47	2	986	98	11	7	66	83	34	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	659	47	2	986	98	11	7	66	83	34	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	157	659	47	2	986	98	11	7	66	83	34	5

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.87	0.13
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1308	192

Capacity Analysis Module:

Vol/Sat:	0.05	0.15	0.03	0.00	0.22	0.07	0.01	0.00	0.04	0.06	0.03	0.03
Crit Vol:	79			329			7			83		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 162 Critical Vol./Cap. (X): 0.790

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 162 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	417	575	27	84	1276	158	142	498	658	41	275	82
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:	417	575	27	84	1276	158	142	498	658	41	275	82
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:	417	575	27	84	1276	158	142	498	658	41	275	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	417	575	27	84	1276	158	142	498	658	41	275	82
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 Vol.:	417	575	27	84	1276	158	142	498	658	41	275	82

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.67	0.33	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4298	202	1500	4004	496	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.28	0.13	0.13	0.06	0.32	0.32	0.09	0.17	0.44	0.03	0.09	0.05
Crit Vol:	417			478			249			41		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 55 Critical Vol./Cap. (X): 0.382
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	710	40	0	1331	0	0	63	0	66	50	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	40	0	1331	0	0	63	0	66	50	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:	0	710	40	0	1331	0	0	63	0	66	50	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	40	0	1331	0	0	63	0	66	50	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 Vol.:	0	710	40	0	1331	0	0	63	0	66	50	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.94	0.06
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1415	85

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.03	0.00	0.30	0.00	0.00	0.04	0.00	0.04	0.04	0.04
Crit Vol:	0			444			63			66		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 105 Critical Vol./Cap. (X): 0.676

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 105 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	7	817	13	602	2208	653	208	62	14	49	160	303
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:	7	817	13	602	2208	653	208	62	14	49	160	303
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:	7	817	13	602	2208	653	208	62	14	49	160	303
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	817	13	602	2208	653	208	62	14	49	160	303
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	8	817	13	662	2208	653	229	62	14	54	160	333

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.45	0.55	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3671	829	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.00	0.18	0.01	0.22	0.49	0.44	0.08	0.02	0.02	0.02	0.11	0.11
Crit Vol:	4			736			115			160		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.293

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0
	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	1208	0	0	2381	0	360	847	1083	0	0	126
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	1208	0	0	2381	0	360	847	1083	0	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0	1208	0	0	2381	0	360	847	1083	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1208	0	0	2381	0	360	847	1083	0	0	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.10	1.00	1.00	0.00
Final Vol.:	0	1208	0	0	2381	0	396	847	1191	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.04	1.96	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1615	3035	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.00	0.00	0.77	0.00	0.26	0.52	0.39	0.00	0.00	0.00
Crit Vol:	0				1191			813			0	
Crit Moves:	****				****			****				

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 104 Critical Vol./Cap. (X): 0.808

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 104 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	742	0	0	860	0	0	0	0	1641	0	168
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	742	0	0	860	0	0	0	0	1641	0	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	742	0	0	860	0	0	0	0	1641	0	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	742	0	0	860	0	0	0	0	1641	0	168
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	1.10	1.00	1.00
Final Vol.:	0	742	0	0	860	0	0	0	0	1805	0	168

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.15	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.55	0.00	0.10
Crit Vol:	0				430			0		903		
Crit Moves:	****				****					****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 66 Critical Vol./Cap. (X): 0.593

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Ovl			Include			Ignore			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0	3	0	0

Volume Module:

Base Vol:	128	0	12	0	0	0	0	2244	417	101	1091	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:	128	0	12	0	0	0	0	2244	417	101	1091	0
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:	128	0	12	0	0	0	0	2244	0	101	1091	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	0	12	0	0	0	0	2244	0	101	1091	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	141	0	12	0	0	0	0	2244	0	101	1091	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.48	0.00	0.07	0.23	0.00
Crit Vol:	71				0			748		101		
Crit Moves:	****							****		****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.043

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	3	1	0	0	1	0	1

Volume Module:

Base Vol:	207	624	30	113	2112	796	291	49	522	23	46	82
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:	207	624	30	113	2112	796	291	49	522	23	46	82
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	207	624	30	113	2112	0	291	49	522	23	46	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	624	30	113	2112	0	291	49	522	23	46	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	207	624	30	113	2112	0	291	49	522	23	46	82

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	3.00	1.00	1.00	0.09	0.91	0.30	0.70	1.00
Final Sat.:	1500	4294	206	1500	4500	1500	1500	129	1371	457	1043	1500

Capacity Analysis Module:

Vol/Sat:	0.14	0.15	0.15	0.08	0.47	0.00	0.19	0.38	0.38	0.05	0.04	0.05
Crit Vol:	207			704			571					82
Crit Moves:	****			****			****					****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.980

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1058	0	0	1211	0	177	0	1838	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1058	0	0	1211	0	177	0	1838	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1058	0	0	1211	0	177	0	1838	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1058	0	0	1211	0	177	0	1838	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1058	0	0	1211	0	195	0	2022	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.37	0.00	0.12	0.00	0.61	0.00	0.00	0.00
Crit Vol:	0				606				1011	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.486

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	566	0	0	821	0	0	0	0	490	0	245
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	566	0	0	821	0	0	0	0	490	0	245
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	566	0	0	821	0	0	0	0	490	0	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	566	0	0	821	0	0	0	0	490	0	245
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	1.10	1.00	1.00
Final Vol.:	0	566	0	0	821	0	0	0	0	539	0	245

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.38	0.00	0.62
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2269	0	1031

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.17	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.24	0.00	0.24
Crit Vol:	0			411			0			392		
Crit Moves:	****			****						****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 84 Critical Vol./Cap. (X): 0.597
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 84 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	270	60	261	18	147	22	14	623	310	705	984	8
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:	270	60	261	18	147	22	14	623	310	705	984	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:	270	60	261	18	147	22	14	623	310	705	984	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	60	261	18	147	22	14	623	310	705	984	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	297	60	261	18	147	22	14	623	310	776	984	8

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.66	0.34	1.00	0.19	1.57	0.24	1.00	2.00	1.00	2.00	1.98	0.02
Final Sat.:	2496	504	1500	289	2358	353	1500	3000	1500	3000	2976	24

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.17	0.06	0.06	0.06	0.01	0.21	0.21	0.26	0.33	0.33
Crit Vol:	179			18			312			388		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.085

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	80	9	0	0	0	7	30	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	80	9	0	0	0	7	30	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	80	9	0	0	0	7	30	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	80	9	0	0	0	7	30	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 Vol.:	0	0	0	0	80	9	0	0	0	7	30	0

Saturation Flow Module:

Sat/Lane:	0	0	0	525	525	525	0	0	0	362	362	362
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.80	0.20	0.00	0.00	0.00	0.38	1.62	0.00
Final Sat.:	0	0	0	0	944	106	0	0	0	137	587	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.05	0.05	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.08			xxxxx			0.05		
Delay/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	1.2	1.2	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.4			xxxxxx			1.2		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			1.4			xxxxxx			1.2		
LOS by Appr:	F			A			F			A		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.057

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	2	45	0	0	0	0	0	0	0	0	40	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:	2	45	0	0	0	0	0	0	0	0	40	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:	2	45	0	0	0	0	0	0	0	0	40	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	45	0	0	0	0	0	0	0	0	40	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 Vol.:	2	45	0	0	0	0	0	0	0	0	40	12

Saturation Flow Module:

Sat/Lane:	472	472	472	0	0	0	0	0	0	456	456	456
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.46
Final Sat.:	40	904	0	0	0	0	0	0	0	0	702	210

Capacity Analysis Module:

Vol/Sat:	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06
Crit Moves:	****					****			****			****
ApproachV/S:	0.05			xxxxx			xxxxx			0.06		
Delay/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.2			xxxxxx			xxxxxx			1.2		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.2			xxxxxx			xxxxxx			1.2		
LOS by Appr:	A			F			F			A		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 55 Critical Vol./Cap. (X): 0.509

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 55 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	3	0	1	1	0	3	0	1	0	1	0

Volume Module:

Base Vol:	14	699	0	19	1323	476	253	0	8	0	1	54
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	699	0	19	1323	476	253	0	8	0	1	54
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	699	0	19	1323	476	253	0	8	0	1	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	699	0	19	1323	476	253	0	8	0	1	54
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 Vol.:	14	699	0	19	1323	476	253	0	8	0	1	54

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.02	0.98
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	0	1500	1500	27	1473

Capacity Analysis Module:

Vol/Sat:	0.01	0.16	0.00	0.01	0.29	0.32	0.17	0.00	0.01	0.00	0.04	0.04
Crit Vol:	14			441			253				55	
Crit Moves:	****			****			****				****	

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.149

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.7

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	15	41	0	0	156	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	15	41	0	0	156	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	15	41	0	0	156	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	15	41	0	0	156	2	0	0	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 Vol.:	0	0	0	15	41	0	0	156	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	333	333	333	529	529	529	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.54	1.46	0.00	0.00	1.97	0.03	0.00	0.00	0.00
Final Sat.:	0	0	0	178	488	0	0	1045	13	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.15	0.15	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.08			0.15			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.4	1.4	0.0	0.0	1.8	1.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.4	1.4	0.0	0.0	1.8	1.8	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.4			1.8			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.4			1.8			xxxxxx		
LOS by Appr:	F			A			A			F		

ITEM 18.1.

Default Scenario

Wed Jul 11, 2001 11:48:45

ATTACHMENT 5

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.074

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	20	6	0	0	0	23	70	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	20	6	0	0	0	23	70	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	20	6	0	0	0	23	70	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	20	6	0	0	0	23	70	0	0	0	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 Vol.:	0	20	6	0	0	0	23	70	0	0	0	0

Saturation Flow Module:

Sat/Lane:	272	272	272	0	0	0	625	625	625	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.54	0.46	0.00	0.00	0.00	0.49	1.51	0.00	0.00	0.00	0.00
Final Sat.:	0	418	126	0	0	0	309	941	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.00	0.00
Crit Moves:			****			****	****					****
ApproachV/S:	0.05			xxxxx			0.07			xxxxx		
Delay/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.2	1.2	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.2			xxxxxx			1.3			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.2			xxxxxx			1.3			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.287

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	121	4	0	22	19	49	95	190	242	0	25	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:	121	4	0	22	19	49	95	190	242	0	25	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:	121	4	0	22	19	49	95	190	242	0	25	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	4	0	22	19	49	95	190	242	0	25	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 Vol.:	121	4	0	22	19	49	95	190	242	0	25	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.28	0.72	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	419	1081	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.08	0.00	0.00	0.01	0.05	0.05	0.06	0.13	0.16	0.00	0.02	0.00
Crit Vol:	121			68					242	0		
Crit Moves:	****			****					****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 57 Critical Vol./Cap. (X): 0.526

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	94	0	20	45	1444	0	0	707	59
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	94	0	20	45	1444	0	0	707	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	94	0	20	45	1444	0	0	707	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	94	0	20	45	1444	0	0	707	59
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 Vol.:	0	0	0	94	0	20	45	1444	0	0	707	59

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.85	0.15
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2861	239

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.01	0.03	0.47	0.00	0.00	0.25	0.25
Crit Vol:	0			94			722		0			
Crit Moves:				****			****		****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.317

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	153	50	73	5	25	10	101	444	56	66	223	19
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:	153	50	73	5	25	10	101	444	56	66	223	19
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:	153	50	73	5	25	10	101	444	56	66	223	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	50	73	5	25	10	101	444	56	66	223	19
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 Vol.:	153	50	73	5	25	10	101	444	56	66	223	19

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.71	0.29	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	1071	429	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.10	0.03	0.05	0.00	0.02	0.02	0.07	0.15	0.04	0.04	0.07	0.01
Crit Vol:	153				35			222		66		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 52 Critical Vol./Cap. (X): 0.351

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 52 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1	0

Volume Module:

Base Vol:	2	90	111	17	31	236	187	287	2	101	149	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:	2	90	111	17	31	236	187	287	2	101	149	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:	2	90	111	17	31	236	187	287	2	101	149	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	90	111	17	31	236	187	287	2	101	149	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 Vol.:	2	90	111	17	31	236	187	287	2	101	149	55

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.46	0.54
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2191	809

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.07	0.01	0.02	0.16	0.12	0.10	0.00	0.07	0.07	0.07
Crit Vol:	2					236	187			102		
Crit Moves:	****					****	****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 66 Critical Vol./Cap. (X): 0.487

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1

Volume Module:

Base Vol:	209	11	0	0	36	313	289	964	694	0	534	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:	209	11	0	0	36	313	289	964	694	0	534	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:	209	11	0	0	36	313	289	964	694	0	534	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	209	11	0	0	36	313	289	964	694	0	534	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	230	11	0	0	36	313	289	964	694	0	534	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.91	0.09	0.00	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2863	137	0	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.08	0.08	0.00	0.00	0.02	0.21	0.19	0.32	0.46	0.00	0.18	0.00
Crit Vol:	0				36				694	0		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.499

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	1114	0	485	0	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1114	0	485	0	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1114	0	485	0	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1114	0	485	0	200	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1114	0	534	0	220	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.34	0.00	0.16	0.00	0.13	0.00	0.00	0.00
Crit Vol:	0				557		267			0		
Crit Moves:					****		****					

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.927

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1
	1	0	0	1	1	0	0	1	1	0	0	1

Volume Module:

Base Vol:	107	591	0	0	3521	54	0	0	156	24	48	156
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:	107	591	0	0	3521	54	0	0	156	24	48	156
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:	107	591	0	0	3521	54	0	0	156	24	48	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	591	0	0	3521	54	0	0	156	24	48	156
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	1.10
Final Vol.:	107	591	0	0	3521	54	0	0	156	24	48	172

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.44	1.56
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	655	2345

Capacity Analysis Module:

Vol/Sat:	0.07	0.13	0.00	0.00	0.78	0.04	0.00	0.00	0.10	0.02	0.07	0.07
Crit Vol:	107				1174		0				110	
Crit Moves:	****				****		****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 54 Critical Vol./Cap. (X): 0.375

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0

Volume Module:

Base Vol:	3	136	103	43	93	74	56	140	2	207	865	118
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	136	103	43	93	74	56	140	2	207	865	118
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	136	103	43	93	74	56	140	2	207	865	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	136	103	43	93	74	56	140	2	207	865	118
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 Vol.:	3	136	103	43	93	74	56	140	2	207	865	118

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.11	0.89	1.00	2.00	1.00	1.00	2.64	0.36
Final Sat.:	1500	1500	1500	1500	1671	1329	1500	3000	1500	1500	3960	540

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.07	0.03	0.06	0.06	0.04	0.05	0.00	0.14	0.22	0.22
Crit Vol:	136			43			56			328		
Crit Moves:	****			****			****			****		

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 47 Critical Vol./Cap. (X): 0.278

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	18	26	10	20	19	13	138	175	101	229	488	211
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:	18	26	10	20	19	13	138	175	101	229	488	211
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:	18	26	10	20	19	13	138	175	101	229	488	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	26	10	20	19	13	138	175	101	229	488	211
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	18	26	10	22	19	13	138	175	101	229	488	211

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.07	0.93	1.00	1.00	2.00	1.00	1.00	2.09	0.91
Final Sat.:	1500	1500	1500	1610	1390	1500	1500	3000	1500	1500	3142	1358

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.01	0.01	0.01	0.01	0.09	0.06	0.07	0.15	0.16	0.16
Crit Vol:	26			21			138			233		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 43 Critical Vol./Cap. (X): 0.207

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	14	63	0	35	23	82	113	3	2	0	8	92
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	63	0	35	23	82	113	3	2	0	8	92
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	63	0	35	23	82	113	3	2	0	8	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	63	0	35	23	82	113	3	2	0	8	92
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 Vol.:	14	63	0	35	23	82	113	3	2	0	8	92

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.60	0.40	1.00	0.08	0.92
Final Sat.:	1500	1500	0	1500	1500	1500	1500	900	600	1500	120	1380

Capacity Analysis Module:

Vol/Sat:	0.01	0.04	0.00	0.02	0.02	0.05	0.08	0.00	0.00	0.00	0.07	0.07
Crit Vol:	63			35			113				100	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 43 Critical Vol./Cap. (X): 0.218

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	102	0	0	0	35	0	0	88	137
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	102	0	0	0	35	0	0	88	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	102	0	0	0	35	0	0	88	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	102	0	0	0	35	0	0	88	137
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 Vol.:	0	0	0	102	0	0	0	35	0	0	88	137

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.39	0.61
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	587	913

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.02	0.00	0.00	0.15	0.15
Crit Vol:	0			102			0				225	
Crit Moves:				****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.476

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 44 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	9	0	464	160	250	0	0	180	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	464	160	250	0	0	180	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:	0	0	0	9	0	464	160	250	0	0	180	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	9	0	464	160	250	0	0	180	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 Vol.:	0	0	0	9	0	464	160	250	0	0	180	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.31	0.11	0.08	0.00	0.00	0.06	0.00
Crit Vol:	0					464	160				90	
Crit Moves:						****	****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
AM Peak Hour

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

Intersection #242 A Street and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.596
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	0

Volume Module:

Base Vol:	0	0	0	307	0	5	40	103	0	0	97	547
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	307	0	5	40	103	0	0	97	547
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	307	0	5	40	103	0	0	97	547
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	307	0	5	40	103	0	0	97	547
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 Vol.:	0	0	0	307	0	5	40	103	0	0	97	547

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.00	0.03	0.03	0.00	0.00	0.06	0.36
Crit Vol:	0			307			40					547
Crit Moves:				****			****					****

**8. INTERSECTION CAPACITY ANALYSIS
EXISTING WITH ALTERNATIVE 1
CONDITIONS
P.M. PEAK HOUR**

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	4		284	61		357	801	113	55	550	9	20
202	Sunrise Blvd.	89		429	3		114	1230	10	15	71	205	4
203	Sunrise Blvd.	311		613	14		49	1079	133	266	0	258	17
204	Sunrise Blvd.	75		916	57		285	1096	155	444	568	383	126
205	Sunrise Blvd.	221		2686	405		438	1304	142	709	580	140	192
206	Sunrise Blvd.	131		3870	5		80	2750	183	259	0	156	20
207	Zinfandel Dri	5		10	10		184	5	26	13	41	5	5
209	Zinfandel Dri	85		913	0		0	756	114	174	0	102	0
210	Zinfandel Dri	99		869	197		4	726	25	70	44	128	77
211	Zinfandel Dri	682		1218	58		88	773	200	253	394	512	24
212	Zinfandel Dri	0		1027	60		3	801	0	174	81	0	68
213	Zinfandel Dri	30		2348	8		319	872	174	557	96	0	29
214	Zinfandel Dri	0		3154	0		0	1080	0	1017	166	287	0
215	Zinfandel Dri	0		2317	0		0	580	0	0	0	0	568
216	Mather Field	444		0	82		0	0	0	0	1315	143	88
217	Mather Field	487		1991	38		120	1013	368	763	53	230	17
218	Mather Field	0		2788	0		0	710	0	336	0	845	0
219	Mather Field	0		1108	0		0	700	0	0	0	0	240
220	Mather Field	736		208	689		42	75	8	8	1550	202	448
221	Mather Blvd.	0		0	0		0	61	22	0	0	0	4
222	Mather Blvd.	3		59	0		0	0	0	0	0	0	0
224	A Street & Zi	11		1192	0		58	792	443	617	1	12	0
225	Von Karman St	0		0	0		26	18	0	0	43	2	0
226	Norden Avenue	0		50	1		0	0	0	14	38	0	0
227	A Street & Ai	234		6	0		2	16	100	61	72	203	0
228	International	0		0	0		94	0	32	3	965	0	0
229	International	70		55	80		21	68	120	9	378	149	114
230	International	2		59	230		58	112	202	339	239	5	122
231	International	631		34	0		0	14	317	344	718	392	1
232	Hazel Avenue	0		0	0		0	232	0	1904	0	144	0
233	Hazel Avenue	102		3110	0		0	1364	38	0	0	133	37
234	White Rock Ro	1		151	166		189	194	106	148	836	6	56
235	White Rock Ro	107		34	111		199	45	85	53	546	11	35
236	B Street & Pr	8		34	0		92	62	165	111	15	14	0
237	B Street & Ki	0		0	0		174	0	0	0	92	0	0
240	C Street and	0		0	0		6	0	288	391	203	0	0
242	A Street and	0		0	0		512	0	46	0	82	0	0

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	E	xxxxx	0.917	E	xxxxx	0.917	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	B	xxxxx	0.671	B	xxxxx	0.671	+ 0.000 V/C
#203 Sunrise Blvd. & International	D	xxxxx	0.840	D	xxxxx	0.840	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	A	xxxxx	0.582	A	xxxxx	0.582	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	E	xxxxx	1.000	E	xxxxx	1.000	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.140	F	xxxxx	1.140	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	A	2.9	0.439	A	2.9	0.439	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.341	A	xxxxx	0.341	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	A	xxxxx	0.298	A	xxxxx	0.298	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	F	xxxxx	1.012	F	xxxxx	1.012	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.414	A	xxxxx	0.414	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.027	F	xxxxx	1.027	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.210	F	xxxxx	1.210	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	B	xxxxx	0.657	B	xxxxx	0.657	+ 0.000 V/C
#216 Mather Field Road & Internatio	B	xxxxx	0.605	B	xxxxx	0.605	+ 0.000 V/C
#217 Mather Field Road & Rockingham	E	xxxxx	0.935	E	xxxxx	0.935	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	D	xxxxx	0.845	D	xxxxx	0.845	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.493	A	xxxxx	0.493	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	F	xxxxx	1.062	F	xxxxx	1.062	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	2.3	0.235	A	2.3	0.235	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	2.4	0.255	A	2.4	0.255	+ 0.000 V/C
#224 A Street & Zinfandel Drive	C	xxxxx	0.733	C	xxxxx	0.733	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.2	0.062	A	1.2	0.062	+ 0.000 V/C

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	1.3	0.063	A	1.3	0.063	+ 0.000 V/C
#227 A Street & Airpark Drive	A	xxxxx	0.385	A	xxxxx	0.385	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.598	A	xxxxx	0.598	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.374	A	xxxxx	0.374	+ 0.000 V/C
#230 International Drive & Kilgore	A	xxxxx	0.527	A	xxxxx	0.527	+ 0.000 V/C
#231 International Drive & Femoyer	C	xxxxx	0.797	C	xxxxx	0.797	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	C	xxxxx	0.705	C	xxxxx	0.705	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	E	xxxxx	0.985	E	xxxxx	0.985	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	A	xxxxx	0.543	A	xxxxx	0.543	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.313	A	xxxxx	0.313	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.196	A	xxxxx	0.196	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.319	A	xxxxx	0.319	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.550	A	xxxxx	0.550	+ 0.000 V/C
#242 A Street and Mather Boulevard	B	xxxxx	0.610	B	xxxxx	0.610	+ 0.000 V/C

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.917

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0

Volume Module:

Base Vol:	4	284	61	357	801	113	55	550	9	20	130	102
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	284	61	357	801	113	55	550	9	20	130	102
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	284	61	357	801	113	55	550	9	20	130	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	284	61	357	801	113	55	550	9	20	130	102
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 Vol.:	4	284	61	357	801	113	55	550	9	20	130	102

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.82	0.18	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1500	1235	265	1500	1500	1500	1500	1500	1500	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.23	0.24	0.53	0.08	0.04	0.37	0.01	0.01	0.09	0.07
Crit Vol:	4			801			550		20			
Crit Moves:	****			****			****		****			

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 103 Critical Vol./Cap. (X): 0.671

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 103 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	0	1	0	0	1

Volume Module:

Base Vol:	89	429	3	114	1230	10	15	71	205	4	2	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:	89	429	3	114	1230	10	15	71	205	4	2	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:	89	429	3	114	1230	10	15	71	205	4	2	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	429	3	114	1230	10	15	71	205	4	2	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 Vol.:	89	429	3	114	1230	10	15	71	205	4	2	36

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.99	0.01	1.00	1.98	0.02	0.05	0.24	0.71	0.67	0.33	1.00
Final Sat.:	1500	2979	21	1500	2976	24	77	366	1057	1000	500	1500

Capacity Analysis Module:

Vol/Sat:	0.06	0.14	0.14	0.08	0.41	0.41	0.19	0.19	0.19	0.00	0.00	0.02
Crit Vol:	89			620			291			6		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.840
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	311	613	14	49	1079	133	266	0	258	17	0	126
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:	311	613	14	49	1079	133	266	0	258	17	0	126
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:	311	613	14	49	1079	133	266	0	258	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	311	613	14	49	1079	133	266	0	258	17	0	126
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 Vol.:	311	613	14	49	1079	133	266	0	258	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	0.12	0.00	0.88
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	0	1500	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.21	0.20	0.01	0.03	0.36	0.09	0.18	0.00	0.17	0.10	0.00	0.10
Crit Vol:	311				540		266					143
Crit Moves:	****				****		****					****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 81 Critical Vol./Cap. (X): 0.582

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 81 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	75	916	57	285	1096	155	444	568	383	126	222	278
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	75	916	57	285	1096	155	444	568	383	126	222	278
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:	75	916	57	285	1096	155	444	568	383	126	222	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	916	57	285	1096	155	444	568	383	126	222	278
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	83	916	57	314	1096	155	488	568	383	139	222	278

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.20	0.04	0.10	0.24	0.10	0.16	0.19	0.26	0.05	0.05	0.19
Crit Vol:	305			157			383			70		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.000
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	221	2686	405	438	1304	142	709	580	140	192	274	289
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:	221	2686	405	438	1304	142	709	580	140	192	274	289
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:	221	2686	405	438	1304	142	709	580	140	192	274	289
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	2686	405	438	1304	142	709	580	140	192	274	289
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	243	2686	405	482	1304	142	780	580	140	211	274	318

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.39	1.61
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2083	2417

Capacity Analysis Module:

Vol/Sat:	0.08	0.45	0.27	0.16	0.29	0.09	0.26	0.19	0.09	0.07	0.13	0.13
Crit Vol:	672			241			390			197		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.140

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	3	0	1	0

Volume Module:

Base Vol:	131	3870	5	80	2750	183	259	0	156	20	0	80
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:	131	3870	5	80	2750	183	259	0	156	20	0	80
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:	131	3870	5	80	2750	183	259	0	156	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	3870	5	80	2750	183	259	0	156	20	0	80
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	144	3870	5	80	2750	183	259	0	172	22	0	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3000	4494	6	1500	4500	1500	1500	0	1500	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.86	0.86	0.05	0.61	0.12	0.17	0.00	0.11	0.01	0.00	0.05
Crit Vol:	1292			80			259					80
Crit Moves:	****			****			****					****

ITEM 18.1.

ATTACHMENT 5

Default Scenario

Wed Jul 11, 2001 12:04:47

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 1 Critical Vol./Cap. (X): 0.439

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.9

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0	0	0	1! 0 0

Volume Module:

Base Vol:	5	10	10	184	5	26	13	41	5	5	5	65
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:	5	10	10	184	5	26	13	41	5	5	5	65
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:	5	10	10	184	5	26	13	41	5	5	5	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	10	10	184	5	26	13	41	5	5	5	65
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 Vol.:	5	10	10	184	5	26	13	41	5	5	5	65

Saturation Flow Module:

Sat/Lane:	453	453	453	858	858	858	360	360	360	171	171	171
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.20	0.40	0.40	0.86	0.02	0.12	0.22	0.70	0.08	0.06	0.07	0.87
Final Sat.:	91	181	181	734	20	104	79	250	31	11	11	148

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.06	0.25	0.25	0.25	0.16	0.16	0.16	0.44	0.44	0.44
Crit Moves:	****			****			****			****		
ApproachV/S:	0.06			0.25			0.16			0.44		
Delay/Veh:	1.2	1.2	1.2	2.6	2.6	2.6	1.9	1.9	1.9	5.3	5.3	5.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.2	1.2	1.2	2.6	2.6	2.6	1.9	1.9	1.9	5.3	5.3	5.3
LOS by Move:	A	A	A	A	A	A	A	A	A	B	B	B
ApproachDel:	1.2			2.6			1.9			5.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	1.2			2.6			1.9			5.3		
LOS by Appr:	A			A			A			B		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 52 Critical Vol./Cap. (X): 0.341
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	85	913	0	0	756	114	174	0	102	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	913	0	0	756	114	174	0	102	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	913	0	0	756	114	174	0	102	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	913	0	0	756	114	174	0	102	0	0	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 Vol.:	85	913	0	0	756	114	174	0	102	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.63	0.00	0.37	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	977	0	573	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.05	0.20	0.00	0.00	0.16	0.07	0.18	0.00	0.18	0.00	0.00	0.00
Crit Vol:	0				252				276	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 48 Critical Vol./Cap. (X): 0.298
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	99	869	197	4	726	25	70	44	128	77	12	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	869	197	4	726	25	70	44	128	77	12	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:	99	869	197	4	726	25	70	44	128	77	12	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	869	197	4	726	25	70	44	128	77	12	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	869	197	4	726	25	70	44	128	77	12	5

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.71	0.29
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1059	441

Capacity Analysis Module:

Vol/Sat:	0.04	0.19	0.13	0.00	0.16	0.02	0.05	0.03	0.09	0.05	0.01	0.01
Crit Vol:	0				242				128	77		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.012

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	682	1218	58	88	773	200	253	394	512	24	516	61
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:	682	1218	58	88	773	200	253	394	512	24	516	61
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:	682	1218	58	88	773	200	253	394	512	24	516	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	682	1218	58	88	773	200	253	394	512	24	516	61
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 Vol.:	682	1218	58	88	773	200	253	394	512	24	516	61

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.38	0.62	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	4295	205	1500	3575	925	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.45	0.28	0.28	0.06	0.22	0.22	0.17	0.13	0.34	0.02	0.17	0.04
Crit Vol:	682			324			253			258		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 58 Critical Vol./Cap. (X): 0.414

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	1027	60	3	801	0	174	81	0	68	99	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1027	60	3	801	0	174	81	0	68	99	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:	0	1027	60	3	801	0	174	81	0	68	99	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1027	60	3	801	0	174	81	0	68	99	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 Vol.:	0	1027	60	3	801	0	174	81	0	68	99	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.97	0.03
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1456	44

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.04	0.00	0.18	0.00	0.12	0.05	0.00	0.05	0.07	0.07
Crit Vol:	342			3			174			102		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.027

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	30	2348	8	319	872	174	557	96	0	29	230	502
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	2348	8	319	872	174	557	96	0	29	230	502
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	2348	8	319	872	174	557	96	0	29	230	502
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	2348	8	319	872	174	557	96	0	29	230	502
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	33	2348	8	351	872	174	613	96	0	32	230	552

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	0.00	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	0	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.52	0.01	0.12	0.19	0.12	0.20	0.02	0.00	0.01	0.15	0.18
Crit Vol:	783			176			307			276		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.210

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	3154	0	0	1080	0	1017	166	287	0	0	528
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	3154	0	0	1080	0	1017	166	287	0	0	528
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3154	0	0	1080	0	1017	166	287	0	0	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3154	0	0	1080	0	1017	166	287	0	0	528
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	3154	0	0	1080	0	1119	166	316	0	0	528

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.69	1.31	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	1068	2032	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	0.35	0.00	0.36	0.16	0.16	0.00	0.00	0.34
Crit Vol:	788			0			560					528
Crit Moves:	****			****			****					****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 58 Critical Vol./Cap. (X): 0.657

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2317	0	0	580	0	0	0	0	568	0	248
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	2317	0	0	580	0	0	0	0	568	0	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2317	0	0	580	0	0	0	0	568	0	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2317	0	0	580	0	0	0	0	568	0	248
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	1.10	1.00	1.00
Final Vol.:	0	2317	0	0	580	0	0	0	0	625	0	248

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.47	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.19	0.00	0.15
Crit Vol:	772			0			0			313		
Crit Moves:	****			****						****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 68 Critical Vol./Cap. (X): 0.605

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Ovl			Include			Ignore			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0	3	0	0

Volume Module:

Base Vol:	444	0	82	0	0	0	0	1315	143	88	2079	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:	444	0	82	0	0	0	0	1315	143	88	2079	0
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:	444	0	82	0	0	0	0	1315	0	88	2079	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	444	0	82	0	0	0	0	1315	0	88	2079	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	488	0	82	0	0	0	0	1315	0	88	2079	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.05	0.00	0.00	0.00	0.00	0.28	0.00	0.06	0.45	0.00
Crit Vol:	244				0		0				693	
Crit Moves:	****						****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.935

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	487	1991	38	120	1013	368	763	53	230	17	116	61
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:	487	1991	38	120	1013	368	763	53	230	17	116	61
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	487	1991	38	120	1013	0	763	53	230	17	116	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	487	1991	38	120	1013	0	763	53	230	17	116	61
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	487	1991	38	120	1013	0	839	53	230	17	116	61

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.94	0.06	1.00	3.00	1.00	1.50	0.09	0.41	0.17	1.20	0.63
Final Sat.:	1500	4416	84	1500	4500	1500	2243	142	615	263	1794	943

Capacity Analysis Module:

Vol/Sat:	0.32	0.45	0.45	0.08	0.23	0.00	0.37	0.37	0.37	0.06	0.06	0.06
Crit Vol:	487			338			561			17		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 129 Critical Vol./Cap. (X): 0.845

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 129 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	2788	0	0	710	0	336	0	845	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2788	0	0	710	0	336	0	845	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2788	0	0	710	0	336	0	845	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2788	0	0	710	0	336	0	845	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2788	0	0	710	0	370	0	930	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.56	0.00	0.00	0.22	0.00	0.22	0.00	0.28	0.00	0.00	0.00
Crit Vol:	929			0			465			0		
Crit Moves:	****			****			****					

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 39 Critical Vol./Cap. (X): 0.493

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	1108	0	0	700	0	0	0	0	240	0	255
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	1108	0	0	700	0	0	0	0	240	0	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1108	0	0	700	0	0	0	0	240	0	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1108	0	0	700	0	0	0	0	240	0	255
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	1.10	1.00	1.00
Final Vol.:	0	1108	0	0	700	0	0	0	0	264	0	255

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.02	0.00	0.98
Final Sat.:	0	3300	0	0	3300	0	0	0	0	1679	0	1621

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.34	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Crit Vol:	554			0			0			260		
Crit Moves:	****			****						****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.062

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	736	208	689	42	75	8	8	1550	202	448	1076	16
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:	736	208	689	42	75	8	8	1550	202	448	1076	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:	736	208	689	42	75	8	8	1550	202	448	1076	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	736	208	689	42	75	8	8	1550	202	448	1076	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	810	208	689	42	75	8	8	1550	202	493	1076	16

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.59	0.41	1.00	0.67	1.20	0.13	1.00	2.00	1.00	2.00	1.97	0.03
Final Sat.:	2387	613	1500	1008	1800	192	1500	3000	1500	3000	2956	44

Capacity Analysis Module:

Vol/Sat:	0.34	0.34	0.46	0.04	0.04	0.04	0.01	0.52	0.13	0.16	0.36	0.36
Crit Vol:	509			63			775			247		
Crit Moves:	****			****			****			****		

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.235

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0
	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	61	22	0	0	0	4	293	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	61	22	0	0	0	4	293	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	61	22	0	0	0	4	293	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	61	22	0	0	0	4	293	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 Vol.:	0	0	0	0	61	22	0	0	0	4	293	0

Saturation Flow Module:

Sat/Lane:	0	0	0	307	307	307	0	0	0	631	631	631
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.47	0.53	0.00	0.00	0.00	0.03	1.97	0.00
Final Sat.:	0	0	0	0	451	163	0	0	0	17	1245	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.24	0.24	0.00
Crit Moves:			****			****			****		****	
ApproachV/S:	xxxxx			0.14			xxxxx			0.24		
Delay/Veh:	0.0	0.0	0.0	0.0	1.7	1.7	0.0	0.0	0.0	2.4	2.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.7	1.7	0.0	0.0	0.0	2.4	2.4	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.7			xxxxxx			2.4		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			1.7			xxxxxx			2.4		
LOS by Appr:	F			A			F			A		

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Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.255

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.4

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	3	59	0	0	0	0	0	0	0	0	292	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	59	0	0	0	0	0	0	0	0	292	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	59	0	0	0	0	0	0	0	0	292	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	59	0	0	0	0	0	0	0	0	292	18
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 Vol.:	3	59	0	0	0	0	0	0	0	0	292	18

Saturation Flow Module:

Sat/Lane:	292	292	292	0	0	0	0	0	0	609	609	609
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.12
Final Sat.:	28	556	0	0	0	0	0	0	0	0	1147	71

Capacity Analysis Module:

Vol/Sat:	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25
Crit Moves:	****					****			****		****	
ApproachV/S:	0.11			xxxxx			xxxxx			0.25		
Delay/Veh:	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6
LOS by Move:	A	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.5			xxxxxx			xxxxxx			2.6		
Delay Adj:	1.00			xxxxxx			xxxxxx			1.00		
ApprAdjDel:	1.5			xxxxxx			xxxxxx			2.6		
LOS by Appr:	A			F			F			A		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 101 Critical Vol./Cap. (X): 0.733

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 101 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	0	1	0	

Volume Module:

Base Vol:	11	1192	0	58	792	443	617	1	12	0	0	27
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:	11	1192	0	58	792	443	617	1	12	0	0	27
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:	11	1192	0	58	792	443	617	1	12	0	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1192	0	58	792	443	617	1	12	0	0	27
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 Vol.:	11	1192	0	58	792	443	617	1	12	0	0	27

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.08	0.92	1.00	0.00	1.00
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	115	1385	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.26	0.00	0.04	0.18	0.30	0.41	0.01	0.01	0.00	0.00	0.02
Crit Vol:	397			58			617					27
Crit Moves:	****			****			****					****

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.062

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	26	18	0	0	43	2	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	18	0	0	43	2	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	18	0	0	43	2	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	26	18	0	0	43	2	0	0	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 Vol.:	0	0	0	26	18	0	0	43	2	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	454	454	454	364	364	364	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.91	0.09	0.00	0.00	0.00
Final Sat.:	0	0	0	454	454	0	0	696	32	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.04	0.00	0.00	0.06	0.06	0.00	0.00	0.00
Crit Moves:			****	****					****			****
ApproachV/S:	xxxxx			0.05			0.06			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.3	1.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.3	1.3	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	A	*	*	*
ApproachDel:	xxxxxx			1.2			1.3			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.2			1.3			xxxxxx		
LOS by Appr:	F			A			A			F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.063

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	50	1	0	0	0	14	38	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	50	1	0	0	0	14	38	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	50	1	0	0	0	14	38	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	50	1	0	0	0	14	38	0	0	0	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 Vol.:	0	50	1	0	0	0	14	38	0	0	0	0

Saturation Flow Module:

Sat/Lane:	407	407	407	0	0	0	455	455	455	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.96	0.04	0.00	0.00	0.00	0.54	1.46	0.00	0.00	0.00	0.00
Final Sat.:	0	798	16	0	0	0	245	665	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.06			xxxxx			0.06			xxxxx		
Delay/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	1.3	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			1.2			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.3			xxxxxx			1.2			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.385

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	234	6	0	2	16	100	61	72	203	0	167	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:	234	6	0	2	16	100	61	72	203	0	167	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:	234	6	0	2	16	100	61	72	203	0	167	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	6	0	2	16	100	61	72	203	0	167	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 Vol.:	234	6	0	2	16	100	61	72	203	0	167	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.14	0.86	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	207	1293	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.16	0.00	0.00	0.00	0.08	0.08	0.04	0.05	0.14	0.00	0.11	0.00
Crit Vol:	234			116			61			167		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 67 Critical Vol./Cap. (X): 0.598

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 67 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	1	0

Volume Module:

Base Vol:	0	0	0	94	0	32	3	965	0	0	1554	107
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	94	0	32	3	965	0	0	1554	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	94	0	32	3	965	0	0	1554	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	94	0	32	3	965	0	0	1554	107
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 Vol.:	0	0	0	94	0	32	3	965	0	0	1554	107

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	1.87	0.13
Final Sat.:	0	0	0	1550	0	1550	1550	3100	0	1550	2900	200

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.02	0.00	0.31	0.00	0.00	0.54	0.54
Crit Vol:	0			94			3				831	
Crit Moves:				****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 54 Critical Vol./Cap. (X): 0.374

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Ovl						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	70	55	80	21	68	120	9	378	149	114	450	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:	70	55	80	21	68	120	9	378	149	114	450	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:	70	55	80	21	68	120	9	378	149	114	450	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	55	80	21	68	120	9	378	149	114	450	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 Vol.:	70	55	80	21	68	120	9	378	149	114	450	11

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	0.36	0.64	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	1500	1500	1500	543	957	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.05	0.04	0.05	0.01	0.13	0.13	0.01	0.13	0.10	0.08	0.15	0.01
Crit Vol:	70				188			189		114		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 72 Critical Vol./Cap. (X): 0.527

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 72 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	1	0	1	1	0	2	0	1	1	0

Volume Module:

Base Vol:	2	59	230	58	112	202	339	239	5	122	296	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	59	230	58	112	202	339	239	5	122	296	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	59	230	58	112	202	339	239	5	122	296	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	59	230	58	112	202	339	239	5	122	296	31
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 Vol.:	2	59	230	58	112	202	339	239	5	122	296	31

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	2716	284

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.15	0.04	0.07	0.13	0.23	0.08	0.00	0.08	0.11	0.11
Crit Vol:			230		58		339				164	
Crit Moves:			****		****		****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 167 Critical Vol./Cap. (X): 0.797

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 167 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Include			Ovl			Ovl			Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	0	1	1	0	2	0	1	1	0

Volume Module:

Base Vol:	631	34	0	0	14	317	344	718	392	1	947	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:	631	34	0	0	14	317	344	718	392	1	947	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:	631	34	0	0	14	317	344	718	392	1	947	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	631	34	0	0	14	317	344	718	392	1	947	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	694	34	0	0	14	317	344	718	392	1	947	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.91	0.09	0.00	0.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	2860	140	0	0	1500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.24	0.24	0.00	0.00	0.01	0.21	0.23	0.24	0.26	0.00	0.32	0.00
Crit Vol:	364				14		344				474	
Crit Moves:	****				****		****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 68 Critical Vol./Cap. (X): 0.705

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	232	0	1904	0	144	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	232	0	1904	0	144	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	232	0	1904	0	144	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	232	0	1904	0	144	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	232	0	2094	0	158	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.07	0.00	0.63	0.00	0.10	0.00	0.00	0.00
Crit Vol:	0				116		1047			0		
Crit Moves:					****		****					

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.985

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	0	0	0	1	1

Volume Module:

Base Vol:	102	3110	0	0	1364	38	0	0	133	37	153	663
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:	102	3110	0	0	1364	38	0	0	133	37	153	663
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:	102	3110	0	0	1364	38	0	0	133	37	153	663
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	3110	0	0	1364	38	0	0	133	37	153	663
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	1.10
Final Vol.:	102	3110	0	0	1364	38	0	0	133	37	153	729

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.35	1.65
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	520	2480

Capacity Analysis Module:

Vol/Sat:	0.07	0.69	0.00	0.00	0.30	0.03	0.00	0.00	0.09	0.02	0.29	0.29
Crit Vol:	1037	0	0	0	0	0	0	0	0	0	0	0
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 74 Critical Vol./Cap. (X): 0.543

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 74 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0

Volume Module:

Base Vol:	1	151	166	189	194	106	148	836	6	56	478	168
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:	1	151	166	189	194	106	148	836	6	56	478	168
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:	1	151	166	189	194	106	148	836	6	56	478	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	151	166	189	194	106	148	836	6	56	478	168
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 Vol.:	1	151	166	189	194	106	148	836	6	56	478	168

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.29	0.71	1.00	2.00	1.00	1.00	2.22	0.78
Final Sat.:	1500	1500	1500	1500	1940	1060	1500	3000	1500	1500	3330	1170

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.11	0.13	0.10	0.10	0.10	0.28	0.00	0.04	0.14	0.14
Crit Vol:	151			189				418		56		
Crit Moves:	****			****				****		****		

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.313

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	107	34	111	199	45	85	53	546	11	35	515	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	34	111	199	45	85	53	546	11	35	515	17
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:	107	34	111	199	45	85	53	546	11	35	515	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	34	111	199	45	85	53	546	11	35	515	17
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	107	34	111	219	45	85	53	546	11	35	515	17

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.66	0.34	1.00	1.00	2.94	0.06	1.00	2.90	0.10
Final Sat.:	1500	1500	1500	2489	511	1500	1500	4411	89	1500	4356	144

Capacity Analysis Module:

Vol/Sat:	0.07	0.02	0.07	0.09	0.09	0.06	0.04	0.12	0.12	0.02	0.12	0.12
Crit Vol:	107			132			53			177		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 42 Critical Vol./Cap. (X): 0.196

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	8	34	0	92	62	165	111	15	14	0	11	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	34	0	92	62	165	111	15	14	0	11	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:	8	34	0	92	62	165	111	15	14	0	11	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	34	0	92	62	165	111	15	14	0	11	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 Vol.:	8	34	0	92	62	165	111	15	14	0	11	46

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.52	0.48	1.00	0.19	0.81
Final Sat.:	1500	1500	0	1500	1500	1500	1500	776	724	1500	289	1211

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.00	0.06	0.04	0.11	0.07	0.02	0.02	0.00	0.04	0.04
Crit Vol:	34			92			111				57	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 50 Critical Vol./Cap. (X): 0.319

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	174	0	0	0	92	0	0	51	253
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	174	0	0	0	92	0	0	51	253
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	174	0	0	0	92	0	0	51	253
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	174	0	0	0	92	0	0	51	253
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 Vol.:	0	0	0	174	0	0	0	92	0	0	51	253

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.17	0.83
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	252	1248

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.06	0.00	0.00	0.20	0.20
Crit Vol:	0			174			0				304	
Crit Moves:				****			****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.550

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	6	0	288	391	203	0	0	292	14
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	6	0	288	391	203	0	0	292	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	6	0	288	391	203	0	0	292	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	6	0	288	391	203	0	0	292	14
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 Vol.:	0	0	0	6	0	288	391	203	0	0	292	14

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.19	0.26	0.07	0.00	0.00	0.10	0.01
Crit Vol:	0					288	391				146	
Crit Moves:						****	****				****	

Villages of Zinfandel
Existing Conditions - Plus Proposed Project Alternative
PM Peak Hour

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

Intersection #242 A Street and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.610

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	0

Volume Module:

Base Vol:	0	0	0	512	0	46	0	82	0	0	177	403
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	512	0	46	0	82	0	0	177	403
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	512	0	46	0	82	0	0	177	403
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	512	0	46	0	82	0	0	177	403
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 Vol.:	0	0	0	512	0	46	0	82	0	0	177	403

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.34	0.00	0.03	0.00	0.03	0.00	0.00	0.12	0.27
Crit Vol:	0			512			0					403
Crit Moves:				****			****					****

**9. INTERSECTION CAPACITY ANALYSIS
FUTURE WITHOUT PROJECT CONDITIONS
A.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

Fri Aug 6, 1999 16:56:13

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	407		1217 128	143		991 569	129		134 3	251		1127 382
202	Sunrise Blvd.	776		2040 27	369		1113 1076	205		632 122	37		1345 689
203	Sunrise Blvd.	0		3237 9	137		1574 0	0		0 0	3		0 40
204	Sunrise Blvd.	1311		1834 3	708		1555 469	87		773 508	10		1518 974
205	Sunrise Blvd.	293		2148 112	628		2799 376	65		223 185	844		682 344
206	Sunrise Blvd.	141		3060 10	40		5076 459	144		10 333	40		15 40
207	Zinfandel Dri	46		869 216	325		151 309	292		1052 17	45		2009 611
211	Zinfandel Dri	224		1403 217	17		714 122	330		513 368	54		144 13
213	Zinfandel Dri	18		1377 31	1394		2096 851	243		107 16	49		354 1479
214	Zinfandel Dri	0		3035 0	0		2926 0	123		692 1606	0		0 65
215	Zinfandel Dri	0		1139 0	0		1257 0	0		0 0	1906		0 38
216	Mather Field	186		0 29	0		0 0	0		1983 0	47		1062 0
217	Mather Field	229		762 16	186		1686 0	384		106 496	12		142 110
218	Mather Field	0		1029 0	0		1558 0	143		0 1247	0		0 0
219	Mather Field	0		521 0	0		887 0	0		0 0	683		0 257
220	Mather Field	268		39 194	25		85 20	13		1038 381	808		1517 9
221	Mather Blvd.	0		0 0	0		36 57	0		0 0	5		139 0
222	Mather Blvd.	0		8 0	0		0 0	0		0 0	0		144 146
225	Von Karman St	0		0 0	12		25 0	0		113 0	0		0 0
226	Norden Avenue	0		4 5	0		0 0	3		60 0	0		0 0
228	International	0		0 0	138		0 184	189		1243 0	0		448 123
229	International	0		0 1	1		1 65	387		450 0	0		205 11
230	International	8		15 0	12		19 182	408		7 23	0		20 14
231	International	781		32 54	0		46 317	452		1275 536	212		223 0
232	Hazel Avenue	0		0 0	0		1986 0	1043		0 537	0		0 0
233	Hazel Avenue	107		1386 0	0		4515 54	0		0 156	67		48 572
234	White Rock Ro	32		96 419	119		62 157	240		1477 117	339		2154 304
235	White Rock Ro	88		7 72	17		35 10	42		950 211	663		1958 161

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.904

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	407	1217	128	143	991	569	129	134	3	251	1127	382
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:	407	1217	128	143	991	569	129	134	3	251	1127	382
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:	407	1217	128	143	991	569	129	134	3	251	1127	382
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	407	1217	128	143	991	569	129	134	3	251	1127	382
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	448	1217	128	157	991	569	129	134	3	251	1127	382

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.27	0.09	0.05	0.22	0.38	0.09	0.04	0.00	0.17	0.38	0.25
Crit Vol:	224					569	0			564		
Crit Moves:	****					****	****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.963
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ignore Ignore Ignore Ignore
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	776	2040	27	369	1113	1076	205	632	122	37	1345	689
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Initial Bse:	776	2040	0	369	1113	0	205	632	0	37	1345	0
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	776	2040	0	369	1113	0	205	632	0	37	1345	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	776	2040	0	369	1113	0	205	632	0	37	1345	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00
Final Vol.:	854	2040	0	406	1113	0	226	632	0	41	1345	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.28	0.45	0.00	0.14	0.25	0.00	0.08	0.14	0.00	0.01	0.30	0.00
Crit Vol:	680			203			113			448		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl
*****Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 2 1 0	1 0 3 0 0	0 0 0 0 0	0 0 1! 0 0

Volume Module:

Base Vol:	0 3237 9	137 1574 0	0 0 0	3 0 40
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 3237 9	137 1574 0	0 0 0	3 0 40
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 3237 9	137 1574 0	0 0 0	3 0 40
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	0 3237 9	137 1574 0	0 0 0	3 0 40

