



**ADMINISTRATIVE APPROVAL
NOTICE OF DECISION**

Date: April 25, 2018
Applicant: SLF IV-Millenia LLC
Case No.: MPA18-0002
Project: Avant Street Deletion (Street "M")
Address: Avant Street between Millenia Avenue and Orion Street
Project Manager: Stacey Kurz
Project Planner: Jeff Steichen
Project Engineer: Sandra Hernandez

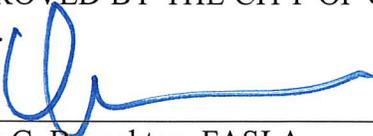
Notice is hereby given that on April 25, 2018, the Director of Development Services and City Engineer considered the deletion of Avant Street (Street "M"), through application MPA18-0002 (Project), filed by SLF IV-Millenia LLC ("Applicant" and "Owner"). The Applicant requests approval of the deletion of Avant Street between Millenia Avenue and Orion Avenue at the southern edge of the Millenia development ("Project Site", Attachment 1). The Project Site is owned by SLF IV-Millenia LLC ("Property Owner"), with a General Plan designation of Eastern Urban Center (EUC).

Per Section 4.06.002 of the EUC Sectional Planning Area ("SPA") Form Based Code ("FBC") as adopted via City Council Ordinance 3372, public streets may be added or deleted on the Final Maps without a new Tentative Map and processed administratively through update on exhibits in the SPA and FBC. Such updates have been made and incorporated into the documents (Attachment 2).

The Director of Development Services and City Engineer have reviewed the Project for compliance with the California Environmental Quality Act (CEQA) and the traffic analysis summarizing results of the Avant Street removal prepared by Linscott, Law & Greenspan, Engineers (LLG) and dated September 29, 2017 (Attachment 3). It has been determined that the Project was adequately covered in previously adopted Final Second Tier Environmental Impact Report, (EIR-07-01). Thus, no further environmental review or documentation is required.

The Administrators find that the deletion of the street segment would not adversely impact the adopted Eastern Urban Center SPA Plan. The Director of Development Services and City Engineer therefore approve the request.

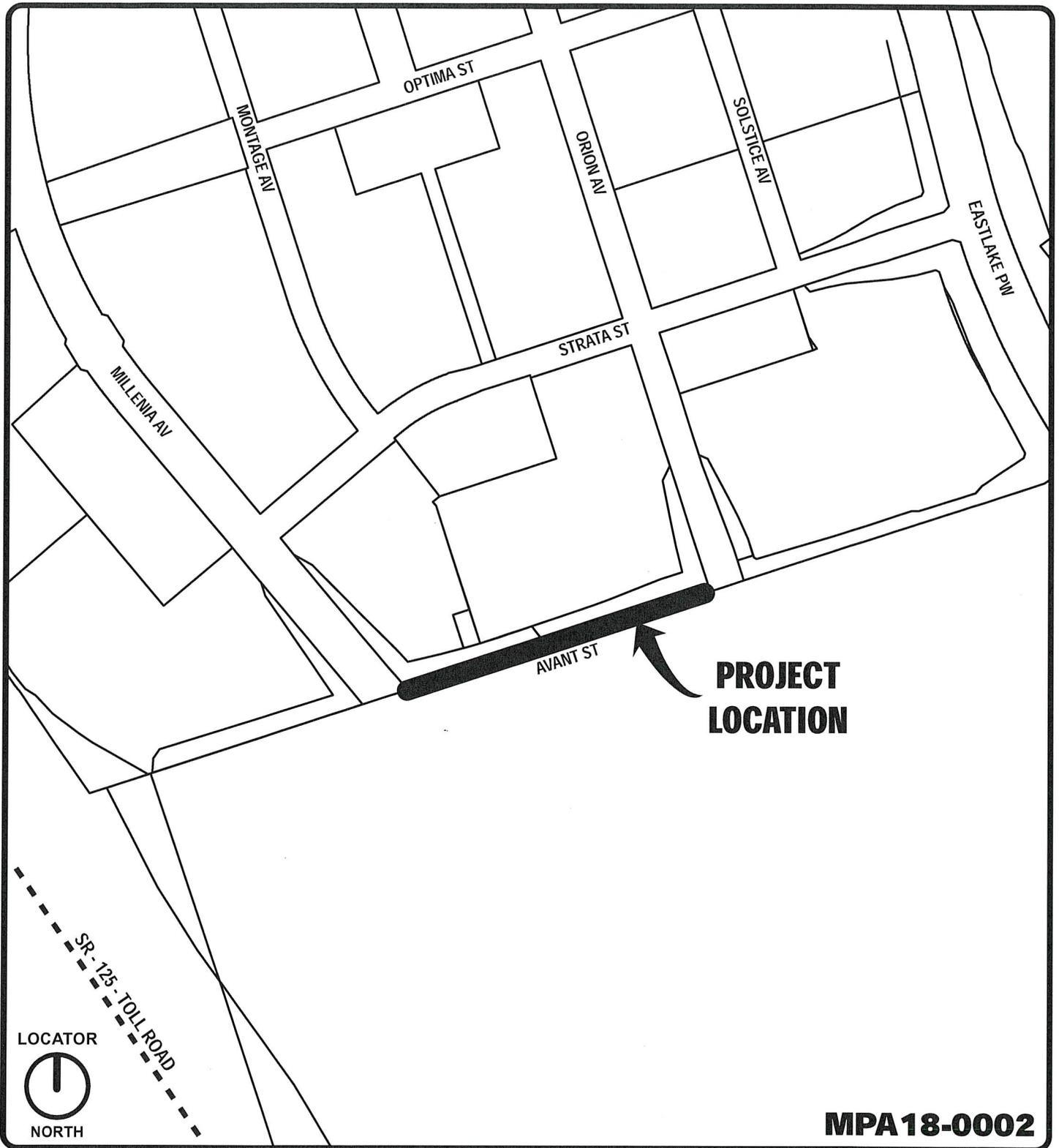
APPROVED BY THE CITY OF CHULA VISTA, CALIFORNIA, this 25th day of April 2018.



