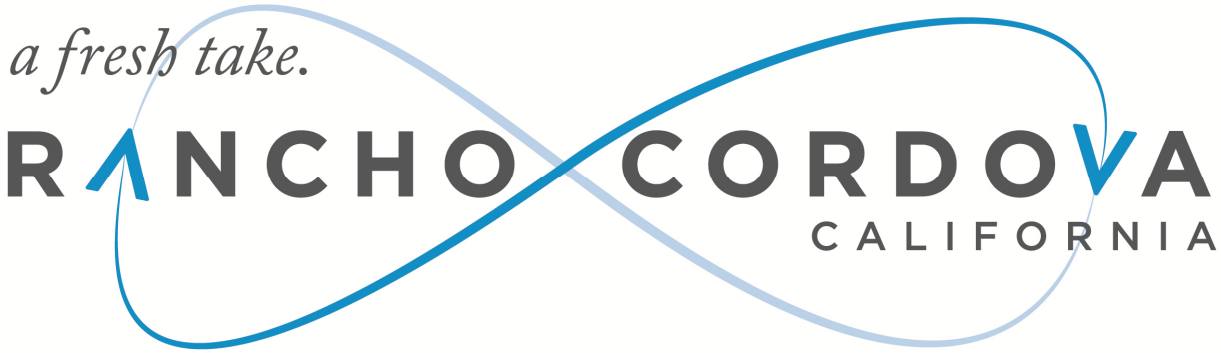
CITY OF RANCHO CORDOVA



CONCURRENT MEETING
CITY COUNCIL/SUCCESSOR AGENCY TO THE CRA/RCFC

Monday, October 19, 2015

5:30 PM – Regular Meeting

AGENDA

Robert J. McGarvey, Mayor

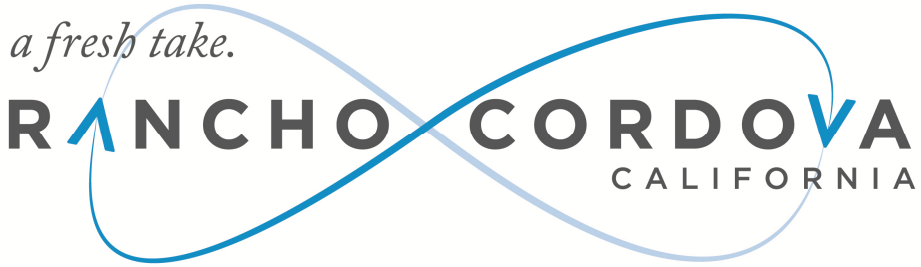
David Sander, Vice Mayor

Donald Terry, Council Member

Linda Budge, Council Member

Dan Skoglund, Council Member

CITY OF RANCHO CORDOVA



CONCURRENT MEETING
CITY COUNCIL/SUCCESSOR AGENCY TO THE COMMUNITY REDEVELOPMENT AGENCY (CRA)/RANCHO CORDOVA FINANCING CORPORATION (RCFC)

City Hall
2729 Prospect Park Drive, Rancho Cordova

Monday, October 19, 2015

5:30 PM – Regular Meeting
David B. Roberts Council Chambers

AGENDA

1. REGULAR MEETING - CALL TO ORDER / ROLL CALL

Council Members Budge, Sander, Skoglund, Terry and Mayor McGarvey.

2. METRO CABLE TV TELEVISION ANNOUNCEMENT

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

3. PLEDGE OF ALLEGIANCE

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

4. INVOCATION

Mayor McGarvey will call on someone in attendance to give the invocation.

5. PRESENTATIONS

5.1 Presentation of Proclamation to Members of the Rancho Cordova Friends Group in Recognition of Friends of the Library Week.

5.2 Presentation of Proclamation to WEAVE Executive Director Beth Hassett in Recognition of Domestic Violence Awareness Month.

5.3 Presentation of Proclamation to Crystal Rowland, Sacramento County Public Health Educator and Aunjuli Reese, Stop Stigma Speakers Bureau in Recognition of Mental Illness Awareness Week.

6. PUBLIC COMMENT

Citizens wishing to address the Council for any matter on the Consent Calendar or not on the agenda may do so at this time by completing and submitting a Speaker Card to the City Clerk. For items on the agenda, speakers will be called up to the podium 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 unagendized item 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.

7. COUNCIL REPORTS

8. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

8.1 **Subject:** Meeting Minutes of October 5, 2015 Special and Regular City Council Meeting and October 13, 2015 Special City Council Meeting.
Recommendation: Adopt minutes.

8.2 **Subject:** Ordinance Amending Sections 10.50.010 and 10.50.020 of the Rancho Cordova Municipal Code Regarding Engineering Traffic Studies on Specific Streets to be in Compliance with State Law and to Establish Radar Enforceable Speed Limits on the Roads Listed in the Ordinance.
Recommendation: Waive second reading and adopt Ordinance No. 13-2015.
Result of Recommended Action: Adoption of Ordinance 13-2015 will allow the City of Rancho Cordova to establish radar enforceable speed limits on the roads listed in the ordinance.
Staff Report: Albert Stricker, Interim Public Works Director and Travis Evans, Engineering Technician.
Advances Goals: 2, 3.

8.3 **Subject:** Boys & Girls Clubs Program Proposal.
Recommendation: Adopt Resolution No. 127-2015 Approving the Boys & Girls Club's Program Proposal for the City of Rancho Cordova.
Result of Recommended Action: Approval will launch Boys & Girls Club after school programs at Cordova High School starting in January 2016, and summer services starting in the summer of 2016.
Staff Report: Peter Ibrahim, Housing & Neighborhood Development Specialist.
Advances Goals: 1, 2, 5, 6.

9. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

9.1 **Subject:** Amendment to the Entertainment Center Financing Agreement Between the City and Rancho Cordova Entertainment Center Group LLC, Allowing for the City to

Loan up to $4 Million to the Developer to Assist with the Development of an $30 Million Entertainment Center Complex. (Continued from the October 5, 2015 Council Meeting)
Recommendation: Open the public hearing and continue it to a date uncertain. Due to the project developers being out of the country for an extended period of time, more time is needed to finalize the amendment to the financing agreement.
Result of Recommended Action: The public hearing on this item would occur at a later date and would be renoticed.
Staff Report: Curt Haven, Director of Economic Development & Neighborhood Services.
Advances Goal: 6.

9.2 **Subject:** Mills Center Starbucks Conditional Use Permit and Design Review; Project No. DD9606 – Located at 10345 Folsom Boulevard.
Recommendation: Adopt Resolution 129-2015.
Result of Recommended Action: Adoption of Resolution 129-2015 would allow the applicant to submit for a building permit for the minor exterior alterations to the façade, conversion of the existing loading aisle into a new drive-through, and additional landscaping.
Staff Report: Matthew Diaz, Associate Planner.
Advances Goals: 1, 2, 5, 6.

9.3 **Subject:** Zinfandel Center Tentative Parcel Map; Project No. DD9611 – Located at Northwest Corner of Bear Hollow Drive and Zinfandel Drive.
Recommendation: Adopt Resolution 128-2015.
Result of Recommended Action: Adoption of Resolution 128-2015 would approve the applicant's request to subdivide a developed 14.05-acre parcel into two new parcels with Parcel 1 at 3.96 acres for the existing parking lot and Parcel 2 at 8.86 acres of undeveloped land. The remaining 1.23 acres is currently in the process of being dedicated to the Cordova Recreation and Parks Districts for the existing bicycle corridor.
Staff Report: Matthew Diaz, Associate Planner.
Advances Goals: 1, 2, 6.

10. PUBLIC HEARING ITEMS

NONE.

11. REGULAR CALENDAR ITEMS

NONE.

12. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

13. CITY MANAGER'S REPORT

14. ADJOURNMENT

Mayor McGarvey will adjourn the meeting to closed session in the Community Board Room.

15. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Council Members Budge, Sander, Skoglund, Terry and Mayor McGarvey.

16. CLOSED SESSION

Council may adjourn to Closed Session to discuss the following item(s):

CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: Rio Del Oro Property, located at the underdeveloped area bordered by White Rock Grant Line Douglas and the industrial area east of Sunrise known as the Rio Del Oro Property Area.
APN: 072-0370-045-0000; 072-0370-046-0000; 072-0370-047-0000; 072-0370-048-0000; 072-0370-071-0000; 072-0370-089-0000; 072-0370-092-0000; 072-0370-102-0000; 072-0370-103-0000; 072-0370-104-0000; 072-0370-105-0000; 072-0540-004-0000; 072-0540-005-0000; 072-0540-006-0000; 072-0540-011-0000; 072-0540-013-0000; 072-0540-014-0000; 072-0540-015-0000; 072-0540-016-0000; 072-0540-017-0000; 072-0540-021-0000; 072-0540-022-0000; 072-0540-023-0000.
Agency negotiators: Cyrus Abhar, Aaron Busch and Adam Lindgren.
Negotiating parties: Elliot Homes and Aerojet.
Under negotiation: Price and terms of payment.

Conference with legal counsel, anticipated litigation (Government Code Section 54956.9 (b)), one (1) potential case: Mohamed, et al. v. Tsakopoulous, et al., City of Rancho Cordova, Case No. 34-2015-00180687.

CONFERENCE WITH LABOR NEGOTIATORS
Agency designated representatives: Cyrus Abhar, Interim City Manager; and Adam Lindgren, City Attorney
Unrepresented employee: Police Chief

CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: 2897 Kilgore Road, Rancho Cordova, CA 95670
Agency negotiator: Cyrus Abhar, Interim City Manager, and Adam Lindgren, City Attorney
Negotiating parties: City of Rancho Cordova, Rancho Cordova Police Department (via the Sacramento County Sheriff's Office)
Under negotiation: Lease price and payment terms

CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION
Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: (Number of potential cases: 1).

17. OPEN SESSION - REPORT FROM CLOSED SESSION

The City Attorney will report on action taken in Closed Session.

18. ADJOURNMENT

ADDITIONAL INFORMATION

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.

CITYWIDE GOALS - (Adopted March 27, 2012)	
1.	Promote the Positive Image of Rancho Cordova
2.	Ensure a Safe, Inviting and Livable Community
3.	Empower Responsible Citizenship
4.	Establish Logical City Boundaries that Provide Regional Leadership and Address Financial Challenges
5.	Ensure the Availability of the Best Public Services in the Region while Practicing Sound Fiscal Management
6.	Drive Diverse Economic Opportunities

UPCOMING MEETINGS	
Tuesday, October 27, 2015	*City Council Special Meeting/Work Session (5:30 PM)*
Monday, November 2, 2015	*City Council Special Meeting (4:00 PM)/Regular Meeting (5:30 PM)*
Monday, November 16, 2015	*City Council Regular Meeting (5:30 PM)*
Monday, December 7, 2015	*City Council Special Meeting (4:00 PM)/Regular Meeting (5:30 PM)*
Tuesday, December 15, 2015	*City Council Special Meeting/Work Session (5:30 PM)*
~~*Monday, December 21, 2015*~~	~~*Regular Meeting CANCELLED*~~

If you have any technical questions related to the agenda items, please contact the appropriate department as follows:

DEPARTMENTAL GENERAL TELEPHONE NUMBERS	
Building and Safety Division	(916) 851-8760
City Attorney's Office	(916) 556-1531
City Clerk's Department	(916) 851-8720
City Manager's Office	(916) 851-8800
Communications Department	(916) 851-8791
Economic Development Department	(916) 851-8780
Finance Department	(916) 851-8730
Housing Division	(916) 851-8784
Human Resources Department	(916) 851-8740
IT Department	(916) 851-8700
Neighborhood Services – Animal Services	(916) 851-8770
Parks & Recreation (Cordova Recreation & Park District)	(916) 362-1841
Planning Department	(916) 851-8750
Public Works Department	(916) 851-8710
Rancho Cordova Police Department	(916) 875-9600
Redevelopment Department	(916) 851-8780
Sac Metro Fire District	(916) 859-4300

The Rancho Cordova City Council/Successor Agency to the CRA/RCFC will be videotaped in its entirety and will be cablecast without interruption on Metro Cable 14, the Government Affairs Channel on the Comcast and SureWest Cable Systems. Closed Captioning will be available on the playback cablecast. Tune to Metro Cable Channel 14, for playback times. A VHS copy is available for check out from any library branch, 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. The City does not control scheduling of this telecast and persons interested in watching the televised meeting should confirm this schedule with Metro Cable TV, Channel 14.

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, Mindy Cuppy, MMC, City Clerk for the City of Rancho Cordova, declare that the foregoing agenda for the Monday, October 19, 2015 Regular Meeting of the Rancho Cordova City Council/Successor Agency to the CRA/RCFC was posted and available for review on Thursday, October 15, 2015 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.cityofranchocordova.org.

Signed Thursday, October 15, 2015 at Rancho Cordova, California.

Mindy Cuppy

Mindy Cuppy, MMC, City Clerk

CONCURRENT MEETING
CITY COUNCIL/SUCCESSOR AGENCY TO THE COMMUNITY REDEVELOPMENT AGENCY (CRA)/RANCHO CORDOVA FINANCING CORPORATION (RCFC)

City Hall
2729 Prospect Park Drive, Rancho Cordova

Monday, October 05, 2015

4:00 PM – Special Meeting
American River Room North

5:30 PM – Regular Meeting
David B. Roberts Council Chambers

Special Meeting/Work Session to Follow the Regular Meeting

DRAFT MINUTES

1. STUDY SESSION - CALL TO ORDER/ROLL CALL

Mayor McGarvey called the special meeting to order in the American River Community Room North at 4:07 PM.

Council Members Present:	McGarvey, Terry, Budge, Skoglund
Council Members Absent:	Sander
Staff Members Present:	Lindgren, Cuppy, Abhar, Downton, Thomas, Peek, Harriman, Stricker (at 5::00 PM)

2. PUBLIC COMMENT

Mayor McGarvey opened the public comment period. There were no speakers. Mayor McGarvey closed the public comment period.

3. SPECIAL MEETING ITEM

3.1 **Subject:** Discussion and Concept Agreement on the Sacramento Regional Transit Horn Road Station Plan Design.
Recommendation: Select a preference for a Horn Road Station design concept and direct staff to continue support of design and construction.
Result of Recommended Action: The opening of the Horn Road station will result in more transportation options available to City of Rancho Cordova (City) residents, employees and patrons. This current action will allow City Staff and Sacramento Regional Transit District (RT) Staff to continue coordinating on the design of the Horn Road station.
Staff Report: Mark Thomas, Senior Engineer.
Advances Goals: 1, 2, 5, 6.

ACTION: Discussion item only; no action taken.

4. ADJOURNMENT OF STUDY SESSION

Mayor McGarvey adjourned the special meeting to the regular meeting at 5:19 PM.

5. REGULAR MEETING - CALL TO ORDER / ROLL CALL

Mayor McGarvey called the regular meeting to order in the David B. Roberts Council Chambers at 5:41 PM.

Council Members Present:	McGarvey, Terry, Budge, Skoglund
Council Members Absent:	Sander
Staff Members Present:	Lindgren, Cuppy, Abhar, Goold, Haven, Downton, Peek, Delaney, Diaz, Stricker

6. METRO CABLE TV TELEVISION ANNOUNCEMENT

The City Clerk read the meetings recordings and playback schedules.

7. PLEDGE OF ALLEGIANCE

Michael Kast led the pledge.

8. INVOCATION

Matt Newton from River City Christian gave the invocation.

9. PRESENTATIONS

9.1 Community Enhancement Fund Grant Check Presentations.

9.2 Introduction of Deputy City Clerk Heather Peek by City Clerk Mindy Cuppy.

10. PUBLIC COMMENT

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

- Maureen Nelson
- Angel Ball

Mayor McGarvey closed the public comment period.

11. COUNCIL REPORTS

Council reported on events since the last meeting.

12. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

ACTION: Motion to approve by Budge second by Skoglund;
Carried by a 4:0 roll call vote. (Sander absent)

12.1 **Subject:** Meeting Minutes of September 21, 2015 Special Meeting, September 21, 2015 Regular Meeting, and September 28, 2015 Special Meeting.
Recommendation: Adopt minutes.

12.2 **Subject:** Resolution of the City Council Authorizing Examination of Sales, Use and Transactions Tax Records.
Recommendation: Adopt Resolution No. 125-2015.
Result of Recommended Action: The BOE requires the attached resolution to be submitted prior to any audit of the Community Enhancement Fund sales tax records can be conducted. The City of Rancho Cordova currently contracts with MuniServices for sales tax auditing services.
Staff Report: Liisa Behrends, Interim Finance Director.
Advances Goal: 5.

12.3 **Subject:** Resolution Authorizing the Interim City Manager to Execute a Contract Amendment No. 129-2014-1 with Mark Thomas & Company, Inc. to Increase the Contract Amount from $724,368 to $932,577 for the Zinfandel Complex Project.
Recommendation: Adopt Resolution No. 123-2015.
Result of Recommended Action: Adoption of this resolution will authorize the Interim City Manager to execute Contract No.129-2015-1 with Mark Thomas & Company, Inc. to increase the contract amount from $724,368 to $932,577 to accommodate the engineering and design services for the Zinfandel Complex Project.
Staff Report: Albert Stricker, Interim Public Works Director and Mark Thomas, Senior Engineer
Advances Goals: 1, 2, 5.

12.4 **Subject:** Resolution Authorizing the Interim City Manager to Execute a License Agreement between the City Of Rancho Cordova and the County of Sacramento for the Mather Rails to Trails Project.
Recommendation: Adopt Resolution No. 119-2015.
Result of Recommended Action: Adoption of this resolution will authorize the Interim City Manager to execute a license agreement between the City of Rancho Cordova and the County of Sacramento for the Mather Rails to Trails Project.

Staff Report: Albert Stricker, Interim Public Works Director and Chris Boyer, Associate Civil Engineer.
Advances Goals: 1, 2, 5.

12.5 **Subject:** Resolution Consenting to Inclusion of the City of Rancho Cordova Properties in the California Home Finance Authority Property Accessed Clean Energy (PACE) Programs and Associate Membership in California Home Finance Authority.
Recommendation: Adopt Resolution 120-2015 and 124-2015.
Result of Recommended Action: Adoption of these resolutions will allow the City to transition from the County's existing Property Accessed Clean Energy (PACE) program which is operated through Sacramento County's Community Facilities District No. 2004-1 (Clean Energy), to one of the two new PACE programs established and operated through California Home Finance Authority, a Joint Powers Authority.
Staff Report: Michelle Mingay, Senior Finance Analyst.
Advances Goal: 5.

12.6 **Subject:** Resolution Authorizing the Interim City Manager and City Attorney to Extend the Contract for Municipal Prosecution Services With the City of Sacramento City Attorney's Office for Six Months.
Recommendation: Staff recommends the City Council adopt the attached Resolution authorizing the 6-month extension of the contract for municipal prosecution services with the City of Sacramento's City Attorney's office.
Result of Recommended Action: Adoption of Resolution No. 118-2015 will authorize the extension of the contract for municipal prosecution services for one year. It will also make minor amendments to the agreement, including the addition of formal office hours for the City's prosecutor, with facilitation by the City Attorney's office.
Staff Report: Adam U. Lindgren, City Attorney.
Advances Goals: 1, 2, 3, 5.

13. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

Mayor McGarvey opened the public hearing. There were no speakers. Mayor McGarvey closed the public hearing.

ACTION: Motion to approve items 13.1 and 13.3 by Budge second by Terry;
Carried by a 4:0 roll call vote. (Sander absent)

Item 13.2 was pulled for further discussion.

ACTION: Motion to approve item 13.2 by Skoglund second by Terry;
Carried by a 4:0 roll call vote. (Sander absent)

13.1 **Subject:** Amendment to the Entertainment Center Financing Agreement Between the City and Rancho Cordova Entertainment Center Group LLC, Allowing for the City to Loan up to $4 Million to the Developer to Assist with the Development of an $30 Million Entertainment Center Complex.
Recommendation: Open the public hearing and continue it to the October 19th regular meeting at 5:30 p.m. Due to the project developers being out of the country for an extended period of time, more time is needed to finalize the amendment to the financing agreement.
Result of Recommended Action: The public hearing on this item would occur at the October 19, 2015 meeting.

Staff Report: Curt Haven, Director of Economic Development & Neighborhood Services.
Advances Goal: 6.

13.2 **Subject:** Sunridge Plaza Conditional Use Permit; Project No. DD9612 – Located at the South West Corner of Sunrise Boulevard and Douglas Road.
Recommendation: Adopt Resolution 122-2015.
Result of Recommended Action: Adoption of Resolution 122-2015 would approve a Conditional Use Permit for alcoholic beverage sales incidental to grocery sales at the future Sunridge Plaza.
Staff Report: Jessica Jordan, Principal Planner.
Advances Goals: 1, 2.

13.3 **Subject:** Ordinance Amending Sections 10.50.010 and 10.50.020 of the Rancho Cordova Municipal Code Regarding Engineering Traffic Studies on Specific Streets to be in Compliance with State Law and to Establish Radar Enforceable Speed Limits on the Roads Listed in the Ordinance.
Recommendation: Introduce and waive the first reading of Ordinance No. 13-2015.
Result of Recommended Action: Adoption of Ordinance 13-2015 will allow the City of Rancho Cordova to establish radar enforceable speed limits on the roads listed in the ordinance.
Staff Report: Albert Stricker, Interim Public Works Director and Travis Evans, Engineering Technician.
Advances Goals: 2, 3.

14. PUBLIC HEARING ITEMS

NONE.

AT THIS POINT: Council took a recess at 6:22 PM. The meeting resumed at 6:34 PM.

15. REGULAR CALENDAR ITEMS

15.1 **Subject:** Visioning Process for the Cordova Community Pool.
Recommendation: Initiate a process, in partnership with Cordova Recreation and Park District (CRPD), to engage the community in a visioning process to identify the improvements that are desired by the residents for the City's proposed investment in the Community Pool.
Result of Recommended Action: The City is inviting the Cordova Blue Marlins and the Cordova Recreation and Park District to collaborate in visioning sessions to explore a variety of issues and options related to the Cordova Community Pool. The City has committed to provide up to $3 Million in additional funding to the Cordova Recreation and Park District to help support the new or renovated pool construction, subject to proper community outreach and technical analysis. The visioning process will identify opportunities to use that funding to maximize improvements to the pool and protect the community's investment in it.
Staff Report: Cyrus Abhar, Interim City Manager.
Advances Goals: 1, 2, 5.

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

- Carol Kraus
- Derald Langwell
- Jessica Bailey
- Kevin McKenna
- Diane Robinson
- Meada Cashatt
- Joyce Higdon
- Tom Higdon
- Ashley Todd
- Dan Lynch

Mayor McGarvey closed the public comment period.

ACTION: Motion to authorize City Manager to schedule a joint meeting with the Cordova Recreation and Park District by Budge second by Terry; Carried by a 4:0 roll call vote. (Sander absent)

16. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

The City Council had no requests for future agenda items.

17. CITY MANAGER'S REPORT

Interim City Manager Cyrus Abhar gave his report.

18. ADJOURNMENT

Mayor McGarvey adjourned the meeting at 8:03 PM.

19. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Mayor McGarvey called the special meeting to order in the Community Board Room at 8:11 PM.

Council Members Present:	McGarvey, Terry, Budge, Skoglund
Council Members Absent:	Sander
Staff Members Present:	Lindgren, Abhar, Haven

20. CLOSED SESSION

CONFERENCE WITH LABOR NEGOTIATORS
Agency designated representatives: Cyrus Abhar, Interim City Manager; and Adam Lindgren, City Attorney
Unrepresented employee: Police Chief

CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: 2897 Kilgore Road, Rancho Cordova, CA 95670
Agency negotiator: Cyrus Abhar, Interim City Manager, and Adam Lindgren, City Attorney
Negotiating parties: City of Rancho Cordova, Rancho Cordova Police Department (via the Sacramento County Sheriff's Office)
Under negotiation: Lease price and payment terms

21. OPEN SESSION - REPORT FROM CLOSED SESSION

City Attorney Adam Lindgren reported that there was no reportable action taken in closed session.

22. ADJOURNMENT

Mayor McGarvey adjourned the meeting at 8:26 PM.

_____
Mindy Cuppy, MMC, City Clerk

CONCURRENT MEETING
CITY COUNCIL/SUCCESSOR AGENCY COMMUNITY REDEVELOPMENT AGENCY (CRA)/RANCHO CORDOVA FINANCING CORPORATION (RCFC)

City Hall
2729 Prospect Park Drive, Rancho Cordova

Tuesday, October 13, 2015

12:00 PM – Special Meeting
Canfield Community Room

DRAFT MINUTES

1. WORK SESSION - CALL TO ORDER/ROLL CALL

Mayor McGarvey called the special meeting to order in the Canfield Community Room at 12:18 PM.

Council Members Present:	McGarvey, Sander, Terry, Budge
Council Members Absent:	Skoglund
Staff Members Present:	Cuppy, Abhar, Busch, Goold, Haven, Downton, Flory, Delaney, Stricker, Peek, Cook, Leitner, Behrends, Ulm, Thomas, Harriman, Ulm, Norton, Mingay (at 1:15 PM), Chan (at 2:27 PM)

2. PUBLIC COMMENT

Mayor McGarvey opened the public comment period. People in attendance were encouraged to make comments or ask questions throughout the Work Session. Mayor McGarvey closed the public comment period.

3. SPECIAL MEETING ITEM

3.1 **Subject:** Community Enhancement Fund (Measure "H") update, discussion, and direction. City staff will provide an update on the status of 2015-2016 Community Enhancement Fund projects, discuss next steps for future funding and grant procedures, and gather feedback on numerous projects, including but not limited to: Gateway Signs; Wayfinding and Neighborhood Monuments; Neighborhood Fence Replacement; Ambassador Drive/Trails Court Pathway; Cordovan Expansion; Sacramento Valley Live Steamers Railroad Museum Irrigation; Dog Park; Frisbee Golf

Course; and the Sunriver Fitness Par Course.

Recommendation: Review, discuss, and provide direction on the status of the 2015-2016 Community Enhancement Fund projects and next steps regarding future expenditures.

Result of Recommended Action: Staff will incorporate Council direction regarding current and future Community Enhancement Fund projects and expenditure procedures.

Staff Report: Stacy Delaney, Community Enhancement Analyst.

Advances Goals: 1, 2, 3, 5, 6.

ACTION: Discussion item only; no action taken.

4. ADJOURNMENT

Mayor McGarvey adjourned the meeting at 4:45 PM.

_____

Mindy Cuppy, MMC, City Clerk

CITY OF RANCHO CORDOVA

ORDINANCE NO. 13-2015

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AMENDING SECTIONS 10.50.010 AND 10.50.020 OF CHAPTER 10.50 OF TITLE 10 OF THE RANCHO CORDOVA MUNICIPAL CODE REGARDING REDUCED SPEED LIMITS ON SPECIFIC STREETS

THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:

Section 1. Purpose and Declarations.

WHEREAS, California Vehicle Code Section 22358 authorizes the City of Rancho Cordova ("City") to determine and declare by ordinance a prima facie speed limit less than the speed limit set forth in Vehicle Code Section 22349 if the City determines upon the basis of an engineering and traffic survey that the speed limit set forth in Vehicle Code Section 22349 is more than is reasonable or safe upon any portion of any street other than a state highway where the speed limit set forth in Vehicle Code Section 22349 is applicable; and

WHEREAS, an engineering and traffic survey ("Survey") was conducted by the City; and

WHEREAS, the Survey established speed limits for certain City streets, as set forth in Section 3; and

WHEREAS, the City Council has determined that the speed limits set forth in the Survey are most appropriate to facilitate the orderly movement of traffic within the City and are reasonable and safe; and

WHEREAS, this ordinance would modify Rancho Cordova Municipal Code section 10.50.010 and 10.50.020 by establishing speed limits for certain City streets, based upon the results of the Survey.

Section 2. Amendment of Code. Section 10.50.010 of Chapter 10.50 of Title 10 of the Rancho Cordova Municipal Code is hereby amended to read as follows:

10.50.010 Determination and declaration of prima facie speed limits.

The city council approves and adopts the engineering and traffic surveys dated October 5, 2015, prepared by the city, for the streets and portions thereof set forth therein, copies of which are on file and available for public inspection in the offices of the city clerk. The city council finds and determines that the surveys were conducted in accordance with the Vehicle Code and methods of conducting engineering and traffic surveys prescribed in the California Department of Transportation and that the survey justifies the speed limits recommended for the streets and portions of streets therein described. The city council declares these speed limits as prima facie speed limits for the streets or portions thereof, which limits shall be effective when appropriate signs giving notice thereof are erected upon the streets or portions thereof.

Section 3. Amendment of Code. Section 10.50.020 of Chapter 10.50 of Title 10 of the Rancho Cordova Municipal Code is hereby amended to read as follows:

10.50.020 Prima Facie Speed Limits Declared.

The following prima facie speed limits are established based on prevailing speeds and according to traffic and engineering studies:

1. Anatolia Drive:
    a. Between Pyxsis Circle and Herodian Drive, 25 mph;
2. Baroque Drive:
    a. Between Zinfandel Drive and Zinfandel Drive, 35 mph;
3. Bear Hollow Drive:
    a. Between Zinfandel Drive and North Mather Boulevard, 35 mph;
4. Business Park Drive:
    a. Between Horn Road and Bradshaw Road, 35 mph;
5. Canyonlands Drive:
    a. Between Branigan Lake Way and Preserve Way, 25 mph;
6. Capital Center Drive:
    a. Between White Rock Road and International Drive, 35 mph;
7. Chase Drive:
    a. Between Coloma Road and Hagan Park, 25 mph;
8. Chrysanthy Boulevard:
    a. Between Sunrise Boulevard and end of street, 40 mph;
9. Coloma Road:
    a. Between Folsom Boulevard and Sunrise Boulevard, 40 mph;
10. Country Gardens Drive:
    a. Between Kiefer Boulevard and Rancho Cordova Parkway, 25 mph;
11. Data Drive:
    a. Between International Drive and White Rock Road, 35 mph;
12. Disk Drive:
    a. Between Data Drive and Prospect Park Drive, 35 mph;
13. Douglas Road:
    a. Between Sunrise Boulevard and Rancho Cordova Parkway, 55 mph,
    b. Between Rancho Cordova Parkway and Americanos Boulevard, 50 mph;
14. Explorer Drive:
    a. Between Lincoln Village Drive to Lincoln Village Drive, 25 mph;
15. Femoyer Street:
    a. Between Mather Boulevard and International Dr., 40 mph;
16. Fitzgerald Road:
    a. Between White Rock Road and Recycle Road, 35 mph;
17. Folsom Boulevard:
    a. Between Horn Road and Routier Road, 45 mph,
    b. Between Routier Road and Cordova Lane, 40 mph,
    c. Between Cordova Lane and Sunrise Boulevard, 45 mph,
    d. Between Sunrise Boulevard and Hazel Avenue, 45 mph;
18. Georgetown Drive:
    a. Between Coloma Road and McGregor Drive, 25 mph;

19. Gold Camp Drive:
    a. Between Sun Center Drive and Prospect Park Drive, 35 mph;
20. Gold Canal Drive:
    a. Between Sun Center Drive and White Rock Road, 35 mph;
21. Gold Center Drive:
    a. Between Zinfandel Drive and Prospect Park Drive, 35 mph,
    b. Between Prospect Park Drive (west) and Prospect Park Drive (east), 35 mph;
22. Horn Road:
    a. Between Routier Road and Paseo Rio Way, 35 mph;
23. International Drive:
    a. Between Mather Field Road and Sunrise Boulevard, 45 mph;
24. Kilgore Road:
    a. Between Folsom Boulevard and White Rock Road, 35 mph,
    b. Between White Rock Road and Baroque Way, 45 mph;
25. Lincoln Village:
    a. Between Bradshaw Road and Draco Drive, 35 mph,
    b. Between Draco Drive and Routier Road, 25 mph;
26. Luyung Drive:
    a. Between White Rock Road and Mechanical Drive, 35 mph;
27. Mather Field Road:
    a. Between Peter A McCuen Boulevard and Folsom Boulevard, 45 mph;
28. McGregor Drive:
    a. Between Folsom Boulevard and Coloma Road, 30 mph;
29. Mills Park Drive:
    a. Between White Rock Road and Folsom Boulevard, 25 mph;
30. Mills Station Drive:
    a. Between Routier Road and Mather Field Road, 35 mph,
    b. Between Mather Field Road and White Rock Road, 25 mph;
31. Monier Circle:
    a. Between Sunrise Boulevard and Sunrise Boulevard, 30 mph;
32. Old Placerville Road:
    a. Between Systems Parkway and Rockingham Drive, 45 mph;
33. Olson Drive:
    a. Between Mills Park Drive and Zinfandel Drive, 25 mph,
    b. Between Zinfandel Drive and Folsom Boulevard, 35 mph;
34. Paseo Drive:
    a. Between Folsom Boulevard and Las Casas Way, 25 mph;
35. Peter A McCuen Boulevard
    a. Mather Boulevard and Femoyer Street, 30 mph;
36. Prospect Park Drive:
    a. Between White Rock Road and White Rock Road, 35 mph,
    b. Between White Rock Road and Baroque Way, 35 mph;
37. Quality Drive:
    a. Between International Drive and White Rock Road, 35 mph;

38. Recycle Road:
    a. Between Sunrise Boulevard and Elks Circle, 30 mph;
39. Reserve Drive:
    a. Between Data Drive and International Drive, 35 mph;
40. Rockingham Drive:
    a. Between Mather Field Road and S White Rock Road, 25 mph,
    b. Between Mather Field Road and Old Placerville Road, 35 mph;
41. Routier Road:
    a. Between Old Placerville Road and Folsom Boulevard, 40 mph;
42. S. White Rock Road:
    a. Between International Drive and White Rock Road, 25 mph;
43. Sun Center Drive:
    a. Between Prospect Park Drive and Sunrise Boulevard, 35 mph;
44. Sunrise Boulevard:
    a. Between Jackson Road and Kiefer Boulevard, 55 mph;
    b. Between Kiefer Boulevard and Douglas Road, 55 mph;
    c. Between Douglas Road and White Rock Road, 50 mph;
    d. Between White Rock Road and Folsom Boulevard, 45 mph;
    e. Between Folsom Boulevard and the American River Bridge, 45 mph;
45. Trade Center Drive:
    a. Between Sun Center Road and Mercantile Road, 35 mph;
46. Trinity River Drive:
    a. Between Coloma Road and Sunrise Boulevard, 30 mph;
47. Vanguard Drive:
    a. Between Explorer Drive and Routier Road, 25 mph;
48. White Rock Road:
    a. Between Mills Station Road and Mills Park Drive, 25 mph,
    b. Between S. White Rock Road and Zinfandel Drive, 40 mph,
    c. Between Zinfandel Drive and Sunrise Boulevard, 45 mph;
49. Zinfandel Drive:
    a. Between Sunrise Boulevard and Folsom Boulevard, 30 mph,
    b. Between Folsom Boulevard and White Rock Road, 35 mph,
    c. Between White Rock Road and International Drive, 40 mph,
    d. Between International Drive and city limits, 45 mph

Section 4. Severability. If any provision of this Ordinance or the application thereof to any person or circumstances, is held invalid, the remainder of the Ordinance, including the application of such part or provision to other persons or circumstances, shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this Ordinance are severable. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phases be held unconstitutional, invalid or unenforceable.

Section 5. Effective Date. Within fifteen (15) days from and after adoption, a Summary of this Ordinance shall be published once in the Grapevine Independent, or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code Section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____ day of _____, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Robert J. McGarvey, Mayor

ATTEST:

_____
Mindy Cuppy, MMC, City Clerk

MEMORANDUM

DATE: October 19, 2015

TO: Honorable Mayor and Council Members

FROM: Peter Ibrahim, Housing & Neighborhood Development Specialist

SUBJECT: **BOYS AND GIRLS CLUB PROGRAM PROPOSAL**

RECOMMENDATION

Adopt Resolution No. 127-2015 for the Boys & Girls Club's Programming Proposal for the City of Rancho Cordova.

RESULT OF RECOMMENDED ACTION

Approval will launch Boys & Girls Club after school programs at Cordova High School starting in January 2016, and summer services starting in the summer of 2016.

BACKGROUND

In winter of 2014 Council instructed staff to initiate contact with the Boys & Girls Club as a potential youth facility and services provider in the City of Rancho Cordova. After a series of informational meetings between Staff and the Boys and Girls Clubs of Greater Sacramento (BGCSAC) to help determine scope and timelines, Staff executed a contract with BGCSAC to conduct a Pre-Development Study. The study was finalized and presented to Council on September 21, 2015 identifying a series of programs to best serve the youth of Rancho Cordova and the best options for long-term service delivery in Rancho Cordova.

Pre-Development Study Summary

The Pre-Development Study evaluated the existing after school programming available to students in the City through a wide variety of providers. The study revealed that while there are multiple well run and beneficial programs available to students after school, these programs only have capacity to serve about 11% of the student body, and none of these programs are offered at the Cordova High School campus. The sheer number of students without access to an after school program in the city demonstrates that there is definitely a need for more after school programming – for all school ages.

The Pre-Development Study served two primary goals. First, it carefully and analytically shows the need for additional after-school programming in the City, which indicates that a Boys and

Girls Club facility would be a long-term asset to the community. Second, it identifies the most immediate after school and summer youth needs, which is programming at Cordova High, and proposes a program that can be ready as soon as January 2016 for implementation.

Program Proposal

The many findings of the Boys & Girls Club's Pre Development Study revealed an immediate need for programming at Cordova High School. Beginning in January 2016, a Boys & Girls Club site will begin operating on the campus of Cordova High School, pending approval from the Folsom Cordova Unified School District. The program would run Monday-Friday from 3pm-6pm, and the goal would be to recruit a minimum of 50 youth to become members in the spring semester. A major focus of the Boys & Girls Club is academic success. The proposed program for Cordova High School will provide homework help, tutoring and high-yield learning activities. The program will also encourage members to become self-directed learners. This program will be offered free of charge.

The Pre-Development Study also identified the need for accessibility to jobs and job training for teens. The Boys & Girls Club proposes to run a career preparedness program, Career Launch at Cordova High School. The program will run for the duration of the spring semester with the goal of serving a minimum of 50 teens in two cohorts of 25 youth each (Monday/Wednesday & Tuesday/Thursday). Those youth who complete the program would then have the opportunity to apply for internship at the summer camp for elementary school-aged youth. This program would place 15 youth in paid internship positions with the Boys & Girls Club in Rancho Cordova. This program will also be offered free of charge.

During the summer of 2016, the Boys & Girls Club proposes to run a day camp for elementary youth ages 6-12. The 8-week program will be held at Cordova Meadows Elementary, and will be free to participants. The camp will run Monday-Friday from 12pm-5pm. The Club's day camp program will offer field trips, swimming, as well as national Boys & Girls Club curriculum to program participants.