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
% Truck/Comb:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
PCE Adj:	1.10 1.00 1.00	1.10 1.00 1.00	1.10 1.10 1.10	1.10 1.10 1.10
Cycl/Car PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Trck/Cmb PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Adj Vol.:	0 3237 9	151 1574 0	0 0 0	3 0 44

Critical Gap Module:

MoveUp Time:	xxxxx xxxxx	2.1 xxxxx	xxxxx xxxxx	3.4 xxxxx	2.6
Critical Gp:	xxxxx xxxxx	5.5 xxxxx	xxxxx xxxxx	7.0 xxxxx	5.5

Capacity Module:

Cnflct Vol:	xxxx xxxxx	3246 xxxxx	xxxx xxxxx	4953 xxxxx	1084
Potent Cap.:	xxxx xxxxx	31 xxxxx	xxxx xxxxx	1 xxxxx	391
Adj Cap:	xxxx xxxxx	1.00 xxxxx	xxxx xxxxx	0.00 xxxxx	1.00
Move Cap.:	xxxx xxxxx	31 xxxxx	xxxx xxxxx	0 xxxxx	391

Level Of Service Module:

Stopped Del:	xxxxx xxxxx	6415 xxxxx	xxxxx xxxxx	xxxxx xxxxx	10.3
LOS by Move:	* * *	F *	* * *	* * *	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx xxxxx	xxxx xxxxx	xxxx xxxxx	xxxx xxxxx	xxxxxx
Shrd StpDel:	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxxx
Shared LOS:	* *	* *	* *	* *	*
ApproachDel:	0.0	560.5	0.0	xxxxxx	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.248
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 2 0 1 2 0 3 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	1311	1834	3	708	1555	469	87	773	508	10	1518	974
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:	1311	1834	3	708	1555	469	87	773	508	10	1518	974
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:	1311	1834	3	708	1555	469	87	773	508	10	1518	974
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1311	1834	3	708	1555	469	87	773	508	10	1518	974
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	1442	1834	3	779	1555	469	96	773	508	11	1518	974

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.48	0.41	0.00	0.26	0.35	0.31	0.03	0.26	0.34	0.00	0.34	0.65
Crit Vol:	721			518			48					974
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.113

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	293	2148	112	628	2799	376	65	223	185	844	682	344
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:	293	2148	112	628	2799	376	65	223	185	844	682	344
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:	293	2148	112	628	2799	376	65	223	185	844	682	344
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	293	2148	112	628	2799	376	65	223	185	844	682	344
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	322	2148	112	691	2799	376	72	223	185	928	682	378

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.93	1.07
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2895	1605

Capacity Analysis Module:

Vol/Sat:	0.11	0.36	0.07	0.23	0.62	0.25	0.02	0.07	0.12	0.31	0.24	0.24
Crit Vol:	161			933			112			464		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.390

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	3	0	1	0	0	1	0

Volume Module:

Base Vol:	141	3060	10	40	5076	459	144	10	333	40	15	40
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:	141	3060	10	40	5076	459	144	10	333	40	15	40
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:	141	3060	10	40	5076	459	144	10	333	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	3060	10	40	5076	459	144	10	333	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	155	3060	10	40	5076	459	144	10	366	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.55	0.04	1.41	1.00	0.19	0.81
Final Sat.:	3000	4485	15	1500	4500	1500	831	58	2112	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.05	0.68	0.68	0.03	1.13	0.31	0.17	0.17	0.17	0.03	0.05	0.03
Crit Vol:	78			1692			260			55		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.962
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 0 1 2 0 2 0 1 2 0 3 0 1 2 0 3 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	46	869	216	325	151	309	292	1052	17	45	2009	611
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:	46	869	216	325	151	309	292	1052	17	45	2009	611
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:	46	869	216	325	151	309	292	1052	17	45	2009	611
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	869	216	325	151	309	292	1052	17	45	2009	611
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	51	869	216	358	151	309	321	1052	17	50	2009	611

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	3000	1500	3000	3000	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.02	0.29	0.14	0.12	0.05	0.21	0.11	0.23	0.01	0.02	0.45	0.41
Crit Vol:	435			179			161				670	
Crit Moves:	****			****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 91 Critical Vol./Cap. (X): 0.626

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 91 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	2	1	0	2	1	0	2	0	1	1	0

Volume Module:

Base Vol:	224	1403	217	17	714	122	330	513	368	54	144	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:	224	1403	217	17	714	122	330	513	368	54	144	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:	224	1403	217	17	714	122	330	513	368	54	144	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	1403	217	17	714	122	330	513	368	54	144	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 Vol.:	224	1403	217	17	714	122	330	513	368	54	144	13

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.60	0.40	1.00	2.56	0.44	1.00	2.00	1.00	1.00	2.75	0.25
Final Sat.:	1500	3897	603	1500	3843	657	1500	3000	1500	1500	4127	373

Capacity Analysis Module:

Vol/Sat:	0.15	0.36	0.36	0.01	0.19	0.19	0.22	0.17	0.25	0.04	0.03	0.03
Crit Vol:	540			17			330			52		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.448

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	18	1377	31	1394	2096	851	243	107	16	49	354	1479
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:	18	1377	31	1394	2096	851	243	107	16	49	354	1479
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:	18	1377	31	1394	2096	851	243	107	16	49	354	1479
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	1377	31	1394	2096	851	243	107	16	49	354	1479
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	20	1377	31	1533	2096	851	267	107	16	54	354	1627

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.61	0.39	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3915	585	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.31	0.02	0.51	0.47	0.57	0.09	0.03	0.03	0.02	0.24	0.54
Crit Vol:	459			767			134			814		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.556

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	3035	0	0	2926	0	123	692	1606	0	0	65
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	3035	0	0	2926	0	123	692	1606	0	0	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3035	0	0	2926	0	123	692	1606	0	0	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3035	0	0	2926	0	123	692	1606	0	0	65
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	3035	0	0	2926	0	135	692	1767	0	0	65

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1550	3100	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.49	0.00	0.00	0.94	0.00	0.09	0.45	0.57	0.00	0.00	0.04
Crit Vol:	0				1463				883			65
Crit Moves:	****				****				****			****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.016
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 3 0 0 0 0 2 0 0 0 2 0 0 0 1

Volume Module:

Base Vol:	0	1139	0	0	1257	0	0	0	0	1906	0	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:	0	1139	0	0	1257	0	0	0	0	1906	0	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:	0	1139	0	0	1257	0	0	0	0	1906	0	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1139	0	0	1257	0	0	0	0	1906	0	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	1.10	1.00	1.00
Final Vol.:	0	1139	0	0	1257	0	0	0	0	2097	0	38

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.64	0.00	0.02
Crit Vol:	0				629			0		1049		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 57 Critical Vol./Cap. (X): 0.523
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Ovl			Include			Ignore			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0	3	0	0

Volume Module:

Base Vol:	186	0	29	0	0	0	0	1983	244	47	1062	0
Growth 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
Initial Bse:	186	0	29	0	0	0	0	1983	0	47	1062	0
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:	186	0	29	0	0	0	0	1983	0	47	1062	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	0	29	0	0	0	0	1983	0	47	1062	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	205	0	29	0	0	0	0	1983	0	47	1062	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.02	0.00	0.00	0.00	0.00	0.43	0.00	0.03	0.23	0.00
Crit Vol:	103				0			661		47		
Crit Moves:	****							****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.017
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Ignore Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 1 0 0 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	229	762	16	186	1686	945	384	106	496	12	142	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	229	762	16	186	1686	0	384	106	496	12	142	110
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	229	762	16	186	1686	0	384	106	496	12	142	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	229	762	16	186	1686	0	384	106	496	12	142	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	229	762	16	186	1686	0	422	106	496	12	142	110

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.94	0.06	1.00	3.00	1.00	1.00	0.03	0.97	0.09	1.08	0.83
Final Sat.:	1500	4407	93	1500	4500	1500	1500	47	1453	136	1614	1250

Capacity Analysis Module:

Vol/Sat:	0.15	0.17	0.17	0.12	0.37	0.00	0.28	2.26	0.34	0.09	0.09	0.09
Crit Vol:	229			562			602			132		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 178 Critical Vol./Cap. (X): 0.888

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 178 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1029	0	0	1558	0	143	0	1247	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1029	0	0	1558	0	143	0	1247	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1029	0	0	1558	0	143	0	1247	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1029	0	0	1558	0	143	0	1247	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1029	0	0	1558	0	157	0	1372	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.47	0.00	0.10	0.00	0.42	0.00	0.00	0.00
Crit Vol:	0				779				686	0		
Crit Moves:	****				****				****			

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 47 Critical Vol./Cap. (X): 0.574

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	521	0	0	887	0	0	0	0	683	0	257
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	521	0	0	887	0	0	0	0	683	0	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	521	0	0	887	0	0	0	0	683	0	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	521	0	0	887	0	0	0	0	683	0	257
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	1.10	1.00	1.00
Final Vol.:	0	521	0	0	887	0	0	0	0	751	0	257

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2459	0	841

Capacity Analysis Module:

Vol/Sat:	0.00	0.16	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Crit Vol:	0				444			0		504		
Crit Moves:	****				****					****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 148 Critical Vol./Cap. (X): 0.797

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 148 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	268	39	194	25	85	20	13	1038	381	808	1517	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	268	39	194	25	85	20	13	1038	381	808	1517	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	268	39	194	25	85	20	13	1038	381	808	1517	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	268	39	194	25	85	20	13	1038	381	808	1517	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	295	39	194	25	85	20	13	1038	381	889	1517	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.77	0.23	1.00	0.38	1.31	0.31	1.00	2.00	1.00	2.00	1.99	0.01
Final Sat.:	2650	350	1500	577	1962	462	1500	3000	1500	3000	2982	18

Capacity Analysis Module:

Vol/Sat:	0.11	0.11	0.13	0.04	0.04	0.04	0.01	0.35	0.25	0.30	0.51	0.51
Crit Vol:	167			65			519			445		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.146

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.6

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	36	57	0	0	0	5	139	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	36	57	0	0	0	5	139	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	36	57	0	0	0	5	139	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	36	57	0	0	0	5	139	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 Vol.:	0	0	0	0	36	57	0	0	0	5	139	0

Saturation Flow Module:

Sat/Lane:	0	0	0	391	391	391	0	0	0	596	596	596
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.07	1.93	0.00
Final Sat.:	0	0	0	0	391	391	0	0	0	41	1151	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.15	0.00	0.00	0.00	0.12	0.12	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.12			xxxxx			0.12		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.4	1.7	0.0	0.0	0.0	1.6	1.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.4	1.7	0.0	0.0	0.0	1.6	1.6	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.6			xxxxxx			1.6		
LOS by Appr:	F			A			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.213
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.2
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	8	0	0	0	0	0	0	0	0	144	146
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	8	0	0	0	0	0	0	0	0	144	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	8	0	0	0	0	0	0	0	0	144	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	8	0	0	0	0	0	0	0	0	144	146
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 Vol.:	0	8	0	0	0	0	0	0	0	0	144	146

Saturation Flow Module:

Sat/Lane:	289	289	289	0	0	0	0	0	0	687	687	687
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Final Sat.:	0	578	0	0	0	0	0	0	0	0	687	687

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21
Crit Moves:	****			****			****			****		
ApproachV/S:	0.01			xxxxx			xxxxx			0.21		

Level Of Service Module:

Delay/Veh:	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2
LOS by Move:	*	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.1			xxxxxx			xxxxxx			2.2		
LOS by Appr:	A			F			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.107

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.4

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	0	0	12	25	0	0	113	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	12	25	0	0	113	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	12	25	0	0	113	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	12	25	0	0	113	0	0	0	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 Vol.:	0	0	0	12	25	0	0	113	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	323	323	323	528	528	528	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.65	1.35	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	210	436	0	0	1056	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.11	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.06			0.11			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.5	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.2	1.2	0.0	0.0	1.5	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			1.2			1.5			xxxxxx		
LOS by Appr:	F			A			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.044

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.2

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	4	5	0	0	0	3	60	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	4	5	0	0	0	3	60	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4	5	0	0	0	3	60	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4	5	0	0	0	3	60	0	0	0	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 Vol.:	0	4	5	0	0	0	3	60	0	0	0	0

Saturation Flow Module:

Sat/Lane:	255	255	255	0	0	0	721	721	721	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.00	0.00	0.00	0.10	1.90	0.00	0.00	0.00	0.00
Final Sat.:	0	255	255	0	0	0	69	1373	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.02	0.02	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:			****			****	****					****
ApproachV/S:	0.02			xxxxx			0.04			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	1.2	1.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.1			xxxxxx			1.2			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 42 Critical Vol./Cap. (X): 0.356

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	138	0	184	189	1243	0	0	448	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:	0	0	0	138	0	184	189	1243	0	0	448	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:	0	0	0	138	0	184	189	1243	0	0	448	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	138	0	184	189	1243	0	0	448	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 Vol.:	0	0	0	138	0	184	189	1243	0	0	448	123

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.35	0.65
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3648	1002

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.12	0.12	0.27	0.00	0.00	0.12	0.12
Crit Vol:	0			138			414			0		
Crit Moves:				****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.307
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 49 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	0	0	1	1	1	65	387	450	0	0	205	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	1	1	1	65	387	450	0	0	205	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	1	1	1	65	387	450	0	0	205	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	1	1	65	387	450	0	0	205	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 Vol.:	0	0	1	1	1	65	387	450	0	0	205	11

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	0.00	1.00	2.85	0.15
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	4500	0	1500	4271	229

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.04	0.26	0.10	0.00	0.00	0.05	0.05
Crit Vol:	0				1		387				72	
Crit Moves:	****				****		****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 49 Critical Vol./Cap. (X): 0.299
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 49 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 1 0 1 0 1 1 0 2 0 1 0 1 0 0 0 0 1 0

Volume Module:

Base Vol:	8	15	0	12	19	182	408	7	23	0	20	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	15	0	12	19	182	408	7	23	0	20	14
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:	8	15	0	12	19	182	408	7	23	0	20	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	15	0	12	19	182	408	7	23	0	20	14
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	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	15	0	12	19	182	449	7	23	0	20	14

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.00	1.00	2.00	1.00	1.00	0.00	0.59	0.41
Final Sat.:	1500	3000	0	1500	1500	1500	3000	1500	1500	0	882	618

Capacity Analysis Module:

Vol/Sat:	0.01	0.01	0.00	0.01	0.01	0.12	0.15	0.00	0.02	0.00	0.02	0.02
Crit Vol:	8					182	225					34
Crit Moves:	****					****	****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.889

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	781	32	54	0	46	317	452	1275	536	212	223	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:	781	32	54	0	46	317	452	1275	536	212	223	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:	781	32	54	0	46	317	452	1275	536	212	223	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	781	32	54	0	46	317	452	1275	536	212	223	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	859	32	54	0	46	317	452	1275	536	212	223	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.07	0.11	0.00	1.00	1.00	1.00	2.11	0.89	1.00	3.00	0.00
Final Sat.:	2727	102	171	0	1500	1500	1500	3168	1332	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.31	0.31	0.32	0.00	0.03	0.21	0.30	0.40	0.40	0.14	0.05	0.00
Crit Vol:	473			46			604			212		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.953

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	1986	0	1043	0	537	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1986	0	1043	0	537	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1986	0	1043	0	537	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1986	0	1043	0	537	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	1986	0	1147	0	591	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	1.97	0.01	1.02	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3267	0	1683	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.60	0.00	0.35	0.00	0.35	0.00	0.00	0.00
Crit Vol:	0				993		579			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.300

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	1386	0	0	4515	54	0	0	156	67	48	572
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:	107	1386	0	0	4515	54	0	0	156	67	48	572
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:	107	1386	0	0	4515	54	0	0	156	67	48	572
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1386	0	0	4515	54	0	0	156	67	48	572
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	1.10
Final Vol.:	107	1386	0	0	4515	54	0	0	156	67	48	629

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.14	1.86
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	213	2787

Capacity Analysis Module:

Vol/Sat:	0.07	0.31	0.00	0.00	1.00	0.04	0.00	0.00	0.10	0.04	0.23	0.23
Crit Vol:	107				1505		0				339	
Crit Moves:	****				****		****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.862

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	32	96	419	119	62	157	240	1477	117	339	2154	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	96	419	119	62	157	240	1477	117	339	2154	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	96	419	119	62	157	240	1477	117	339	2154	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	96	419	119	62	157	240	1477	117	339	2154	304
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 Vol.:	32	96	419	119	62	157	240	1477	117	339	2154	304

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.63	0.37
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	3943	557

Capacity Analysis Module:

Vol/Sat:	0.02	0.06	0.28	0.08	0.04	0.10	0.16	0.49	0.08	0.23	0.55	0.55
Crit Vol:	96			119			739			339		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 156 Critical Vol./Cap. (X): 0.782

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 156 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Split Phase			Split Phase			Protected			Protected				
Rights:	Ovl			Ovl			Include			Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	1	0	1	1	0	0	1	1	0	2	1	0

Volume Module:

Base Vol:	88	7	72	17	35	10	42	950	211	663	1958	161
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:	88	7	72	17	35	10	42	950	211	663	1958	161
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:	88	7	72	17	35	10	42	950	211	663	1958	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	7	72	17	35	10	42	950	211	663	1958	161
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	88	7	72	19	35	10	42	950	211	663	1958	161

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.45	0.55	1.00	2.77	0.23
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3682	818	1500	4158	342

Capacity Analysis Module:

Vol/Sat:	0.06	0.00	0.05	0.01	0.02	0.01	0.03	0.26	0.26	0.44	0.47	0.47
Crit Vol:	88			35			387			663		
Crit Moves:	****			****			****			****		

**10. INTERSECTION CAPACITY ANALYSIS
FUTURE WITHOUT PROJECT CONDITIONS
P.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	8		977 176	270		1359 166	524		1232 268	139		278 172
202	Sunrise Blvd.	222		1350 12	577		2082 299	1071		1349 574	53		787 592
203	Sunrise Blvd.	0		2365 14	49		2740 0	0		0 0	17		0 126
204	Sunrise Blvd.	757		2050 15	965		2007 251	155		1226 854	78		793 734
205	Sunrise Blvd.	261		2657 833	261		1892 248	100		911 315	319		315 456
206	Sunrise Blvd.	143		4712 5	80		3462 189	416		10 140	20		20 60
207	Zinfandel Dri	22		322 103	908		727 262	397		1620 135	159		1266 389
211	Zinfandel Dri	232		1105 112	23		1209 565	376		272 445	367		508 21
213	Zinfandel Dri	14		2199 84	898		1437 81	793		301 6	68		244 1042
214	Zinfandel Dri	0		4117 0	0		1877 0	884		119 689	0		0 567
215	Zinfandel Dri	0		2216 0	0		986 0	0		0 0	1034		0 310
216	Mather Field	252		0 45	0		0 0	0		1483 0	46		1742 0
217	Mather Field	668		1562 9	165		1303 0	1206		135 366	11		170 168
218	Mather Field	0		2240 0	0		1063 0	531		0 903	0		0 0
219	Mather Field	0		1104 0	0		670 0	0		0 0	446		0 49
220	Mather Field	335		141 730	47		47 9	28		1999 149	500		1381 45
221	Mather Blvd.	0		0 0	0		245 92	0		0 0	0		250 0
222	Mather Blvd.	0		50 0	0		0 0	0		0 0	0		250 22
225	Von Karman St	0		0 0	239		6 0	0		161 0	0		0 0
226	Norden Avenue	0		34 0	0		0 0	16		142 0	0		0 0
228	International	0		0 0	152		0 340	287		1047 0	0		1398 140
229	International	1		0 0	4		1 563	226		274 1	0		473 1
230	International	3		7 1	3		1 457	255		3 1	0		8 7
231	International	490		74 181	0		92 533	448		924 485	314		1287 0
232	Hazel Avenue	0		0 0	0		592 0	1729		0 518	0		0 0
233	Hazel Avenue	102		3978 0	0		2688 38	0		0 133	89		153 1144
234	White Rock Ro	132		148 192	259		291 45	154		1550 70	448		1602 162
235	White Rock Ro	157		39 466	87		14 41	35		1309 146	235		1037 18

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.819

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	8	977	176	270	1359	166	524	1232	268	139	278	172
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	977	176	270	1359	166	524	1232	268	139	278	172
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:	8	977	176	270	1359	166	524	1232	268	139	278	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	977	176	270	1359	166	524	1232	268	139	278	172
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	9	977	176	297	1359	166	524	1232	268	139	278	172

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.12	0.10	0.30	0.11	0.35	0.41	0.18	0.09	0.09	0.11
Crit Vol:	326			149			616			139		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.112

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	222	1350	12	577	2082	299	1071	1349	574	53	787	592
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Initial Bse:	222	1350	0	577	2082	0	1071	1349	0	53	787	0
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	222	1350	0	577	2082	0	1071	1349	0	53	787	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1350	0	577	2082	0	1071	1349	0	53	787	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00
Final Vol.:	244	1350	0	635	2082	0	1178	1349	0	58	787	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.08	0.30	0.00	0.21	0.46	0.00	0.39	0.30	0.00	0.02	0.17	0.00
Crit Vol:	122			694			589			262		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl
*****Average Delay (sec/veh): OVERFLOW Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 2 1 0	1 0 3 0 0	0 0 0 0 0	0 0 1! 0 0

Volume Module:

Base Vol:	0 2365 14	49 2740 0	0 0 0	17 0 126
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 2365 14	49 2740 0	0 0 0	17 0 126
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 2365 14	49 2740 0	0 0 0	17 0 126
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	0 2365 14	49 2740 0	0 0 0	17 0 126

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
% Truck/Comb:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
PCE Adj:	1.10 1.00 1.00	1.10 1.00 1.00	1.10 1.10 1.10	1.10 1.10 1.10
Cycl/Car PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Trck/Cmb PCE:	xxxx xxxx	xxxx xxxx	xxxx xxxx	xxxx xxxx
Adj Vol.:	0 2365 14	54 2740 0	0 0 0	19 0 139

Critical Gap Module:

MoveUp Time:	xxxxx xxxxx	2.1 xxxxx	xxxxx xxxxx	3.4 xxxxx	2.6
Critical Gp:	xxxxx xxxxx	5.5 xxxxx	xxxxx xxxxx	7.0 xxxxx	5.5

Capacity Module:

Cnflct Vol:	xxxx xxxxx	2379 xxxxx	xxxx xxxxx	5161 xxxxx	795
Potent Cap.:	xxxx xxxxx	91 xxxxx	xxxx xxxxx	1 xxxxx	547
Adj Cap:	xxxx xxxxx	1.00 xxxxx	xxxx xxxxx	0.40 xxxxx	1.00
Move Cap.:	xxxx xxxxx	91 xxxxx	xxxx xxxxx	0 xxxxx	547

Level Of Service Module:

Stopped Del:	xxxxx xxxxx	84.2 xxxxx	xxxxx xxxxx	xxxxx xxxxx	8.5
LOS by Move:	* * *	F * *	* * *	* * *	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx xxxxx	xxxx xxxxx	xxxx xxxxx	xxxx xxxxx	xxxxxx
Shrd StpDel:	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxxx
Shared LOS:	* * *	* * *	* * *	* * *	*
ApproachDel:	0.0	1.6	0.0	xxxxxx	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.247

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	757	2050	15	965	2007	251	155	1226	854	78	793	734
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:	757	2050	15	965	2007	251	155	1226	854	78	793	734
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:	757	2050	15	965	2007	251	155	1226	854	78	793	734
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	757	2050	15	965	2007	251	155	1226	854	78	793	734
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	833	2050	15	1062	2007	251	171	1226	854	86	793	734

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.28	0.46	0.01	0.35	0.45	0.17	0.06	0.41	0.57	0.03	0.18	0.49
Crit Vol:	683			531			613			43		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.959

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	261	2657	833	261	1892	248	100	911	315	319	315	456
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	2657	833	261	1892	248	100	911	315	319	315	456
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	2657	833	261	1892	248	100	911	315	319	315	456
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	2657	833	261	1892	248	100	911	315	319	315	456
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	287	2657	833	287	1892	248	110	911	315	351	315	502

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.16	1.84
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	1735	2765

Capacity Analysis Module:

Vol/Sat:	0.10	0.44	0.56	0.10	0.42	0.17	0.04	0.30	0.21	0.12	0.18	0.18
Crit Vol:	664			144			455			176		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.439
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 0 0 1! 0 1 1 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	143	4712	5	80	3462	189	416	10	140	20	20	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:	143	4712	5	80	3462	189	416	10	140	20	20	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:	143	4712	5	80	3462	189	416	10	140	20	20	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	4712	5	80	3462	189	416	10	140	20	20	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	157	4712	5	80	3462	189	416	10	154	22	20	60

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.99	0.01	1.00	1.00	0.01	0.99
Final Sat.:	3000	4495	5	1500	4500	1500	1485	15	1500	1500	15	1485

Capacity Analysis Module:

Vol/Sat:	0.05	1.05	1.05	0.05	0.77	0.13	0.28	0.67	0.10	0.01	1.33	0.04
Crit Vol:	1572			80			426			80		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.867
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: D

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 0 1 2 0 2 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol:	22	322	103	908	727	262	397	1620	135	159	1266	389
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:	22	322	103	908	727	262	397	1620	135	159	1266	389
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:	22	322	103	908	727	262	397	1620	135	159	1266	389
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	322	103	908	727	262	397	1620	135	159	1266	389
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	24	322	103	999	727	262	437	1620	135	175	1266	389

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	3000	1500	3000	3000	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.11	0.07	0.33	0.24	0.17	0.15	0.36	0.09	0.06	0.28	0.26
Crit Vol:	161			500			219			422		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.936

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	232	1105	112	23	1209	565	376	272	445	367	508	21
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:	232	1105	112	23	1209	565	376	272	445	367	508	21
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:	232	1105	112	23	1209	565	376	272	445	367	508	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	232	1105	112	23	1209	565	376	272	445	367	508	21
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 Vol.:	232	1105	112	23	1209	565	376	272	445	367	508	21

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.72	0.28	1.00	2.04	0.96	1.00	2.00	1.00	1.00	2.88	0.12
Final Sat.:	1500	4086	414	1500	3067	1433	1500	3000	1500	1500	4321	179

Capacity Analysis Module:

Vol/Sat:	0.15	0.27	0.27	0.02	0.39	0.39	0.25	0.09	0.30	0.24	0.12	0.12
Crit Vol:	0			591			445			367		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.491

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	14	2199	84	898	1437	81	793	301	6	68	244	1042
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	2199	84	898	1437	81	793	301	6	68	244	1042
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	2199	84	898	1437	81	793	301	6	68	244	1042
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	2199	84	898	1437	81	793	301	6	68	244	1042
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	15	2199	84	988	1437	81	872	301	6	75	244	1146

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.94	0.06	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4412	88	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.49	0.06	0.33	0.32	0.05	0.29	0.07	0.07	0.03	0.16	0.38
Crit Vol:	733			494			436			573		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.343

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	4117	0	0	1877	0	884	119	689	0	0	567
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	4117	0	0	1877	0	884	119	689	0	0	567
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4117	0	0	1877	0	884	119	689	0	0	567
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4117	0	0	1877	0	884	119	689	0	0	567
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	4117	0	0	1877	0	972	119	758	0	0	567

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.27	1.73	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	421	2679	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.66	0.00	0.00	0.61	0.00	0.31	0.28	0.28	0.00	0.00	0.37
Crit Vol:		1029			0		486					567
Crit Moves:	****		****			****				****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 96 Critical Vol./Cap. (X): 0.792

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2216	0	0	986	0	0	0	0	1034	0	310
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	2216	0	0	986	0	0	0	0	1034	0	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2216	0	0	986	0	0	0	0	1034	0	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2216	0	0	986	0	0	0	0	1034	0	310
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	1.10	1.00	1.00
Final Vol.:	0	2216	0	0	986	0	0	0	0	1137	0	310

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.45	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.34	0.00	0.19
Crit Vol:	739			0			0			569		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 50 Critical Vol./Cap. (X): 0.464

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 50 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	252	0	45	0	0	0	0	1483	119	46	1742	0
Growth 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
Initial Bse:	252	0	45	0	0	0	0	1483	0	46	1742	0
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:	252	0	45	0	0	0	0	1483	0	46	1742	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	252	0	45	0	0	0	0	1483	0	46	1742	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	277	0	45	0	0	0	0	1483	0	46	1742	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.09	0.00	0.03	0.00	0.00	0.00	0.00	0.32	0.00	0.03	0.37	0.00
Crit Vol:	139				0		0				581	
Crit Moves:	****						****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.461

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	668	1562	9	165	1303	620	1206	135	366	11	170	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	668	1562	9	165	1303	0	1206	135	366	11	170	168
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	668	1562	9	165	1303	0	1206	135	366	11	170	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	668	1562	9	165	1303	0	1206	135	366	11	170	168
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	668	1562	9	165	1303	0	1327	135	366	11	170	168

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.45	0.15	0.40	0.06	0.98	0.96
Final Sat.:	1500	4474	26	1500	4500	1500	2178	222	601	95	1461	1444

Capacity Analysis Module:

Vol/Sat:	0.45	0.35	0.35	0.11	0.29	0.00	0.61	0.61	0.61	0.12	0.12	0.12
Crit Vol:	668			434			914			175		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 87 Critical Vol./Cap. (X): 0.771

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 87 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	0	0	1	0	1	0

Volume Module:

Base Vol:	0	2240	0	0	1063	0	531	0	903	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2240	0	0	1063	0	531	0	903	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2240	0	0	1063	0	531	0	903	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2240	0	0	1063	0	531	0	903	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2240	0	0	1063	0	584	0	993	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.11	xxxx	1.89	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1833	-0	3117	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.45	0.00	0.00	0.32	0.00	0.32	0.00	0.32	0.00	0.00	0.00
Crit Vol:	747			0			526			0		
Crit Moves:	****			****			****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 40 Critical Vol./Cap. (X): 0.498

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	1104	0	0	670	0	0	0	0	446	0	49
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	1104	0	0	670	0	0	0	0	446	0	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1104	0	0	670	0	0	0	0	446	0	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1104	0	0	670	0	0	0	0	446	0	49
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	1.10	1.00	1.00
Final Vol.:	0	1104	0	0	670	0	0	0	0	491	0	49

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.82	0.00	0.18
Final Sat.:	0	3300	0	0	3300	0	0	0	0	3001	0	299

Capacity Analysis Module:

Vol/Sat:	0.00	0.33	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Crit Vol:	552			0			0			270		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.187
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Split Phase Split Phase Protected Protected
 Rights: Ovl Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 1 0 0 1 0 1 0 1 0 2 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	335	141	730	47	47	9	28	1999	149	500	1381	45
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:	335	141	730	47	47	9	28	1999	149	500	1381	45
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:	335	141	730	47	47	9	28	1999	149	500	1381	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	335	141	730	47	47	9	28	1999	149	500	1381	45
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	369	141	730	47	47	9	28	1999	149	550	1381	45

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.45	0.55	1.00	0.92	0.91	0.17	1.00	2.00	1.00	2.00	1.94	0.06
Final Sat.:	2171	829	1500	1369	1369	262	1500	3000	1500	3000	2905	95

Capacity Analysis Module:

Vol/Sat:	0.17	0.17	0.49	0.03	0.03	0.03	0.02	0.67	0.10	0.18	0.48	0.48
Crit Vol:			730			52		1000		0		
Crit Moves:			****			****		****		****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.346
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.4
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	245	92	0	0	0	0	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	245	92	0	0	0	0	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	245	92	0	0	0	0	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	245	92	0	0	0	0	250	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 Vol.:	0	0	0	0	245	92	0	0	0	0	250	0

Saturation Flow Module:

Sat/Lane:	0	0	0	487	487	487	0	0	0	454	454	454
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.45	0.55	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	708	266	0	0	0	0	908	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.00	0.28	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.35			xxxxx			0.28		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	3.7	3.7	0.0	0.0	0.0	0.0	2.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	3.7	3.7	0.0	0.0	0.0	0.0	2.8	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	*	A	*
ApproachDel:	xxxxxx			3.7			xxxxxx			2.8		
LOS by Appr:	F			A			F			A		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.219
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.2
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	50	0	0	0	0	0	0	0	0	250	22
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	50	0	0	0	0	0	0	0	0	250	22
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	50	0	0	0	0	0	0	0	0	250	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	50	0	0	0	0	0	0	0	0	250	22
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 Vol.:	0	50	0	0	0	0	0	0	0	0	250	22

Saturation Flow Module:

Sat/Lane:	290	290	290	0	0	0	0	0	0	622	622	622
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	0.16
Final Sat.:	0	580	0	0	0	0	0	0	0	0	1143	101

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.22
Crit Moves:	****			****			****			****		
ApproachV/S:	0.09			xxxxx			xxxxx			0.22		

Level Of Service Module:

Delay/Veh:	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
LOS by Move:	*	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.4			xxxxxx			xxxxxx			2.3		
LOS by Appr:	A			F			F			A		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.476
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.9
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	0	0	239	6	0	0	161	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	239	6	0	0	161	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	239	6	0	0	161	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	239	6	0	0	161	0	0	0	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 Vol.:	0	0	0	239	6	0	0	161	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	502	502	502	252	252	252	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	502	502	0	0	504	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.48	0.01	0.00	0.00	0.32	0.00	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx			0.24			0.32			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	6.1	1.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	6.1	1.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	B	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			2.5			3.4			xxxxxx		
LOS by Appr:	F			A			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.129
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.6
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	34	0	0	0	0	16	142	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	34	0	0	0	0	16	142	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	34	0	0	0	0	16	142	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	34	0	0	0	0	16	142	0	0	0	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 Vol.:	0	34	0	0	0	0	16	142	0	0	0	0

Saturation Flow Module:

Sat/Lane:	273	273	273	0	0	0	611	611	611	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.20	1.80	0.00	0.00	0.00	0.00
Final Sat.:	0	546	0	0	0	0	124	1098	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.06			xxxxx			0.13			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0	0.0
LOS by Move:	*	A	*	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			1.6			xxxxxx		
LOS by Appr:	A			F			A			F		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 70 Critical Vol./Cap. (X): 0.614
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 70 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 1 0

Volume Module:

Base Vol:	0	0	0	152	0	340	287	1047	0	0	1398	140
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	152	0	340	287	1047	0	0	1398	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	152	0	340	287	1047	0	0	1398	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	152	0	340	287	1047	0	0	1398	140
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 Vol.:	0	0	0	152	0	340	287	1047	0	0	1398	140

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.73	0.27
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	4227	423

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.22	0.19	0.23	0.00	0.00	0.33	0.33
Crit Vol:	0			152			287				513	
Crit Moves:				****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 66 Critical Vol./Cap. (X): 0.481
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 66 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:

Base Vol:	1	0	0	4	1	563	226	274	1	0	473	1
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:	1	0	0	4	1	563	226	274	1	0	473	1
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:	1	0	0	4	1	563	226	274	1	0	473	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	0	0	4	1	563	226	274	1	0	473	1
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 Vol.:	1	0	0	4	1	563	226	274	1	0	473	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.99	0.01	1.00	2.99	0.01
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	4484	16	1500	4491	9

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.38	0.15	0.06	0.06	0.00	0.11	0.11
Crit Vol:	1					563	0				158	
Crit Moves:	****					****	****				****	

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 58 Critical Vol./Cap. (X): 0.410

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	0	1	0	0

Volume Module:

Base Vol:	3	7	1	3	1	457	255	3	1	0	8	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	7	1	3	1	457	255	3	1	0	8	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	7	1	3	1	457	255	3	1	0	8	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	7	1	3	1	457	255	3	1	0	8	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	7	1	3	1	457	281	3	1	0	8	7

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.00	1.00	2.00	1.00	1.00	0.00	0.53	0.47
Final Sat.:	1500	2625	375	1500	1500	1500	3000	1500	1500	0	800	700

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.30	0.09	0.00	0.00	0.00	0.01	0.01
Crit Vol:	3					457	141				15	
Crit Moves:	****					****	****				****	

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.911
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Split Phase Split Phase Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1! 0 0 0 1 0 0 2 1 0 1 0 2 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	490	74	181	0	92	533	448	924	485	314	1287	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:	490	74	181	0	92	533	448	924	485	314	1287	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:	490	74	181	0	92	533	448	924	485	314	1287	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	490	74	181	0	92	533	448	924	485	314	1287	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	539	74	181	0	92	533	448	924	485	314	1287	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.36	0.19	0.45	0.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	0.00
Final Sat.:	2037	280	684	0	1500	1500	1500	3000	1500	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.26	0.26	0.26	0.00	0.06	0.36	0.30	0.31	0.32	0.21	0.29	0.00
Crit Vol:	397				92		448				429	
Crit Moves:	****				****		****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 82 Critical Vol./Cap. (X): 0.756

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 82 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	592	0	1729	0	518	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	592	0	1729	0	518	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	592	0	1729	0	518	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	592	0	1729	0	518	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	592	0	1902	0	570	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.00	0.58	0.00	0.35	0.00	0.00	0.00
Crit Vol:	0				296		951			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.354

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	0	0	0	1	1

Volume Module:

Base Vol:	102	3978	0	0	2688	38	0	0	133	89	153	1144
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:	102	3978	0	0	2688	38	0	0	133	89	153	1144
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:	102	3978	0	0	2688	38	0	0	133	89	153	1144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	3978	0	0	2688	38	0	0	133	89	153	1144
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	1.10
Final Vol.:	102	3978	0	0	2688	38	0	0	133	89	153	1258

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.22	1.78
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	325	2675

Capacity Analysis Module:

Vol/Sat:	0.07	0.88	0.00	0.00	0.60	0.03	0.00	0.00	0.09	0.06	0.47	0.47
Crit Vol:	1326			0			0			706		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.087

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	132	148	192	259	291	45	154	1550	70	448	1602	162
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:	132	148	192	259	291	45	154	1550	70	448	1602	162
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:	132	148	192	259	291	45	154	1550	70	448	1602	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	148	192	259	291	45	154	1550	70	448	1602	162
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 Vol.:	132	148	192	259	291	45	154	1550	70	448	1602	162

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.73	0.27	1.00	2.00	1.00	1.00	2.72	0.28
Final Sat.:	1500	1500	1500	1500	2598	402	1500	3000	1500	1500	4087	413

Capacity Analysis Module:

Vol/Sat:	0.09	0.10	0.13	0.17	0.11	0.11	0.10	0.52	0.05	0.30	0.39	0.39
Crit Vol:	148			259			775			448		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 103 Critical Vol./Cap. (X): 0.671

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 103 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	1	1	0	0	1	1	0

Volume Module:

Base Vol:	157	39	466	87	14	41	35	1309	146	235	1037	18
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:	157	39	466	87	14	41	35	1309	146	235	1037	18
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:	157	39	466	87	14	41	35	1309	146	235	1037	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	39	466	87	14	41	35	1309	146	235	1037	18
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	157	39	466	96	14	41	35	1309	146	235	1037	18

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.75	0.25	1.00	1.00	2.70	0.30	1.00	2.95	0.05
Final Sat.:	1500	1500	1500	2618	382	1500	1500	4048	452	1500	4423	77

Capacity Analysis Module:

Vol/Sat:	0.10	0.03	0.31	0.04	0.04	0.03	0.02	0.32	0.32	0.16	0.23	0.23
Crit Vol:	466			55			485			0		
Crit Moves:	****			****			****			****		

**11. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH APPROVED PROJECT
CONDITIONS
A.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	450	1205	130	153	951	537	130	121	3	238	1100	415
202	Sunrise Blvd.	818	2063	0	394	1092	0	101	523	0	38	1263	0
203	Sunrise Blvd.	1135	2387	9	137	1379	416	334	0	451	3	0	40
204	Sunrise Blvd.	676	1790	55	645	1743	453	80	731	315	121	1529	881
205	Sunrise Blvd.	213	2059	107	624	2770	507	246	204	162	956	628	293
206	Sunrise Blvd.	134	3046	10	40	5277	462	125	10	335	40	15	40
207	Zinfandel Dri	92	948	171	606	175	572	622	573	1	25	1060	0
208	Zinfandel Dri	1014	1949	0	178	1206	52	15	82	500	0	16	48
209	Zinfandel Dri	111	1583	0	238	1410	208	52	31	27	0	27	134
210	Zinfandel Dri	109	1518	307	0	1221	89	33	7	97	306	46	0
211	Zinfandel Dri	256	1568	80	43	1413	108	250	666	544	87	560	297
212	Zinfandel Dri	0	1603	165	16	1712	0	0	2	0	144	17	46
213	Zinfandel Dri	20	1693	25	1730	2327	881	197	84	13	23	237	1349
214	Zinfandel Dri	0	3174	0	0	3446	0	198	692	1683	0	0	65
215	Zinfandel Dri	0	1285	0	0	1208	0	0	0	0	2024	0	182
216	Mather Field	64	0	1	0	0	0	0	2113	0	82	1348	0
217	Mather Field	289	878	5	228	1851	0	374	142	451	10	124	68
218	Mather Field	0	1132	0	0	1503	0	32	0	1493	0	0	0
219	Mather Field	0	431	0	0	786	0	0	0	0	669	0	232
220	Mather Field	304	39	67	25	85	20	13	1103	374	713	1610	9
221	Mather Blvd.	0	0	0	0	40	35	0	0	0	5	155	0
222	Mather Blvd.	0	4	0	0	0	0	0	0	0	0	160	9
223	C Street & Ai	11	72	363	48	101	3	1	624	20	234	768	1
224	A Street & Zi	29	1620	0	0	1690	349	280	0	38	0	0	0
225	Von Karman St	0	0	0	28	12	0	0	489	0	0	0	0
226	Norden Avenue	0	1	5	0	0	0	2	453	0	0	0	0
227	A Street & Ai	5	19	0	25	84	61	83	621	59	0	772	11
228	International	0	0	0	218	0	129	52	1412	0	0	776	229
229	International	124	159	1	56	40	47	198	647	34	0	832	285
230	International	86	184	232	55	94	92	130	516	44	378	933	274
231	International	774	9	21	0	27	281	343	1339	722	105	603	0
232	Hazel Avenue	0	0	0	0	2039	0	998	0	568	0	0	0
233	Hazel Avenue	107	1370	0	0	4591	54	0	0	156	90	48	525
234	White Rock Ro	32	235	152	105	98	149	206	1516	117	116	1745	296
235	White Rock Ro	74	7	52	17	35	10	42	897	278	518	1687	161
236	B Street & Pr	13	128	0	1	39	33	132	54	5	0	109	23
237	B Street & Ki	0	94	0	290	35	106	60	0	0	0	0	184
238	B Street & Ai	0	0	0	13	0	107	107	623	0	0	1036	1

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.890

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	450	1205	130	153	951	537	130	121	3	238	1100	415
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:	450	1205	130	153	951	537	130	121	3	238	1100	415
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:	450	1205	130	153	951	537	130	121	3	238	1100	415
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	1205	130	153	951	537	130	121	3	238	1100	415
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	495	1205	130	168	951	537	130	121	3	238	1100	415

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.17	0.27	0.09	0.06	0.21	0.36	0.09	0.04	0.00	0.16	0.37	0.28
Crit Vol:	248					537	0			550		
Crit Moves:	****					****	****			****		

Default Scenario

Mon Aug 9, 1999 14:15:42

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.920
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ignore Ignore Ignore Ignore
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	818	2063	21	394	1092	1008	101	523	102	38	1263	787
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Initial Bse:	818	2063	0	394	1092	0	101	523	0	38	1263	0
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	818	2063	0	394	1092	0	101	523	0	38	1263	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	818	2063	0	394	1092	0	101	523	0	38	1263	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00
Final Vol.:	900	2063	0	433	1092	0	111	523	0	42	1263	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.30	0.46	0.00	0.14	0.24	0.00	0.04	0.12	0.00	0.01	0.28	0.00
Crit Vol:	688			217			56			421		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.874
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: D

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Split Phase Split Phase
 Rights: Include Ovl Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 2 1 0 1 0 3 0 1 1 1 0 0 2 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	1135	2387	9	137	1379	416	334	0	451	3	0	40
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:	1135	2387	9	137	1379	416	334	0	451	3	0	40
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:	1135	2387	9	137	1379	416	334	0	451	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1135	2387	9	137	1379	416	334	0	451	3	0	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	1249	2387	9	137	1379	416	367	0	496	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	2.00	0.00	2.00	0.07	0.00	0.93
Final Sat.:	3000	4483	17	1500	4500	1500	3000	0	3000	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.42	0.53	0.53	0.09	0.31	0.28	0.12	0.00	0.17	0.03	0.00	0.03
Crit Vol:	625				460		184					43
Crit Moves:	****				****		****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.015
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 2 0 1 2 0 3 0 1

Volume Module:

Base Vol:	676	1790	55	645	1743	453	80	731	315	121	1529	881
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:	676	1790	55	645	1743	453	80	731	315	121	1529	881
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:	676	1790	55	645	1743	453	80	731	315	121	1529	881
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	676	1790	55	645	1743	453	80	731	315	121	1529	881
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	744	1790	55	710	1743	453	88	731	315	133	1529	881

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.25	0.40	0.04	0.24	0.39	0.30	0.03	0.24	0.21	0.04	0.34	0.59
Crit Vol:	372			581			44					881
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.112

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	213	2059	107	624	2770	507	246	204	162	956	628	293
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:	213	2059	107	624	2770	507	246	204	162	956	628	293
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:	213	2059	107	624	2770	507	246	204	162	956	628	293
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	2059	107	624	2770	507	246	204	162	956	628	293
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	234	2059	107	686	2770	507	271	204	162	1052	628	322

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.98	1.02
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2975	1525

Capacity Analysis Module:

Vol/Sat:	0.08	0.34	0.07	0.23	0.62	0.34	0.09	0.07	0.11	0.35	0.21	0.21
Crit Vol:	117			923			102			526		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.427

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	134	3046	10	40	5277	462	125	10	335	40	15	40
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	3046	10	40	5277	462	125	10	335	40	15	40
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	3046	10	40	5277	462	125	10	335	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	3046	10	40	5277	462	125	10	335	40	15	40
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	147	3046	10	40	5277	462	125	10	369	44	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.50	0.04	1.46	1.00	0.19	0.81
Final Sat.:	3000	4485	15	1500	4500	1500	744	60	2196	1500	288	1212

Capacity Analysis Module:

Vol/Sat:	0.05	0.68	0.68	0.03	1.17	0.31	0.17	0.17	0.17	0.03	0.05	0.03
Crit Vol:	74				1759				252		55	
Crit Moves:	****				****				****		****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.897
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: D

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ignore
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol:	92	948	171	606	175	572	622	573	1	25	1060	1490
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	92	948	171	606	175	572	622	573	1	25	1060	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	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	92	948	171	606	175	572	622	573	1	25	1060	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	948	171	606	175	572	622	573	1	25	1060	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	0.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	0.00
Final Vol.:	101	948	171	667	175	572	684	573	1	28	1060	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.21	0.11	0.22	0.04	0.38	0.23	0.13	0.00	0.01	0.24	0.00
Crit Vol:	316			334			342			353		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #208 Zinfandel Drive & Airpark Drive

Cycle (sec): 111 Critical Vol./Cap. (X): 0.692

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 111 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	2	1	0	0	1	0

Volume Module:

Base Vol:	1014	1949	0	178	1206	52	15	82	500	0	16	48
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:	1014	1949	0	178	1206	52	15	82	500	0	16	48
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:	1014	1949	0	178	1206	52	15	82	500	0	16	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1014	1949	0	178	1206	52	15	82	500	0	16	48
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.00
Final Vol.:	1115	1949	0	178	1206	52	15	82	550	0	16	48

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	2.00	1.00	0.25	0.75
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	3000	1500	375	1125

Capacity Analysis Module:

Vol/Sat:	0.37	0.43	0.00	0.12	0.27	0.03	0.01	0.05	0.18	0.00	0.04	0.04
Crit Vol:	558			402			15			64		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 98 Critical Vol./Cap. (X): 0.652

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 98 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	111	1583	0	238	1410	208	52	31	27	0	27	134
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:	111	1583	0	238	1410	208	52	31	27	0	27	134
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:	111	1583	0	238	1410	208	52	31	27	0	27	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1583	0	238	1410	208	52	31	27	0	27	134
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	1583	0	238	1410	208	52	31	27	0	27	134

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.17	0.83
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	252	1248

Capacity Analysis Module:

Vol/Sat:	0.04	0.35	0.00	0.16	0.31	0.14	0.03	0.02	0.02	0.00	0.11	0.11
Crit Vol:	528			238			52			161		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 89 Critical Vol./Cap. (X): 0.617

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 89 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		2	0	3	0	1	
	1	0	0	1	0		1	0	0	1	0	

Volume Module:

Base Vol:	109	1518	307	0	1221	89	33	7	97	306	46	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:	109	1518	307	0	1221	89	33	7	97	306	46	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:	109	1518	307	0	1221	89	33	7	97	306	46	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	1518	307	0	1221	89	33	7	97	306	46	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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	1518	307	0	1221	89	33	7	97	306	46	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	0.07	0.93	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	101	1399	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.07	0.34	0.20	0.00	0.27	0.06	0.02	0.07	0.07	0.20	0.03	0.00
Crit Vol:	109				407			104		306		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 117 Critical Vol./Cap. (X): 0.709

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 117 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	256	1568	80	43	1413	108	250	666	544	87	560	297
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:	256	1568	80	43	1413	108	250	666	544	87	560	297
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:	256	1568	80	43	1413	108	250	666	544	87	560	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	256	1568	80	43	1413	108	250	666	544	87	560	297
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	282	1568	80	47	1413	108	275	666	544	96	560	297

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.09	0.35	0.05	0.02	0.31	0.07	0.09	0.15	0.36	0.03	0.12	0.20
Crit Vol:	0			471					544	48		
Crit Moves:	****			****					****	****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 65 Critical Vol./Cap. (X): 0.478

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 65 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		2	0	3	0	1	
	1	0	0	1	0		1	0	0	1	0	

Volume Module:

Base Vol:	0	1603	165	16	1712	0	0	2	0	144	17	46
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	1603	165	16	1712	0	0	2	0	144	17	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:	0	1603	165	16	1712	0	0	2	0	144	17	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1603	165	16	1712	0	0	2	0	144	17	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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	1603	165	18	1712	0	0	2	0	144	17	46

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	1500	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.36	0.11	0.01	0.38	0.00	0.00	0.00	0.00	0.10	0.01	0.03
Crit Vol:	0			571			2			144		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.578

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	
	2	0	2	1	0		2	0	1	1	1	

Volume Module:

Base Vol:	20	1693	25	1730	2327	881	197	84	13	23	237	1349
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1693	25	1730	2327	881	197	84	13	23	237	1349
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1693	25	1730	2327	881	197	84	13	23	237	1349
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1693	25	1730	2327	881	197	84	13	23	237	1349
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	22	1693	25	1903	2327	881	217	84	13	25	237	1484