Kelly G. Broughton, FASLA
Director of Development Services



William S. Valle
Director of Engineering/City Engineer



CHULA VISTA PLANNING AND BUILDING DEPARTMENT

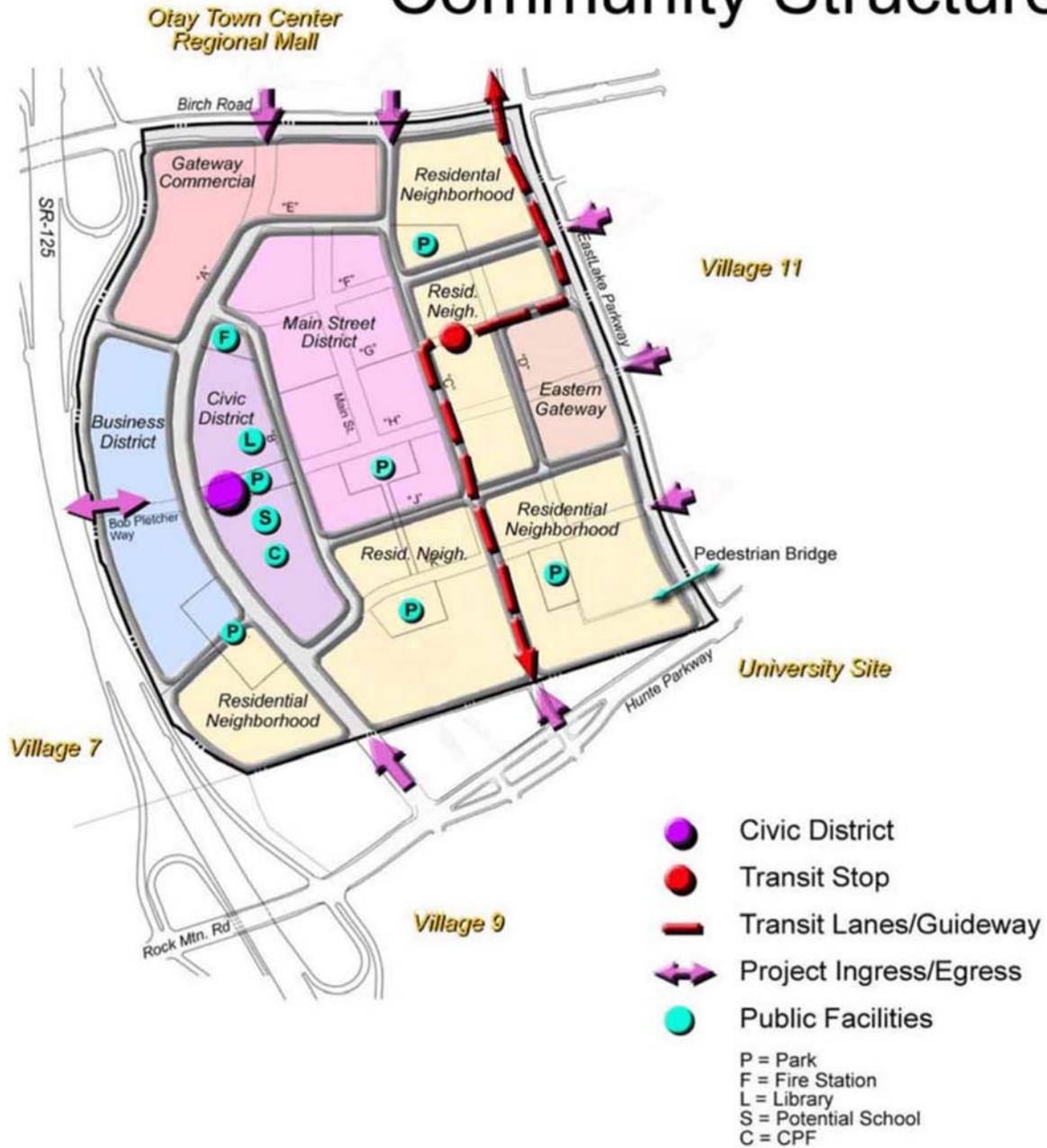
<p>LOCATOR</p>  <p>NORTH</p>	<p>PROJECT APPLICANT: Meridian Development</p>	<p>PROJECT DESCRIPTION: MAJOR PLANNING APPLICATION</p> <p>Project Summary: Avant Street Amendment Adjacent to Lots I and J</p>
	<p>PROJECT ADDRESS: South Side of Lots I & J</p>	
	<p>SCALE: No Scale</p>	<p>FILE NUMBER: MPA18-0002</p>
		<p>Related cases: None</p> <p style="text-align: right;">Attachment 1</p>