For the fall, the Boys & Girls Club will focus back on the teens of the community, continuing to operate the teen center on the campus of Cordova High. The programming at Cordova High School will reflect the needs of the teens in the program and incorporate the highly successful nationally acclaimed Club programs. Examples are offered in the attached Program Proposal.

Marketing and Communications Plan

City staff and the Boys & Girls Club will work in collaboration to develop a marketing and communications strategy for the proposed programs to ensure that a full range of participants have the opportunity to engage in the programs. All materials will be appropriately co-branded and approved by both the City Communications Department and Boys & Girls Club.

Marketing materials will include, but not limited to:

- Poster/postcard outreach to Cordova High School
- Informational postcards at all youth organizations, community centers, churches, etc.
- Fliers and marketing packets distributed to area businesses and through the Rotary Club
- Published newspaper/letter articles
- Promoted on City and Boys & Girls Club website
- Social Media: Facebook, Instagram, and Twitter

FISCAL IMPACT

The start-up costs for the after school programming at Cordova High School and summer programming for the summer of 2016 is $200,000. The startup costs are separated into three categories: Professional Project & Program Staff, Operating Expenses, and Administrative Overhead/Indirect. A comprehensive and detailed budget is included as Attachment 2.

The Boys & Girls Club is projecting $129,450 for Professional Project & Program Staff. A Site Coordinator will be responsible for the project from beginning to end. The Second Lead will assist in creating and delivering Club programming and assisting in the day to day operations. Program Assistants will help implement Club programming as well as play a large role in Club recruitment on campus. These three positions will be for the full year, as they will also be responsible for the summer camp. Summer staff will be exclusively used for the 8-week summer program. HR/Finance clerical staff will be significantly impacted during the employee on boarding phase and the employment phase.

The Operating Expenses for the Career Launch & Summer Camp Programs are projected at $44,450. Operating expenses cover and include supplies necessary to maintain and operate the overall Boys & Girls Club Program, as well as for summer camp. These expenses include: employee recruitment, staff uniforms, member t-shirts, office supplies, other supplies & materials, program supplies & equipment, IT expenses, membership tracking, computers & accessories, cell service, internship stipends, field trips, transportation, mileage, outreach, incentives, training, conferences, and insurance.

The Administrative Overhead/Indirect costs are estimated at $26,100. These costs include: printing, phone, utilities, computers, communication, administrative and management staff time, facility usage, liability insurance, etc.

ATTACHMENTS

1. Resolution No. 127-2015.
2. Boys & Girls Clubs of Greater Sacramento Program Proposal (includes a publicity plan, program deliverables, budget & detailed line item breakdown of program and operating expenses).

ATTACHMENT 1

CITY OF RANCHO CORDOVA

RESOLUTION NO. 127-2015

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AUTHORIZING AN AGREEMENT FOR PROGRAMMING BETWEEN THE BOYS & GIRLS CLUBS OF GREATER SACRAMENTO AND THE CITY OF RANCHO CORDOVA

WHEREAS, on September 21, 2015 the City Council of Rancho Cordova received a report on the results of the Pre-Development Study; and

WHEREAS, the City Council now desires to enter into an Agreement with the Boys & Girls Clubs for youth programming and services commencing in January 2016 in the amount not to exceed $200,000; and

WHEREAS, those services will exceed the maximum amount the City Manager has authorization to approve.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA authorizes the City Manager to execute a Professional Services Agreement with the Boys & Girls Clubs of Greater Sacramento in a form approved by the City Attorney. This resolution shall become effective immediately upon adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____day of _____, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Robert J. McGarvey, Mayor

ATTEST:

_____
Mindy Cuppy, City Clerk

BOYS & GIRLS CLUBS OF GREATER SACRAMENTO

Boys & Girls Clubs of Greater Sacramento Program Proposal – Rancho Cordova

PURPOSE

The Boys & Girls Clubs of Greater Sacramento has been the leading provider of youth development programs and services to underserved youth in high poverty communities in the urban core for over 15 years. Located in housing projects, Juvenile Hall, on Priority 1 school sites and purposefully placed in highly distressed neighborhoods, the Boys & Girls Club reaches youth and families who need us most. We have built a solid reputation within the academic, health, business and law enforcement community due to the high impact programs we provide and for the opportunities we deliver to our youth and their families.

Our board is comprised of civic, philanthropic and business leaders, whose expertise, prominence, reputation and influence ensure that the organization is well run, responsive to our mission and effective in achieving our goals for youth. In 2012 the board revitalized its vision and developed a strategic growth plan for our future. The two drivers of the plan are: Broadening Our Reach; and Deepening Our Impact. In other words, serving more young people with greater impact.

A key component of this plan is to significantly increase our services to teens, attracting and retaining more teens than ever before into The Club; and then focusing on three key impact areas: academic success that leads to sustainable employment; avoiding risky behaviors and adopting healthy lifestyles; and building character through civic engagement.

In line with these key strategic imperatives, we have recently taken two major steps forward – one bold and one incremental. We took the bold step of converting our downtown clubhouse to a Teen Center; and we have extended our "Teens Only" hours at the Teichert branch in south Sacramento. We have also partnered with Sacramento County Office of Education to open a small high school program – called the LINKS Academy – right on our Teen Center site, with three additional satellite programs on the other SCOE campuses. Additionally, we partnered with Sacramento County Probation Department to open a Boys & Girls Club program within the county Juvenile Hall facility on June 2, 2014. In spring of 2015 a Club was opened on the campus of Inderkum High School in Natomas, in partnership with SHRA and Councilwoman Angelique Ashby.

Our downtown Teen Center is a 20,000 square foot, highly visible, well-kept, attractive and functional site located in the heart of the urban core of Sacramento and just two blocks from City Hall and four blocks from the State Capitol. It is conveniently located directly on the Light Rail and bus routes making it easy for teens to get to the club. (And it is only blocks from the site of the new King's Arena.) In 2013 our downtown club, called the "Raley Branch" (in honor of the Raleys family) was "adopted" by the Leadership Sacramento Class of 2013 as part of their class project. The Leadership class "Remixed" our teen center and raised funds and in-kind donations to renovate, repurpose, and improve the Game Room wing of The Club. It is now equipped with: a full gymnasium; an updated Technology Center; a Creative Arts Studio; an updated library/study hall; a new dance studio; updated Game Room; a multi-purpose room; a recording studio; a full commercial kitchen and an outdoor sports area.

The Teichert Branch in south Sacramento on Lemon Hill Avenue is a 34,000 square foot full-service clubhouse located on five acres in one of the most impoverished neighborhoods in the region. With all the amenities of the Raley Branch (and more), it serves youth ages six to eighteen and has a

vibrant Teen Center within the facilities.

In accordance with the findings of the Club's predevelopment study, we are proposing to run multiple programs to best serve the youth of Rancho Cordova. Beginning in January of 2016 we would open a Boys & Girls Club site on the campus of Cordova High School, pending approval from the Folsom Cordova Unified School District. The program would run Monday-Friday from 3pm-6pm and the goal would be to recruit a minimum of 50 youth to become Club members in the spring semester. A major focus for the Club is academic success. One way that he Club empowers youth to be successful academically is through our "Power Hour" program. The program provides homework help, tutoring and high-yield learning activities and encourages members to become self-directed learners. According to the predevelopment study a major need for teens in Rancho Cordova is accessibility to jobs and job training. To help meet that need the Club proposes to run our premier career preparedness program, "Career Launch". The program would run for the duration of the spring semester, with a goal to serve a minimum of 50 teens, with two separate cohorts of 25 youth each (Monday/Wednesday, Tuesday/Thursday). Youth completing that program would then have an opportunity to apply for an internship at our summer camp for elementary-aged youth. This program would place 15 youth in paid internship positions with the Club in Rancho Cordova. Here is a brief overview:

- 50 youth ages 14-18 go through a career education and employment program (Career Launch) facilitated by Club staff at Cordova High School.
- 10 week career preparation course (2 sessions a week plus local field trips)
- Teens completing the program will have the opportunity to interview for 15 paid summer internship positions that would be at the Club's elementary-aged summer camp.
- Youth not receiving internship positions would have the opportunity for continuing support from Club staff to gain employment in Rancho Cordova. Staff would maintain an active job board consisting of available positions within the community. Students would also have the opportunity to receive support from Club staff for job application and interview preparation.
- Work permits must be obtained for students under 18.
- Those students selected for internships at the Club's summer camp would work 10-15 hours a week (Monday –Thursday), with Fridays being an employment development day. Youth will continue their workforce education with guest speakers, field trips to local businesses, and a culminating college tour field trip.

Traditionally affordable summer programming for youth can be difficult to find for families in need. In an effort to meet said need the Club would propose to run a summer day camp for elementary youth ages 6-12. The program would be held at Cordova Meadows Elementary School (pending Folsom Cordova Unified School District approval) and would be free to participants. The camp would run 12-5 Monday-Friday. Field trips, swimming, as well as national Boys & Girls Club curriculum would be offered to program participants. The camp would run for eight weeks over the summer of 2016.

For fall we would again focus back on the teens of the community, continuing to run our teen center on Cordova High's campus. Programming for the Club at Cordova High would reflect the needs of the teens in the program, as well as incorporating several highly successful, nationally acclaimed Club programs. Examples of potential programs at Cordova High Include:

- Money Matters - Money Matters promotes financial responsibility and independence among Boys & Girls Club members by building their basic money management skills. Participants learn how to manage a checking account, budget, save and invest. They also learn about starting small businesses and paying for college.
- Triple Play - Triple Play is the Boys & Girls Clubs' comprehensive health and wellness initiative, strives to improve the overall health of members by increasing their daily physical activity, teaching them good nutrition and helping them develop healthy relationships. Since the Triple Play initiative was introduced in 2005, more than one million Club members nationwide have participated in fun fitness activities. The Triple Play initiative, nurtures the minds, bodies and souls of Club members.
- Diplomas to Degrees - This program provides a range of services to guide Boys & Girls Club members as they work toward high school graduation and prepare for post-secondary education and career success. The Teen College Guide offers tips on achieving academic success and planning for post-secondary education.
- SMART Moves - The SMART (Skills Mastery and Resistance Training) Moves program is a nationally acclaimed prevention program originally developed in the 1980s with help from prevention specialists and Clubs around the country. Newly revised, the program incorporates the latest information and approaches that Boys & Girls Clubs of America has learned about effective prevention. Participants will be exposed to various activities designed to hone their decision-making and critical-thinking skills, as well as learn how to avoid and/or resist alcohol, tobacco and other drugs.

It is our fundamental belief that all young people need to have a sense of belonging, usefulness, influence and competence. When a young person finds something that they are good at (competency) and that someone actually needs and depends on them for (usefulness), that they are imbued with a sense of confidence and hope – and the foundation for a future. A job. With the implementation of a comprehensive program at Cordova High School, we would be meeting an area of great need within the community as well as addressing a key issue facing young people.

Our emphasis since fall 2012 since opening the downtown Teen Center and expanding our hours at our south Sacramento branch has been Academics and Jobs… Academics and Jobs….Academics and Jobs. Many, if not most of the young people we serve, do not come from families where they witnessed a parent or parent figure working. They actually do not know what "work" looks like. They don't know how to shake an adult's hand, they have no idea what paperwork is required to get a job, they don't know how to dress to an interview, they don't know how to call in sick, they have never experienced a job interview; and don't know how to handle money because they simply don't have it. It is our experience with the young people with whom we work, that they sometimes lack the passion for school because they can't make the connection with a future job or career possibility.

PUBLICITY

We will work in coordination with the City of Rancho Cordova to develop a marketing strategy around this project. All materials will be appropriately co-branded and approved by both the City of Rancho Cordova and the Boys & Girls Club.

Beginning with a major Program Launch in January 2016, the program will be marketed and promoted through a number of vehicles:

Poster/postcard outreach to Cordova High School
Informational postcards at all youth organizations, community centers, churches, etc
Fliers and marketing packets distributed to area businesses and through Rotary
Articles published in the Sacramento Bee
Promoted on our website, facebook, Instagram, and twitter accounts.
We will regularly post stories and updates on our web and facebook accounts

PROGRAM DELIVERABLES

Task		Deadline
I.	A minimum of 150 unduplicated youth will become Boys & Girls Club members within the first year of opening.	A. 50 teens will become Club members by 5/31/2016 B. 75 elementary-aged youth will become Club members by 8/15/2016 C. 25 teens will become Club members by 12/31/2016
II.	A minimum of 50 youth will participate in the "Career Launch" program at Cordova High School	A. 5/31/2016
III.	Approximately 15 Boys & Girls Club teen members will receive paid summer internships at the Club's Summer Camp Program	A. 7/1/2016
IV.	A minimum of 75 elementary-aged youth will participate in the Club's Summer Camp program. The program will be free of charge for Rancho Cordova residents.	A. 8/15/2016
V.	All programming at the Boys & Girls Club will reflect the Club's 5 Core Program Areas: Health & Life Skills, The Arts, Education & Career Development, Sports, Fitness & Recreation, & Character & Leadership Development	A. Ongoing
VI.	In order to maximize job marketability, a minimum of 25 teens will complete the necessary coursework to obtain their California Food Handlers Card at no cost to them. (dependent on computer accessibility)	A. 12/31/16

BUDGET BREAKDOWN **Amount Requested: $200,000**

Professional Project & Program Staff **$129,450**

The Site Coordinator will be responsible for the project from beginning to end. The Second Lead will assist in creating and delivering Club programming and assisting in the day to day operations. Program Assistants will help implement Club programming as well as play a large role in Club recruitment on campus. These three positions will be for the full year, as they will also be responsible for the summer camp. Summer staff will be exclusively used for the 8-week summer program. HR/Finance clerical staff will be significantly impacted during the employee on boarding phase and the employment phase.

Vice President of Programs & Operations: 1 staff @ 5% FTE
Program Director: 1 staff @ 40% FTE
Site Coordinator: 1 staff x 48 weeks x $18/hour x 40 hours/week
2nd Lead/Program Assistant: 2 staff x 48 weeks x $12/hour x 29 hours/week
Summer Camp Staff: 3 staff x 9 weeks x $11.50/hour x 28 hours/week
Payroll Taxes & Benefits

Operating Expenses – Career Launch & Summer Camp **$44,450**

Operating expenses cover and include supplies necessary to maintain and operate the overall Boys & Girls Club Program, as well as for summer camp.

Employee recruitment, staff uniforms, member t-shirts, office supplies, other supplies & materials, program supplies & equipment, IT expenses, membership tracking, computers & accessories, cell service, internship stipends, field trips, transportation, mileage, outreach, incentives, training, conferences, and insurance.

Admin/Indirect/Overhead **$26,100**

Printing, phone, utilities, computers, communication, administrative and management staff time, facility usage, liability insurance, etc.

TOTAL REQUESTED **$200,000**

DETAILED TIMELINE

January 2016	• Assign Project Director and support staff • Begin recruitment at Cordova High School through outreach activities at lunch and after-school • Attend and present at Cordova High School teacher staff meetings to promote the program as well as sharing project goals and gathering input from teachers.
February 2016	• Official "Club Opening" • Career Launch program component would begin at Cordova High with 2 cohorts of 25 students each. • Academic support (Power Hour) as well as other Club enrichment programs would be offered Monday-Friday 3pm-6pm • Opportunity for local as well as regional field trips to enhance learning opportunities.
April 2016	• Continue Club programming as well as Career Launch Classes • Recruitment for summer camp program at local elementary schools begins
May 2016	• Continue Career Launch Classes and Financial Literacy Training • Group interview day • Final Career Launch classes • Career Launch completion party/event • Job notification letters go out to selected youth in the last week of May. • Summer camp parent/child orientations at local school camp site
June 2016	• Summer Camp opens at Cordova Meadows • Internships begin (week 1) • First Development Day: Interns will complete team building exercise and begin the leadership training process of planning and executing a community service project and/or a large scale event for our summer camp.
July 2016	• Internships continue • Summer camp continues
August 2016	• Summer Camp concludes • Internships conclude • Summer interns conduct large-scale end-of-summer event for Summer Camp participants and their families. • Fall teen program starts up again at Cordova High
Sep. – Dec. 2016	• Teen program continues at Cordova High

Salaries & Wages - All Club Programming	
Vice President of Programs & Operations FTE 5%	$3,750.00
Program Director FTE 40%	$26,500.00
Site Coordinator FTE 100%	$33,200.00
Program Assistants (2 Positions)	$32,600.00
Summer Camp Staff (3 Positions-Total)	$8,700.00
Payroll Taxes & Benefits	$24,700.00
Total Salaries & Wages - All Club Programming	$129,450.00

Operating Expenses - Career Launch & Summer Camp	
Employee Recruitment	$500.00
Staff Uniforms	$700.00
Member T-Shirts (60 @ $20)	$1,200.00
Office Supplies	$2,500.00
Supplies & Materials	$10,950.00
Program Supplies & Equipment	$5,000.00
IT Expenses Including Membership Tracking	$2,000.00
Computers & Accessories for Site Coordinator & Site	$2,000.00
Monthly Services For Cell Phones (2)	$1,500.00
Internships Stipends 15 @ $500	$7,500.00
Field Trips	$2,000.00
Transportation & Mileage	$4,000.00
Outreach/Incentives	$2,000.00
Training/Conferences	$2,100.00
Insurance	$500.00
Total Operating Expenses - Career Launch & Summer Camp	$44,450.00
Admin 15%	$26,100.00
Program Total	$200,000.00

MEMORANDUM

DATE: October 19, 2015

TO: Honorable Mayor and Council Members

FROM: Matthew Diaz, Associate Planner

SUBJECT: **MILLS CENTER STARBUCKS CONDITIONAL USE PERMIT AND DESIGN REVIEW; PROJECT NO. DD9606 – LOCATED AT 10345 FOLSOM BOULEVARD.**

PROPERTY OWNER:	**APPLICANT/DEVELOPER:**
ROIC California Mr. Robert Doran 8905 Towne Centre Drive, Suite 108 San Diego, CA 92122	Same as Owner

PROJECT:	The applicant is proposing to operate a new 2,076 square foot Starbucks café within a portion of an existing commercial building within the Mills Shopping Center along Folsom Boulevard. A Conditional Use Permit is required to convert the existing loading aisle into a new drive-through order aisle and Design Review permit is required for the minor exterior changes and landscaping.
FILE:	DD9606
LOCATION:	10345 Folsom Boulevard;
APN:	076-0222-023-0000
PLANNER:	Matthew Diaz, Associate Planner

RECOMMENDATION

Adopt Resolution 129-2015.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution 129-2015 would allow the applicant to submit for a building permit for the minor exterior alterations to the façade, conversion of the existing loading aisle into a new drive-through, and installation of additional landscaping.

BACKGROUND

On August 10, 2015, the applicant submitted a proposal to establish a new 2,076 square foot Starbucks café within a portion of an existing commercial building. This new café would include improved parking area, minor changes to the exterior of the building, and conversion of the existing loading drive aisle into a new drive through. This drive through would include the removal of 6 parking spaces and new landscaping as required by the City's zoning code. This project was circulated for review by all City departments and applicable agencies.

Figure 1: Project Site (Existing Conditions)

Figure 2: Site Plan

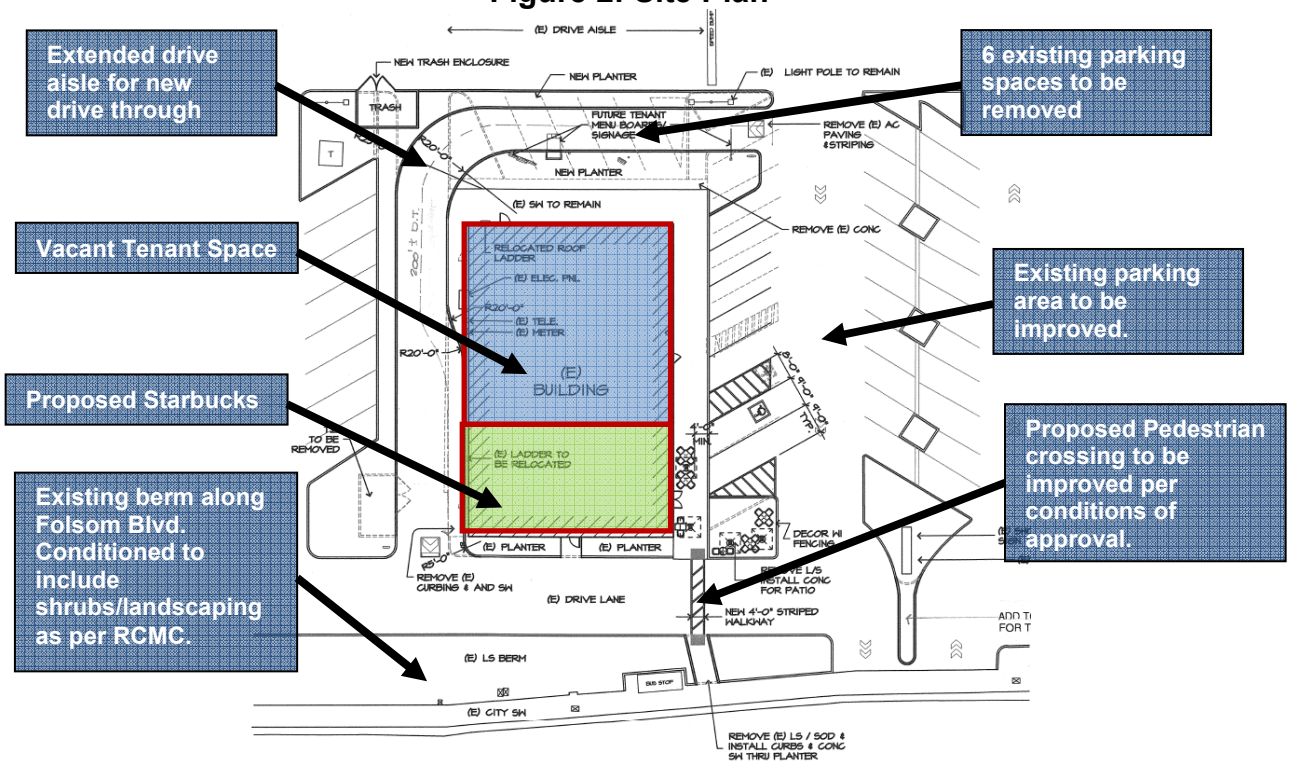


Figure 3: Proposed Floor Plan

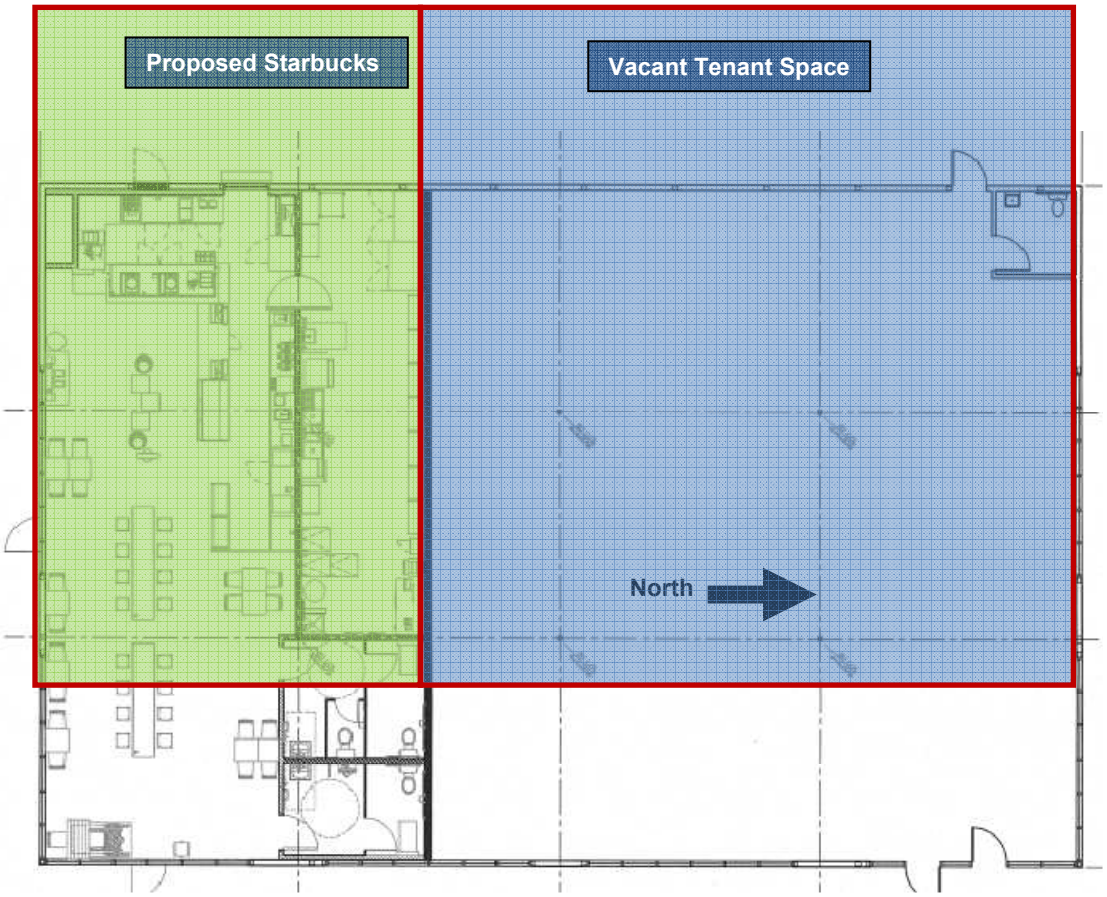


Figure 4: Existing Loading Aisle-Proposed Drive Through (Looking North from Folsom Blvd.)

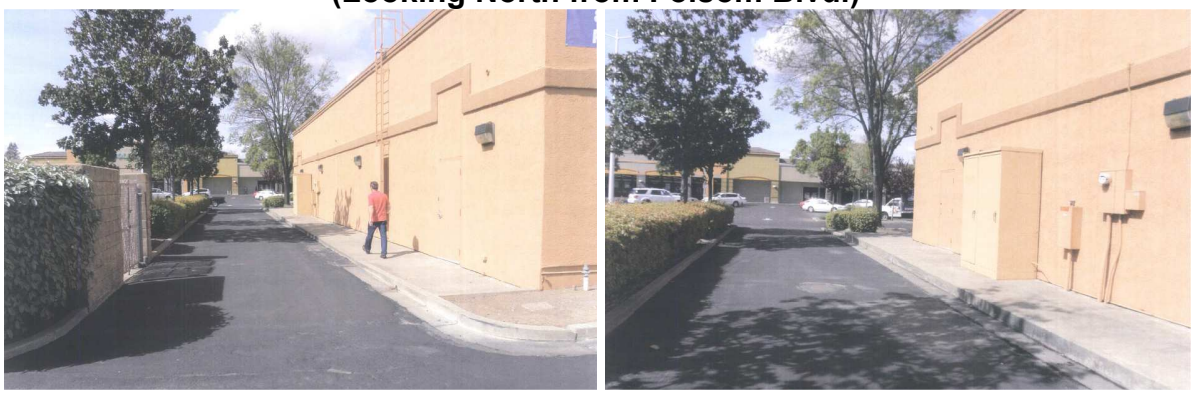


Figure 5: Existing Building-Proposed Starbucks Entrance (Looking West)

REQUIRED PERMITS AND REGULATORY BASIS

The Starbucks café is a permitted by right use and would require a business license to operate and building permit for any interior improvements. Drive-through sales/services are allowed with the approval of a Conditional Use Permit per Table 2-2 of the Folsom Boulevard Specific Plan (FBSP) CMU (Commercial Mixed Use) zone. Although the exterior changes remain very minor, staff has included the minor design review (Section 23.140) to ensure compatibility with the surrounding shopping center and implementation of all applicable development standards.

Permits Required after Approval:

- Building Permit
- Business License

ANALYSIS

General Plan:

The project site is within the Folsom Boulevard Planning Area (FBPA). The Folsom Boulevard Planning Area serves as the high-intensity development center of the City, with commercial nodes strategically located at light rail stations and freeway interchanges. It is the City's intent that the FBPA encourage new development that will help revitalize the aging corridor and become a vibrant place to live, work, play, and shop, with walkable areas that connect plazas to mass transit option (bus and light rail). The proposed modifications are an attempt to bring a

new and popular café use into the aging commercial center. The drive-through and on-site improvements will enhance aesthetic appeal and provide a new dining option for students of the new community college that is in walking distance from the proposed facility.

Zoning Code:
The project site is zoned FB-CMU (Folsom Boulevard – Commercial Mixed-Use) which provides for a wide variety of general commercial and more intense types of commercial uses. This district is intended to designate property primarily for commercial development; however, it may also include office and/or residential uses. Retail and service uses (including general retail and personal services) are permitted by right and more intense commercial and service uses are conditionally permitted. Business and professional office uses, as well as residential uses with a density between 10 and 18 units per acre, are also permitted by right when integrated vertically or horizontally with commercial uses.

As mentioned in the General Plan discussion above, the improvements will enhance the aging shopping center in an attempt to attract the new commercial tenants that will service potential customers. The proposed use is allowed within the FB-CMU zoning designation. Additionally, the on-site and off-site improvements will enhance motorist circulation to and through the shopping center as well as pedestrian access along the improved frontage improvements. Specific descriptions of the improvements are listed below within the Design section of this report.

Table 1: Surrounding Designations and Existing Uses

Location	Existing Use	General Plan Designation	Zoning Designation
10345 Folsom Boulevard	Vacant commercial building	DTPA (Downtown Planning Area)	FB-CMU (Folsom Boulevard Specific Plan-Commercial Mixed Use)
North	Main Mills Center Building/Single Family Residential Uses	DTPA/ LDR (Low Density Residential)	FB-CMU/ RD5 (Residential)
East	Mills Center Commercial Pads (Heritage Community Union)	DTPA	FB-CMU
South	Folsom Boulevard/ Residential Homes	DTPA/ LDR (Low Density Residential), MDR (Medium Density Residential)	RD30 (Residential)
West	Mills Center Commercial Pads (McDonald's Restaurant)	DTPA	FB-CMU

Design:
All renovations and new construction must adhere to the City's Design Guidelines to ensure all improvements and additions will be attractive while integrating into the surrounding environment. The project has been reviewed in accordance with the guidelines sections pertaining to commercial development.

Site Plan and Parking:

On July 15, 2014, the City Council conducted a workshop to discuss future drive-through design and locations. Examples of existing Rancho Cordova drive-throughs were presented and the City Council expressed their preference on design, function, location, as a means provide direction to staff. While the Council acknowledged the location plays a large role in determining the design of drive-throughs, some of the typical characteristics they preferred included:

- Drive-throughs aisle should not run parallel to public right-of-ways;
- Drive-throughs should be located adjacent to main streets to ensure pedestrian connectivity; and
- Sufficient screening should be provided to reduce the visibility of the automobiles within the drive-through aisle as well as any associated impact with their stacking (i.e. head light glare onto passing pedestrians and motorists).

The proposed drive through will modify the existing loading area which will remain perpendicular to the main street frontage. This will help to reduce visibility of the drive-through as landscaping will be added to reduce the visibility and unwanted glare from headlights during nighttime use of the drive-through. The proposed drive-through is consistent with zoning standards and will be approximately 200 feet long by 15-18 feet wide (Figure 2-3). The project has been conditioned to include enhanced pedestrian connectivity and reduce pedestrian-automobile conflicts. Conditions were included to provide better internal circulation and safety by adding pedestrian crossway improvements such as raised crosswalks, enhanced stripping and signage. These improvements are described in detail on the attached Conditions of Approval (**Exhibit B**).

While the Starbucks will remove 6 parking spaces, the Mills Center has an overall surplus of parking that would accommodate the proposed use and loss of 6 stalls. The new trash enclosure is located along the north end of the new drive-through and will be hidden from motorist and pedestrians traveling along Folsom Boulevard.

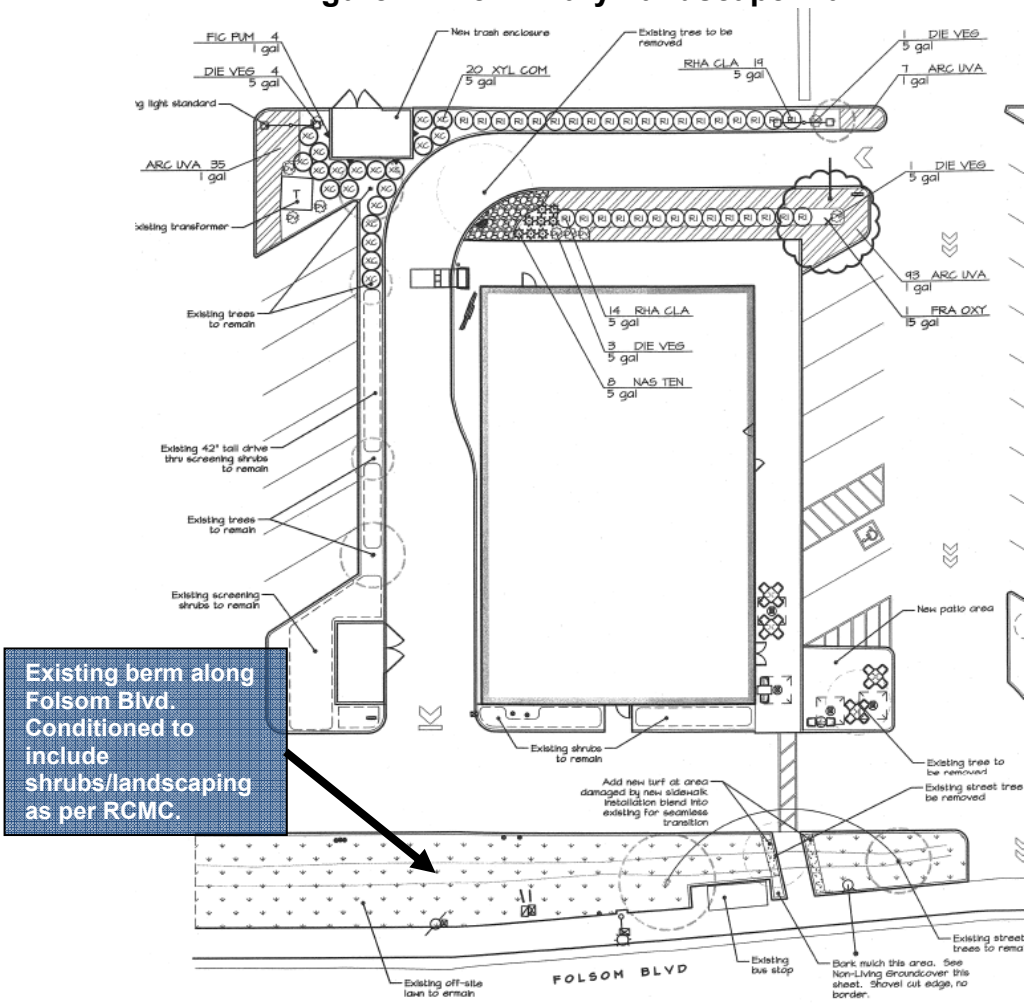
Architecture:
The proposed exterior improvements are minor as new canopies will be added consistent with the green color scheme of Starbuck's corporate branding. A new door will be added along the southeast end of the building while a new opening will be installed along the southwest of the building for the drive-through aisle pickup window. Minor stucco improvements are included as well as a refresh of paint on the weathered façade.

Figure 6: Main Facade facing the Zinfandel Drive
(Southern Section. *See Figure 5 for existing*)

Landscaping:
There is existing landscaping along the proposed drive aisle. The project proposes to install a minimum 3-foot tall shrub within the existing planter along Folsom Boulevard and the new drive

aisle portion to the north of the building. This is to minimize the visual impact of the drive-through reader board and directional signs from the public right-of-ways. This also includes new landscaping around the menu board. Conditions of approval are in place to ensure installation of this landscaping prior to occupancy (Figure 7).

Figure 7: Preliminary Landscape Plan



Traffic:

Fehr & Peers completed its analysis of the proposed Folsom Boulevard Starbucks planned within the Mills Center along Folsom Boulevard. Cumulative conditions were analyzed using future year 2035 forecasts based on SACOG's MTP/SCS 2035 model, and included such land uses as the Folsom Lake College. The proposed project would generate about 206 gross trips during the weekday AM peak hour and 88 gross trips during the weekday PM peak hour. These

consist of both new trips and pass-by trips, which are trips made by motorists who are already on the adjacent roadways and enter the site from a different primary destination.

The proposed project would increase the average delay at study intersections by no more than one second, and no LOS standards would decrease due to the project. No significant queueing issues would arise due to the proposed project. Since no study intersections would experience any degradation in LOS or queuing, no impacts to the study intersections would arise due to the proposed project in either existing or cumulative scenarios. No significant queueing issues would arise due to the proposed project. The entire study has been included within **Attachment 3** of this report.

FISCAL ANALYSIS OF PROJECT

The City anticipates that this project will provide additional revenues from an increase in sales taxes through new businesses and increases in general sale of goods purchased by the onsite employees.

ENVIRONMENTAL

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Chapter 3, Division 6 (State CEQA Guidelines) Sections 15301 (Existing Facilities) and 15303 (New Construction of Small Structures).

RECOMMENDED MOTIONS

Staff recommends that the City Council find the project to be in compliance with the California Environmental Quality Act (CEQA) as exempt pursuant to CEQA Guidelines Section 15301 and 15303 and adopt Resolution No. 129-2015 the Conditional Use Permit and Design Review for the Mills Center Starbucks DD9606, subject to the findings, Project Plans (**Exhibit A**) and Conditions of Approval (**Exhibit B**)."

ATTACHMENTS

1. Resolution 129-2015, including Project Plans (**Exhibit A**) and subject to the Conditions of Approval (**Exhibit B**).
2. 500' Radius Map with Mailing Labels.
3. Traffic Study dated September 18, 2015.
4. Existing Site Photos.

ATTACHMENT 1

CITY OF RANCHO CORDOVA

RESOLUTION NO. 129-2015

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING MILLS CENTER STARBUCKS CONDITIONAL USE PERMIT AND DESIGN REVIEW - PROJECT NO. DD9606

WHEREAS, On August 10, 2015, Robert Doran with ROIC California (referred to as the Applicant) filed a formal submittal to propose minor façade improvements to the existing commercial building and the conversion of an existing loading aisle into a new drive through to accommodate a new 2,076 square foot Starbucks café within the Mills Center shopping center located at 10345 Folsom Boulevard. (Assessor's Parcel Number: 076-0222-023-0000); and

WHEREAS, this project was reviewed by all applicable City departments and agencies for comments and conditions; and

WHEREAS, the City Council is the appropriate authority to hear and take action on this project; 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, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA that the Council approves the Mills Center Starbucks Conditional Use Permit and Design Review Permit **(Exhibit A)**, subject to the following findings and attached Conditions of Approval **(Exhibit B)**:

A. *Finds the project site was adequately analyzed according to the California Environmental Quality Act (CEQA) Guidelines and is exempt per 15301 (Existing Facilities) and 15303 (New Construction of Small Structures).*

   Evidence: The project proposes to make minor changes to the existing commercial pad and paved area that will not impact the shopping centers design or function. A traffic study was submitted that analyzed the potential impacts of the new drive-through. The results of the traffic study indicated the new drive-through would create a less than significant impact that would not impact the current level of services. Future build out of the project site, were previously analyzed as part of the Folsom Boulevard Specific Plan Mitigated Negative Declaration.