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.60	0.40	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3897	603	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.38	0.02	0.63	0.52	0.59	0.07	0.02	0.02	0.01	0.16	0.49
Crit Vol:	564		952		109		742					
Crit Moves:	****		****		****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.751

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	3174	0	0	3446	0	198	692	1683	0	0	65
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	3174	0	0	3446	0	198	692	1683	0	0	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3174	0	0	3446	0	198	692	1683	0	0	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3174	0	0	3446	0	198	692	1683	0	0	65
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	3174	0	0	3446	0	218	692	1851	0	0	65

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1550	3100	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	1.11	0.00	0.14	0.45	0.60	0.00	0.00	0.04
Crit Vol:	0				1723				925			65
Crit Moves:	****				****				****			****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.041
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 3 0 0 0 0 2 0 0 0 2 0 0 0 1

Volume Module:
 Base Vol: 0 1285 0 0 1208 0 0 0 0 2024 0 182
 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 1285 0 0 1208 0 0 0 0 2024 0 182
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 1285 0 0 1208 0 0 0 0 2024 0 182
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 1285 0 0 1208 0 0 0 0 2024 0 182
 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 1.10 1.00 1.00
 Final Vol.: 0 1285 0 0 1208 0 0 0 0 2226 0 182

Saturation Flow Module:
 Sat/Lane: 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650 1650
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 3.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00 2.00 0.00 1.00
 Final Sat.: 0 4950 0 0 3300 0 0 0 0 3300 0 1650

Capacity Analysis Module:
 Vol/Sat: 0.00 0.26 0.00 0.00 0.37 0.00 0.00 0.00 0.00 0.67 0.00 0.11
 Crit Vol: 0 604 0 1113
 Crit Moves: ****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 57 Critical Vol./Cap. (X): 0.530

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	64	0	1	0	0	0	0	2113	232	82	1348	0
Growth 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
Initial Bse:	64	0	1	0	0	0	0	2113	0	82	1348	0
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:	64	0	1	0	0	0	0	2113	0	82	1348	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	0	1	0	0	0	0	2113	0	82	1348	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	70	0	1	0	0	0	0	2113	0	82	1348	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.05	0.29	0.00
Crit Vol:	35				0			704		82		
Crit Moves:	****							****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.067

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	3	1	0	1	0	0	0

Volume Module:

Base Vol:	289	878	5	228	1851	928	374	142	451	10	124	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	289	878	5	228	1851	0	374	142	451	10	124	68
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	289	878	5	228	1851	0	374	142	451	10	124	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	289	878	5	228	1851	0	374	142	451	10	124	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	289	878	5	228	1851	0	411	142	451	10	124	68

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.00	0.10	0.90	0.10	1.23	0.67
Final Sat.:	1500	4475	25	1500	4500	1500	1500	152	1348	149	1842	1010

Capacity Analysis Module:

Vol/Sat:	0.19	0.20	0.20	0.15	0.41	0.00	0.27	0.93	0.33	0.07	0.07	0.07
Crit Vol:	289			617			593			101		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.953

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1132	0	0	1503	0	32	0	1493	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1132	0	0	1503	0	32	0	1493	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1132	0	0	1503	0	32	0	1493	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1132	0	0	1503	0	32	0	1493	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	1132	0	0	1503	0	35	0	1642	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.23	0.00	0.00	0.46	0.00	0.02	0.00	0.50	0.00	0.00	0.00
Crit Vol:	0				752				821	0		
Crit Moves:	****				****				****			

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 43 Critical Vol./Cap. (X): 0.532

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	2	0	0	2	0	0	0	0	1	0	1

Volume Module:

Base Vol:	0	431	0	0	786	0	0	0	0	669	0	232
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	431	0	0	786	0	0	0	0	669	0	232
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	431	0	0	786	0	0	0	0	669	0	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	431	0	0	786	0	0	0	0	669	0	232
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	1.10	1.00	1.00
Final Vol.:	0	431	0	0	786	0	0	0	0	736	0	232

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.52	0.00	0.48
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2509	0	791

Capacity Analysis Module:

Vol/Sat:	0.00	0.13	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Crit Vol:	0				393			0		484		
Crit Moves:	****				****					****		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 148 Critical Vol./Cap. (X): 0.797

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 148 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	304	39	67	25	85	20	13	1103	374	713	1610	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	304	39	67	25	85	20	13	1103	374	713	1610	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	304	39	67	25	85	20	13	1103	374	713	1610	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	304	39	67	25	85	20	13	1103	374	713	1610	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	334	39	67	25	85	20	13	1103	374	784	1610	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.79	0.21	1.00	0.38	1.31	0.31	1.00	2.00	1.00	2.00	1.99	0.01
Final Sat.:	2686	314	1500	577	1962	462	1500	3000	1500	3000	2983	17

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.04	0.04	0.04	0.04	0.01	0.37	0.25	0.26	0.54	0.54
Crit Vol:	187			65			552			392		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.131
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.6
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0

Volume Module:

Base Vol:	0	0	0	0	40	35	0	0	0	5	155	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	40	35	0	0	0	5	155	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	40	35	0	0	0	5	155	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	40	35	0	0	0	5	155	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 Vol.:	0	0	0	0	40	35	0	0	0	5	155	0

Saturation Flow Module:

Sat/Lane:	0	0	0	355	355	355	0	0	0	610	610	610
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.07	0.93	0.00	0.00	0.00	0.06	1.94	0.00
Final Sat.:	0	0	0	0	379	331	0	0	0	38	1182	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.13	0.13	0.00
Crit Moves:			****			****			****		****	
ApproachV/S:	xxxxx			0.11			xxxxx			0.13		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	1.6	1.6	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	1.6	1.6	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.5			xxxxxx			1.6		
LOS by Appr:	F			A			F			A		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.123
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.6
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	4	0	0	0	0	0	0	0	0	160	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	4	0	0	0	0	0	0	0	0	160	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4	0	0	0	0	0	0	0	0	160	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4	0	0	0	0	0	0	0	0	160	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	4	0	0	0	0	0	0	0	0	160	9

Saturation Flow Module:

Sat/Lane:	220	220	220	0	0	0	0	0	0	688	688	688
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.11
Final Sat.:	0	440	0	0	0	0	0	0	0	0	1303	73

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12
Crit Moves:	****			****			****			****		
ApproachV/S:	0.01			xxxxx			xxxxx			0.12		

Level Of Service Module:

Delay/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
LOS by Move:	*	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.0			xxxxxx			xxxxxx			1.6		
LOS by Appr:	A			F			F			A		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #223 C Street & Airpark Drive

Cycle (sec): 96 Critical Vol./Cap. (X): 0.645
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 96 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	11	72	363	48	101	3	1	624	20	234	768	1
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:	11	72	363	48	101	3	1	624	20	234	768	1
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:	11	72	363	48	101	3	1	624	20	234	768	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	72	363	48	101	3	1	624	20	234	768	1
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 Vol.:	11	72	363	48	101	3	1	624	20	234	768	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.94	0.06	1.00	1.99	0.01
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	2907	93	1500	2996	4

Capacity Analysis Module:

Vol/Sat:	0.01	0.05	0.24	0.03	0.07	0.00	0.00	0.21	0.21	0.16	0.26	0.26
Crit Vol:	363			48			322			234		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 62 Critical Vol./Cap. (X): 0.563

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 62 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	1	0	0	0

Volume Module:

Base Vol:	29	1620	0	0	1690	349	280	0	38	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	1620	0	0	1690	349	280	0	38	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	29	1620	0	0	1690	349	280	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	1620	0	0	1690	349	280	0	38	0	0	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 Vol.:	29	1620	0	0	1690	349	280	0	38	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	1550	0	1550	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.35	0.00	0.00	0.36	0.23	0.18	0.00	0.02	0.00	0.00	0.00
Crit Vol:	29				563		280			0		
Crit Moves:	****				****		****					

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.439
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 5.0
 Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	28	12	0	0	489	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	12	0	0	489	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	28	12	0	0	489	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	28	12	0	0	489	0	0	0	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 Vol.:	0	0	0	28	12	0	0	489	0	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	0	0	0	238	238	238	557	557	557	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	238	238	0	0	1114	0	0	0	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.12	0.05	0.00	0.00	0.44	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.08			0.44			xxxxx		

Level Of Service Module:	North Bound			South Bound			East Bound			West Bound		
Delay/Veh:	0.0	0.0	0.0	1.6	1.2	0.0	0.0	5.3	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.6	1.2	0.0	0.0	5.3	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			1.4			5.3			xxxxxx		
LOS by Appr:	F			A			B			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.278

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.9

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	1	5	0	0	0	2	453	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	5	0	0	0	2	453	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1	5	0	0	0	2	453	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1	5	0	0	0	2	453	0	0	0	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 Vol.:	0	1	5	0	0	0	2	453	0	0	0	0

Saturation Flow Module:

Sat/Lane:	206	206	206	0	0	0	818	818	818	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.00	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.00
Final Sat.:	0	206	206	0	0	0	7	1629	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.02	0.00	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.00
Crit Moves:			****			****	****					****
ApproachV/S:	0.01			xxxxx			0.28			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.0	1.1	0.0	0.0	0.0	2.9	2.9	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.0	1.1	0.0	0.0	0.0	2.9	2.9	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.1			xxxxxx			2.9			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #227 A Street & Airpark Drive
*****Average Delay (sec/veh): 4.6 Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1

Volume Module:

Base Vol:	5	19	0	25	84	61	83	621	59	0	772	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:	5	19	0	25	84	61	83	621	59	0	772	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:	5	19	0	25	84	61	83	621	59	0	772	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	5	19	0	25	84	61	83	621	59	0	772	11

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	6	21	0	28

Critical Gap Module:

MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	6.5	6.0	xxxxx	6.5	6.0	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1578	1517	xxxxx	1515	1535	772	783	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	129	175	xxxxx	140	171	563	726	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Adj Cap:	0.41	0.87	xxxxx	0.81	0.87	1.00	1.00	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Move Cap.:	53	153	xxxxx	114	149	563	726	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	75.5	26.9	xxxxx	40.5	54.0	7.2	5.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	F	*	*	E	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	153	xxxx	xxxx	216	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	26.9	xxxxx	xxxx	34.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	D	*	*	E	*	*	*	*	*	*
ApproachDel:	37.1			35.2			0.7				0.0	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.444

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	218	0	129	52	1412	0	0	776	229
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	218	0	129	52	1412	0	0	776	229
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	218	0	129	52	1412	0	0	776	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	218	0	129	52	1412	0	0	776	229
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 Vol.:	0	0	0	218	0	129	52	1412	0	0	776	229

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.32	0.68
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3590	1060

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.08	0.03	0.30	0.00	0.00	0.22	0.22
Crit Vol:	0			218				471		0		
Crit Moves:				****				****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 58 Critical Vol./Cap. (X): 0.413

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 58 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected			Protected			Protected			Protected					
Rights:	Ovl			Ovl			Ovl			Ovl					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	3	0	1

Volume Module:

Base Vol:	124	159	1	56	40	47	198	647	34	0	832	285
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:	124	159	1	56	40	47	198	647	34	0	832	285
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:	124	159	1	56	40	47	198	647	34	0	832	285
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	159	1	56	40	47	198	647	34	0	832	285
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 Vol.:	124	159	1	56	40	47	198	647	34	0	832	285

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.08	0.05	0.00	0.04	0.01	0.03	0.13	0.14	0.02	0.00	0.18	0.19
Crit Vol:	124			20			198			277		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 71 Critical Vol./Cap. (X): 0.522

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 71 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	86	184	232	55	94	92	130	516	44	378	933	274
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	184	232	55	94	92	130	516	44	378	933	274
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	184	232	55	94	92	130	516	44	378	933	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	184	232	55	94	92	130	516	44	378	933	274
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 Vol.:	86	184	232	55	94	92	130	516	44	378	933	274

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.06	0.06	0.15	0.04	0.03	0.06	0.09	0.17	0.03	0.25	0.31	0.18
Crit Vol:	92			55			258			378		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.863

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1! 0 0	0	1	0 0 1	1	0	2 1 0	1	0	2 1 0

Volume Module:

Base Vol:	774	9	21	0	27	281	343	1339	722	105	603	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:	774	9	21	0	27	281	343	1339	722	105	603	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:	774	9	21	0	27	281	343	1339	722	105	603	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	774	9	21	0	27	281	343	1339	722	105	603	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	851	9	21	0	27	281	343	1339	722	105	603	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.93	0.02	0.05	0.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	0.00
Final Sat.:	2898	31	72	0	1500	1500	1500	3000	1500	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.29	0.29	0.29	0.00	0.02	0.19	0.23	0.45	0.48	0.07	0.13	0.00
Crit Vol:	441				27				722	105		
Crit Moves:	****				****				****	****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.966
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 2 0 0 0 0 2 0 0 1 0 1! 0 1 0 0 0 0 0

Volume Module:

Base Vol:	0	0	0	0	2039	0	998	0	568	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	2039	0	998	0	568	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	2039	0	998	0	568	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	2039	0	998	0	568	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	2039	0	1098	0	625	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	1.91	0.01	1.08	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3154	0	1796	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.62	0.00	0.35	0.00	0.35	0.00	0.00	0.00
Crit Vol:	0				1020		574			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.300

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	1370	0	0	4591	54	0	0	156	90	48	525
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:	107	1370	0	0	4591	54	0	0	156	90	48	525
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:	107	1370	0	0	4591	54	0	0	156	90	48	525
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1370	0	0	4591	54	0	0	156	90	48	525
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	1.10
Final Vol.:	107	1370	0	0	4591	54	0	0	156	90	48	578

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.15	1.85
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	230	2770

Capacity Analysis Module:

Vol/Sat:	0.07	0.30	0.00	0.00	1.02	0.04	0.00	0.00	0.10	0.06	0.21	0.21
Crit Vol:	107				1530		0				313	
Crit Moves:	****				****		****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.818

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	32	235	152	105	98	149	206	1516	117	116	1745	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	235	152	105	98	149	206	1516	117	116	1745	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	235	152	105	98	149	206	1516	117	116	1745	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	235	152	105	98	149	206	1516	117	116	1745	296
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 Vol.:	32	235	152	105	98	149	206	1516	117	116	1745	296

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.56	0.44
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3000	1500	1500	3847	653

Capacity Analysis Module:

Vol/Sat:	0.02	0.16	0.10	0.07	0.07	0.10	0.14	0.51	0.08	0.08	0.45	0.45
Crit Vol:	235			105			206			680		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 106 Critical Vol./Cap. (X): 0.679
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 106 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Split Phase Split Phase Protected Protected
 Rights: Ovl Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 1 0 1 1 1 0 0 0 1 1 0 2 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	74	7	52	17	35	10	42	897	278	518	1687	161
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:	74	7	52	17	35	10	42	897	278	518	1687	161
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:	74	7	52	17	35	10	42	897	278	518	1687	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	7	52	17	35	10	42	897	278	518	1687	161
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	74	7	52	19	35	10	42	897	278	518	1687	161

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.29	0.71	1.00	2.74	0.26
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3435	1065	1500	4108	392

Capacity Analysis Module:

Vol/Sat:	0.05	0.00	0.03	0.01	0.02	0.01	0.03	0.26	0.26	0.35	0.41	0.41
Crit Vol:	74				35			392		518		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 43 Critical Vol./Cap. (X): 0.218
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 43 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1	0

Volume Module:

Base Vol:	13	128	0	1	39	33	132	54	5	0	109	23
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:	13	128	0	1	39	33	132	54	5	0	109	23
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:	13	128	0	1	39	33	132	54	5	0	109	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	128	0	1	39	33	132	54	5	0	109	23
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 Vol.:	13	128	0	1	39	33	132	54	5	0	109	23

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.83	0.17	1.00	1.65	0.35
Final Sat.:	1500	1500	0	1500	1500	1500	1500	2746	254	1500	2477	523

Capacity Analysis Module:

Vol/Sat:	0.01	0.09	0.00	0.00	0.03	0.02	0.09	0.02	0.02	0.00	0.04	0.04
Crit Vol:	128			1			132			66		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #237 B Street & Kilgore Road

Cycle (sec): 58 Critical Vol./Cap. (X): 0.419
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 58 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 0 1 0 1 0 1 0 1 0 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	0	94	0	290	35	106	60	0	0	0	0	184
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	94	0	290	35	106	60	0	0	0	0	184
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	94	0	290	35	106	60	0	0	0	0	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	94	0	290	35	106	60	0	0	0	0	184
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 Vol.:	0	94	0	290	35	106	60	0	0	0	0	184

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	3000	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.00	0.19	0.02	0.07	0.04	0.00	0.00	0.00	0.00	0.12
Crit Vol:	94			290			60					184
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #238 B Street & Airpark Drive

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0

Volume Module:

Base Vol:	0	0	0	13	0	107	107	623	0	0	1036	1
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	13	0	107	107	623	0	0	1036	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	13	0	107	107	623	0	0	1036	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	13	0	107	107	623	0	0	1036	1

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	14

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	1767	xxxx	519	1037	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	79	xxxx	756	476	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.75	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	59	xxxx	756	476	xxxx	xxxxx	xxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	77.8	xxxx	5.5	9.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0	13.4	1.6	0.0								

**12. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH APPROVED PROJECT
CONDITIONS
P.M. PEAK HOUR**

ITEM 18.1.**ATTACHMENT 5**

Default Scenario

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Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Default Scenario

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Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	7	914	170	355	1411	154	502	1206	361	130	288	186
202	Sunrise Blvd.	214	1314	0	718	2035	0	861	1224	0	34	690	0
203	Sunrise Blvd.	820	1769	14	49	1839	352	516	0	1330	17	0	126
204	Sunrise Blvd.	321	2091	151	958	1822	318	294	1151	294	126	773	690
205	Sunrise Blvd.	210	2753	906	188	1895	243	160	832	236	332	358	397
206	Sunrise Blvd.	146	4806	5	80	3477	188	421	10	137	20	20	60
207	Zinfandel Dri	1	386	48	1522	936	661	812	904	41	151	717	0
208	Zinfandel Dri	598	1733	0	77	2294	10	46	45	843	0	110	179
209	Zinfandel Dri	45	1716	0	274	1783	95	197	46	76	0	86	326
210	Zinfandel Dri	102	1518	495	0	1665	53	92	57	102	588	26	0
211	Zinfandel Dri	469	1852	70	235	1771	368	301	828	406	84	674	90
212	Zinfandel Dri	0	2032	207	41	1895	0	0	44	0	257	29	19
213	Zinfandel Dri	22	2351	27	730	1822	40	987	244	18	40	146	1236
214	Zinfandel Dri	0	4657	0	0	2125	0	905	119	617	0	0	567
215	Zinfandel Dri	0	2380	0	0	999	0	0	0	0	1231	0	280
216	Mather Field	245	0	68	0	0	0	0	1891	0	19	1923	0
217	Mather Field	680	1724	9	171	1436	0	1243	120	429	5	166	157
218	Mather Field	0	2525	0	0	1015	0	488	0	1045	0	0	0
219	Mather Field	0	1025	0	0	672	0	0	0	0	424	0	52
220	Mather Field	239	141	723	47	47	9	28	1973	211	441	1469	45
221	Mather Blvd.	0	0	0	0	15	109	0	0	0	0	640	0
222	Mather Blvd.	0	50	0	0	0	0	0	0	0	0	640	31
223	C Street & Ai	10	83	227	20	136	8	6	726	8	439	694	40
224	A Street & Zi	44	2007	0	0	1892	370	385	0	44	0	0	0
225	Von Karman St	0	0	0	9	5	0	0	204	0	0	0	0
226	Norden Avenue	0	35	0	0	0	0	15	250	0	0	0	0
227	A Street & Ai	50	76	0	9	34	76	43	731	19	12	687	13
228	International	0	0	0	299	0	109	192	1341	0	0	1465	280
229	International	49	136	0	316	223	206	97	1015	116	10	734	188
230	International	31	194	430	335	397	169	159	1087	65	297	686	204
231	International	684	40	85	0	18	438	391	1220	689	50	1386	0
232	Hazel Avenue	0	0	0	0	562	0	1898	0	453	0	0	0
233	Hazel Avenue	102	4087	0	0	2675	38	0	0	133	90	153	1048
234	White Rock Ro	157	222	76	277	421	248	115	1153	96	290	1376	157
235	White Rock Ro	245	39	369	87	14	41	35	995	123	166	732	18
236	B Street & Pr	4	59	0	25	119	202	112	135	13	0	103	12
237	B Street & Ki	0	59	0	401	101	110	133	0	0	0	0	382
238	B Street & Ai	0	0	0	19	0	120	117	910	0	0	756	7

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.822

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	7	914	170	355	1411	154	502	1206	361	130	288	186
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:	7	914	170	355	1411	154	502	1206	361	130	288	186
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:	7	914	170	355	1411	154	502	1206	361	130	288	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	914	170	355	1411	154	502	1206	361	130	288	186
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	914	170	391	1411	154	502	1206	361	130	288	186

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.11	0.13	0.31	0.10	0.33	0.40	0.24	0.09	0.10	0.12
Crit Vol:	305			196			603			130		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.024

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	214	1314	9	718	2035	262	861	1224	741	34	690	670
Growth Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Initial Bse:	214	1314	0	718	2035	0	861	1224	0	34	690	0
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	214	1314	0	718	2035	0	861	1224	0	34	690	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	1314	0	718	2035	0	861	1224	0	34	690	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00	1.10	1.00	0.00
Final Vol.:	235	1314	0	790	2035	0	947	1224	0	37	690	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.08	0.29	0.00	0.26	0.45	0.00	0.32	0.27	0.00	0.01	0.15	0.00
Crit Vol:	438			395			474			230		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.994

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Split Phase			Split Phase			
Rights:	Include			Ovl			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	2	1	0	3	0	1	1	1	0	0	2

Volume Module:

Base Vol:	820	1769	14	49	1839	352	516	0	1330	17	0	126
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:	820	1769	14	49	1839	352	516	0	1330	17	0	126
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:	820	1769	14	49	1839	352	516	0	1330	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	820	1769	14	49	1839	352	516	0	1330	17	0	126
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	902	1769	14	49	1839	352	568	0	1463	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	2.00	0.00	2.00	0.12	0.00	0.88
Final Sat.:	3000	4465	35	1500	4500	1500	3000	0	3000	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.30	0.40	0.40	0.03	0.41	0.23	0.19	0.00	0.49	0.10	0.00	0.10
Crit Vol:	451			613			284			143		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.246

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	321	2091	151	958	1822	318	294	1151	294	126	773	690
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:	321	2091	151	958	1822	318	294	1151	294	126	773	690
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:	321	2091	151	958	1822	318	294	1151	294	126	773	690
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	321	2091	151	958	1822	318	294	1151	294	126	773	690
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	353	2091	151	1054	1822	318	323	1151	294	139	773	690

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.12	0.46	0.10	0.35	0.40	0.21	0.11	0.38	0.20	0.05	0.17	0.46
Crit Vol:	697			527			576			70		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.950

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	210	2753	906	188	1895	243	160	832	236	332	358	397
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:	210	2753	906	188	1895	243	160	832	236	332	358	397
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:	210	2753	906	188	1895	243	160	832	236	332	358	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	2753	906	188	1895	243	160	832	236	332	358	397
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	231	2753	906	207	1895	243	176	832	236	365	358	437

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.35	1.65
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2026	2474

Capacity Analysis Module:

Vol/Sat:	0.08	0.46	0.60	0.07	0.42	0.16	0.06	0.28	0.16	0.12	0.18	0.18
Crit Vol:	906			104			416			0		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.457

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	146	4806	5	80	3477	188	421	10	137	20	20	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:	146	4806	5	80	3477	188	421	10	137	20	20	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:	146	4806	5	80	3477	188	421	10	137	20	20	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	4806	5	80	3477	188	421	10	137	20	20	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.00	1.00
Final Vol.:	161	4806	5	80	3477	188	421	10	151	22	20	60

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.99	0.01	1.00	1.00	0.01	0.99
Final Sat.:	3000	4495	5	1500	4500	1500	1485	15	1500	1500	15	1485

Capacity Analysis Module:

Vol/Sat:	0.05	1.07	1.07	0.05	0.77	0.13	0.28	0.67	0.10	0.01	1.33	0.04
Crit Vol:	1604			80			422			80		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.101
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: F

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ignore
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 2 0 3 0 1 2 0 3 0 1

Volume Module:

Base Vol:	1	386	48	1522	936	661	812	904	41	151	717	774
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Initial Bse:	1	386	48	1522	936	661	812	904	41	151	717	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	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	1	386	48	1522	936	661	812	904	41	151	717	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	386	48	1522	936	661	812	904	41	151	717	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	0.00
MLF Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	0.00
Final Vol.:	1	386	48	1674	936	661	893	904	41	166	717	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.03	0.56	0.21	0.44	0.30	0.20	0.03	0.06	0.16	0.00
Crit Vol:	129			837			447			239		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #208 Zinfandel Drive & Airpark Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.952
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 1 0 3 0 1 1 0 1 0 2 1 0 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	598	1733	0	77	2294	10	46	45	843	0	110	179
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:	598	1733	0	77	2294	10	46	45	843	0	110	179
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:	598	1733	0	77	2294	10	46	45	843	0	110	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	598	1733	0	77	2294	10	46	45	843	0	110	179
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00	1.00
Final Vol.:	658	1733	0	77	2294	10	46	45	927	0	110	179

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	2.00	1.00	0.38	0.62
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	3000	1500	571	929

Capacity Analysis Module:

Vol/Sat:	0.22	0.39	0.00	0.05	0.51	0.01	0.03	0.03	0.31	0.00	0.19	0.19
Crit Vol:	329			765			46			289		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.970
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 2 0 3 0 1 1 0 3 0 1 1 0 1 0 1 0
 -----|-----|-----|-----|

Volume Module:

Base Vol:	45	1716	0	274	1783	95	197	46	76	0	86	326
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:	45	1716	0	274	1783	95	197	46	76	0	86	326
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:	45	1716	0	274	1783	95	197	46	76	0	86	326
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1716	0	274	1783	95	197	46	76	0	86	326
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	50	1716	0	274	1783	95	197	46	76	0	86	326

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.21	0.79
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	313	1187

Capacity Analysis Module:

Vol/Sat:	0.02	0.38	0.00	0.18	0.40	0.06	0.13	0.03	0.05	0.00	0.27	0.27
Crit Vol:	572			274			197				412	
Crit Moves:	****			****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 180 Critical Vol./Cap. (X): 0.936
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		2	0	3	0	1	
	1	0	0	1	0		1	0	0	1	0	

Volume Module:

Base Vol:	102	1518	495	0	1665	53	92	57	102	588	26	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:	102	1518	495	0	1665	53	92	57	102	588	26	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:	102	1518	495	0	1665	53	92	57	102	588	26	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	1518	495	0	1665	53	92	57	102	588	26	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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	102	1518	495	0	1665	53	92	57	102	588	26	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	0.36	0.64	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	538	962	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.07	0.34	0.33	0.00	0.37	0.04	0.06	0.11	0.11	0.39	0.02	0.00
Crit Vol:	102				555			159		588		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.826

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	469	1852	70	235	1771	368	301	828	406	84	674	90
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:	469	1852	70	235	1771	368	301	828	406	84	674	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:	469	1852	70	235	1771	368	301	828	406	84	674	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	469	1852	70	235	1771	368	301	828	406	84	674	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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00
Final Vol.:	516	1852	70	259	1771	368	331	828	406	92	674	90

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.17	0.41	0.05	0.09	0.39	0.25	0.11	0.18	0.27	0.03	0.15	0.06
Crit Vol:	258			590			166			225		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 102 Critical Vol./Cap. (X): 0.667

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 102 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1	2	0	3	0	1	1	0	0	1	0	1	0	1	0	1

Volume Module:

Base Vol:	0	2032	207	41	1895	0	0	44	0	257	29	19
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	2032	207	41	1895	0	0	44	0	257	29	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2032	207	41	1895	0	0	44	0	257	29	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2032	207	41	1895	0	0	44	0	257	29	19
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	2032	207	45	1895	0	0	44	0	257	29	19

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	4500	1500	3000	4500	1500	1500	1500	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.45	0.14	0.02	0.42	0.00	0.00	0.03	0.00	0.17	0.02	0.01
Crit Vol:	677			23			44			257		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.605

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	22	2351	27	730	1822	40	987	244	18	40	146	1236
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:	22	2351	27	730	1822	40	987	244	18	40	146	1236
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:	22	2351	27	730	1822	40	987	244	18	40	146	1236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	2351	27	730	1822	40	987	244	18	40	146	1236
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:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.00	1.10
Final Vol.:	24	2351	27	803	1822	40	1086	244	18	44	146	1360

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.79	0.21	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4191	309	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.52	0.02	0.27	0.40	0.03	0.36	0.06	0.06	0.01	0.10	0.45
Crit Vol:	784			402			543			680		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.438

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Split Phase			Split Phase			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	1	0	0	0	0	0	1	1	0	1

Volume Module:

Base Vol:	0	4657	0	0	2125	0	905	119	617	0	0	567
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	4657	0	0	2125	0	905	119	617	0	0	567
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4657	0	0	2125	0	905	119	617	0	0	567
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4657	0	0	2125	0	905	119	617	0	0	567
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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	4657	0	0	2125	0	996	119	679	0	0	567

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.30	1.70	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	462	2638	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.75	0.00	0.00	0.69	0.00	0.32	0.26	0.26	0.00	0.00	0.37
Crit Vol:	1164			0			498					567
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.891

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2380	0	0	999	0	0	0	0	1231	0	280
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	2380	0	0	999	0	0	0	0	1231	0	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2380	0	0	999	0	0	0	0	1231	0	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2380	0	0	999	0	0	0	0	1231	0	280
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	1.10	1.00	1.00
Final Vol.:	0	2380	0	0	999	0	0	0	0	1354	0	280

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.48	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.41	0.00	0.17
Crit Vol:	793			0			0			677		
Crit Moves:	****			****						****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 55 Critical Vol./Cap. (X): 0.506

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 55 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	1	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	245	0	68	0	0	0	0	1891	162	19	1923	0
Growth 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
Initial Bse:	245	0	68	0	0	0	0	1891	0	19	1923	0
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:	245	0	68	0	0	0	0	1891	0	19	1923	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	0	68	0	0	0	0	1891	0	19	1923	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	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Vol.:	270	0	68	0	0	0	0	1891	0	19	1923	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.41	0.00	0.01	0.41	0.00
Crit Vol:	135				0			630		19		
Crit Moves:	****							****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.520

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	680	1724	9	171	1436	576	1243	120	429	5	166	157
Growth Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	680	1724	9	171	1436	0	1243	120	429	5	166	157
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	680	1724	9	171	1436	0	1243	120	429	5	166	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	680	1724	9	171	1436	0	1243	120	429	5	166	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.10	1.00	1.00	1.00	1.00	1.00
Final Vol.:	680	1724	9	171	1436	0	1367	120	429	5	166	157

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.43	0.12	0.45	0.03	1.01	0.96
Final Sat.:	1500	4477	23	1500	4500	1500	2140	188	672	46	1518	1436

Capacity Analysis Module:

Vol/Sat:	0.45	0.39	0.39	0.11	0.32	0.00	0.64	0.64	0.64	0.11	0.11	0.11
Crit Vol:	680			479			958			164		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 141 Critical Vol./Cap. (X): 0.859

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 141 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	2525	0	0	1015	0	488	0	1045	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2525	0	0	1015	0	488	0	1045	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2525	0	0	1015	0	488	0	1045	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2525	0	0	1015	0	488	0	1045	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	2525	0	0	1015	0	537	0	1150	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.00	0.00	0.31	0.00	0.33	0.00	0.35	0.00	0.00	0.00
Crit Vol:	842		0		575		0					
Crit Moves:	****		****		****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 38 Critical Vol./Cap. (X): 0.468

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	1025	0	0	672	0	0	0	0	424	0	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:	0	1025	0	0	672	0	0	0	0	424	0	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:	0	1025	0	0	672	0	0	0	0	424	0	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1025	0	0	672	0	0	0	0	424	0	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	1.10	1.00	1.00
Final Vol.:	0	1025	0	0	672	0	0	0	0	466	0	52

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.80	0.00	0.20
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2969	0	331

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.16	0.00	0.16
Crit Vol:	513			0			0			259		
Crit Moves:	****			****						****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.174

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	239	141	723	47	47	9	28	1973	211	441	1469	45
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:	239	141	723	47	47	9	28	1973	211	441	1469	45
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:	239	141	723	47	47	9	28	1973	211	441	1469	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	141	723	47	47	9	28	1973	211	441	1469	45
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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.00	1.00
Final Vol.:	263	141	723	47	47	9	28	1973	211	485	1469	45

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.30	0.70	1.00	0.92	0.91	0.17	1.00	2.00	1.00	2.00	1.94	0.06
Final Sat.:	1953	1047	1500	1369	1369	262	1500	3000	1500	3000	2911	89

Capacity Analysis Module:

Vol/Sat:	0.13	0.13	0.48	0.03	0.03	0.03	0.02	0.66	0.14	0.16	0.50	0.50
Crit Vol:			723			52		986		0		
Crit Moves:			****			****		****		****		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.426
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.6
 Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	15	109	0	0	0	0	640	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	15	109	0	0	0	0	640	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	15	109	0	0	0	0	640	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	15	109	0	0	0	0	640	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 Vol.:	0	0	0	0	15	109	0	0	0	0	640	0

Saturation Flow Module:

Sat/Lane:	0	0	0	281	281	281	0	0	0	751	751	751
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	281	281	0	0	0	0	1502	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.05	0.39	0.00	0.00	0.00	0.00	0.43	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.22			xxxxx			0.43		

Level Of Service Module:

Delay/Veh:	0.0	0.0	0.0	0.0	1.2	4.4	0.0	0.0	0.0	0.0	5.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.2	4.4	0.0	0.0	0.0	0.0	5.0	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	*	B	*
ApproachDel:	xxxxxx			2.3			xxxxxx			5.0		
LOS by Appr:	F			A			F			B		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.505

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.4

Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	50	0	0	0	0	0	0	0	0	640	31
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	50	0	0	0	0	0	0	0	0	640	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	50	0	0	0	0	0	0	0	0	640	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	50	0	0	0	0	0	0	0	0	640	31
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 Vol.:	0	50	0	0	0	0	0	0	0	0	640	31

Saturation Flow Module:

Sat/Lane:	242	242	242	0	0	0	0	0	0	665	665	665
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.09
Final Sat.:	0	484	0	0	0	0	0	0	0	0	1269	61

Capacity Analysis Module:

Vol/Sat:	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50
Crit Moves:	****			****			****			****		
ApproachV/S:	0.10			xxxxx			xxxxx			0.50		

Level Of Service Module:

Delay/Veh:	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	6.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	6.8
LOS by Move:	*	A	*	*	*	*	*	*	*	*	B	B
ApproachDel:	1.5			xxxxxx			xxxxxx			6.8		
LOS by Appr:	A			F			F			B		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #223 C Street & Airpark Drive

Cycle (sec): 114 Critical Vol./Cap. (X): 0.702

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 114 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	10	83	227	20	136	8	6	726	8	439	694	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	83	227	20	136	8	6	726	8	439	694	40
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:	10	83	227	20	136	8	6	726	8	439	694	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	83	227	20	136	8	6	726	8	439	694	40
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 Vol.:	10	83	227	20	136	8	6	726	8	439	694	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.98	0.02	1.00	1.89	0.11
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	2967	33	1500	2837	163

Capacity Analysis Module:

Vol/Sat:	0.01	0.06	0.15	0.01	0.09	0.01	0.00	0.24	0.24	0.29	0.24	0.24
Crit Vol:	227			20			367			439		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 85 Critical Vol./Cap. (X): 0.684
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 85 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Protected Protected Permitted Permitted
 Rights: Include Ovl Ovl Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 3 0 0 0 0 3 0 1 1 0 0 0 0 0

Volume Module:

Base Vol:	44	2007	0	0	1892	370	385	0	44	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	2007	0	0	1892	370	385	0	44	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	44	2007	0	0	1892	370	385	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	2007	0	0	1892	370	385	0	44	0	0	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 Vol.:	44	2007	0	0	1892	370	385	0	44	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	1550	0	1550	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.03	0.43	0.00	0.00	0.41	0.24	0.25	0.00	0.03	0.00	0.00	0.00
Crit Vol:	44				631		385				0	
Crit Moves:	****				****		****					

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.179
 Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.9
 Optimal Cycle: 0 Level Of Service: A

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign
 Rights: Include Include Include Include
 Lanes: 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 0

Volume Module:
 Base Vol: 0 0 0 9 5 0 0 204 0 0 0 0
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 0 0 9 5 0 0 204 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 0 9 5 0 0 204 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 0 9 5 0 0 204 0 0 0 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 Vol.: 0 0 0 9 5 0 0 204 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 0 0 0 232 232 232 571 571 571 0 0 0
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Lanes: 0.00 0.00 0.00 1.00 1.00 0.00 0.00 2.00 0.00 0.00 0.00 0.00
 Final Sat.: 0 0 0 232 232 0 0 1142 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.00 0.00 0.00 0.04 0.02 0.00 0.00 0.18 0.00 0.00 0.00 0.00
 Crit Moves: **** *
 ApproachV/S: xxxxx 0.03 0.18 xxxxx

Level Of Service Module:
 Delay/Veh: 0.0 0.0 0.0 1.2 1.1 0.0 0.0 2.0 0.0 0.0 0.0 0.0
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 0.0 0.0 1.2 1.1 0.0 0.0 2.0 0.0 0.0 0.0 0.0
 LOS by Move: * * * A A * * A *
 ApproachDel: xxxxxx 1.1 2.0 xxxxxx
 LOS by Appr: F A A F

Default Scenario

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.206

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.1

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	35	0	0	0	0	15	250	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	35	0	0	0	0	15	250	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	35	0	0	0	0	15	250	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	35	0	0	0	0	15	250	0	0	0	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 Vol.:	0	35	0	0	0	0	15	250	0	0	0	0

Saturation Flow Module:

Sat/Lane:	250	250	250	0	0	0	642	642	642	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.11	1.89	0.00	0.00	0.00	0.00
Final Sat.:	0	500	0	0	0	0	73	1211	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.07			xxxxx			0.21			xxxxx		

Level Of Service Module:

Delay/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.2	2.2	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.2	2.2	0.0	0.0	0.0	0.0
LOS by Move:	*	A	*	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			2.2			xxxxxx		
LOS by Appr:	A			F			A			F		

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #227 A Street & Airpark Drive
*****Average Delay (sec/veh): 5.8 Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1

Volume Module:

Base Vol:	50	76	0	9	34	76	43	731	19	12	687	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:	50	76	0	9	34	76	43	731	19	12	687	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:	50	76	0	9	34	76	43	731	19	12	687	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	50	76	0	9	34	76	43	731	19	12	687	13

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	55	84	0	10

Critical Gap Module:

MoveUp Time:	3.4	3.3	xxxxx	3.4	3.3	2.6	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	6.5	6.0	xxxxx	6.5	6.0	5.5	5.0	xxxx	xxxxx	5.0	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	1538	1496	xxxxx	1521	1492	687	700	xxxx	xxxxx	750	xxxx	xxxxx
Potent Cap.:	136	179	xxxxx	139	180	621	795	xxxx	xxxxx	753	xxxx	xxxxx
Adj Cap:	0.68	0.92	xxxxx	0.57	0.92	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	92	165	xxxxx	80	166	621	795	xxxx	xxxxx	753	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	83.2	39.9	xxxxx	51.0	27.2	6.6	4.8	xxxx	xxxxx	4.9	xxxx	xxxxx
LOS by Move:	F	*	*	F	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	165	xxxx	xxxx	336	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	39.9	xxxxx	xxxx	13.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	E	*	*	C	*	*	*	*	*	*
ApproachDel:	57.1			15.9			0.3			0.1		

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 88 Critical Vol./Cap. (X): 0.692
 Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 88 Level Of Service: B

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Protected Protected
 Rights: Include Ovl Include Include
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 0 0 0 0 0 1 0 0 0 1 1 0 3 0 0 0 0 2 1 0

Volume Module:

Base Vol:	0	0	0	299	0	109	192	1341	0	0	1465	280
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	299	0	109	192	1341	0	0	1465	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	299	0	109	192	1341	0	0	1465	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	299	0	109	192	1341	0	0	1465	280
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 Vol.:	0	0	0	299	0	109	192	1341	0	0	1465	280

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.52	0.48
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3904	746

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.07	0.12	0.29	0.00	0.00	0.38	0.38
Crit Vol:	0			299			192				582	
Crit Moves:				****			****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 66 Critical Vol./Cap. (X): 0.488

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 66 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected			Protected			Protected			Protected					
Rights:	Ovl			Ovl			Ovl			Ovl					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	3	0	1

Volume Module:

Base Vol:	49	136	0	316	223	206	97	1015	116	10	734	188
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:	49	136	0	316	223	206	97	1015	116	10	734	188
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:	49	136	0	316	223	206	97	1015	116	10	734	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	136	0	316	223	206	97	1015	116	10	734	188
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 Vol.:	49	136	0	316	223	206	97	1015	116	10	734	188

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.05	0.00	0.21	0.07	0.14	0.06	0.23	0.08	0.01	0.16	0.13
Crit Vol:	68			316			338			10		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.872
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: D

 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Ovl Ovl Ovl Ovl
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
 Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 2 0 1
 -----|-----|-----|-----|

Volume Module:

Base Vol:	31	194	430	335	397	169	159	1087	65	297	686	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	194	430	335	397	169	159	1087	65	297	686	204
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:	31	194	430	335	397	169	159	1087	65	297	686	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	194	430	335	397	169	159	1087	65	297	686	204
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 Vol.:	31	194	430	335	397	169	159	1087	65	297	686	204

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.02	0.06	0.29	0.22	0.13	0.11	0.11	0.36	0.04	0.20	0.23	0.14
Crit Vol:			430		335			544		0		
Crit Moves:			****		****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.892
 Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	0	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	684	40	85	0	18	438	391	1220	689	50	1386	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:	684	40	85	0	18	438	391	1220	689	50	1386	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:	684	40	85	0	18	438	391	1220	689	50	1386	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	684	40	85	0	18	438	391	1220	689	50	1386	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:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	752	40	85	0	18	438	391	1220	689	50	1386	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.72	0.09	0.19	0.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	0.00
Final Sat.:	2572	137	291	0	1500	1500	1500	3000	1500	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.29	0.29	0.29	0.00	0.01	0.29	0.26	0.41	0.46	0.03	0.31	0.00
Crit Vol:	439					438	0				462	
Crit Moves:	****					****	****				****	

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 102 Critical Vol./Cap. (X): 0.803
 Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
 Optimal Cycle: 102 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	562	0	1898	0	453	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	562	0	1898	0	453	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	562	0	1898	0	453	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	562	0	1898	0	453	0	0	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	1.10	1.00	1.10	1.00	1.00	1.00
Final Vol.:	0	0	0	0	562	0	2088	0	498	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.00	0.63	0.00	0.30	0.00	0.00	0.00
Crit Vol:	0				281		1044			0		
Crit Moves:					****		****					

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.344

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1
	1	0	0	1	1	0	0	1	1	1	0	1

Volume Module:

Base Vol:	102	4087	0	0	2675	38	0	0	133	90	153	1048
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:	102	4087	0	0	2675	38	0	0	133	90	153	1048
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:	102	4087	0	0	2675	38	0	0	133	90	153	1048
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	4087	0	0	2675	38	0	0	133	90	153	1048
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	1.10
Final Vol.:	102	4087	0	0	2675	38	0	0	133	90	153	1153

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.23	1.77
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	351	2649

Capacity Analysis Module:

Vol/Sat:	0.07	0.91	0.00	0.00	0.59	0.03	0.00	0.00	0.09	0.06	0.44	0.44
Crit Vol:	1362			0			0			653		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.910

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	157	222	76	277	421	248	115	1153	96	290	1376	157
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:	157	222	76	277	421	248	115	1153	96	290	1376	157
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:	157	222	76	277	421	248	115	1153	96	290	1376	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	222	76	277	421	248	115	1153	96	290	1376	157
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 Vol.:	157	222	76	277	421	248	115	1153	96	290	1376	157

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.26	0.74	1.00	2.00	1.00	1.00	2.69	0.31
Final Sat.:	1500	1500	1500	1500	1888	1112	1500	3000	1500	1500	4039	461

Capacity Analysis Module:

Vol/Sat:	0.10	0.15	0.05	0.18	0.22	0.22	0.08	0.38	0.06	0.19	0.34	0.34
Crit Vol:	222			277			577			290		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 77 Critical Vol./Cap. (X): 0.559

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 77 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	245	39	369	87	14	41	35	995	123	166	732	18
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:	245	39	369	87	14	41	35	995	123	166	732	18
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:	245	39	369	87	14	41	35	995	123	166	732	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	245	39	369	87	14	41	35	995	123	166	732	18
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	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	245	39	369	96	14	41	35	995	123	166	732	18

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.75	0.25	1.00	1.00	2.67	0.33	1.00	2.93	0.07
Final Sat.:	1500	1500	1500	2618	382	1500	1500	4005	495	1500	4392	108

Capacity Analysis Module:

Vol/Sat:	0.16	0.03	0.25	0.04	0.04	0.03	0.02	0.25	0.25	0.11	0.17	0.17
Crit Vol:	245				55			373		166		
Crit Moves:	****				****			****		****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 42 Critical Vol./Cap. (X): 0.195

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 42 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1	0

Volume Module:

Base Vol:	4	59	0	25	119	202	112	135	13	0	103	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:	4	59	0	25	119	202	112	135	13	0	103	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:	4	59	0	25	119	202	112	135	13	0	103	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	59	0	25	119	202	112	135	13	0	103	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 Vol.:	4	59	0	25	119	202	112	135	13	0	103	12

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.82	0.18	1.00	1.79	0.21
Final Sat.:	1500	1500	0	1500	1500	1500	1500	2736	264	1500	2687	313

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.00	0.02	0.08	0.13	0.07	0.05	0.05	0.00	0.04	0.04
Crit Vol:	4			119			112			57		
Crit Moves:	****			****			****			****		

Default Scenario

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Level Of Service Computation Report

Circular 212 Planning Method (Base Volume Alternative)

Intersection #237 B Street & Kilgore Road

Cycle (sec): 97 Critical Vol./Cap. (X): 0.650

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 97 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	0	59	0	401	101	110	133	0	0	0	0	382
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	59	0	401	101	110	133	0	0	0	0	382
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	59	0	401	101	110	133	0	0	0	0	382
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	59	0	401	101	110	133	0	0	0	0	382
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 Vol.:	0	59	0	401	101	110	133	0	0	0	0	382

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00
Final Sat.:	1500	1500	0	1500	1500	1500	1500	3000	0	1500	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.04	0.00	0.27	0.07	0.07	0.09	0.00	0.00	0.00	0.00	0.25
Crit Vol:	59			401			133					382
Crit Moves:	****			****			****					****

Default Scenario

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Level Of Service Computation Report

1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #238 B Street & Airpark Drive

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Rights:	Include	Include	Include	Include
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0

Volume Module:

Base Vol:	0	0	0	19	0	120	117	910	0	0	756	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	19	0	120	117	910	0	0	756	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	19	0	120	117	910	0	0	756	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	19	0	120	117	910	0	0	756	7

Adjusted Volume Module:

Grade:	0%	0%	0%	0%
% Cycle/Cars:	xxxx	xxxx	xxxx	xxxx
% Truck/Comb:	xxxx	xxxx	xxxx	xxxx
PCE Adj:	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx	xxxx	xxxx
Trck/Cmb PCE:	xxxx	xxxx	xxxx	xxxx
Adj Vol.:	0	0	0	21

Critical Gap Module:

MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	7.0	xxxx	5.5	5.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	1787	xxxx	382	763	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	76	xxxx	887	668	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.81	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	62	xxxx	887	668	xxxx	xxxxx	xxxx	xxxx	xxxxx

Level Of Service Module:

Stopped Del:	xxxxx	xxxx	xxxxx	84.0	xxxx	4.7	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	A	B	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0			15.5			0.8			0.0		

**13. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH PROPOSED PROJECT
CONDITIONS
A.M. PEAK HOUR**

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	464	1183	133	153	924	530	122	150	10	236	1089	413
202	Sunrise Blvd.	794	1999	20	478	1024	1338	75	463	76	35	1003	1092
203	Sunrise Blvd.	894	2544	9	137	1336	666	216	0	548	3	0	40
204	Sunrise Blvd.	812	1713	31	695	1791	352	180	706	306	277	1470	822
205	Sunrise Blvd.	244	2010	111	642	2807	484	241	205	169	919	603	318
206	Sunrise Blvd.	158	3002	10	40	5277	450	131	10	333	40	15	40
207	Zinfandel Dri	83	1086	116	506	158	558	592	587	0	39	1096	1433
209	Zinfandel Dri	131	1830	0	0	1494	174	28	0	69	0	0	0
210	Zinfandel Dri	507	1837	268	0	1447	100	29	10	260	237	33	0
211	Zinfandel Dri	339	1590	97	44	1451	137	301	687	564	80	675	248
212	Zinfandel Dri	0	1688	171	1	1564	0	0	3	0	103	52	3
213	Zinfandel Dri	21	1541	26	1703	2380	925	126	95	13	22	178	1487
214	Zinfandel Dri	0	3089	0	0	3440	0	151	692	1760	0	0	65
215	Zinfandel Dri	0	1019	0	0	1080	0	0	0	0	2057	0	190
216	Mather Field	74	0	10	0	0	0	0	2110	221	65	1306	0
217	Mather Field	287	849	3	225	1846	929	418	153	442	9	113	123
218	Mather Field	0	1456	0	0	1538	0	77	0	1450	0	0	0
219	Mather Field	0	676	0	0	940	0	0	0	0	652	0	230
220	Mather Field	407	39	187	25	85	20	13	1088	393	815	1433	9
221	Mather Blvd.	0	0	0	0	32	41	0	0	0	5	127	0
222	Mather Blvd.	0	4	0	0	0	0	0	0	0	0	132	8
224	A Street & Zi	32	1659	0	14	1552	526	320	1	13	0	3	44
225	Von Karman St	0	0	0	17	14	0	0	390	0	0	0	0
226	Norden Avenue	0	3	5	0	0	0	1	344	0	0	0	0
227	A Street & Ai	278	21	0	0	5	164	166	174	499	0	33	0
228	International	0	0	0	215	0	159	100	1508	0	0	995	237
229	International	133	191	1	79	39	64	205	679	35	0	865	248
230	International	8	296	136	82	66	105	157	565	23	307	995	292
231	International	448	14	36	0	29	317	375	1469	636	118	840	0
232	Hazel Avenue	0	0	0	0	1995	0	1047	0	547	0	0	0
233	Hazel Avenue	107	1406	0	0	4559	54	0	0	156	68	48	521
234	White Rock Ro	32	297	256	77	138	130	204	1506	117	62	1815	257
235	White Rock Ro	50	7	51	17	35	10	42	886	321	493	1762	161
236	B Street & Pr	21	76	0	26	17	30	156	31	8	0	99	91
237	B Street & Ki	0	0	0	258	0	96	34	24	0	0	84	383
240	C Street and	0	0	0	7	0	180	30	348	0	0	475	1
241	Zinfandel Dri	0	2684	325	47	1442	212	55	12	0	132	37	30