INTRODUCTION

public life of Chula Vista, and enliven the EUC. Larger parcels may be appropriate to accommodate major uses.

Gateway Mixed-Use Districts: These districts will serve as the portals that serve as a transition from surrounding areas into the core of the EUC, including landmark buildings announcing that the EUC is a special place. The Eastern Gateway District will provide a retail transition from the Otay Town Center commercial north of the EUC, while the Eastern Gateway District will announce arrival with landmark architecture.

Community Structure



Eastern Urban Center OTAY RANCH



Exhibit I-4

Circulation

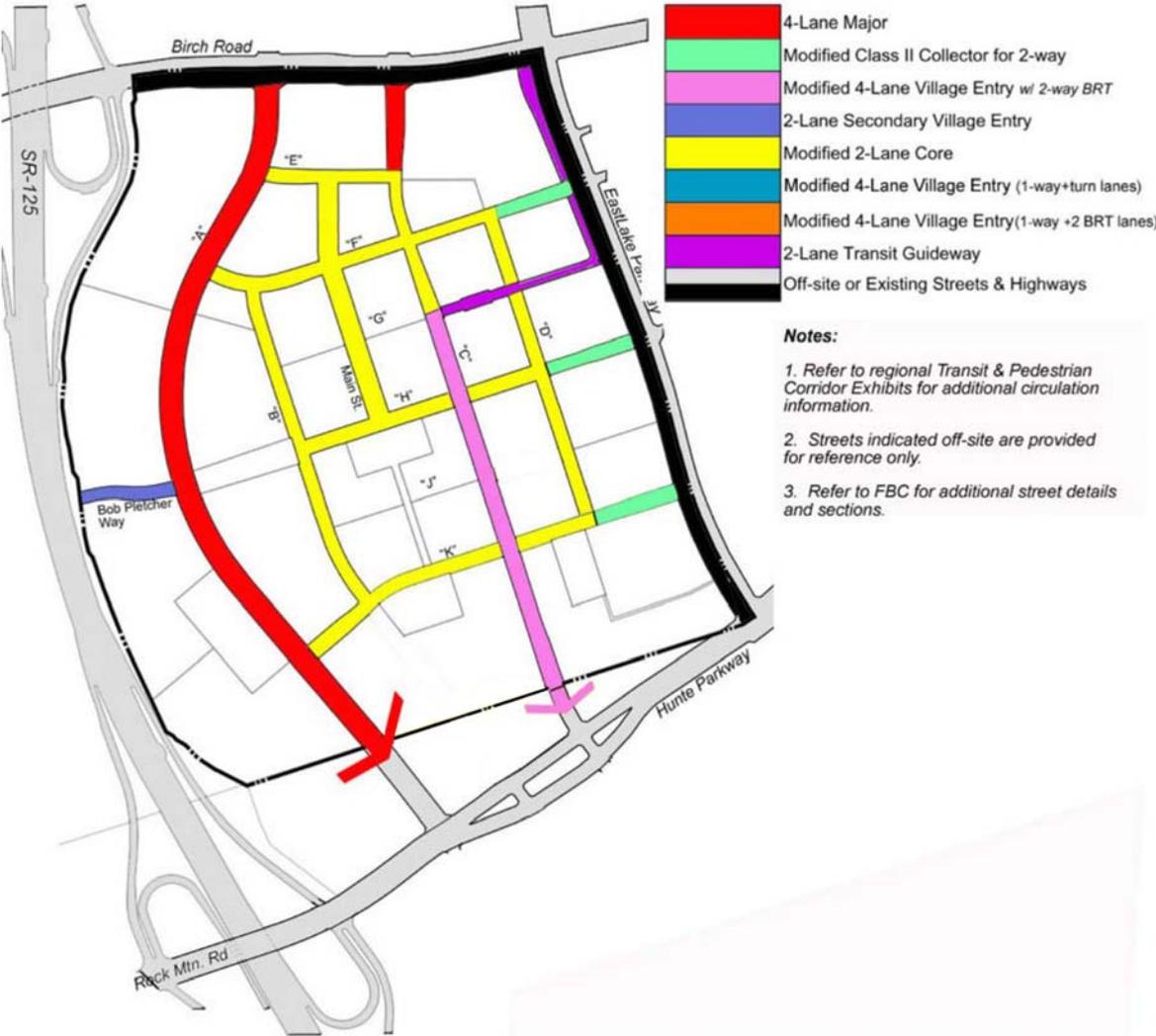


Exhibit III-3

Chapter 19.48 CVMC. These regulations provide for the implementation of the GDP and P-C zone by setting forth the development and use standards for all property within Otay Ranch Eastern Urban Center SPA Planned Community District through the adoption of Planned Community (PC) District Regulations as provided in this Ordinance. These PC District Regulations, along with the Eastern Urban Center Sectional Planning Area Plan, delineate precisely the allowable use and development of the property.

01.04.000 Use of the Code

The Eastern Urban Center (*EUC*) *Form Based Code (FBC)* blends the regulations typically found in Planned Community District Regulation with the guidelines typically found in a village design plan. Because of this, the format and arrangement of regulations and guidelines is atypical. There are two quick reference features that provides most of the commonly sought after regulations.

The first of these are the specific regulations provided for each district in Chapter 02. The second are the regulations that apply to all areas in the *EUC*, which are contained in Chapter 03. Also, words which have been defined herein (Chapter 01.05) have been italicized.

In this *form based code (FBC)*, the activities within the building are less important than the form and relationships between buildings and public spaces. The regulations for each district include a character description for that district. The purpose of these regulations is to implement the proposed design concept for the *EUC*. Therefore, the fundamental question that should be asked to resolve any issue, not otherwise addressed in this code, shall be: Is the proposal consistent with, or enhances, the purpose and scope, above, and the character description included for each district in this chapter? If the answer is yes, then the proposal should be permitted and vice versa.

Regulating Plan

Street & Block Identification



- "A" Street Reference Identification
- 27 Block Reference Identification
- P2 Park Reference Identification