B. Approve the Conditional Use Permit subject to the Conditions of Approval herein, and subject to the findings as defined by Zoning Code sections 23.134.030 and evidence as follows:

   1. *Finding: The site size, dimensions, location, topography, and access are adequate for the needs of the proposed use, considering the proposed building mass, parking, traffic, noise, vibration, exhaust/ emissions, light, glare, erosion, odor, dust, visibility, safety, and aesthetic considerations.*

      Evidence: The proposed improvements have been designed to follow all Folsom Boulevard Specific Plan regulations and provisions in the Rancho Cordova Municipal Code. The site currently has access to all main streets, sidewalks and is in close proximity to public transit (Mather Light-Rail Station). The project will

enhance the existing drive aisle to connect motorists and pedestrians while parking lot improvements will enhance onsite circulation. The project has been conditioned to minimize any impacts from construction and/or operation of the new establishment.

2. *Finding: The negative impacts of the proposed use on adjacent properties and on the public can be mitigated through application of other code standards or other reasonable conditions of approval.*

   Evidence: The proposed project will fit within the existing adjacent land uses and will complement the existing Mills Center by improved infrastructure and supportive commercial development. The new Starbucks café will provide a new dining option for future students of the nearby community college. The project parking is designed to integrate into the surrounding circulation to facilitate movement of autos and pedestrians between main streets and shopping center.

3. *Finding: All required public facilities have adequate capacity to serve the proposal.*

   Evidence: The existing center currently has access to all public facilities. The proposed improvements will have access to all required public facilities (water, sewer, solid waste, electric, etc.).

4. *Finding: The project meets the requirements of the zoning code including development standards, design guidelines, and special use provisions.*

   Evidence: The project has been designed to meet all of the applicable standards of the General Plan, Folsom Boulevard Specific Plan, Municipal Code, and Design Guidelines. To ensure compliance with all standards, the project has been conditioned to guarantee these standards are achieved before any building permit can be issued.

5. *Finding: If structures and site plans are considered nonconforming, the elements of a project that are nonconforming have been brought into compliance with the zoning code, where feasible.*

   Evidence: The proposed project has been designed to meet all applicable standards, regulations, and provisions of the Folsom Boulevard Specific Plan and Zoning Code of the City of Rancho Cordova. While staff is not aware of any existing building nonconformity, all future construction would be subject to review and approval by the Building Department and Sacramento Metro Fire.

C. Approve the Design Review permit subject to the Conditions of Approval herein, and subject to the findings as defined by Zoning Code sections 23.140.050 and evidence as follows:

1. *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 project is consistent with the purpose and intent of adopted policies and regulations, including the Folsom Boulevard Specific Plan, the Zoning Code, the Municipal Code, and the General Plan. The project site is

located within the Folsom Boulevard Specific Plan as the project proposed to convert an existing loading aisle into a new drive-through.

2. *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 proposed design includes new canopies along the façade, enhanced pedestrian connection to Folsom Boulevard, conversion of an existing loading aisle into a new drive through, and landscaping improvements. These designs will enhance the character of the project site by modernizing an aging commercial pad to accommodate the new café use. The building's façade and use of color and material are consistent with the City's Design Guidelines for commercial projects.

3. *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 design and proposed use of the project is established clearly within the submitted application for minor façade improvements and Conditional Use Permit. The design and use are consistent with the existing businesses in the area which consist of retail, restaurants, personal services (salons, etc.), along Folsom Boulevard. The design, color, and materials are compatible with the character and of existing development and have been designed to foster a more human scale façade.

4. *Finding: The proposed project will not create conflicts with vehicular, bicycle, or pedestrian transportation modes of circulation.*

   Evidence: The proposed project will not substantially affect current traffic flows or existing modes of transportation circulation as the layout will be similar to the current conditions. The project has been conditioned to improve safety for pedestrians coming from the main streets or that utilize the Mather Light Rail Station.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the ____ day of _____ 2015 by the following vote:

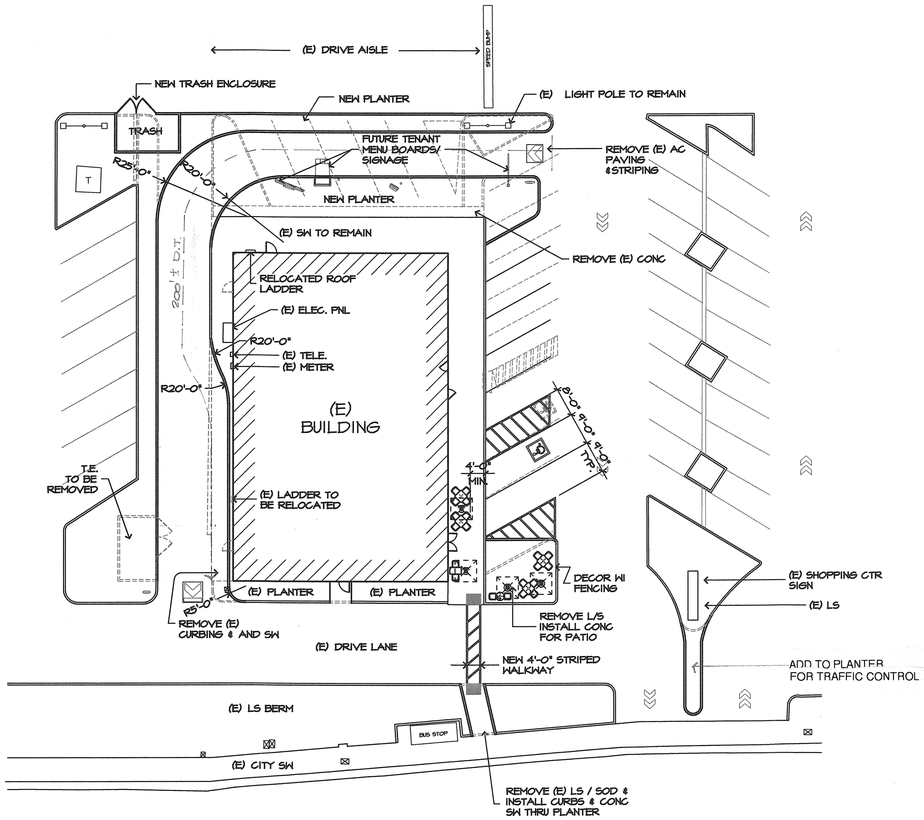
AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Robert J. McGarvey, Mayor

ATTEST:

_____
Mindy Cuppy, MMC, City Clerk

EXHIBIT A



A SITE PLAN
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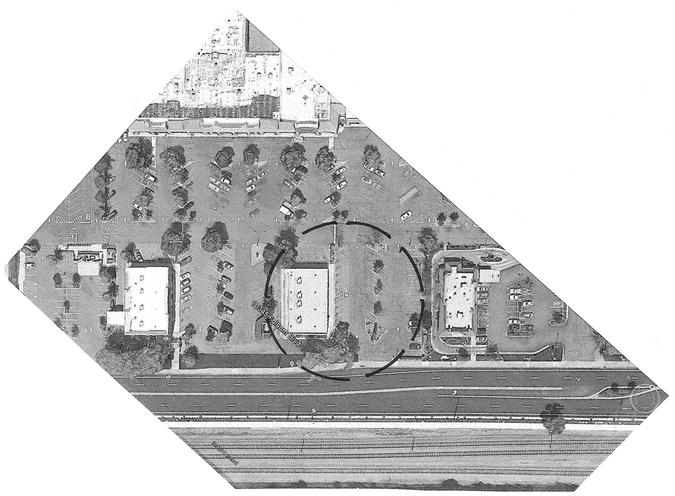
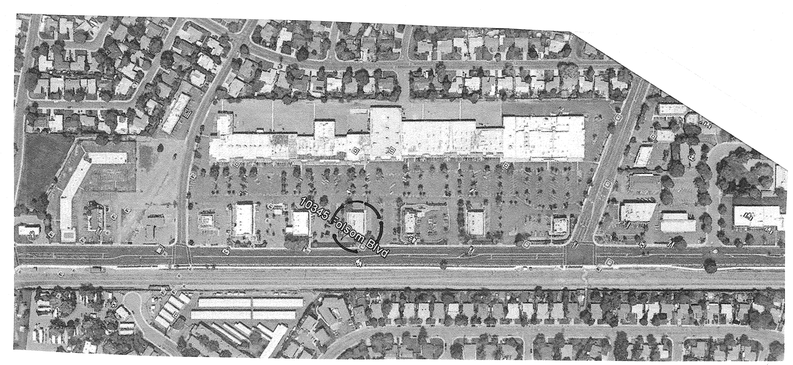


ENLARGED AREA (E)



AREA LOCATION

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FAX: (209)577-0116

NORMAN E. WILSON, AIA

LICENSED ARCHITECT
NORMAN E. WILSON
EXPIRES
SEP 30 2015
NO. C10851
STATE OF CALIFORNIA

PROJECT TITLE:
LANDLORD IMPROVEMENT:
ROIC
10345 FOLSOM BLVD
RANCHO CORDOVA, CA

SHEET TITLE:
SITE PLAN

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DATE: MAY 2015
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DRAWN: JPH

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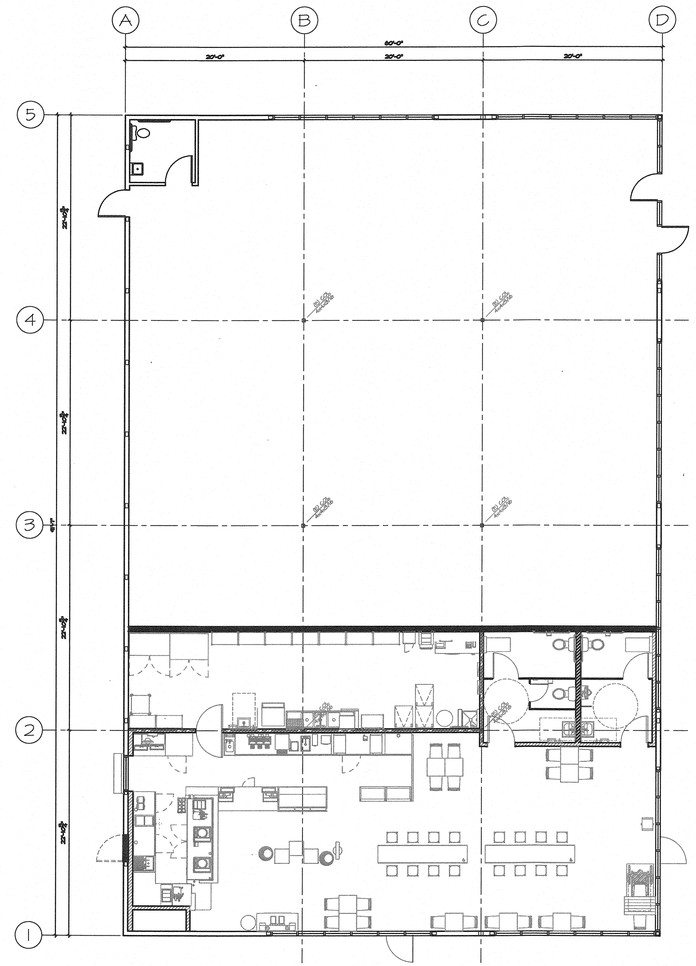

A FLOOR PLAN CONCEPT
SCALE: 1/8" = 1'-0"

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EXPIRES
SEP 30 2015
NO. C10851
STATE OF CALIFORNIA

PROJECT TITLE:

LANDLORD IMPROVEMENT:
ROIC
10345 FOLSOM BLVD
RANCHO CORDOVA, CA

SHEET TITLE:
FLOOR PLAN

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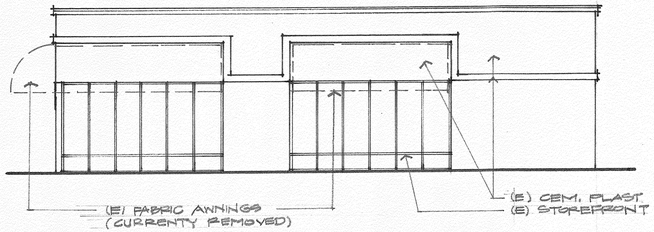

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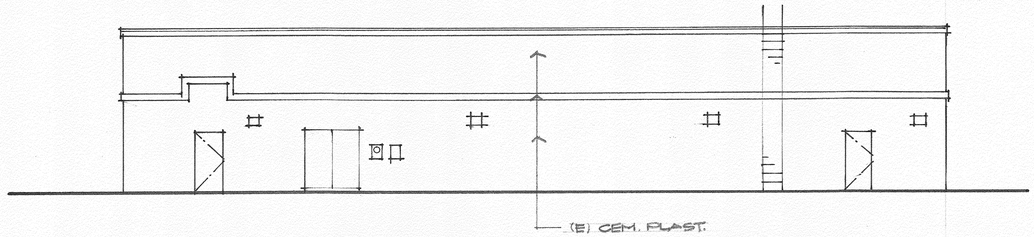

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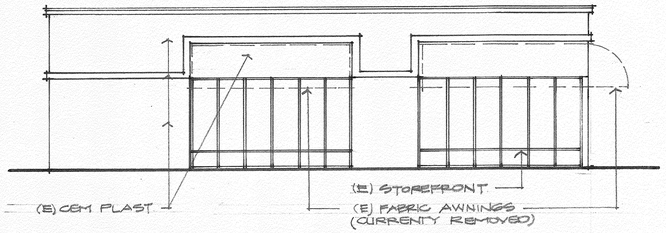

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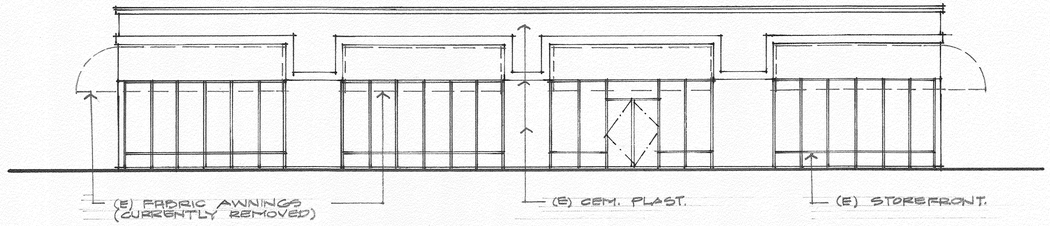

EAST ELEV.

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NORMAN E. WILSON, AIA

LICENSED ARCHITECT
NORMAN E. WILSON
EXPIRES
SEP 30 2015
NO. C10851
STATE OF CALIFORNIA

PROJECT TITLE:

LANDLORD IMPROVEMENT:
ROIC
10345 FOLSOM BLVD
RANCHO CORDOVA, CA

SHEET TITLE:
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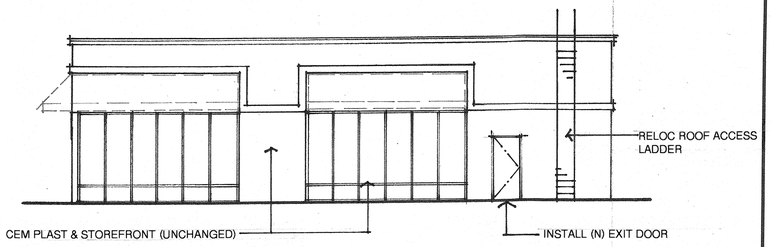
EXHIBIT A



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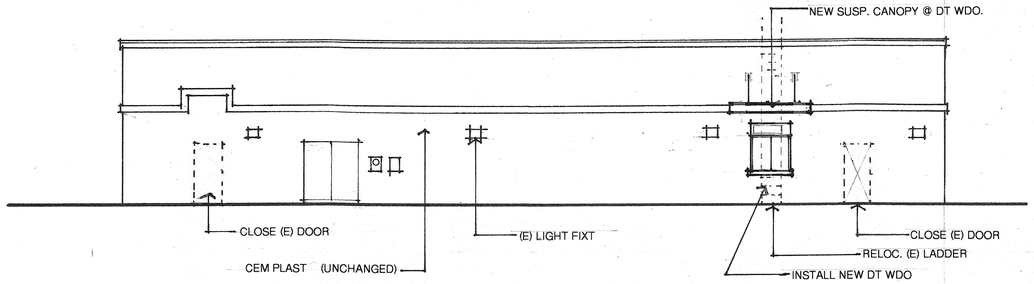

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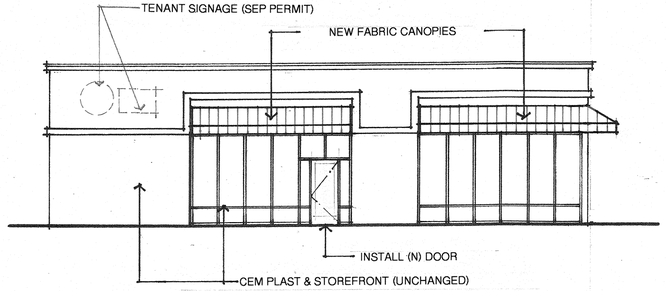

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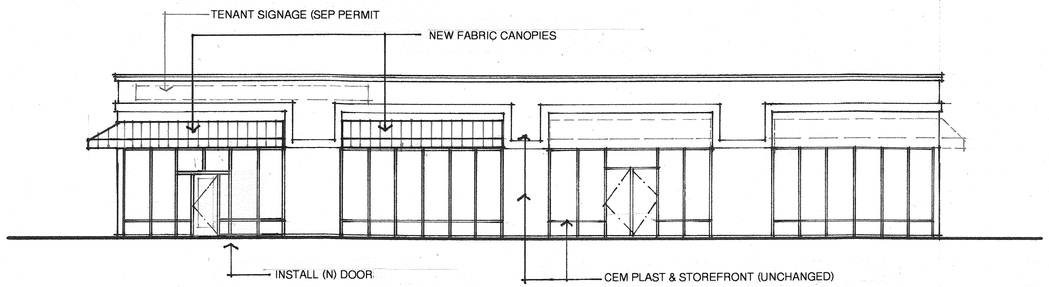

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NORMAN E. WILSON, AIA

LICENSED ARCHITECT
NORMAN E. WILSON
EXPIRES
SEP 30 2015
NO. C10851
STATE OF CALIFORNIA

PROJECT TITLE:

LANDLORD IMPROVEMENT:
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RANCHO CORDOVA, CA

SHEET TITLE:

PROPOSED ELEVATIONS

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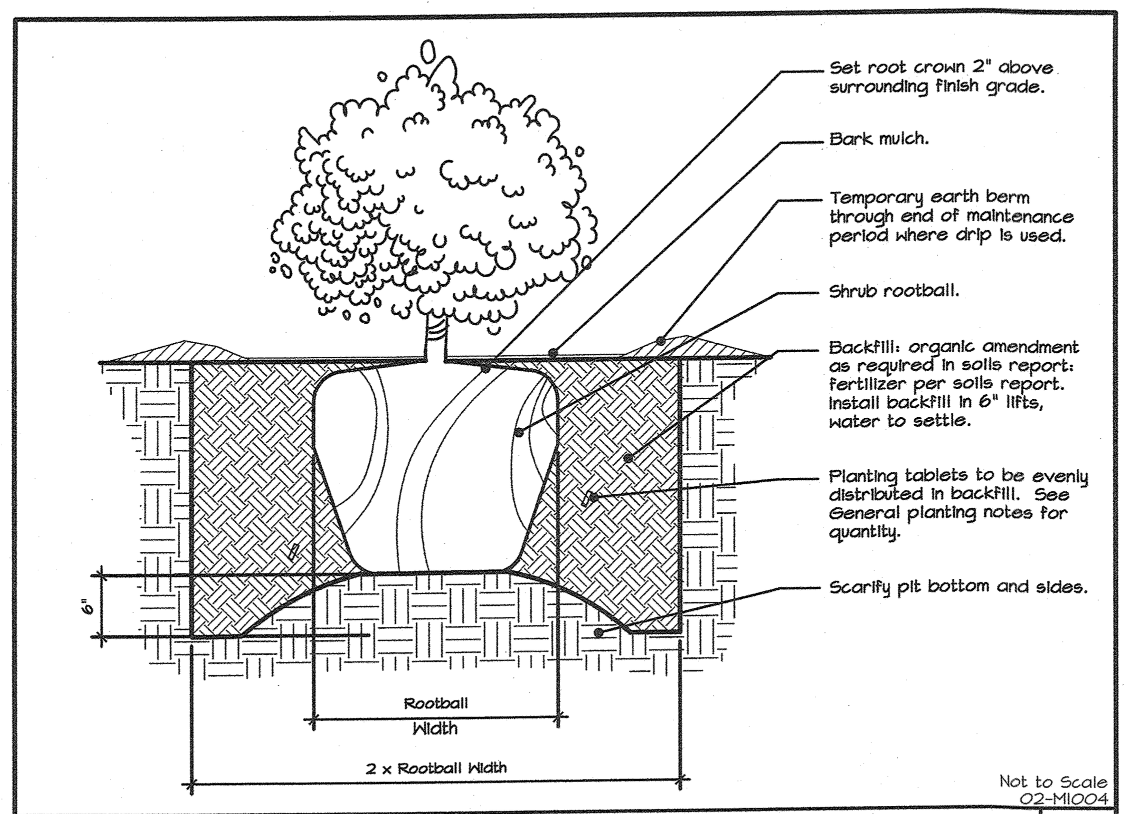
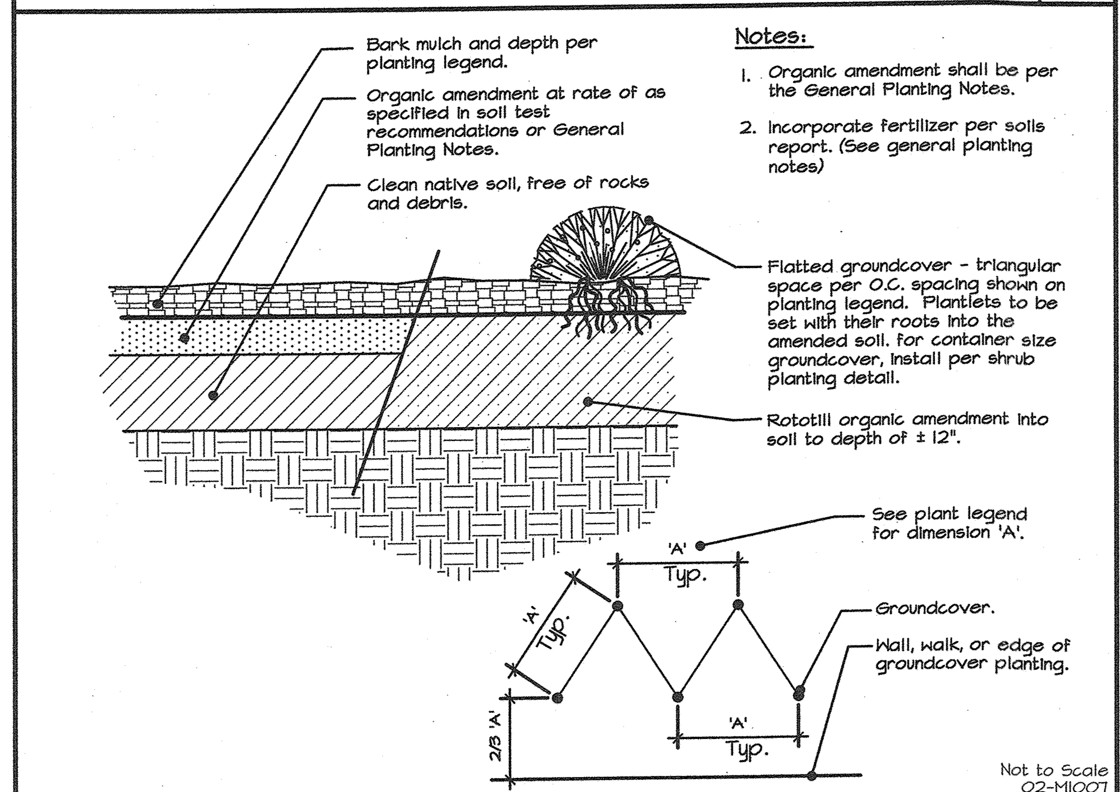
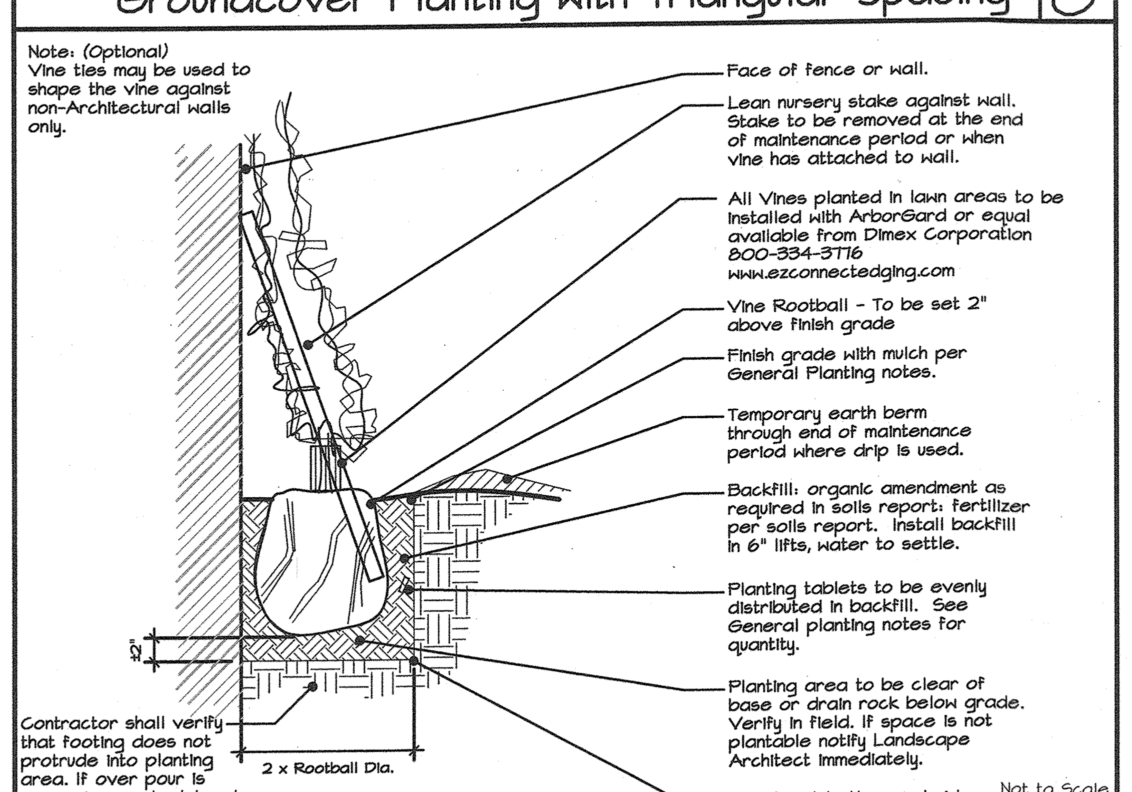


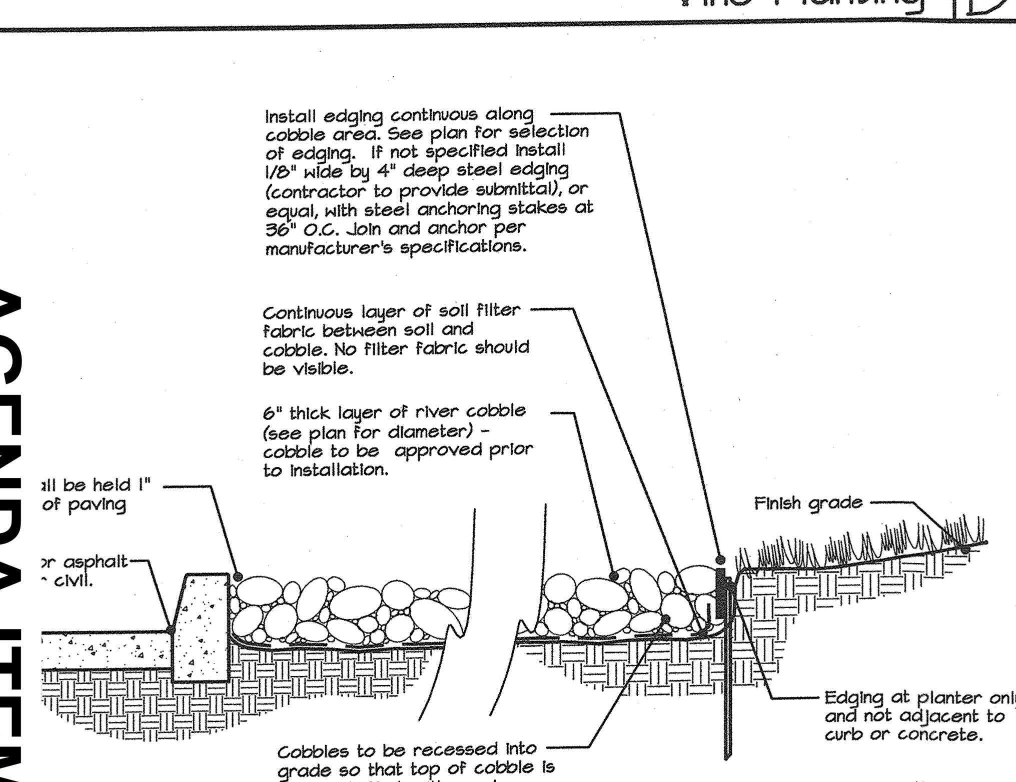
Shrub Planting | B



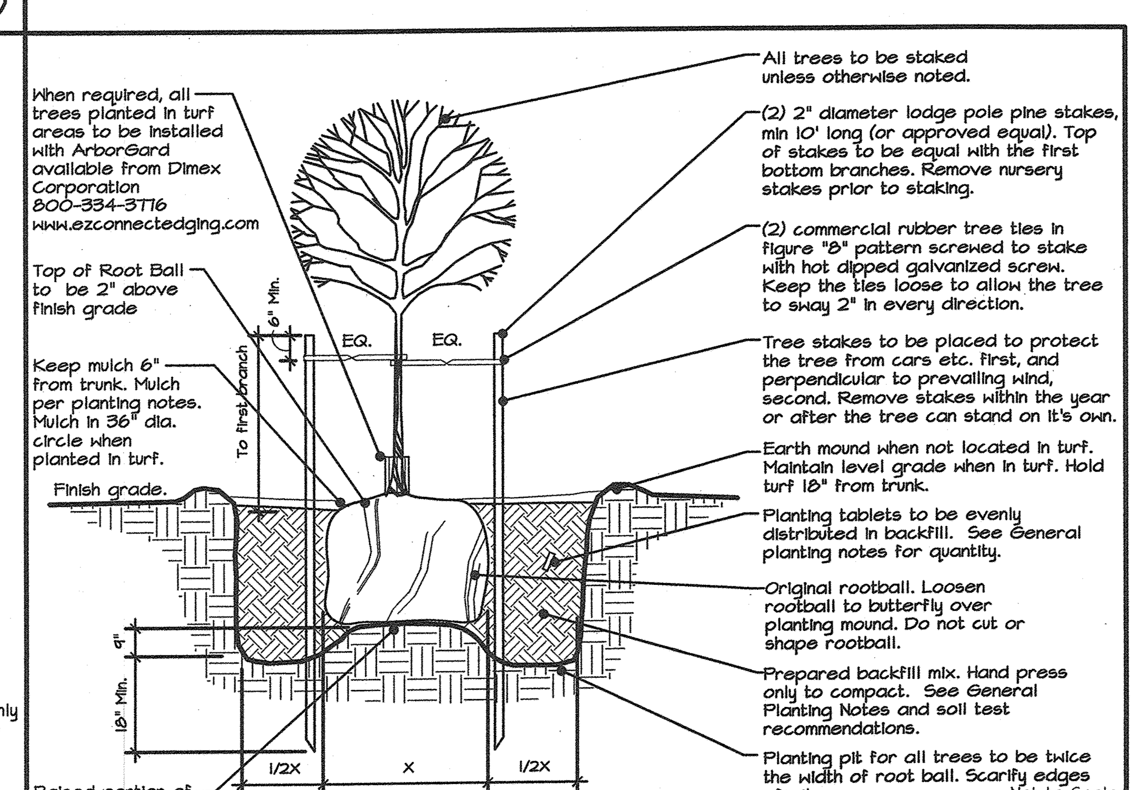
Groundcover Planting with Triangular Spacing | C



Vine Planting | D



Cobble with Edging | E



Broadleaf Tree Planting and Staking | A

AGENDA ITEM 9.2

GENERAL PLANTING NOTES

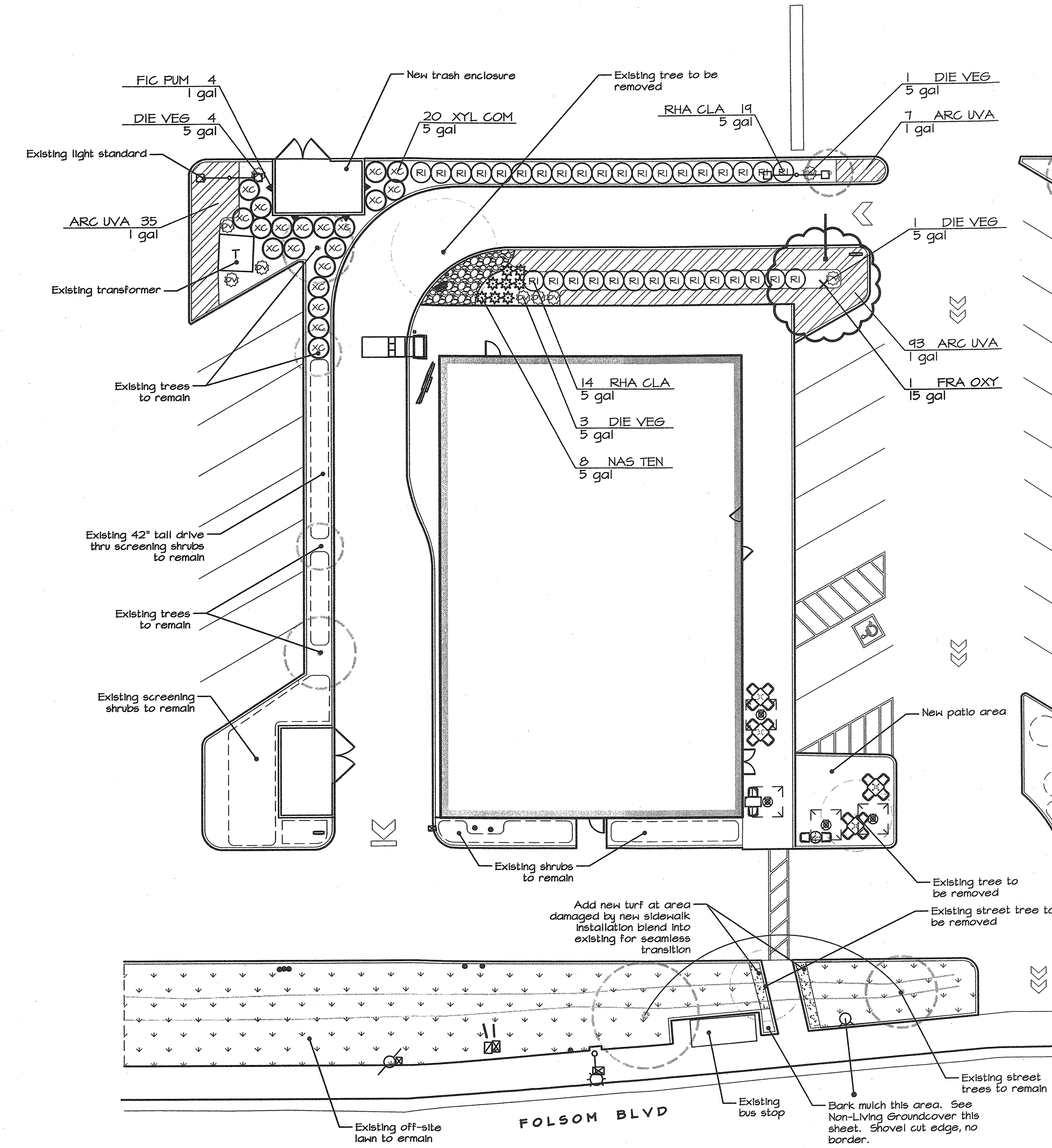
1. The contractor shall examine the conditions of the site prior to commencement of work. Any conditions that differ from what is shown on the plans that will affect the installation process shall be brought to the attention of the Owner or Land. Arch. prior to work. Commencement of work implies acceptance of the conditions of the site.
2. The contractor shall verify all plant quantities prior to installation. Plant quantities are listed for the convenience of the contractor, number of symbols shall have priority over quantity given.
3. The contractor shall be responsible for the purchasing of all material to meet the specifications of the plans including plants, soil, fertilizer and stakes. The contractor shall also be responsible for the protection of these materials until the project has been completely turned over to the owner.
4. All plant material shall be subject to approval or rejection by the Landscape Architect or Owner's Representative prior to installation. Installed and then rejected material shall be replaced by the contractor at his/her expense.
5. The contractor shall include in the bid for a continued maintenance period of sixty (60) days after completion and acceptance of the project by the Owner or Owner's Rep.
6. Trees to be planted a min. of 3'-0" from edge of paving or walls (unless otherwise stated on plan). All trees in a formal group or in a row shall be matching in size and shape.
7. Groundcover shall be installed continuous under all shrub masses unless otherwise noted.
8. All vines shall be installed with the nursery stakes removed and runners espaliered to the adjacent wall.
9. The following soil amendments specified are for bidding purposes only. The Landscape Contractor shall provide for a Soil Agronomy Report from an approved soils laboratory and/or any additional specifications provided by the Land. Arch. prior to installation of the plant material. The following amendments shall be incorporated into all planting pits and broadcast into soil to depth of 12" by means of a rototiller or equal per 1000 square feet.
   - 4 cyds nitrogen stabilized organic amendment derived from redwood sawdust, fir sawdust or cedar sawdust.
   - 15 lbs. soil sulfur
   - 15 lbs. 15-15-15 fertilizer
10. All soil preparation shall be installed per the soil agronomy report to be provided and paid for by the Landscape Contractor. The report is to be immediately forwarded to the Land. Arch. upon completion.
11. A nitrogen stabilized commercial-grade mulch with maximum 3/4" dia. chip size shall be uniformly broadcast over all shrub areas (not turf) to a depth as specified on the Planting Legend.
12. The planting pits for trees shall be excavated per the detail on the Landscape Details sheet. The backfill mix for use in all tree and shrub pits shall consist of the following:
   - 6 parts 'on-site' soil
   - 4 parts organic amendment (above)
   - 1 lb./yd. of mix 12-12-12 commercial fertilizer
   - 2 lbs./cu. yd. of mix Iron Sulfate
   - 10 lbs./cu. yd. of mix Agricultural Gypsum
13. Fertilizer tablets shall be BEST, 21 gram fertilizer tablets (20-10-5) placed in all planting pits in quantities as follows:

1 gallon	1 tablet
5 gallon	3 tablets
15 gallon	9 tablets
24"-Box	9 tablets
36"-Box	15 tablets

14. Thirty (30) days after installation all landscape shall be fertilized with 16-6-8 Fertilizer applied at the rate of 6 lbs./1000 sf. Fertilizer application shall be continued thereafter at bi-monthly intervals.
15. For weed control prior to planting, the Landscape Contractor shall thoroughly irrigate the site to promote germination of weed seeds that may be in the soil. After germination has taken place spray the site with Round-Up (or equal) in the amount, and let sit for the time specified by the manufacturer. Reapply Round-Up if needed. After all green weeds have been eradicated, apply Ronstar-G (or equal) Pre-Emergent weed control in the amounts specified by the manufacturer.
16. All plant material to be nursery grown in similar climate. All plant material shall be vigorous and of normal habit of growth and shall be free of girdling roots, sun scald, abrasions, disease, insects, insect eggs and larvae. Plants shall equal or exceed the standards as outlined by the American Standards for Nursery Stock and to applicable California Agriculture Code.