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	D	xxxxx	0.871	D	xxxxx	0.871	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	D	xxxxx	0.851	D	xxxxx	0.851	+ 0.000 V/C
#203 Sunrise Blvd. & International	C	xxxxx	0.759	C	xxxxx	0.759	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	F	xxxxx	1.055	F	xxxxx	1.055	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	F	xxxxx	1.080	F	xxxxx	1.080	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.447	F	xxxxx	1.447	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	D	xxxxx	0.851	D	xxxxx	0.851	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.424	A	xxxxx	0.424	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	B	xxxxx	0.655	B	xxxxx	0.655	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	C	xxxxx	0.725	C	xxxxx	0.725	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.446	A	xxxxx	0.446	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.448	F	xxxxx	1.448	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.719	F	xxxxx	1.719	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	E	xxxxx	0.951	E	xxxxx	0.951	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.520	A	xxxxx	0.520	+ 0.000 V/C
#217 Mather Field Road & Rockingham	F	xxxxx	1.080	F	xxxxx	1.080	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	E	xxxxx	0.905	E	xxxxx	0.905	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.552	A	xxxxx	0.552	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	C	xxxxx	0.800	C	xxxxx	0.800	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	1.5	0.110	A	1.5	0.110	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	1.5	0.102	A	1.5	0.102	+ 0.000 V/C
#224 A Street & Zinfandel Drive	B	xxxxx	0.623	B	xxxxx	0.623	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	3.4	0.336	A	3.4	0.336	+ 0.000 V/C

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Default Scenario

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 Villages of Zinfandel
 Cumulative Conditions - With Proposed Project
 AM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	2.3	0.221	A	2.3	0.221	+ 0.000 V/C
#227 A Street & Airpark Drive	B	xxxxx	0.631	B	xxxxx	0.631	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.468	A	xxxxx	0.468	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.445	A	xxxxx	0.445	+ 0.000 V/C
#230 International Drive & Kilgore	A	xxxxx	0.590	A	xxxxx	0.590	+ 0.000 V/C
#231 International Drive & Femoyer	C	xxxxx	0.732	C	xxxxx	0.732	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	E	xxxxx	0.927	E	xxxxx	0.927	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	F	xxxxx	1.274	F	xxxxx	1.274	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	D	xxxxx	0.846	D	xxxxx	0.846	+ 0.000 V/C
#235 White Rock Road & Prospect Par	B	xxxxx	0.654	B	xxxxx	0.654	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.299	A	xxxxx	0.299	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.506	A	xxxxx	0.506	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.298	A	xxxxx	0.298	+ 0.000 V/C
#241 Zinfandel Drive and Mather Bou	C	xxxxx	0.724	C	xxxxx	0.724	+ 0.000 V/C

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.871

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	464	1183	133	153	924	530	122	150	10	236	1089	413
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:	464	1183	133	153	924	530	122	150	10	236	1089	413
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:	464	1183	133	153	924	530	122	150	10	236	1089	413
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	1183	133	153	924	530	122	150	10	236	1089	413
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 Vol.:	464	1183	133	153	924	530	122	150	10	236	1089	413

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.26	0.09	0.05	0.21	0.35	0.08	0.05	0.01	0.16	0.36	0.28
Crit Vol:	232					530	0			545		
Crit Moves:	****					****	****			****		

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.851

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ignore					Ignore					Ignore					Ignore				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	794	1999	20	478	1024	1338	75	463	76	35	1003	1092
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:	794	1999	20	478	1024	1338	75	463	76	35	1003	1092
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	794	1999	0	478	1024	0	75	463	0	35	1003	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	794	1999	0	478	1024	0	75	463	0	35	1003	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Vol.:	794	1999	0	478	1024	0	75	463	0	35	1003	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.26	0.44	0.00	0.16	0.23	0.00	0.03	0.10	0.00	0.01	0.22	0.00
Crit Vol:	666			239			38			334		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 141 Critical Vol./Cap. (X): 0.759
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 141 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	3	0	1	1	0	0	2

Volume Module:

Base Vol:	894	2544	9	137	1336	666	216	0	548	3	0	40
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:	894	2544	9	137	1336	666	216	0	548	3	0	40
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:	894	2544	9	137	1336	666	216	0	548	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	894	2544	9	137	1336	666	216	0	548	3	0	40
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 Vol.:	894	2544	9	137	1336	666	216	0	548	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	2.00	0.00	2.00	0.07	0.00	0.93
Final Sat.:	3000	4484	16	1500	4500	1500	3000	0	3000	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.30	0.57	0.57	0.09	0.30	0.44	0.07	0.00	0.18	0.03	0.00	0.03
Crit Vol:	851			137			108					43
Crit Moves:	****			****			****					****

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.055

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	812	1713	31	695	1791	352	180	706	306	277	1470	822
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:	812	1713	31	695	1791	352	180	706	306	277	1470	822
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	812	1713	31	695	1791	352	180	706	306	277	1470	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	812	1713	31	695	1791	352	180	706	306	277	1470	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	812	1713	31	695	1791	352	180	706	306	277	1470	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.27	0.38	0.02	0.23	0.40	0.23	0.06	0.24	0.20	0.09	0.33	0.00
Crit Vol:	406			597			90			490		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.080

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	244	2010	111	642	2807	484	241	205	169	919	603	318
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:	244	2010	111	642	2807	484	241	205	169	919	603	318
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:	244	2010	111	642	2807	484	241	205	169	919	603	318
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	2010	111	642	2807	484	241	205	169	919	603	318
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 Vol.:	244	2010	111	642	2807	484	241	205	169	919	603	318

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.96	1.04
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2946	1554

Capacity Analysis Module:

Vol/Sat:	0.08	0.34	0.07	0.21	0.62	0.32	0.08	0.07	0.11	0.31	0.20	0.20
Crit Vol:	122			936			103			460		
Crit Moves:	****			****			****			****		

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.447

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	3	0	1	0

Volume Module:

Base Vol:	158	3002	10	40	5277	450	131	10	333	40	15	40
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:	158	3002	10	40	5277	450	131	10	333	40	15	40
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:	158	3002	10	40	5277	450	131	10	333	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	3002	10	40	5277	450	131	10	333	40	15	40
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 Vol.:	158	3002	10	40	5277	450	131	10	333	40	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.55	0.04	1.41	1.00	0.16	0.84
Final Sat.:	3000	4485	15	1500	4500	1500	829	63	2108	1500	237	1263

Capacity Analysis Module:

Vol/Sat:	0.05	0.67	0.67	0.03	1.17	0.30	0.16	0.16	0.16	0.03	0.06	0.03
Crit Vol:	79				1759			237			95	
Crit Moves:	****				****			****			****	

Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.851

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	83	1086	116	506	158	558	592	587	0	39	1096	1433
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:	83	1086	116	506	158	558	592	587	0	39	1096	1433
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	83	1086	116	506	158	558	592	587	0	39	1096	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1086	116	506	158	558	592	587	0	39	1096	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	83	1086	116	506	158	558	592	587	0	39	1096	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.24	0.08	0.17	0.04	0.37	0.20	0.13	0.00	0.01	0.24	0.00
Crit Vol:	362			253			296			365		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 59 Critical Vol./Cap. (X): 0.424

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	131	1830	0	0	1494	174	28	0	69	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	131	1830	0	0	1494	174	28	0	69	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	131	1830	0	0	1494	174	28	0	69	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	131	1830	0	0	1494	174	28	0	69	0	0	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 Vol.:	131	1830	0	0	1494	174	28	0	69	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.29	0.00	0.71	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	447	0	1103	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.08	0.39	0.00	0.00	0.32	0.11	0.06	0.00	0.06	0.00	0.00	0.00
Crit Vol:	131				498		28				0	
Crit Moves:	****				****		****					

Villages of Zinfandel
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AM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 99 Critical Vol./Cap. (X): 0.655

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 99 Level Of Service: B

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	507	1837	268	0	1447	100	29	10	260	237	33	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:	507	1837	268	0	1447	100	29	10	260	237	33	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:	507	1837	268	0	1447	100	29	10	260	237	33	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	507	1837	268	0	1447	100	29	10	260	237	33	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 Vol.:	507	1837	268	0	1447	100	29	10	260	237	33	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.17	0.41	0.18	0.00	0.32	0.07	0.02	0.01	0.17	0.16	0.02	0.00
Crit Vol:	254			482			10			237		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 124 Critical Vol./Cap. (X): 0.725

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 124 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	339	1590	97	44	1451	137	301	687	564	80	675	248
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:	339	1590	97	44	1451	137	301	687	564	80	675	248
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:	339	1590	97	44	1451	137	301	687	564	80	675	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	339	1590	97	44	1451	137	301	687	564	80	675	248
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 Vol.:	339	1590	97	44	1451	137	301	687	564	80	675	248

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.11	0.35	0.06	0.01	0.32	0.09	0.10	0.15	0.38	0.03	0.15	0.17
Crit Vol:	0				484				564	40		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 61 Critical Vol./Cap. (X): 0.446
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 61 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	1688	171	1	1564	0	0	3	0	103	52	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1688	171	1	1564	0	0	3	0	103	52	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:	0	1688	171	1	1564	0	0	3	0	103	52	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1688	171	1	1564	0	0	3	0	103	52	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 Vol.:	0	1688	171	1	1564	0	0	3	0	103	52	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.95	0.05
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1418	82

Capacity Analysis Module:

Vol/Sat:	0.00	0.38	0.11	0.00	0.35	0.00	0.00	0.00	0.00	0.07	0.04	0.04
Crit Vol:	563			1			3			103		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.448

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	21	1541	26	1703	2380	925	126	95	13	22	178	1487
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:	21	1541	26	1703	2380	925	126	95	13	22	178	1487
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:	21	1541	26	1703	2380	925	126	95	13	22	178	1487
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	1541	26	1703	2380	925	126	95	13	22	178	1487
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 Vol.:	21	1541	26	1703	2380	925	126	95	13	22	178	1487

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.64	0.36	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3958	542	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.34	0.02	0.57	0.53	0.62	0.04	0.02	0.02	0.01	0.12	0.50
Crit Vol:	514			852			63					744
Crit Moves:	****			****			****					****

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.719

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	3089	0	0	3440	0	151	692	1760	0	0	65
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	3089	0	0	3440	0	151	692	1760	0	0	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3089	0	0	3440	0	151	692	1760	0	0	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3089	0	0	3440	0	151	692	1760	0	0	65
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 Vol.:	0	3089	0	0	3440	0	151	692	1760	0	0	65

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1550	3100	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.50	0.00	0.00	1.11	0.00	0.10	0.45	0.57	0.00	0.00	0.04
Crit Vol:	0				1720				880			65
Crit Moves:	****				****				****			****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.951

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	0	0	1

Volume Module:

Base Vol:	0	1019	0	0	1080	0	0	0	0	2057	0	190
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	1019	0	0	1080	0	0	0	0	2057	0	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1019	0	0	1080	0	0	0	0	2057	0	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1019	0	0	1080	0	0	0	0	2057	0	190
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 Vol.:	0	1019	0	0	1080	0	0	0	0	2057	0	190

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.62	0.00	0.12
Crit Vol:	0				540			0		1029		
Crit Moves:	****				****					****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 56 Critical Vol./Cap. (X): 0.520

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Ovl			Include			Ignore			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0	3	0	0

Volume Module:

Base Vol:	74	0	10	0	0	0	0	2110	221	65	1306	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:	74	0	10	0	0	0	0	2110	221	65	1306	0
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:	74	0	10	0	0	0	0	2110	0	65	1306	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	0	10	0	0	0	0	2110	0	65	1306	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	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
Final Vol.:	74	0	10	0	0	0	0	2110	0	65	1306	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.45	0.00	0.04	0.28	0.00
Crit Vol:	37				0			703		65		
Crit Moves:	****							****		****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.080

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	3	1	0	0	1	0	1

Volume Module:

Base Vol:	287	849	3	225	1846	929	418	153	442	9	113	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:	287	849	3	225	1846	929	418	153	442	9	113	123
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	287	849	3	225	1846	0	418	153	442	9	113	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	287	849	3	225	1846	0	418	153	442	9	113	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	287	849	3	225	1846	0	418	153	442	9	113	123

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.99	0.01	1.00	3.00	1.00	1.00	0.26	0.74	0.07	0.93	1.00
Final Sat.:	1500	4484	16	1500	4500	1500	1500	386	1114	110	1390	1500

Capacity Analysis Module:

Vol/Sat:	0.19	0.19	0.19	0.15	0.41	0.00	0.28	0.40	0.40	0.08	0.08	0.08
Crit Vol:	287			615			595			123		
Crit Moves:	****			****			****			****		

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.905

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1456	0	0	1538	0	77	0	1450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1456	0	0	1538	0	77	0	1450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1456	0	0	1538	0	77	0	1450	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1456	0	0	1538	0	77	0	1450	0	0	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 Vol.:	0	1456	0	0	1538	0	77	0	1450	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.29	0.00	0.00	0.47	0.00	0.05	0.00	0.44	0.00	0.00	0.00
Crit Vol:	0				769				725	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 45 Critical Vol./Cap. (X): 0.552

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 45 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	676	0	0	940	0	0	0	0	652	0	230
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	676	0	0	940	0	0	0	0	652	0	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	676	0	0	940	0	0	0	0	652	0	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	676	0	0	940	0	0	0	0	652	0	230
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 Vol.:	0	676	0	0	940	0	0	0	0	652	0	230

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.48	0.00	0.52
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2439	0	861

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.20	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.27	0.00	0.27
Crit Vol:	0			470			0			441		
Crit Moves:	****			****						****		

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 170 Critical Vol./Cap. (X): 0.800

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 170 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	407	39	187	25	85	20	13	1088	393	815	1433	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	407	39	187	25	85	20	13	1088	393	815	1433	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	407	39	187	25	85	20	13	1088	393	815	1433	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	407	39	187	25	85	20	13	1088	393	815	1433	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	407	39	187	25	85	20	13	1088	393	815	1433	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.83	0.17	1.00	0.38	1.31	0.31	1.00	2.00	1.00	2.00	1.99	0.01
Final Sat.:	2738	262	1500	577	1962	462	1500	3000	1500	3000	2981	19

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.12	0.04	0.04	0.04	0.01	0.36	0.26	0.27	0.48	0.48
Crit Vol:	223			25				544		408		
Crit Moves:	****			****				****		****		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.110

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.5

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0
	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	32	41	0	0	0	5	127	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	32	41	0	0	0	5	127	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	32	41	0	0	0	5	127	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	32	41	0	0	0	5	127	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 Vol.:	0	0	0	0	32	41	0	0	0	5	127	0

Saturation Flow Module:

Sat/Lane:	0	0	0	372	372	372	0	0	0	606	606	606
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.08	1.92	0.00
Final Sat.:	0	0	0	0	372	372	0	0	0	46	1166	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.09	0.11	0.00	0.00	0.00	0.11	0.11	0.00
Crit Moves:			****			****			****	****		
ApproachV/S:	xxxxx			0.10			xxxxx			0.11		
Delay/Veh:	0.0	0.0	0.0	0.0	1.4	1.5	0.0	0.0	0.0	1.5	1.5	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.4	1.5	0.0	0.0	0.0	1.5	1.5	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.5			xxxxxx			1.5		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			1.5			xxxxxx			1.5		
LOS by Appr:	F			A			F			A		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.102

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.5

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	4	0	0	0	0	0	0	0	0	132	8
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	4	0	0	0	0	0	0	0	0	132	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:	0	4	0	0	0	0	0	0	0	0	132	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4	0	0	0	0	0	0	0	0	132	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 Vol.:	0	4	0	0	0	0	0	0	0	0	132	8

Saturation Flow Module:

Sat/Lane:	222	222	222	0	0	0	0	0	0	686	686	686
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.89	0.11
Final Sat.:	0	444	0	0	0	0	0	0	0	0	1294	78

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
Crit Moves:	****			****			****			****		
ApproachV/S:	0.01			xxxxx			xxxxx			0.10		
Delay/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
LOS by Move:	*	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.0			xxxxxx			xxxxxx			1.5		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.0			xxxxxx			xxxxxx			1.5		
LOS by Appr:	A			F			F			A		

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 72 Critical Vol./Cap. (X): 0.623

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 72 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	32	1659	0	14	1552	526	320	1	13	0	3	44
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	1659	0	14	1552	526	320	1	13	0	3	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	1659	0	14	1552	526	320	1	13	0	3	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	1659	0	14	1552	526	320	1	13	0	3	44
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 Vol.:	32	1659	0	14	1552	526	320	1	13	0	3	44

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.07	0.93	1.00	0.06	0.94
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	107	1393	1500	96	1404

Capacity Analysis Module:

Vol/Sat:	0.02	0.37	0.00	0.01	0.34	0.35	0.21	0.01	0.01	0.00	0.03	0.03
Crit Vol:	553			14			320			47		
Crit Moves:	****			****			****			****		

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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.336

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 3.4

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	17	14	0	0	390	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	17	14	0	0	390	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	17	14	0	0	390	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	17	14	0	0	390	0	0	0	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 Vol.:	0	0	0	17	14	0	0	390	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	237	237	237	581	581	581	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	237	237	0	0	1162	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.06	0.00	0.00	0.34	0.00	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx			0.07			0.34			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	3.6	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.3	1.3	0.0	0.0	3.6	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			1.3			3.6			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.3			3.6			xxxxxx		
LOS by Appr:	F			A			A			F		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.221

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	3	5	0	0	0	1	344	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3	5	0	0	0	1	344	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3	5	0	0	0	1	344	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	5	0	0	0	1	344	0	0	0	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 Vol.:	0	3	5	0	0	0	1	344	0	0	0	0

Saturation Flow Module:

Sat/Lane:	211	211	211	0	0	0	782	782	782	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.00	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.00
Final Sat.:	0	211	211	0	0	0	5	1559	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.02	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.00
Crit Moves:			****			****	****					****
ApproachV/S:	0.02			xxxxx			0.22			xxxxx		
Delay/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	2.3	2.3	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.1			xxxxxx			2.3			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.1			xxxxxx			2.3			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.631

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	278	21	0	0	5	164	166	174	499	0	33	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:	278	21	0	0	5	164	166	174	499	0	33	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:	278	21	0	0	5	164	166	174	499	0	33	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	21	0	0	5	164	166	174	499	0	33	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 Vol.:	278	21	0	0	5	164	166	174	499	0	33	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.03	0.97	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	44	1456	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.19	0.01	0.00	0.00	0.11	0.11	0.11	0.12	0.33	0.00	0.02	0.00
Crit Vol:	278				169				499	0		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 51 Critical Vol./Cap. (X): 0.468

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	215	0	159	100	1508	0	0	995	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:	0	0	0	215	0	159	100	1508	0	0	995	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:	0	0	0	215	0	159	100	1508	0	0	995	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	215	0	159	100	1508	0	0	995	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 Vol.:	0	0	0	215	0	159	100	1508	0	0	995	237

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.42	0.58
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3755	895

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.14	0.00	0.10	0.06	0.32	0.00	0.00	0.26	0.26
Crit Vol:	0			215			100				411	
Crit Moves:				****			****				****	

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 61 Critical Vol./Cap. (X): 0.445

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 61 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	133	191	1	79	39	64	205	679	35	0	865	248
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	191	1	79	39	64	205	679	35	0	865	248
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	191	1	79	39	64	205	679	35	0	865	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	191	1	79	39	64	205	679	35	0	865	248
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 Vol.:	133	191	1	79	39	64	205	679	35	0	865	248

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.09	0.06	0.00	0.05	0.01	0.04	0.14	0.15	0.02	0.00	0.19	0.17
Crit Vol:	96			79			205				288	
Crit Moves:	****			****			****				****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 83 Critical Vol./Cap. (X): 0.590

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	8	296	136	82	66	105	157	565	23	307	995	292
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	296	136	82	66	105	157	565	23	307	995	292
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:	8	296	136	82	66	105	157	565	23	307	995	292
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	296	136	82	66	105	157	565	23	307	995	292
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 Vol.:	8	296	136	82	66	105	157	565	23	307	995	292

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.10	0.09	0.05	0.02	0.07	0.10	0.19	0.02	0.20	0.33	0.19
Crit Vol:	148			82			157			498		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 127 Critical Vol./Cap. (X): 0.732

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 127 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	1	1	0	2	1	0	1

Volume Module:

Base Vol:	448	14	36	0	29	317	375	1469	636	118	840	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:	448	14	36	0	29	317	375	1469	636	118	840	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:	448	14	36	0	29	317	375	1469	636	118	840	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	448	14	36	0	29	317	375	1469	636	118	840	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 Vol.:	448	14	36	0	29	317	375	1469	636	118	840	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.80	0.06	0.14	0.00	1.00	1.00	1.00	2.09	0.91	1.00	3.00	0.00
Final Sat.:	2699	84	217	0	1500	1500	1500	3140	1360	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.17	0.17	0.17	0.00	0.02	0.21	0.25	0.47	0.47	0.08	0.19	0.00
Crit Vol:	249				29			702		118		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.927

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	1995	0	1047	0	547	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	1995	0	1047	0	547	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	1995	0	1047	0	547	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1995	0	1047	0	547	0	0	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 Vol.:	0	0	0	0	1995	0	1047	0	547	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	1.97	0.01	1.02	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3251	0	1699	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.60	0.00	0.32	0.00	0.32	0.00	0.00	0.00
Crit Vol:	0				997		531			0		
Crit Moves:					****		****					

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Villages of Zinfandel
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.274

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	1406	0	0	4559	54	0	0	156	68	48	521
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:	107	1406	0	0	4559	54	0	0	156	68	48	521
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:	107	1406	0	0	4559	54	0	0	156	68	48	521
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1406	0	0	4559	54	0	0	156	68	48	521
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 Vol.:	107	1406	0	0	4559	54	0	0	156	68	48	521

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.17	1.83
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	253	2747

Capacity Analysis Module:

Vol/Sat:	0.07	0.31	0.00	0.00	1.01	0.04	0.00	0.00	0.10	0.05	0.19	0.19
Crit Vol:	107				1520		0			285		
Crit Moves:	****				****		****			****		

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.846

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	32	297	256	77	138	130	204	1506	117	62	1815	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	297	256	77	138	130	204	1506	117	62	1815	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	297	256	77	138	130	204	1506	117	62	1815	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	297	256	77	138	130	204	1506	117	62	1815	257
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 Vol.:	32	297	256	77	138	130	204	1506	117	62	1815	257

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.03	0.97	1.00	2.00	1.00	1.00	2.63	0.37
Final Sat.:	1500	1500	1500	1500	1545	1455	1500	3000	1500	1500	3942	558

Capacity Analysis Module:

Vol/Sat:	0.02	0.20	0.17	0.05	0.09	0.09	0.14	0.50	0.08	0.04	0.46	0.46
Crit Vol:	297			77			204				691	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 98 Critical Vol./Cap. (X): 0.654

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 98 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	1	1	0	2	1	0	0

Volume Module:

Base Vol:	50	7	51	17	35	10	42	886	321	493	1762	161
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:	50	7	51	17	35	10	42	886	321	493	1762	161
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:	50	7	51	17	35	10	42	886	321	493	1762	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	7	51	17	35	10	42	886	321	493	1762	161
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 Vol.:	50	7	51	17	35	10	42	886	321	493	1762	161

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.20	0.80	1.00	2.75	0.25
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3303	1197	1500	4123	377

Capacity Analysis Module:

Vol/Sat:	0.03	0.00	0.03	0.01	0.02	0.01	0.03	0.27	0.27	0.33	0.43	0.43
Crit Vol:	50				35			402		493		
Crit Moves:	****				****			****		****		

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 48 Critical Vol./Cap. (X): 0.299

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 48 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1

Volume Module:

Base Vol:	21	76	0	26	17	30	156	31	8	0	99	91
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:	21	76	0	26	17	30	156	31	8	0	99	91
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:	21	76	0	26	17	30	156	31	8	0	99	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	76	0	26	17	30	156	31	8	0	99	91
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 Vol.:	21	76	0	26	17	30	156	31	8	0	99	91

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.79	0.21	1.00	0.52	0.48
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1192	308	1500	782	718

Capacity Analysis Module:

Vol/Sat:	0.01	0.05	0.00	0.02	0.01	0.02	0.10	0.03	0.03	0.00	0.13	0.13
Crit Vol:	76			26			156			190		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 69 Critical Vol./Cap. (X): 0.506

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 69 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	258	0	96	34	24	0	0	84	383
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	258	0	96	34	24	0	0	84	383
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	258	0	96	34	24	0	0	84	383
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	258	0	96	34	24	0	0	84	383
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 Vol.:	0	0	0	258	0	96	34	24	0	0	84	383

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.18	0.82
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	270	1230

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.06	0.02	0.02	0.00	0.00	0.31	0.31
Crit Vol:	0			258			34				467	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.298

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 32 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	7	0	180	30	348	0	0	475	1
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	7	0	180	30	348	0	0	475	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	7	0	180	30	348	0	0	475	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	7	0	180	30	348	0	0	475	1
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 Vol.:	0	0	0	7	0	180	30	348	0	0	475	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.12	0.02	0.12	0.00	0.00	0.16	0.00
Crit Vol:	0					180	30				238	
Crit Moves:						****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
AM Peak Hour

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

Intersection #241 Zinfandel Drive and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.724

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	0	2684	325	47	1442	212	55	12	0	132	37	30
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	2684	325	47	1442	212	55	12	0	132	37	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2684	325	47	1442	212	55	12	0	132	37	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2684	325	47	1442	212	55	12	0	132	37	30
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 Vol.:	0	2684	325	47	1442	212	55	12	0	132	37	30

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.55	0.45
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	828	672

Capacity Analysis Module:

Vol/Sat:	0.00	0.60	0.22	0.03	0.32	0.14	0.04	0.01	0.00	0.09	0.04	0.04
Crit Vol:	895			47			12			132		
Crit Moves:	****			****			****			****		

**14. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH PROPOSED PROJECT
CONDITIONS
P.M. PEAK HOUR**

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

Scenario Report

Scenario: Default Scenario

Command: Default Command
Volume: Default Volume
Geometry: Default Geometry
Impact Fee: Default Impact Fee
Trip Generation: Default Trip Generation
Trip Distribution: Default Trip Distribution
Paths: Default Paths
Routes: Default Routes
Configuration: Default Configuration

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	8	940	166	310	1407	154	540	1169	371	133	287	188
202	Sunrise Blvd.	213	1243	19	776	2113	232	1049	1153	646	40	690	645
203	Sunrise Blvd.	843	1727	14	49	1891	302	586	0	1279	17	0	126
204	Sunrise Blvd.	331	2029	194	1017	1738	331	321	1050	373	117	757	732
205	Sunrise Blvd.	236	2724	947	202	1866	245	188	806	256	347	321	438
206	Sunrise Blvd.	139	4796	5	80	3447	185	413	0	140	20	0	80
207	Zinfandel Dri	1	357	47	1519	940	614	783	911	34	135	731	768
209	Zinfandel Dri	164	1688	0	0	1834	64	189	0	200	0	0	0
210	Zinfandel Dri	207	1690	345	1	1898	46	131	60	388	372	17	0
211	Zinfandel Dri	460	1835	79	232	1754	374	342	799	400	70	716	96
212	Zinfandel Dri	0	1700	178	2	1666	0	19	137	0	233	106	1
213	Zinfandel Dri	20	2362	25	772	1762	53	992	221	20	35	180	1209
214	Zinfandel Dri	0	4646	0	0	2072	0	876	119	665	0	0	567
215	Zinfandel Dri	0	2345	0	0	993	0	0	0	0	1193	0	282
216	Mather Field	228	0	64	0	0	0	0	1881	174	23	1885	0
217	Mather Field	668	1679	10	175	1478	598	1265	119	389	4	216	183
218	Mather Field	0	3163	0	0	1094	0	501	0	1035	0	0	0
219	Mather Field	0	1071	0	0	731	0	0	0	0	437	0	39
220	Mather Field	247	141	805	47	47	9	28	1930	267	428	1466	45
221	Mather Blvd.	0	0	0	0	12	120	0	0	0	0	609	0
222	Mather Blvd.	0	52	0	0	0	0	0	0	0	0	609	26
224	A Street & Zi	4	1716	0	50	1659	514	638	2	10	0	1	20
225	Von Karman St	0	0	0	8	4	0	0	194	0	0	0	0
226	Norden Avenue	0	36	0	0	0	0	16	237	0	0	0	0
227	A Street & Ai	438	19	0	0	34	189	156	66	259	0	174	0
228	International	0	0	0	271	0	121	203	1375	0	0	1481	302
229	International	54	116	0	286	256	222	126	1001	113	2	747	169
230	International	3	248	389	407	388	168	191	1075	1	237	705	218
231	International	656	45	94	0	46	442	401	1254	625	63	1401	0
232	Hazel Avenue	0	0	0	0	578	0	1747	0	422	0	0	0
233	Hazel Avenue	102	4044	0	0	2672	38	0	0	133	95	153	1110
234	White Rock Ro	172	255	108	202	473	238	78	1200	115	298	1385	148
235	White Rock Ro	266	39	344	87	14	41	35	1050	82	169	700	18
236	B Street & Pr	13	35	0	82	66	220	92	203	22	0	121	42
237	B Street & Ki	0	0	0	503	0	121	195	79	0	0	39	434
240	C Street and	0	0	0	11	0	79	207	392	0	0	331	9
241	Zinfandel Dri	0	1849	417	52	2597	108	196	97	0	487	47	53

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	C	xxxxx	0.791	C	xxxxx	0.791	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	F	xxxxx	1.038	F	xxxxx	1.038	+ 0.000 V/C
#203 Sunrise Blvd. & International	E	xxxxx	0.992	E	xxxxx	0.992	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	F	xxxxx	1.179	F	xxxxx	1.179	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	E	xxxxx	0.967	E	xxxxx	0.967	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.449	F	xxxxx	1.449	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	F	xxxxx	1.009	F	xxxxx	1.009	+ 0.000 V/C
#209 Zinfandel Drive & C Street	B	xxxxx	0.645	B	xxxxx	0.645	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	E	xxxxx	0.928	E	xxxxx	0.928	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	D	xxxxx	0.816	D	xxxxx	0.816	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	B	xxxxx	0.626	B	xxxxx	0.626	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.516	F	xxxxx	1.516	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.398	F	xxxxx	1.398	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	D	xxxxx	0.835	D	xxxxx	0.835	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.493	A	xxxxx	0.493	+ 0.000 V/C
#217 Mather Field Road & Rockingham	F	xxxxx	1.499	F	xxxxx	1.499	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	E	xxxxx	0.953	E	xxxxx	0.953	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.469	A	xxxxx	0.469	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	F	xxxxx	1.214	F	xxxxx	1.214	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	4.3	0.415	A	4.3	0.415	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	B	5.8	0.480	B	5.8	0.480	+ 0.000 V/C
#224 A Street & Zinfandel Drive	D	xxxxx	0.854	D	xxxxx	0.854	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.9	0.170	A	1.9	0.170	+ 0.000 V/C

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 Villages of Zinfandel
 Cumulative Conditions - With Proposed Project
 PM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	2.0	0.198	A	2.0	0.198	+ 0.000 V/C
#227 A Street & Airpark Drive	B	xxxxx	0.661	B	xxxxx	0.661	+ 0.000 V/C
#228 International Drive & Capital	B	xxxxx	0.689	B	xxxxx	0.689	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.479	A	xxxxx	0.479	+ 0.000 V/C
#230 International Drive & Kilgore	D	xxxxx	0.889	D	xxxxx	0.889	+ 0.000 V/C
#231 International Drive & Femoyer	D	xxxxx	0.874	D	xxxxx	0.874	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	C	xxxxx	0.705	C	xxxxx	0.705	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	F	xxxxx	1.320	F	xxxxx	1.320	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	E	xxxxx	0.950	E	xxxxx	0.950	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.575	A	xxxxx	0.575	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.264	A	xxxxx	0.264	+ 0.000 V/C
#237 B Street & Kilgore Road	C	xxxxx	0.781	C	xxxxx	0.781	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.301	A	xxxxx	0.301	+ 0.000 V/C
#241 Zinfandel Drive and Mather Bou	E	xxxxx	0.966	E	xxxxx	0.966	+ 0.000 V/C

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 162 Critical Vol./Cap. (X): 0.791

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 162 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	8	940	166	310	1407	154	540	1169	371	133	287	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	940	166	310	1407	154	540	1169	371	133	287	188
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:	8	940	166	310	1407	154	540	1169	371	133	287	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	940	166	310	1407	154	540	1169	371	133	287	188
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 Vol.:	8	940	166	310	1407	154	540	1169	371	133	287	188

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.11	0.10	0.31	0.10	0.36	0.39	0.25	0.09	0.10	0.13
Crit Vol:	313			155			585			133		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.038

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	213	1243	19	776	2113	232	1049	1153	646	40	690	645
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:	213	1243	19	776	2113	232	1049	1153	646	40	690	645
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	213	1243	0	776	2113	0	1049	1153	0	40	690	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	1243	0	776	2113	0	1049	1153	0	40	690	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Vol.:	213	1243	0	776	2113	0	1049	1153	0	40	690	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.07	0.28	0.00	0.26	0.47	0.00	0.35	0.26	0.00	0.01	0.15	0.00
Crit Vol:	414			388			525			230		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.992
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Split Phase			Split Phase			
Rights:	Include			Ovl			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	2	1	0	3	0	1	1	1	0	0	2

Volume Module:

Base Vol:	843	1727	14	49	1891	302	586	0	1279	17	0	126
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:	843	1727	14	49	1891	302	586	0	1279	17	0	126
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:	843	1727	14	49	1891	302	586	0	1279	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	843	1727	14	49	1891	302	586	0	1279	17	0	126
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 Vol.:	843	1727	14	49	1891	302	586	0	1279	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	2.00	0.00	2.00	0.12	0.00	0.88
Final Sat.:	3000	4464	36	1500	4500	1500	3000	0	3000	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.28	0.39	0.39	0.03	0.42	0.20	0.20	0.00	0.43	0.10	0.00	0.10
Crit Vol:	422				630		293					143
Crit Moves:	****				****		****					****

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.179

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	331	2029	194	1017	1738	331	321	1050	373	117	757	732
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:	331	2029	194	1017	1738	331	321	1050	373	117	757	732
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:	331	2029	194	1017	1738	331	321	1050	373	117	757	732
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	331	2029	194	1017	1738	331	321	1050	373	117	757	732
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 Vol.:	331	2029	194	1017	1738	331	321	1050	373	117	757	732

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.11	0.45	0.13	0.34	0.39	0.22	0.11	0.35	0.25	0.04	0.17	0.49
Crit Vol:	676			509			525			59		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.967

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	236	2724	947	202	1866	245	188	806	256	347	321	438
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	2724	947	202	1866	245	188	806	256	347	321	438
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	2724	947	202	1866	245	188	806	256	347	321	438
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	236	2724	947	202	1866	245	188	806	256	347	321	438
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 Vol.:	236	2724	947	202	1866	245	188	806	256	347	321	438

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.27	1.73
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	1903	2597

Capacity Analysis Module:

Vol/Sat:	0.08	0.45	0.63	0.07	0.41	0.16	0.06	0.27	0.17	0.12	0.17	0.17
Crit Vol:			947		101			403			0	
Crit Moves:			****		****			****			****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.449

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	3	0	1	0

Volume Module:

Base Vol:	139	4796	5	80	3447	185	413	0	140	20	0	80
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:	139	4796	5	80	3447	185	413	0	140	20	0	80
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:	139	4796	5	80	3447	185	413	0	140	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	4796	5	80	3447	185	413	0	140	20	0	80
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 Vol.:	139	4796	5	80	3447	185	413	0	140	20	0	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3000	4495	5	1500	4500	1500	1500	0	1500	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.05	1.07	1.07	0.05	0.77	0.12	0.28	0.00	0.09	0.01	0.00	0.05
Crit Vol:	1600			80			413					80
Crit Moves:	****			****			****					****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.009

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ignore				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	1	357	47	1519	940	614	783	911	34	135	731	768
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:	1	357	47	1519	940	614	783	911	34	135	731	768
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	1	357	47	1519	940	614	783	911	34	135	731	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	357	47	1519	940	614	783	911	34	135	731	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	1	357	47	1519	940	614	783	911	34	135	731	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.03	0.51	0.21	0.41	0.26	0.20	0.02	0.05	0.16	0.00
Crit Vol:	119			760			392			244		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 96 Critical Vol./Cap. (X): 0.645

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 96 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	164	1688	0	0	1834	64	189	0	200	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	164	1688	0	0	1834	64	189	0	200	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	164	1688	0	0	1834	64	189	0	200	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	164	1688	0	0	1834	64	189	0	200	0	0	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 Vol.:	164	1688	0	0	1834	64	189	0	200	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.49	0.00	0.51	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	753	0	797	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.11	0.36	0.00	0.00	0.39	0.04	0.25	0.00	0.25	0.00	0.00	0.00
Crit Vol:	0				611				389	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 180 Critical Vol./Cap. (X): 0.928
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	207	1690	345	1	1898	46	131	60	388	372	17	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:	207	1690	345	1	1898	46	131	60	388	372	17	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:	207	1690	345	1	1898	46	131	60	388	372	17	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	1690	345	1	1898	46	131	60	388	372	17	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 Vol.:	207	1690	345	1	1898	46	131	60	388	372	17	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.38	0.23	0.00	0.42	0.03	0.09	0.04	0.26	0.25	0.01	0.00
Crit Vol:	0				633				388	372		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.816

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	460	1835	79	232	1754	374	342	799	400	70	716	96
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:	460	1835	79	232	1754	374	342	799	400	70	716	96
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:	460	1835	79	232	1754	374	342	799	400	70	716	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	460	1835	79	232	1754	374	342	799	400	70	716	96
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 Vol.:	460	1835	79	232	1754	374	342	799	400	70	716	96

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.15	0.41	0.05	0.08	0.39	0.25	0.11	0.18	0.27	0.02	0.16	0.06
Crit Vol:	230			585			171			239		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 91 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	1700	178	2	1666	0	19	137	0	233	106	1
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	1700	178	2	1666	0	19	137	0	233	106	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1700	178	2	1666	0	19	137	0	233	106	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1700	178	2	1666	0	19	137	0	233	106	1
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 Vol.:	0	1700	178	2	1666	0	19	137	0	233	106	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.99	0.01
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1486	14

Capacity Analysis Module:

Vol/Sat:	0.00	0.38	0.12	0.00	0.37	0.00	0.01	0.09	0.00	0.16	0.07	0.07
Crit Vol:	567			2			137			233		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.516

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	20	2362	25	772	1762	53	992	221	20	35	180	1209
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	2362	25	772	1762	53	992	221	20	35	180	1209
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	2362	25	772	1762	53	992	221	20	35	180	1209
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	2362	25	772	1762	53	992	221	20	35	180	1209
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 Vol.:	20	2362	25	772	1762	53	992	221	20	35	180	1209

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.75	0.25	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4127	373	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.52	0.02	0.26	0.39	0.04	0.33	0.05	0.05	0.01	0.12	0.40
Crit Vol:	787			386			496					605
Crit Moves:	****			****			****					****

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.398

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	4646	0	0	2072	0	876	119	665	0	0	567
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	4646	0	0	2072	0	876	119	665	0	0	567
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4646	0	0	2072	0	876	119	665	0	0	567
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4646	0	0	2072	0	876	119	665	0	0	567
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 Vol.:	0	4646	0	0	2072	0	876	119	665	0	0	567

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.30	1.70	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	471	2629	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.75	0.00	0.00	0.67	0.00	0.28	0.25	0.25	0.00	0.00	0.37
Crit Vol:	1162			0			438					567
Crit Moves:	****			****			****					****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 121 Critical Vol./Cap. (X): 0.835

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 121 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	1

Volume Module:

Base Vol:	0	2345	0	0	993	0	0	0	0	1193	0	282
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	2345	0	0	993	0	0	0	0	1193	0	282
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2345	0	0	993	0	0	0	0	1193	0	282
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2345	0	0	993	0	0	0	0	1193	0	282
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 Vol.:	0	2345	0	0	993	0	0	0	0	1193	0	282

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.47	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.36	0.00	0.17
Crit Vol:	782			0			0			597		
Crit Moves:	****			****						****		

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 53 Critical Vol./Cap. (X): 0.493

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	228	0	64	0	0	0	0	1881	174	23	1885	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:	228	0	64	0	0	0	0	1881	174	23	1885	0
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:	228	0	64	0	0	0	0	1881	0	23	1885	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	0	64	0	0	0	0	1881	0	23	1885	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	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
Final Vol.:	228	0	64	0	0	0	0	1881	0	23	1885	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.00	0.01	0.41	0.00
Crit Vol:	114				0			627		23		
Crit Moves:	****							****		****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.499

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	668	1679	10	175	1478	598	1265	119	389	4	216	183
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:	668	1679	10	175	1478	598	1265	119	389	4	216	183
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	668	1679	10	175	1478	0	1265	119	389	4	216	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	668	1679	10	175	1478	0	1265	119	389	4	216	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	668	1679	10	175	1478	0	1265	119	389	4	216	183

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.43	0.13	0.44	0.02	1.07	0.91
Final Sat.:	1500	4473	27	1500	4500	1500	2140	201	658	30	1608	1362

Capacity Analysis Module:

Vol/Sat:	0.45	0.38	0.38	0.12	0.33	0.00	0.59	0.59	0.59	0.13	0.13	0.13
Crit Vol:	668			493			887			202		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.953

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	3163	0	0	1094	0	501	0	1035	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3163	0	0	1094	0	501	0	1035	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3163	0	0	1094	0	501	0	1035	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3163	0	0	1094	0	501	0	1035	0	0	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 Vol.:	0	3163	0	0	1094	0	501	0	1035	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.64	0.00	0.00	0.33	0.00	0.30	0.00	0.31	0.00	0.00	0.00
Crit Vol:	1054			0					518	0		
Crit Moves:	****			****					****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 38 Critical Vol./Cap. (X): 0.469

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	0	1071	0	0	731	0	0	0	0	437	0	39
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	1071	0	0	731	0	0	0	0	437	0	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1071	0	0	731	0	0	0	0	437	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1071	0	0	731	0	0	0	0	437	0	39
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 Vol.:	0	1071	0	0	731	0	0	0	0	437	0	39

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.84	0.00	0.16
Final Sat.:	0	3300	0	0	3300	0	0	0	0	3030	0	270

Capacity Analysis Module:

Vol/Sat:	0.00	0.32	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.14	0.00	0.14
Crit Vol:	536			0			0			238		
Crit Moves:	****			****						****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.214

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	247	141	805	47	47	9	28	1930	267	428	1466	45
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:	247	141	805	47	47	9	28	1930	267	428	1466	45
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:	247	141	805	47	47	9	28	1930	267	428	1466	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	247	141	805	47	47	9	28	1930	267	428	1466	45
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 Vol.:	247	141	805	47	47	9	28	1930	267	428	1466	45

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.27	0.73	1.00	0.92	0.91	0.17	1.00	2.00	1.00	2.00	1.94	0.06
Final Sat.:	1910	1090	1500	1369	1369	262	1500	3000	1500	3000	2911	89

Capacity Analysis Module:

Vol/Sat:	0.13	0.13	0.54	0.03	0.03	0.03	0.02	0.64	0.18	0.14	0.50	0.50
Crit Vol:			805			52		965		0		
Crit Moves:			****			****		****		****		

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Villages of Zinfandel
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PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.415

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.3

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	12	120	0	0	0	0	609	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	12	120	0	0	0	0	609	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	12	120	0	0	0	0	609	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	12	120	0	0	0	0	609	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 Vol.:	0	0	0	0	12	120	0	0	0	0	609	0

Saturation Flow Module:

Sat/Lane:	0	0	0	289	289	289	0	0	0	747	747	747
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	289	289	0	0	0	0	1494	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.04	0.42	0.00	0.00	0.00	0.00	0.41	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.23			xxxxx			0.41		
Delay/Veh:	0.0	0.0	0.0	0.0	1.2	4.8	0.0	0.0	0.0	0.0	4.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.2	4.8	0.0	0.0	0.0	0.0	4.7	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	*	A	*
ApproachDel:	xxxxxx			2.4			xxxxxx			4.7		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			2.4			xxxxxx			4.7		
LOS by Appr:	F			A			F			A		

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Villages of Zinfandel
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PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.480

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 5.8

Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	52	0	0	0	0	0	0	0	0	609	26
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	52	0	0	0	0	0	0	0	0	609	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	52	0	0	0	0	0	0	0	0	609	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	52	0	0	0	0	0	0	0	0	609	26
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 Vol.:	0	52	0	0	0	0	0	0	0	0	609	26

Saturation Flow Module:

Sat/Lane:	244	244	244	0	0	0	0	0	0	662	662	662
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.08
Final Sat.:	0	488	0	0	0	0	0	0	0	0	1270	54

Capacity Analysis Module:

Vol/Sat:	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48
Crit Moves:	****			****			****			****		
ApproachV/S:	0.11			xxxxx			xxxxx			0.48		
Delay/Veh:	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	6.2
LOS by Move:	*	A	*	*	*	*	*	*	*	*	B	B
ApproachDel:	1.5			xxxxxx			xxxxxx			6.2		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.5			xxxxxx			xxxxxx			6.2		
LOS by Appr:	A			F			F			B		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.854

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1	0	1	0	0	1	0	0

Volume Module:

Base Vol:	4	1716	0	50	1659	514	638	2	10	0	1	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:	4	1716	0	50	1659	514	638	2	10	0	1	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:	4	1716	0	50	1659	514	638	2	10	0	1	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	1716	0	50	1659	514	638	2	10	0	1	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 Vol.:	4	1716	0	50	1659	514	638	2	10	0	1	20

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.17	0.83	1.00	0.05	0.95
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	250	1250	1500	71	1429

Capacity Analysis Module:

Vol/Sat:	0.00	0.38	0.00	0.03	0.37	0.34	0.43	0.01	0.01	0.00	0.01	0.01
Crit Vol:	572			50			638				21	
Crit Moves:	****			****			****				****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.170

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.9

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	8	4	0	0	194	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	8	4	0	0	194	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	8	4	0	0	194	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	8	4	0	0	194	0	0	0	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 Vol.:	0	0	0	8	4	0	0	194	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	229	229	229	571	571	571	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	229	229	0	0	1142	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx			0.03				0.17			xxxxx	
Delay/Veh:	0.0	0.0	0.0	1.1	1.1	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.1	1.1	0.0	0.0	1.9	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			1.1				1.9			xxxxxx	
Delay Adj:	xxxxx			1.00				1.00			xxxxx	
ApprAdjDel:	xxxxxx			1.1				1.9			xxxxxx	
LOS by Appr:	F			A				A			F	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.198

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.0

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	36	0	0	0	0	16	237	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	0	0	0	0	16	237	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	36	0	0	0	0	16	237	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	36	0	0	0	0	16	237	0	0	0	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 Vol.:	0	36	0	0	0	0	16	237	0	0	0	0

Saturation Flow Module:

Sat/Lane:	253	253	253	0	0	0	638	638	638	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.13	1.87	0.00	0.00	0.00	0.00
Final Sat.:	0	506	0	0	0	0	81	1195	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.07			xxxxx			0.20			xxxxx		
Delay/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0
LOS by Move:	*	A	*	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			2.1			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.3			xxxxxx			2.1			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.661

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 67 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	438	19	0	0	34	189	156	66	259	0	174	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:	438	19	0	0	34	189	156	66	259	0	174	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:	438	19	0	0	34	189	156	66	259	0	174	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	19	0	0	34	189	156	66	259	0	174	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 Vol.:	438	19	0	0	34	189	156	66	259	0	174	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.15	0.85	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	229	1271	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.29	0.01	0.00	0.00	0.15	0.15	0.10	0.04	0.17	0.00	0.12	0.00
Crit Vol:	438			223			156				174	
Crit Moves:	****			****			****				****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 87 Critical Vol./Cap. (X): 0.689

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 87 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	271	0	121	203	1375	0	0	1481	302
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	271	0	121	203	1375	0	0	1481	302
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	271	0	121	203	1375	0	0	1481	302
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	271	0	121	203	1375	0	0	1481	302
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 Vol.:	0	0	0	271	0	121	203	1375	0	0	1481	302

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.49	0.51
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3862	788

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.08	0.13	0.30	0.00	0.00	0.38	0.38
Crit Vol:	0			271			203				594	
Crit Moves:				****			****				****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 65 Critical Vol./Cap. (X): 0.479

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 65 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	54	116	0	286	256	222	126	1001	113	2	747	169
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:	54	116	0	286	256	222	126	1001	113	2	747	169
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:	54	116	0	286	256	222	126	1001	113	2	747	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	116	0	286	256	222	126	1001	113	2	747	169
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 Vol.:	54	116	0	286	256	222	126	1001	113	2	747	169

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.04	0.04	0.00	0.19	0.09	0.15	0.08	0.22	0.08	0.00	0.17	0.11
Crit Vol:	58			286			126				249	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.889

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	3	248	389	407	388	168	191	1075	1	237	705	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:	3	248	389	407	388	168	191	1075	1	237	705	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	248	389	407	388	168	191	1075	1	237	705	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	248	389	407	388	168	191	1075	1	237	705	218
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 Vol.:	3	248	389	407	388	168	191	1075	1	237	705	218

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.26	0.27	0.13	0.11	0.13	0.36	0.00	0.16	0.23	0.15
Crit Vol:			389		407			538		0		
Crit Moves:			****		****			****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.874

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	0	1	1	0	2	1	0	1	0

Volume Module:

Base Vol:	656	45	94	0	46	442	401	1254	625	63	1401	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:	656	45	94	0	46	442	401	1254	625	63	1401	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:	656	45	94	0	46	442	401	1254	625	63	1401	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	656	45	94	0	46	442	401	1254	625	63	1401	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 Vol.:	656	45	94	0	46	442	401	1254	625	63	1401	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.65	0.11	0.24	0.00	1.00	1.00	1.00	2.00	1.00	1.00	3.00	0.00
Final Sat.:	2475	170	355	0	1500	1500	1500	3003	1497	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.26	0.27	0.27	0.00	0.03	0.29	0.27	0.42	0.42	0.04	0.31	0.00
Crit Vol:	398				46		401				467	
Crit Moves:	****				****		****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 68 Critical Vol./Cap. (X): 0.705