Eastern Urban Center

OTAY RANCH



10/11/17
Exhibit I-1

District 9 Requirements

Central Southern Neighborhood District

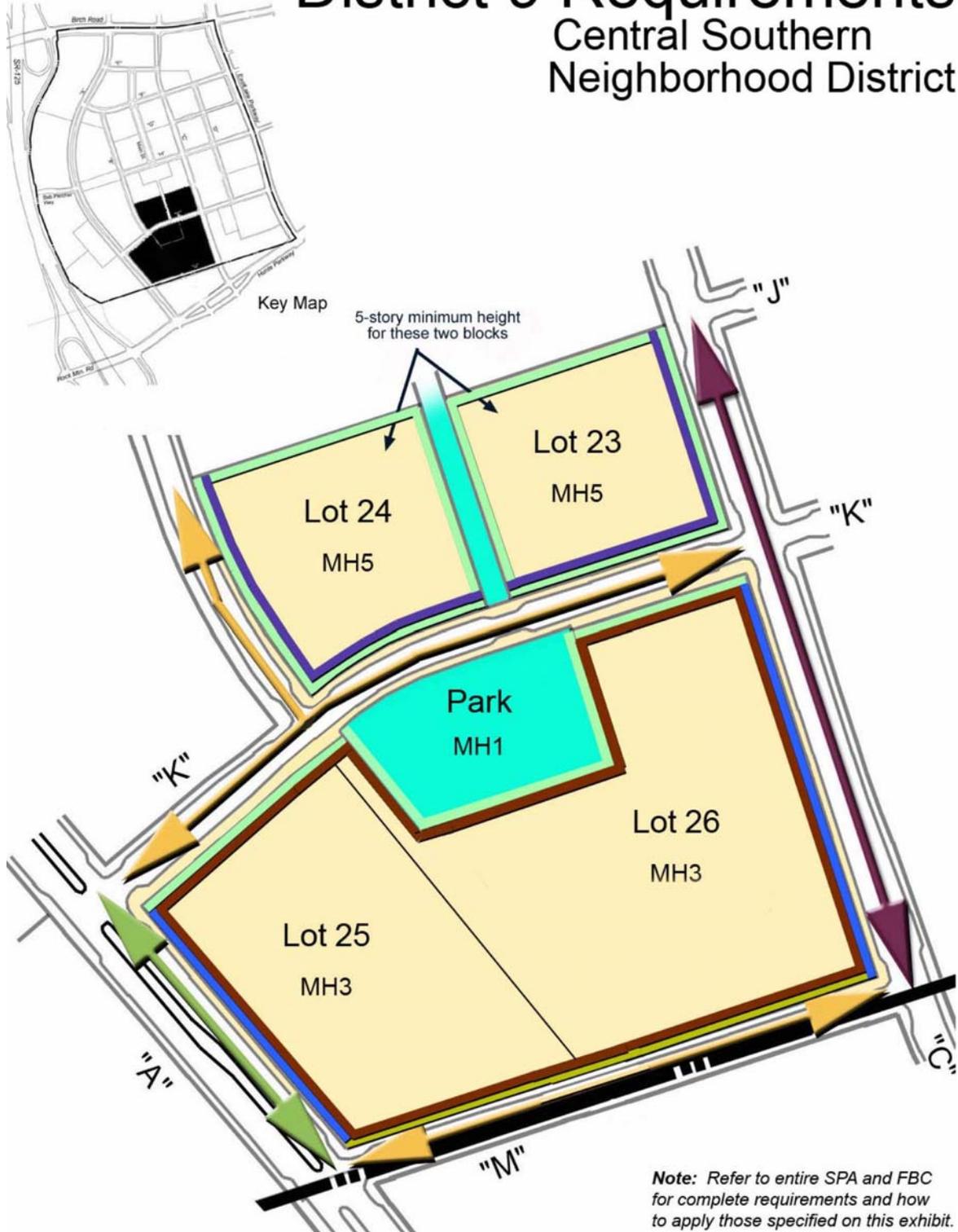


Exhibit 34B

- Southeastern Neighborhood District Urban Design Diagram (Design Framework Plan)