GENERAL TREE PROTECTION DURING CONSTRUCTION

1. All trees that are shown on the planting plan denoted with an 'E' or specifically shown not to be removed are to remain on site and to be cared for throughout the construction process in accordance with the following notes. If there is a question as to whether a tree is to remain or be removed, ask the landscape architect or owner prior to removal. The contractor will be required to replace any trees that are removed or die due to negligence or not specifically following these notes.
2. Utility lines and all associated trenching are to be laid-out to avoid conflict and cutting of the existing tree roots.
3. Any damage inadvertently caused to the trees such as broken branches, etc. is to be reviewed immediately by a certified arborist. The recommendations made by the arborist are to be carried out immediately to the satisfaction of the owner.
4. When landscape operations begin, grading within the dripline of the tree is to be kept to a minimum. Any roots damaged by irrigation trenching or planting pit excavation are to be repaired per the recommendations of a certified arborist. No mainline is to be located within the tree dripline and lateral lines are to be laid-out with minimal impact on the tree's root structure.
5. It is the responsibility of the General Contractor to ensure the health of all existing trees. Trees damaged or killed during construction are to be replaced at a size large enough to the satisfaction of the owner.



LANDSCAPE AREAS

Turf:	0 sf	0%
Shrub:	2,070 sf	95%
Decorative rock:	103 sf	5%
Total Landscape Area:	2,173 sf	100%

WATER EFFICIENT LANDSCAPE ORDINANCE

The State Model Water Efficiency Ordinance requires that a landscape which exceeds 2,500 sf is subject to the ordinance. The landscape modifications of this project are less than 2,500sf and are therefore not subject to the provisions of the State Model Water Efficiency Ordinance.

SITE TREE SUMMARY

There are (7) existing trees immediately adjacent to the building structure. There are also street trees on Folsom Boulevard and several other trees in the shopping centers parking lot. There are no Heritage Oaks at the site as defined by Rancho Cordova's Municipal Code.

This proposal indicates the removal of (1) Sycamore street tree (approx 9" dbh) to accommodate the ADA accessible walk from the public sidewalk to the building. The plan also indicates the removal of (2) Raywood Ash (12"+ dbh and 6"+ dbh) to accomodate the drive-thru and a new outdoor seating area. (1) new Raywood Ash is proposed on the project.

PLANT SCHEDULE

TREES	BOTANICAL NAME	COMMON NAME	CONT		QTY	Water Use
FRA OXY	Fraxinus oxycarpa 'Raywood'	Raywood Ash	15 gal		1	Medium
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE		QTY	Water Use
DIE VEG	Dietes vegeta	African Iris	5 gal		9	Low
NAS TEN	Nassella tenuissima	Texas Needle Grass	5 gal		8	Low
RHA CLA	Rhaphiolepis indica 'Clara'	Indian Hawthorn	5 gal		33	Medium
XYL COM	Xylosma congestum 'Compacta'	Compact Xylosma	5 gal		20	Low
VINE/ESPALIER	BOTANICAL NAME	COMMON NAME	SIZE		QTY	Water Use
FIC PUM	Ficus pumila	Creeping Fig	1 gal		4	Medium
GROUND COVERS	BOTANICAL NAME	COMMON NAME	CONT	SPACING	QTY	Water Use
ARC UVA	Arctostaphylos uva-ursi	Kinnikinnick	1 gal	30" o.c.	803 sf	Low
SOD/SEED	BOTANICAL NAME	COMMON NAME	CONT	SPACING	QTY	Water Use
TURF	Turf Sod Dwarf Fescue - Blue Mix	Dwarf Fescue Blend	Sod		44 sf	High

Non-Living Groundcover

Mulch to be evenly distributed throughout all shrub and groundcover areas (not turf and Fescue) unless otherwise noted on plans. Mulch to be nitrogen stabilized, max. 3/4", recycled material installed at min. 3" depth. Contractor to provide sample for approval prior to installation. "Gorilla-Hair" is not acceptable unless specifically noted for slope areas.

Crushed decorative stone less than 1" over filter weed fabric contained by steel edging. Contractor to submit sample to Landscape Architect for approval prior to installation.

Existing off-site lawn to remain

Planting Detail References
For Broadleaf Trees, refer to Detail A, Sheet L2
For Shrubs, refer to Detail B, Sheet L2
For Vines, refer to Detail D, Sheet L2
For Groundcovers, refer to Detail C, Sheet L2

NORTH
Scale: 1" = 16'-0"
0' 8' 16' 32'

811 Know what's below. Call before you dig. Dial 811 or 800-227-2600

EXHIBIT A

KLA LANDSCAPE ARCHITECTURE PLANNING
www.knoxla.com
151 N. Norlin St., Sonora, CA 95370
(209)532-2856 (209)532-9510 fax

LICENSED LANDSCAPE ARCHITECT THOMAS W. HOLLOWAY #3589 Signature Renewal Date Date STATE OF CALIFORNIA

Revisions
Date By
Modification

These plans are the property of KLA, Inc.; their use shall be restricted to the site for which they were prepared. Publication or other uses of these plans in whole or in part is not permitted without the express consent of KLA, Inc. Visual contact with these plans implies acceptance of the above restrictions.
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Mills Center Retail Pad
Rancho Cordova, CA

Wilson Architecture
609 15th Street
Modesto, CA 95354

The original size of this drawing is 24" x 36". If the plan is a different size than 24x36 do not scale off of the drawing.

Planting Plan

Scale: 1" = 16'-0"
Date: July 31, 2015
Drawn:\Checked: MBH / DFM
Project No.: 15-1743
Sheet Number: L2

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	Conditions of Approval	Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
General Conditions					
1.	The approved entitlement is for a Condition Use Permit (CUP) and Design Review Permit to establish a new Starbuck's cafe with a new drive-through in the existing Mills shopping center, as described in the City Council staff report dated October 19, 2015 and Project Plans (**Exhibit A**) with the conditions herein, for project number DD9606.	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	General	On-Going	Planning/ Building /Public Works	

	Conditions of Approval	Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	applicable decision making body.				
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	
5.	All reciprocal access and parking agreements shall be maintained and updated to reflect the new project layout. A copy of the recorded agreements shall be given to the Planning Department.	Compliance	On-Going	Planning	
Prior to Issuance of Building Permits					
6.	Applicant shall apply for an encroachment permit from the Public Works Department for the replacement of damaged sidewalk along property frontage to the satisfaction of The Public Works Department. Please contact the Public Works Department at (916) 851-8713 to arrange for a site meeting and markout of damaged sidewalk. Sidewalk panels shall be replaced to the nearest joint prior to occupancy.	Infrastructure	Prior to issuance of Building Permits	Public Works	
7.	Vents, gutters, downspouts, flashing, electrical conduits, etc., shall be painted to match the color of the adjacent surface, unless otherwise approved by	Architectural	Prior to Issuance of Building Permits	Planning	

	Conditions of Approval	Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	the Planning Department. Utility areas, electrical and gas meters shall be architecturally screened from view.				
8.	Construction plans must include all windows and final architectural element details to be reviewed and approved by the Planning Department. This includes all building fixtures, exterior lighting, walkway lighting, parking lot lighting, and street lights on the Site, Utility, Landscape, and Building Plans, prior to the issuance of any permits. The height and style of fixtures shall be shown. Energy-saving fixtures shall be used and noted on the plans and all illumination shall be installed in a manner that is glare shielded and directed away from adjacent properties and right-of-ways.	Architectural	Prior to Issuance of Building Permits	Planning	
9.	Rooftop equipment (HVAC, meters, refrigeration equipment, plumbing lines, ductwork and transformers), shall not extend above the building parapet and shall be screened from view on all sides with materials architecturally compatible with the main structure. Screening details shall be shown on the Building Plans and submitted for review and approval by the Planning Department, prior to the issuance of Building Permits and installed prior to occupancy approval.	Architectural	Prior to Issuance of Building Permits	Planning	
10.	Bicycle Parking (short and long term) shall be installed in accordance with RCMC 23.719.115. All parking shall be located near main entrances and not	Bicycle Parking	Prior to Issuance of Building Permits	Planning	

	Conditions of Approval	Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	impede onsite automobile and pedestrian access. The final design and location will be review and approved by the Planning Department.				
11.	Trash Enclosures shall comply with Zoning Code and Republic Services, Inc. standards regarding enclosure design, access requirements, and the number of required individual refuse receptacles based upon waste pickup schedules. Trash enclosures should incorporate the same architectural treatments, materials and colors as the main building in order to properly integrate within the project.	Architectural	Prior to Issuance of Building Permits	Planning/Building	
12.	A final landscape plan shall be submitted in conjunction with improvement plan and or building permit submittal and approved by the Planning and Public Works Departments prior to issuance of permits and/or any installation of landscape materials RCMC 23.716.020. The final landscape planting and irrigation plan shall be prepared by a registered licensed landscape architect and include the following items per RCMC 22.180.060: • Planting plan to scale that indicate slope • Irrigation Plan • Soils Test • Water Use Calculations • Irrigation Schedule	Landscaping	Prior to Issuance of Building Permits	Planning	

Conditions of Approval		Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
13.	The applicant shall install a minimum 3-foot tall shrubs within the existing planter along Folsom Boulevard as required by the zoning code. This is to minimize the visual impact of the drive-through reader board and directional signs, from the public right-of-ways	Landscaping	Prior to Issuance of Building Permits	Planning	
14.	Improvements for pedestrian access shall be made along the south end of the building to ensure pedestrian safety from Folsom Boulevard to the new café. Pathways shall be minimum 5-feet wide with landscape to be review and approved by the Planning Department. Pedestrian improvements can include a variety of traffic calming measures (i.e. raised crosswalk, raised intersections, enhanced stripping, signage, etc.) to be determined based on further analysis at the time of the improvement plans.	Pedestrian Safety	Prior to Issuance of Building Permits	Planning	
15.	Ensure that no debris or construction scrap material is placed on any adjoining lot, open space area, or street, and that any such material stored on an adjoining site shall be completely removed and the site cleaned, prior to occupancy approval.	Construction	Prior to Issuance of Building Permits	Planning/Building	
16.	All new buildings shall be review and approved by Sacramento Metro Fire Department.	Safety	Prior to Issuance of Building Permits	Metro Fire	
Prior to Certificate of Occupancy					
17.	Upon completion of the installation of the landscaping, the designer shall certify that the landscape complies with all city water conserving landscape	Landscaping	Prior to final building inspection	Planning	

	Conditions of Approval	Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	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				

The following items are noted for the applicant's information. These items are required by other local agencies, the City, state or federal agencies, and are not conditions of approval of the project.

1. Permits and/or fees are required for the following reviews: civil plans, architectural plans, fire sprinkler plans and fire alarm plans. Additional permits and fees may apply depending upon the scope of the project. (Fire Department)
2. The installation of on-site or off-site fire protection equipment, including fire hydrants and water mains, shall meet the standards of the Metro Fire District and the water purveyor having jurisdiction. (Metro Fire)
3. The installation of addresses, landscaping, tree wells and/or traffic islands are subject to the standards outlined by the Metro Fire District.
4. Gas service may be available to this project if desired. The developer should contact PG & E's Service Planning Department as soon as possible to coordinate construction so as not to delay the project. (PG&E)
5. Developers will construct a concrete base for placement of the centralized mail delivery unit after construction of curb, gutter and sidewalk. Specifications and location of such base shall be determined pursuant to the applicable requirements of the Postal Service and the Sacramento County Public Works Agency, with due consideration of street light location, traffic safety, security, and consumer convenience. (Post Office)
6. Skylight side panels that are placed next to entrance doors will not be on the same side as the lock mechanism of the door. Only one panel may be installed per door, adjacent to the hinges. (Police Department)
7. All external door frames, including the side garage, will have screws that are a minimum of three inches long in the strike plate. Strike plates should be anchored with a minimum of four screws. (Police Department)

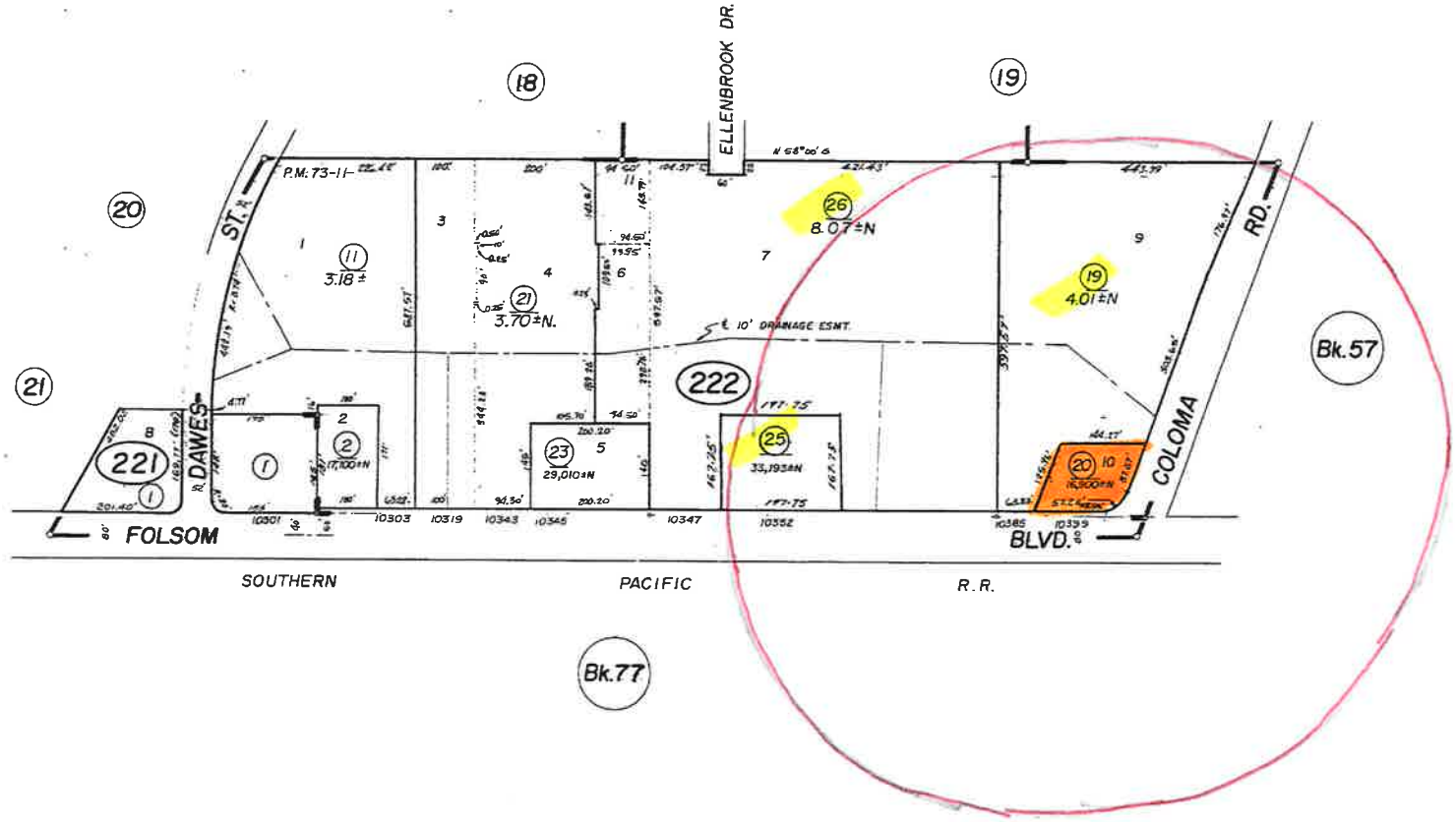
8. On-site source and control measures are required for this project in accordance with the latest version of the City/County Guidance Manual (Guidance Manual of On-Site Storm Water Quality Control Measures). In all cases, source control measures on the improvement plans will include provision of a permanent storm drain message "No Dumping – Flows to Creek" or other approved message shall be stamped in concrete at each inlet. Other on-site source and treatment control measure(s) should also be used in accordance with specific residential activities referenced in the Guidance Manual. The final design of the proposed on-site source and treatment controls will be approved by the Department of Water Resources. (Water Resources).
9. Project proponents and/or future successors of interests shall comply with all 'Water Supply' provisions established in Ordinance No. SZC 2002-0014, Control No. 93-0243.
10. All pedestrian access ramps affected by this project must be installed/upgraded pursuant to the State of California Title 24 Code of Regulations and to the satisfaction of the Department of Transportation of the Public Works Agency.

ATTACHMENT 2

POR. SEC. 34 T. 9N. R. 6E. M.D.B & M.

(PROJ. INTO RANCHO RIO DE LOS AMERICANOS)

Tax Area Code 76-22



MAY 06 2004

Cordova Park Unit No. 2 R.M. Bk.42 Pg.17

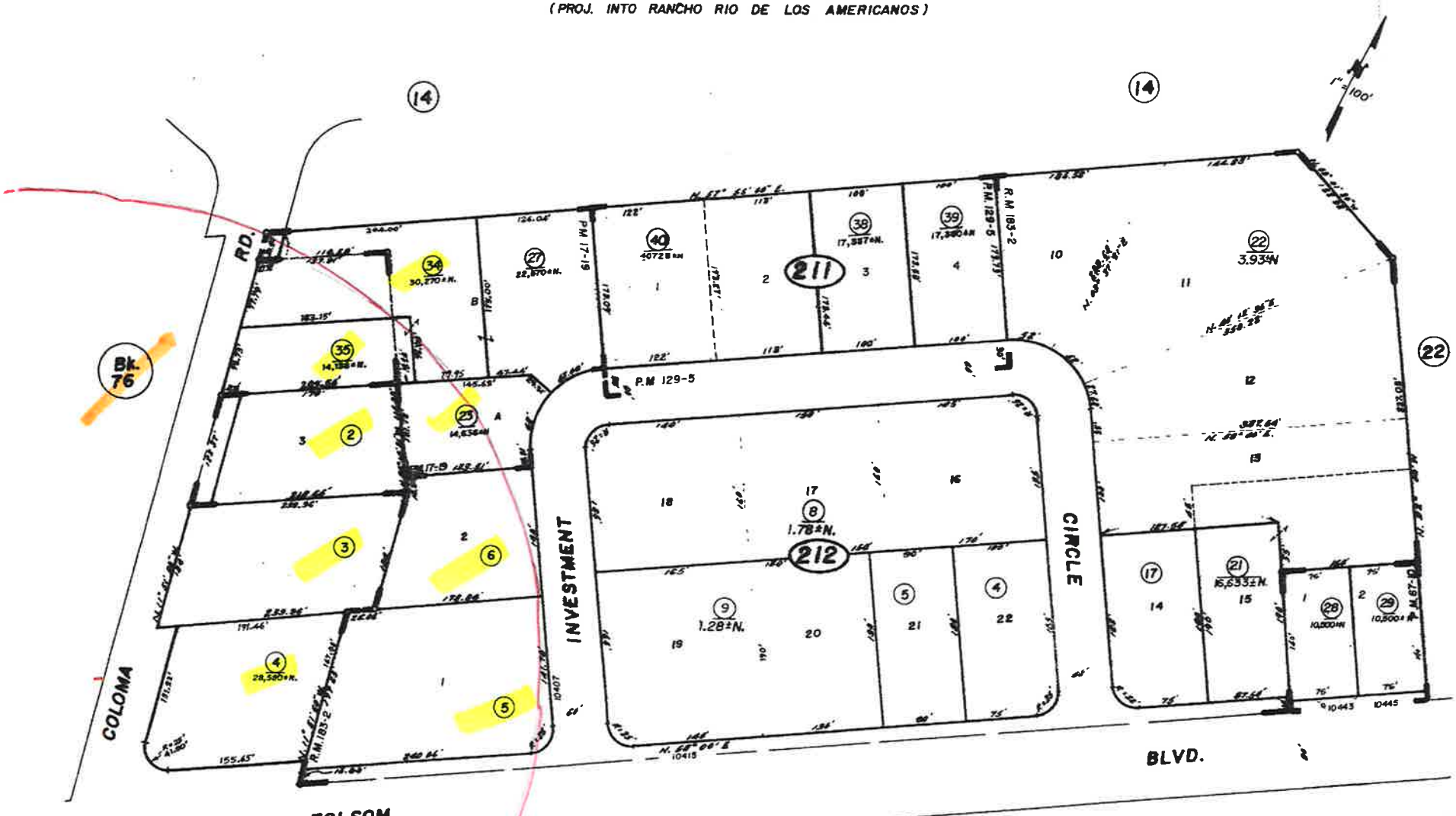
NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 76 –Pg.22
County of Sacramento, Calif.

ATTACHMENT 2

57-21

POR. SEC'S. 34 & 35 T. 9 N., R. 6 E., M.D.B. & M.
(PROJ. INTO RANCHO RIO DE LOS AMERICANOS)



Mills Commercial Park, R.M. Bk. 83, Pg. 2

Assessor's Map Bk. 57-Pg. 21
County of Sacramento, Calif.

MAY 2 0 2006

Tax Area Code 72-13

POR. SEC. 34, T.9N., R.6E. M.D.B.&M.
(PROJ. INTO RANCHO RIO DE LOS AMERICANOS)

Mills Park Terrace Unit I, R.M. Bk. 53, Pg. 11

NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

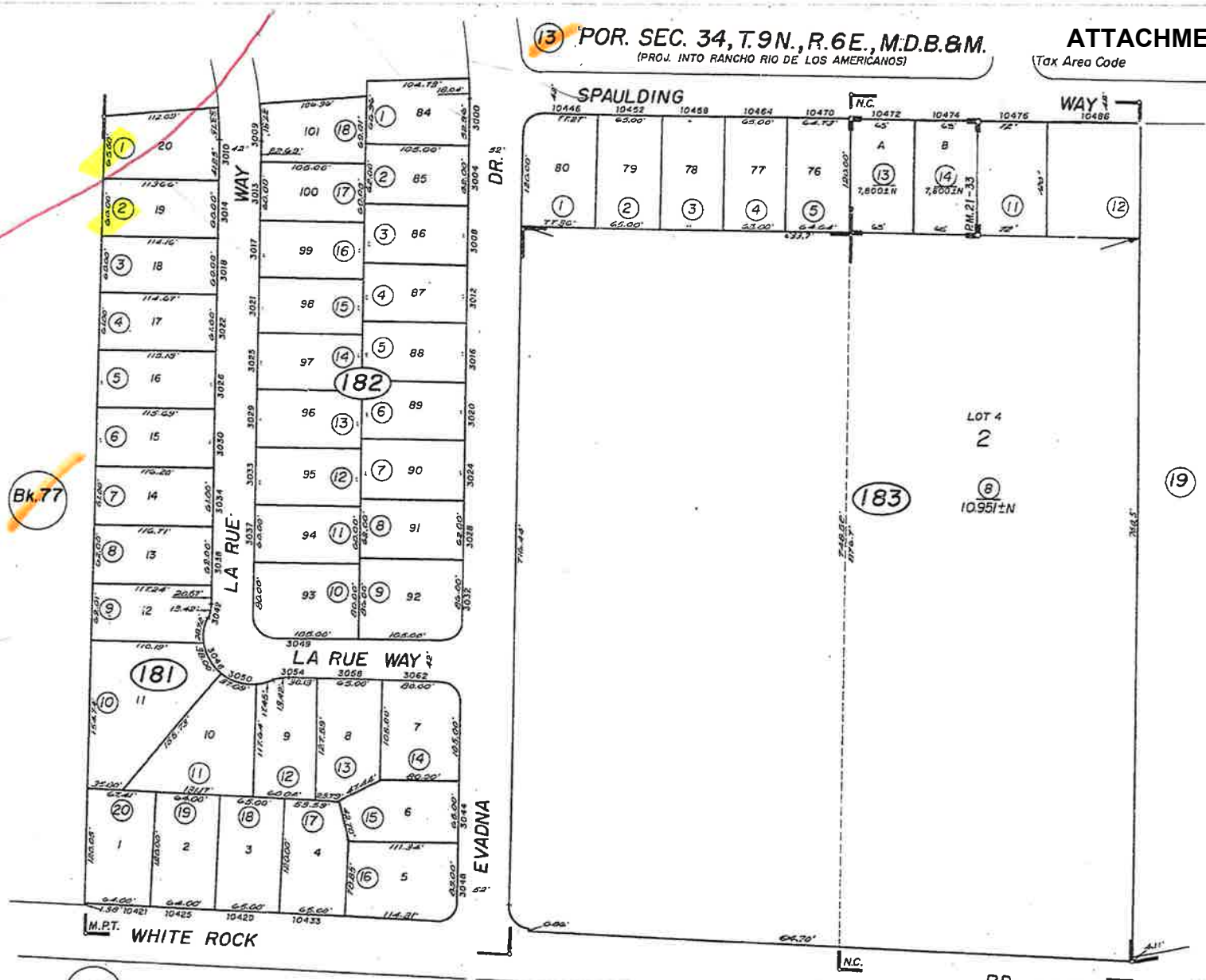
Assessor's Map Bk. 72–Pg. 13
County of Sacramento, Calif.

ATTACHMENT 2

72-18

(13) POR. SEC. 34, T.9N., R.6E., M.D.B.&M.
(PROJ. INTO RANCHO RIO DE LOS AMERICANOS)

Tax Area Code



Bk.77 Mills Park Terrace Unit 1, R.M.Bk.53, Pg.11
Natomas Consolidated Sub. No.3, R.M. Bk.14, Pg.46

NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

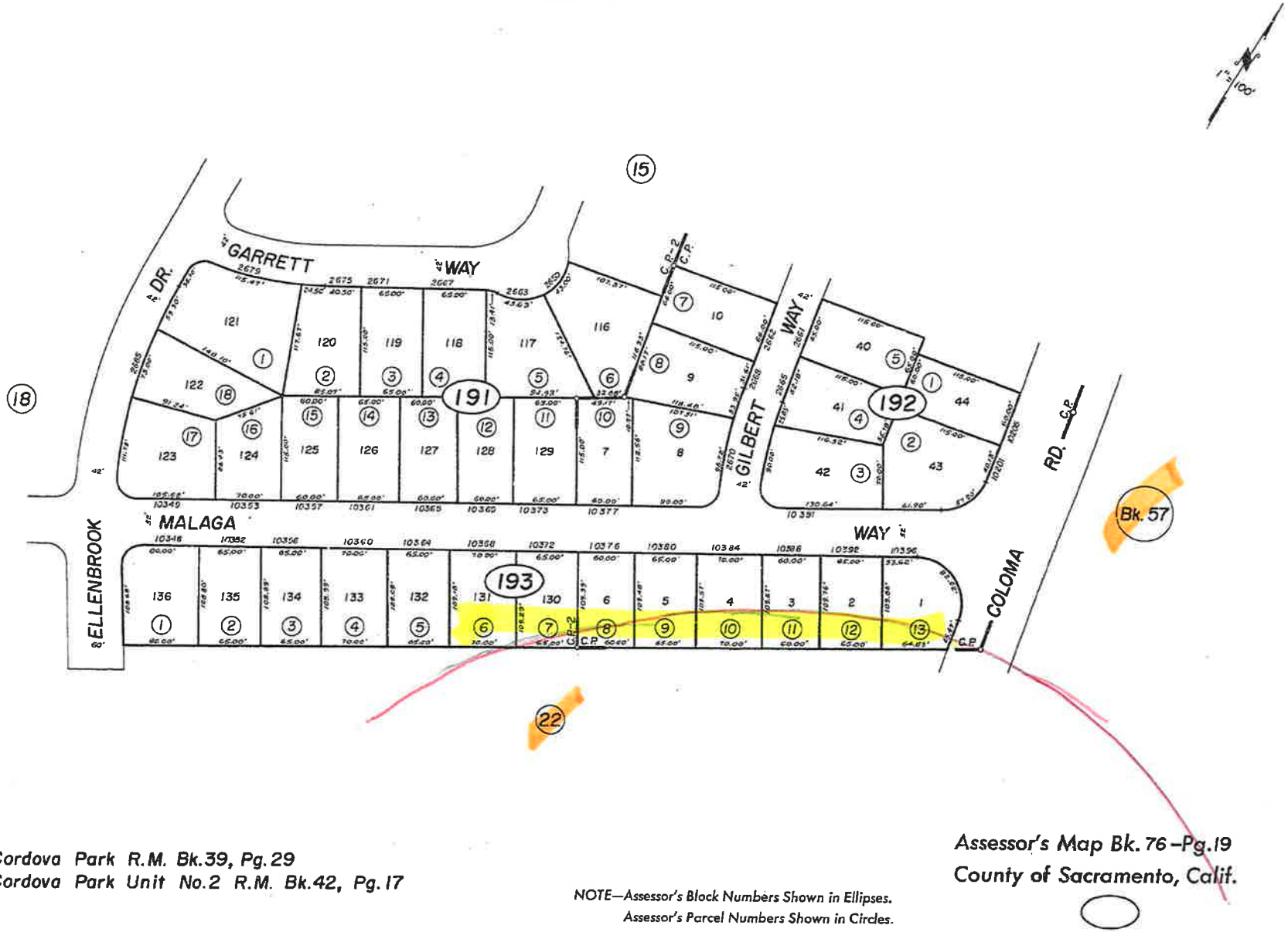
Assessor's Map Bk.72—Pg.18
County of Sacramento, Calif.

POR. SEC. 34 T. 9N., R. 6E. M.D.B. & M.

(PROJ. INTO RANCHO RIO DE LOS AMERICANOS)

Tax Area Code

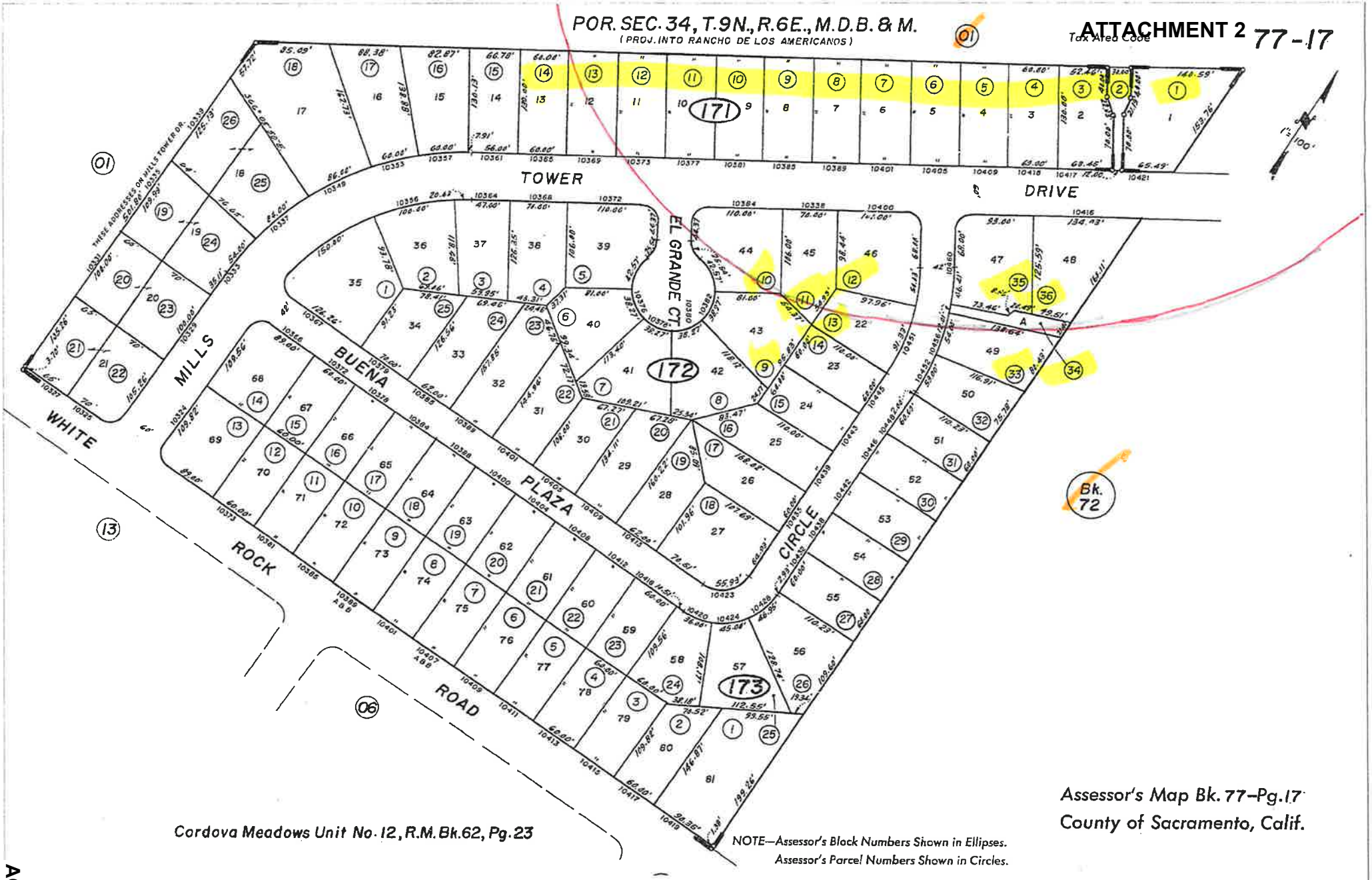
ATTACHMENT 2 76-19



Cordova Park R.M. Bk.39, Pg.29
Cordova Park Unit No.2 R.M. Bk.42, Pg.17

NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk. 76 –Pg.19
County of Sacramento, Calif.


POR. SEC. 34, T.9N., R.6E., M.D.B. & M.
(PROJ. INTO RANCHO DE LOS AMERICANOS)
Tax Area Code
01
TOWER
DRIVE
EL GRANDE CT.
BUENA
PLAZA
CIRCLE
WHITE
ROCK
ROAD
MILLS
THESE ADDRESSES ON MILLS TOWER DR.
171
172
173
Bk. 72
06
13
Cordova Meadows Unit No. 12, R.M. Bk. 62, Pg. 23
NOTE—Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.
Assessor's Map Bk. 77–Pg. 17
County of Sacramento, Calif.