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	578	0	1747	0	422	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	578	0	1747	0	422	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	578	0	1747	0	422	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	578	0	1747	0	422	0	0	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 Vol.:	0	0	0	0	578	0	1747	0	422	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.18	0.00	0.53	0.00	0.26	0.00	0.00	0.00
Crit Vol:	0				289		874			0		
Crit Moves:					****		****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.320

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	0	0	0	1	1

Volume Module:

Base Vol:	102	4044	0	0	2672	38	0	0	133	95	153	1110
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:	102	4044	0	0	2672	38	0	0	133	95	153	1110
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:	102	4044	0	0	2672	38	0	0	133	95	153	1110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	4044	0	0	2672	38	0	0	133	95	153	1110
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 Vol.:	102	4044	0	0	2672	38	0	0	133	95	153	1110

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.24	1.76
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	363	2637

Capacity Analysis Module:

Vol/Sat:	0.07	0.90	0.00	0.00	0.59	0.03	0.00	0.00	0.09	0.06	0.42	0.42
Crit Vol:	1348			0			0			632		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.950

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	172	255	108	202	473	238	78	1200	115	298	1385	148
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:	172	255	108	202	473	238	78	1200	115	298	1385	148
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:	172	255	108	202	473	238	78	1200	115	298	1385	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	255	108	202	473	238	78	1200	115	298	1385	148
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 Vol.:	172	255	108	202	473	238	78	1200	115	298	1385	148

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.33	0.67	1.00	2.00	1.00	1.00	2.71	0.29
Final Sat.:	1500	1500	1500	1500	1996	1004	1500	3000	1500	1500	4066	434

Capacity Analysis Module:

Vol/Sat:	0.11	0.17	0.07	0.13	0.24	0.24	0.05	0.40	0.08	0.20	0.34	0.34
Crit Vol:	172			356			600			298		
Crit Moves:	****			****			****			****		

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 80 Critical Vol./Cap. (X): 0.575

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 80 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	266	39	344	87	14	41	35	1050	82	169	700	18
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:	266	39	344	87	14	41	35	1050	82	169	700	18
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:	266	39	344	87	14	41	35	1050	82	169	700	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	266	39	344	87	14	41	35	1050	82	169	700	18
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 Vol.:	266	39	344	87	14	41	35	1050	82	169	700	18

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.72	0.28	1.00	1.00	2.78	0.22	1.00	2.92	0.08
Final Sat.:	1500	1500	1500	2584	416	1500	1500	4174	326	1500	4387	113

Capacity Analysis Module:

Vol/Sat:	0.18	0.03	0.23	0.03	0.03	0.03	0.02	0.25	0.25	0.11	0.16	0.16
Crit Vol:	266			51				377		169		
Crit Moves:	****			****				****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 46 Critical Vol./Cap. (X): 0.264
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	13	35	0	82	66	220	92	203	22	0	121	42
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:	13	35	0	82	66	220	92	203	22	0	121	42
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:	13	35	0	82	66	220	92	203	22	0	121	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	35	0	82	66	220	92	203	22	0	121	42
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 Vol.:	13	35	0	82	66	220	92	203	22	0	121	42

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.10	1.00	0.74	0.26
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1353	147	1500	1113	387

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.00	0.05	0.04	0.15	0.06	0.15	0.15	0.00	0.11	0.11
Crit Vol:	13					220	0				163	
Crit Moves:	****					****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 155 Critical Vol./Cap. (X): 0.781

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 155 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	503	0	121	195	79	0	0	39	434
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	503	0	121	195	79	0	0	39	434
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	503	0	121	195	79	0	0	39	434
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	503	0	121	195	79	0	0	39	434
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 Vol.:	0	0	0	503	0	121	195	79	0	0	39	434

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.08	0.92
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	124	1376

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.34	0.00	0.08	0.13	0.05	0.00	0.00	0.32	0.32
Crit Vol:	0			503			195				473	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.301

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	11	0	79	207	392	0	0	331	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	11	0	79	207	392	0	0	331	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	11	0	79	207	392	0	0	331	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	11	0	79	207	392	0	0	331	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	11	0	79	207	392	0	0	331	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.05	0.14	0.13	0.00	0.00	0.11	0.01
Crit Vol:	0					79	207				166	
Crit Moves:						****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project
PM Peak Hour

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

Intersection #241 Zinfandel Drive and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.966

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		1	0	3	0	1	
	1						1	0	1	0	1	

Volume Module:

Base Vol:	0	1849	417	52	2597	108	196	97	0	487	47	53
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	1849	417	52	2597	108	196	97	0	487	47	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1849	417	52	2597	108	196	97	0	487	47	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1849	417	52	2597	108	196	97	0	487	47	53
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 Vol.:	0	1849	417	52	2597	108	196	97	0	487	47	53

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	0.47	0.53
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	705	795

Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.28	0.03	0.58	0.07	0.13	0.06	0.00	0.32	0.07	0.07
Crit Vol:	0				866			97		487		
Crit Moves:	****				****			****		****		

**15. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH ALTERNATIVE 1
CONDITIONS
A.M. PEAK HOUR**

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	428	1138	121	128	949	521	126	147	5	239	1093	424
202	Sunrise Blvd.	775	1972	35	475	1045	1349	83	479	81	36	991	1125
203	Sunrise Blvd.	926	2576	9	137	1380	714	226	0	583	3	0	40
204	Sunrise Blvd.	723	1873	0	697	1836	345	161	754	312	301	1615	683
205	Sunrise Blvd.	213	2016	111	686	2799	544	252	206	167	971	621	432
206	Sunrise Blvd.	151	3007	10	40	5287	519	128	10	334	40	15	40
207	Zinfandel Dri	88	1036	127	510	172	567	610	604	2	34	1101	1422
209	Zinfandel Dri	139	1804	0	0	1506	112	20	0	68	0	0	0
210	Zinfandel Dri	802	1820	281	0	1454	101	28	8	458	252	39	0
211	Zinfandel Dri	372	1568	98	49	1404	136	307	733	547	78	714	241
212	Zinfandel Dri	0	1660	165	0	1501	0	0	3	0	117	50	3
213	Zinfandel Dri	21	1505	24	1756	2398	982	139	83	14	25	162	1531
214	Zinfandel Dri	0	3109	0	0	3517	0	134	692	1810	0	0	65
215	Zinfandel Dri	0	1021	0	0	1218	0	0	0	0	2005	0	172
216	Mather Field	67	0	10	0	0	0	0	2026	214	58	1326	0
217	Mather Field	292	854	5	274	1780	927	488	152	414	12	110	122
218	Mather Field	0	1530	0	0	1541	0	98	0	1427	0	0	0
219	Mather Field	0	765	0	0	991	0	0	0	0	639	0	221
220	Mather Field	406	39	274	25	85	20	13	1082	429	857	1444	9
221	Mather Blvd.	0	0	0	0	44	43	0	0	0	5	113	0
222	Mather Blvd.	0	5	0	0	0	0	0	0	0	0	118	5
224	A Street & Zi	36	1626	0	13	1486	525	360	2	15	0	3	48
225	Von Karman St	0	0	0	31	13	0	0	462	0	0	0	0
226	Norden Avenue	0	3	5	0	0	0	2	428	0	0	0	0
227	A Street & Ai	419	33	0	0	2	163	149	110	311	0	27	0
228	International	0	0	0	273	0	153	67	1484	0	0	1060	244
229	International	130	182	1	105	42	66	203	719	47	0	897	271
230	International	8	308	137	83	86	109	179	608	23	320	1045	309
231	International	405	14	40	0	33	305	361	1408	628	105	911	0
232	Hazel Avenue	0	0	0	0	2029	0	1059	0	556	0	0	0
233	Hazel Avenue	107	1429	0	0	4655	54	0	0	156	49	48	533
234	White Rock Ro	32	309	283	76	144	124	257	1515	117	70	1842	270
235	White Rock Ro	50	7	52	17	35	10	42	947	323	484	1792	161
236	B Street & Pr	25	75	0	35	23	30	145	34	7	0	106	92
237	B Street & Ki	0	0	0	282	0	105	38	31	0	0	83	391
240	C Street and	0	0	0	7	0	145	73	573	0	0	769	1
242	A Street and	0	0	0	359	0	4	103	287	0	0	191	723

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	D	xxxxx	0.854	D	xxxxx	0.854	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	D	xxxxx	0.844	D	xxxxx	0.844	+ 0.000 V/C
#203 Sunrise Blvd. & International	C	xxxxx	0.770	C	xxxxx	0.770	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	F	xxxxx	1.061	F	xxxxx	1.061	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	F	xxxxx	1.085	F	xxxxx	1.085	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.446	F	xxxxx	1.446	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	D	xxxxx	0.848	D	xxxxx	0.848	+ 0.000 V/C
#209 Zinfandel Drive & C Street	A	xxxxx	0.426	A	xxxxx	0.426	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	C	xxxxx	0.796	C	xxxxx	0.796	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	C	xxxxx	0.703	C	xxxxx	0.703	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	A	xxxxx	0.449	A	xxxxx	0.449	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.476	F	xxxxx	1.476	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.760	F	xxxxx	1.760	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	E	xxxxx	0.977	E	xxxxx	0.977	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.495	A	xxxxx	0.495	+ 0.000 V/C
#217 Mather Field Road & Rockingham	E	xxxxx	0.976	E	xxxxx	0.976	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	D	xxxxx	0.899	D	xxxxx	0.899	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.561	A	xxxxx	0.561	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	D	xxxxx	0.811	D	xxxxx	0.811	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	1.5	0.107	A	1.5	0.107	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	A	1.4	0.090	A	1.4	0.090	+ 0.000 V/C
#224 A Street & Zinfandel Drive	B	xxxxx	0.644	B	xxxxx	0.644	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	4.6	0.419	A	4.6	0.419	+ 0.000 V/C

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 Villages of Zinfandel
 Cumulative Conditions - With Proposed Project Alternative
 AM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	2.8	0.274	A	2.8	0.274	+ 0.000 V/C
#227 A Street & Airpark Drive	A	xxxxx	0.597	A	xxxxx	0.597	+ 0.000 V/C
#228 International Drive & Capital	A	xxxxx	0.500	A	xxxxx	0.500	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.465	A	xxxxx	0.465	+ 0.000 V/C
#230 International Drive & Kilgore	B	xxxxx	0.626	B	xxxxx	0.626	+ 0.000 V/C
#231 International Drive & Femoyer	B	xxxxx	0.697	B	xxxxx	0.697	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	E	xxxxx	0.941	E	xxxxx	0.941	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	F	xxxxx	1.299	F	xxxxx	1.299	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	D	xxxxx	0.897	D	xxxxx	0.897	+ 0.000 V/C
#235 White Rock Road & Prospect Par	B	xxxxx	0.662	B	xxxxx	0.662	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.302	A	xxxxx	0.302	+ 0.000 V/C
#237 B Street & Kilgore Road	A	xxxxx	0.529	A	xxxxx	0.529	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.402	A	xxxxx	0.402	+ 0.000 V/C
#242 A Street and Mather Boulevard	C	xxxxx	0.790	C	xxxxx	0.790	+ 0.000 V/C

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.854

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	428	1138	121	128	949	521	126	147	5	239	1093	424
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:	428	1138	121	128	949	521	126	147	5	239	1093	424
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:	428	1138	121	128	949	521	126	147	5	239	1093	424
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	428	1138	121	128	949	521	126	147	5	239	1093	424
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 Vol.:	428	1138	121	128	949	521	126	147	5	239	1093	424

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.14	0.25	0.08	0.04	0.21	0.35	0.08	0.05	0.00	0.16	0.36	0.28
Crit Vol:	214					521	0			547		
Crit Moves:	****					****	****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.844

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	775	1972	35	475	1045	1349	83	479	81	36	991	1125
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:	775	1972	35	475	1045	1349	83	479	81	36	991	1125
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	775	1972	0	475	1045	0	83	479	0	36	991	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	775	1972	0	475	1045	0	83	479	0	36	991	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Vol.:	775	1972	0	475	1045	0	83	479	0	36	991	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.26	0.44	0.00	0.16	0.23	0.00	0.03	0.11	0.00	0.01	0.22	0.00
Crit Vol:	657			238			42			330		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 148 Critical Vol./Cap. (X): 0.770
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 148 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	3	0	1	1	0	0	2
	0	0	1	0	0	0	0	0	0	0	1	0

Volume Module:

Base Vol:	926	2576	9	137	1380	714	226	0	583	3	0	40
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:	926	2576	9	137	1380	714	226	0	583	3	0	40
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:	926	2576	9	137	1380	714	226	0	583	3	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	926	2576	9	137	1380	714	226	0	583	3	0	40
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 Vol.:	926	2576	9	137	1380	714	226	0	583	3	0	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	2.00	0.00	2.00	0.07	0.00	0.93
Final Sat.:	3000	4484	16	1500	4500	1500	3000	0	3000	105	0	1395

Capacity Analysis Module:

Vol/Sat:	0.31	0.57	0.57	0.09	0.31	0.48	0.08	0.00	0.19	0.03	0.00	0.03
Crit Vol:	862			137			113					43
Crit Moves:	****			****			****					****

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.061

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ignore				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	0	1	2	0	3	0	1

Volume Module:

Base Vol:	723	1873	0	697	1836	345	161	754	312	301	1615	683
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:	723	1873	0	697	1836	345	161	754	312	301	1615	683
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	723	1873	0	697	1836	345	161	754	312	301	1615	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	723	1873	0	697	1836	345	161	754	312	301	1615	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	723	1873	0	697	1836	345	161	754	312	301	1615	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.24	0.42	0.00	0.23	0.41	0.23	0.05	0.25	0.21	0.10	0.36	0.00
Crit Vol:	624			349			81			538		
Crit Moves:	****			****			****			****		

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	213	2016	111	686	2799	544	252	206	167	971	621	432
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:	213	2016	111	686	2799	544	252	206	167	971	621	432
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:	213	2016	111	686	2799	544	252	206	167	971	621	432
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	2016	111	686	2799	544	252	206	167	971	621	432
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 Vol.:	213	2016	111	686	2799	544	252	206	167	971	621	432

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.77	1.23
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	2654	1846

Capacity Analysis Module:

Vol/Sat:	0.07	0.34	0.07	0.23	0.62	0.36	0.08	0.07	0.11	0.32	0.23	0.23
Crit Vol:	106			933			103			486		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.446

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	151	3007	10	40	5287	519	128	10	334	40	15	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	3007	10	40	5287	519	128	10	334	40	15	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	3007	10	40	5287	519	128	10	334	40	15	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	3007	10	40	5287	519	128	10	334	40	15	40
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 Vol.:	151	3007	10	40	5287	519	128	10	334	40	15	40

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	0.54	0.04	1.42	1.00	0.16	0.84
Final Sat.:	3000	4485	15	1500	4500	1500	814	64	2123	1500	237	1263

Capacity Analysis Module:

Vol/Sat:	0.05	0.67	0.67	0.03	1.17	0.35	0.16	0.16	0.16	0.03	0.06	0.03
Crit Vol:	76				1762			236			95	
Crit Moves:	****				****			****			****	

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.848

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	88	1036	127	510	172	567	610	604	2	34	1101	1422
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:	88	1036	127	510	172	567	610	604	2	34	1101	1422
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	88	1036	127	510	172	567	610	604	2	34	1101	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1036	127	510	172	567	610	604	2	34	1101	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	88	1036	127	510	172	567	610	604	2	34	1101	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.23	0.08	0.17	0.04	0.38	0.20	0.13	0.00	0.01	0.24	0.00
Crit Vol:	345			255			305			367		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 59 Critical Vol./Cap. (X): 0.426

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	0	0	0	1	0	0	0

Volume Module:

Base Vol:	139	1804	0	0	1506	112	20	0	68	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	139	1804	0	0	1506	112	20	0	68	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	139	1804	0	0	1506	112	20	0	68	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1804	0	0	1506	112	20	0	68	0	0	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 Vol.:	139	1804	0	0	1506	112	20	0	68	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.23	0.00	0.77	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	352	0	1198	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.09	0.39	0.00	0.00	0.32	0.07	0.06	0.00	0.06	0.00	0.00	0.00
Crit Vol:	139				502		20				0	
Crit Moves:	****				****		****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 167 Critical Vol./Cap. (X): 0.796
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 167 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	1	1	0	0	1	0

Volume Module:

Base Vol:	802	1820	281	0	1454	101	28	8	458	252	39	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:	802	1820	281	0	1454	101	28	8	458	252	39	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:	802	1820	281	0	1454	101	28	8	458	252	39	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	802	1820	281	0	1454	101	28	8	458	252	39	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 Vol.:	802	1820	281	0	1454	101	28	8	458	252	39	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.27	0.40	0.19	0.00	0.32	0.07	0.02	0.01	0.31	0.17	0.03	0.00
Crit Vol:	0				485				458	252		
Crit Moves:	****				****				****	****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
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Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 114 Critical Vol./Cap. (X): 0.703

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 114 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	372	1568	98	49	1404	136	307	733	547	78	714	241
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:	372	1568	98	49	1404	136	307	733	547	78	714	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:	372	1568	98	49	1404	136	307	733	547	78	714	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	372	1568	98	49	1404	136	307	733	547	78	714	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 Vol.:	372	1568	98	49	1404	136	307	733	547	78	714	241

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.12	0.35	0.07	0.02	0.31	0.09	0.10	0.16	0.36	0.03	0.16	0.16
Crit Vol:	0				468				547	39		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 62 Critical Vol./Cap. (X): 0.449
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 62 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	1660	165	0	1501	0	0	3	0	117	50	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1660	165	0	1501	0	0	3	0	117	50	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:	0	1660	165	0	1501	0	0	3	0	117	50	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1660	165	0	1501	0	0	3	0	117	50	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 Vol.:	0	1660	165	0	1501	0	0	3	0	117	50	3

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.94	0.06
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1415	85

Capacity Analysis Module:

Vol/Sat:	0.00	0.37	0.11	0.00	0.33	0.00	0.00	0.00	0.00	0.08	0.04	0.04
Crit Vol:	553			0			3			117		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.476

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	21	1505	24	1756	2398	982	139	83	14	25	162	1531
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:	21	1505	24	1756	2398	982	139	83	14	25	162	1531
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:	21	1505	24	1756	2398	982	139	83	14	25	162	1531
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	1505	24	1756	2398	982	139	83	14	25	162	1531
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 Vol.:	21	1505	24	1756	2398	982	139	83	14	25	162	1531

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.57	0.43	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3851	649	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.33	0.02	0.59	0.53	0.65	0.05	0.02	0.02	0.01	0.11	0.51
Crit Vol:	502			878			70			766		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.760

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	3109	0	0	3517	0	134	692	1810	0	0	65
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	3109	0	0	3517	0	134	692	1810	0	0	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3109	0	0	3517	0	134	692	1810	0	0	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3109	0	0	3517	0	134	692	1810	0	0	65
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 Vol.:	0	3109	0	0	3517	0	134	692	1810	0	0	65

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	1550	1550	3100	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.50	0.00	0.00	1.13	0.00	0.09	0.45	0.58	0.00	0.00	0.04
Crit Vol:	0				1759				905			65
Crit Moves:	****				****				****			****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.977

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	1021	0	0	1218	0	0	0	0	2005	0	172
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	1021	0	0	1218	0	0	0	0	2005	0	172
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1021	0	0	1218	0	0	0	0	2005	0	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1021	0	0	1218	0	0	0	0	2005	0	172
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 Vol.:	0	1021	0	0	1218	0	0	0	0	2005	0	172

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.21	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.61	0.00	0.10
Crit Vol:	0			609			0			1003		
Crit Moves:	****			****						****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 53 Critical Vol./Cap. (X): 0.495

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Ovl			Include			Ignore			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1
	0	0	0	0	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	67	0	10	0	0	0	0	2026	214	58	1326	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:	67	0	10	0	0	0	0	2026	214	58	1326	0
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:	67	0	10	0	0	0	0	2026	0	58	1326	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	0	10	0	0	0	0	2026	0	58	1326	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	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
Final Vol.:	67	0	10	0	0	0	0	2026	0	58	1326	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.44	0.00	0.04	0.29	0.00
Crit Vol:	34				0			675		58		
Crit Moves:	****							****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 0.976

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	0	1	0	0	1	0	1	0

Volume Module:

Base Vol:	292	854	5	274	1780	927	488	152	414	12	110	122
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:	292	854	5	274	1780	927	488	152	414	12	110	122
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	292	854	5	274	1780	0	488	152	414	12	110	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	292	854	5	274	1780	0	488	152	414	12	110	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	292	854	5	274	1780	0	488	152	414	12	110	122

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	1.00	0.27	0.73	0.10	0.90	1.00
Final Sat.:	1500	4474	26	1500	4500	1500	1500	403	1097	148	1352	1500

Capacity Analysis Module:

Vol/Sat:	0.19	0.19	0.19	0.18	0.40	0.00	0.33	0.38	0.38	0.08	0.08	0.08
Crit Vol:	292			593			566		12			
Crit Moves:	****			****			****		****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.899

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	1530	0	0	1541	0	98	0	1427	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1530	0	0	1541	0	98	0	1427	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1530	0	0	1541	0	98	0	1427	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1530	0	0	1541	0	98	0	1427	0	0	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 Vol.:	0	1530	0	0	1541	0	98	0	1427	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1650	0	3300	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.31	0.00	0.00	0.47	0.00	0.06	0.00	0.43	0.00	0.00	0.00
Crit Vol:	0			771			714			0		
Crit Moves:	****			****			****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 46 Critical Vol./Cap. (X): 0.561

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 46 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	765	0	0	991	0	0	0	0	639	0	221
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	765	0	0	991	0	0	0	0	639	0	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	765	0	0	991	0	0	0	0	639	0	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	765	0	0	991	0	0	0	0	639	0	221
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 Vol.:	0	765	0	0	991	0	0	0	0	639	0	221

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.49	0.00	0.51
Final Sat.:	0	3300	0	0	3300	0	0	0	0	2452	0	848

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.23	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.26	0.00	0.26
Crit Vol:	0			496			0			430		
Crit Moves:	****			****						****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.811

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	406	39	274	25	85	20	13	1082	429	857	1444	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	406	39	274	25	85	20	13	1082	429	857	1444	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	406	39	274	25	85	20	13	1082	429	857	1444	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	406	39	274	25	85	20	13	1082	429	857	1444	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	406	39	274	25	85	20	13	1082	429	857	1444	9

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.82	0.18	1.00	0.38	1.31	0.31	1.00	2.00	1.00	2.00	1.99	0.01
Final Sat.:	2737	263	1500	577	1962	462	1500	3000	1500	3000	2981	19

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.18	0.04	0.04	0.04	0.01	0.36	0.29	0.29	0.48	0.48
Crit Vol:	223			25				541		429		
Crit Moves:	****			****				****		****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
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Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.107

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.5

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	44	43	0	0	0	5	113	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	44	43	0	0	0	5	113	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	44	43	0	0	0	5	113	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	44	43	0	0	0	5	113	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 Vol.:	0	0	0	0	44	43	0	0	0	5	113	0

Saturation Flow Module:

Sat/Lane:	0	0	0	406	406	406	0	0	0	562	562	562
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.01	0.99	0.00	0.00	0.00	0.08	1.92	0.00
Final Sat.:	0	0	0	0	411	401	0	0	0	48	1076	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.10	0.10	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxxx			0.11			xxxxxx			0.10		
Delay/Veh:	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	1.5	1.5	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	1.5	1.5	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	A	A	*
ApproachDel:	xxxxxx			1.5			xxxxxx			1.5		
Delay Adj:	xxxxxx			1.00			xxxxxx			1.00		
ApprAdjDel:	xxxxxx			1.5			xxxxxx			1.5		
LOS by Appr:	F			A			F			A		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.090

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.4

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	5	0	0	0	0	0	0	0	0	118	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	5	0	0	0	0	0	0	0	0	118	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:	0	5	0	0	0	0	0	0	0	0	118	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	5	0	0	0	0	0	0	0	0	118	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 Vol.:	0	5	0	0	0	0	0	0	0	0	118	5

Saturation Flow Module:

Sat/Lane:	226	226	226	0	0	0	0	0	0	680	680	680
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.08
Final Sat.:	0	452	0	0	0	0	0	0	0	0	1305	55

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
Crit Moves:	****			****			****			****		
ApproachV/S:	0.01			xxxxx			xxxxx			0.09		
Delay/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4
LOS by Move:	*	A	*	*	*	*	*	*	*	*	A	A
ApproachDel:	1.0			xxxxxx			xxxxxx			1.4		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.0			xxxxxx			xxxxxx			1.4		
LOS by Appr:	A			F			F			A		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 76 Critical Vol./Cap. (X): 0.644

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 76 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	36	1626	0	13	1486	525	360	2	15	0	3	48
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:	36	1626	0	13	1486	525	360	2	15	0	3	48
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:	36	1626	0	13	1486	525	360	2	15	0	3	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1626	0	13	1486	525	360	2	15	0	3	48
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 Vol.:	36	1626	0	13	1486	525	360	2	15	0	3	48

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.12	0.88	1.00	0.06	0.94
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	176	1324	1500	88	1412

Capacity Analysis Module:

Vol/Sat:	0.02	0.36	0.00	0.01	0.33	0.35	0.24	0.01	0.01	0.00	0.03	0.03
Crit Vol:	542			13			360			51		
Crit Moves:	****			****			****			****		

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Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.419

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.6

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	31	13	0	0	462	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	31	13	0	0	462	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	31	13	0	0	462	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	31	13	0	0	462	0	0	0	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 Vol.:	0	0	0	31	13	0	0	462	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	243	243	243	551	551	551	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	243	243	0	0	1102	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.13	0.05	0.00	0.00	0.42	0.00	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx			0.09			0.42			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.6	1.2	0.0	0.0	4.9	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.6	1.2	0.0	0.0	4.9	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			1.4			4.9			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.4			4.9			xxxxxx		
LOS by Appr:	F			A			A			F		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.274

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.8

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	3	5	0	0	0	2	428	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3	5	0	0	0	2	428	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3	5	0	0	0	2	428	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	5	0	0	0	2	428	0	0	0	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 Vol.:	0	3	5	0	0	0	2	428	0	0	0	0

Saturation Flow Module:

Sat/Lane:	208	208	208	0	0	0	785	785	785	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.00	1.00	0.00	0.00	0.00	0.01	1.99	0.00	0.00	0.00	0.00
Final Sat.:	0	208	208	0	0	0	7	1563	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.01	0.02	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.00
Crit Moves:			****			****	****					****
ApproachV/S:	0.02			xxxxx			0.27			xxxxx		
Delay/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	2.8	2.8	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.1	1.1	0.0	0.0	0.0	2.8	2.8	0.0	0.0	0.0	0.0
LOS by Move:	*	A	A	*	*	*	A	A	*	*	*	*
ApproachDel:	1.1			xxxxxx			2.8			xxxxxx		
Delay Adj:	1.00			xxxxx			1.00			xxxxx		
ApprAdjDel:	1.1			xxxxxx			2.8			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.597

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	419	33	0	0	2	163	149	110	311	0	27	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:	419	33	0	0	2	163	149	110	311	0	27	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:	419	33	0	0	2	163	149	110	311	0	27	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	419	33	0	0	2	163	149	110	311	0	27	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 Vol.:	419	33	0	0	2	163	149	110	311	0	27	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.01	0.99	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	18	1482	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.28	0.02	0.00	0.00	0.11	0.11	0.10	0.07	0.21	0.00	0.02	0.00
Crit Vol:	419				165				311	0		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 54 Critical Vol./Cap. (X): 0.500

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	273	0	153	67	1484	0	0	1060	244
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	273	0	153	67	1484	0	0	1060	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	273	0	153	67	1484	0	0	1060	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	273	0	153	67	1484	0	0	1060	244
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 Vol.:	0	0	0	273	0	153	67	1484	0	0	1060	244

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.44	0.56
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3780	870

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.10	0.04	0.32	0.00	0.00	0.28	0.28
Crit Vol:	0			273			67				435	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 64 Critical Vol./Cap. (X): 0.465

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 64 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	
	1	0	2	0	1		1	0	3	0	1	

Volume Module:

Base Vol:	130	182	1	105	42	66	203	719	47	0	897	271
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	182	1	105	42	66	203	719	47	0	897	271
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	182	1	105	42	66	203	719	47	0	897	271
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	182	1	105	42	66	203	719	47	0	897	271
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 Vol.:	130	182	1	105	42	66	203	719	47	0	897	271

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.09	0.06	0.00	0.07	0.01	0.04	0.14	0.16	0.03	0.00	0.20	0.18
Crit Vol:	91			105			203				299	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 91 Critical Vol./Cap. (X): 0.626

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 91 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	8	308	137	83	86	109	179	608	23	320	1045	309
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	308	137	83	86	109	179	608	23	320	1045	309
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:	8	308	137	83	86	109	179	608	23	320	1045	309
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	308	137	83	86	109	179	608	23	320	1045	309
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 Vol.:	8	308	137	83	86	109	179	608	23	320	1045	309

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.01	0.10	0.09	0.06	0.03	0.07	0.12	0.20	0.02	0.21	0.35	0.21
Crit Vol:	154			83			179			523		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 112 Critical Vol./Cap. (X): 0.697

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 112 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	0	1	1	0	2	1	0	1	0

Volume Module:

Base Vol:	405	14	40	0	33	305	361	1408	628	105	911	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:	405	14	40	0	33	305	361	1408	628	105	911	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:	405	14	40	0	33	305	361	1408	628	105	911	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	405	14	40	0	33	305	361	1408	628	105	911	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 Vol.:	405	14	40	0	33	305	361	1408	628	105	911	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.77	0.06	0.17	0.00	1.00	1.00	1.00	2.07	0.93	1.00	3.00	0.00
Final Sat.:	2647	92	261	0	1500	1500	1500	3112	1388	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.15	0.15	0.15	0.00	0.02	0.20	0.24	0.45	0.45	0.07	0.20	0.00
Crit Vol:	230				33			679		105		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.941

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	2029	0	1059	0	556	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	2029	0	1059	0	556	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	2029	0	1059	0	556	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	2029	0	1059	0	556	0	0	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 Vol.:	0	0	0	0	2029	0	1059	0	556	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	1.96	0.01	1.03	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3246	0	1704	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.61	0.00	0.33	0.00	0.33	0.00	0.00	0.00
Crit Vol:	0				1015		538				0	
Crit Moves:					****		****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.299

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1
	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	107	1429	0	0	4655	54	0	0	156	49	48	533
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:	107	1429	0	0	4655	54	0	0	156	49	48	533
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:	107	1429	0	0	4655	54	0	0	156	49	48	533
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	1429	0	0	4655	54	0	0	156	49	48	533
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 Vol.:	107	1429	0	0	4655	54	0	0	156	49	48	533

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.17	1.83
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	248	2752

Capacity Analysis Module:

Vol/Sat:	0.07	0.32	0.00	0.00	1.03	0.04	0.00	0.00	0.10	0.03	0.19	0.19
Crit Vol:	107				1552		0			291		
Crit Moves:	****				****		****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.897

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected			Protected			Protected			Protected						
Rights:	Ovl			Include			Ovl			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0	2	1	0

Volume Module:

Base Vol:	32	309	283	76	144	124	257	1515	117	70	1842	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	309	283	76	144	124	257	1515	117	70	1842	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	309	283	76	144	124	257	1515	117	70	1842	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	309	283	76	144	124	257	1515	117	70	1842	270
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 Vol.:	32	309	283	76	144	124	257	1515	117	70	1842	270

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.07	0.93	1.00	2.00	1.00	1.00	2.62	0.38
Final Sat.:	1500	1500	1500	1500	1612	1388	1500	3000	1500	1500	3925	575

Capacity Analysis Module:

Vol/Sat:	0.02	0.21	0.19	0.05	0.09	0.09	0.17	0.51	0.08	0.05	0.47	0.47
Crit Vol:	309			76			257			704		
Crit Moves:	****			****			****			****		

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.662

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 100 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	50	7	52	17	35	10	42	947	323	484	1792	161
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:	50	7	52	17	35	10	42	947	323	484	1792	161
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:	50	7	52	17	35	10	42	947	323	484	1792	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	7	52	17	35	10	42	947	323	484	1792	161
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 Vol.:	50	7	52	17	35	10	42	947	323	484	1792	161

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.24	0.76	1.00	2.75	0.25
Final Sat.:	1500	1500	1500	1500	1500	1500	1500	3356	1144	1500	4129	371

Capacity Analysis Module:

Vol/Sat:	0.03	0.00	0.03	0.01	0.02	0.01	0.03	0.28	0.28	0.32	0.43	0.43
Crit Vol:	50				35			423		484		
Crit Moves:	****				****			****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 49 Critical Vol./Cap. (X): 0.302

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 49 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	25	75	0	35	23	30	145	34	7	0	106	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	75	0	35	23	30	145	34	7	0	106	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	75	0	35	23	30	145	34	7	0	106	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	75	0	35	23	30	145	34	7	0	106	92
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 Vol.:	25	75	0	35	23	30	145	34	7	0	106	92

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.17	1.00	0.54	0.46
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1244	256	1500	803	697

Capacity Analysis Module:

Vol/Sat:	0.02	0.05	0.00	0.02	0.02	0.02	0.10	0.03	0.03	0.00	0.13	0.13
Crit Vol:	75			35			145				198	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 72 Critical Vol./Cap. (X): 0.529

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 72 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	282	0	105	38	31	0	0	83	391
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	282	0	105	38	31	0	0	83	391
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	282	0	105	38	31	0	0	83	391
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	282	0	105	38	31	0	0	83	391
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 Vol.:	0	0	0	282	0	105	38	31	0	0	83	391

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.18	0.82
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	263	1237

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.07	0.03	0.02	0.00	0.00	0.32	0.32
Crit Vol:	0			282			38				474	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.402

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 38 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	7	0	145	73	573	0	0	769	1
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	7	0	145	73	573	0	0	769	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	7	0	145	73	573	0	0	769	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	7	0	145	73	573	0	0	769	1
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 Vol.:	0	0	0	7	0	145	73	573	0	0	769	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.10	0.05	0.19	0.00	0.00	0.26	0.00
Crit Vol:	0					145	73				385	
Crit Moves:						****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
AM Peak Hour

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

Intersection #242 A Street and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.790

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 109 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	0

Volume Module:

Base Vol:	0	0	0	359	0	4	103	287	0	0	191	723
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	359	0	4	103	287	0	0	191	723
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	359	0	4	103	287	0	0	191	723
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	359	0	4	103	287	0	0	191	723
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 Vol.:	0	0	0	359	0	4	103	287	0	0	191	723

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	1500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.00	0.07	0.10	0.00	0.00	0.13	0.48
Crit Vol:	0			359			103					723
Crit Moves:				****			****					****

**16. INTERSECTION CAPACITY ANALYSIS
FUTURE WITH ALTERNATIVE 1
CONDITIONS
P.M. PEAK HOUR**

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Scenario Report

Scenario:	Default Scenario
Command:	Default Command
Volume:	Default Volume
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Intersection Volume Report
Base Volume Alternative

Node	Intersection	Northbound			Southbound			Eastbound			Westbound		
		L	--	T -- R	L	--	T -- R	L	--	T -- R	L	--	T -- R
201	Jackson Road	8		929	173	312	1409	156	502	1205	339	138	282 178
202	Sunrise Blvd.	207		1258	17	762	2075	224	998	1195	650	48	677 666
203	Sunrise Blvd.	857		1763	14	49	1876	299	556	0	1262	17	0 126
204	Sunrise Blvd.	342		2020	204	1014	1728	332	292	1062	348	118	792 708
205	Sunrise Blvd.	241		2641	981	168	1886	265	224	748	284	324	320 442
206	Sunrise Blvd.	148		4803	5	80	3456	181	412	0	145	20	0 80
207	Zinfandel Dri	1		324	42	1474	967	595	801	932	23	123	740 697
209	Zinfandel Dri	162		1806	0	0	1954	69	122	0	207	0	0 0
210	Zinfandel Dri	621		1802	271	1	2017	50	136	52	770	350	17 0
211	Zinfandel Dri	435		1889	79	214	1765	378	324	827	471	63	722 96
212	Zinfandel Dri	0		1765	162	3	1777	0	12	128	0	246	106 1
213	Zinfandel Dri	22		2337	15	766	1816	41	1065	237	18	31	164 1244
214	Zinfandel Dri	0		4729	0	0	2091	0	868	119	682	0	0 567
215	Zinfandel Dri	0		2337	0	0	970	0	0	0	0	1215	0 294
216	Mather Field	222		0	61	0	0	0	0	1871	163	7	1831 0
217	Mather Field	651		1640	7	196	1451	567	1251	121	394	5	206 171
218	Mather Field	0		3097	0	0	1071	0	534	0	1021	0	0 0
219	Mather Field	0		1061	0	0	740	0	0	0	0	406	0 30
220	Mather Field	244		141	815	47	47	9	28	1934	271	426	1475 45
221	Mather Blvd.	0		0	0	0	11	112	0	0	0	0	665 0
222	Mather Blvd.	0		45	0	0	0	0	0	0	0	0	665 28
224	A Street & Zi	9		1769	0	37	1768	494	609	3	12	0	1 20
225	Von Karman St	0		0	0	8	3	0	0	188	0	0	0 0
226	Norden Avenue	0		36	0	0	0	0	9	238	0	0	0 0
227	A Street & Ai	315		15	0	0	38	164	184	51	419	0	130 0
228	International	0		0	0	295	0	106	210	1433	0	0	1475 293
229	International	49		120	0	296	227	207	137	1004	119	34	766 167
230	International	3		194	328	401	374	162	184	1096	1	238	712 220
231	International	594		45	100	0	25	446	395	1314	554	66	1377 0
232	Hazel Avenue	0		0	0	0	557	0	1768	0	686	0	0 0
233	Hazel Avenue	102		4065	0	0	2676	38	0	0	133	85	153 1115
234	White Rock Ro	177		252	85	201	475	235	84	1182	102	298	1423 156
235	White Rock Ro	286		39	332	87	14	41	35	1037	95	168	690 18
236	B Street & Pr	14		34	0	83	77	219	97	176	23	0	137 38
237	B Street & Ki	0		0	0	471	0	141	169	78	0	0	39 345
240	C Street and	0		0	0	4	0	201	190	782	0	0	750 8
242	A Street and	0		0	0	729	0	81	15	243	0	0	518 433

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#201 Jackson Road & Sunrise Blvd.	D	xxxxx	0.804	D	xxxxx	0.804	+ 0.000 V/C
#202 Sunrise Blvd. & Douglas Road	F	xxxxx	1.017	F	xxxxx	1.017	+ 0.000 V/C
#203 Sunrise Blvd. & International	E	xxxxx	0.983	E	xxxxx	0.983	+ 0.000 V/C
#204 Sunrise Blvd. & White Rock Roa	F	xxxxx	1.180	F	xxxxx	1.180	+ 0.000 V/C
#205 Sunrise Blvd. & Folsom Blvd.	E	xxxxx	0.959	E	xxxxx	0.959	+ 0.000 V/C
#206 Sunrise Blvd. & Zinfandel Driv	F	xxxxx	1.450	F	xxxxx	1.450	+ 0.000 V/C
#207 Zinfandel Drive & Douglas Road	E	xxxxx	0.995	E	xxxxx	0.995	+ 0.000 V/C
#209 Zinfandel Drive & C Street	B	xxxxx	0.632	B	xxxxx	0.632	+ 0.000 V/C
#210 Zinfandel Drive & B Street (so	E	xxxxx	0.938	E	xxxxx	0.938	+ 0.000 V/C
#211 Zinfandel Drive & Internationa	D	xxxxx	0.806	D	xxxxx	0.806	+ 0.000 V/C
#212 Zinfandel Drive & B Street (no	B	xxxxx	0.644	B	xxxxx	0.644	+ 0.000 V/C
#213 Zinfandel Drive & White Rock R	F	xxxxx	1.544	F	xxxxx	1.544	+ 0.000 V/C
#214 Zinfandel Drive & US50 EB Ramp	F	xxxxx	1.409	F	xxxxx	1.409	+ 0.000 V/C
#215 Zinfandel Drive & US50 WB Ramp	D	xxxxx	0.840	D	xxxxx	0.840	+ 0.000 V/C
#216 Mather Field Road & Internatio	A	xxxxx	0.478	A	xxxxx	0.478	+ 0.000 V/C
#217 Mather Field Road & Rockingham	F	xxxxx	1.472	F	xxxxx	1.472	+ 0.000 V/C
#218 Mather Field Road & US50 EB Ra	E	xxxxx	0.940	E	xxxxx	0.940	+ 0.000 V/C
#219 Mather Field Road & US50 WB Ra	A	xxxxx	0.454	A	xxxxx	0.454	+ 0.000 V/C
#220 Mather Field Road & Folsom Blv	F	xxxxx	1.222	F	xxxxx	1.222	+ 0.000 V/C
#221 Mather Blvd. & Von Karman Stre	A	4.8	0.438	A	4.8	0.438	+ 0.000 V/C
#222 Mather Blvd. & Whitehead Stree	B	6.8	0.517	B	6.8	0.517	+ 0.000 V/C
#224 A Street & Zinfandel Drive	D	xxxxx	0.838	D	xxxxx	0.838	+ 0.000 V/C
#225 Von Karman Street & Norden Ave	A	1.8	0.167	A	1.8	0.167	+ 0.000 V/C

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
#226 Norden Avenue & Whitehead Stre	A	2.0	0.194	A	2.0	0.194	+ 0.000 V/C
#227 A Street & Airpark Drive	B	xxxxx	0.624	B	xxxxx	0.624	+ 0.000 V/C
#228 International Drive & Capital	C	xxxxx	0.706	C	xxxxx	0.706	+ 0.000 V/C
#229 International Drive & Prospect	A	xxxxx	0.499	A	xxxxx	0.499	+ 0.000 V/C
#230 International Drive & Kilgore	D	xxxxx	0.856	D	xxxxx	0.856	+ 0.000 V/C
#231 International Drive & Femoyer	D	xxxxx	0.850	D	xxxxx	0.850	+ 0.000 V/C
#232 Hazel Avenue & US50 EB Ramps	C	xxxxx	0.705	C	xxxxx	0.705	+ 0.000 V/C
#233 Hazel Avenue & US50 WB Ramps	F	xxxxx	1.326	F	xxxxx	1.326	+ 0.000 V/C
#234 White Rock Road & Kilgore Road	E	xxxxx	0.947	E	xxxxx	0.947	+ 0.000 V/C
#235 White Rock Road & Prospect Par	A	xxxxx	0.588	A	xxxxx	0.588	+ 0.000 V/C
#236 B Street & Prospect Park Drive	A	xxxxx	0.272	A	xxxxx	0.272	+ 0.000 V/C
#237 B Street & Kilgore Road	B	xxxxx	0.683	B	xxxxx	0.683	+ 0.000 V/C
#240 C Street and A Street	A	xxxxx	0.511	A	xxxxx	0.511	+ 0.000 V/C
#242 A Street and Mather Boulevard	D	xxxxx	0.813	D	xxxxx	0.813	+ 0.000 V/C

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #201 Jackson Road & Sunrise Blvd.

Cycle (sec): 174 Critical Vol./Cap. (X): 0.804
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 174 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	8	929	173	312	1409	156	502	1205	339	138	282	178
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	929	173	312	1409	156	502	1205	339	138	282	178
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:	8	929	173	312	1409	156	502	1205	339	138	282	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	929	173	312	1409	156	502	1205	339	138	282	178
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 Vol.:	8	929	173	312	1409	156	502	1205	339	138	282	178

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.21	0.12	0.10	0.31	0.10	0.33	0.40	0.23	0.09	0.09	0.12
Crit Vol:	310			156			603			138		
Crit Moves:	****			****			****			****		

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #202 Sunrise Blvd. & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.017

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Ignore			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	207	1258	17	762	2075	224	998	1195	650	48	677	666
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:	207	1258	17	762	2075	224	998	1195	650	48	677	666
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	207	1258	0	762	2075	0	998	1195	0	48	677	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	1258	0	762	2075	0	998	1195	0	48	677	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Vol.:	207	1258	0	762	2075	0	998	1195	0	48	677	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.07	0.28	0.00	0.25	0.46	0.00	0.33	0.27	0.00	0.02	0.15	0.00
Crit Vol:	419			381			499			226		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #203 Sunrise Blvd. & International Drive/Monier Circl

Cycle (sec): 180 Critical Vol./Cap. (X): 0.983
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	3	0	1	1	0	0	2

Volume Module:

Base Vol:	857	1763	14	49	1876	299	556	0	1262	17	0	126
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:	857	1763	14	49	1876	299	556	0	1262	17	0	126
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:	857	1763	14	49	1876	299	556	0	1262	17	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	857	1763	14	49	1876	299	556	0	1262	17	0	126
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 Vol.:	857	1763	14	49	1876	299	556	0	1262	17	0	126

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.98	0.02	1.00	3.00	1.00	2.00	0.00	2.00	0.12	0.00	0.88
Final Sat.:	3000	4465	35	1500	4500	1500	3000	0	3000	178	0	1322

Capacity Analysis Module:

Vol/Sat:	0.29	0.39	0.39	0.03	0.42	0.20	0.19	0.00	0.42	0.10	0.00	0.10
Crit Vol:	429				625		278					143
Crit Moves:	****				****		****					****

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #204 Sunrise Blvd. & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.180

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1		2	0	3	0	1	

Volume Module:

Base Vol:	342	2020	204	1014	1728	332	292	1062	348	118	792	708
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:	342	2020	204	1014	1728	332	292	1062	348	118	792	708
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:	342	2020	204	1014	1728	332	292	1062	348	118	792	708
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	342	2020	204	1014	1728	332	292	1062	348	118	792	708
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 Vol.:	342	2020	204	1014	1728	332	292	1062	348	118	792	708

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	3000	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.11	0.45	0.14	0.34	0.38	0.22	0.10	0.35	0.23	0.04	0.18	0.47
Crit Vol:	673			507			531			59		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #205 Sunrise Blvd. & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 0.959
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	2	0	4	0	1	2	0	3	0	1	2	0	2	0	1	2	0	1	1	1

Volume Module:

Base Vol:	241	2641	981	168	1886	265	224	748	284	324	320	442
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:	241	2641	981	168	1886	265	224	748	284	324	320	442
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:	241	2641	981	168	1886	265	224	748	284	324	320	442
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	2641	981	168	1886	265	224	748	284	324	320	442
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 Vol.:	241	2641	981	168	1886	265	224	748	284	324	320	442

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	4.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	1.26	1.74
Final Sat.:	3000	6000	1500	3000	4500	1500	3000	3000	1500	3000	1890	2610

Capacity Analysis Module:

Vol/Sat:	0.08	0.44	0.65	0.06	0.42	0.18	0.07	0.25	0.19	0.11	0.17	0.17
Crit Vol:			981		84			374			0	
Crit Moves:			****		****			****			****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #206 Sunrise Blvd. & Zinfandel Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.450

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	2	1	0	0	1	0	3	0	1	0

Volume Module:

Base Vol:	148	4803	5	80	3456	181	412	0	145	20	0	80
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:	148	4803	5	80	3456	181	412	0	145	20	0	80
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:	148	4803	5	80	3456	181	412	0	145	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	148	4803	5	80	3456	181	412	0	145	20	0	80
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 Vol.:	148	4803	5	80	3456	181	412	0	145	20	0	80

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.99	0.01	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3000	4495	5	1500	4500	1500	1500	0	1500	1500	0	1500

Capacity Analysis Module:

Vol/Sat:	0.05	1.07	1.07	0.05	0.77	0.12	0.27	0.00	0.10	0.01	0.00	0.05
Crit Vol:	1603			80			412					80
Crit Moves:	****			****			****					****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #207 Zinfandel Drive & Douglas Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.995

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ignore				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	1	324	42	1474	967	595	801	932	23	123	740	697
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:	1	324	42	1474	967	595	801	932	23	123	740	697
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	1	324	42	1474	967	595	801	932	23	123	740	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1	324	42	1474	967	595	801	932	23	123	740	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Vol.:	1	324	42	1474	967	595	801	932	23	123	740	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.03	0.49	0.21	0.40	0.27	0.21	0.02	0.04	0.16	0.00
Crit Vol:	108			737			401			247		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #209 Zinfandel Drive & C Street

Cycle (sec): 93 Critical Vol./Cap. (X): 0.632

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 93 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Ovl			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	162	1806	0	0	1954	69	122	0	207	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	1806	0	0	1954	69	122	0	207	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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:	162	1806	0	0	1954	69	122	0	207	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	1806	0	0	1954	69	122	0	207	0	0	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 Vol.:	162	1806	0	0	1954	69	122	0	207	0	0	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.37	0.00	0.63	0.00	0.00	0.00
Final Sat.:	1550	4650	0	0	4650	1550	575	0	975	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.10	0.39	0.00	0.00	0.42	0.04	0.21	0.00	0.21	0.00	0.00	0.00
Crit Vol:	0				651				329	0		
Crit Moves:	****				****				****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #210 Zinfandel Drive & B Street (south)

Cycle (sec): 180 Critical Vol./Cap. (X): 0.938
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Ovl					Ovl				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	1	0	3	0	1	1	0	1	0	2	1	0	0	1	0

Volume Module:

Base Vol:	621	1802	271	1	2017	50	136	52	770	350	17	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:	621	1802	271	1	2017	50	136	52	770	350	17	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:	621	1802	271	1	2017	50	136	52	770	350	17	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	621	1802	271	1	2017	50	136	52	770	350	17	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 Vol.:	621	1802	271	1	2017	50	136	52	770	350	17	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	2.00	1.00	1.00	0.00
Final Sat.:	3000	4500	1500	1500	4500	1500	1500	1500	3000	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.21	0.40	0.18	0.00	0.45	0.03	0.09	0.03	0.26	0.23	0.01	0.00
Crit Vol:	0			672					385	350		
Crit Moves:	****			****					****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #211 Zinfandel Drive & International Drive

Cycle (sec): 175 Critical Vol./Cap. (X): 0.806

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 175 Level Of Service: D

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Ovl					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1	2	0	3	0	1

Volume Module:

Base Vol:	435	1889	79	214	1765	378	324	827	471	63	722	96
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:	435	1889	79	214	1765	378	324	827	471	63	722	96
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:	435	1889	79	214	1765	378	324	827	471	63	722	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	435	1889	79	214	1765	378	324	827	471	63	722	96
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 Vol.:	435	1889	79	214	1765	378	324	827	471	63	722	96

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4500	1500	3000	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.14	0.42	0.05	0.07	0.39	0.25	0.11	0.18	0.31	0.02	0.16	0.06
Crit Vol:	217			588			162			241		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #212 Zinfandel Drive & B Street (north)

Cycle (sec): 96 Critical Vol./Cap. (X): 0.644

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 96 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	3	0	1	0

Volume Module:

Base Vol:	0	1765	162	3	1777	0	12	128	0	246	106	1
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	1765	162	3	1777	0	12	128	0	246	106	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1765	162	3	1777	0	12	128	0	246	106	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1765	162	3	1777	0	12	128	0	246	106	1
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 Vol.:	0	1765	162	3	1777	0	12	128	0	246	106	1

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.99	0.01
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	1500	0	1500	1486	14

Capacity Analysis Module:

Vol/Sat:	0.00	0.39	0.11	0.00	0.39	0.00	0.01	0.09	0.00	0.16	0.07	0.07
Crit Vol:	0			592			128			246		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #213 Zinfandel Drive & White Rock Road

Cycle (sec): 180 Critical Vol./Cap. (X): 1.544

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ovl					Ovl					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2	0	3	0	1	2	0	3	0	1	2	0	2	1	0	2	0	1	1	1

Volume Module:

Base Vol:	22	2337	15	766	1816	41	1065	237	18	31	164	1244
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:	22	2337	15	766	1816	41	1065	237	18	31	164	1244
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:	22	2337	15	766	1816	41	1065	237	18	31	164	1244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	2337	15	766	1816	41	1065	237	18	31	164	1244
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 Vol.:	22	2337	15	766	1816	41	1065	237	18	31	164	1244

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.79	0.21	2.00	1.00	2.00
Final Sat.:	3000	4500	1500	3000	4500	1500	3000	4182	318	3000	1500	3000

Capacity Analysis Module:

Vol/Sat:	0.01	0.52	0.01	0.26	0.40	0.03	0.35	0.06	0.06	0.01	0.11	0.41
Crit Vol:	779			383			533				622	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #214 Zinfandel Drive & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.409

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	4729	0	0	2091	0	868	119	682	0	0	567
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	4729	0	0	2091	0	868	119	682	0	0	567
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	4729	0	0	2091	0	868	119	682	0	0	567
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	4729	0	0	2091	0	868	119	682	0	0	567
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 Vol.:	0	4729	0	0	2091	0	868	119	682	0	0	567

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	4.00	0.00	0.00	2.00	0.00	2.00	0.30	1.70	0.00	0.00	1.00
Final Sat.:	0	6200	0	0	3100	0	3100	461	2639	0	0	1550

Capacity Analysis Module:

Vol/Sat:	0.00	0.76	0.00	0.00	0.67	0.00	0.28	0.26	0.26	0.00	0.00	0.37
Crit Vol:	1182			0			434					567
Crit Moves:	****			****			****					****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #215 Zinfandel Drive & US50 WB Ramps

Cycle (sec): 125 Critical Vol./Cap. (X): 0.840

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 125 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Permitted			Permitted					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	3	0	0	0	0	0	0	0	2	0	0	0	1

Volume Module:

Base Vol:	0	2337	0	0	970	0	0	0	0	1215	0	294
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	2337	0	0	970	0	0	0	0	1215	0	294
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2337	0	0	970	0	0	0	0	1215	0	294
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2337	0	0	970	0	0	0	0	1215	0	294
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 Vol.:	0	2337	0	0	970	0	0	0	0	1215	0	294

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	4950	0	0	3300	0	0	0	0	3300	0	1650

Capacity Analysis Module:

Vol/Sat:	0.00	0.47	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.37	0.00	0.18
Crit Vol:	779			0			0			608		
Crit Moves:	****			****						****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #216 Mather Field Road & International Drive

Cycle (sec): 52 Critical Vol./Cap. (X): 0.478

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 52 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Permitted			Permitted			Protected			Protected						
Rights:	Ovl			Include			Ignore			Include						
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	2	0	0	0	0	0	0	0	3	0	1	1	0	3	0	0

Volume Module:

Base Vol:	222	0	61	0	0	0	0	1871	163	7	1831	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:	222	0	61	0	0	0	0	1871	163	7	1831	0
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:	222	0	61	0	0	0	0	1871	0	7	1831	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	0	61	0	0	0	0	1871	0	7	1831	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	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
Final Vol.:	222	0	61	0	0	0	0	1871	0	7	1831	0

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3100	0	1550	0	0	0	0	4650	1550	1550	4650	0

Capacity Analysis Module:

Vol/Sat:	0.07	0.00	0.04	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.39	0.00
Crit Vol:	111				0			624		7		
Crit Moves:	****						****		****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #217 Mather Field Road & Rockingham Drive

Cycle (sec): 180 Critical Vol./Cap. (X): 1.472

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L - T - R					L - T - R					L - T - R					L - T - R				
Control:	Protected					Protected					Split Phase					Split Phase				
Rights:	Include					Ignore					Include					Include				
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	1	0	0	0	1	0	1	0

Volume Module:

Base Vol:	651	1640	7	196	1451	567	1251	121	394	5	206	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:	651	1640	7	196	1451	567	1251	121	394	5	206	171
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	651	1640	7	196	1451	0	1251	121	394	5	206	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	651	1640	7	196	1451	0	1251	121	394	5	206	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	651	1640	7	196	1451	0	1251	121	394	5	206	171

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.99	0.01	1.00	3.00	1.00	1.42	0.14	0.44	0.03	1.08	0.89
Final Sat.:	1500	4481	19	1500	4500	1500	2125	206	669	39	1618	1343

Capacity Analysis Module:

Vol/Sat:	0.43	0.37	0.37	0.13	0.32	0.00	0.59	0.59	0.59	0.13	0.13	0.13
Crit Vol:	651			484			883			191		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #218 Mather Field Road & US50 EB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 0.940

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	3	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	3097	0	0	1071	0	534	0	1021	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	3097	0	0	1071	0	534	0	1021	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	3097	0	0	1071	0	534	0	1021	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3097	0	0	1071	0	534	0	1021	0	0	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 Vol.:	0	3097	0	0	1071	0	534	0	1021	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	0.00	0.00	2.00	0.00	1.03	0.01	1.96	0.00	0.00	0.00
Final Sat.:	0	4950	0	0	3300	0	1700	0	3250	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.63	0.00	0.00	0.32	0.00	0.31	0.00	0.31	0.00	0.00	0.00
Crit Vol:	1032			0			518			0		
Crit Moves:	****			****			****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #219 Mather Field Road & US50 WB Ramps

Cycle (sec): 37 Critical Vol./Cap. (X): 0.454

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Permitted			Permitted			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	0	0	2	0	0	0	0	0	0	0	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	1061	0	0	740	0	0	0	0	406	0	30
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	1061	0	0	740	0	0	0	0	406	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1061	0	0	740	0	0	0	0	406	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1061	0	0	740	0	0	0	0	406	0	30
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 Vol.:	0	1061	0	0	740	0	0	0	0	406	0	30

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	1.86	0.00	0.14
Final Sat.:	0	3300	0	0	3300	0	0	0	0	3073	0	227

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.32	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Crit Vol:	531			0			0			218		
Crit Moves:	****			****						****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #220 Mather Field Road & Folsom Blvd.