ATTACHMENT 2

057 0211 002 0000
Ho & Chong Kim
11617 Union Mill Way
Gold River, CA 95670-8246

057 0211 003 0000
Rancho Cordova Lodge No 2357 Loyal Order
10124 Coloma Rd #2357
Rancho Cordova, CA 95670-4602

057 0211 004 0000
Lee Partnership
Po Box 221385
Sacramento, CA 95822-8385

057 0211 005 0000
Kincade 10407 LLC
5016 Alterra Way
Sacramento, CA 95835-1619

057 0211 006 0000
Rancho Cordova Lodge No 2357 Loyal Order
10124 Coloma Rd
Rancho Cordova, CA 95670-4602

057 0211 023 0000
Gen2gen LLC
10416 Investment Cir
Rancho Cordova, CA 95670-4605

057 0211 034 0000
Hanan & Sabah Francis
4030 Truxel Rd
Sacramento, CA 95834-3767

057 0211 035 0000
Sabah & Hanan Francis
4030 Truxel Rd
Sacramento, CA 95834-3767

072 0131 001 0000
Gary Kerekes
10425 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 002 0000
Daniel & Donna Eisner
10429 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 003 0000
Nicolas Haro Carlos
10433 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 004 0000
Jay Yang
10437 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 005 0000
O Cha
10441 Mills Tower Dr
Rancho Cordova, CA 95670-5443

072 0132 002 0000
Nicolai Turanschi
3000 La Rue Way
Rancho Cordova, CA 95670-5411

072 0132 003 0000
Virginia Jeannette Foster
2542 Queenwood Dr
Rancho Cordova, CA 95670-5111

072 0133 001 0000
Doug Ratliff
10426 Mills Tower Dr
Rancho Cordova, CA 95670-5440

072 0133 002 0000
Ruslan & Vera Savca
10430 Mills Tower Dr
Rancho Cordova, CA 95670-5439

072 0133 003 0000
Ligaya Cheeseman
10434 Mills Tower Dr
Rancho Cordova, CA 95670-5439

072 0133 006 0000
Marcel & Lorraine Clemmons
3005 La Rue Way
Rancho Cordova, CA 95670-5410

072 0181 001 0000
B & F Printing Inc
394 Wilde Ave
San Francisco, CA 94134-2252

072 0181 002 0000
Werking
9830 Mira Del Rio Dr
Sacramento, CA 95827-1323

076 0193 006 0000
Frank & Connie Munoz
10368 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 007 0000
Timothy & Debra Van Noy
10372 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 008 0000
Nancy Oller
Po Box 1602
Rancho Cordova, CA 95741-1602

076 0193 009 0000
Tatyana McFarland
10380 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 010 0000
Hamid Behshad
10384 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 011 0000
Maria Sandoval
10388 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 012 0000
Donald Records
10392 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 013 0000
Billy Palomares
10396 Malaga Way
Rancho Cordova, CA 95670-3529

076 0222 019 0000
Roic Ca LLC
8905 Towne Centre Dr #108
San Diego, CA 92122-5608

ATTACHMENT 2

076 0222 020 0000
Roic Ca LLC
8905 Towne Centre Dr #108
San Diego, CA 92122-5608

076 0222 025 0000
Roic Ca LLC
8905 Towne Centre Dr #108
San Diego, CA 92122-5608

076 0222 026 0000
Roic Ca LLC
8905 Towne Centre Dr #108
San Diego, CA 92122-5608

077 0171 001 0000
Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 002 0000
County Of Sacramento
827 7th St
Sacramento, CA 95814-2406

077 0171 003 0000
Colombini Gene 2004 Special Needs
Po Box 393
Forestville, CA 95436-0393

077 0171 004 0000
Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 005 0000
J Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 006 0000
Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 007 0000
Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 008 0000
Milo & Garth II
524 N Crescent Heights Blvd
Los Angeles, CA 90048-2208

077 0171 009 0000
Milo & Garth II
524 N Crescent Heights Blvd
Los Angeles, CA 90048-2208

077 0171 010 0000
Msp LLC
Po Box 1325
Folsom, CA 95763-1325

077 0171 011 0000
Garth & Vicki Mason
4661 Mossy Glen Ct
Shingle Springs, CA 95682-9413

077 0171 012 0000
Bernest Burnett
10375 Mills Tower Dr
Rancho Cordova, CA 95670-5444

077 0171 013 0000
William Carlton
Po Box 7035
Folsom, CA 95763-7035

077 0171 014 0000
Melba Wood
10365 Mills Tower Dr
Rancho Cordova, CA 95670-5444

077 0172 009 0000
Frank & Dorothy Scott
Po Box 245238
Sacramento, CA 95824-5238

077 0172 010 0000
Alina Katrechko
5673 Mesa Verde Cir
Rocklin, CA 95677-2625

077 0172 011 0000
Tuan Mai & Phung Loan Nguyen Ab Livi
1549 Bittern Dr
Sunnyvale, CA 94087-3339

077 0172 012 0000
Barbara Price
Po Box 627
Fair Oaks, CA 95628-0627

077 0172 013 0000
Eric Hampton
2142 Monifieth Way
Sacramento, CA 95822-3958

077 0173 033 0000
Dickson
6233 Cole Ave
Carmichael, CA 95608-4512

077 0173 034 0000
James & Shirley Dickson
6233 Cole Ave
Carmichael, CA 95608-4512

077 0173 035 0000
Darvin Bryant
14769 Guadalupe Dr
Rancho Murieta, CA 95683-9439

077 0173 036 0000
Wood Melba
10836 Glenhaven Way
Rancho Cordova, CA 95670-4947

ATTACHMENT 2

057 0211 002 0000
Occupant At
10134 Coloma Rd
Rancho Cordova, CA 95670-4602

057 0211 003 0000
Occupant At
10124 Coloma Rd #2357
Rancho Cordova, CA 95670-4602

057 0211 004 0000
Occupant At
10401 Folsom Blvd
Rancho Cordova, CA 95670-4635

057 0211 005 0000
Occupant At
10407 Investment Cir
Rancho Cordova, CA 95670-0000

057 0211 006 0000
Occupant At
10408 Investment Cir
Rancho Cordova, CA 95670-0000

057 0211 023 0000
Occupant At
10416 Investment Cir
Rancho Cordova, CA 95670-4605

057 0211 034 0000
Occupant At
10154 Coloma Rd
Rancho Cordova, CA 95670-4602

057 0211 035 0000
Occupant At
10138 Coloma Rd
Rancho Cordova, CA 95670-4602

072 0131 001 0000
Occupant At
10425 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 002 0000
Occupant At
10429 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 003 0000
Occupant At
10433 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 004 0000
Occupant At
10437 Mills Tower Dr
Rancho Cordova, CA 95670-5414

072 0131 005 0000
Occupant At
10441 Mills Tower Dr
Rancho Cordova, CA 95670-5443

072 0132 002 0000
Occupant At
3000 La Rue Way
Rancho Cordova, CA 95670-5411

072 0132 003 0000
Occupant At
3006 La Rue Way
Rancho Cordova, CA 95670-5411

072 0133 001 0000
Occupant At
10426 Mills Tower Dr
Rancho Cordova, CA 95670-5440

072 0133 002 0000
Occupant At
10430 Mills Tower Dr
Rancho Cordova, CA 95670-5439

072 0133 003 0000
Occupant At
10434 Mills Tower Dr
Rancho Cordova, CA 95670-5439

072 0133 006 0000
Occupant At
3005 La Rue Way
Rancho Cordova, CA 95670-5410

072 0181 001 0000
Occupant At
3010 La Rue Way
Rancho Cordova, CA 95670-5411

072 0181 002 0000
Occupant At
3014 La Rue Way
Rancho Cordova, CA 95670-5411

076 0193 006 0000
Occupant At
10368 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 007 0000
Occupant At
10372 Malaga Way
Rancho Cordova, CA 95670-3529

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Occupant At
10376 Malaga Way
Rancho Cordova, CA 95670-3529

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Occupant At
10380 Malaga Way
Rancho Cordova, CA 95670-3529

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Occupant At
10384 Malaga Way
Rancho Cordova, CA 95670-3529

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Occupant At
10388 Malaga Way
Rancho Cordova, CA 95670-3529

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Occupant At
10392 Malaga Way
Rancho Cordova, CA 95670-3529

076 0193 013 0000
Occupant At
10396 Malaga Way
Rancho Cordova, CA 95670-3529

076 0222 019 0000
Occupant At
10385 Folsom Blvd
Rancho Cordova, CA 95670-3518

ATTACHMENT 2

076 0222 020 0000
Occupant At
10399 Folsom Blvd
Rancho Cordova, CA 95670-3518

076 0222 025 0000
Occupant At
10355 Folsom Blvd
Rancho Cordova, CA 95670-3518

076 0222 026 0000
Occupant At
10347 Folsom Blvd
Rancho Cordova, CA 95670-3518

077 0171 001 0000
Occupant At
10421 Mills Tower Dr
Rancho Cordova, CA 95670-5414

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Occupant At
Mills Tower Dr
Rancho Cordova, CA 95670-0000

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Occupant At
10417 Mills Tower Dr
Rancho Cordova, CA 95670-5414

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Occupant At
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Rancho Cordova, CA 95670-5414

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Occupant At
10409 Mills Tower Dr
Rancho Cordova, CA 95670-5414

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Occupant At
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Rancho Cordova, CA 95670-5414

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Occupant At
10401 Mills Tower Dr
Rancho Cordova, CA 95670-5414

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Occupant At
10389 Mills Tower Dr
Rancho Cordova, CA 95670-5444

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Occupant At
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Rancho Cordova, CA 95670-5444

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Rancho Cordova, CA 95670-5444

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Occupant At
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Rancho Cordova, CA 95670-5374

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Occupant At
10384 Mills Tower Dr
Rancho Cordova, CA 95670-5441

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Occupant At
10388 Mills Tower Dr
Rancho Cordova, CA 95670-5441

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Occupant At
10400 Mills Tower Dr
Rancho Cordova, CA 95670-5415

077 0172 013 0000
Occupant At
10451 Buena Plaza Cir
Rancho Cordova, CA 95670-5403

077 0173 033 0000
Occupant At
10456 Buena Plaza Cir
Rancho Cordova, CA 95670-5404

077 0173 034 0000
Occupant At
Buena Plaza Cir
Rancho Cordova, CA 95670-0000

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Occupant At
10460 Buena Plaza Cir
Rancho Cordova, CA 95670-5404

077 0173 036 0000
Occupant At
10416 Mills Tower Dr
Rancho Cordova, CA 95670-5440

FEHR PEERS

TECHNICAL MEMORANDUM

Date: September 18, 2015

To: Robert Doran, ROIC California, LLC

From: Ryan Sager, Fehr & Peers
David B. Robinson, Fehr & Peers

Subject: ***Folsom Boulevard Starbucks Traffic Impact Study***

RS15-3329

Fehr & Peers completed its analysis of the proposed Folsom Boulevard Starbucks planned within the Mills Shopping Center along Folsom Boulevard in Rancho Cordova, CA. This technical memorandum presents a summary of our findings followed by a detailed discussion of our analysis assumptions, methodologies, and results, organized into the following sections:

I. Summary of Findings
II. Existing Conditions
III. Project Travel Characteristics
IV. Existing Plus Project Conditions
V. Cumulative Conditions
VI. Cumulative Plus Project Conditions

The proposed project would convert a portion of an existing building within the Mills Shopping Center (located at 10345 Folsom Boulevard) into a Starbucks. The proposed project consists of a 2,050 sq. ft. Starbucks with indoor and outdoor seating, and a drive-thru. **Figure 1** shows the project location.

I. Summary of Findings

The proposed project would generate about 206 gross trips during the weekday AM peak hour and 88 gross trips during the weekday PM peak hour. These consist of both new trips and pass-by trips, which are trips made my motorists who are already on the adjacent roadways and enter the site en route to a different primary destination. Following are the conclusions of the "existing plus project" analysis of study intersections.

- The proposed project would increase the average delay at study intersections by no more than one second, and no LOS standards would decrease due to the project.
- No significant queueing issues would arise due to the proposed project.

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1 Study Intersection

Project Site

Figure 1

Study Area

Cumulative conditions were analyzed using future year 2035 forecasts based on SACOG's MTP/SCS 2035 model, and included such land uses as the Folsom Lake College – Rancho Cordova Center project. Following are the conclusions of the "cumulative plus project" analysis of study intersections.

- The proposed project would increase the average delay at study intersections by no more than one second, and no LOS standards would decrease due to the project.
- No significant queueing issues would arise due to the proposed project.

Since no study intersections would experience any degradation in LOS or queuing, no impacts to the study intersections would arise due to the proposed project in either existing or cumulative years.

II. Existing Conditions

The following five intersections and driveways were selected for analysis based on discussions with City staff. This study area was chosen based on the project's travel characteristics, including the directionality of travel and peak hours of operation:

1. Folsom Boulevard/Mather Field Road
2. Folsom Boulevard/Dawes Street
3. Folsom Boulevard/Starbucks Driveway
4. Folsom Boulevard/McDonalds Driveway
5. Folsom Boulevard/Coloma Road

Roadway System

We collected traffic counts at all five intersections on Tuesday, July 16, 2015. **Figure 2** shows existing AM and PM peak hour intersection traffic volumes at the study intersections. Since the counts were conducted when school was out of session, the traffic volumes were compared to City of Rancho Cordova counts for reasonableness and to identify if adjustments were necessary to account for school-related traffic. Available traffic counts on Folsom Boulevard showed that the collected counts were within three percent (+/-) of the previously collected counts. Therefore, no adjustments were made to the intersection turning movements.

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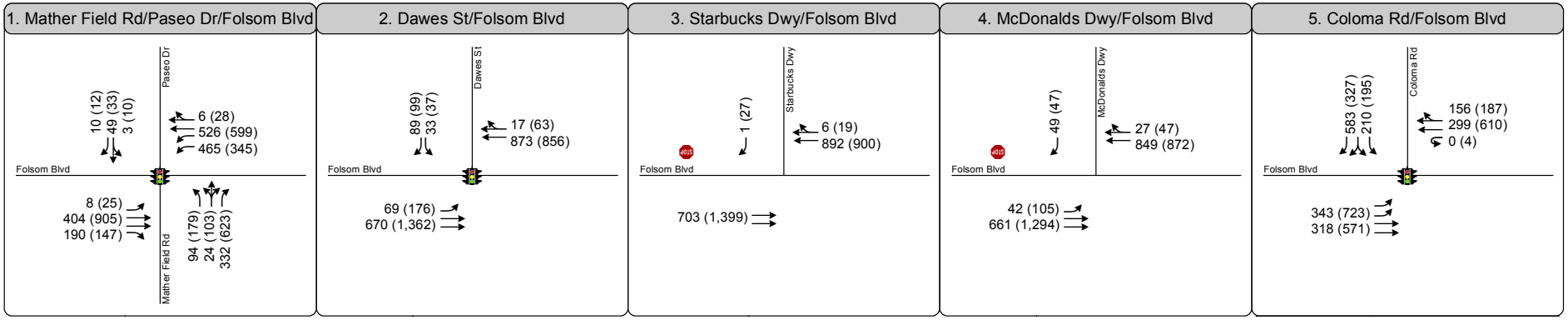

1 Study Intersection

Project Site

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 2

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

Field observations reveal long vehicle queues on Mather Field Road (northbound) approaching Folsom Boulevard, primarily due to the Light Rail crossing preemption. Observed vehicle queues at all other intersections were contained within available turn pocket storage.

Bicycle/Pedestrian System

Figure 3 displays the pedestrian facilities located near the project site. As shown, sidewalks are continuous along the project frontage on Folsom Boulevard, Dawes Street, and Coloma Road. The Dawes Street/Folsom Boulevard and Coloma Road/Folsom Boulevard intersections have crosswalks on all approaches with pedestrian-actuated push-button signals.

Transit System

Transit service within the study area is provided by fixed-bus routes and light rail, operated by Sacramento Regional Transit (RT). As shown on **Figure 3**, two bus shelters are located on westbound Folsom Boulevard along the Mills Shopping Center frontage with one directly in front of the proposed Starbucks. Additionally, the Mather Field/Mills light rail station is located on the southwest corner of the Mather Field Road/Folsom Boulevard intersection, serving the east-west Gold line, which provides service between Downtown Sacramento and the City of Folsom. The project is served by the following bus routes:

Route 21 provides service on Folsom Boulevard starting from the Mather Field/Mills light rail station on Folsom Boulevard to the Louis & Orlando transit center on Auburn Boulevard. Route 21 operates Monday through Friday on approximately 30-minute headways from 5:00 AM to 10:30 PM. For Saturday, Sunday, and Holidays, Route 21 operates on 1-hour headways from 6:00 AM to 9:00 PM. The nearest transit stops to the project site in the westbound direction are located in the northwest corner of the Coloma Road/Folsom Boulevard intersection and in front of the proposed project (adjacent to project site). In the eastbound direction, there is a bus stop located north of the Folsom Boulevard/Coloma Road intersection.

Route 28 provides service on Folsom Boulevard starting from the Sunrise Mall to Butterfield Light Rail Station. This route begins at Sunrise Mall and continues south along Sunrise Boulevard turning west onto Zinfandel Drive. This route continues until reaching Folsom Boulevard where it heads west to the Light Rail Station. Route 28 operates Monday through Friday on approximately 30-minute headways from 5:00 AM to 7:00 PM. There is no Saturday or Sunday service. Route 28 stops in the westbound direction are located in the northwest corner of the Coloma Road/Folsom Boulevard intersection front of the KFC on Folsom Boulevard as well as in front of the proposed project (adjacent to the project site). In the eastbound direction, there is a bus stop located on the corner of Folsom Boulevard/Coloma Road.

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Bus Stop
Sidewalk/Crosswalk
Class II Bike Lane
Project Site

Figure 3
Existing Transit, Bicycle & Pedestrian Facilities

Analysis Methodology

The study area (including intersections and roadways) was analyzed using Synchro 8. The level of service (LOS) at signalized intersections is based on the average delay experienced by all motorists traveling through the intersection as described in the 2010 *Highway Capacity Manual* (HCM). At side-street stop-controlled intersections, the average delay and LOS is reported for the minor street movement with the greatest delay and for the overall intersection. **Table 1** displays the average delay range for each LOS category associated with signalized and unsignalized intersections.

TABLE 1:

INTERSECTION LEVEL OF SERVICE THRESHOLDS

LOS	Description (for signalized intersections)	Average Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay occurring with favorable traffic signal progression and/or short cycle lengths.	≤ 10.0	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0	> 10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0	> 15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0	> 25.0 to 35.0
E	Operations with high delay values indicating poor progression, and long cycle lengths. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to 80.0	> 35.0 to 50.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2010.

Minimum Level of Service

As instructed by the City of Rancho Cordova, the minimum Level of Service standards for facilities in this area follow the County of Sacramento *Traffic Impact Analysis Guidelines* (July 2004). Thus, LOS "E" is the acceptable Level of Service for urban areas and LOS "D" for rural areas. This project is in an urban area of Sacramento County, and therefore the LOS "E" threshold is applicable.

Existing Intersection Operations

Table 2 displays the existing average delay and level of service (LOS) at the study intersections. Refer to Attachment A for technical calculations. The Mather Field Road/Folsom Boulevard intersection was analyzed by averaging the delay with and without the light rail passing to account for delay caused by waiting for trains to pass. As shown, all intersections operate acceptably at LOS D or better today, with Mather Field Road/Folsom Boulevard having the highest delay. These results are consistent with field observations, which indicate free-flow travel on all study roadways and little delay.

TABLE 2:

INTERSECTION LEVEL OF SERVICE – EXISTING CONDITIONS

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay[1]	LOS	Delay[1]	LOS
1. Folsom Boulevard/Mather Field Road	Signal	29	C	41	D
2. Folsom Boulevard/Dawes Street	Signal	6	A	8	A
3. Folsom Boulevard/Starbucks Driveway	SSSC[2]	1 (12)	A (B)	1 (12)	A (B)
4. Folsom Boulevard/McDonalds Driveway	SSSC[2]	1 (13)	A (B)	1 (12)	A (B)
5. Folsom Boulevard/Coloma Road	Signal	14	B	18	B

Notes:

[1] Delay is reported per *2010 HCM* methodologies. Average intersection delay, in seconds per vehicle, reported for signal and all-way stop intersections. Worst movement delay, in seconds per vehicle, reported for side-street stop intersections. All results are rounded to the nearest second.

[2] SSSC – Side-Street Stop Control

BOLD type indicates unacceptable operations.

Source: Fehr & Peers, 2015.

Collision History

Table 3 summarizes reported collisions at the study intersections from January 2012 through December 2014. The Folsom Boulevard/Mather Field Road intersection experienced the most collisions, and had the highest collision rate. About 40 percent of the collisions at this intersection were injury-related. Two collisions at the Folsom Boulevard/Coloma Road intersection and one collision at the McDonald's Driveway involved bicyclists. All three of the auto-bicycle collisions involved bicyclists travelling in the wrong direction.

TABLE 3:

COLLISION HISTORY AT STUDY INTERSECTIONS

Intersection	Number of Collisions					Most Common Collision Type	Most Common Primary Collision Factor (PCF)	Collision Rate[2]
	3-Year Total[1]	Average Per Year	Total Injury Collisions	Total Fatal Collisions	Total Involving Peds or Bicyclists			
1. Folsom Boulevard/Mather Field Road	16	5	6	1	4	Rear-End	Unsafe Speeds	0.45
2. Folsom Boulevard/Dawes Street	7	2	2	0	3	Broadside / Read-End	Unsafe Speeds	0.21
3. Folsom Boulevard/Starbucks Driveway	0	0	0	0	0	N/A	N/A	0
4. Folsom Boulevard/McDonalds Driveway	2	1	2	0	1	Broadside	Wrong Side of Road	0.17
5. Folsom Boulevard/Coloma Road	9	3	4	0	4	Broadside	Wrong Side of Road	0.31

Notes:

[1]Total number of collisions from January 2012 through December 2014.

[2]The collision rate is expressed as accidents per million vehicles entering the intersection.

Source: Fehr & Peers, 2015.

The most common collision type was broadside collisions, followed by rear-end collisions. The primary collision factors were mostly related to unsafe speeds and travelling on the wrong side of the road. Rear-end collisions are typical on major arterials with traffic signals, while broadside collisions are typical of uncontrolled intersections.

III. Project Travel Characteristics

This section describes the project's expected travel characteristics including trip generation and trip distribution.

Trip Generation

The trip generation rate was based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* (2012). The Coffee/Donut Shop with Drive-Through Window land use was used to establish

peak hour trips for the site. Using this land use, 206 AM peak hour trips and 88 PM peak hour trips are projected based on the proposed square footage of 2,050.

We developed pass-by[1] rates based on AM peak hour customer trip purpose surveys previously collected at a Starbucks in San Jose, California. Based on those interviews, 78% of the AM peak hour trips are pass-by (i.e. Starbucks is not their primary destination). We used a pass-by percentage of 50% for PM peak hour conditions based on information contained in the ITE *Trip Generation Handbook* (2012). The 50% pass-by rate was based on the ITE rates for a Fast-Food Restaurant with Drive-Through Window. ITE does provide a pass-by rate for a coffee shop with a drive through, but this category does not include indoor seating. Therefore, the more conservative estimate of 50% has been used.

In order to understand the impact the project will have on study intersections, proposed project trips generated were analyzed against those of the entitled existing land use. To calculate the entitled land use trips, the Shopping Center land use was selected from the ITE *Trip Generation Manual* (2012). Using the ITE trip generation formula associated with Shopping Centers and 239,081 square feet for the Mills Shopping Center, 265 AM peak hour trips and 1074 PM peak hour trips were projected to be generated by the site. These trips were adjusted proportionately to the 2,050 square foot entitled land use and its function, equating to 7 AM peak hour trips and 27 PM peak hour trips. Subtracting the entitled and pass-by trips from the total Starbucks trips yielded a delta providing the net project trips, which can be seen in Table 4.

[1] Pass-by trips are trips already on the adjacent roadway that simply "stop-by" the proposed development on the way to a primary destination. Pass-by trips do not add traffic to nearby intersections.

TABLE 4:

TRIP GENERATION ESTIMATES

Land Use	Amount	Trip Rate[1]						Trips					
		AM			PM			AM			PM		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Starbucks	2.05 ksf[2]	51.3	49.3	100.6	21.4	21.4	42.8	105	101	206	44	44	88
Total Starbucks Trips:								***105***	***101***	***206***	***44***	***44***	***88***
Starbucks Pass-By (AM Peak Hour: 78%, PM Peak Hour: 50%):								- 80	- 80	- 160	- 22	- 22	- 44
Entitled Use	2.05 ksf[2]	ITE Formula			ITE Formula			- 4	- 3	- 15	- 12	- 15	- 44
Net New Trips:								***21***	***18***	***39***	***10***	***7***	***17***

Notes:

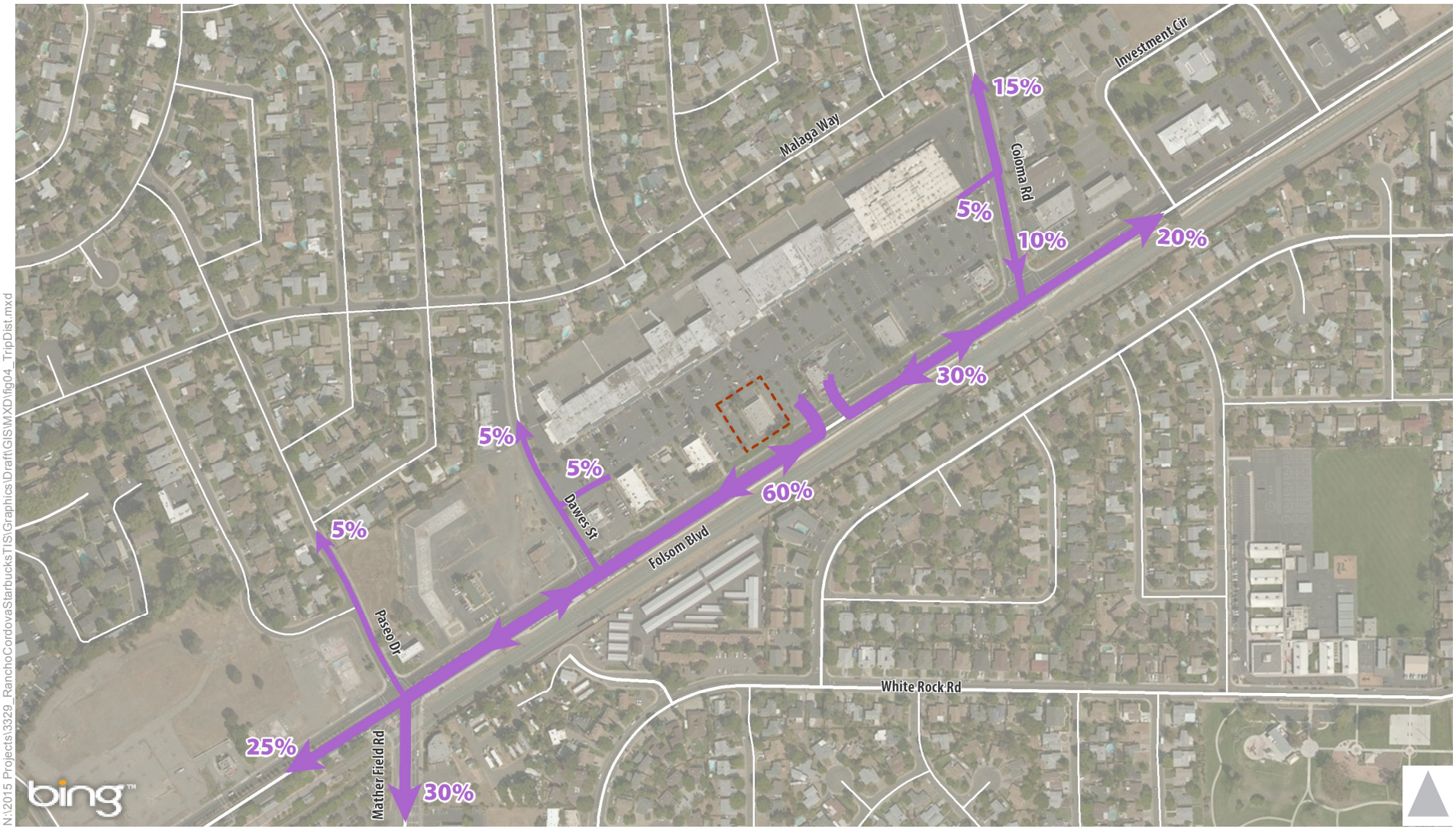
[1] Trip generation rates are based on *Trip Generation Handbook* (ITE, 2012). AM peak hour pass-by rate based on trip surveys conducted by Fehr & Peers at a Starbucks located in San Jose, CA. PM peak hour pass-by rate based on *Trip Generation Handbook* (ITE, 2012).

[2] ksf= 1,000 square feet

Source: Fehr & Peers, 2015.

New Trips

We estimated the distribution of new trips generated by the proposed project using the Sacramento Area Council of Governments (SACOG) regional travel demand model, the location of complementary land uses, and existing traffic patterns in the study area. **Figure 4** shows the assumed trip distribution.



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Trip Distribution (Inbound & Outbound)

Project Site

Figure 4

Trip Distribution

Pass-By Trips

Pass-by trips are trips already on the adjacent roadway system that make an intermediate stop at the project site on their way to a primary destination. Pass-by trips will follow the same trip distribution as new trips.

Trip Distribution

Using the trip generation and trip distribution estimates, we assigned trips to the adjacent roadway system. Trip assignments for net new project trips (see **Figure 5**) and pass-by trips (see **Figure 6**) were developed. We combined these trip assignments to develop plus project turning movements at the study intersections.

Site Access and Circulation

Direct vehicular access to the project would be provided by an existing right-in/right-out driveway located on Folsom Boulevard. Left-in access along Folsom Boulevard is possible through the McDonalds driveway. Full access is also possible on driveways along Dawes Street and Coloma Road.

Fehr & Peers reviewed the proposed site plan to assess site-access and on-site circulation. After conducting a site visit to a similar Starbucks in Rancho Cordova located at 3110 Sunrise Boulevard during the AM and PM peak hours, it was determined that the drive-thru queue from this project would be contained within the shopping center and not impact Folsom Boulevard operations.

IV. Existing Plus Project Conditions

This section analyzes the effects of the project under existing conditions. Traffic forecasts are first presented, followed by the traffic operations analysis results.

Traffic Forecasts

Net new project trips were assigned to the study intersections in accordance with the trip generation and distribution estimates in the previous section. Net new project trips were added to the existing volumes to yield the existing plus project forecasts shown on **Figure 7**.

Table 5 displays the average delay and LOS for critical stop-controlled movements at the study intersections under existing plus project conditions. As shown, all study intersections would operate acceptably with the addition of project traffic under existing conditions. Refer to Attachment B for technical calculations.

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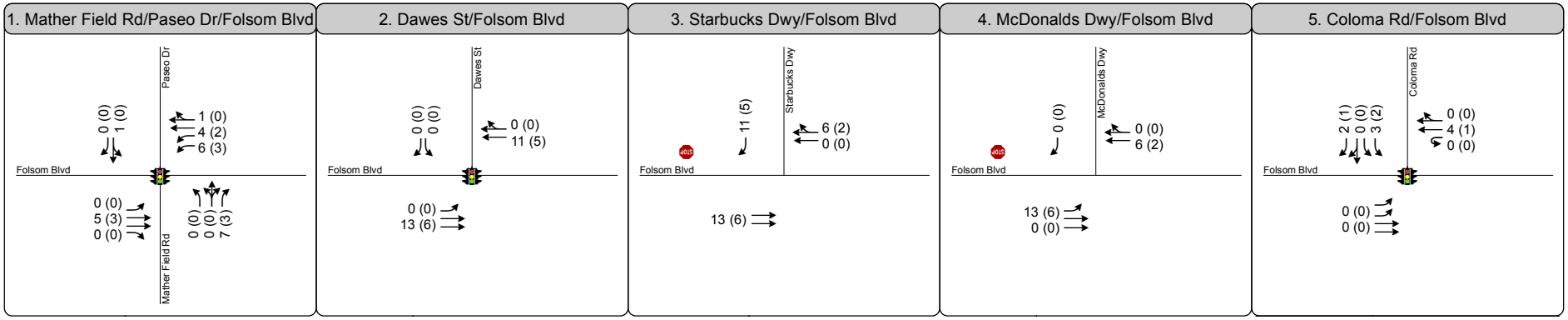

1	Study Intersection		Turn Lane
	Project Site	AM (PM)	Peak Hour Traffic Volume
			Traffic Signal
			Stop Sign

Figure 5

Peak Hour Traffic Volumes and Lane Configurations - Net Project Trips Only Conditions

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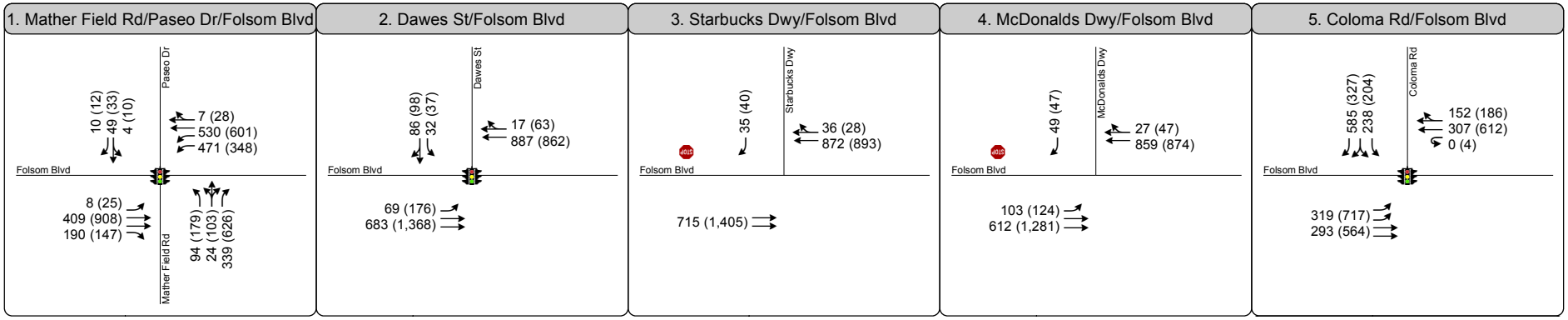
23 (8) AM (PM) Peak Hour Trip

Project Site

Figure 6

Pass-By Trip Distribution



1 Study Intersection

Project Site

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 7

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

TABLE 5:

INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT CONDITIONS

Intersection	Control	Existing				Existing Plus Project			
		AM		PM		AM		PM	
		Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS
1. Folsom Boulevard/Mather Field Road	Signal	29	C	41	D	29	C	41	D
2. Folsom Boulevard/Dawes Street	Signal	6	A	8	A	5	A	8	A
3. Folsom Boulevard/Starbucks Driveway	SSSC[2]	1 (12)	A (B)	1 (12)	A (B)	1 (13)	A (B)	1 (12)	A (B)
4. Folsom Boulevard/McDonalds Driveway	SSSC[2]	1 (13)	A (B)	1 (12)	A (B)	1 (13)	A (B)	1 (13)	A (B)
5. Folsom Boulevard/Coloma Road	Signal	14	B	18	B	14	B	19	B

Notes:

[1] Delay is reported per *2010 HCM* methodologies. Average intersection delay, in seconds per vehicle, reported for signal and all-way stop intersections. Worst movement delay, in seconds per vehicle, reported for side-street stop intersections. All results are rounded to the nearest second.

[2] SSSC – Side-Street Stop Control

BOLD type indicates unacceptable operations.

BOLD type indicates significant impact.

Source: Fehr & Peers, 2015.

V. Cumulative Conditions

This section describes anticipated cumulative (2035) operating conditions in the study area for the roadway system.

Traffic Forecasts

A modified version of the SACOG regional travel demand model was used to forecast cumulative traffic volumes within the study area. The 2035 horizon year is the current horizon year associated with SACOG's MTP/SCS 2035. The model was modified to include more detail including the addition of local roadways and disaggregation of land uses into smaller traffic analysis zones (TAZ). This detail provides a more accurate estimation of travel patterns within the study area.

Figure 8 displays the resulting Cumulative No Project forecasts, which includes planned land use development (including the Folsom Lake College – Rancho Cordova Center) and transportation infrastructure within the city as well as the surrounding six-county region.

Cumulative Intersection Operations

Cumulative conditions intersection delay and LOS was calculated for the study intersections, and is shown in **Table 6.** The technical calculations are provided in Attachment C.

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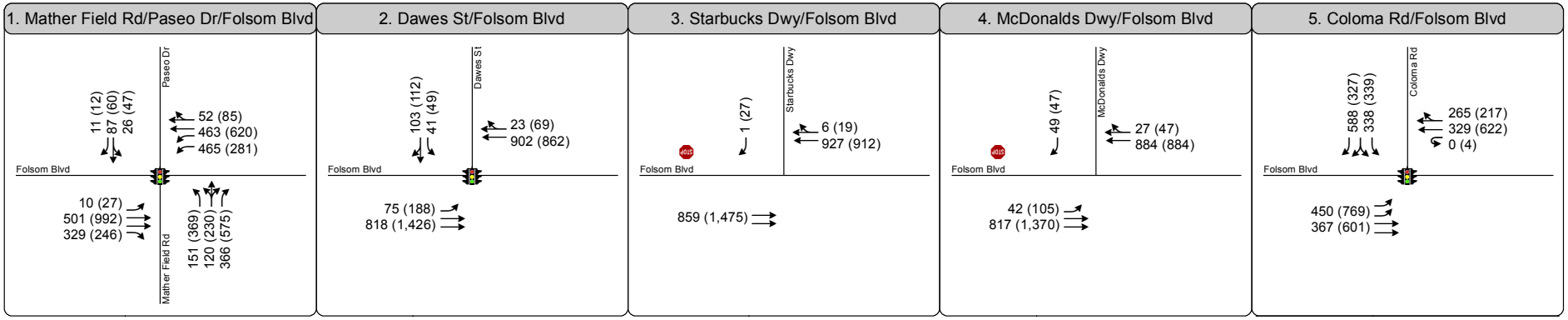

Study Intersection

Project Site

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 8

Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions

TABLE 6:

INTERSECTION LEVEL OF SERVICE – CUMULATIVE CONDITIONS

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay[1]	LOS	Delay[1]	LOS
1. Folsom Boulevard/Mather Field Road	Signal	55	D	51	D
2. Folsom Boulevard/Dawes Street	Signal	6	A	8	A
3. Folsom Boulevard/Starbucks Driveway	SSSC[2]	1 (12)	A (B)	1 (12)	A (B)
4. Folsom Boulevard/McDonalds Driveway	SSSC[2]	1 (13)	A (B)	1 (13)	A (B)
5. Folsom Boulevard/Coloma Road	Signal	18	B	21	C

Notes:

[1] Delay is reported per *2010 HCM* methodologies. Average intersection delay, in seconds per vehicle, reported for signal and all-way stop intersections. Worst movement delay, in seconds per vehicle, reported for side-street stop intersections. All results are rounded to the nearest second.

[2] SSSC – Side-Street Stop Control

BOLD type indicates unacceptable operations.

Source: Fehr & Peers, 2015.

As shown in Table 6, all study intersections would continue to operate acceptably, with Folsom Boulevard/Mather Field Road having the highest delay and operating at LOS D during both peak hours.

VI. Cumulative Plus Project Conditions

Net new project trips were assigned to the study intersections in accordance with the trip generation and distribution estimates in the previous section. Net new project trips were added to the cumulative volumes to yield the cumulative plus project forecasts, which are shown in **Figure 9.**

Cumulative Plus Project Intersection Operations

Cumulative plus project conditions intersection delay and LOS was calculated for the study intersections and shown in **Table 7.** With the project, all study intersections would continue to operate acceptably at LOS D or better with the addition of project traffic. The technical calculations are provided in Attachment D.

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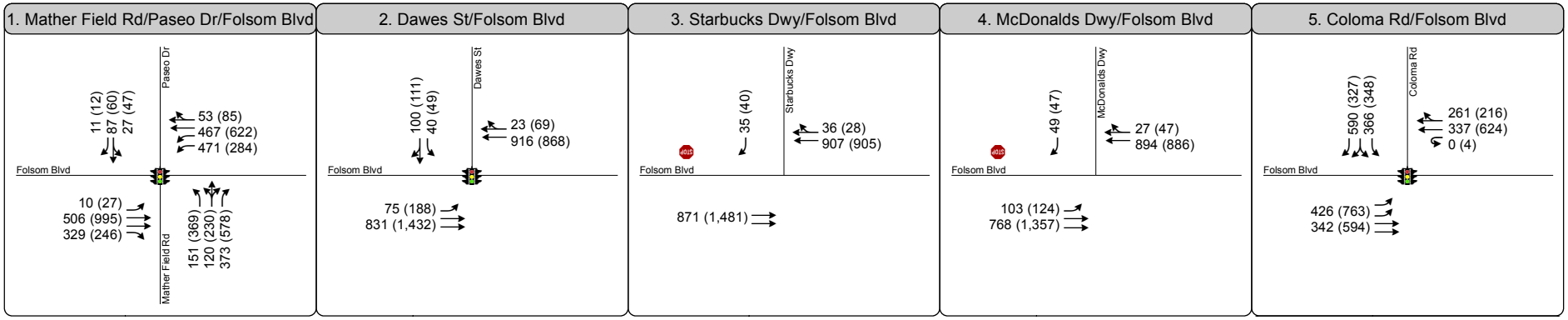

1 Study Intersection

Project Site

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 9

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions

TABLE 7:

INTERSECTION LEVEL OF SERVICE – CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control	Cumulative				Cumulative Plus Project			
		AM		PM		AM		PM	
		Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS
1. Folsom Boulevard/Mather Field Road	Signal	55	D	51	D	55	D	52	D
2. Folsom Boulevard/Dawes Street	Signal	6	A	8	A	6	A	8	A
3. Folsom Boulevard/Starbucks Driveway	SSSC[2]	1 (12)	A (B)	1 (12)	A (B)	1 (13)	A (B)	1 (12)	A (B)
4. Folsom Boulevard/McDonalds Driveway	SSSC[2]	1 (13)	A (B)	1 (13)	A (B)	1 (13)	A (B)	1 (13)	A (B)
5. Folsom Boulevard/Coloma Road	Signal	18	B	21	C	18	B	21	C

Notes:

[1] Delay is reported per *2010 HCM* methodologies. Average intersection delay, in seconds per vehicle, reported for signal and all-way stop intersections. Worst movement delay, in seconds per vehicle, reported for side-street stop intersections. All results are rounded to the nearest second.

[2] SSSC – Side-Street Stop Control

BOLD type indicates unacceptable operations.

BOLD type indicates significant impact.

Source: Fehr & Peers, 2015.

We hope this information is helpful. Please call or email us with any questions or comments.

APPENDIX A:

EXISTING CONDITIONS TECHNICAL CALCULATIONS

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
7/9/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	404	190	465	526	6	94	24	332	3	49	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	0.99	1.00		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1770	3539	1532	3433	3531		1681	1465	1497		1858	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	1770	3539	1532	3433	3531		1681	1465	1497		1858	1539
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	9	454	213	522	591	7	106	27	373	3	55	11
RTOR Reduction (vph)	0	0	58	0	0	0	0	89	113	0	0	10
Lane Group Flow (vph)	9	454	155	522	598	0	95	121	88	0	58	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	1.0	23.3	23.3	26.4	49.1		13.8	13.8	40.2		8.4	8.4
Effective Green, g (s)	1.0	23.3	23.3	26.4	49.1		13.8	13.8	40.2		8.4	8.4
Actuated g/C Ratio	0.01	0.25	0.25	0.29	0.53		0.15	0.15	0.44		0.09	0.09
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	19	895	387	984	1882		251	219	653		169	140
v/s Ratio Prot	0.01	c0.13		c0.15	0.17		0.06	c0.08	0.04		c0.03	
v/s Ratio Perm			0.10						0.02			0.00
v/c Ratio	0.47	0.51	0.40	0.53	0.32		0.38	0.55	0.13		0.34	0.01
Uniform Delay, d1	45.3	29.5	28.6	27.6	12.1		35.3	36.3	15.5		39.3	38.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	17.5	0.5	0.7	0.6	0.1		1.0	3.0	0.1		1.2	0.0
Delay (s)	62.8	29.9	29.3	28.2	12.2		36.2	39.3	15.6		40.5	38.1
Level of Service	E	C	C	C	B		D	D	B		D	D
Approach Delay (s)		30.2			19.6			29.3			40.1	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	92.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

AM Peak Hour
7/9/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	670	0	0	873	17	0	0	0	33	0	89
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	75	728	0	0	949	17	0	0	0	36	0	8
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	96	2600	0	0	2082	37	0	4	0	68	0	60
Arrive On Green	0.05	0.73	0.00	0.00	0.59	0.59	0.00	0.00	0.00	0.04	0.00	0.04
Sat Flow, veh/h	1774	3632	0	0	3649	64	0	1863	0	1774	0	1563
Grp Volume(v), veh/h	75	728	0	0	472	494	0	0	0	36	0	8
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1850	0	1863	0	1774	0	1563
Q Serve(g_s), s	1.8	2.9	0.0	0.0	6.4	6.4	0.0	0.0	0.0	0.8	0.0	0.2
Cycle Q Clear(g_c), s	1.8	2.9	0.0	0.0	6.4	6.4	0.0	0.0	0.0	0.8	0.0	0.2
Prop In Lane	1.00		0.00	0.00		0.03	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	2600	0	0	1036	1083	0	4	0	68	0	60
V/C Ratio(X)	0.78	0.28	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.53	0.00	0.13
Avail Cap(c_a), veh/h	1050	5865	0	0	2933	3065	0	1014	0	1680	0	1480
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	1.9	0.0	0.0	4.9	4.9	0.0	0.0	0.0	19.9	0.0	19.6
Incr Delay (d2), s/veh	12.7	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	6.3	0.0	1.0
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	1.2	1.3	0.0	0.0	3.1	3.2	0.0	0.0	0.0	0.5	0.0	0.1
LnGrp Delay(d),s/veh	32.5	1.9	0.0	0.0	5.3	5.2	0.0	0.0	0.0	26.2	0.0	20.6
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		803			966			0			44	
Approach Delay, s/veh		4.8			5.3			0.0			25.2	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.3	29.3		0.0		35.6		6.6
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	25.0	70.0		23.0		70.0		40.0
Max Q Clear Time (g_c+I1), s	3.8	8.4		0.0		4.9		2.8
Green Ext Time (p_c), s	0.1	16.4		0.0		16.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	703	892	6	0	1
Conflicting Peds, #/hr	0	0	0	4	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	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	790	1002	7	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1009	0	-	0	1401	504
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	683	-	-	-	131	513
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	683	-	-	-	131	513
Mov Cap-2 Maneuver	-	-	-	-	131	-
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	650	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	683	-	-	-	513
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	12
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	42	661	849	27	0	49
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	751	965	31	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	995	0	-	0	1451	498
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	471	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	691	-	-	-	122	518
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	594	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	691	-	-	-	114	518
Mov Cap-2 Maneuver	-	-	-	-	234	-
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	691	-	-	-	518
HCM Lane V/C Ratio	0.069	-	-	-	0.107
HCM Control Delay (s)	10.6	-	-	-	12.8
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

AM Peak Hour
7/9/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	343	318	0	0	0	299	156	0	0	0	210	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	423	393	0		0	369	137	0	0	0	303	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.81	0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	632	2103	0		0	769	281	0	4	0	614	0
Arrive On Green	0.18	0.59	0.00		0.00	0.30	0.30	0.00	0.00	0.00	0.17	0.00
Sat Flow, veh/h	3442	3632	0		0	2618	923	0	1863	0	3548	0
Grp Volume(v), veh/h	423	393	0		0	257	249	0	0	0	303	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1678	0	1863	0	1774	0
Q Serve(g_s), s	5.5	2.4	0.0		0.0	5.7	5.8	0.0	0.0	0.0	3.7	0.0
Cycle Q Clear(g_c), s	5.5	2.4	0.0		0.0	5.7	5.8	0.0	0.0	0.0	3.7	0.0
Prop In Lane	1.00		0.00		0.00		0.55	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	632	2103	0		0	539	511	0	4	0	614	0
V/C Ratio(X)	0.67	0.19	0.00		0.00	0.48	0.49	0.00	0.00	0.00	0.49	0.00
Avail Cap(c_a), veh/h	1788	5140	0		0	2574	2441	0	968	0	2949	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	4.5	0.0		0.0	13.6	13.7	0.0	0.0	0.0	18.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0		0.0	0.7	0.7	0.0	0.0	0.0	0.6	0.0
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
%ile BackOfQ(50%),veh/ln	2.7	1.2	0.0		0.0	2.9	2.8	0.0	0.0	0.0	1.9	0.0
LnGrp Delay(d),s/veh	19.5	4.5	0.0		0.0	14.3	14.4	0.0	0.0	0.0	18.6	0.0
LnGrp LOS	B	A				B	B				B	
Approach Vol, veh/h		816				506			0			398
Approach Delay, s/veh		12.3				14.3			0.0			16.7
Approach LOS		B				B						B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.9	19.6		0.0		33.5		14.6
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 25	* 70		* 25		* 70		40.0
Max Q Clear Time (g_c+I1), s	7.5	7.8		0.0		4.4		5.7
Green Ext Time (p_c), s	1.4	6.4		0.0		6.4		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	583
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	95
Adj No. of Lanes	1
Peak Hour Factor	0.81
Percent Heavy Veh, %	2
Cap, veh/h	558
Arrive On Green	0.17
Sat Flow, veh/h	1548
Grp Volume(v), veh/h	95
Grp Sat Flow(s),veh/h/ln	1548
Q Serve(g_s), s	2.0
Cycle Q Clear(g_c), s	2.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	558
V/C Ratio(X)	0.17
Avail Cap(c_a), veh/h	1577
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	10.6
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.9
LnGrp Delay(d),s/veh	10.8
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis

AM Peak Hour

1: Mather Field Rd/Paseo Dr & Folsom Blvd - With Train Delay/LOS

7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	404	190	465	526	6	94	24	332	3	49	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00		1.00	0.99	0.99		1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1770	3539	1510	3433	3531		1681	1464	1494		1858	1525
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	1770	3539	1510	3433	3531		1681	1464	1494		1858	1525
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	9	454	213	522	591	7	106	27	373	3	55	11
RTOR Reduction (vph)	0	0	24	0	0	0	0	66	36	0	0	10
Lane Group Flow (vph)	9	454	189	522	598	0	95	144	165	0	58	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	2.7	70.0	31.4	25.4	93.1		21.9	21.9	47.3		12.0	12.0
Effective Green, g (s)	2.7	70.0	31.4	25.4	93.1		21.9	21.9	47.3		12.0	12.0
Actuated g/C Ratio	0.02	0.41	0.19	0.15	0.55		0.13	0.13	0.28		0.07	0.07
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	28	1461	279	514	1939		217	189	416		131	107
v/s Ratio Prot	0.01	c0.13		c0.15	0.17		0.06	c0.10	0.06		c0.03	
v/s Ratio Perm			c0.13						0.05			0.00
v/c Ratio	0.32	0.31	0.68	1.02	0.31		0.44	0.76	0.40		0.44	0.01
Uniform Delay, d1	82.5	33.5	64.3	72.0	20.7		68.1	71.3	49.5		75.5	73.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.6	0.1	6.4	43.7	0.1		1.4	16.4	0.6		2.4	0.0
Delay (s)	89.1	33.6	70.8	115.7	20.8		69.5	87.7	50.2		77.9	73.2
Level of Service	F	C	E	F	C		E	F	D		E	E
Approach Delay (s)		46.1			65.0			69.4			77.2	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	60.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	169.5	Sum of lost time (s)	40.2
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	905	147	345	599	28	179	103	623	10	33	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	0.99	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.90	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1522	3433	3507		1681	1498	1485		1842	1547
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1522	3433	3507		1681	1498	1485		1842	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	933	152	356	618	29	185	106	642	10	34	12
RTOR Reduction (vph)	0	0	45	0	2	0	0	35	205	0	0	11
Lane Group Flow (vph)	26	933	107	356	645	0	166	360	167	0	44	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	4.8	46.3	46.3	20.2	62.1		41.3	41.3	61.5		8.8	8.8
Effective Green, g (s)	4.8	46.3	46.3	20.2	62.1		41.3	41.3	61.5		8.8	8.8
Actuated g/C Ratio	0.04	0.34	0.34	0.15	0.45		0.30	0.30	0.45		0.06	0.06
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	62	1197	515	506	1591		507	452	667		118	99
v/s Ratio Prot	0.01	c0.26		c0.10	0.18		0.10	c0.24	0.04		c0.02	
v/s Ratio Perm			0.07						0.08			0.00
v/c Ratio	0.42	0.78	0.21	0.70	0.41		0.33	0.80	0.25		0.37	0.01
Uniform Delay, d1	64.6	40.7	32.2	55.5	25.0		37.0	43.9	23.4		61.4	59.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.5	3.3	0.2	4.4	0.2		0.4	9.4	0.2		2.0	0.0
Delay (s)	69.2	43.9	32.4	59.9	25.2		37.4	53.3	23.6		63.3	59.9
Level of Service	E	D	C	E	C		D	D	C		E	E
Approach Delay (s)		43.0			37.5			38.6			62.6	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	136.8	Sum of lost time (s)	20.2
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	176	1362	0	0	856	63	0	0	0	37	0	99
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.93
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	181	1404	0	0	882	62	0	0	0	38	0	10
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	229	2768	0	0	1996	140	0	3	0	145	0	121
Arrive On Green	0.13	0.78	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	1774	3632	0	0	3440	235	0	1863	0	1774	0	1479
Grp Volume(v), veh/h	181	1404	0	0	466	478	0	0	0	38	0	10
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1812	0	1863	0	1774	0	1479
Q Serve(g_s), s	7.0	10.1	0.0	0.0	10.2	10.2	0.0	0.0	0.0	1.4	0.0	0.4
Cycle Q Clear(g_c), s	7.0	10.1	0.0	0.0	10.2	10.2	0.0	0.0	0.0	1.4	0.0	0.4
Prop In Lane	1.00		0.00	0.00		0.13	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	2768	0	0	1055	1081	0	3	0	145	0	121
V/C Ratio(X)	0.79	0.51	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.26	0.00	0.08
Avail Cap(c_a), veh/h	629	3513	0	0	1756	1799	0	607	0	1006	0	839
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.8	2.8	0.0	0.0	7.8	7.8	0.0	0.0	0.0	30.4	0.0	29.9
Incr Delay (d2), s/veh	6.0	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	1.0	0.0	0.3
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	3.8	4.7	0.0	0.0	5.0	5.1	0.0	0.0	0.0	0.7	0.0	0.2
LnGrp Delay(d),s/veh	35.8	2.9	0.0	0.0	8.1	8.1	0.0	0.0	0.0	31.3	0.0	30.2
LnGrp LOS	D	A			A	A				C		C
Approach Vol, veh/h		1585			944			0			48	
Approach Delay, s/veh		6.7			8.1			0.0			31.1	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.1	46.7		0.0		59.8		10.8
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	25.0	70.0		23.0		70.0		40.0
Max Q Clear Time (g_c+I1), s	9.0	12.2		0.0		12.1		3.4
Green Ext Time (p_c), s	0.4	29.9		0.0		29.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1399	900	19	0	27
Conflicting Peds, #/hr	0	0	0	4	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	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1442	928	20	0	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	947	0	-	0	1659	474
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	721	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	721	-	-	-	88	537
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	443	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	721	-	-	-	88	537
Mov Cap-2 Maneuver	-	-	-	-	88	-
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	443	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	721	-	-	-	537
HCM Lane V/C Ratio	-	-	-	-	0.052
HCM Control Delay (s)	0	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	105	1294	872	47	0	47
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	1348	908	49	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	957	0	-	0	1826	479
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	893	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	714	-	-	-	68	533
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	360	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	714	-	-	-	58	533
Mov Cap-2 Maneuver	-	-	-	-	174	-
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	305	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	714	-	-	-	533
HCM Lane V/C Ratio	0.153	-	-	-	0.092
HCM Control Delay (s)	11	-	-	-	12.4
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.3

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	723	571	0	4	0	610	187	0	0	0	195	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	745	589	0		0	629	175	0	0	0	230	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	899	2542	0		0	1046	291	0	3	0	431	0
Arrive On Green	0.26	0.72	0.00		0.00	0.38	0.38	0.00	0.00	0.00	0.12	0.00
Sat Flow, veh/h	3442	3632	0		0	2817	757	0	1863	0	3548	0
Grp Volume(v), veh/h	745	589	0		0	408	396	0	0	0	230	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1711	0	1863	0	1774	0
Q Serve(g_s), s	14.3	3.9	0.0		0.0	12.9	13.0	0.0	0.0	0.0	4.3	0.0
Cycle Q Clear(g_c), s	14.3	3.9	0.0		0.0	12.9	13.0	0.0	0.0	0.0	4.3	0.0
Prop In Lane	1.00		0.00		0.00		0.44	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	899	2542	0		0	680	657	0	3	0	431	0
V/C Ratio(X)	0.83	0.23	0.00		0.00	0.60	0.60	0.00	0.00	0.00	0.53	0.00
Avail Cap(c_a), veh/h	1231	3540	0		0	1772	1713	0	666	0	2031	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	24.3	3.3	0.0		0.0	17.2	17.2	0.0	0.0	0.0	28.8	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0		0.0	0.9	0.9	0.0	0.0	0.0	1.0	0.0
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
%ile BackOfQ(50%),veh/ln	7.2	1.9	0.0		0.0	6.4	6.2	0.0	0.0	0.0	2.1	0.0
LnGrp Delay(d),s/veh	27.9	3.4	0.0		0.0	18.1	18.1	0.0	0.0	0.0	29.9	0.0
LnGrp LOS	C	A				B	B				C	
Approach Vol, veh/h		1334				804			0			293
Approach Delay, s/veh		17.1				18.1			0.0			26.5
Approach LOS		B				B						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	23.4	31.7		0.0		55.1		14.8
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 25	* 70		* 25		* 70		40.0
Max Q Clear Time (g_c+I1), s	16.3	15.0		0.0		5.9		6.3
Green Ext Time (p_c), s	2.0	11.8		0.0		12.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	327
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	63
Adj No. of Lanes	1
Peak Hour Factor	0.97
Percent Heavy Veh, %	2
Cap, veh/h	602
Arrive On Green	0.12
Sat Flow, veh/h	1548
Grp Volume(v), veh/h	63
Grp Sat Flow(s),veh/h/ln	1548
Q Serve(g_s), s	1.8
Cycle Q Clear(g_c), s	1.8
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	602
V/C Ratio(X)	0.10
Avail Cap(c_a), veh/h	1300
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	13.9
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
LnGrp Delay(d),s/veh	14.0
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis

PM Peak Hour

1: Mather Field Rd/Paseo Dr & Folsom Blvd - With Train Delay/LOS

7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	905	147	345	599	28	179	103	623	10	33	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.90	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1506	3433	3505		1681	1495	1484		1842	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1506	3433	3505		1681	1495	1484		1842	1543
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	933	152	356	618	29	185	106	642	10	34	12
RTOR Reduction (vph)	0	0	19	0	2	0	0	28	59	0	0	11
Lane Group Flow (vph)	26	933	133	356	645	0	166	367	313	0	44	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	6.8	64.7	26.4	25.2	83.5		40.3	40.3	65.5		9.7	9.7
Effective Green, g (s)	6.8	64.7	26.4	25.2	83.5		40.3	40.3	65.5		9.7	9.7
Actuated g/C Ratio	0.04	0.36	0.15	0.14	0.46		0.22	0.22	0.36		0.05	0.05
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	66	1271	220	480	1625		376	334	539		99	83
v/s Ratio Prot	0.01	c0.26		c0.10	0.18		0.10	c0.25	0.08		c0.02	
v/s Ratio Perm			0.09						0.13			0.00
v/c Ratio	0.39	0.73	0.61	0.74	0.40		0.44	1.10	0.58		0.44	0.01
Uniform Delay, d1	84.6	50.2	72.0	74.3	31.8		60.2	69.9	46.2		82.6	80.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.8	2.2	4.7	6.1	0.2		0.8	78.5	1.6		3.2	0.0
Delay (s)	88.5	52.4	76.6	80.4	31.9		61.0	148.4	47.8		85.7	80.7
Level of Service	F	D	E	F	C		E	F	D		F	F
Approach Delay (s)		56.6			49.1			92.7			84.7	
Approach LOS		E			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	65.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	180.1	Sum of lost time (s)	40.2
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX B:

EXISTING PLUS PROJECT CONDITIONS TECHNICAL CALCULATIONS

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	409	190	471	530	7	94	24	339	4	49	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	0.99	1.00		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1770	3539	1532	3433	3530		1681	1465	1497		1856	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	1770	3539	1532	3433	3530		1681	1465	1497		1856	1539
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	9	460	213	529	596	8	106	27	381	4	55	11
RTOR Reduction (vph)	0	0	57	0	0	0	0	91	116	0	0	10
Lane Group Flow (vph)	9	460	156	529	604	0	95	122	90	0	59	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	1.0	23.5	23.5	26.4	49.3		13.9	13.9	40.3		8.4	8.4
Effective Green, g (s)	1.0	23.5	23.5	26.4	49.3		13.9	13.9	40.3		8.4	8.4
Actuated g/C Ratio	0.01	0.25	0.25	0.29	0.53		0.15	0.15	0.44		0.09	0.09
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	19	900	389	980	1883		252	220	652		168	139
v/s Ratio Prot	0.01	c0.13		c0.15	0.17		0.06	c0.08	0.04		c0.03	
v/s Ratio Perm			0.10						0.02			0.00
v/c Ratio	0.47	0.51	0.40	0.54	0.32		0.38	0.55	0.14		0.35	0.01
Uniform Delay, d1	45.4	29.5	28.6	27.9	12.1		35.4	36.4	15.6		39.4	38.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	17.5	0.5	0.7	0.6	0.1		0.9	3.0	0.1		1.3	0.0
Delay (s)	62.9	30.0	29.3	28.4	12.2		36.3	39.4	15.7		40.7	38.2
Level of Service	E	C	C	C	B		D	D	B		D	D
Approach Delay (s)		30.2			19.8			29.3			40.3	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	92.4	Sum of lost time (s)	20.2
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	683	0	0	887	17	0	0	0	32	0	86
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.98	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	75	742	0	0	964	17	0	0	0	35	0	4
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	96	2619	0	0	2107	37	0	4	0	63	0	56
Arrive On Green	0.05	0.74	0.00	0.00	0.59	0.59	0.00	0.00	0.00	0.04	0.00	0.04
Sat Flow, veh/h	1774	3632	0	0	3650	63	0	1863	0	1774	0	1563
Grp Volume(v), veh/h	75	742	0	0	480	501	0	0	0	35	0	4
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1850	0	1863	0	1774	0	1563
Q Serve(g_s), s	1.8	3.0	0.0	0.0	6.5	6.5	0.0	0.0	0.0	0.8	0.0	0.1
Cycle Q Clear(g_c), s	1.8	3.0	0.0	0.0	6.5	6.5	0.0	0.0	0.0	0.8	0.0	0.1
Prop In Lane	1.00		0.00	0.00		0.03	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	2619	0	0	1048	1096	0	4	0	63	0	56
V/C Ratio(X)	0.78	0.28	0.00	0.00	0.46	0.46	0.00	0.00	0.00	0.55	0.00	0.07
Avail Cap(c_a), veh/h	1036	5788	0	0	2894	3025	0	1001	0	1658	0	1461
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	1.8	0.0	0.0	4.9	4.9	0.0	0.0	0.0	20.3	0.0	20.0
Incr Delay (d2), s/veh	12.7	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	7.4	0.0	0.5
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	1.2	1.4	0.0	0.0	3.2	3.3	0.0	0.0	0.0	0.5	0.0	0.1
LnGrp Delay(d),s/veh	32.7	1.9	0.0	0.0	5.2	5.2	0.0	0.0	0.0	27.7	0.0	20.5
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		817			981			0			39	
Approach Delay, s/veh		4.7			5.2			0.0			26.9	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.3	30.0		0.0		36.3		6.5
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	25.0	70.0		23.0		70.0		40.0
Max Q Clear Time (g_c+I1), s	3.8	8.5		0.0		5.0		2.8
Green Ext Time (p_c), s	0.1	16.9		0.0		17.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.4
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	715	872	36	0	35
Conflicting Peds, #/hr	0	0	0	4	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	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	803	980	40	0	39

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1020	0	-	0	1402	510
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	402	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	676	-	-	-	131	509
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	676	-	-	-	131	509
Mov Cap-2 Maneuver	-	-	-	-	131	-
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	644	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	676	-	-	-	509
HCM Lane V/C Ratio	-	-	-	-	0.077
HCM Control Delay (s)	0	-	-	-	12.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	103	612	859	27	0	49
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	695	976	31	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1007	0	-	0	1573	503
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	582	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	684	-	-	-	101	514
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	522	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	684	-	-	-	84	514
Mov Cap-2 Maneuver	-	-	-	-	205	-
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	433	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	684	-	-	-	514
HCM Lane V/C Ratio	0.171	-	-	-	0.108
HCM Control Delay (s)	11.3	-	-	-	12.9
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.4

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	319	293	0	0	0	307	152	0	0	0	238	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	394	362	0		0	379	134	0	0	0	345	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.81	0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	597	2056	0		0	773	269	0	4	0	663	0
Arrive On Green	0.17	0.58	0.00		0.00	0.30	0.30	0.00	0.00	0.00	0.19	0.00
Sat Flow, veh/h	3442	3632	0		0	2655	892	0	1863	0	3548	0
Grp Volume(v), veh/h	394	362	0		0	260	253	0	0	0	345	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1684	0	1863	0	1774	0
Q Serve(g_s), s	5.2	2.3	0.0		0.0	5.8	6.0	0.0	0.0	0.0	4.2	0.0
Cycle Q Clear(g_c), s	5.2	2.3	0.0		0.0	5.8	6.0	0.0	0.0	0.0	4.2	0.0
Prop In Lane	1.00		0.00		0.00		0.53	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	597	2056	0		0	534	508	0	4	0	663	0
V/C Ratio(X)	0.66	0.18	0.00		0.00	0.49	0.50	0.00	0.00	0.00	0.52	0.00
Avail Cap(c_a), veh/h	1784	5129	0		0	2568	2444	0	966	0	2943	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	18.6	4.7	0.0		0.0	13.8	13.8	0.0	0.0	0.0	17.7	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0		0.0	0.7	0.8	0.0	0.0	0.0	0.6	0.0
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
%ile BackOfQ(50%),veh/ln	2.5	1.1	0.0		0.0	2.9	2.8	0.0	0.0	0.0	2.1	0.0
LnGrp Delay(d),s/veh	19.8	4.8	0.0		0.0	14.5	14.6	0.0	0.0	0.0	18.3	0.0
LnGrp LOS	B	A				B	B				B	
Approach Vol, veh/h		756				513			0			455
Approach Delay, s/veh		12.6				14.5			0.0			16.5
Approach LOS		B				B						B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.5	19.5		0.0		32.9		15.3
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 25	* 70		* 25		* 70		40.0
Max Q Clear Time (g_c+I1), s	7.2	8.0		0.0		4.3		6.2
Green Ext Time (p_c), s	1.3	6.1		0.0		6.1		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	585
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	110
Adj No. of Lanes	1
Peak Hour Factor	0.81
Percent Heavy Veh, %	2
Cap, veh/h	564
Arrive On Green	0.19
Sat Flow, veh/h	1550
Grp Volume(v), veh/h	110
Grp Sat Flow(s),veh/h/ln	1550
Q Serve(g_s), s	2.4
Cycle Q Clear(g_c), s	2.4
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	564
V/C Ratio(X)	0.19
Avail Cap(c_a), veh/h	1561
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	10.6
Incr Delay (d2), s/veh	0.2
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.0
LnGrp Delay(d),s/veh	10.8
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	409	190	471	530	7	94	24	339	4	49	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00		1.00	0.99	0.99		1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.88	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1770	3539	1510	3433	3530		1681	1464	1494		1856	1525
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	1770	3539	1510	3433	3530		1681	1464	1494		1856	1525
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	9	460	213	529	596	8	106	27	381	4	55	11
RTOR Reduction (vph)	0	0	24	0	0	0	0	68	37	0	0	10
Lane Group Flow (vph)	9	460	189	529	604	0	95	145	169	0	59	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	2.7	70.2	31.5	25.4	93.3		22.1	22.1	47.5		12.0	12.0
Effective Green, g (s)	2.7	70.2	31.5	25.4	93.3		22.1	22.1	47.5		12.0	12.0
Actuated g/C Ratio	0.02	0.41	0.19	0.15	0.55		0.13	0.13	0.28		0.07	0.07
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	28	1462	279	513	1938		218	190	417		131	107
v/s Ratio Prot	0.01	c0.13		c0.15	0.17		0.06	c0.10	0.06		c0.03	
v/s Ratio Perm			c0.13						0.05			0.00
v/c Ratio	0.32	0.31	0.68	1.03	0.31		0.44	0.76	0.41		0.45	0.01
Uniform Delay, d1	82.7	33.6	64.5	72.2	20.8		68.2	71.4	49.7		75.8	73.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.6	0.1	6.4	48.0	0.1		1.4	16.6	0.6		2.5	0.0
Delay (s)	89.3	33.7	70.9	120.2	20.9		69.5	87.9	50.4		78.2	73.4
Level of Service	F	C	E	F	C		E	F	D		E	E
Approach Delay (s)		46.1			67.3			69.5			77.5	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	169.9	Sum of lost time (s)	40.2
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	908	147	348	601	28	179	103	626	10	33	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	0.99	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.90	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1522	3433	3507		1681	1498	1485		1842	1547
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1522	3433	3507		1681	1498	1485		1842	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	936	152	359	620	29	185	106	645	10	34	12
RTOR Reduction (vph)	0	0	45	0	2	0	0	35	206	0	0	11
Lane Group Flow (vph)	26	936	107	359	647	0	166	361	168	0	44	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	4.8	46.5	46.5	20.4	62.5		41.3	41.3	61.7		8.9	8.9
Effective Green, g (s)	4.8	46.5	46.5	20.4	62.5		41.3	41.3	61.7		8.9	8.9
Actuated g/C Ratio	0.03	0.34	0.34	0.15	0.46		0.30	0.30	0.45		0.06	0.06
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	61	1198	515	510	1596		505	450	667		119	100
v/s Ratio Prot	0.01	c0.26		c0.10	0.18		0.10	c0.24	0.04		c0.02	
v/s Ratio Perm			0.07						0.08			0.00
v/c Ratio	0.43	0.78	0.21	0.70	0.41		0.33	0.80	0.25		0.37	0.01
Uniform Delay, d1	64.9	40.8	32.3	55.6	25.0		37.2	44.2	23.5		61.5	60.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.7	3.4	0.2	4.4	0.2		0.4	9.9	0.2		1.9	0.0
Delay (s)	69.6	44.2	32.5	60.0	25.2		37.6	54.2	23.7		63.5	60.1
Level of Service	E	D	C	E	C		D	D	C		E	E
Approach Delay (s)		43.2			37.6			39.0			62.7	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	137.3	Sum of lost time (s)	20.2
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	176	1368	0	0	862	63	0	0	0	37	0	98
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.93
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	181	1410	0	0	889	62	0	0	0	38	0	9
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	229	2773	0	0	2002	140	0	3	0	144	0	120
Arrive On Green	0.13	0.78	0.00	0.00	0.60	0.60	0.00	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	1774	3632	0	0	3442	234	0	1863	0	1774	0	1478
Grp Volume(v), veh/h	181	1410	0	0	470	481	0	0	0	38	0	9
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1813	0	1863	0	1774	0	1478
Q Serve(g_s), s	7.0	10.2	0.0	0.0	10.3	10.3	0.0	0.0	0.0	1.4	0.0	0.4
Cycle Q Clear(g_c), s	7.0	10.2	0.0	0.0	10.3	10.3	0.0	0.0	0.0	1.4	0.0	0.4
Prop In Lane	1.00		0.00	0.00		0.13	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	2773	0	0	1058	1084	0	3	0	144	0	120
V/C Ratio(X)	0.79	0.51	0.00	0.00	0.44	0.44	0.00	0.00	0.00	0.26	0.00	0.07
Avail Cap(c_a), veh/h	625	3492	0	0	1746	1789	0	604	0	1000	0	833
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.0	2.8	0.0	0.0	7.8	7.8	0.0	0.0	0.0	30.6	0.0	30.1
Incr Delay (d2), s/veh	6.0	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	1.0	0.0	0.3
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	3.8	4.8	0.0	0.0	5.0	5.2	0.0	0.0	0.0	0.7	0.0	0.2
LnGrp Delay(d),s/veh	36.0	2.9	0.0	0.0	8.1	8.1	0.0	0.0	0.0	31.6	0.0	30.4
LnGrp LOS	D	A			A	A				C		C
Approach Vol, veh/h		1591			951			0			47	
Approach Delay, s/veh		6.7			8.1			0.0			31.3	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	13.2	47.0		0.0		60.2		10.8
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	25.0	70.0		23.0		70.0		40.0
Max Q Clear Time (g_c+I1), s	9.0	12.3		0.0		12.2		3.4
Green Ext Time (p_c), s	0.4	30.1		0.0		30.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1405	893	28	0	40
Conflicting Peds, #/hr	0	0	0	4	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	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1448	921	29	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	949	0	-	0	1659	475
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	724	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	719	-	-	-	88	536
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	441	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	719	-	-	-	88	536
Mov Cap-2 Maneuver	-	-	-	-	88	-
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	441	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	719	-	-	-	536
HCM Lane V/C Ratio	-	-	-	-	0.077
HCM Control Delay (s)	0	-	-	-	12.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	124	1281	874	47	0	47
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	1334	910	49	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	959	0	-	0	1861	480
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	926	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	713	-	-	-	65	532
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	346	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	713	-	-	-	53	532
Mov Cap-2 Maneuver	-	-	-	-	165	-
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	283	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	713	-	-	-	532
HCM Lane V/C Ratio	0.181	-	-	-	0.092
HCM Control Delay (s)	11.2	-	-	-	12.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.3

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	717	564	0	4	0	612	186	0	0	0	204	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	739	581	0		0	631	174	0	0	0	239	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	893	2533	0		0	1046	288	0	3	0	440	0
Arrive On Green	0.26	0.72	0.00		0.00	0.38	0.38	0.00	0.00	0.00	0.12	0.00
Sat Flow, veh/h	3442	3632	0		0	2823	752	0	1863	0	3548	0
Grp Volume(v), veh/h	739	581	0		0	409	396	0	0	0	239	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1712	0	1863	0	1774	0
Q Serve(g_s), s	14.2	3.9	0.0		0.0	12.9	13.0	0.0	0.0	0.0	4.4	0.0
Cycle Q Clear(g_c), s	14.2	3.9	0.0		0.0	12.9	13.0	0.0	0.0	0.0	4.4	0.0
Prop In Lane	1.00		0.00		0.00		0.44	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	893	2533	0		0	678	656	0	3	0	440	0
V/C Ratio(X)	0.83	0.23	0.00		0.00	0.60	0.60	0.00	0.00	0.00	0.54	0.00
Avail Cap(c_a), veh/h	1231	3539	0		0	1772	1714	0	666	0	2030	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	24.4	3.4	0.0		0.0	17.3	17.3	0.0	0.0	0.0	28.8	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0		0.0	0.9	0.9	0.0	0.0	0.0	1.0	0.0
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
%ile BackOfQ(50%),veh/ln	7.1	1.9	0.0		0.0	6.4	6.2	0.0	0.0	0.0	2.2	0.0
LnGrp Delay(d),s/veh	27.9	3.4	0.0		0.0	18.2	18.2	0.0	0.0	0.0	29.8	0.0
LnGrp LOS	C	A				B	B				C	
Approach Vol, veh/h		1320				805			0			302
Approach Delay, s/veh		17.1				18.2			0.0			26.5
Approach LOS		B				B						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	23.2	31.7		0.0		54.9		15.0
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 25	* 70		* 25		* 70		40.0
Max Q Clear Time (g_c+I1), s	16.2	15.0		0.0		5.9		6.4
Green Ext Time (p_c), s	2.0	11.7		0.0		11.9		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	327
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	63
Adj No. of Lanes	1
Peak Hour Factor	0.97
Percent Heavy Veh, %	2
Cap, veh/h	603
Arrive On Green	0.12
Sat Flow, veh/h	1549
Grp Volume(v), veh/h	63
Grp Sat Flow(s),veh/h/ln	1549
Q Serve(g_s), s	1.8
Cycle Q Clear(g_c), s	1.8
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	603
V/C Ratio(X)	0.10
Avail Cap(c_a), veh/h	1297
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	13.8
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
LnGrp Delay(d),s/veh	13.9
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	908	147	348	601	28	179	103	626	10	33	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.90	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1506	3433	3505		1681	1495	1484		1842	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1506	3433	3505		1681	1495	1484		1842	1543
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	936	152	359	620	29	185	106	645	10	34	12
RTOR Reduction (vph)	0	0	19	0	2	0	0	29	60	0	0	11
Lane Group Flow (vph)	26	936	133	359	647	0	166	367	314	0	44	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	6.8	64.9	26.6	25.2	83.7		40.3	40.3	65.5		9.7	9.7
Effective Green, g (s)	6.8	64.9	26.6	25.2	83.7		40.3	40.3	65.5		9.7	9.7
Actuated g/C Ratio	0.04	0.36	0.15	0.14	0.46		0.22	0.22	0.36		0.05	0.05
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	66	1273	222	479	1627		375	334	539		99	83
v/s Ratio Prot	0.01	c0.26		c0.10	0.18		0.10	c0.25	0.08		c0.02	
v/s Ratio Perm			0.09						0.13			0.00
v/c Ratio	0.39	0.74	0.60	0.75	0.40		0.44	1.10	0.58		0.44	0.01
Uniform Delay, d1	84.7	50.2	71.9	74.5	31.7		60.3	70.0	46.3		82.7	80.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.8	2.2	4.5	6.3	0.2		0.8	78.7	1.6		3.2	0.0
Delay (s)	88.6	52.5	76.4	80.9	31.9		61.2	148.7	47.9		85.8	80.8
Level of Service	F	D	E	F	C		E	F	D		F	F
Approach Delay (s)		56.6			49.3			92.9			84.8	
Approach LOS		E			D			F			F	

Intersection Summary			
HCM 2000 Control Delay	65.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	180.3	Sum of lost time (s)	40.2
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX C:

CUMULATIVE CONDITIONS TECHNICAL CALCULATIONS

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	501	329	465	463	52	151	120	366	26	87	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.93	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1533	3433	3472		1681	1558	1492		1842	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1533	3433	3472		1681	1558	1492		1842	1543
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	563	370	522	520	58	170	135	411	29	98	12
RTOR Reduction (vph)	0	0	127	0	7	0	0	31	172	0	0	10
Lane Group Flow (vph)	11	563	243	522	571	0	153	261	99	0	127	2
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	0.5	25.4	25.4	14.0	39.3		19.6	19.6	33.6		12.4	12.4
Effective Green, g (s)	0.5	25.4	25.4	14.0	39.3		19.6	19.6	33.6		12.4	12.4
Actuated g/C Ratio	0.01	0.28	0.28	0.15	0.43		0.21	0.21	0.37		0.14	0.14
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	9	981	425	524	1489		359	333	547		249	208
v/s Ratio Prot	0.01	c0.16		c0.15	0.16		0.09	c0.17	0.03		c0.07	
v/s Ratio Perm			0.16						0.04			0.00
v/c Ratio	1.22	0.57	0.57	1.00	0.38		0.43	0.78	0.18		0.51	0.01
Uniform Delay, d1	45.5	28.4	28.4	38.8	17.9		31.1	34.0	19.7		36.8	34.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	385.4	0.8	1.9	38.1	0.2		0.8	11.4	0.2		1.8	0.0
Delay (s)	431.0	29.3	30.3	76.9	18.0		32.0	45.3	19.8		38.5	34.3
Level of Service	F	C	C	E	B		C	D	B		D	C
Approach Delay (s)		34.3			45.9			32.8			38.2	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	91.6	Sum of lost time (s)	20.2
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