Cycle (sec): 180 Critical Vol./Cap. (X): 1.222
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	1	0	0	1	0	1	0	2	0	1	0

Volume Module:

Base Vol:	244	141	815	47	47	9	28	1934	271	426	1475	45
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:	244	141	815	47	47	9	28	1934	271	426	1475	45
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:	244	141	815	47	47	9	28	1934	271	426	1475	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	141	815	47	47	9	28	1934	271	426	1475	45
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 Vol.:	244	141	815	47	47	9	28	1934	271	426	1475	45

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.27	0.73	1.00	0.92	0.91	0.17	1.00	2.00	1.00	2.00	1.94	0.06
Final Sat.:	1901	1099	1500	1369	1369	262	1500	3000	1500	3000	2911	89

Capacity Analysis Module:

Vol/Sat:	0.13	0.13	0.54	0.03	0.03	0.03	0.02	0.64	0.18	0.14	0.51	0.51
Crit Vol:			815			52		967		0		
Crit Moves:			****			****		****		****		

ITEM 18.1.

ATTACHMENT 5

Default Scenario

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #221 Mather Blvd. & Von Karman Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.438

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 4.8

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	0	1	1	0	0	0	0	0

Volume Module:

Base Vol:	0	0	0	0	11	112	0	0	0	0	665	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	11	112	0	0	0	0	665	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	11	112	0	0	0	0	665	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	11	112	0	0	0	0	665	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 Vol.:	0	0	0	0	11	112	0	0	0	0	665	0

Saturation Flow Module:

Sat/Lane:	0	0	0	278	278	278	0	0	0	759	759	759
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	278	278	0	0	0	0	1518	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.04	0.40	0.00	0.00	0.00	0.00	0.44	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	xxxxx			0.22			xxxxx			0.44		
Delay/Veh:	0.0	0.0	0.0	0.0	1.2	4.6	0.0	0.0	0.0	0.0	5.3	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	1.2	4.6	0.0	0.0	0.0	0.0	5.3	0.0
LOS by Move:	*	*	*	*	A	A	*	*	*	*	B	*
ApproachDel:	xxxxxx			2.3			xxxxxx			5.3		
Delay Adj:	xxxxx			1.00			xxxxx			1.00		
ApprAdjDel:	xxxxxx			2.3			xxxxxx			5.3		
LOS by Appr:	F			A			F			B		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #222 Mather Blvd. & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.517

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 6.8

Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	1	0	0	0	0	0	0	0	1	1

Volume Module:

Base Vol:	0	45	0	0	0	0	0	0	0	0	665	28
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	45	0	0	0	0	0	0	0	0	665	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	45	0	0	0	0	0	0	0	0	665	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	45	0	0	0	0	0	0	0	0	665	28
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 Vol.:	0	45	0	0	0	0	0	0	0	0	665	28

Saturation Flow Module:

Sat/Lane:	237	237	237	0	0	0	0	0	0	670	670	670
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.08
Final Sat.:	0	474	0	0	0	0	0	0	0	0	1286	54

Capacity Analysis Module:

Vol/Sat:	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
Crit Moves:	****			****			****			****		
ApproachV/S:	0.09			xxxxx			xxxxx			0.52		
Delay/Veh:	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1
LOS by Move:	*	A	*	*	*	*	*	*	*	*	B	B
ApproachDel:	1.4			xxxxxx			xxxxxx			7.1		
Delay Adj:	1.00			xxxxx			xxxxx			1.00		
ApprAdjDel:	1.4			xxxxxx			xxxxxx			7.1		
LOS by Appr:	A			F			F			B		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #224 A Street & Zinfandel Drive

Cycle (sec): 166 Critical Vol./Cap. (X): 0.838

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 166 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1		1	0	0	1	0	

Volume Module:

Base Vol:	9	1769	0	37	1768	494	609	3	12	0	1	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:	9	1769	0	37	1768	494	609	3	12	0	1	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:	9	1769	0	37	1768	494	609	3	12	0	1	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	1769	0	37	1768	494	609	3	12	0	1	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 Vol.:	9	1769	0	37	1768	494	609	3	12	0	1	20

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.20	0.80	1.00	0.05	0.95
Final Sat.:	1500	4500	1500	1500	4500	1500	1500	300	1200	1500	71	1429

Capacity Analysis Module:

Vol/Sat:	0.01	0.39	0.00	0.02	0.39	0.33	0.41	0.01	0.01	0.00	0.01	0.01
Crit Vol:	590			37			609				21	
Crit Moves:	****			****			****				****	

ITEM 18.1.

Default Scenario

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ATTACHMENT 5

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Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #225 Von Karman Street & Norden Avenue

Cycle (sec): 1 Critical Vol./Cap. (X): 0.167

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 1.8

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	0	1	1	0	0	0	0	1	1

Volume Module:

Base Vol:	0	0	0	8	3	0	0	188	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	8	3	0	0	188	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	8	3	0	0	188	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	8	3	0	0	188	0	0	0	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 Vol.:	0	0	0	8	3	0	0	188	0	0	0	0

Saturation Flow Module:

Sat/Lane:	0	0	0	228	228	228	563	563	563	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	228	228	0	0	1126	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.17	0.00	0.00	0.00	0.00
Crit Moves:			****	****				****				****
ApproachV/S:	xxxxx			0.02			0.17			xxxxx		
Delay/Veh:	0.0	0.0	0.0	1.1	1.1	0.0	0.0	1.9	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	1.1	1.1	0.0	0.0	1.9	0.0	0.0	0.0	0.0
LOS by Move:	*	*	*	A	A	*	*	A	*	*	*	*
ApproachDel:	xxxxxx			1.1			1.9			xxxxxx		
Delay Adj:	xxxxx			1.00			1.00			xxxxx		
ApprAdjDel:	xxxxxx			1.1			1.9			xxxxxx		
LOS by Appr:	F			A			A			F		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

Level Of Service Computation Report

1994 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #226 Norden Avenue & Whitehead Street

Cycle (sec): 1 Critical Vol./Cap. (X): 0.194

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 2.0

Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign			
Rights:	Include			Include			Include			Include			
Lanes:	0	0	1	1	0	0	0	0	0	0	1	1	0

Volume Module:

Base Vol:	0	36	0	0	0	0	9	238	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	0	0	0	0	9	238	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	36	0	0	0	0	9	238	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	36	0	0	0	0	9	238	0	0	0	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 Vol.:	0	36	0	0	0	0	9	238	0	0	0	0

Saturation Flow Module:

Sat/Lane:	258	258	258	0	0	0	636	636	636	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	0.00	0.00	0.07	1.93	0.00	0.00	0.00	0.00
Final Sat.:	0	516	0	0	0	0	46	1226	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
ApproachV/S:	0.07			xxxxxx			0.19			xxxxxx		
Delay/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	1.3	0.0	0.0	0.0	0.0	2.1	2.1	0.0	0.0	0.0	0.0
LOS by Move:	*	A	*	*	*	*	A	A	*	*	*	*
ApproachDel:	1.3			xxxxxx			2.1			xxxxxx		
Delay Adj:	1.00			xxxxxx			1.00			xxxxxx		
ApprAdjDel:	1.3			xxxxxx			2.1			xxxxxx		
LOS by Appr:	A			F			A			F		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #227 A Street & Airpark Drive

Cycle (sec): 100 Critical Vol./Cap. (X): 0.624

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 61 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	315	15	0	0	38	164	184	51	419	0	130	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:	315	15	0	0	38	164	184	51	419	0	130	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:	315	15	0	0	38	164	184	51	419	0	130	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	315	15	0	0	38	164	184	51	419	0	130	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 Vol.:	315	15	0	0	38	164	184	51	419	0	130	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	0.19	0.81	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1500	1500	0	1500	282	1218	1500	1500	1500	1500	1500	0

Capacity Analysis Module:

Vol/Sat:	0.21	0.01	0.00	0.00	0.13	0.13	0.12	0.03	0.28	0.00	0.09	0.00
Crit Vol:	315				202				419	0		
Crit Moves:	****				****				****	****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #228 International Drive & Capital Center Drive

Cycle (sec): 92 Critical Vol./Cap. (X): 0.706

Loss Time (sec): 15 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 92 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	3	0	0	0

Volume Module:

Base Vol:	0	0	0	295	0	106	210	1433	0	0	1475	293
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	295	0	106	210	1433	0	0	1475	293
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	295	0	106	210	1433	0	0	1475	293
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	295	0	106	210	1433	0	0	1475	293
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 Vol.:	0	0	0	295	0	106	210	1433	0	0	1475	293

Saturation Flow Module:

Sat/Lane:	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550	1550
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.50	0.50
Final Sat.:	0	0	0	1550	0	1550	1550	4650	0	0	3879	771

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.07	0.14	0.31	0.00	0.00	0.38	0.38
Crit Vol:	0			295			210				589	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #229 International Drive & Prospect Park Drive

Cycle (sec): 68 Critical Vol./Cap. (X): 0.499

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	
	1	0	2	0	1		1	0	3	0	1	

Volume Module:

Base Vol:	49	120	0	296	227	207	137	1004	119	34	766	167
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:	49	120	0	296	227	207	137	1004	119	34	766	167
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:	49	120	0	296	227	207	137	1004	119	34	766	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	120	0	296	227	207	137	1004	119	34	766	167
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 Vol.:	49	120	0	296	227	207	137	1004	119	34	766	167

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	4500	1500	1500	4500	1500

Capacity Analysis Module:

Vol/Sat:	0.03	0.04	0.00	0.20	0.08	0.14	0.09	0.22	0.08	0.02	0.17	0.11
Crit Vol:	60			296			137				255	
Crit Moves:	****			****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #230 International Drive & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.856

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1		1	0	2	0	1	

Volume Module:

Base Vol:	3	194	328	401	374	162	184	1096	1	238	712	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:	3	194	328	401	374	162	184	1096	1	238	712	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:	3	194	328	401	374	162	184	1096	1	238	712	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	194	328	401	374	162	184	1096	1	238	712	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 Vol.:	3	194	328	401	374	162	184	1096	1	238	712	220

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1500	3000	1500	1500	3000	1500	1500	3000	1500	1500	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.22	0.27	0.12	0.11	0.12	0.37	0.00	0.16	0.24	0.15
Crit Vol:		97		401				548		238		
Crit Moves:	****			****			****		****			

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #231 International Drive & Femoyer Street

Cycle (sec): 180 Critical Vol./Cap. (X): 0.850

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	0	1	0	2	1	0	1

Volume Module:

Base Vol:	594	45	100	0	25	446	395	1314	554	66	1377	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:	594	45	100	0	25	446	395	1314	554	66	1377	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:	594	45	100	0	25	446	395	1314	554	66	1377	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	594	45	100	0	25	446	395	1314	554	66	1377	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 Vol.:	594	45	100	0	25	446	395	1314	554	66	1377	0

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.61	0.12	0.27	0.00	1.00	1.00	1.00	2.11	0.89	1.00	3.00	0.00
Final Sat.:	2411	183	406	0	1500	1500	1500	3165	1335	1500	4500	0

Capacity Analysis Module:

Vol/Sat:	0.25	0.25	0.25	0.00	0.02	0.30	0.26	0.42	0.42	0.04	0.31	0.00
Crit Vol:	370			446			0			459		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #232 Hazel Avenue & US50 EB Ramps

Cycle (sec): 68 Critical Vol./Cap. (X): 0.705

Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 68 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	0	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	0	0	0	557	0	1768	0	686	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	557	0	1768	0	686	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	557	0	1768	0	686	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	557	0	1768	0	686	0	0	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 Vol.:	0	0	0	0	557	0	1768	0	686	0	0	0

Saturation Flow Module:

Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3300	0	0	3300	0	3300	0	1650	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.17	0.00	0.54	0.00	0.42	0.00	0.00	0.00
Crit Vol:	0				279		884				0	
Crit Moves:					****		****					

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #233 Hazel Avenue & US50 WB Ramps

Cycle (sec): 180 Critical Vol./Cap. (X): 1.326
Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	3	0	1	0	0	0	1

Volume Module:

Base Vol:	102	4065	0	0	2676	38	0	0	133	85	153	1115
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:	102	4065	0	0	2676	38	0	0	133	85	153	1115
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:	102	4065	0	0	2676	38	0	0	133	85	153	1115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	4065	0	0	2676	38	0	0	133	85	153	1115
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 Vol.:	102	4065	0	0	2676	38	0	0	133	85	153	1115

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	0.00	0.00	1.00	1.00	0.24	1.76
Final Sat.:	1500	4500	0	0	4500	1500	0	0	1500	1500	362	2638

Capacity Analysis Module:

Vol/Sat:	0.07	0.90	0.00	0.00	0.59	0.03	0.00	0.00	0.09	0.06	0.42	0.42
Crit Vol:	1355	0	0	0	0	0	0	0	0	634	0	0
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #234 White Rock Road & Kilgore Road

Cycle (sec): 180 Critical Vol./Cap. (X): 0.947

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 180 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Ovl			Include			Ovl			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	0	1	1	0

Volume Module:

Base Vol:	177	252	85	201	475	235	84	1182	102	298	1423	156
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:	177	252	85	201	475	235	84	1182	102	298	1423	156
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:	177	252	85	201	475	235	84	1182	102	298	1423	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	177	252	85	201	475	235	84	1182	102	298	1423	156
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 Vol.:	177	252	85	201	475	235	84	1182	102	298	1423	156

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.34	0.66	1.00	2.00	1.00	1.00	2.70	0.30
Final Sat.:	1500	1500	1500	1500	2007	993	1500	3000	1500	1500	4055	445

Capacity Analysis Module:

Vol/Sat:	0.12	0.17	0.06	0.13	0.24	0.24	0.06	0.39	0.07	0.20	0.35	0.35
Crit Vol:	177			355			591			298		
Crit Moves:	****			****			****			****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #235 White Rock Road & Prospect Park Drive

Cycle (sec): 83 Critical Vol./Cap. (X): 0.588

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 83 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Protected			Protected			
Rights:	Ovl			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	1	0	1	0	1	0	2	1	0	1	0

Volume Module:

Base Vol:	286	39	332	87	14	41	35	1037	95	168	690	18
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:	286	39	332	87	14	41	35	1037	95	168	690	18
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:	286	39	332	87	14	41	35	1037	95	168	690	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	286	39	332	87	14	41	35	1037	95	168	690	18
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 Vol.:	286	39	332	87	14	41	35	1037	95	168	690	18

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.72	0.28	1.00	1.00	2.75	0.25	1.00	2.92	0.08
Final Sat.:	1500	1500	1500	2584	416	1500	1500	4122	378	1500	4386	114

Capacity Analysis Module:

Vol/Sat:	0.19	0.03	0.22	0.03	0.03	0.03	0.02	0.25	0.25	0.11	0.16	0.16
Crit Vol:	286			51				377		168		
Crit Moves:	****			****				****		****		

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #236 B Street & Prospect Park Drive

Cycle (sec): 47 Critical Vol./Cap. (X): 0.272

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Protected			Protected			Protected			Protected			
Rights:	Include			Ovl			Include			Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	0	1	0	1	1	0	0	1	0	1	0

Volume Module:

Base Vol:	14	34	0	83	77	219	97	176	23	0	137	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:	14	34	0	83	77	219	97	176	23	0	137	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:	14	34	0	83	77	219	97	176	23	0	137	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	34	0	83	77	219	97	176	23	0	137	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 Vol.:	14	34	0	83	77	219	97	176	23	0	137	38

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.12	1.00	0.78	0.22
Final Sat.:	1500	1500	0	1500	1500	1500	1500	1327	173	1500	1174	326

Capacity Analysis Module:

Vol/Sat:	0.01	0.02	0.00	0.06	0.05	0.15	0.06	0.13	0.13	0.00	0.12	0.12
Crit Vol:	14					219	0				175	
Crit Moves:	****					****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #237 B Street & Kilgore Road

Cycle (sec): 107 Critical Vol./Cap. (X): 0.683

Loss Time (sec): 20 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 107 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:

Base Vol:	0	0	0	471	0	141	169	78	0	0	39	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	471	0	141	169	78	0	0	39	345
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	471	0	141	169	78	0	0	39	345
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	471	0	141	169	78	0	0	39	345
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 Vol.:	0	0	0	471	0	141	169	78	0	0	39	345

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.10	0.90
Final Sat.:	0	0	0	1500	0	1500	1500	1500	0	0	152	1348

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.31	0.00	0.09	0.11	0.05	0.00	0.00	0.26	0.26
Crit Vol:	0			471			169				384	
Crit Moves:				****			****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #240 C Street and A Street

Cycle (sec): 100 Critical Vol./Cap. (X): 0.511

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1

Volume Module:

Base Vol:	0	0	0	4	0	201	190	782	0	0	750	8
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	4	0	201	190	782	0	0	750	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:	0	0	0	4	0	201	190	782	0	0	750	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	4	0	201	190	782	0	0	750	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 Vol.:	0	0	0	4	0	201	190	782	0	0	750	8

Saturation Flow Module:

Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	3000	1500

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.26	0.00	0.00	0.25	0.01
Crit Vol:	0					201	190				375	
Crit Moves:						****	****				****	

Villages of Zinfandel
Cumulative Conditions - With Proposed Project Alternative
PM Peak Hour

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

Intersection #242 A Street and Mather Boulevard

Cycle (sec): 100 Critical Vol./Cap. (X): 0.813

Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 122 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	0	1	0	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	729	0	81	15	243	0	0	518	433
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	729	0	81	15	243	0	0	518	433
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	729	0	81	15	243	0	0	518	433
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	729	0	81	15	243	0	0	518	433
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 Vol.:	0	0	0	729	0	81	15	243	0	0	518	433

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	0.91
Final Sat.:	0	0	0	1500	0	1500	1500	3000	0	0	1634	1366

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.49	0.00	0.05	0.01	0.08	0.00	0.00	0.32	0.32
Crit Vol:	0			729			15				475	
Crit Moves:				****			****				****	

**17. FREEWAY MAINLINE AND
INTERCHANGE ANALYSIS**

Capacity Analysis of Freeway Mainline Segments																													
Capacity based on 2200 vphpl for freeway lanes, 1600 vphpl for auxiliary lanes																													
Alternative: Peak Hour:	Fwy Lanes	Aux Lanes	Existing Input Data								Future Input Data																		
			Existing No Project				Existing + Approved Project				Existing + Proposed Project				Existing + Project Alternative				Fwy Lanes	Aux Lanes	Car- pool Lanes	Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
			AM		PM		AM		PM		AM		PM		AM		PM					AM		PM		AM		PM	
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM				AM	PM	AM	PM	AM	PM	AM	PM
WB U.S.-50 -- east of Hazel Avenue	2	0	5,195	1,947	5,244	1,920	5,277	1,937	5,272	1,914	2	0	0	7,615	3,876	7,659	3,861	7,605	3,846	7,642	3,881								
WB U.S.-50 -- Hazel off to NB Hazel on	2	0	4,925	1,040	5,042	1,064	5,043	1,089	5,044	1,061	2	0	0	6,928	2,491	6,995	2,570	6,968	2,488	7,011	2,531								
WB U.S.-50 -- NB Hazel on to SB Hazel on	2	0	5,545	1,171	5,658	1,198	5,652	1,237	5,650	1,192	2	0	0	7,833	2,923	7,881	3,002	7,895	2,939	7,901	2,961								
WB U.S.-50 -- Hazel to Sunrise off	3	0	7,478	1,696	7,657	1,764	7,634	1,805	7,632	1,761	3	0	0	9,692	3,917	9,810	3,984	9,825	3,916	9,835	3,941								
WB U.S.-50 -- Sunrise off to Sunrise on	3	0	6,638	1,176	6,811	1,281	6,809	1,285	6,797	1,260	3	0	0	8,356	3,026	8,391	3,135	8,364	3,094	8,269	3,117								
WB U.S.-50 -- Sunrise on to Zinfandel off	4	0	9,158	3,236	9,552	3,495	9,563	3,504	9,526	3,455	4	0	0	11,144	5,411	11,312	5,500	11,316	5,495	11,315	5,516								
WB U.S.-50 -- Zinfandel off to NB Zinfandel on	4	0	8,007	2,772	7,737	2,682	7,722	2,690	7,717	2,639	4	0	0	8,844	4,021	8,660	3,943	8,620	3,974	8,643	3,961								
WB U.S.-50 -- NB Zinfandel on to SB Zinfandel on	4	0	8,373	4,352	8,193	4,056	8,152	4,078	8,156	4,024	4	0	0	10,219	5,916	9,978	5,888	10,034	5,928	10,098	5,928								
WB U.S.-50 -- Zinfandel to Mather Field off	4	0	8,739	4,971	8,552	4,764	8,529	4,795	8,505	4,763	4	0	0	10,554	6,474	10,343	6,436	10,468	6,466	10,464	6,469								
WB U.S.-50 -- Mather Field off to NB Mather Field on	4	0	8,017	4,517	7,841	4,269	7,788	4,295	7,771	4,268	4	0	0	9,532	5,846	9,360	5,827	9,504	5,857	9,521	5,900								
WB U.S.-50 -- NB Mather Field on to SB Mather Field on	4	0	8,333	4,978	8,296	5,547	8,208	5,559	8,186	5,508	4	0	0	10,005	6,946	9,860	7,248	9,936	7,248	9,984	7,258								
WB U.S.-50 -- west of Mather Field Road	4	0	8,863	5,338	8,777	5,827	8,706	5,834	8,702	5,776	4	0	0	10,512	7,185	10,386	7,487	10,452	7,455	10,538	7,467								
EB U.S.-50 -- west of Mather Field Road	4	0	7,712	8,823	8,289	8,719	8,321	8,691	8,297	8,666	4	0	0	9,825	10,340	10,036	10,249	10,057	10,292	10,088	10,303								
EB U.S.-50 -- Mather Field off to SB Mather Field on	4	0	6,317	7,725	6,290	7,490	6,315	7,505	6,282	7,485	4	0	0	7,772	8,901	7,847	8,711	7,866	8,751	7,899	8,808								
EB U.S.-50 -- SB Mather Field on to NB Mather Field on	4	0	6,553	8,001	6,474	7,719	6,497	7,740	6,462	7,715	4	0	0	8,008	9,053	8,080	8,891	8,088	8,923	8,138	8,986								
EB U.S.-50 -- Mather Field to Zinfandel off	4	0	6,727	8,422	6,644	8,115	6,660	8,135	6,621	8,122	4	0	0	8,287	9,914	8,321	9,655	8,377	9,686	8,422	9,757								
EB U.S.-50 -- Zinfandel off to SB Zinfandel on	4	0	4,395	6,921	4,349	6,655	4,346	6,680	4,331	6,651	4	0	0	5,357	8,164	5,238	7,957	5,265	7,968	5,277	8,030								
EB U.S.-50 -- SB Zinfandel on to NB Zinfandel on	4	0	4,482	7,066	4,435	6,771	4,430	6,759	4,417	6,719	4	0	0	5,631	8,325	5,399	8,079	5,410	8,099	5,423	8,142								
EB U.S.-50 -- Zinfandel to Sunrise off	4	0	4,774	7,428	5,001	7,738	4,984	7,763	4,964	7,716	4	0	0	6,612	10,308	6,491	10,409	6,471	10,414	6,495	10,526								
EB U.S.-50 -- Sunrise off to Sunrise on	3	0	3,074	5,788	3,148	5,946	3,172	5,943	3,162	5,919	3	0	0	4,581	8,057	4,400	8,138	4,426	8,157	4,480	8,271								
EB U.S.-50 -- Sunrise to Hazel off	3	0	3,609	6,558	3,631	6,716	3,659	6,727	3,637	6,733	3	0	0	5,639	8,860	5,633	9,025	5,581	8,998	5,665	9,066								
EB U.S.-50 -- Hazel off to Hazel on	2	0	2,950	4,697	2,961	4,784	2,968	4,793	2,952	4,685	2	0	0	4,059	6,613	4,067	6,674	3,987	6,752	4,050	6,611								
EB U.S.-50 -- east of Hazel	2	0	3,636	5,595	3,581	5,660	3,592	5,655	3,581	5,654	2	0	0	5,010	8,517	4,991	8,538	4,903	8,584	5,001	8,583								
Calculations																													
Volume to Capacity (V/C)																													
WB U.S.-50 -- east of Hazel Avenue			1.181	0.443	1.192	0.436	1.199	0.440	1.198	0.435				1.731	0.881	1.741	0.878	1.728	0.874	1.737	0.882								
WB U.S.-50 -- Hazel off to NB Hazel on			1.119	0.236	1.146	0.242	1.146	0.248	1.146	0.241				1.575	0.566	1.590	0.564	1.584	0.565	1.593	0.574								
WB U.S.-50 -- NB Hazel on to SB Hazel on			1.260	0.266	1.286	0.272	1.285	0.278	1.284	0.271				1.780	0.564	1.791	0.562	1.794	0.560	1.796	0.574								
WB U.S.-50 -- Hazel to Sunrise off			1.133	0.257	1.160	0.267	1.157	0.273	1.156	0.267				1.468	0.593	1.486	0.604	1.489	0.593	1.490	0.595								
WB U.S.-50 -- Sunrise off to Sunrise on			1.006	0.178	1.032	0.194	1.032	0.195	1.030	0.191				1.266	0.458	1.271	0.475	1.267	0.469	1.253	0.472								
WB U.S.-50 -- Sunrise on to Zinfandel off			1.041	0.368	1.085	0.397	1.087	0.398	1.083	0.393				1.266	0.615	1.285	0.625	1.286	0.624	1.286	0.627								
WB U.S.-50 -- Zinfandel off to NB Zinfandel on			0.910	0.315	0.879	0.305	0.878	0.306	0.877	0.300				1.005	0.457	0.984	0.448	0.980	0.452	0.982	0.450								
WB U.S.-50 -- NB Zinfandel on to SB Zinfandel on			0.951	0.495	0.931	0.461	0.926	0.463	0.927	0.457				1.161	0.672	1.134	0.669	1.140	0.674	1.148	0.674								
WB U.S.-50 -- Zinfandel to Mather Field off			0.993	0.565	0.972	0.541	0.969	0.545	0.966	0.541				1.199	0.736	1.175	0.731	1.190	0.735	1.189	0.737								
WB U.S.-50 -- Mather Field off to NB Mather Field on			0.911	0.513	0.891	0.485	0.885	0.488	0.883	0.485				1.083	0.664	1.064	0.662	1.080	0.666	1.082	0.670								
WB U.S.-50 -- NB Mather Field on to SB Mather Field on			0.947	0.566	0.942	0.630	0.933	0.632	0.930	0.626				1.137	0.789	1.120	0.824	1.129	0.824	1.135	0.828								
WB U.S.-50 -- west of Mather Field Road			1.007	0.607	0.997	0.662	0.989	0.663	0.989	0.656				1.195	0.816	1.180	0.851	1.188	0.847	1.198	0.849								
EB U.S.-50 -- west of Mather Field Road			0.876	1.003	0.942	0.991	0.946	0.988	0.943	0.985				1.116	1.175	1.140	1.165	1.143	1.170	1.146	1.177								
EB U.S.-50 -- Mather Field off to SB Mather Field on			0.718	0.878	0.715	0.851	0.718	0.853	0.714	0.851				0.883	1.011	0.892	0.990	0.894	0.994	0.898	1.000								
EB U.S.-50 -- SB Mather Field on to NB Mather Field on			0.745	0.909	0.736	0.877	0.738	0.880	0.734	0.877				0.910	1.029	0.918	1.010	0.919	1.014	0.925	1.026								
EB U.S.-50 -- Mather Field to Zinfandel off			0.764	0.957	0.755	0.922	0.757	0.924	0.752	0.923				0.942	1.127	0.946	1.097	0.952	1.101	0.957	1.109								
EB U.S.-50 -- Zinfandel off to SB Zinfandel on			0.499	0.786	0.494	0.756	0.494	0.759	0.492	0.756				0.609	0.928	0.595	0.904	0.598	0.905	0.600	0.913								
EB U.S.-50 -- SB Zinfandel on to NB Zinfandel on			0.509	0.803	0.504	0.769	0.503	0.768	0.502	0.764				0.640	0.946	0.614	0.918	0.615	0.920	0.616	0.925								
EB U.S.-50 -- Zinfandel to Sunrise off			0.543	0.844	0.568	0.879	0.566	0.882	0.564	0.877				0.751	1.171	0.738	1.183	0.735	1.183	0.738	1.195								
EB U.S.-50 -- Sunrise off to Sunrise on			0.466	0.877	0.477	0.901	0.481	0.900	0.479	0.897				0.694	1.221	0.667	1.233	0.671	1.236	0.679	1.251								
EB U.S.-50 -- Sunrise to Hazel off			0.547	0.994	0.550	1.018	0.554	1.019	0.551	1.020				0.854	1.342	0.853	1.367	0.846	1.363	0.858	1.373								
EB U.S.-50 -- Hazel off to Hazel on			0.670	1.068	0.673	1.087	0.675	1.089	0.671	1.065				0.923	1.503	0.924	1.517	0.906	1.535	0.920	1.505								
EB U.S.-50 -- east of Hazel			0.826	1.272	0.814	1.286	0.816	1.285	0.814	1.285				1.139	1.936	1.134	1.940	1.114	1.951	1.137	1.951								
Level of Service																													
WB U.S.-50 -- east of Hazel Avenue			F	B	F	B	F	B	F	B				F	E	F	E	F	E	F	E								
WB U.S.-50 -- Hazel off to NB Hazel on			F	A	F	A	F	A	F	A				F	C	F	C	F	C	F	C								
WB U.S.-50 -- NB Hazel on to SB Hazel on			F	A	F	A	F	A	F	A				F	C	F	C	F	C	F	C								
WB U.S.-50 -- Hazel to Sunrise off			F	A	F	A	F	A	F	A				F	C	F	C	F	C	F	C								
WB U.S.-50 -- Sunrise off to Sunrise on			F	A	F	A	F	A	F	A				F	B	F	C	F	B	F	C								
WB U.S.-50 -- Sunrise on to Zinfandel off			F	B	F	B	F	B	F	B				F	B	F	C	F	B	F	C								
WB U.S.-50 -- Zinfandel off to NB Zinfandel on			E	B	E	B	E	B	E	B				F	C	E	B	E	B	E	B								
WB U.S.-50 -- NB Zinfandel on to SB Zinfandel on			E	C	E	C	E	C	E	C				F	C	E	F	C	F	C	F								
WB U.S.-50 -- Zinfandel to Mather Field off			E	C	E	C	E	C	E	C				F	D	F	D	F	D	F	D								
WB U.S.-50 -- Mather Field off to NB Mather Field on			E	C	E	C	E	C	E	C				F	D	F	C	F	C	F	C								
WB U.S.-50 -- NB Mather Field on to SB Mather Field on			E	C	E	C	E	C	E	C				F	D	F	D	F	D	F	D								
WB U.S.-50 -- west of Mather Field Road			E	C	E	C	E	C	E	C				F	D	F	E	D	F	E	D								
EB U.S.-50 -- west of Mather Field Road			E	F	E	F	E	F	E	F				F	F	F	F	F	F	F	F								
EB U.S.-50 -- Mather Field off to SB Mather Field on			D	E	D	E	D	E	D	E				E	F	E	E	E	E	E	F								
EB U.S.-50 -- SB Mather Field on to NB Mather Field on			D	E	D	E	D	E	D	E				E	F	E	E	E	E	E	F								
EB U.S.-50 -- Mather Field to Zinfandel off			D	E	D	E	D	E	D	E				E	F	E	F	E	F	E	F								
EB U.S.-50 -- Zinfandel off to SB Zinfandel on			C	D	C	D	C	D	C	D				C	E	C	E	C	E	C	E								
EB U.S.-50 -- SB Zinfandel on to NB Zinfandel on			C	D	C	D	C																						

U.S.-50 WB off-ramp to Hazel Avenue																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 2 V12 Equation: 6 Existing Dnstrm Frwy Lanes / Aux. Lanes 2 Future Upstrm Frwy Lanes / Aux. Lanes 2 Future Dnstrm Frwy Lanes / Aux. Lanes 2																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5,195	1,947	5,244	1,920	5,277	1,937	5,272	1,914	7,615	3,876	7,659	3,861	7,605	3,846	7,642	3,879
Ramp Volume:	270	907	202	856	234	848	228	853	687	1,385	664	1,291	637	1,358	631	1,352
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	5667	2124	5721	2095	5757	2113	5751	2088	8307	4228	8355	4212	8296	4196	8337	4232
Adjusted Ramp Volume:	295	989	220	934	255	925	249	931	749	1511	724	1408	695	1481	688	1475
Upstream Freeway Capacity:	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
Upstream Freeway V/C:	1.18	0.44	1.19	0.44	1.20	0.44	1.20	0.44	1.73	0.88	1.74	0.88	1.73	0.87	1.74	0.88
Proportion in lanes 1,2 (Pfd):	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
V12 (upstream two-lane volume):	5667	2124	5721	2095	5757	2113	5751	2088	8307	4228	8355	4212	8296	4196	8337	4232
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	1.29	0.48	1.30	0.48	1.31	0.48	1.31	0.47	1.89	0.96	1.90	0.96	1.89	0.95	1.89	0.96
Density (pc/mi/ln):	43.99	13.52	44.45	13.27	44.76	13.42	44.71	13.21	66.69	31.61	67.11	31.48	66.60	31.34	66.95	31.65
Level of Service:	F	B	F	B	F	B	F	B	F	D	F	D	F	D	F	D

U.S.-50 WB on-ramp from NB Hazel Avenue																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps																
Ramp Analysis Type: Single Lane On-Ramp																
Freeway																
Existing Upstrm Frwy Lanes / Aux. Lanes	2		V12 Equation:												1	
Existing Dnstrm Frwy Lanes / Aux. Lanes	2															
Future Upstrm Frwy Lanes / Aux. Lanes	2															
Future Dnstrm Frwy Lanes / Aux. Lanes	2															
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour:																
Freeway Volume (Upstream):	4,925	1,040	5,042	1,064	5,043	1,089	5,044	1,061	6,928	2,491	6,995	2,570	6,968	2,488	7,011	2,527
Ramp Volume:	620	131	616	134	609	134	606	131	905	432	886	432	927	451	890	439
Acceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	5373	1135	5500	1161	5501	1188	5503	1157	7558	2717	7631	2804	7601	2714	7648	2757
Adjusted Ramp Volume:	676	143	672	146	664	146	661	143	987	471	967	471	1011	492	971	479
Downstream Freeway Capacity:	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
Downstream Freeway V/C:	1.26	0.27	1.29	0.27	1.28	0.28	1.28	0.27	1.78	0.66	1.79	0.68	1.79	0.67	1.80	0.67
Proportion in lanes 1,2 (Pfm):	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
V12 (upstream two-lane volume):	5373	1135	5500	1161	5501	1188	5503	1157	7558	2717	7631	2804	7601	2714	7648	2757
VR12 (downstream two-lane volume):	6049	1278	6172	1307	6165	1334	6164	1300	8545	3188	8598	3275	8612	3206	8619	3236
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	1.32	0.28	1.34	0.28	1.34	0.29	1.34	0.28	1.86	0.69	1.87	0.71	1.87	0.70	1.87	0.70
Density (pc/mi/ln):	46.08	9.11	47.04	9.33	46.99	9.54	46.98	9.28	65.40	23.85	65.82	24.53	65.91	23.99	65.99	24.23
Level of Service:	F	A	F	A	F	A	F	A	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from SB Hazel Avenue																
Highway Capacity Manual, Special Report 209 1994 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: One Lane On-Ramp; Freeway Gains Lane																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	5545	1171	5658	1198	5652	1223	5650	1192	7833	2923	7881	3002	7895	2939	7901	2966
Ramp Volume:	1,933	525	1,999	566	1,982	582	1,982	569	1,859	994	1,929	982	1,930	977	1,934	975
Acceleration Length (ft.):	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Ramp Volume:	2109	549	2090	592	2072	608	2072	595	1944	1039	2017	1027	2018	1021	2022	1019
Capacity:	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Ramp V/C Ratio:	1.055	0.275	1.045	0.296	1.036	0.304	1.036	0.298	0.972	0.520	1.009	0.514	1.009	0.511	1.011	0.510
Level of Service:	F	C	F	C	F	C	F	C	E	C	F	C	F	C	F	C

U.S.-50 WB off-ramp to Sunrise Boulevard																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 3 V12 Equation: 7 Existing Dnstrm Frwy Lanes / Aux. Lanes 3 Future Upstrm Frwy Lanes / Aux. Lanes 3 Future Dnstrm Frwy Lanes / Aux. Lanes 3																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,478	1,696	7,657	1,764	7,634	1,805	7,632	1,761	9,692	3,917	9,810	3,984	9,825	3,916	9,835	3,941
Ramp Volume:	840	520	846	483	825	520	835	501	1,336	891	1,419	849	1,461	822	1,566	824
Deceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	8158	1850	8353	1924	8328	1969	8326	1921	10573	4273	10702	4346	10718	4272	10729	4299
Adjusted Ramp Volume:	916	567	923	527	900	567	911	547	1457	972	1548	926	1594	897	1708	899
Upstream Freeway Capacity:	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200
Upstream Freeway V/C:	1.13	0.26	1.16	0.27	1.16	0.27	1.16	0.27	1.47	0.59	1.49	0.60	1.49	0.59	1.49	0.60
Proportion in lanes 1,2 (Pfd):	0.514	0.688	0.509	0.688	0.510	0.685	0.510	0.687	0.429	0.608	0.421	0.609	0.419	0.612	0.413	0.611
V12 (upstream two-lane volume):	4638	1449	4703	1488	4691	1527	4692	1491	5365	2981	5404	3008	5414	2962	5436	2977
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	1.05	0.33	1.07	0.34	1.07	0.35	1.07	0.34	1.22	0.68	1.23	0.68	1.23	0.67	1.24	0.68
Density (pc/mi/ln):	35.14	7.71	35.70	8.05	35.59	8.38	35.60	8.07	41.39	20.89	41.73	21.12	41.81	20.73	42.00	20.85
Level of Service:	F	A	F	A	F	A	F	A	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from Sunrise Boulevard																
Highway Capacity Manual, Special Report 209 1994 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: One Lane On-Ramp; Freeway Gains Lane																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6638	1176	6811	1281	6809	1285	6797	1260	8356	3026	8391	3135	8364	3094	8269	3117
Ramp Volume:	2,520	2,060	2,741	2,214	2,754	2,219	2,729	2,195	2,788	2,385	2,921	2,365	2,952	2,401	3,046	2,399
Acceleration Length (ft.):	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Ramp Volume:	2749	2154	2866	2315	2879	2320	2853	2295	2915	2493	3054	2473	3086	2510	3184	2508
Capacity:	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Ramp V/C Ratio:	1.375	1.077	1.433	1.158	1.440	1.160	1.427	1.148	1.458	1.247	1.527	1.237	1.543	1.255	1.592	1.254
Level of Service:	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F

U.S.-50 WB off-ramp to Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 7																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour:																
Freeway Volume (Upstream):	9,158	3,236	9,552	3,495	9,563	3,504	9,526	3,455	11,144	5,411	11,312	5,500	11,316	5,495	11,315	5,516
Ramp Volume:	1,151	464	1,815	813	1,841	814	1,809	816	2,300	1,390	2,652	1,557	2,696	1,521	2,672	1,555
Deceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	9991	3530	10420	3813	10432	3823	10392	3769	12157	5903	12340	6000	12345	5995	12344	6017
Adjusted Ramp Volume:	1256	506	1980	887	2008	888	1973	890	2509	1516	2893	1699	2941	1659	2915	1696
Upstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Upstream Freeway V/C:	1.04	0.37	1.09	0.40	1.09	0.40	1.08	0.39	1.27	0.61	1.29	0.63	1.29	0.62	1.29	0.63
Proportion in lanes 1,2 (Pfd):	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436
V12 (upstream two-lane volume):	5064	1824	5660	2163	5681	2168	5644	2145	6716	3429	7012	3574	7041	3549	7026	3580
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	1.15	0.41	1.29	0.49	1.29	0.49	1.28	0.49	1.53	0.78	1.59	0.81	1.60	0.81	1.60	0.81
Density (pc/mi/ln):	38.80	10.94	43.93	13.85	44.11	13.90	43.79	13.70	53.01	24.74	55.56	25.99	55.80	25.77	55.68	26.04
Level of Service:	F	B	F	B	F	B	F	B	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from NB Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,007	2,772	7,737	2,682	7,722	2,690	7,717	2,639	8,844	4,021	8,660	3,943	8,620	3,974	8,643	3,961
Ramp Volume:	366	1,580	456	1,374	430	1,388	439	1,385	1,375	1,895	1,318	1,945	1,414	1,954	1,455	1,967
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	8735	3024	8440	2926	8424	2935	8419	2879	9648	4387	9447	4301	9404	4335	9429	4321
Adjusted Ramp Volume:	399	1724	497	1499	469	1514	479	1511	1500	2067	1438	2122	1543	2132	1587	2146
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.95	0.49	0.93	0.46	0.93	0.46	0.93	0.46	1.16	0.67	1.13	0.67	1.14	0.67	1.15	0.67
Proportion in lanes 1,2 (Pfm):	0.447	0.281	0.434	0.309	0.438	0.307	0.437	0.308	0.309	0.238	0.317	0.231	0.304	0.230	0.298	0.228
V12 (upstream two-lane volume):	3902	850	3667	905	3689	902	3676	886	2982	1045	2993	995	2856	997	2811	986
VR12 (downstream two-lane volume):	4301	2574	4164	2404	4158	2416	4155	2397	4482	3112	4431	3117	4399	3129	4398	3132
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.94	0.56	0.91	0.52	0.90	0.53	0.90	0.52	0.97	0.68	0.96	0.68	0.96	0.68	0.96	0.68
Density (pc/mi/ln):	32.57	18.49	31.46	17.27	31.42	17.35	31.39	17.21	33.47	22.53	33.11	22.54	32.81	22.63	32.78	22.65
Level of Service:	D	B	D	B	D	B	D	B	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from SB Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,373	4,352	8,193	4,056	8,152	4,078	8,156	4,024	10,219	5,916	9,978	5,888	10,034	5,928	10,098	5,928
Ramp Volume:	366	619	359	708	377	717	349	739	335	558	365	548	434	538	366	541
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	9134	4748	8938	4425	8893	4449	8897	4390	11148	6454	10885	6423	10946	6467	11016	6467
Adjusted Ramp Volume:	399	675	392	772	411	782	381	806	365	609	398	598	473	587	399	590
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.99	0.56	0.97	0.54	0.97	0.54	0.97	0.54	1.20	0.74	1.18	0.73	1.19	0.73	1.19	0.74
Proportion in lanes 1,2 (Pfm):	0.447	0.412	0.448	0.400	0.445	0.399	0.449	0.396	0.451	0.420	0.447	0.422	0.437	0.423	0.447	0.423
V12 (upstream two-lane volume):	4080	1957	4000	1770	3959	1774	3994	1738	5027	2713	4863	2709	4788	2737	4921	2734
VR12 (downstream two-lane volume):	4479	2632	4392	2542	4370	2556	4375	2544	5392	3322	5261	3307	5261	3324	5320	3324
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.97	0.57	0.95	0.55	0.95	0.56	0.95	0.55	1.17	0.72	1.14	0.72	1.14	0.72	1.16	0.72
Density (pc/mi/ln):	33.96	19.42	33.28	18.68	33.10	18.78	33.15	18.68	41.09	24.84	40.06	24.72	40.02	24.86	40.52	24.86
Level of Service:	D	B	D	B	D	B	D	B	F	C	F	C	F	C	F	C