AM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	75	818	0	0	902	23	0	0	0	41	0	103
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	82	889	0	0	980	24	0	0	0	45	0	23
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	101	2449	0	0	1863	46	0	5	0	92	0	81
Arrive On Green	0.06	0.69	0.00	0.00	0.53	0.53	0.00	0.00	0.00	0.05	0.00	0.05
Sat Flow, veh/h	1774	3632	0	0	3621	86	0	1863	0	1774	0	1566
Grp Volume(v), veh/h	82	889	0	0	492	512	0	0	0	45	0	23
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1845	0	1863	0	1774	0	1566
Q Serve(g_s), s	1.7	3.9	0.0	0.0	6.8	6.8	0.0	0.0	0.0	0.9	0.0	0.5
Cycle Q Clear(g_c), s	1.7	3.9	0.0	0.0	6.8	6.8	0.0	0.0	0.0	0.9	0.0	0.5
Prop In Lane	1.00		0.00	0.00		0.05	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	101	2449	0	0	934	974	0	5	0	92	0	81
V/C Ratio(X)	0.81	0.36	0.00	0.00	0.53	0.53	0.00	0.00	0.00	0.49	0.00	0.28
Avail Cap(c_a), veh/h	237	3299	0	0	1224	1276	0	1144	0	1137	0	1004
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.4	2.4	0.0	0.0	5.8	5.8	0.0	0.0	0.0	17.3	0.0	17.1
Incr Delay (d2), s/veh	14.0	0.1	0.0	0.0	0.5	0.4	0.0	0.0	0.0	4.0	0.0	1.9
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	1.2	1.9	0.0	0.0	3.4	3.5	0.0	0.0	0.0	0.6	0.0	0.3
LnGrp Delay(d),s/veh	31.4	2.5	0.0	0.0	6.2	6.2	0.0	0.0	0.0	21.3	0.0	19.0
LnGrp LOS	C	A			A	A				C		B
Approach Vol, veh/h		971			1004			0			68	
Approach Delay, s/veh		4.9			6.2			0.0			20.5	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.1	24.4		0.0		30.5		6.9
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	5.0	25.9		23.0		34.9		24.0
Max Q Clear Time (g_c+I1), s	3.7	8.8		0.0		5.9		2.9
Green Ext Time (p_c), s	0.0	11.0		0.0		15.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	859	927	6	0	1
Conflicting Peds, #/hr	0	0	0	4	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	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	965	1042	7	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1048	0	-	0	1528	524
Stage 1	-	-	-	-	1045	-
Stage 2	-	-	-	-	483	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	660	-	-	-	108	498
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	586	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	660	-	-	-	108	498
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	586	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	660	-	-	-	498
HCM Lane V/C Ratio	-	-	-	-	0.002
HCM Control Delay (s)	0	-	-	-	12.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	42	817	884	27	0	49
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	928	1005	31	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1035	0	-	0	1580	518
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	560	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	667	-	-	-	100	502
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	667	-	-	-	93	502
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	667	-	-	-	502
HCM Lane V/C Ratio	0.072	-	-	-	0.111
HCM Control Delay (s)	10.8	-	-	-	13.1
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

AM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	450	367	0	0	0	329	265	0	0	0	338	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	556	453	0		0	406	271	0	0	0	463	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.81	0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	715	2166	0		0	648	427	0	3	0	717	0
Arrive On Green	0.21	0.61	0.00		0.00	0.32	0.32	0.00	0.00	0.00	0.20	0.00
Sat Flow, veh/h	3442	3632	0		0	2121	1338	0	1863	0	3548	0
Grp Volume(v), veh/h	556	453	0		0	354	323	0	0	0	463	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1596	0	1863	0	1774	0
Q Serve(g_s), s	9.2	3.4	0.0		0.0	10.2	10.4	0.0	0.0	0.0	7.2	0.0
Cycle Q Clear(g_c), s	9.2	3.4	0.0		0.0	10.2	10.4	0.0	0.0	0.0	7.2	0.0
Prop In Lane	1.00		0.00		0.00		0.84	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	715	2166	0		0	565	510	0	3	0	717	0
V/C Ratio(X)	0.78	0.21	0.00		0.00	0.63	0.63	0.00	0.00	0.00	0.65	0.00
Avail Cap(c_a), veh/h	1080	2732	0		0	852	768	0	773	0	1514	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	22.5	5.2	0.0		0.0	17.4	17.5	0.0	0.0	0.0	22.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0		0.0	1.1	1.3	0.0	0.0	0.0	1.0	0.0
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
%ile BackOfQ(50%),veh/ln	4.5	1.7	0.0		0.0	5.1	4.8	0.0	0.0	0.0	3.6	0.0
LnGrp Delay(d),s/veh	24.6	5.3	0.0		0.0	18.6	18.8	0.0	0.0	0.0	23.0	0.0
LnGrp LOS	C	A				B	B				C	
Approach Vol, veh/h		1009				677			0			562
Approach Delay, s/veh		15.9				18.7			0.0			21.0
Approach LOS		B				B						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	17.6	24.1		0.0		41.8		18.5
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 19	* 29		* 25		* 47		25.7
Max Q Clear Time (g_c+I1), s	11.2	12.4		0.0		5.4		9.2
Green Ext Time (p_c), s	1.3	6.4		0.0		8.5		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	588
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	99
Adj No. of Lanes	1
Peak Hour Factor	0.81
Percent Heavy Veh, %	2
Cap, veh/h	643
Arrive On Green	0.20
Sat Flow, veh/h	1553
Grp Volume(v), veh/h	99
Grp Sat Flow(s),veh/h/ln	1553
Q Serve(g_s), s	2.4
Cycle Q Clear(g_c), s	2.4
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	643
V/C Ratio(X)	0.15
Avail Cap(c_a), veh/h	992
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	11.2
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.1
LnGrp Delay(d),s/veh	11.3
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis

AM Peak Hour

1: Mather Field Rd/Paseo Dr & Folsom Blvd - With Train Delay/LOS

7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	501	329	465	463	52	151	120	366	26	87	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	0.99		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.93	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1511	3433	3468		1681	1557	1489		1842	1529
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1511	3433	3468		1681	1557	1489		1842	1529
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	563	370	522	520	58	170	135	411	29	98	12
RTOR Reduction (vph)	0	0	40	0	6	0	0	20	41	0	0	11
Lane Group Flow (vph)	11	563	330	522	572	0	153	272	230	0	127	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	1.3	67.5	29.5	13.5	80.1		28.0	28.0	41.5		16.3	16.3
Effective Green, g (s)	1.3	67.5	29.5	13.5	80.1		28.0	28.0	41.5		16.3	16.3
Actuated g/C Ratio	0.01	0.41	0.18	0.08	0.48		0.17	0.17	0.25		0.10	0.10
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	13	1443	269	280	1678		284	263	373		181	150
v/s Ratio Prot	0.01	c0.16		c0.15	0.17		0.09	c0.17	0.05		c0.07	
v/s Ratio Perm			c0.22						0.10			0.00
v/c Ratio	0.85	0.39	1.23	1.86	0.34		0.54	1.03	0.62		0.70	0.01
Uniform Delay, d1	82.0	34.5	68.0	76.0	26.4		62.8	68.8	54.9		72.2	67.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	166.4	0.2	130.0	402.3	0.1		2.0	64.7	3.0		11.6	0.0
Delay (s)	248.4	34.7	198.0	478.3	26.5		64.8	133.5	58.0		83.9	67.3
Level of Service	F	C	F	F	C		E	F	E		F	E
Approach Delay (s)		101.2			240.9			90.2			82.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	150.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	165.5	Sum of lost time (s)	40.2
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	992	246	281	620	85	369	230	575	47	60	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.94	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	3539	1529	3433	3453		1681	1577	1484		1823	1552
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (perm)	1770	3539	1529	3433	3453		1681	1577	1484		1823	1552
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	28	1023	254	290	639	88	380	237	593	48	62	12
RTOR Reduction (vph)	0	0	75	0	8	0	0	19	190	0	0	11
Lane Group Flow (vph)	28	1023	179	290	719	0	342	434	225	0	110	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	3.6	37.1	37.1	10.9	44.8		32.1	32.1	43.0		12.9	12.9
Effective Green, g (s)	3.6	37.1	37.1	10.9	44.8		32.1	32.1	43.0		12.9	12.9
Actuated g/C Ratio	0.03	0.33	0.33	0.10	0.40		0.28	0.28	0.38		0.11	0.11
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	56	1159	501	330	1366		476	447	563		207	176
v/s Ratio Prot	0.02	c0.29		c0.08	0.21		0.20	c0.28	0.04		c0.06	
v/s Ratio Perm			0.12						0.11			0.00
v/c Ratio	0.50	0.88	0.36	0.88	0.53		0.72	0.97	0.40		0.53	0.01
Uniform Delay, d1	53.9	36.0	29.0	50.5	26.1		36.5	40.1	25.7		47.3	44.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.9	8.2	0.4	22.2	0.4		5.1	35.1	0.5		2.6	0.0
Delay (s)	60.8	44.2	29.4	72.7	26.5		41.6	75.2	26.1		49.9	44.5
Level of Service	E	D	C	E	C		D	E	C		D	D
Approach Delay (s)		41.7			39.7			48.9			49.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	113.2	Sum of lost time (s)	20.2
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	1426	0	0	862	69	0	0	0	49	0	112
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	194	1470	0	0	889	68	0	0	0	51	0	23
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	247	2528	0	0	1650	126	0	4	0	173	0	146
Arrive On Green	0.14	0.71	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.10	0.00	0.10
Sat Flow, veh/h	1774	3632	0	0	3416	254	0	1863	0	1774	0	1495
Grp Volume(v), veh/h	194	1470	0	0	473	484	0	0	0	51	0	23
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1808	0	1863	0	1774	0	1495
Q Serve(g_s), s	5.4	10.3	0.0	0.0	9.4	9.4	0.0	0.0	0.0	1.4	0.0	0.7
Cycle Q Clear(g_c), s	5.4	10.3	0.0	0.0	9.4	9.4	0.0	0.0	0.0	1.4	0.0	0.7
Prop In Lane	1.00		0.00	0.00		0.14	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	2528	0	0	879	898	0	4	0	173	0	146
V/C Ratio(X)	0.78	0.58	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.30	0.00	0.16
Avail Cap(c_a), veh/h	418	3117	0	0	1003	1025	0	840	0	835	0	704
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.2	3.6	0.0	0.0	8.8	8.8	0.0	0.0	0.0	21.4	0.0	21.1
Incr Delay (d2), s/veh	5.4	0.2	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.9	0.0	0.5
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	3.0	5.0	0.0	0.0	4.6	4.7	0.0	0.0	0.0	0.7	0.0	0.3
LnGrp Delay(d),s/veh	26.6	3.8	0.0	0.0	9.3	9.3	0.0	0.0	0.0	22.3	0.0	21.6
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		1664			957			0			74	
Approach Delay, s/veh		6.4			9.3			0.0			22.1	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.1	29.9		0.0		41.0		10.0
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	12.0	28.9		23.0		44.9		24.0
Max Q Clear Time (g_c+I1), s	7.4	11.4		0.0		12.3		3.4
Green Ext Time (p_c), s	0.2	13.9		0.0		22.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1475	912	19	0	27
Conflicting Peds, #/hr	0	0	0	4	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	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1521	940	20	0	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	960	0	-	0	1710	480
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	760	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	712	-	-	-	82	532
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	422	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	712	-	-	-	82	532
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	336	-
Stage 2	-	-	-	-	422	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	712	-	-	-	532
HCM Lane V/C Ratio	-	-	-	-	0.052
HCM Control Delay (s)	0	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	105	1370	884	47	0	47
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	1427	921	49	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	970	0	-	0	1877	485
Stage 1	-	-	-	-	945	-
Stage 2	-	-	-	-	932	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	706	-	-	-	63	528
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	344	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	706	-	-	-	53	528
Mov Cap-2 Maneuver	-	-	-	-	167	-
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	291	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	706	-	-	-	528
HCM Lane V/C Ratio	0.155	-	-	-	0.093
HCM Control Delay (s)	11	-	-	-	12.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.3

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

PM Peak Hour
7/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	769	601	0	4	0	622	217	0	0	0	339	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	793	620	0		0	641	206	0	0	0	378	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	953	2444	0		0	904	290	0	3	0	561	0
Arrive On Green	0.28	0.69	0.00		0.00	0.34	0.34	0.00	0.00	0.00	0.16	0.00
Sat Flow, veh/h	3442	3632	0		0	2714	841	0	1863	0	3548	0
Grp Volume(v), veh/h	793	620	0		0	433	414	0	0	0	378	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1693	0	1863	0	1774	0
Q Serve(g_s), s	16.0	4.9	0.0		0.0	15.7	15.7	0.0	0.0	0.0	7.4	0.0
Cycle Q Clear(g_c), s	16.0	4.9	0.0		0.0	15.7	15.7	0.0	0.0	0.0	7.4	0.0
Prop In Lane	1.00		0.00		0.00		0.50	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	953	2444	0		0	610	584	0	3	0	561	0
V/C Ratio(X)	0.83	0.25	0.00		0.00	0.71	0.71	0.00	0.00	0.00	0.67	0.00
Avail Cap(c_a), veh/h	1381	2879	0		0	763	730	0	629	0	1055	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	4.3	0.0		0.0	21.0	21.0	0.0	0.0	0.0	29.4	0.0
Incr Delay (d2), s/veh	3.0	0.1	0.0		0.0	2.3	2.4	0.0	0.0	0.0	1.4	0.0
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
%ile BackOfQ(50%),veh/ln	8.0	2.3	0.0		0.0	8.0	7.6	0.0	0.0	0.0	3.7	0.0
LnGrp Delay(d),s/veh	28.1	4.4	0.0		0.0	23.3	23.4	0.0	0.0	0.0	30.8	0.0
LnGrp LOS	C	A				C	C				C	
Approach Vol, veh/h		1413				847			0			441
Approach Delay, s/veh		17.7				23.4			0.0			28.1
Approach LOS		B				C						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.6	30.4		0.0		56.0		18.0
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 30	* 32		* 25		* 60		22.0
Max Q Clear Time (g_c+I1), s	18.0	17.7		0.0		6.9		9.4
Green Ext Time (p_c), s	2.5	7.7		0.0		12.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	327
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	63
Adj No. of Lanes	1
Peak Hour Factor	0.97
Percent Heavy Veh, %	2
Cap, veh/h	684
Arrive On Green	0.16
Sat Flow, veh/h	1556
Grp Volume(v), veh/h	63
Grp Sat Flow(s),veh/h/ln	1556
Q Serve(g_s), s	1.8
Cycle Q Clear(g_c), s	1.8
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	684
V/C Ratio(X)	0.09
Avail Cap(c_a), veh/h	901
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	12.3
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
LnGrp Delay(d),s/veh	12.4
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis

PM Peak Hour

1: Mather Field Rd/Paseo Dr & Folsom Blvd - With Train Delay/LOS

7/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	992	246	281	620	85	369	230	575	47	60	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	0.99		1.00	0.99	0.98		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.94	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	3539	1511	3433	3449		1681	1575	1481		1823	1546
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (perm)	1770	3539	1511	3433	3449		1681	1575	1481		1823	1546
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	28	1023	254	290	639	88	380	237	593	48	62	12
RTOR Reduction (vph)	0	0	30	0	7	0	0	13	64	0	0	11
Lane Group Flow (vph)	28	1023	224	290	720	0	342	440	351	0	110	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	4.9	70.4	32.3	10.9	76.8		32.1	32.1	43.0		15.5	15.5
Effective Green, g (s)	4.9	70.4	32.3	10.9	76.8		32.1	32.1	43.0		15.5	15.5
Actuated g/C Ratio	0.03	0.42	0.19	0.06	0.45		0.19	0.19	0.25		0.09	0.09
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	51	1473	288	221	1566		319	298	376		167	141
v/s Ratio Prot	0.02	c0.29		c0.08	0.21		0.20	c0.28	0.06		c0.06	
v/s Ratio Perm			c0.15						0.18			0.00
v/c Ratio	0.55	0.69	0.78	1.31	0.46		1.07	1.48	0.93		0.66	0.01
Uniform Delay, d1	81.0	40.5	65.0	79.1	31.8		68.5	68.5	61.6		74.2	69.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	11.5	1.4	12.4	169.0	0.2		70.9	231.8	29.8		9.0	0.0
Delay (s)	92.6	42.0	77.4	248.1	32.1		139.4	300.3	91.5		83.3	69.8
Level of Service	F	D	E	F	C		F	F	F		F	E
Approach Delay (s)		49.9			93.6			183.2			82.0	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	107.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	169.1	Sum of lost time (s)	40.2
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX D:

CUMULATIVE PLUS PROJECT CONDITIONS TECHNICAL CALCULATIONS

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	506	329	471	467	53	151	120	373	27	87	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.93	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1533	3433	3471		1681	1557	1492		1841	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1533	3433	3471		1681	1557	1492		1841	1543
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	569	370	529	525	60	170	135	419	30	98	12
RTOR Reduction (vph)	0	0	126	0	7	0	0	32	176	0	0	10
Lane Group Flow (vph)	11	569	244	529	578	0	153	262	101	0	128	2
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	0.7	25.6	25.6	14.0	39.3		19.7	19.7	33.7		12.5	12.5
Effective Green, g (s)	0.7	25.6	25.6	14.0	39.3		19.7	19.7	33.7		12.5	12.5
Actuated g/C Ratio	0.01	0.28	0.28	0.15	0.43		0.21	0.21	0.37		0.14	0.14
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	13	984	426	522	1482		359	333	546		250	209
v/s Ratio Prot	0.01	c0.16		c0.15	0.17		0.09	c0.17	0.03		c0.07	
v/s Ratio Perm			0.16						0.04			0.00
v/c Ratio	0.85	0.58	0.57	1.01	0.39		0.43	0.79	0.19		0.51	0.01
Uniform Delay, d1	45.6	28.6	28.5	39.0	18.1		31.3	34.2	19.8		36.9	34.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	166.4	0.8	1.9	42.8	0.2		0.8	11.6	0.2		1.8	0.0
Delay (s)	212.0	29.4	30.4	81.8	18.3		32.1	45.7	20.0		38.7	34.4
Level of Service	F	C	C	F	B		C	D	B		D	C
Approach Delay (s)		31.9			48.4			33.0			38.3	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	92.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	75	831	0	0	916	23	0	0	0	40	0	100
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.99
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	82	903	0	0	996	24	0	0	0	43	0	20
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
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	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	101	2463	0	0	1878	45	0	5	0	86	0	76
Arrive On Green	0.06	0.70	0.00	0.00	0.53	0.53	0.00	0.00	0.00	0.05	0.00	0.05
Sat Flow, veh/h	1774	3632	0	0	3623	85	0	1863	0	1774	0	1565
Grp Volume(v), veh/h	82	903	0	0	499	521	0	0	0	43	0	20
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1845	0	1863	0	1774	0	1565
Q Serve(g_s), s	1.7	3.9	0.0	0.0	6.9	6.9	0.0	0.0	0.0	0.9	0.0	0.5
Cycle Q Clear(g_c), s	1.7	3.9	0.0	0.0	6.9	6.9	0.0	0.0	0.0	0.9	0.0	0.5
Prop In Lane	1.00		0.00	0.00		0.05	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	101	2463	0	0	942	982	0	5	0	86	0	76
V/C Ratio(X)	0.81	0.37	0.00	0.00	0.53	0.53	0.00	0.00	0.00	0.50	0.00	0.26
Avail Cap(c_a), veh/h	236	3288	0	0	1220	1272	0	1140	0	1133	0	1000
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	2.3	0.0	0.0	5.7	5.7	0.0	0.0	0.0	17.4	0.0	17.2
Incr Delay (d2), s/veh	14.0	0.1	0.0	0.0	0.5	0.4	0.0	0.0	0.0	4.4	0.0	1.8
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	1.2	1.9	0.0	0.0	3.5	3.6	0.0	0.0	0.0	0.5	0.0	0.2
LnGrp Delay(d),s/veh	31.5	2.4	0.0	0.0	6.2	6.2	0.0	0.0	0.0	21.8	0.0	19.0
LnGrp LOS	C	A			A	A				C		B
Approach Vol, veh/h		985			1020			0			63	
Approach Delay, s/veh		4.8			6.2			0.0			20.9	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.1	24.6		0.0		30.7		6.8
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	5.0	25.9		23.0		34.9		24.0
Max Q Clear Time (g_c+I1), s	3.7	8.9		0.0		5.9		2.9
Green Ext Time (p_c), s	0.0	11.1		0.0		15.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	871	907	36	0	35
Conflicting Peds, #/hr	0	0	0	4	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	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	979	1019	40	0	39

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1060	0	-	0	1528	530
Stage 1	-	-	-	-	1039	-
Stage 2	-	-	-	-	489	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	653	-	-	-	108	493
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	582	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	653	-	-	-	108	493
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	582	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	653	-	-	-	493
HCM Lane V/C Ratio	-	-	-	-	0.08
HCM Control Delay (s)	0	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	103	768	894	27	0	49
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	873	1016	31	0	56

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1047	0	-	0	1701	523
Stage 1	-	-	-	-	1031	-
Stage 2	-	-	-	-	670	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	660	-	-	-	83	499
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	660	-	-	-	68	499
Mov Cap-2 Maneuver	-	-	-	-	186	-
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	387	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	660	-	-	-	499
HCM Lane V/C Ratio	0.177	-	-	-	0.112
HCM Control Delay (s)	11.6	-	-	-	13.1
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.4

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

AM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	426	342	0	0	0	337	261	0	0	0	366	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	526	422	0		0	416	266	0	0	0	499	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.81	0.81	0.81		0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	679	2122	0		0	655	414	0	3	0	757	0
Arrive On Green	0.20	0.60	0.00		0.00	0.32	0.32	0.00	0.00	0.00	0.21	0.00
Sat Flow, veh/h	3442	3632	0		0	2158	1306	0	1863	0	3548	0
Grp Volume(v), veh/h	526	422	0		0	356	326	0	0	0	499	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1602	0	1863	0	1774	0
Q Serve(g_s), s	8.7	3.2	0.0		0.0	10.3	10.5	0.0	0.0	0.0	7.7	0.0
Cycle Q Clear(g_c), s	8.7	3.2	0.0		0.0	10.3	10.5	0.0	0.0	0.0	7.7	0.0
Prop In Lane	1.00		0.00		0.00		0.82	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	679	2122	0		0	561	508	0	3	0	757	0
V/C Ratio(X)	0.77	0.20	0.00		0.00	0.63	0.64	0.00	0.00	0.00	0.66	0.00
Avail Cap(c_a), veh/h	1005	2629	0		0	839	759	0	777	0	1640	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	22.8	5.5	0.0		0.0	17.5	17.5	0.0	0.0	0.0	21.6	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.0		0.0	1.2	1.4	0.0	0.0	0.0	1.0	0.0
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
%ile BackOfQ(50%),veh/ln	4.3	1.6	0.0		0.0	5.2	4.8	0.0	0.0	0.0	3.8	0.0
LnGrp Delay(d),s/veh	25.0	5.5	0.0		0.0	18.7	18.9	0.0	0.0	0.0	22.6	0.0
LnGrp LOS	C	A				B	B				C	
Approach Vol, veh/h		948				682			0			599
Approach Delay, s/veh		16.3				18.8			0.0			20.7
Approach LOS		B				B						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	16.9	23.9		0.0		40.8		19.1
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 18	* 28		* 25		* 45		27.7
Max Q Clear Time (g_c+I1), s	10.7	12.5		0.0		5.2		9.7
Green Ext Time (p_c), s	1.1	6.2		0.0		8.2		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	590
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	100
Adj No. of Lanes	1
Peak Hour Factor	0.81
Percent Heavy Veh, %	2
Cap, veh/h	644
Arrive On Green	0.21
Sat Flow, veh/h	1554
Grp Volume(v), veh/h	100
Grp Sat Flow(s),veh/h/ln	1554
Q Serve(g_s), s	2.4
Cycle Q Clear(g_c), s	2.4
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	644
V/C Ratio(X)	0.16
Avail Cap(c_a), veh/h	1031
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	11.1
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.1
LnGrp Delay(d),s/veh	11.2
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

AM Peak Hour
9/15/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	506	329	471	467	53	151	120	373	27	87	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	0.99		1.00	0.99	0.99		1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.93	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (prot)	1770	3539	1511	3433	3466		1681	1556	1489		1841	1529
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.99	1.00
Satd. Flow (perm)	1770	3539	1511	3433	3466		1681	1556	1489		1841	1529
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	11	569	370	529	525	60	170	135	419	30	98	12
RTOR Reduction (vph)	0	0	40	0	6	0	0	20	41	0	0	11
Lane Group Flow (vph)	11	569	330	529	579	0	153	274	236	0	128	1
Confl. Peds. (#/hr)			13			6			1			7
Confl. Bikes (#/hr)			8			3			1			3
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	1.7	67.5	29.5	13.5	79.7		28.0	28.0	41.5		16.4	16.4
Effective Green, g (s)	1.7	67.5	29.5	13.5	79.7		28.0	28.0	41.5		16.4	16.4
Actuated g/C Ratio	0.01	0.41	0.18	0.08	0.48		0.17	0.17	0.25		0.10	0.10
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	18	1442	269	279	1668		284	263	373		182	151
v/s Ratio Prot	0.01	c0.16		c0.15	0.17		0.09	c0.18	0.05		c0.07	
v/s Ratio Perm			c0.22						0.11			0.00
v/c Ratio	0.61	0.39	1.23	1.90	0.35		0.54	1.04	0.63		0.70	0.01
Uniform Delay, d1	81.6	34.6	68.0	76.0	26.8		62.9	68.8	55.3		72.2	67.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	48.7	0.2	130.0	416.4	0.1		2.0	66.9	3.5		11.6	0.0
Delay (s)	130.3	34.8	198.0	492.5	26.9		64.9	135.7	58.7		83.9	67.3
Level of Service	F	C	F	F	C		E	F	E		F	E
Approach Delay (s)		99.5			248.0			91.3			82.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	153.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	165.6	Sum of lost time (s)	40.2
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

ATTACHMENT 3

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	995	246	284	622	85	369	230	578	47	60	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	0.99	0.99		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.94	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	3539	1532	3433	3454		1681	1577	1485		1823	1553
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (perm)	1770	3539	1532	3433	3454		1681	1577	1485		1823	1553
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	28	1026	254	293	641	88	380	237	596	48	62	12
RTOR Reduction (vph)	0	0	83	0	9	0	0	21	216	0	0	11
Lane Group Flow (vph)	28	1026	171	293	720	0	342	433	201	0	110	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6		5	2		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	3.5	32.6	32.6	9.5	39.0		28.1	28.1	37.6		12.4	12.4
Effective Green, g (s)	3.5	32.6	32.6	9.5	39.0		28.1	28.1	37.6		12.4	12.4
Actuated g/C Ratio	0.03	0.32	0.32	0.09	0.38		0.27	0.27	0.37		0.12	0.12
Clearance Time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	60	1122	485	317	1310		459	431	543		219	187
v/s Ratio Prot	0.02	c0.29		c0.09	0.21		0.20	c0.27	0.03		c0.06	
v/s Ratio Perm			0.11						0.10			0.00
v/c Ratio	0.47	0.91	0.35	0.92	0.55		0.75	1.00	0.37		0.50	0.01
Uniform Delay, d1	48.7	33.8	27.0	46.3	25.0		34.1	37.3	23.9		42.3	39.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	5.6	11.3	0.4	31.4	0.5		6.5	44.5	0.4		1.8	0.0
Delay (s)	54.4	45.1	27.4	77.7	25.5		40.5	81.8	24.3		44.1	39.8
Level of Service	D	D	C	E	C		D	F	C		D	D
Approach Delay (s)		41.9			40.5			50.4			43.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	102.8	Sum of lost time (s)	20.2
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 Signalized Intersection Summary
2: Folsom Blvd & Dawes St

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	1432	0	0	868	69	0	0	0	49	0	111
Number	1	6	16	5	2	12	7	4	14	3	8	18
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		0.97	1.00		1.00	1.00		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	194	1476	0	0	895	68	0	0	0	51	0	22
Adj No. of Lanes	1	2	0	0	2	0	0	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	247	2531	0	0	1654	126	0	4	0	172	0	145
Arrive On Green	0.14	0.72	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.10	0.00	0.10
Sat Flow, veh/h	1774	3632	0	0	3418	253	0	1863	0	1774	0	1495
Grp Volume(v), veh/h	194	1476	0	0	476	487	0	0	0	51	0	22
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1808	0	1863	0	1774	0	1495
Q Serve(g_s), s	5.4	10.4	0.0	0.0	9.5	9.5	0.0	0.0	0.0	1.4	0.0	0.7
Cycle Q Clear(g_c), s	5.4	10.4	0.0	0.0	9.5	9.5	0.0	0.0	0.0	1.4	0.0	0.7
Prop In Lane	1.00		0.00	0.00		0.14	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	2531	0	0	880	899	0	4	0	172	0	145
V/C Ratio(X)	0.78	0.58	0.00	0.00	0.54	0.54	0.00	0.00	0.00	0.30	0.00	0.15
Avail Cap(c_a), veh/h	417	3113	0	0	1002	1023	0	839	0	834	0	703
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	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.2	3.6	0.0	0.0	8.8	8.8	0.0	0.0	0.0	21.4	0.0	21.1
Incr Delay (d2), s/veh	5.4	0.2	0.0	0.0	0.5	0.5	0.0	0.0	0.0	1.0	0.0	0.5
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	3.0	5.0	0.0	0.0	4.6	4.7	0.0	0.0	0.0	0.7	0.0	0.3
LnGrp Delay(d),s/veh	26.7	3.8	0.0	0.0	9.3	9.3	0.0	0.0	0.0	22.4	0.0	21.6
LnGrp LOS	C	A			A	A				C		C
Approach Vol, veh/h		1670			963			0			73	
Approach Delay, s/veh		6.4			9.3			0.0			22.2	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.1	30.0		0.0		41.1		9.9
Change Period (Y+Rc), s	4.0	4.6		3.5		4.6		5.0
Max Green Setting (Gmax), s	12.0	28.9		23.0		44.9		24.0
Max Q Clear Time (g_c+I1), s	7.4	11.5		0.0		12.4		3.4
Green Ext Time (p_c), s	0.2	13.9		0.0		22.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	0	1481	905	28	0	40
Conflicting Peds, #/hr	0	0	0	4	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	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1527	933	29	0	41

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	962	0	-	0	1710	481
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	763	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	711	-	-	-	82	531
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	421	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	711	-	-	-	82	531
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	421	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	711	-	-	-	531
HCM Lane V/C Ratio	-	-	-	-	0.078
HCM Control Delay (s)	0	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	124	1357	886	47	0	47
Conflicting Peds, #/hr	0	0	0	4	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	1414	923	49	0	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	972	0	-	0	1912	486
Stage 1	-	-	-	-	947	-
Stage 2	-	-	-	-	965	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	705	-	-	-	60	527
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	330	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	705	-	-	-	49	527
Mov Cap-2 Maneuver	-	-	-	-	159	-
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	270	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	705	-	-	-	527
HCM Lane V/C Ratio	0.183	-	-	-	0.093
HCM Control Delay (s)	11.2	-	-	-	12.5
HCM Lane LOS	B	-	-	-	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.3

HCM 2010 Signalized Intersection Summary
5: Folsom Blvd & Coloma Rd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (veh/h)	763	594	0	4	0	624	216	0	0	0	348	0
Number	1	6	16		5	2	12	7	4	14	3	8
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	0		0	1863	1900	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	787	612	0		0	643	205	0	0	0	388	0
Adj No. of Lanes	2	2	0		0	2	0	0	1	0	2	0
Peak Hour Factor	0.97	0.97	0.97		0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0		0	2	2	2	2	2	2	2
Cap, veh/h	946	2436	0		0	905	288	0	3	0	571	0
Arrive On Green	0.27	0.69	0.00		0.00	0.34	0.34	0.00	0.00	0.00	0.16	0.00
Sat Flow, veh/h	3442	3632	0		0	2720	837	0	1863	0	3548	0
Grp Volume(v), veh/h	787	612	0		0	433	415	0	0	0	388	0
Grp Sat Flow(s),veh/h/ln	1721	1770	0		0	1770	1694	0	1863	0	1774	0
Q Serve(g_s), s	15.9	4.8	0.0		0.0	15.7	15.8	0.0	0.0	0.0	7.6	0.0
Cycle Q Clear(g_c), s	15.9	4.8	0.0		0.0	15.7	15.8	0.0	0.0	0.0	7.6	0.0
Prop In Lane	1.00		0.00		0.00		0.49	0.00		0.00	1.00	
Lane Grp Cap(c), veh/h	946	2436	0		0	610	584	0	3	0	571	0
V/C Ratio(X)	0.83	0.25	0.00		0.00	0.71	0.71	0.00	0.00	0.00	0.68	0.00
Avail Cap(c_a), veh/h	1369	2869	0		0	764	731	0	628	0	1057	0
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
Upstream Filter(I)	1.00	1.00	0.00		0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	25.3	4.4	0.0		0.0	21.1	21.1	0.0	0.0	0.0	29.3	0.0
Incr Delay (d2), s/veh	3.0	0.1	0.0		0.0	2.3	2.4	0.0	0.0	0.0	1.4	0.0
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
%ile BackOfQ(50%),veh/ln	7.9	2.3	0.0		0.0	8.1	7.8	0.0	0.0	0.0	3.8	0.0
LnGrp Delay(d),s/veh	28.3	4.4	0.0		0.0	23.4	23.5	0.0	0.0	0.0	30.8	0.0
LnGrp LOS	C	A				C	C				C	
Approach Vol, veh/h		1399				848			0			451
Approach Delay, s/veh		17.9				23.4			0.0			28.2
Approach LOS		B				C						C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.5	30.5		0.0		55.9		18.2
Change Period (Y+Rc), s	* 5.1	* 4.9		* 5.1		* 4.9		6.3
Max Green Setting (Gmax), s	* 30	* 32		* 25		* 60		22.1
Max Q Clear Time (g_c+I1), s	17.9	17.8		0.0		6.8		9.6
Green Ext Time (p_c), s	2.4	7.6		0.0		12.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Movement	SBR
Lane Configurations	
Volume (veh/h)	327
Number	18
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	0.98
Parking Bus, Adj	1.00
Adj Sat Flow, veh/h/ln	1863
Adj Flow Rate, veh/h	63
Adj No. of Lanes	1
Peak Hour Factor	0.97
Percent Heavy Veh, %	2
Cap, veh/h	685
Arrive On Green	0.16
Sat Flow, veh/h	1557
Grp Volume(v), veh/h	63
Grp Sat Flow(s),veh/h/ln	1557
Q Serve(g_s), s	1.8
Cycle Q Clear(g_c), s	1.8
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	685
V/C Ratio(X)	0.09
Avail Cap(c_a), veh/h	899
HCM Platoon Ratio	1.00
Upstream Filter(I)	1.00
Uniform Delay (d), s/veh	12.3
Incr Delay (d2), s/veh	0.1
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.8
LnGrp Delay(d),s/veh	12.4
LnGrp LOS	B
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer	

User approved ignoring U-Turning movement.
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM Signalized Intersection Capacity Analysis
1: Mather Field Rd/Paseo Dr & Folsom Blvd

PM Peak Hour
9/14/2015

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	995	246	284	622	85	369	230	578	47	60	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.7	4.7	5.5	4.6		4.6	4.6	5.5		5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.91	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.95	1.00	0.99		1.00	0.99	0.98		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.94	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	3539	1511	3433	3449		1681	1575	1481		1823	1546
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.98	1.00
Satd. Flow (perm)	1770	3539	1511	3433	3449		1681	1575	1481		1823	1546
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	28	1026	254	293	641	88	380	237	596	48	62	12
RTOR Reduction (vph)	0	0	30	0	7	0	0	13	22	0	0	11
Lane Group Flow (vph)	28	1026	224	293	722	0	342	441	395	0	110	1
Confl. Peds. (#/hr)			16			7			5			4
Confl. Bikes (#/hr)			3			8						1
Turn Type	Prot	NA	custom	Prot	NA		Split	NA	pm+ov	Split	NA	Perm
Protected Phases	1	6 10		5	2 9		4	4	5	3	3	
Permitted Phases			6						4			3
Actuated Green, G (s)	4.9	70.2	32.1	11.3	77.0		32.2	32.2	43.5		15.5	15.5
Effective Green, g (s)	4.9	70.2	32.1	11.3	77.0		32.2	32.2	43.5		15.5	15.5
Actuated g/C Ratio	0.03	0.41	0.19	0.07	0.45		0.19	0.19	0.26		0.09	0.09
Clearance Time (s)	5.2		4.7	5.5			4.6	4.6	5.5		5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0			3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	51	1466	286	229	1567		319	299	380		166	141
v/s Ratio Prot	0.02	c0.29		c0.09	0.21		0.20	c0.28	0.07		c0.06	
v/s Ratio Perm			c0.15						0.20			0.00
v/c Ratio	0.55	0.70	0.78	1.28	0.46		1.07	1.48	1.04		0.66	0.01
Uniform Delay, d1	81.2	40.9	65.3	79.0	31.9		68.6	68.6	63.0		74.4	70.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	11.5	1.5	13.1	155.0	0.2		70.9	231.1	56.6		9.5	0.0
Delay (s)	92.7	42.4	78.4	234.0	32.1		139.5	299.7	119.5		84.0	70.0
Level of Service	F	D	E	F	C		F	F	F		F	E
Approach Delay (s)		50.5			90.0			192.6			82.6	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	109.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	169.4	Sum of lost time (s)	40.2
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

AVAILABLE
(642)
MILLS CENTER
Round Table
Planet fitness
NAILS
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Primadu BEAUTY SUPPLY

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MEMORANDUM

DATE: October 19, 2015

TO: Honorable Mayor and Council Members

FROM: Matthew Diaz, Associate Planner

SUBJECT: **ZINFANDEL CENTER TENATIVE PARCEL MAP; PROJECT NO. DD9611 – LOCATED AT THE NORTHWEST CORNER OF BEAR HOLLOW DRIVE AND ZINFANDEL DRIVE.**

PROPERTY OWNER:	**APPLICANT/DEVELOPER:**
3300 Zinfandel, LLC Mr. Scott Stafford 101 Mission Street, Suite 420 San Francisco, CA 94105	RSC Engineering, Inc. Ms. Tiffany Wilson 2250 Douglas Boulevard, Suite 150 Roseville, CA 95661

PROJECT:	Zinfandel Center Tentative Parcel Map
FILE:	DD9611
LOCATION:	Northwest corner of Bear Hollow Drive and Zinfandel Drive
APN:	072-2360-001-0000
PLANNER:	Matthew Diaz, Associate Planner

RECOMMENDATION

Adopt the Resolution 128-2015.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution 128-2015 would approve the applicant's request to subdivide a developed 14.05-acre parcel into two new parcels with Parcel 1 at 3.96 acres for the existing parking lot and Parcel 2 at 8.86 acres of undeveloped land. The remaining 1.23 acres is currently in the process of being dedicated to the Cordova Recreation and Parks Districts for the existing bicycle corridor.

BACKGROUND

A parking lot was recently constructed on the project site to support the adjacent Blue Shield office complex as well as future construction of the undeveloped section of the parcel at Bear Hollow Drive and Zinfandel Drive. As part of that approval, the existing bike path will be dedicated to the Cordova Recreation and Park District (CRPD), as CRPD currently maintains the bike corridor. The dedication is a requirement of the Village of Zinfandel Special Planning Area conditions of approval. The remaining parcel will contain the parking lot and an undeveloped section of land located on the northwest corner of Zinfandel Drive and Bear Hollow Drive. The project site is zoned BP-ZSPA (Business Professional in the Villages of Zinfandel Special Planning Area).

Figure 1: Project Site

The City of Rancho Cordova received an application on September 11, 2015 requesting a Tentative Parcel Map to divide the existing parcel into two (2) new parcels with the remainder parcel currently in the process of dedication to the Cordova Recreation and Parks District (CRPD). The new parcels will include:

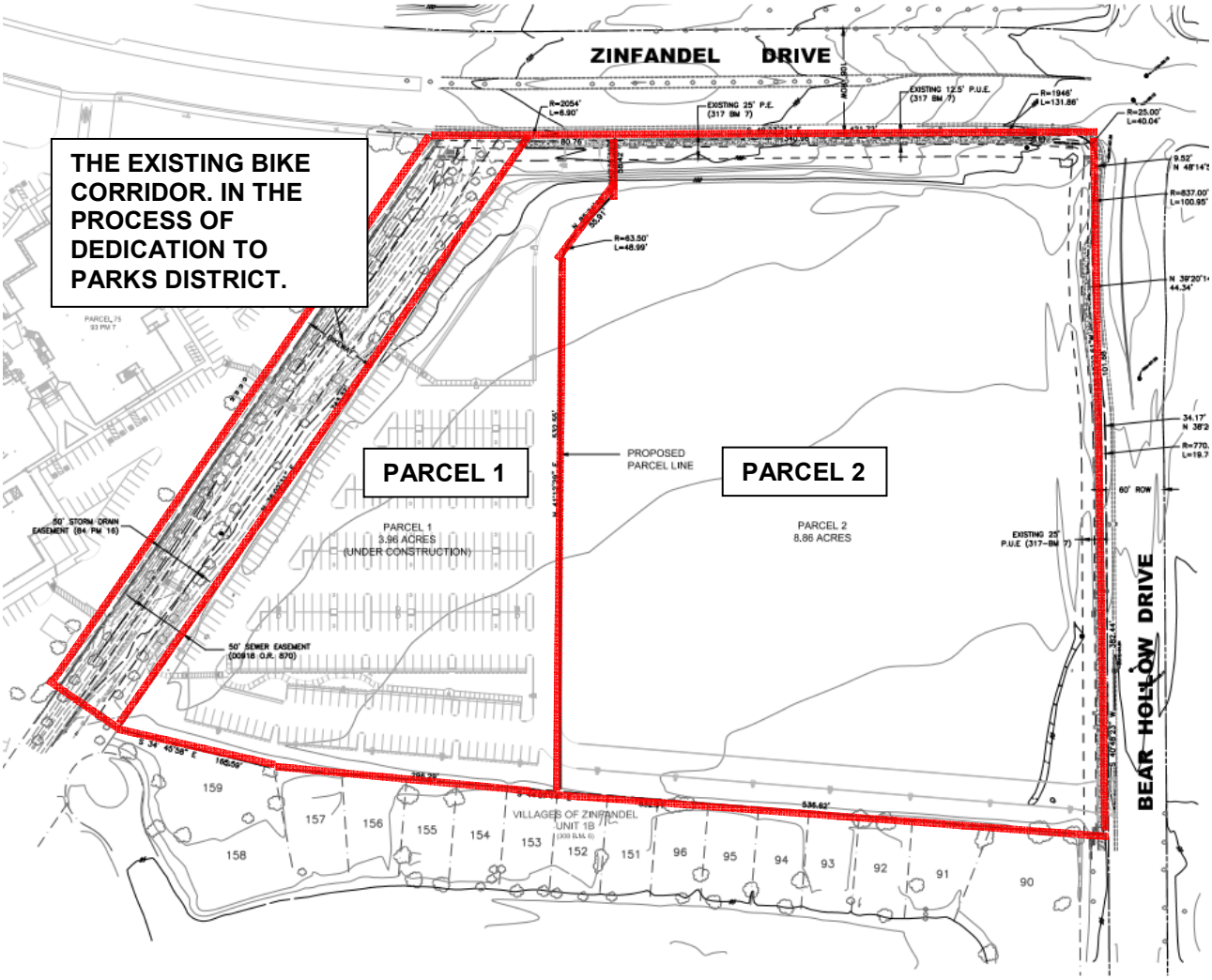
- Parcel 1: A new 3.96 acre (172,497 square feet) parcel with a recently completed paved parking area with landscape and lighting. This area will serve the adjacent business center as well as future development at the corner of Zinfandel Drive and Bear Hollow Drive;

- Parcel 2: A new 8.86 acre (385,941 square feet) undeveloped parcel;

- Remainder Parcel: the remainder 1.23 acre (59,227 square feet) parcel is currently in the process of being dedicated to the Cordova Parks and Recreation District (CRPD) as part of the original requirements of the Villages of Zinfandel 2002 approval for the Class I bike corridor.

The application was routed to the City's commenting agencies and reviewed for environmental concerns.

Figure 2: Proposed 2 Parcel Subdivision



REQUIRED PERMITS AND REGULATORY BASIS

According to the State Subdivision Map Act and Municipal Code, a commercial parcel may be split up into separate lots with a Subdivision 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. Villages of Zinfandel Special Planning Area provides specific standards for development to regulate the use and size and is the primary regulatory tool for the site.

ANALYSIS

The applicant is requesting approval of a Tentative Parcel Map to divide a developed parcel totaling 14.05 acres into two (2) parcels with the remainder parcel currently in the process of dedication to the Cordova Recreation and Parks District (CRPD). No physical improvements or changes in use are proposed at this time.

General Plan: The project site is located in the OMU (Office Mixed Use) designation of the City's General Plan. The Office Mixed Use category encourages the integration of commercial and/or residential use in conjunction with office use of a site. In any case, office uses are the predominant use, but others may be included in a vertical or horizontal configuration.

Table 1: Surrounding Designations and Existing Uses

Location	Existing Use	General Plan Designation	Zoning Designation
Northwest corner of Bear Hollow Drive and Zinfandel Drive (Project Site)	Parking Lot and Undeveloped Land	OMU (Office Mixed Use)	BP-ZSPA (Business Professional within the Zinfandel Village Special Planning Area)
North	Office Uses	OMU (Office Mixed Use)	OPMU (Office Professional Mixed Use)
East	Zinfandel Drive and Residential Uses (Stonecreek)	LDR (Low Density Residential)	LD-ZSPA (Low Density within the Zinfandel Village Special Planning Area)
South	Bear Hollow Drive and vacant parcel (Stonecreek)	CMU (Commercial Mixed Use)	RC-ZSPA (Regional Commercial within the Zinfandel Village Special Planning Area)
West	Residential Uses (Stonecreek)	LDR (Low Density Residential)	LD-ZSPA (Low Density within the Zinfandel Village Special Planning Area)

Zoning Code: The project site is zoned BP-ZSPA (Business Professional within the Zinfandel Village Special Planning Area) which is intended to promote a harmonious development of business and professional office areas with adjacent commercial or residential development. The BP-ZSPA zoning district generally permits office buildings and related uses such as banks, doctor's offices, general business office, and general uses. No physical improvements are included with this lot split. The new parcels will exceed the 10,000 square foot minimum lot size zoning requirement of the Villages of Zinfandel Special Planning Area.

There is a recently developed parking lot on Parcel 1 that will serve the adjacent business as well as future development. Parcel 2 will require design review prior to construction to ensure any future project complies with all development standards (FAR, setbacks, parking, etc.). The parcels will maintain shared access and shared parking and are subject to the requirements of the Villages of Zinfandel Special Planning Area and related environmental mitigation.

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.

FISCAL IMPACT

The City anticipates that this project will result in additional revenues created from the potential sale of the new parcel and through taxes collected for each new parcel.

ENVIRONMENTAL

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Chapter 3, Division 6 (State CEQA Guidelines) Section 15315 (Minor Land Division). A description of the evidence for the exemption is found in the findings included in **Attachment 1**.

RECOMMENDED MOTIONS

Staff recommends that the City Council find the project to be in compliance with the California Environmental Quality Act (CEQA) as a Class 5 exemption per section 15315 "Minor Land Division" and adopt Resolution Number 128-2015 approving the Tentative Parcel Map for the Zinfandel Center DD9611, subject to the findings, Tentative Parcel Map (**Exhibit A**) and Conditions of Approval (**Exhibit B**)."

ATTACHMENTS

1. Resolution 128-2015, including Tentative Parcel Map (**Exhibit A**) and subject to the Conditions of Approval (**Exhibit B**).
2. 500' Radius Map and Labels.

ATTACHMENT 1

CITY OF RANCHO CORDOVA

RESOLUTION NO. 128-2015

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING THE ZINFANDEL CENTER TENTATIVE PARCEL MAP, PROJECT NO. DD9611

WHEREAS, Tiffany Wilson of the RSC Engineering, Inc. (hereinafter referred to as Applicant) filed an application with the City of Rancho Cordova for a two lot Tentative Parcel Map for the Zinfandel Center Parking Lot, located at Northwest corner of Bear Hollow Drive and Zinfandel Drive (Assessor's Parcel Number: 072-2360-001-0000); and

WHEREAS, the City Council is the appropriate authority to hear and take action on this project; 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, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does authorize that the Council approves the Zinfandel Center Tentative Parcel Map **(Exhibit A)**, subject to the following findings and attached Conditions of Approval (**Exhibit B**):

A. Finds the project site was adequately analyzed according to the California Environmental Quality Act (CEQA) Guidelines and is Exempt under Section 15315, Minor Land Division, as supported by the following:

   The property is in an urbanized area zoned for office uses. The division of one lot into two parcels is in conformance with the General Plan and Special Planning Area standards as no variances or exceptions are required. All services and access to the proposed parcels to local standards are available and the parcel does not have an average slope greater than 20 percent.

B. Section 66474 of the California Subdivision Map Act requires a City to deny approval of a tentative map, if any of the 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 the land use designation specified for this parcel. There are no buildings onsite. One of the proposed parcels will contain the existing parking lot while the other will be left undeveloped. Both the lots are consistent with the existing development standards of the General Plan designation of Office Mixed Use (OMU) and the zoning designation of Business Professional (BP) within the Villages of Zinfandel Special Planning Area (BP-ZSPA). No changes to the existing uses or physical improvements are proposed.

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 Map is consistent with the existing development standards of the General Plan designation of OMU and the zoning standards of the Villages of Zinfandel Special Planning Area (ZSPA).

3. Finding: That the site is not physically suitable for the type of development.

   Evidence: The site is physically suitable to subdivide. The existing parcel will be split into two parcels. There are no buildings onsite and one of the proposed parcels will contain the existing parking lot while the other will be left undeveloped. Each new parcel will be supported by cross access, parking and to existing utilities for future development.

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 development. The proposed Tentative Parcel Map will divide the existing parcel into two office lots. No additions or physical improvements are proposed at this time. The existing parking and vehicular access drives will be reciprocally joined for common use and maintenance as a condition of the map.

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 project does not involve any physical improvements or changes in use at this time. The site is currently partially developed with paved parking and an undeveloped portion containing hard packed surfaces without any sensitive plant and/or wildlife. The proposed project can be found exempt from environmental review pursuant to Section 15315 of the California Environmental Quality Act.

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 two new parcels would allow the future buildings to be placed on individual lots. The subject property is already partially developed with a parking lot. The proposed Tentative Parcel Map does not include any physical change and will not disturb any previously undisturbed area. No public health problems will result from approval of the subdivision map.

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.

ATTACHMENT 1

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.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the ____ day of _____ 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

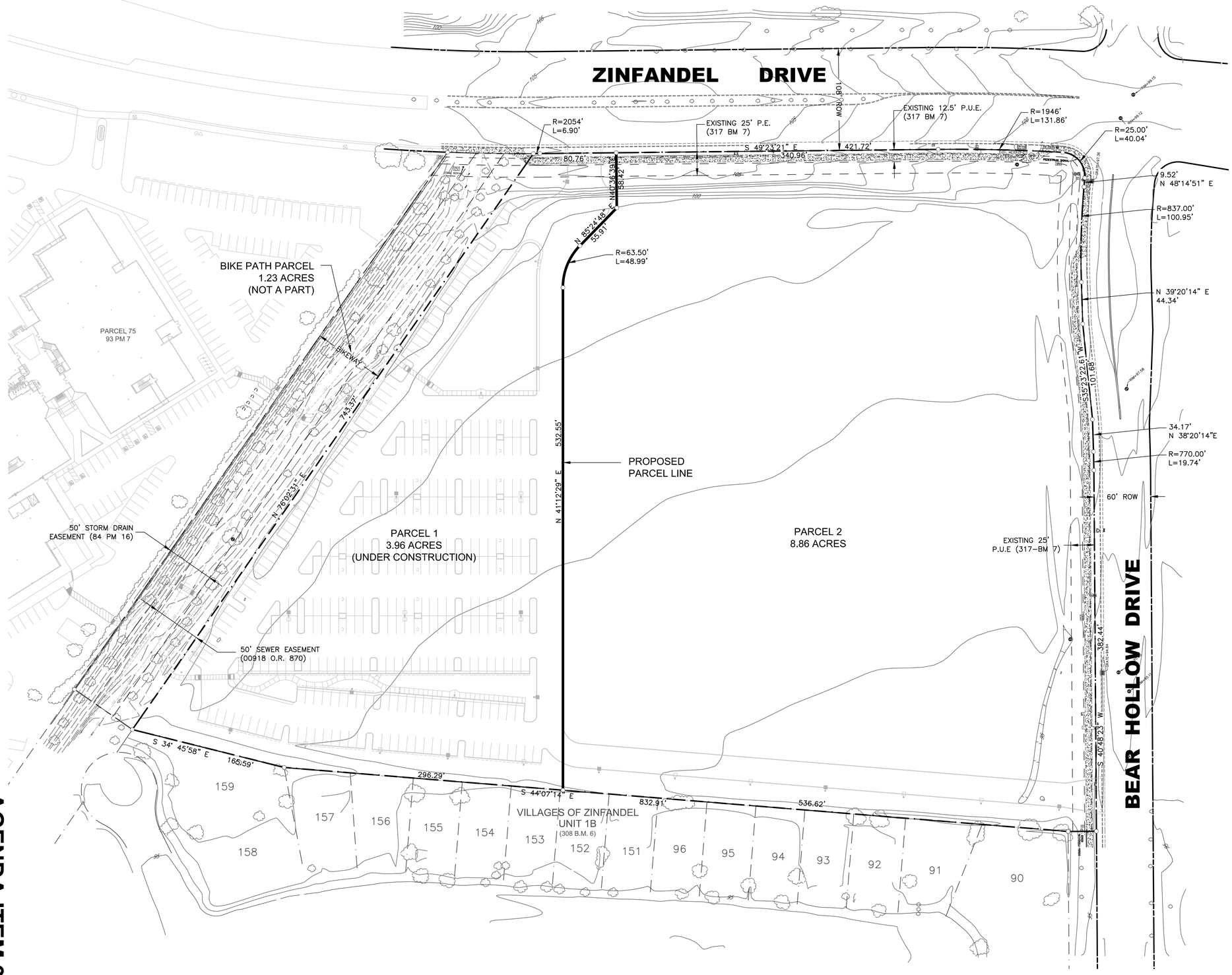
_____
Robert J. McGarvey, Mayor

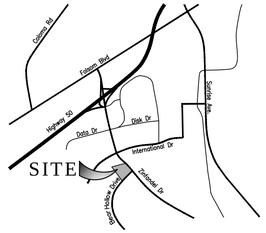
ATTEST:

_____
Mindy Cuppy, MMC, City Clerk

EXHIBIT A

3300 ZINFANDEL LLC





VICINITY MAP
NO SCALE

PROJECT SUMMARY:

OWNER/APPLICANT
3300 ZINFANDEL, LLC
101 MISSION ST., STE 420
SAN FRANCISCO CA, 94105
(415)971-1319

ENGINEER
RSC ENGINEERING, INC.
ATTN: TIFFANY WILSON
2250 DOUGLAS BLVD., STE. 150
ROSEVILLE, CA 95661
(916) 788-2884
T.WILSON@RSC-ENGR.COM

APN
072-2360-001

ZONING:
BP (BUSINESS PROFESSIONAL)
VILLAGES OF ZINFANDEL S.P.A.
UNIT No. 9

GENERAL PLAN:
OFFICE MIXED USE

AREA:
14.05 ACRES

ACREAGE:

PARCEL 1	3.96 ACRES
PARCEL 2	8.86 ACRES
TOTAL	12.82 ACRES

NOTES:
1. PRIVATE CROSS ACCES AGREEMENT WILL BE PREPARED BETWEEN THE TWO PARCELS.

UTILITY PROVIDERS:

WATER	GOLDEN STATE WATER COMPANY
SEWER	SASD
DRAINAGE	CITY OF RANCHO CORDOVA
FIRE	SAC METRO FIRE DISTRICT
GAS	PG&E
ELECTRIC	SMUD
TELEPHONE	AT&T
CABLE	COMCAST

LEGEND:
EXISTING BOUNDARY
PROPOSED PARCEL LINE
EXSITING EASEMENT

1 inch = 50 ft.

REV NO.	DESCRIPTION	ENG INIT.	BY	CITY APPROVED	DATE

REGISTERED PROFESSIONAL ENGINEER
RICHARD S. CHAVEZ
No.29033
Mar. 31, 2017
CIVIL
STATE OF CALIFORNIA

RSC ENGINEERING
2250 Douglas Blvd. Suite 150
Roseville, CA 95661
Ph:916.788.2884 Fax:916.788.4408

PROJECT NO: 135-001
DRAWN BY: RSL
CHECKED BY: TA
DESIGNED BY: RSC Eng

TENTATIVE PARCEL MAP
3300 ZINFANDEL DRIVE
RANCHO CORDOVA, CA

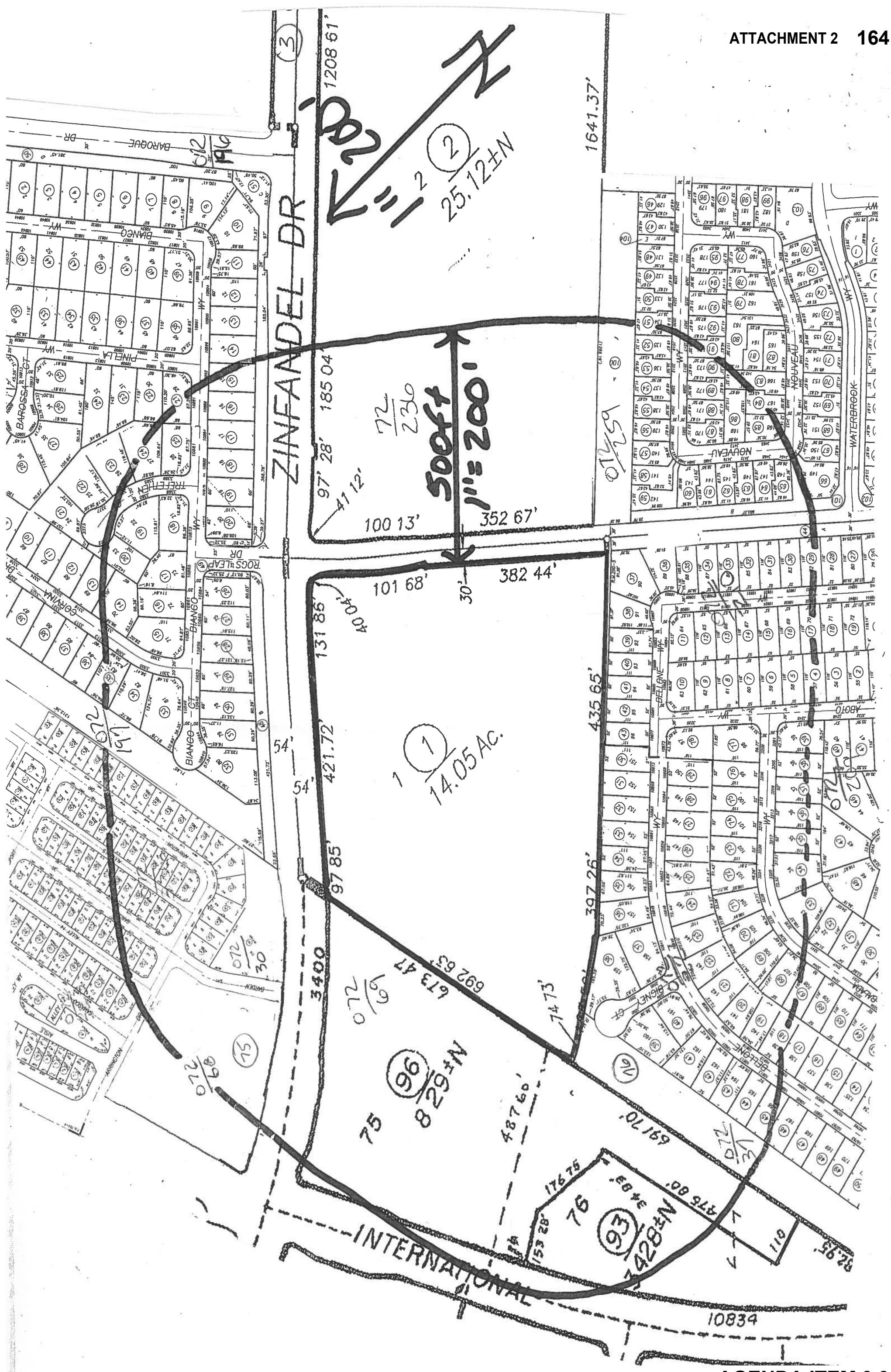
SHEET TITLE
TENTATIVE PARCEL MAP

SHEET NO.
1

DATE: SEPTEMBER 3, 2015

		Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date & Signature)
General Conditions					
1.	The approved entitlement is for a Tentative Parcel Map, to subdivide one (1) parcel (APN 072-2360-001-0000) into two (2) parcels, as described in the City Council staff report dated October 19, 2015 and Tentative Subdivision Map (**Exhibit A**) submitted September 11, 2015 with the conditions herein, for project number DD9611.	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	

		Category	Timing/ Implementation	Enforcement/ Monitoring	Verification (date & Signature)
5.	Construction of the undeveloped Parcel 2 at the corner of Zinfandel Drive and Bear Hollow Drive will require a separate submittal for design review and approval. Intensification of the site through construction of this undeveloped parcel will require a reassessment of the clearance between the main entrance and future pedestrian crossing along Zinfandel Drive.	Design Review	On-Going	Planning	
Prior to Recordation of the Subdivision Map					
6.	The Tentative Parcel 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	
7.	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. Any change in tenant parking must be reviewed and approved by the Planning Department prior to occupancy of the buildings.	Access and Parking	Prior to Recordation of the Subdivision Map	Public Works/Planning	
8.	Dedicate a standard 12.5-foot Public Utility Easement for the installation and maintenance of water, gas, sewer and drainage pipes, traffic control devices and for poles and overhead and underground wires and conduits for electrical, television and telephone services and appurtenances adjacent to all public drive.	Utilities	Prior to Recordation of the Subdivision Map	Public Works	


ZINFANDEL DR
1208 61'
1641.37'
25.12±N
500ft
1"=200'
185 04'
97' 28'
41 12'
100 13'
352 67'
382 44'
101 68'
30'
40 04'
131 85'
421.72'
54'
54'
14.05AC.
435 65'
397 26'
692 63'
613 47'
74 73'
487 60'
691 70'
475 80'
92.95'
153 28'
10834
3400
INTERNATIONAL
BARGUE DR
BIANCO
PINELLA
BARCOSSA CT
TRUFFLEY
ROGS LEAP DR
CORVINA
BIANCO CT
NOUVEAU
WATERBROOK
BELLONE
ABOTO
ARRINGTON
ALLEY

072-2360-001
3300 ZINFANDEL LLC
101 MISSION ST #420
SAN FRANCISCO CA 94105

072-2360-001
OCCUPANT
3370 ZINFANDEL DR
RANCHO CORDOVA CA 95670

072-0370-076
REC CORDOVA
2729 PROSPECT PARK DR #230
RANCHO CORDOVA CA 95670

072-0680-075
MG PARTNERS FUND VIII CAPITAL
VILLAGE LLC
425 CALIFORNIA ST
SAN FRANCISCO CA 94104

072-0680-075
OCCUPANT
3301 ZINFANDEL DR
RANCHO CORDOVA CA 95670

072-0690-093,096
3300 ZINFANDEL LLC
101 MISSION ST #420
SAN FRANCISCO CA 94105

072-0690-093
OCCUPANT
10834 INTERNATIONAL DR
RANCHO CORDOVA CA 95670

072-0690-096
OCCUPANT
3300 ZINFANDEL DR
RANCHO CORDOVA CA 95670

072-1960-014
CHRISTINA FIELD
10896 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-015
WENDELL & CAMILA VILLACARLOS
10892 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-016
BOLCHI ROJHANI FAMILY TRUST
10888 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-017
INDRI SIMANHADI
10884 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-018
WENDY KASSOUF
10880 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-019
LALAN & ROWENA KUMAR
200 MOON CIR #221
FOLSOM CA 95630

072-1960-019
OCCUPANT
10876 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-020
JOHN D & JEANNA B DYTE
10872 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1960-021
STANGLE LIVING TRUST
10901 PINELLA WAY
RANCHO CORDOVA CA 95670

072-1960-022
ANKUR N & HEENA SHAH
10905 PINELLA WAY
RANCHO CORDOVA CA 95670

072-1960-051,052/1970-047-049/2100-044/2590-100,101
RECREATION CORDOVA
2729 PROSPECT PARK DR #230
RANCHO CORDOVA CA 95670

072-1970-013
BARBARA A & RICHARD CAMPANA
3316 CORVINA DR
RANCHO CORDOVA CA 95670

072-1970-014
JUDY & JEFF GELEIN
3312 CORVINA DR
RANCHO CORDOVA CA 95670

072-1970-015
MANUEL S & EMMA R MORADA
10857 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-016
KEVIN & CATHY T LUONG
10861 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-017
INGE SHIRLEY LIVING TRUST
10865 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-018
ARTHUR & CHRISTINA C WEINER
13962 SW HILLSHIRE DR
PORTLAND OR 97223

072-1970-018
OCCUPANT
3388 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-019
JANET R & ROBERT M HOGE
3380 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-020
NATHAN A GAUFF
PO BOX 2550
SACRAMENTO CA 95812

072-1970-020
OCCUPANT
3372 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-022
KATALYN MINH REVOCABLE LIVING TRUST
3377 TREFETHEN CT
GOLD RIVER CA 95670

072-1970-023
GILBERT FAMILY TRUST
3381 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-024
GLEN & KIMBERLIE DAVIS FAMILY TRUST
3385 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-025
GREGORY C & KELLEY L WENTWORTH
3389 TREFETHEN CT
RANCHO CORDOVA CA 95670

072-1970-026
JOSEPH B SHIN
10864 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-027
JON & SUK M LEE
10860 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-028
CHRISTINE POK
10856 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-029
MARIO C ALVARADO REVOCABLE TRUST
10852 BIANCO WAY
RANCHO CORDOVA CA 95670

072-1970-030
HUY T LE
10848 BIANCO CT
RANCHO CORDOVA CA 95670

072-1970-031
MICHAEL DIPPON
10844 BIANCO CT
RANCHO CORDOVA CA 95670

072-1970-032
CRYSTAL M & MICHAEL J HUCKLEBERRY
10840 BIANCO CT
RANCHO CORDOVA CA 95670

072-1970-033
JUSTIN BALL
3301 CORVINA DR
RANCHO CORDOVA CA 95670

072-1970-034
BILLECI FAMILY TRUST
3305 CORVINA DR
RANCHO CORDOVA CA 95670

072-1970-035
CRISTINA CIBOTAR
3309 CORVINA DR
RANCHO CORDOVA CA 95670

072-1970-036
ARMEN TOROSIAN
3313 CORVINA DR
GOLD RIVER CA 95670

072-2090-032
NAVIN K VARMA
3241 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-033
JENNIFER K HANDY
3235 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-034
SERGEY & ANNA STUDENTSOV
10517 WHITE ROCK RD
RANCHO CORDOVA CA 95670

072-2090-034
OCCUPANT
3225 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-035
TERRY S & BARBARA KROPACEK H HALL
3217 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-036
MY FAMILY PROP LLC
2130 ARMSMERE CIR
EL DORADO HILL CA 95762

072-2090-036
OCCUPANT
3213 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-037
BART T & POLLY A ESCOVEDO
3209 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-038
VASILIY M & TATYANA V YUSHCHUK
3205 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-039
LYUDMILA & PAVEL KOVALCHUK
3201 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-066
DONES FAMILY TRUST
3248 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-067
YOUNG SOOK NOWLIN
3244 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-068
NEVA L MOECKEL
3240 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-069
MI SOON LEE
3236 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-070
JOJO THOMAS
1010 MOONLIT WAY
FOLSOM CA 95630

072-2090-070
OCCUPANT
3232 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-071
HONG & XIAO W CHEN
11883 FIRE AGATE WAY
RANCHO CORDOVA CA 95742

072-2090-071
OCCUPANT
3228 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-072
JESSICA & DAVID R JOHNSON
3224 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-073
JERRY D & JEYAMARY D SAMI
3220 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-074
KATHLEEN A DELIMA
3216 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-075
ARVIND VENUGOPAL
3212 BALADA WAY
GOLD RIVER CA 95670

072-2090-076
YINH SIA NGO
113 BIRCH WAY
SAN RAFAEL CA 94903

072-2090-076
OCCUPANT
3206 BALADA WAY
RANCHO CORDOVA CA 95670

072-2090-077
CAMMIE L ARTHERTON
3200 BALADA WAY
GOLD RIVER CA 95670

072-2090-078
RAED MAHDI
10872 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-004
RICHARD G & SHAWNNA M HENDRIX
3245 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-005
CELESTINE HALL
3241 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-006
ANA M VILLALPANDO
3237 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-007
BRYAN P KIM
3233 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-008
LIM TONDATUAN FAMILY TRUST
26 DEWEY
IRVINE CA 92620

072-2100-008
OCCUPANT
3229 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-009
WENDY CASTILLO
3225 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-010
TED H HANSEN
3221 ABOTO WAY
RANCHO CORDOVA CA 95670

072-2100-011
MICHELE P & TILMAN A LETHCO
10908 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-012
ANNA N & CONSTANTIN I SARI
10912 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-013
DAN E & TOSHIKO I KUHNS
10916 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-014
TAM C DAO
15277 PRESILLA DR
JAMUL CA 91935

072-2100-014
OCCUPANT
10920 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-015
ISRAEL & RUTH TAN
10924 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-016
SERGEY SELYUZHITSKIY
10928 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-017
ALEKSANDR PAUTOV
10932 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-029
KUN F KUANG
7048 GLORIA DR
SACRAMENTO CA 95831

072-2100-029
OCCUPANT
10933 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-030
GREGORY & MARGARET ABBOTT
10929 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-031
JOSEPH THOMAS STANGER
10925 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-032
SUNG WOO KIM
17297 NW BROKEN TOP DR
BEAVERTON OR 97006

072-2100-032
OCCUPANT
10921 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-033
SHERRI L JOHNSON
10917 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-034
MORRISSETTE 2004 RESIDENCE TRUST
792 GRANDVIEW DR
FOLSOM CA 95630

072-2100-034
OCCUPANT
10913 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-035
CURTIS A & KIMBERLY J KITTEL
10909 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-036
KHUSHWINDER S & SURINDER K WARRIN
476 HIGGINS ST
FOLSOM CA 95630

072-2100-036
OCCUPANT
10905 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-037
JAMES L & SHEILA M GREATHOUSE
10901 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-038
GEORGE & ECATERINA MICHESCU
10897 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-039
TRAVIS & DEAN TAKETA
10893 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-040
MARK BEAN
10889 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-041
CHRISTOPHER & HEATHER DUXLER
10885 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-042
JANE M KWON
10881 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2100-043
DZMITRY HRYNASHKA
1013 FULTON AVE #126
SACRAMENTO CA 95825

072-2100-043
OCCUPANT
10877 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-017
WINSTAN FAMILY TRUST
10808 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-018
TALBERT WALTON
2613 EVERGREEN ST
SACRAMENTO CA 95815

072-2210-018
OCCUPANT
10812 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-019
CHESTER & HYUNNAH HONG
10816 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-020
NOORT FAMILY TRUST
10820 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-021
KRISHNA MURTI
10828 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-022
RONALD R HAMPTON
10832 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-023
ABDULRAHMAN G JARRAR
3201 ALDRIDGE WAY
EL DORADO HILL CA 95762

072-2210-023
OCCUPANT
10840 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-024
SCOTT R CROW
3408 NOBLESSA WAY
RANCHO CORDOVA CA 95670

072-2210-024
OCCUPANT
10848 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-025
MORGAN J MITCHELL
10852 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-026
SONYA CLARK
10856 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-027
DINESH KUMAR
10860 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-028
SAM CHON
3251 BALADA WAY
RANCHO CORDOVA CA 95670

072-2210-028
OCCUPANT
10864 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-029
RACHMAT JAHJA & MONIKA SAPUTRA
REVOCABLE TRUST
3417 NOBLESSA WAY
RANCHO CORDOVA CA 95670

072-2210-029
OCCUPANT
10868 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-030
DAROLD L COOPER
11025 ORLEANS RIVER CT
RANCHO CORDOVA CA 95670

072-2210-030
OCCUPANT
10873 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-031
PEDRO & MARIBEL M ARIZMENDIZ
10869 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-032
ANTHONY A HAMILTON
10865 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-033
LAWRENCE E SILVIS FMILY LIVING
10861 BELLONE WAY
GOLD RIVER CA 95670

072-2210-034
DAMIEN JOHNSON
10857 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-035
CHRISTOPHER GORE
10853 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-036
NY TAN
10849 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-037
MARINE CHAKHOYAN
3205 BIGNEY CT
RANCHO CORDOVA CA 95670

072-2210-038
BACHILLER FAMILY LIVING TRUST
3201 BIGNEY CT
RANCHO CORDOVA CA 95670

072-2210-039
SCOTT J SMITH
3200 BIGNEY CT
RANCHO CORDOVA CA 95670

072-2210-040
KWAN O & MAI C KIM
11952 PERICLES DR
RANCHO CORDOVA CA 95742

072-2210-040
OCCUPANT
3204 BIGNEY CT
RANCHO CORDOVA CA 95670

072-2210-041
JOSE & ROSA M CRISTALES
10825 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-042
TABITHA S WONG
10821 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-043
GUSTAVO A LAREDO
10817 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-044
SIMONETTA Y KOSIR REVOCABLE LIVING
TRUST
10813 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-045
MIKE & KATHERINE DORDEVIC
PO BOX 300
SHINGLE SPRING CA 95682

072-2210-045
OCCUPANT
10809 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2210-046
COLLEEN & RICHARD BRIGHT
10805 BELLONE WAY
RANCHO CORDOVA CA 95670

072-2360-002
ELLIOTT ASHTON PLACE LLC
340 PALLADIO PKWY #521
FOLSOM CA 95630

072-2590-051
AMAN & KALLIE PAHWA
3520 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-052,053
HOLY EASTERN CATHOLIC ORTHODOX CH
3516 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-053
OCCUPANT
3512 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-054
FRANK S HALL
3508 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-055
CSILLA I BOLYA
3504 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-056
KHALED H & LUBNA CHOWDHURY
3500 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-057
JUAN CALDERON
PO BOX 663
RANCHO CORDOVA CA 95741

072-2590-057
OCCUPANT
3496 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-058
DOUG L MATASOL
3492 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-059
ESPERANZA SANCHEZ
166 BLACK POWDER CIR
FOLSOM CA 95630

072-2590-059
OCCUPANT
3488 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-060
JOHN D SHERO
3484 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-061
JESUS A GUTIERREZ
3480 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-062
GOMES FAMILY LIVING TRUST
3476 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-063
L & L RICO FAMILY REVOCABLE 2004 TRUST
3472 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-064
VENUGOPALAN SRINIVASAN
3468 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-065
ZHONG H CHEN
3464 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-066
SAINATH R ALIMINATI
3460 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-067
NICOLE J & KEVIN P FLANAGAN
3456 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-080
DAVID M & SANDRA J HIGGINS
3433 NOUVEAU WAY
GOLD RIVER CA 95670

072-2590-081
DAVID BUCHERT
3437 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-083
VIOREL & OLGHINA HUTIUC
3445 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-084
DON F SABA FAMILY REVOCABLE 1976 TRUST
2305 W LA LOMA DR
RANCHO CORDOVA CA 95670

072-2590-084
OCCUPANT
3449 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-085
RAM & SITA LALCHANDANI REVOCABLE TRUST
4110 RIDING CLUB LN
SACRAMENTO CA 95864

072-2590-085
OCCUPANT
3453 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-086
SAMUEL & NEAY CHHLANG
3473 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-087
AK R AHMED
3501 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-088
ROBERT KENNERSON
PO BOX 111686
CAMPBELL CA 95011

072-2590-088
OCCUPANT
3505 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-089
DAVID ROELOFS
3509 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-090
PRASANNA & PLACIDA RUPASINGHE TRUST
719 LEFEBRE DR
FOLSOM CA 95630

072-2590-090
OCCUPANT
3513 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-091
KIDERLYN R BROWN
3517 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-2590-092
DEBRA L MESKE
3521 NOUVEAU WAY
RANCHO CORDOVA CA 95670

072-3050-207
BEAZER HOMES HOLDINGS CORPORATION
3721 DOUGLAS BLVD #100
ROSEVILLE CA 95661

072-3230-042,043/3260-016-027,037-063
BEAZER HOMES HOLDINGS CORPORATION
1731 E ROSEVILLE PKWY #140
ROSEVILLE CA 95661