U.S.-50 WB off-ramp to Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 10																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,739	4,971	8,552	4,764	8,529	4,795	8,505	4,763	10,554	6,474	10,343	6,436	10,468	6,466	10,464	6,469
Ramp Volume:	722	454	711	495	741	500	734	495	1,022	628	983	609	964	609	943	569
Deceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	9533	5423	9329	5197	9304	5231	9278	5196	11513	7063	11283	7021	11420	7054	11415	7057
Adjusted Ramp Volume:	788	495	776	540	808	545	801	540	1115	685	1072	664	1052	664	1029	621
Upstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Upstream Freeway V/C:	0.99	0.56	0.97	0.54	0.97	0.54	0.97	0.54	1.20	0.74	1.18	0.73	1.19	0.73	1.19	0.74
Proportion in lanes 1,2 (Pfd):	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436
V12 (upstream two-lane volume):	4601	2644	4505	2570	4512	2588	4497	2570	5649	3466	5524	3436	5572	3450	5557	3427
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	1.05	0.60	1.02	0.58	1.03	0.59	1.02	0.58	1.28	0.79	1.26	0.78	1.27	0.78	1.26	0.78
Density (pc/mi/ln):	34.82	17.99	34.00	17.35	34.06	17.51	33.93	17.35	43.83	25.06	42.76	24.80	43.17	24.92	43.04	24.72
Level of Service:	F	B	F	B	F	B	F	B	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from NB Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,017	4,517	7,841	4,269	7,788	4,295	7,771	4,268	9,532	5,846	9,360	5,827	9,504	5,857	9,521	5,900
Ramp Volume:	316	461	445	1,278	420	1,264	415	1,240	473	1,100	500	1,421	432	1,391	463	1,358
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	8746	4928	8554	4657	8496	4685	8477	4656	10399	6377	10211	6357	10368	6389	10387	6436
Adjusted Ramp Volume:	345	503	485	1394	458	1379	453	1353	516	1200	545	1550	471	1517	505	1481
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.95	0.57	0.94	0.63	0.93	0.63	0.93	0.63	1.14	0.79	1.12	0.82	1.13	0.82	1.13	0.82
Proportion in lanes 1,2 (Pfm):	0.453	0.434	0.436	0.322	0.439	0.324	0.440	0.327	0.432	0.347	0.428	0.303	0.438	0.307	0.433	0.311
V12 (upstream two-lane volume):	3966	2137	3729	1501	3732	1519	3729	1524	4493	2210	4375	1925	4538	1961	4502	2004
VR12 (downstream two-lane volume):	4311	2640	4214	2895	4190	2898	4182	2877	5009	3410	4920	3475	5009	3478	5007	3485
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.94	0.57	0.92	0.63	0.91	0.63	0.91	0.63	1.09	0.74	1.07	0.76	1.09	0.76	1.09	0.76
Density (pc/mi/ln):	32.67	19.57	31.85	21.14	31.68	21.18	31.62	21.02	38.04	25.25	37.33	25.60	38.06	25.64	38.03	25.71
Level of Service:	D	B	D	C	D	C	D	C	F	C	F	C	F	C	F	C

U.S.-50 WB on-ramp from SB Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	8,333	4,978	8,286	5,547	8,208	5,559	8,186	5,508	10,005	6,946	9,860	7,248	9,936	7,248	9,984	7,258
Ramp Volume:	530	360	491	280	498	275	516	268	507	239	526	239	516	207	554	209
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	9091	5431	9039	6051	8954	6064	8930	6009	10915	7577	10756	7907	10839	7907	10892	7918
Adjusted Ramp Volume:	578	393	536	305	543	300	563	292	553	261	574	261	563	226	604	228
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	1.01	0.61	1.00	0.66	0.99	0.66	0.99	0.66	1.19	0.82	1.18	0.85	1.19	0.85	1.20	0.85
Proportion in lanes 1,2 (Pfm):	0.424	0.447	0.430	0.458	0.429	0.459	0.426	0.460	0.427	0.464	0.425	0.464	0.426	0.468	0.421	0.468
V12 (upstream two-lane volume):	3857	2430	3883	2774	3838	2784	3806	2764	4665	3515	4569	3668	4619	3703	4586	3706
VR12 (downstream two-lane volume):	4435	2823	4419	3079	4381	3084	4369	3056	5218	3776	5143	3929	5182	3929	5190	3934
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.96	0.61	0.96	0.67	0.95	0.67	0.95	0.66	1.13	0.82	1.12	0.85	1.13	0.85	1.13	0.86
Density (pc/mi/ln):	33.53	21.04	33.43	23.08	33.13	23.12	33.02	22.91	39.65	28.54	39.06	29.73	39.37	29.75	39.41	29.79
Level of Service:	F	C	D	C	D	C	D	C	F	D	F	D	F	D	F	D

U.S.-50 EB off-ramp to Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 10																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	7,712	8,823	8,289	8,719	8,321	8,691	8,297	8,666	9,825	10,340	10,036	10,249	10,057	10,292	10,088	10,368
Ramp Volume:	1,395	1,098	1,999	1,229	2,006	1,186	2,015	1,181	2,053	1,439	2,189	1,538	2,191	1,541	2,189	1,560
Deceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	8413	9625	9043	9512	9077	9481	9051	9454	10718	11280	10948	11181	10971	11228	11005	11311
Adjusted Ramp Volume:	1522	1198	2181	1341	2188	1294	2198	1288	2240	1570	2388	1678	2390	1681	2388	1702
Upstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Upstream Freeway V/C:	0.88	1.00	0.94	0.99	0.95	0.99	0.94	0.98	1.12	1.18	1.14	1.16	1.14	1.17	1.15	1.18
Proportion in lanes 1,2 (Pfd):	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436
V12 (upstream two-lane volume):	4526	4872	5173	4904	5192	4864	5186	4848	5936	5804	6120	5821	6131	5843	6145	5892
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	1.03	1.11	1.18	1.11	1.18	1.11	1.18	1.10	1.35	1.32	1.39	1.32	1.39	1.33	1.40	1.34
Density (pc/mi/ln):	34.18	37.15	39.74	37.43	39.90	37.08	39.85	36.94	46.30	45.17	47.88	45.31	47.98	45.50	48.10	45.92
Level of Service:	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F

U.S.-50 EB on-ramp from SB Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,317	7,725	6,290	7,490	6,315	7,505	6,282	7,485	7,772	8,901	7,847	8,711	7,866	8,751	7,899	8,808
Ramp Volume:	236	276	184	229	182	235	180	230	236	152	233	180	222	172	239	175
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	6891	8427	6862	8171	6889	8187	6853	8165	8479	9710	8560	9503	8581	9547	8617	9609
Adjusted Ramp Volume:	257	301	201	250	199	256	196	251	257	166	254	196	242	188	261	191
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.74	0.91	0.74	0.88	0.74	0.88	0.73	0.88	0.91	1.03	0.92	1.01	0.92	1.01	0.92	1.02
Proportion in lanes 1,2 (Pfm):	0.464	0.459	0.471	0.465	0.472	0.465	0.472	0.465	0.464	0.476	0.465	0.472	0.466	0.473	0.464	0.473
V12 (upstream two-lane volume):	3200	3867	3235	3802	3249	3803	3235	3798	3938	4620	3979	4486	4001	4516	3998	4542
VR12 (downstream two-lane volume):	3457	4168	3436	4052	3448	4059	3431	4049	4195	4786	4233	4682	4243	4704	4259	4733
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.75	0.91	0.75	0.88	0.75	0.88	0.75	0.88	0.91	1.04	0.92	1.02	0.92	1.02	0.93	1.03
Density (pc/mi/ln):	26.05	31.58	25.91	30.70	26.01	30.75	25.88	30.67	31.81	36.46	32.11	35.63	32.19	35.81	32.31	36.03
Level of Service:	C	D	C	D	C	D	C	D	D	F	D	F	D	F	D	F

U.S.-50 EB on-ramp from NB Mather Field Road																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	6,553	8,001	6,474	7,719	6,497	7,740	6,462	7,715	8,008	9,053	8,080	8,891	8,088	8,923	8,138	8,983
Ramp Volume:	174	421	170	396	163	395	159	407	279	861	241	764	289	763	284	774
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	7149	8728	7063	8421	7088	8444	7049	8416	8736	9876	8815	9699	8823	9734	8878	9800
Adjusted Ramp Volume:	190	459	185	432	178	431	173	444	304	939	263	833	315	832	310	844
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.76	0.96	0.76	0.92	0.76	0.92	0.75	0.92	0.94	1.13	0.95	1.10	0.95	1.10	0.96	1.11
Proportion in lanes 1,2 (Pfm):	0.473	0.439	0.473	0.443	0.474	0.443	0.475	0.441	0.459	0.379	0.464	0.392	0.457	0.393	0.458	0.391
V12 (upstream two-lane volume):	3380	3833	3344	3727	3362	3738	3348	3712	4006	3745	4087	3806	4034	3821	4064	3832
VR12 (downstream two-lane volume):	3570	4292	3529	4159	3540	4169	3521	4156	4310	4684	4350	4639	4349	4653	4374	4676
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.78	0.93	0.77	0.90	0.77	0.91	0.77	0.90	0.94	1.02	0.95	1.01	0.95	1.01	0.95	1.02
Density (pc/mi/ln):	26.96	32.47	26.65	31.45	26.74	31.52	26.59	31.42	32.68	35.31	33.01	35.01	32.98	35.12	33.18	35.29
Level of Service:	C	D	C	D	C	D	C	D	D	F	D	F	D	F	D	F

U.S.-50 EB off-ramp to Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Two Lane Off-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: V12 = 0.260																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour:																
Freeway Volume (Upstream):	6,727	8,422	6,644	8,115	6,660	8,135	6,621	8,122	8,287	9,914	8,321	9,655	8,377	9,686	8,422	9,757
Ramp Volume:	2,332	1,501	2,295	1,460	2,314	1,455	2,290	1,471	2,930	1,750	3,083	1,698	3,112	1,718	3,145	1,726
Deceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	7339	9188	7248	8853	7265	8875	7223	8860	9040	10815	9077	10533	9139	10567	9188	10644
Adjusted Ramp Volume:	2544	1637	2504	1593	2524	1587	2498	1605	3196	1909	3363	1852	3395	1874	3431	1883
Upstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Upstream Freeway V/C:	0.76	0.96	0.76	0.92	0.76	0.92	0.75	0.92	0.94	1.13	0.95	1.10	0.95	1.10	0.96	1.11
Proportion in lanes 1,2 (Pfd):	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260	0.260
V12 (upstream two-lane volume):	3791	3600	3737	3481	3757	3482	3727	3491	4715	4225	4849	4109	4888	4134	4928	4161
V12 Capacity:	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400	4400
V12 V/C:	0.86	0.82	0.85	0.79	0.85	0.79	0.85	0.79	1.07	0.96	1.10	0.93	1.11	0.94	1.12	0.95
Density (pc/mi/ln):	27.85	26.21	27.39	25.19	27.56	25.20	27.30	25.27	35.80	31.59	36.95	30.59	37.29	30.80	37.63	31.04
Level of Service:	C	C	C	C	C	C	C	C	F	F	F	F	F	F	F	F

U.S.-50 EB on-ramp from SB Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	4,395	6,921	4,349	6,655	4,346	6,680	4,331	6,651	5,357	8,164	5,238	7,957	5,265	7,968	5,277	8,031
Ramp Volume:	87	145	86	116	84	79	86	68	274	161	161	122	145	131	146	111
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	4795	7550	4744	7260	4741	7287	4725	7256	5844	8906	5714	8680	5744	8692	5757	8761
Adjusted Ramp Volume:	95	158	94	127	92	86	94	74	299	176	176	133	158	143	159	121
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.51	0.80	0.50	0.77	0.50	0.77	0.50	0.76	0.64	0.95	0.61	0.92	0.61	0.92	0.62	0.93
Proportion in lanes 1,2 (Pfm):	0.485	0.477	0.485	0.481	0.485	0.486	0.485	0.487	0.459	0.475	0.475	0.480	0.477	0.479	0.477	0.481
V12 (upstream two-lane volume):	2324	3600	2300	3490	2300	3540	2291	3536	2683	4226	2712	4166	2739	4161	2744	4218
VR12 (downstream two-lane volume):	2419	3758	2394	3617	2392	3626	2385	3610	2982	4402	2888	4299	2897	4304	2903	4339
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.53	0.82	0.52	0.79	0.52	0.79	0.52	0.78	0.65	0.96	0.63	0.93	0.63	0.94	0.63	0.94
Density (pc/mi/ln):	18.03	28.44	17.83	27.36	17.82	27.45	17.76	27.33	22.33	33.46	21.65	32.68	21.73	32.71	21.78	32.99
Level of Service:	B	D	B	C	B	C	B	C	C	D	C	D	C	D	C	D

U.S.-50 EB on-ramp from NB Zinfandel Drive																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 4 V12 Equation: 5 Existing Dnstrm Frwy Lanes / Aux. Lanes 4 Future Upstrm Frwy Lanes / Aux. Lanes 4 Future Dnstrm Frwy Lanes / Aux. Lanes 4																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour:																
Freeway Volume (Upstream):	4,482	7,066	4,435	6,771	4,430	6,759	4,417	6,719	5,631	8,325	5,399	8,079	5,410	8,099	5,423	8,142
Ramp Volume:	292	362	566	967	554	1,004	547	997	981	1,983	1,092	2,330	1,061	2,315	1,072	2,384
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	4889	7708	4838	7387	4833	7373	4819	7330	6143	9082	5890	8813	5902	8835	5916	8882
Adjusted Ramp Volume:	319	395	617	1055	604	1095	597	1088	1070	2163	1191	2542	1157	2525	1169	2601
Downstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Downstream Freeway V/C:	0.54	0.84	0.57	0.88	0.57	0.88	0.56	0.88	0.75	1.17	0.74	1.18	0.74	1.18	0.74	1.20
Proportion in lanes 1,2 (Pfm):	0.457	0.447	0.419	0.365	0.421	0.360	0.422	0.361	0.363	0.226	0.348	0.179	0.352	0.181	0.350	0.171
V12 (upstream two-lane volume):	2233	3447	2029	2694	2035	2652	2033	2643	2229	2054	2048	1576	2077	1598	2073	1523
VR12 (downstream two-lane volume):	2552	3842	2646	3749	2639	3747	2630	3731	3299	4217	3239	4118	3234	4123	3242	4124
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.55	0.84	0.58	0.82	0.57	0.81	0.57	0.81	0.72	0.92	0.70	0.90	0.70	0.90	0.70	0.90
Density (pc/mi/ln):	18.96	28.99	19.56	27.96	19.51	27.93	19.44	27.81	24.45	31.10	23.92	30.16	23.90	30.20	23.95	30.18
Level of Service:	B	D	B	C	B	C	B	C	C	F	C	F	C	F	C	F

U.S.-50 EB off-ramp to Sunrise Boulevard																
Highway Capacity Manual, Special Report 209 1994 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Major Diverge - Two Lane Off-Ramp; Freeway Loses One Lane																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	4774	7428	5001	7738	4984	7763	4964	7716	6612	10308	6491	10409	6471	10414	6495	10526
Ramp Volume:	1,700	1,640	1,853	1,792	1,812	1,820	1,802	1,797	2,031	2,251	2,091	2,271	2,045	2,257	2,015	2,255
Number of Lanes (one-way) Upstream:	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Lanes (one-way) Downstream:	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	5208	8103	5456	8441	5437	8469	5415	8417	7213	11245	7081	11355	7059	11361	7085	11483
Adjusted Ramp Volume:	1855	1789	2021	1955	1977	1985	1966	1960	2216	2456	2281	2477	2231	2462	2198	2460
Adjusted Freeway Volume (downstream):	3353	6314	3435	6486	3460	6484	3449	6457	4997	8789	4800	8878	4828	8899	4887	9023
Upstream Freeway Capacity:	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600	9600
Ramp Capacity (Table 5-6):	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
Downstream Freeway Capacity:	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200
Upstream Freeway V/C:	0.543	0.844	0.568	0.879	0.566	0.882	0.564	0.877	0.751	1.171	0.738	1.183	0.735	1.183	0.738	1.196
Ramp V/C:	0.488	0.471	0.532	0.514	0.520	0.522	0.517	0.516	0.583	0.646	0.600	0.652	0.587	0.648	0.578	0.647
Downstream Freeway V/C:	0.466	0.877	0.477	0.901	0.481	0.901	0.479	0.897	0.694	1.221	0.667	1.233	0.671	1.236	0.679	1.253
Density (pc/mi/ln):	22.79	35.45	23.87	36.93	23.79	37.05	23.69	36.82	31.56	49.20	30.98	49.68	30.88	49.70	31.00	50.24
Level of Service:	C	E	C	E	C	E	C	E	D	F	D	F	D	F	D	F

U.S.-50 EB on-ramp from Sunrise Boulevard																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps																
Ramp Analysis Type: Single Lane On-Ramp																
Freeway																
Existing Upstrm Frwy Lanes / Aux. Lanes	3	V12 Equation: 2														
Existing Dnstrm Frwy Lanes / Aux. Lanes	3															
Future Upstrm Frwy Lanes / Aux. Lanes	3															
Future Dnstrm Frwy Lanes / Aux. Lanes	3															
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Peak Hour:																
Freeway Volume (Upstream):	3,074	5,788	3,148	5,946	3,172	5,943	3,162	5,919	4,581	8,057	4,400	8,138	4,426	8,157	4,480	8,271
Ramp Volume:	535	770	483	770	487	784	475	814	1,058	803	1,233	887	1,155	841	1,185	794
Acceleration Length (ft.):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	3353	6314	3434	6487	3460	6483	3449	6457	4997	8789	4800	8878	4828	8899	4887	9023
Adjusted Ramp Volume:	584	840	527	840	531	855	518	888	1154	876	1345	968	1260	917	1293	866
Downstream Freeway Capacity:	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200
Downstream Freeway V/C:	0.55	0.99	0.55	1.02	0.55	1.02	0.55	1.02	0.85	1.34	0.85	1.37	0.85	1.36	0.86	1.37
Proportion in lanes 1,2 (Pfm):	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606	0.606
V12 (upstream two-lane volume):	2030	3823	2079	3928	2095	3925	2088	3910	3026	5322	2906	5376	2923	5388	2959	5463
VR12 (downstream two-lane volume):	2614	4663	2606	4768	2626	4780	2606	4798	4180	6198	4251	6344	4183	6305	4252	6329
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.57	1.01	0.57	1.04	0.57	1.04	0.57	1.04	0.91	1.35	0.92	1.38	0.91	1.37	0.92	1.38
Density (pc/mi/ln):	19.33	35.19	19.29	36.01	19.44	36.10	19.29	36.22	31.28	47.15	31.74	48.24	31.25	47.96	31.78	48.17
Level of Service:	B	F	B	F	B	F	B	F	D	F	D	F	D	F	D	F

U.S.-50 EB off-ramp to Hazel Avenue																
Highway Capacity Manual, Special Report 209 1994 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Own Lane Off-Ramp; Freeway Loses Lane																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	3609	6558	3631	6716	3659	6727	3637	6733	5639	8860	5633	9025	5581	8998	5665	9065
Ramp Volume:	659	1,861	670	1,932	691	1,934	685	2,048	1,580	2,247	1,566	2,351	1,594	2,246	1,615	2,454
Acceleration Length (ft.):	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Ramp Free-Flow Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Ramp Volume:	719	2030	731	2108	754	2110	747	2234	1724	2451	1708	2565	1739	2450	1762	2677
Capacity:	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Ramp V/C Ratio:	0.360	1.015	0.366	1.054	0.377	1.055	0.374	1.117	0.862	1.226	0.854	1.283	0.870	1.225	0.881	1.339
Level of Service:	C	F	C	F	C	F	C	F	E	F	E	F	E	F	E	F

U.S.-50 EB on-ramp from Hazel Avenue																
Highway Capacity Manual, Special Report 209 1997 Edition Capacity Analysis of Freeway Ramps Ramp Analysis Type: Single Lane On-Ramp																
Freeway Existing Upstrm Frwy Lanes / Aux. Lanes 2 Existing Dnstrm Frwy Lanes / Aux. Lanes 2 Future Upstrm Frwy Lanes / Aux. Lanes 2 Future Dnstrm Frwy Lanes / Aux. Lanes 2 V12 Equation: 1																
Input Data																
Alternative:	Existing No Project		Existing + Approved Project		Existing + Proposed Project		Existing + Project Alternative		Cumulative No Project		Cumulative + Approved Project		Cumulative + Proposed Project		Cumulative + Project Alternative	
Peak Hour:	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Freeway Volume (Upstream):	2,950	4,697	2,961	4,784	2,968	4,793	2,952	4,685	4,059	6,613	4,067	6,674	3,987	6,752	4,050	6,611
Ramp Volume:	686	898	620	876	624	862	629	969	951	1,904	924	1,864	916	1,832	951	1,972
Acceleration Length (ft):	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Ramp Design Speed (mph):	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Calculations																
Adjusted Freeway Volume (Upstream):	3218	5124	3230	5219	3238	5229	3220	5111	4428	7214	4437	7281	4349	7366	4418	7212
Adjusted Ramp Volume:	748	980	676	956	681	940	686	1057	1037	2077	1008	2033	999	1999	1037	2151
Downstream Freeway Capacity:	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
Downstream Freeway V/C:	0.83	1.27	0.81	1.29	0.82	1.29	0.81	1.29	1.14	1.94	1.13	1.94	1.11	1.95	1.14	1.95
Proportion in lanes 1,2 (Pfm):	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
V12 (upstream two-lane volume):	3218	5124	3230	5219	3238	5229	3220	5111	4428	7214	4437	7281	4349	7366	4418	7212
VR12 (downstream two-lane volume):	3966	6104	3906	6175	3919	6169	3906	6168	5465	9291	5445	9314	5348	9365	5455	9363
VR12 Capacity:	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600	4600
VR12 V/C:	0.86	1.33	0.85	1.34	0.85	1.34	0.85	1.34	1.19	2.02	1.18	2.02	1.16	2.04	1.19	2.04
Density (pc/mi/ln):	29.80	46.37	29.36	46.93	29.46	46.89	29.36	46.83	41.35	70.72	41.21	70.92	40.46	71.33	41.28	71.25
Level of Service:	D	F	D	F	D	F	D	F	F	F	F	F	F	F	F	F



October 7, 2021
(August 19, 2021 original report date)

Maurice Musy
BRR Architecture, Inc.
Maurice.Musy@brrarch.com

RE: Sprouts - Rancho Cordova, CA - Environmental Noise Study
Environmental Noise Study
Project No. 2150002419

Dear Maurice:

We reviewed the 50% Full Set drawing package dated August 8, 2021 for the proposed Sprouts Farmers Market, Store #452 project in Rancho Cordova, California. This report documents the City of Rancho Cordova Noise Ordinance requirements, proposed site conditions, exterior equipment sound data, sound level calculations, and noise barrier recommendations. In addition, comments from the City and design team subsequent to the first version of this report have been incorporated.

Environmental Noise Study

The following analysis was conducted to determine the sound level at the adjacent property line from the exterior mechanical equipment, trash compactor and truck loading dock. The receiving property line, located on Nouveau Way, southwest of Sprouts' site, is residential; therefore, exterior noise propagating from the site must comply with residential noise ordinance requirements.

Sound levels at the nearest receiving property line were predicted using sound pressure and sound power data supplied by the equipment manufacturers. The results are then compared to the city of Rancho Cordova noise ordinance found in chapter 6.68 of the Rancho Cordova Municipal Code, listed below.

City of Racho Cordova Noise Ordinance (Municipal Code Chapter 6.68)

6.68.070- Exterior Noise Standards.

- A. The following noise standards, unless otherwise specifically indicated in this chapter, shall apply to all properties within a designated noise area:*

Noise Area	City Zoning Districts	Time Period	Exterior Noise Standard
1	RE-1, RD-1, RE-2, RD-2, RE-3, RD-3, RD-4, R-1-A, RD-5, R-2, RD-10, R-2A, RD-20, R-3, RD-30, RD-40, RM-1, RM-2, A-1-B, AR-1, A-2, AR-2, A-5, AR-5	7:00 a.m. – 10:00 p.m.	55 dBA
		10:00 p.m. – 7:00 a.m.	50 dBA

To meet code requirements, the combined noise levels must not exceed 55 dBA at any point at least one foot inside the affected residential property line during the daytime hours of 7am – 10pm, and 50 dBA during the nighttime hours of 10pm – 7am.

Zoning and Site Conditions

Figure 1 below shows the zoning map for the project site and adjacent properties. This project property is zoned RC1 “Retail Commercial”. The property directly Southwest of the project site is zoned LDC “Low Density Cluster” and is “limited to those uses allowed in RD-5, RD-10 and RD-15 Land Use Zones”.

Figure 2 below shows the building location and existing masonry fence between the building and residential property line. The sprouts building is proposed to be approximately 130 feet from the residential property line.



Figure 1-Zoning Map

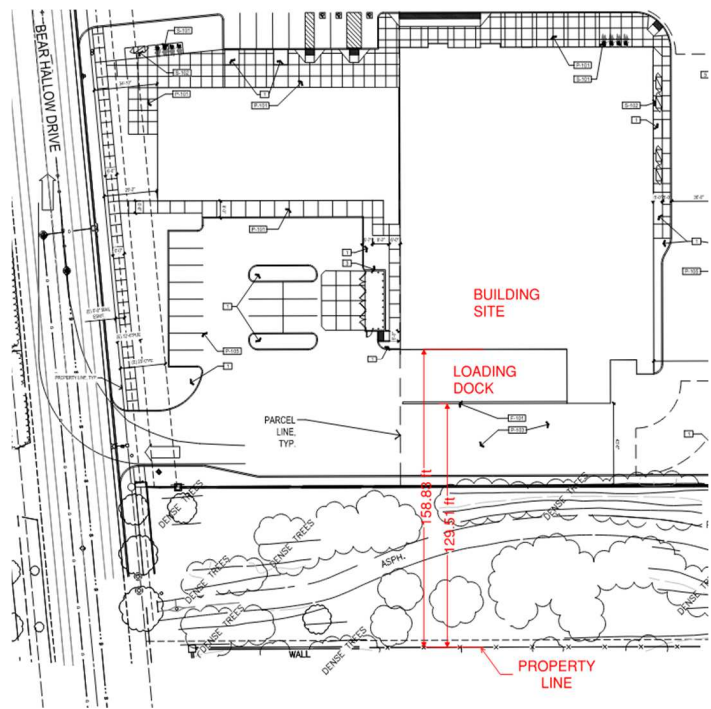


Figure 2-Site Plan

Predicted Sound Levels

A. Mechanical Equipment

The proposed mechanical equipment includes a refrigeration condensing unit, three condensing units, and four rooftop units. Exhaust fans are also shown to be located on the roof but their overall sound level contribution at the property line is negligible. The sound data is listed in the table below.

Table 1: Equipment Sound Levels

Equipment	Manufacturer	Model Number	Sound Power Level
Refrigeration Condensing Unit	Baltimore Aircoil Company	1 TSDC2-CO2-202-12.4	92
CU-1	Lennox	MB024	61
CU-2, CU-3	Lennox	MPB030	63
RTU-1, RTU-2	Lennox	LGH210H4	94
RTU-3, RTU-4	Lennox	LGH210H4	88

B. Trash Compactor

The trash compactor will be located outdoors in the truck well. The self-contained trash compactor will be a PTR Baler and Compactor Model PT-300 LD. The compactor has a 30-yard container and utilizes a 10 horsepower, three phase motor to drive a 10.5 GPM hydraulic pump. Shown in the table below is the overall sound pressure level from a measurement at a previous project with an equivalent trash compactor. This overall sound pressure level includes the combined sound level of all trash compactor components including the items being compacted, ram action, and hydraulic pump.

Table 2: Trash Compactor Sound Levels

Equipment	Equipment Details	Sound Pressure Level, dBA	Sound Power Level, LWA
Compactor Overall	Previous sound measurement of equivalent compactor	72 dB(A) at 15 feet	93

C. Loading Dock/Truck Noise

The loading dock will be located on the Southwest corner of the building and is the closest noise source to the affected residential property line. The sound pressure levels for a commercial grade semi-truck were taken from a measurement for a previous project. The overall sound pressure level was then converted to sound power level and is shown in the table below.

Table 3: Semi-Truck Sound Levels

Noise Source	Sound Pressure Level, dBA	Sound Power Level, LWA
Semi-Truck	76 dB(A) at 10 feet	94

Calculated Sound Levels

All calculations follow procedures from ASHRAE Handbook of Applications Chapter 48 and AHRI 275. These procedures define methods for estimating A-Weighted Sound Pressure Levels and A-weighted Sound Power Ratings using a point-source propagation model including factors for distance, barrier shielding, etc. Noise from the mechanical equipment, trash compactor and trucks are calculated to the residential property line.

Table 4: Predicted Sound Pressure Level at Southwest Residential Property Line

Equipment	Sound Power Level (LWA)	Distance Reduction	Sound Pressure Level (dBA)
RTU-1	94	-44 (198 feet)	50
RTU-2	94	-46 (271 feet)	48*
RTU-3	88	-45 (238 feet)	43
RTU-4	88	-42 (172 feet)	46
CU-1	61	-47 (307 feet)	14
CU-2, CU-3	66	-47 (307 feet)	19
Refrg. CU	92	-42 (170 feet)	49
Truck	94	-40 (130 feet)	54
Trash Compactor	93	-41 (145 feet)	53
Combined Sound Pressure Level at Southwest Residential Property Line (dBA)			59

*Refer to Recommendations, Item B for further review of RTU-2 sound propagation

As shown in the table above, the calculated combined sound level for the proposed exterior mechanical equipment, trash compactor and semi-trucks is 59 dBA which exceeds the acceptable code limit.

Recommendations

In order to meet the noise ordinance sound level requirements, we recommend adding a noise control barrier at the loading dock to shield associated truck and loading dock noise, as well as the trash compactor. Screening is also needed at select rooftop equipment.

A. Noise Barrier at Loading Dock

The noise barrier should be constructed of solid material of at least 3 lbs/sq.ft surface weight and located within 4 feet of the truck location along the southwest end of the loading dock. Barrier height needs to be at least 17 feet tall from the highest part of the loading ramp, due to the tractor trailer exhaust stack (which is 13' tall). Refer to Figure 3.

The barrier can be a CMU wall. However, sound absorptive treatment is needed on the surface facing the development premises. This can be perforated metal panels with acoustical insulation in the cavity, attached to the CMU. Or, the barrier can be an engineered sound wall. Possible manufacturers for both sound walls and perforated acoustical panels include:

- AIL Silent Protector
- Sound Fighter Systems
- Empire Acoustical Panels

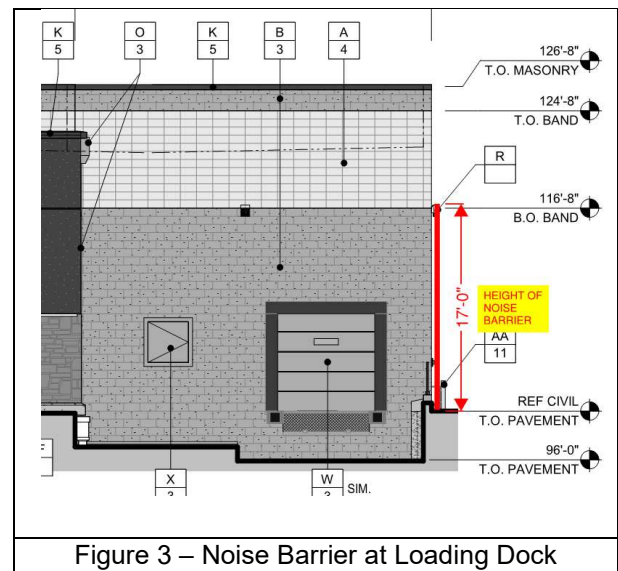
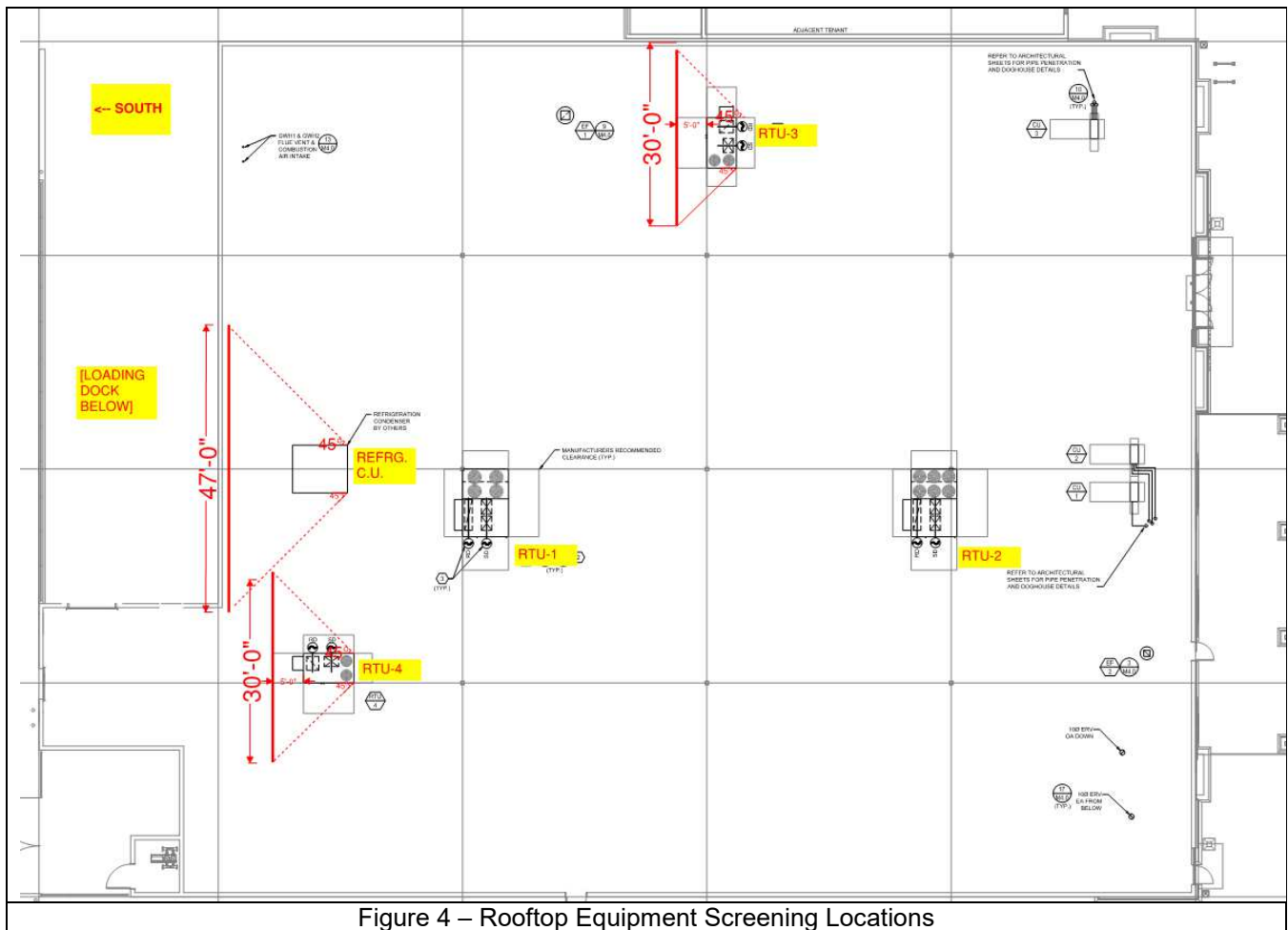


Figure 3 – Noise Barrier at Loading Dock

B. Rooftop Equipment Screening

Screening should be added to the following rooftop mechanical equipment – RTU-3, RTU-4, and refrigeration CU. By adding screening at these units, RTU-1 will also be screened. Also, due to the geometry of RTU-2 being located towards the front of the building and the residential houses being shorter than Sprouts, the building will shield most of RTU-2's noise which will have a similar barrier effect as screening.

- C. The image below shows the locations of the rooftop screens. The screens are shown at the manufacturer's minimum clearance location. The length of the screen needs to be approximately 45 degrees off the farthest corner of the unit. Since the equipment is at an elevation above the residential houses to the south, the screen height can be limited to approximately 2 feet taller than the unit. This would equate to approximately 8'-6" for RTU-3 and RTU-4, and 11' for refrigeration CU.



Results

The following table shows the noise reduction provided by the noise control barrier and rooftop screening.

Table 5 – Revised Sound Power Levels at Property Line (w/ Noise Mitigation)

Equipment	Sound Power Level (LWA)	Distance Reduction	Sound Pressure Level without Barriers (dBA)	Barrier Noise Reduction	Sound Pressure Level at Property Line with Barriers (dBA)
RTU-1	94	-44 (226 feet)	50	-7	43
RTU-2	94	-47 (299 feet)	48	-7	41
RTU-3	88	-46 (266 feet)	43	-7	36
RTU-4	88	-43 (200 feet)	46	-7	39
CU-1	61	-48 (329 feet)	14	0	14
CU-2, CU-3	66	-48 (329 feet)	19	0	19
Refrg. CU	92	-44 (198 feet)	49	-7	42
Truck	94	-42 (130 feet)	54	-12	42
Trash Compactor	93	-42 (135 feet)	53	-12	41
Combined Sound Pressure Level at Southwest Residential Property Line (dBA)			59		50

Notes about the calculations:

- The combined calculated sound level represents the worst case scenario with all rooftop equipment operating, a truck idling in the loading dock, and the trash compactor in use.
- The refrigeration condensing unit will be running 24-hours a day. However, it will be on a variable frequency drive (VFD) which will inherently lower its operating sound level when the loads are low, which is typical of nighttime.
- It is highly unlikely that all four rooftop units will be operating during nighttime hours. Instead, usually one rooftop unit is operating at a time. If the loudest rooftop unit (RTU-1) is operating while refrigeration CU is operating near full load, the sound level will be approximately 45 dBA.

- If a truck is delivering in the early morning hours (i.e., before 7am), then the overall sound level is predicted to be 47 dBA when RTU-1 is operating and the refrigeration CU is running near full load. If the trash compactor comes on during this time, then the sound level would increase to 48 dBA.
- The noise barrier at the loading dock provides sufficient noise mitigation at all hours of the day (42 dBA), including if truck deliveries were to occur during the early morning hours (before 7am).

Conclusion

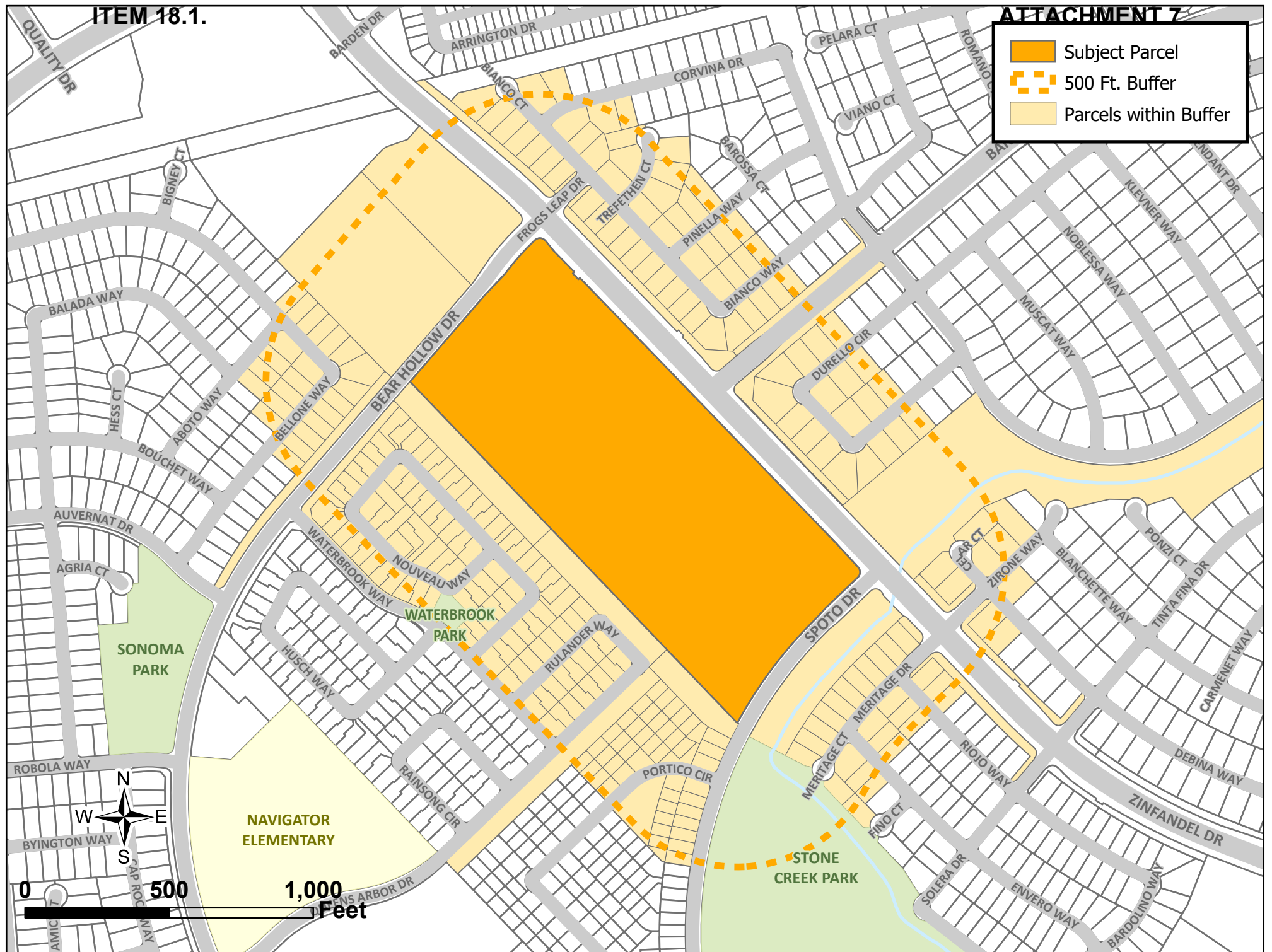
With the inclusion of a noise barrier at the loading dock and rooftop equipment screening, the calculated combined sound level of the proposed exterior mechanical equipment, trash compactor, and semi-truck, is maximum 50 dBA. However, as discussed, this is the worst case scenario which would only occur during the daytime. During times when the store is closed (10pm – 7am), mechanical equipment will only be partial operable and sound levels will be below 50 dBA, even during early morning deliveries. The calculated sound levels with noise mitigation is within the acceptable code limit.

Please contact me if you have any questions.

Sincerely,
Henderson Engineers



Jeff Teel
Director of Acoustics
Jeff.Teel@hendersonengineers.com



ITEM 18.1.

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ADAIR FAMILY TRUST
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LIVING TRUST/ETAL
1054 KOKO KAI PL
HONOLULU HI 96825

ALIMINATI NAGOLE LIVING TRUST
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RANCHO CORDOVA CA 95670

ANTONIO ANTONIO VILLALUZ/IV
JOCELLE CASTRO ANTONIO
10727 PORTICO CR
RANCHO CORDOVA CA 95670

BABAK/VERONICA JAFARNEJAD
REVOCABLE TRUST
3372 TREFETHEN CT
RANCHO CORDOVA CA 95670

BARETSKY JULIE E/WILLIAM F
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RANCHO CORDOVA CA 95670

BEECK FAMILY REVOCABLE LIVING
TRUST
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RANCHO CORDOVA CA 95670

BOEHNEN JEFFREY
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SACRAMENTO CA 95864

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RANCHO CORDOVA CA 95670

ABBOTT GREGORY/MARGARET
10929 BELLONE WAY
RANCHO CORDOVA CA 95670

AHMED AK R
3501 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ALEXANDROVA ELEONORA/ALBENKO
ALEXANDROV
3504 ENVERO WAY
RANCHO CORDOVA CA 95670

ALSARRAJ MOHAMMAD/SHERRINE AL
SARRAJ
3529 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ANZELC JESSE D/HANNAH LYNN
3432 NOUVEAU WAY
RANCHO CORDOVA CA 95670

BAGHA RANJEET
3578 RULANDER WAY
RANCHO CORDOVA CA 95670

BEATRIX H SPEIERER-REUSS VON
PLAUEN TRUST
3512 NOUVEAU WAY
RANCHO CORDOVA CA 95670

BEJARANO PHILLIP/JESSICA
10923 BIANCO WAY
RANCHO CORDOVA CA 95670

BOLCHI ROJHANI FAMILY TRUST
10888 BIANCO WAY
RANCHO CORDOVA CA 95670

BUCHHOLZ CARLYE A/NATHAN D
4781 JUANITA DR
SHINGLE SPRING CA 95682

ATTACHMENT 7

ABDULLA MOSTAFA/SHEREEN GHOZZY
4386 KILROY CT
RANCHO CORDOVA CA 95742

AKHROMTSEV SERGEY/LYUDMILA
AKHROMTSEVA
10909 PINELLA WAY
RANCHO CORDOVA CA 95670

ALI NAZMIN/MOHAMMED IBRAHIM
10975 MERITAGE CT
RANCHO CORDOVA CA 95670

ALTERMAN BROWN NORMA J
4401 ANATOLIA DR
RANCHO CORDOVA CA 95742

ARAKELIAN MICHAEL
3513 DEBINA WAY
RANCHO CORDOVA CA 95670

BALL JUSTIN/LORI ANN
3301 CORVINA DR
RANCHO CORDOVA CA 95670

BECK RONNIE D
3114 W HAMMER LN
STOCKTON CA 95209

BILLECI FAMILY TRUST
3305 CORVINA DR
RANCHO CORDOVA CA 95670

BOLYA CSILLA I/KYLE F KRAMNIC
3504 NOUVEAU WAY
RANCHO CORDOVA CA 95670

BYRNE JACQUELINE/SEAN
3320 CRISTOM DR
RANCHO CORDOVA CA 95670

ITEM 18.1.

CADORNA ROSMARIE S/JULIUS
3559 RULANDER WAY
RANCHO CORDOVA CA 95670

CARDOZA GINA L/JAMES Q
10916 BIANCO WAY
RANCHO CORDOVA CA 95670

CHEN YONG
3495 CELAR CT
RANCHO CORDOVA CA 95670

CHIGAI STANISLAV/LIUBA A
3500 RIOJO WAY
RANCHO CORDOVA CA 95670

CHOI SUNG E
3428 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CHOW MICHELLE P/MYO LWIN
10723 PORTICO CR
RANCHO CORDOVA CA 95670

CORDOVA REC & PK DIST
2729 PROSPECT PARK DR STE 230
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10932 BIANCO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10876 BIANCO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3388 TREFETHEN CT
RANCHO CORDOVA CA 95670

CAMPANA LIVING TRUST
18024 CHICKAREE DR
OREGON CITY OR 97045

CESPEDES EDUARDO M/ELENA F
3556 SPOTO DR
RANCHO CORDOVA CA 95670

CHEPLICK CORINNA ANN
3476 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CHO HANNA
3554 RULANDER WAY
RANCHO CORDOVA CA 95670

CHOI YOON JONG/CHUNGSUK KIM
10729 PORTICO CR
RANCHO CORDOVA CA 95670

CITY YOUTH ASSEMBLY LLC
PO BOX 277
LOVELOCK NV 89419

CORDOVA RECREATION/PARK DISTRICT
2197 CHASE DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10928 BIANCO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10931 BIANCO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3452 DURELLO CIR
RANCHO CORDOVA CA 95670

ATTACHMENT 7

CAMPBELL DANIEL P/BIANCA C
10773 PORTICO CR
RANCHO CORDOVA CA 95670

CHEN JIN JIANG
3464 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CHHLANG NEAY/SATHYA SASHA MANG
3473 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CHO JAMES SUNG HO/IN OK
3554 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CHOUINIERE DAVID/MARY F
10963 MERITAGE DR
RANCHO CORDOVA CA 95670

COLE REVOCABLE LIVING TRUST/
10995 ZIRONE WAY
RANCHO CORDOVA CA 95670

CROSS ANYA/JONATHAN JAMES
3424 DURELLO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10912 BIANCO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3316 CORVINA DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3420 DURELLO CIR
RANCHO CORDOVA CA 95670

ITEM 18.1.

CURRENT OCCUPANT
10920 BELLONE WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3370 ZINFANDEL DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10985 ZIRONE WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10947 MERITAGE DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3532 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3488 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3448 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3453 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10849 WATERBROOK WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3582 RULANDER WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10913 BELLONE WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10851 BEAR HOLLOW DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3505 ENVERO WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10943 MERITAGE DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3528 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3472 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3436 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3505 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10882 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3558 RULANDER WAY
RANCHO CORDOVA CA 95670

ATTACHMENT 7

CURRENT OCCUPANT
10905 BELLONE WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3494 CELAR CT
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10959 MERITAGE DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10935 MERITAGE DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3516 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3452 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3425 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3513 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10898 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3579 RULANDER WAY
RANCHO CORDOVA CA 95670

ITEM 18.1.

CURRENT OCCUPANT
3550 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3567 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3596 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3584 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3572 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10721 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10729 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10735 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10740 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10743 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3546 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3574 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3592 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3580 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3417 DURELLO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10725 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10731 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10737 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10741 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10744 PORTICO CIR
RANCHO CORDOVA CA 95670

ATTACHMENT 7

CURRENT OCCUPANT
3587 NOUVEAU WAY
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3625 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3588 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3576 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10760 BEAR HOLLOW DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10727 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10733 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10739 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10742 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10745 PORTICO CIR
RANCHO CORDOVA CA 95670

ITEM 18.1.

CURRENT OCCUPANT
10746 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10749 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10753 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10759 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10765 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10771 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10723 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10738 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10842 BEAR HOLLOW DR
RANCHO CORDOVA CA 95670

DAO TAM C/CHAU TRUONG
15277 PRESILLA DR
JAMUL CA 91935

CURRENT OCCUPANT
10747 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10750 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10755 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10761 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10767 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10773 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3566 SPOTO DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
3384 ZINFANDEL DR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10846 BEAR HOLLOW DR
RANCHO CORDOVA CA 95670

DARBINYAN ARMAN
3385 TREFETHEN CT
RANCHO CORDOVA CA 95670

ATTACHMENT 7

CURRENT OCCUPANT
10748 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10751 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10757 PORTICO CIR
RANCHO CORDOVA CA 95670

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10763 PORTICO CIR
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10769 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10775 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10736 PORTICO CIR
RANCHO CORDOVA CA 95670

CURRENT OCCUPANT
10866 BEAR HOLLOW DR
RANCHO CORDOVA CA 95670

DAMIL MARLA/ISAGANI
3570 RULANDER WAY
RANCHO CORDOVA CA 95670

DASARI SURESH K/KEERTHI P
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ITEM 18.1.

DAVID/JULIA BORBA REVOCABLE
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DEBRA LEE MESKE TRUST
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DEVAGUPTAPU BHANU K/ETAL
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DO THIEN T/NAI H SAETERN
10900 BIANCO WAY
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DUNLAP FAMILY TRUST
3404 NOUVEAU WAY
RANCHO CORDOVA CA 95670

EISENMAN MARTIN/LINDA
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ERICH SHASTA LP
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FAY EVAN/MAICHOR K
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GARCIA EDWIN
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GRASSI STEVEN ENZO
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DAVIS STEVEN/LYSA
10917 BELLONE WAY
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DENNIS C GODFREY SURVIVORS TRUST
10880 BIANCO WAY
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DIAZ ZANIE M/MARTIN A
10749 PORTICO CR
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DOAN TONY
10740 PORTICO CR
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DYTE JOHN D/JEANNA B
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ELKHEIR AHMAD
3562 NOUVEAU WAY
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FARRIS FAMILY REVOCABLE TRUST
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FRANK S HALL TRUST
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GELEIN FAMILY TRUST
3312 CORVINA DR
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GREATHOUSE JAMES L/SHEILA M
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ATTACHMENT 7

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DIPPON MICHAEL
10844 BIANCO CT
RANCHO CORDOVA CA 95670

DUNCAN R ANTHONY/CONSUELO
BALLANTYNE LIVING TRUST
10924 BIANCO WAY
RANCHO CORDOVA CA 95670

EDGREN KAREN/DENIS
3512 DEBINA WAY
RANCHO CORDOVA CA 95670

ELLIOTT ASHTON PLACE LLC
340 PALLADIO PKWY STE 521
FOLSOM CA 95630

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GARCIA AURELIA/JAIME
3583 RULANDER WAY
RANCHO CORDOVA CA 95670

GILBERT FAMILY TRUST
3381 TREFETHEN CT
RANCHO CORDOVA CA 95670

GREEN MICHAEL A/ALICIA M
10745 PORTICO CR
RANCHO CORDOVA CA 95670

ITEM 18.1.

GUTIERREZ JESUS
3480 NOUVEAU WAY
RANCHO CORDOVA CA 95670

HERNANDEZ IRENE M
3560 SPOTO DR
RANCHO CORDOVA CA 95670

HOANG NHU HANH
3533 NOUVEAU WAY
RANCHO CORDOVA CA 95670

HUCKLEBERRY CRYSTAL M/MICHAEL J
10840 BIANCO CT
RANCHO CORDOVA CA 95670

INGE SHIRLEY LIVING TRUST
10865 BIANCO WAY
RANCHO CORDOVA CA 95670

JAN ABDUL A
10878 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

JARVIS ELYSE N
10913 PINELLA WAY
RANCHO CORDOVA CA 95670

JOSEF CHRISTOPHER DECENA
REVOCABLE LIVING TRUST
10721 PORTICO CR
RANCHO CORDOVA CA 95670

KANNAPPAN
SANGEETHA/SWAMINATHAN
SUBRAMANIAN
3579 NOUVEAU WAY
RANCHO CORDOVA CA 95670
KEARNEY ROBERT
3575 RULANDER WAY
RANCHO CORDOVA CA 95670

HAN LINDA
10917 BIANCO WAY
RANCHO CORDOVA CA 95670

HIGGINS DAVID M/SANDRA J
3433 NOUVEAU WAY
RANCHO CORDOVA CA 95670

HOANG TRONG/KHANH TRAN/THANH
THAO TRAN HOANG
3571 NOUVEAU WAY
RANCHO CORDOVA CA 95670

HUTIUC VIOREL/OLGHINA/ANCUTA
RALUCA/OTILIA REBECA
3445 NOUVEAU WAY
RANCHO CORDOVA CA 95670

JACK E/VALARIE L COONS REVOCABLE
TRUST
4281 MEADOW CIR
RESCUE CA 95672

JANE M KWON FAMILY TRUST
10881 BELLONE WAY
RANCHO CORDOVA CA 95670

JOHAL LAKHPAL S/RABINDER
S/SUKHMINDER SANDHU
10916 BELLONE WAY
RANCHO CORDOVA CA 95670

JOSEFINA D BIXLER REVOCABLE TRUST
3441 NOUVEAU WAY
RANCHO CORDOVA CA 95670

KAO LEE JULIA H/STEVE Z LEE
3498 CELAR CT
RANCHO CORDOVA CA 95670

KENNETH J SPENCER 2015 TRUST
3444 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ATTACHMENT 7

HENINGBURG BENJAMIN I/ELISA
3412 DURELLO CIR
RANCHO CORDOVA CA 95670

HILLENBURG ALEJANDRO FAMILY
TRUST
3516 DEBINA WAY
RANCHO CORDOVA CA 95670

HRYNASHKA DZMITRY/ALENA
10877 BELLONE WAY
RANCHO CORDOVA CA 95670

HUYNH DON/DUNG THI LE
3420 NOUVEAU WAY
RANCHO CORDOVA CA 95670

JAMES/CHERYL VOGUE FAMILY TRUST
2108 1ST ST
LINCOLN CA 95648

JANG JUSTIN
3538 NOUVEAU WAY
RANCHO CORDOVA CA 95670

JOSE R ROBLETO/MARY L DEROBLETO
FAM REVOCABLE TRS
10912 PINELLA WAY
RANCHO CORDOVA CA 95670

KANG IN S
9357 OREO RANCH CIR
ELK GROVE CA 95624

KATALYN MINH REVOCABLE LIVING
TRUST
3377 TREFETHEN CT
RANCHO CORDOVA CA 95670

KESOYAN NELLI
3448 DURELLO CIR
RANCHO CORDOVA CA 95670

ITEM 18.1.

KHUSHWINDER S/SURINDER K WARRIN
REV TRUST
476 HIGGINS ST
FOLSOM CA 95630

KINTER ZACHARY C
10767 PORTICO CR
RANCHO CORDOVA CA 95670

KUMARASINGHAM/SUBODHINI
BALASINGHAM FAMILY REV TRS
3416 DURELLO CIR
RANCHO CORDOVA CA 95670

KWONG CHRISTINE J/KENJI L BUIRST
10870 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

LE TRACEY P
10743 PORTICO CR
RANCHO CORDOVA CA 95670

LETHCO MICHELE P/TILMAN A
10908 BELLONE WAY
RANCHO CORDOVA CA 95670

LEWIS DANNESHA Y/DEMOND
SAFFORD
10731 PORTICO CR
RANCHO CORDOVA CA 95670

LOSSER MEGAN A
10885 BELLONE WAY
RANCHO CORDOVA CA 95670

LYSYUK MARK/YELENA H
3444 DURELLO CIR
RANCHO CORDOVA CA 95670

MALLI HARBANS
3449 NOUVEAU WAY
RANCHO CORDOVA CA 95670

KIM BRYAN P
3233 ABOTO WAY
RANCHO CORDOVA CA 95670

KOROVYANKO IVANNA/IGOR STEBAEV
10744 PORTICO CR
RANCHO CORDOVA CA 95670

KWAK KYEUNGRAN/NOHOON
3508 RIOJO WAY
RANCHO CORDOVA CA 95670

LAPAYAN ZARUHI
3461 DURELLO CIR
RANCHO CORDOVA CA 95670

LEE JON/SUK M
10860 BIANCO WAY
RANCHO CORDOVA CA 95670

LEUNG FAMILY REVOCABLE
TRUST/MARGARET W LEUNG
3525 NOUVEAU WAY
RANCHO CORDOVA CA 95670

LEWIS EDWARD/ELANA
10951 MERITAGE DR
RANCHO CORDOVA CA 95670

LOUSTALE EMILY A
10765 PORTICO CR
RANCHO CORDOVA CA 95670

MADLANGBAYAN GINA
10886 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

MARLENE J LARSON REVOCABLE TRUST
3505 RIOJO WAY
RANCHO CORDOVA CA 95670

ATTACHMENT 7

KIM HONG D
3456 DURELLO CIR
RANCHO CORDOVA CA 95670

KUMAR LALAN/ROWENA
200 MOON CIR UNIT 221
FOLSOM CA 95630

KWATRA GAURAV/KITTY
3563 RULANDER WAY
RANCHO CORDOVA CA 95670

LE HUY T
10848 BIANCO CT
RANCHO CORDOVA CA 95670

LEE ZSE CYNTHIA VANG/JAY G
10896 BIANCO WAY
RANCHO CORDOVA CA 95670

LEVINE MICHAEL D
3421 NOUVEAU WAY
RANCHO CORDOVA CA 95670

LOPEZ ABRAN L/LUCIANITA B
3586 NOUVEAU WAY
RANCHO CORDOVA CA 95670

LUONG KEVIN/CATHY T
10861 BIANCO WAY
RANCHO CORDOVA CA 95670

MALKO VIOLET/ROBERT ESSAGHI
3578 NOUVEAU WAY
RANCHO CORDOVA CA 95670

MARTENS NADIA
3509 RIOJO WAY
RANCHO CORDOVA CA 95670

ITEM 18.1.

MARTINEZ GEORGE A/GINA A
3437 NOUVEAU WAY
RANCHO CORDOVA CA 95670

MC FARLAND SHELLEY CAROL
10909 BELLONE WAY
RANCHO CORDOVA CA 95670

MELISSA/JAZZIE MUGANZO MURPHY
JOINT REV TRUST
10771 PORTICO CR
RANCHO CORDOVA CA 95670

MONCRIEF RIKKI
10757 PORTICO CR
RANCHO CORDOVA CA 95670

MORRISSETTE GARY ALLEN
7529 PINERIDGE LN
FAIR OAKS CA 95628

MYRMYR DENIS/ALBINA
10905 PINELLA WAY
RANCHO CORDOVA CA 95670

NGUYEN HENRY/VICKY
9675 FOLSOM BLVD
SACRAMENTO CA 95827

NONIS PRIYANKARA/PRADEEPA
1367 SOUZA DR
EL DORADO HILL CA 95762

OH SANDY S
6033 EDGEHILL DR
EL DORADO HILL CA 95762

OSIPOV VADIM
10949 FINO CT
RANCHO CORDOVA CA 95670

MARTINEZ GLIDA Y
3225 ABOTO WAY
RANCHO CORDOVA CA 95670

MCKELLRY JAMI K
3500 NOUVEAU WAY
RANCHO CORDOVA CA 95670

MICHESCU GEORGE/ECATERINA
10897 BELLONE WAY
RANCHO CORDOVA CA 95670

MONIQUE CRAYTON REVOCABLE
LIVING TRUST
10737 PORTICO CR
RANCHO CORDOVA CA 95670

MOSELEY FAMILY TRUST
1325 ORCHID DR
SANTA BARBARA CA 93111

NGO DAVID/LAN LUONG
3229 ABOTO WAY
RANCHO CORDOVA CA 95670

NGUYEN MYANH
3562 RULANDER WAY
RANCHO CORDOVA CA 95670

OCEGUEDA CARLOS J/AMBER C
10769 PORTICO CR
RANCHO CORDOVA CA 95670

OLGUIN RONALD R/LINDA ANN
3453 DURELLO CIR
RANCHO CORDOVA CA 95670

OZUNA HILDELISA/RAMIRO STROUD
10755 PORTICO CR
RANCHO CORDOVA CA 95670

ATTACHMENT 7

MATASOL DOUG L
3492 NOUVEAU WAY
RANCHO CORDOVA CA 95670

MEIER PAUL EDWARD/LESLIE CAROLE
3558 NOUVEAU WAY
RANCHO CORDOVA CA 95670

MILLER CHRISTOPHER
10900 PINELLA WAY
RANCHO CORDOVA CA 95670

MORADA MANUEL S/EMMA R
10857 BIANCO WAY
RANCHO CORDOVA CA 95670

MURADYAN DIANA RAZMIKOVNA
10852 BIANCO WAY
RANCHO CORDOVA CA 95670

NGUYEN CINDY A H
3504 RIOJO WAY
RANCHO CORDOVA CA 95670

NGUYEN TRANG/DUY DUONG
3496 NOUVEAU WAY
RANCHO CORDOVA CA 95670

OCILLE Y PERRY TRUST
24347 SARADELLA CT
MURRIETA CA 92562

OPIELA SANDRA
10874 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

PABALINAS ROMMEL T/WYNNE C
10753 PORTICO CR
RANCHO CORDOVA CA 95670

ITEM 18.1.

PAHWA
AMAN/KALLIE/GULSHAN/KUSAM
3520 NOUVEAU WAY
RANCHO CORDOVA CA 95670

PARIAN PAMELA ASHLEY
10748 PORTICO CR
RANCHO CORDOVA CA 95670

PARVIN ABBIE LEIGH
10735 PORTICO CR
RANCHO CORDOVA CA 95670

PIPER FAMILY TRUST
10920 BIANCO WAY
RANCHO CORDOVA CA 95670

POPOV ARTHUR/INESSA POPOVA
10971 MERITAGE CT
RANCHO CORDOVA CA 95670

RAHN FAMILY 2007 REVOCABLE LIVING
TRUST
151 JOHN HENRY CIR
FOLSOM CA 95630

REY & MARIA ASTRONOMO FAMILY
TRUST
509 FORT ROCK CT
FOLSOM CA 95630

ROBERTSON MARCEL/MARK
10901 PINELLA WAY
RANCHO CORDOVA CA 95670

SAINT JARRAD
10751 PORTICO CR
RANCHO CORDOVA CA 95670

SANCHEZ ESPERANZA
166 BLACK POWDER CIR
FOLSOM CA 95630

PAK CHAN IL/MI Y
3509 ENVERO WAY
RANCHO CORDOVA CA 95670

PARK SANG CHAE/DUK SIL
8370 E TRINITY LN
FAIR OAKS CA 95628

PETERSON KELLY M
10927 BIANCO WAY
RANCHO CORDOVA CA 95670

POK CHRISTINE
10856 BIANCO WAY
RANCHO CORDOVA CA 95670

PRASANNA/PLACIDA RUPASINGHE
TRUST
719 LEFEBRE DR
FOLSOM CA 95630

RAM/SITA LALCHANDANI REVOCABLE
TRUST
4110 RIDING CLUB LN
SACRAMENTO CA 95864

REYNOLDS RYAN A/LINDSEY P
3524 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ROCKWELL KAREN/RICHARD
3542 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SAMUEL EARL CLOWER JR TRUST
10894 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

SANCHEZ GABRIEL P
10759 PORTICO CR
RANCHO CORDOVA CA 95670

ATTACHMENT 7

PAPIO MICHAEL A/GEMMA
3436 DURELLO CIR
RANCHO CORDOVA CA 95670

PARKER CHRISTOPHER/TRACY
10967 MERITAGE CT
RANCHO CORDOVA CA 95670

PHILIP & MAUREEN CORNYN TRUST
19409 LOOKOUT PL
TEHACHAPI CA 93561

POPOV ARTHUR/INESSA POPOVA
10974 MERITAGE CT
RANCHO CORDOVA CA 95670

PRUTHI MITESH/SWATI
2612 SUNNYCREST CT
FREMONT CA 94539

RANCHO CORDOVA RETIREMENT
RESIDENCE L P
2260 MCGILCHRIST ST SE
SALEM OR 97302

RICHARD BRIAN OLEARY TRUST
3457 DURELLO CIR
RANCHO CORDOVA CA 95670

ROELOFS DAVID
3509 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SANAGAVARAPU SASHI KIRAN/HONEY
SHAKTI
10747 PORTICO CR
RANCHO CORDOVA CA 95670

SARGSYAN VARDAN/LILIT SMBATYAN
3500 ENVERO WAY
RANCHO CORDOVA CA 95670

ITEM 18.1.

SCHAFER JEFFREY L
10904 BIANCO WAY
RANCHO CORDOVA CA 95670

SEAN & MELISSA DUPUIS FAMILY
TRUST
2621 FIREBRAND LN
ROCKLIN CA 95765

SHAH JIGNA N/NIRAV
10991 ZIRONE WAY
RANCHO CORDOVA CA 95670

SHERO JOHN D
3484 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SINGH MITA/HARJIT K
3460 DURELLO CIR
RANCHO CORDOVA CA 95670

SMITH AUDRI
10741 PORTICO CR
RANCHO CORDOVA CA 95670

SPENCE KENNETH
10742 PORTICO CR
RANCHO CORDOVA CA 95670

SUNIL NEKKANTI/SRIVIDHYA
RAMAMOORTHY REV LIVING TR
3432 DURELLO CIR
RANCHO CORDOVA CA 95670

TARUSOV ALEXEY/LUYBOV
10890 QUEENS ARBOR DR
RANCHO CORDOVA CA 95670

THOMAS/KIMBERLY HERLACHE REV
TRUST
3440 DURELLO CIR
RANCHO CORDOVA CA 95670

SCHAFFNER AMBER/JOHN
10864 BIANCO WAY
RANCHO CORDOVA CA 95670

SEMENOV ANDREY/RAISA
3501 RIOJO WAY
RANCHO CORDOVA CA 95670

SHAHLAIE BABAK/SHAINAIN
1128 WIDGEON CT
FOLSOM CA 95630

SIMONYAN NSHAN/SILVA
MAMIKONYAN
3380 TREFETHEN CT
RANCHO CORDOVA CA 95670

SINGH NEHA/TEJINDER
3566 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SOLDATELLI CARIM
10750 PORTICO CR
RANCHO CORDOVA CA 95670

SPRINGER EDWARD EARL JR/MARION C
3413 DURELLO CIR
RANCHO CORDOVA CA 95670

TALBERT DENNIS M/KRISTI L
3566 RULANDER WAY
RANCHO CORDOVA CA 95670

TENG CHU-HSIANG/HSIN-TING YEH
3582 NOUVEAU WAY
RANCHO CORDOVA CA 95670

TO ORASA/VITUEN WEIDENBACH
3508 ENVERO WAY
RANCHO CORDOVA CA 95670

ATTACHMENT 7

SCHOCH FRANK R/KARI A
3564 SPOTO DR
RANCHO CORDOVA CA 95670

SESSION DONALD M
10725 PORTICO CR
RANCHO CORDOVA CA 95670

SHAHNAZ MOHAMMADIADL
REVOCABLE TRUST 20
3404 DURELLO CIR
RANCHO CORDOVA CA 95670

SINGH KALPANA/GYANA R SATPATHY
3424 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SINGH PRITAM/ASHA
3421 DURELLO CIR
RANCHO CORDOVA CA 95670

SORENSEN KRISTEN
3583 NOUVEAU WAY
RANCHO CORDOVA CA 95670

SRINIVASAN VENUGOPALAN
3468 NOUVEAU WAY
RANCHO CORDOVA CA 95670

TAN ISRAEL/RUTH
10924 BELLONE WAY
RANCHO CORDOVA CA 95670

THOI ALEX
10921 BELLONE WAY
RANCHO CORDOVA CA 95670

TRAN CAN/HANH
129 BUCKINGHAM WAY
FOLSOM CA 95630

ITEM 18.1.

TREHERNE REVOCABLE LIVING TRUST
3400 NOUVEAU WAY
RANCHO CORDOVA CA 95670

VILLACARLOS WENDELL/CAMILA
10892 BIANCO WAY
RANCHO CORDOVA CA 95670

WANG ZHANE
10775 PORTICO CR
RANCHO CORDOVA CA 95670

WEINER ARTHUR/CHRISTINA C
9672 175TH PL NE
REDMOND WA 98052

WENELL JOEL C/NITAL N
10955 MERITAGE DR
RANCHO CORDOVA CA 95670

WIELAND WALKER/JULIANNE
3456 NOUVEAU WAY
RANCHO CORDOVA CA 95670

YANG JUN MO/YESEUL
10763 PORTICO CR
RANCHO CORDOVA CA 95670

ZIMRING MATTHEW F/TATYANA O
HOLODNOVA
10739 PORTICO CR
RANCHO CORDOVA CA 95670

MORTON PITALO INC
600 COOLIDGE DR STE 140
FOLSOM CA 95630

TU HUNG DO
10939 MERITAGE DR
RANCHO CORDOVA CA 95670

VINH SEN/STEVEN BRUNELLE
3440 NOUVEAU WAY
RANCHO CORDOVA CA 95670

WASDYKE DEBORAH R/MICHAEL S
3412 NOUVEAU WAY
RANCHO CORDOVA CA 95670

WELKER MICAH/VICTORIA A LANDAKER
10889 BELLONE WAY
RANCHO CORDOVA CA 95670

WENTWORTH GREGORY C/KELLEY
L/KELLEY
3389 TREFETHEN CT
RANCHO CORDOVA CA 95670

WONG HEISZE
10908 BIANCO WAY
RANCHO CORDOVA CA 95670

YI NAOMI/WON J
3517 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ZULKADER SHEIKH
3429 NOUVEAU WAY
RANCHO CORDOVA CA 95670

ATTACHMENT 7

UNDERWOOD CHRISTIE A/LOUIS D JR
10904 PINELLA WAY
RANCHO CORDOVA CA 95670

WALLER ELIZABETH A
3555 RULANDER WAY
RANCHO CORDOVA CA 95670

WASDYKE MICHAEL S/DEBORAH R
3408 NOUVEAU WAY
RANCHO CORDOVA CA 95670

WEN/SU FAMILY TRUST
1246 PURDUE ST
SAN LEANDRO CA 94579

WIECZNER SABINA
10761 PORTICO CR
RANCHO CORDOVA CA 95670

WOODLAND PHILIP J/THERESA M
3570 NOUVEAU WAY
RANCHO CORDOVA CA 95670

YUN TAE I/OK JIN
10733 PORTICO CR
RANCHO CORDOVA CA 95670

BROADSTONE LAND LLC
340 PALLADIO PKWY STE 521
FOLSOM CA 95630

ITEM 18.1.

SACRAMENTO SANITATION DISTRICT
10060 GOETHE ROAD
SACRAMENTO CA 95827

PG&E
2730 GATEWAY OAKS DRIVE
SACRAMENTO CA 95833

SMUD
6301 S STREET MS B304
SACRAMENTO CA 95817

FOLSOM CORDOVA UNIFIED SCHOOL
DISTRICT
1965 BIRKMONT DRIVE
RANCHO CORDOVA CA 95742

SACRAMENTO REGIONAL COUNTY
SANITATION DISTRICT
10060 GOETHE ROAD
SACRAMENTO CA 95827

PG&E
343 SACRAMENTO STREET
AUBURN CA 95603

SMUD
6301 S STREET MS B404
SACRAMENTO CA 95817

GOLDEN STATE WATER COMPANY
3005 GOLD CANAL DRIVE
RANCHO CORDOVA CA 95670

ATTACHMENT 7

SACRAMENTO COUNTY WATER
AGENCY
10151 FLORIN ROAD
SACRAMENTO CA 95829

SMUD
6301 S STREET MS B304
SACRAMENTO CA 95817

SACRAMENTO METROPOLITAN FIRE
10545 ARMSTRONG AVE STE 310
MATHER CA 95655

CITY OF RANCHO CORDOVA
2729 PROSPECT PARK DR
RANCHO CORDOVA CA 95670

MEMORANDUM



ITEM 18.2.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Darcy Goulart, Planning Manager
SUBJECT: **ECO SITE II, CELLULAR TELECOMMUNICATION TOWER AT THE SOUTHEAST CORNER OF ZINFANDEL DRIVE AND FOLSOM BOULEVARD - CONDITIONAL USE PERMIT - PROJECT NO. DD10018**

RECOMMENDATION

Provide Planning staff direction on the design. If a change is desired, direct staff and the City Attorney to prepare a Resolution for consideration at the November 1, 2021 meeting rescinding the August 16, 2021 approval and approving the revised design.

RESULT OF RECOMMENDED ACTION

Direction to staff to either implement the August 16, 2021 design and approval or to return to Council for approval of an amended design.

BACKGROUND

At the September 20th City Council meeting, a request was made under the Future Agenda Topics section of the agenda to bring this item back to Council for discussion and possible reconsideration or rescission and amendment of the design of the proposed cell tower.

The City Council previously considered and took action to approve the cell tower on August 16, 2021. The approved renderings and simulations of the cell tower are included as Attachment A to this report. The Council requested that the blue color of the tower be changed to red and that the proposed art work shown on the wall enclosure be removed and reserved for a future mural. A condition of approval was added that stated:

The applicant shall work with staff on final cell tower design. Revise the color from blue to red. The enclosure shall reserve space for future murals.

The applicant provided a revised tower based upon the new condition of approval which is included as Attachment B to this report. Staff has provided the approved and latest revised cell

tower simulations to assist with the discussion.

FISCAL IMPACT AND FUNDING SOURCE

There is no Fiscal Impact.

ATTACHMENT(S)

1. 8.16.21 Council Approved Cell Tower Photo Simulation
2. Revised Cell Tower Simulation

ITEM 18.2.

KEY MAP

ATTACHMENT 1
NEW VERTICAL BRIDGE
8' CMU WALL
COMPOUND WITH 50'
HIGH CELL TOWER

VIEW 2

VIEW 1









NEW VERTICAL BRIDGE
8' CMU WALL COMPOUND
WITH 50' HIGH CELL TOWER
MODERN DESIGN



NEW VERTICAL BRIDGE
8' CMU WALL COMPOUND
WITH 50' HIGH CELL TOWER
MODERN DESIGN

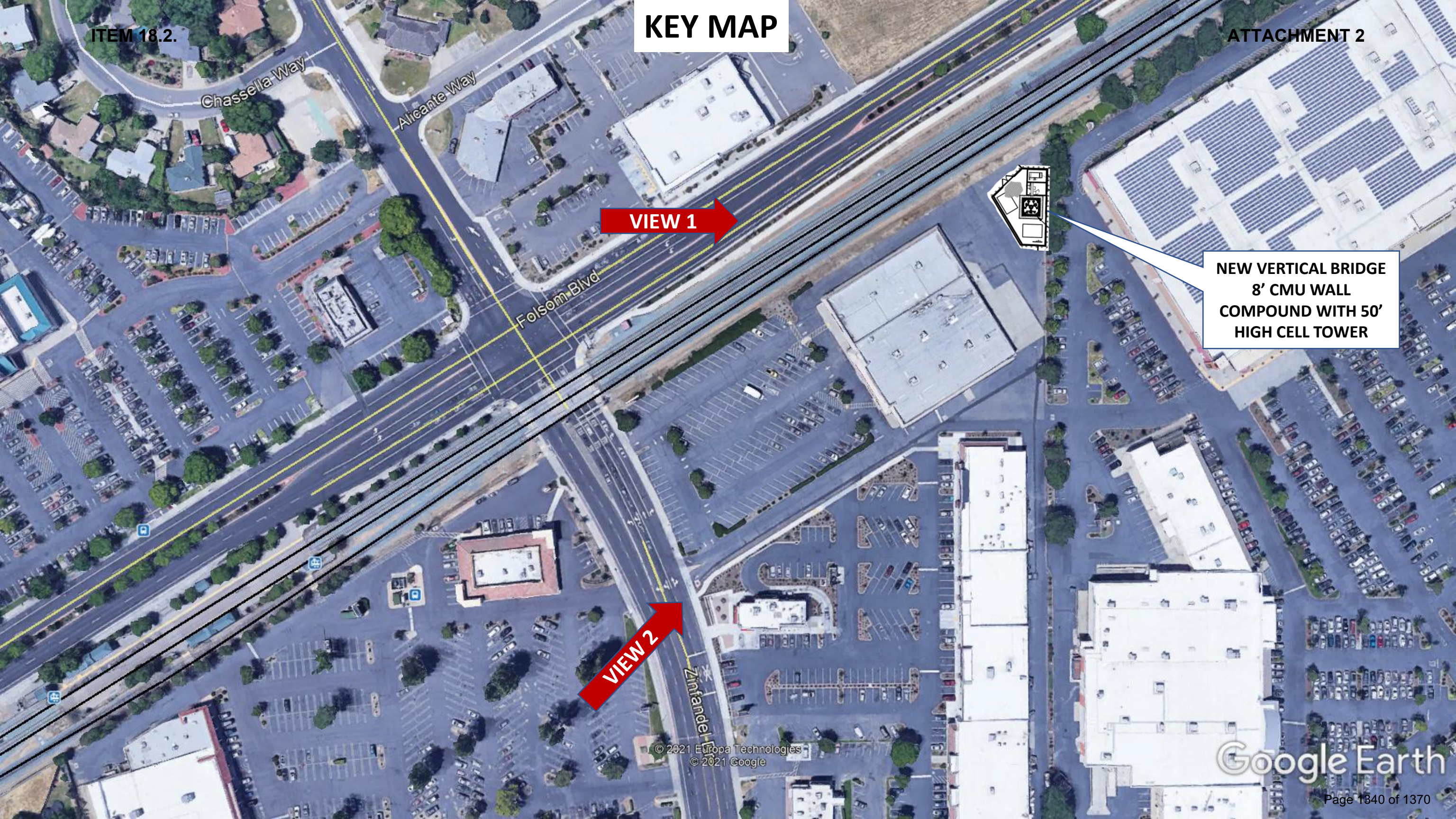




NEW VERTICAL BRIDGE
8' CMU WALL COMPOUND
WITH 50' HIGH CELL TOWER
MODERN DESIGN



NEW VERTICAL BRIDGE
8' CMU WALL COMPOUND
WITH 50' HIGH CELL TOWER
MODERN DESIGN



VIEW 1

VIEW 2

NEW VERTICAL BRIDGE
8' CMU WALL
COMPOUND WITH 50'
HIGH CELL TOWER

















MEMORANDUM



ITEM 19.1.

DATE: October 18, 2021
TO: Honorable Mayor and Council Members
FROM: Cyrus Abhar, City Manager
Megan Siren, Senior Management Analyst
SUBJECT: **RANCHO CORDOVA YOUTH CENTER OPERATIONS DISCUSSION**

RECOMMENDATION

Receive presentation on the Rancho Cordova Youth Center Operations and provide Council input.

RESULT OF RECOMMENDED ACTION

This presentation will provide an update on the Rancho Cordova Youth Center Operations Plan. After the presentation, the City Council will be asked to provide their input on the Operations Plan for the Rancho Cordova Youth Center.

BACKGROUND

The Center of Praise Ministries, Inc. and the founding and Senior Pastor Bishop Parnell Lovelace, Jr. graciously offered to partner with the City of Rancho Cordova to establish a Rancho Cordova Youth Center at their property at 10455 Investment Circle. The lease agreement with Center of Praise Ministries, Inc. was finalized and adopted by the City Council in January 2020 for 25 years at One Dollar annually with the option to renew for an additional 25 years. The lease agreement allows the City of Rancho Cordova to use the property for youth related activities, including, but not limited to the following:

- Before and After School Programs
- Tutoring Programs
- Literacy and Math Development Classes
- Police Activities League
- Use by Organized Youth Programs, Youth Clubs and Youth Sports Leagues
- Classes in Workforce Readiness and Job Training

The lease agreement prohibits the use of the facility for drug rehabilitation programs and as a homeless shelter.

The construction contract for the Rancho Cordova Youth Center building and site improvements was awarded to Z Squared Construction, Inc. in July 2021 and construction is currently underway. The Rancho Cordova Youth Center Project includes interior modifications including new mechanical units, electrical modifications, new windows, kitchen modifications, bathroom modifications, American Disability Act (ADA) modifications, security, parking lot overlay, exterior fencing, covered area for seating, multi-sport turf field and an outdoor basketball court.

Staff along with RCPD Police Activities League and the Boys and Girls Club of Sacramento have been in ongoing conversations to develop an operation plan for the facility. It is anticipated that the primary operators of the facility will be Boys and Girls Club of Sacramento in partnerships with RCPD Police Activities League. The presentation will provide an overview of the operation plan for the facility.

FISCAL IMPACT AND FUNDING SOURCE

This update provides an opportunity for input on the operations plan for the Rancho Cordova Youth Center. A final programming plan, budget and operations agreement will return to Council that incorporates input received from tonight's discussion.

ATTACHMENT(S)

1. Rancho Cordova Youth Center Presentation

RANCHO CORDOVA YOUTH CENTER

POWERED BY:

City of Rancho Cordova, PAL, Boys & Girls Club

October 18, 2021



Meeting Goals:

- Provide Update on Youth Center
- Introduce Youth Center Partners for Operations & Discussion on Operations
- Receive Feedback from Council & Next Steps

History of the Rancho Cordova Youth Center

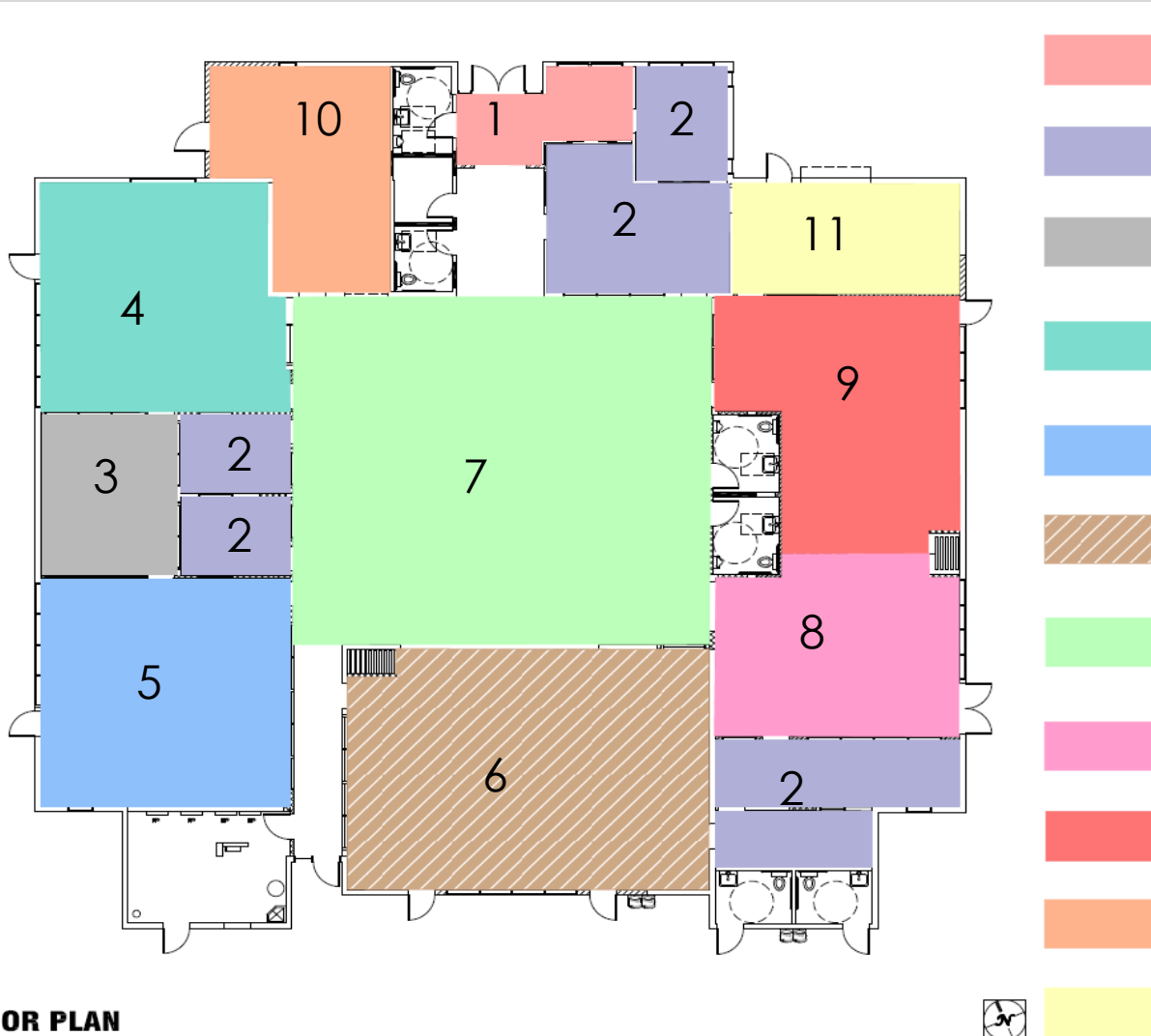
Fall 2019 – 2020

- Ribbon Cutting to Celebrate Lease Agreement with The Center of Praise Ministries, Inc. Approved by City Council
- Met with 15 Community Organizations to review capital modifications and programming needs
- Architectural Design

2021

- City of Rancho Cordova, PAL & Boys & Girls Club begin program and general operations planning
- Construction Contract Awarded
- Renovations underway Fall 2021

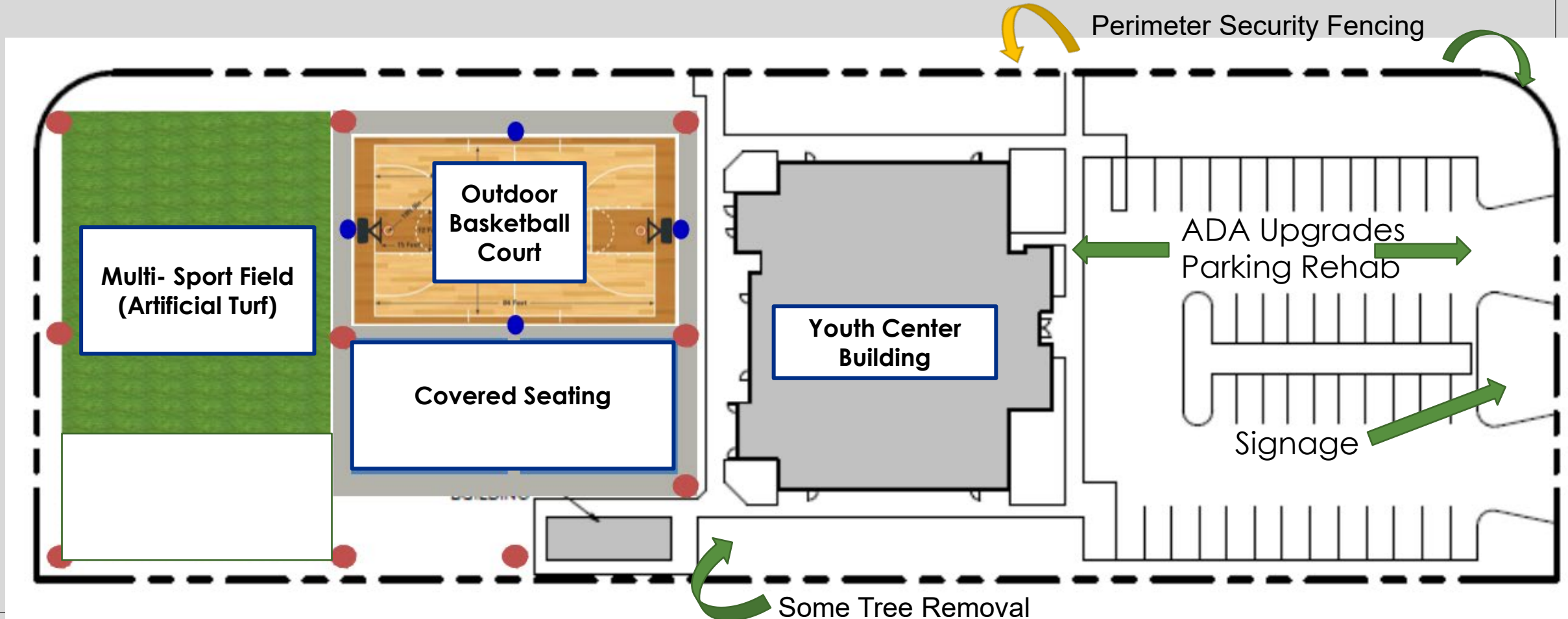
Interior Features



1. Secure Entry
2. Office Spaces
3. Computer Lab
4. Reading & Creative Writing Room
5. Arts/Music Room
6. Boxing Ring / Gym
7. Large Recreation / Game Room
8. Teen Room
9. Multi-Purpose Room
10. Catering Kitchen
11. Break Room

FLOOR PLAN

Outdoor Features



STRONGER TOGETHER

The Rancho Cordova Youth Center Team is coming together to serve more youth & teens than ever before! Together we will harness the power of our reputations, strength of our relationships in the community, and experience serving at-risk youth to provide a safe place that will allow young people to continue to learn while having fun, build character through leadership activities, stay healthy through sports and most importantly build relationships with positive adult role models that truly care.



CITY OF RANCHO CORDOVA



**RANCHO CORDOVA
POLICE ACTIVITIES LEAGUE**



BOYS & GIRLS CLUBS

ITEM 19.1.



ATTACHMENT 1



Youth Center Programs

Youth Leadership Council (YLC)

PAL Fitness

PAL Boxing Club

Summer Public Safety Academy

Junior Giants

Girls Circle

Boys Group

BrainWise

Side Hustle

Girls Circle

Boys Group

Rancho Cordova PAL builds relationships between RCPD and youth through a variety of programs, at no cost to the kids. Each year, the program serves more than 3,500 youth in our community.

Youth learn vital skills such as teamwork and sportsmanship, create lasting friendships with each other, build trust with officers, give back to the community, and have fun! PAL youth have gone on to do great things from becoming a police officer to achieving success in education and sports.

“Every Kid Needs a PAL”

The Boys & Girls Club's mission is to inspire and enable all young people, especially those who need us most, to reach their full potential as responsible, caring and productive citizens. The Club provides a world-class Club Experience that assures success is within reach of every young person who enters our doors; with all members on track to graduate from high school with a plan for the future, demonstrating good character and citizenship, and living a healthy lifestyle.



Youth Center Programs

Power Hour

Triple Play

SMART Moves

Youth of the Year

Diplomas to Degrees

Career Launch

Lyricism 101

MYFuture

Keystone Club

GREAT FUTURES START [HERE.](#)

Sample Youth Center Daily Schedule

	Games Room/Café	Clubhouse Program Room	Clubhouse Computer Lab	Teen Program Room	PAL Gym	Outdoor Area
3pm-4pm	Clubhouse Meal Time & Triple Play	<i>Early Bird Power Hour</i>	<i>Early Bird Power Hour</i>	Teen Snack & Power Hour	Brain Wise	<i>Power Hour</i>
4pm-5pm	Teen Meal Time & Triple Play	<i>Power Hour</i>	<i>Power Hour</i>	Money Matters Financial Literacy	PAL Fitness	Teen Basketball
5pm-6pm	Healthy Habits	CBO Programming Elementary	My Future Computer Literacy	Lyricism 101	PAL Boxing Club	CBO Programming Teen
6pm-7pm	Games Room Tournaments	Be GREAT-Create!	SMART Moves	Career Launch	PAL Boxing Club	Teen Outdoor Program

Youth Center by Numbers

Operating Hours

- School-year 3:00PM-7:00PM
Monday-Friday
- Summer Camp 8:00AM-
6:00PM
- PAL Weekend Programs
- Special Events

Youth

- Elementary/ Staff Ratio 1:20
- Teen/Staff Ratio 1:15
- Daily Attendance Goal 125
- Youth Served Annually 5,000+



Impact & Vision



Youth Outreach:
PAL & Boys & Girls Club currently
serve Rancho Cordova youth and
will be able to support even more
kids at the Youth Center.

To ensure we support every young person who enters the Youth Center, we will deliver a comprehensive approach to youth development—ultimately creating greater outcomes in the lives of the youth we serve.

1. Safe, positive environment
2. Fun and a sense of belonging
3. Supportive relationships
4. Opportunities and expectations
5. Recognition



ITEM 19.1. COMMUNITY PARTNERSHIPS



ATTACHMENT 1

Community-Based Organization Partners

- Serve Sacramento
- California PAL
- Boys & Girls Clubs of America
- KINGS
- Folsom Lake College
- NIKE
- Anthem Blue Cross
- National PAL
- Studio T Dance
- Fit Body Boot Camp
- Metro Fire
- Pro Youth
- Rancho Cordova PD
- Sacramento County Sheriff's Dept.
- MACH

Rancho Cordova Youth Center Next Steps

2021

City of Rancho Cordova, PAL, & Boys & Girls Club begin program and general operations planning

Construction contract awarded July 2021

Renovations underway Fall 2021

Formalize operating agreements

2022

Member Outreach & Registration

Construction Completed

Grand Opening Celebration

Programs begins Summer 2022

QUESTIONS & FEEDBACK

THANK YOU!

MEMORANDUM



ITEM 19.2.

DATE: October 18, 2021

TO: Honorable Mayor and Council Members

FROM: Adam Lindgren, City Attorney

SUBJECT: **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AND ON BEHALF OF COMMISSIONS AND COMMITTEES CREATED BY THE CITY COUNCIL PURSUANT TO GOVERNMENT CODE SECTION 54952(B) CONFIRMING THE STATE OF EMERGENCY UNDER GOVERNMENT CODE SECTION 8625, RECOGNIZING CONTINUED MEASURES TO PROMOTE SOCIAL DISTANCING, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE CITY FOR THE PERIOD FROM OCTOBER 18, 2021 TO NOVEMBER 17, 2021**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the attached Resolution will allow the City Council and the City's other legislative bodies to continue to meet via teleconference ("virtually") in a manner substantially similar to the manner in which they have met during the COVID-19 pandemic, if a proclaimed State of Emergency remains in effect and other requirements are satisfied.

BACKGROUND

All meetings of the City Council and the City's other legislative bodies are open and public, as required by the Ralph M. Brown Act, Government Code section 54950 et seq., so that any member of the public may attend, participate, and watch the City's legislative bodies conduct their business. On March 17, 2020, in response to the COVID-19 pandemic, Governor Newsom issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow local legislative bodies to conduct virtual meetings to slow the spread of COVID-19. As a result of Executive Order N-29-20, City Staff set up virtual meetings for the City Council and other City legislative bodies. On June 11, 2021, Governor Newsom issued Executive Order N-08-21, which, effective September 30, 2021, ended the provisions of Executive Order N-29-20 that allowed local legislative bodies to conduct meetings

telephonically or by other means.

On September 16, 2021, Governor Newsom signed Assembly Bill 361 ("AB 361"), which allows local legislative bodies to continue to conduct meetings via teleconferencing under specified conditions. AB 361 took effect upon the expiration of Executive Order N-29-20 on October 1, 2021. On September 20, 2021, the City Council held a meeting in compliance with AB 361's requirements for remote meetings.

In order for AB 361 to remain effective for meetings of the City's legislative bodies, the City Council is required to make specified findings every 30 days. AB 361 allows a legislative body to continue holding meetings utilizing teleconferencing without complying with the standard teleconferencing requirements if a State of Emergency is proclaimed under Government Code section 8625, the City has reconsidered the emergency conditions, and if the local Public Health Officer continues to recommend social distancing measures to protect the public's health and safety during local government meetings. These conditions are present.

Governor Newsom's March 4, 2020 Proclamation of Emergency related to the COVID-19 pandemic is still in effect. The potential spread of COVID-19 continues to threaten public health and safety during indoor public gatherings, including indoor gatherings of the Rancho Cordova City Council and other Rancho Cordova legislative bodies. In addition, the Sacramento County Public Health Officer continues to recommend teleconferencing or social distancing to protect the public's health and safety during local government meetings.

SUMMARY

The attached Resolution makes the required findings that the current conditions exist to allow teleconference meetings pursuant to AB 361 for the City Council and on behalf of all of the legislative bodies commissions and committees created by the City Council pursuant to Government Code section 54952(b). This will allow members of the public to safely observe and participate in local government meetings during the pandemic.

If a meeting is held via teleconference under AB 361, the following requirements apply:

1. Notices and agenda requirements remain the same under the Brown Act;
2. No physical location is required for public attendance or public comment. However, the public must be able to access and participate in the meeting through a call-in or an internet-based service, and instructions for how to participate must appear in the posted notices or agenda;
3. Teleconference meetings must protect the statutory and constitutional rights of the parties and the public;
4. If there is any disruption of the call-in or internet-based service, the agency must suspend the meeting until the problem is fixed;

5. Legislative bodies may allow public comments to be submitted prior to a meeting but must also allow the public to participate in real time through call-in or internet-based service;

6. If an internet-based service requires registration through a third-party, individuals can be required to register with the third-party to participate in the meeting; and

7. When providing a public comment period, whether after each item or during a general comment period, a legislative body must allow reasonable time for members of the public to comment and must also include reasonable time for members to register with a third-party host if applicable.

FISCAL IMPACT AND FUNDING SOURCE

The cost of continued remote access to Council meetings and the meetings of other City committees.

ATTACHMENT(S)

1. Resolution - AB 361 Rancho Cordova

CITY OF RANCHO CORDOVA

CITY COUNCIL RESOLUTION NO. XX-2021

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AND ON BEHALF OF COMMISSIONS AND COMMITTEES CREATED BY THE CITY COUNCIL PURSUANT TO GOVERNMENT CODE SECTION 54952(b) CONFIRMING THE STATE OF EMERGENCY UNDER GOVERNMENT CODE SECTION 8625, RECOGNIZING CONTINUED MEASURES TO PROMOTE SOCIAL DISTANCING, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE CITY FOR THE PERIOD FROM OCTOBER 18, 2021 TO NOVEMBER 17, 2021

WHEREAS, the City is committed to preserving and promoting public access and participation in meetings of the legislative bodies; and

WHEREAS, all meetings of the City are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the City conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, on September 20, 2021 the City held a meeting during a state of emergency under Government Code section 8625 and during a period of recommended social distancing by state and local officials while complying with Government Code section 54953(e)(2); and

WHEREAS, the City is required to make certain findings every thirty (30) days to continue teleconferencing under Government Code section 54953(e)(3), including reconsideration of the state of emergency declared by the Governor pursuant to Government Code section 8625, and State or local officials continue to impose or recommend measures to promote social distancing; and

WHEREAS, the City continues to experience emergency conditions due to COVID-19, specifically, the highly transmissible SARS-CoV-2 B.1.617.2 ("Delta") continues to threaten public health and safety during indoor public gatherings; and

WHEREAS, the City Council has considered the circumstances of the Governor's state of emergency proclamation pursuant to Government Code section 8625, which remains active; and

WHEREAS, on July 30, 2021, the Sacramento County Health Officer issued an order requiring all individuals, regardless of vaccination status, to wear a mask while indoors in public spaces; and

WHEREAS, the Centers for Disease Control and Prevention ("CDC") continues to recommend physical distancing of at least six feet (6') from others outside of the household; and

WHEREAS, the Sacramento County Health Officer's order incorporates the CDC's guidance for vaccinated and unvaccinated people; and

WHEREAS, the City Council, acting as a legislative body pursuant to Government Code section 54952(a) and for the benefit of the commissions, committees, and other bodies that were created by the City Council pursuant to Government Code section 54952(b) (collectively referred to as the "Legislative Bodies"), does hereby find that the Legislative Bodies shall continue to conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that the Legislative Bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953 as a consequence of the ongoing state of emergency and the continued social distancing measures required by local officials; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Affirmation that Local Emergency Persists. The City Council hereby considers the conditions of the state of emergency pursuant to Government Code section 8625 and proclaims that a local emergency persists throughout the City, affirms the Sacramento Health Order's required and recommended measures to promote social distancing, and finds that the conditions continue to exist pursuant to Government Code section 54953(e)(3) to allow the Legislative Bodies to use teleconferencing to hold public meetings in accordance with Government Code section 54953(e)(2) to ensure members of the public have continued access to safely observe and participate in local government meetings.

Section 3. Remote Teleconference Meetings. City Staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 4. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) November 17, 2021 or such time the City Council adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of City may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova, this 18th day of October 2021, by the following vote:

ITEM 19.2.

ATTACHMENT 1

AYES:

NOES:

ABSENT:

ABSTAIN:

Garrett Gatewood, Mayor

ATTEST:

Stacy Leitner, CMC
City Clerk