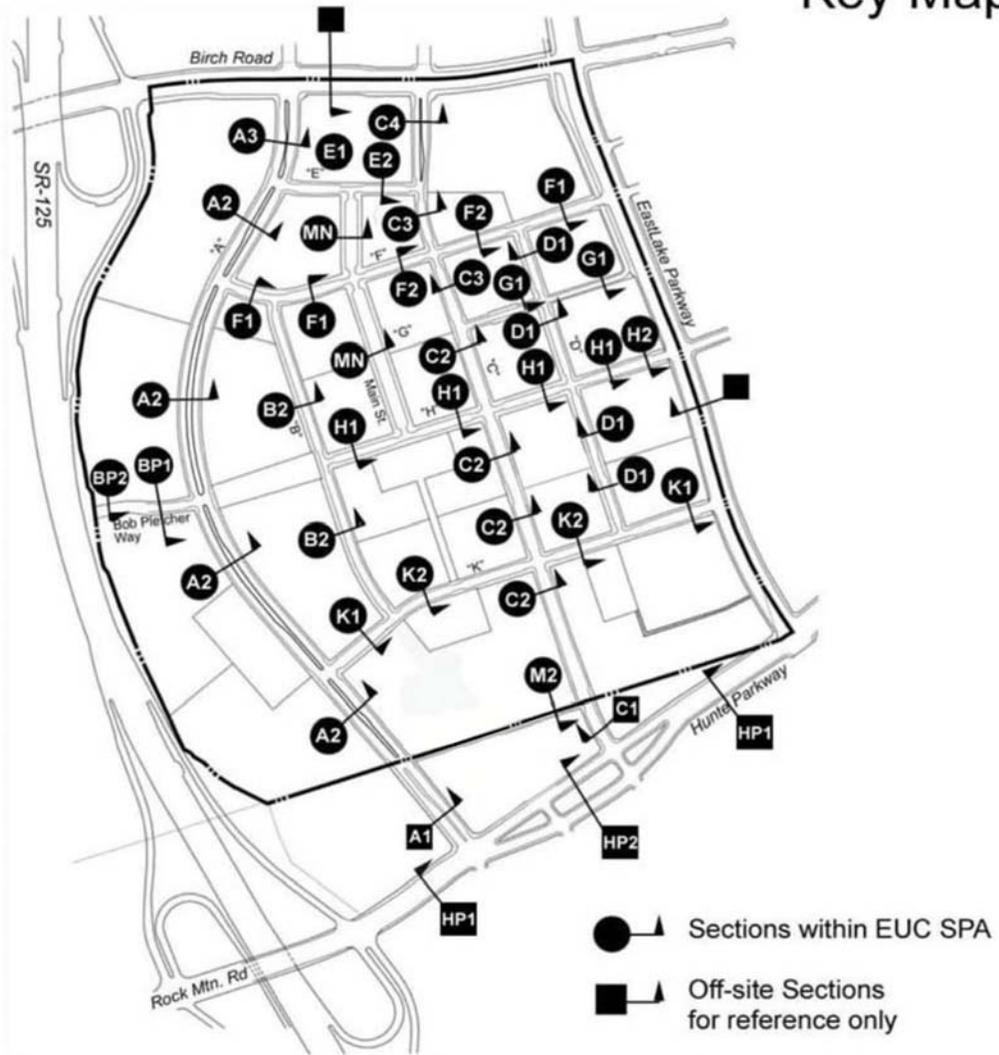


Number Legend:

1. Edge condition between adjacent districts to be flexible with compatible interface.
2. Pedestrian Bridge to extend Regional Trail.
3. Transit Guideway with limited access b/w parcels to the north and south. Widen setback for safety if pedestrian corridor is adjacent to Transit Guideway.
4. Create urban character along edge, but front doors are not required to front on Transit Guideway.

Exhibit II-35

Street Sections Key Map



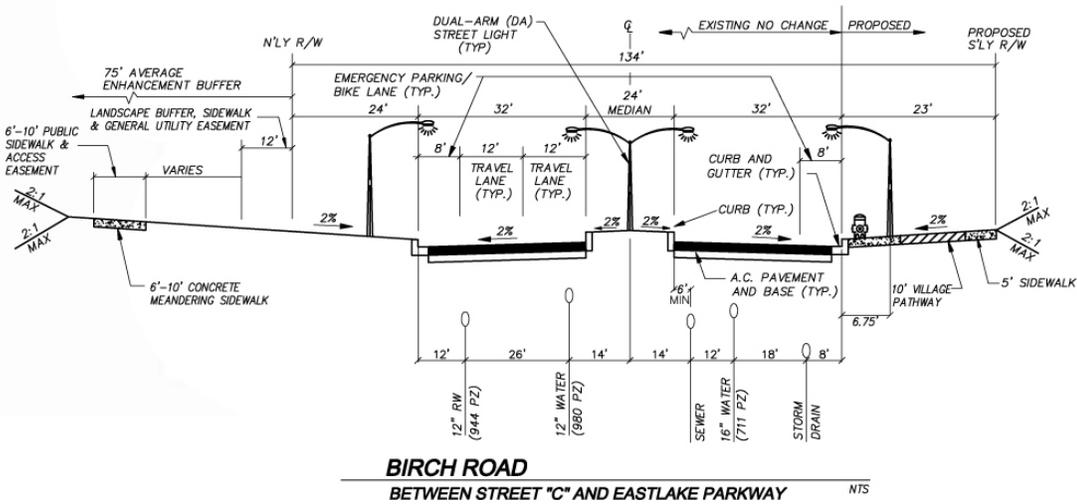
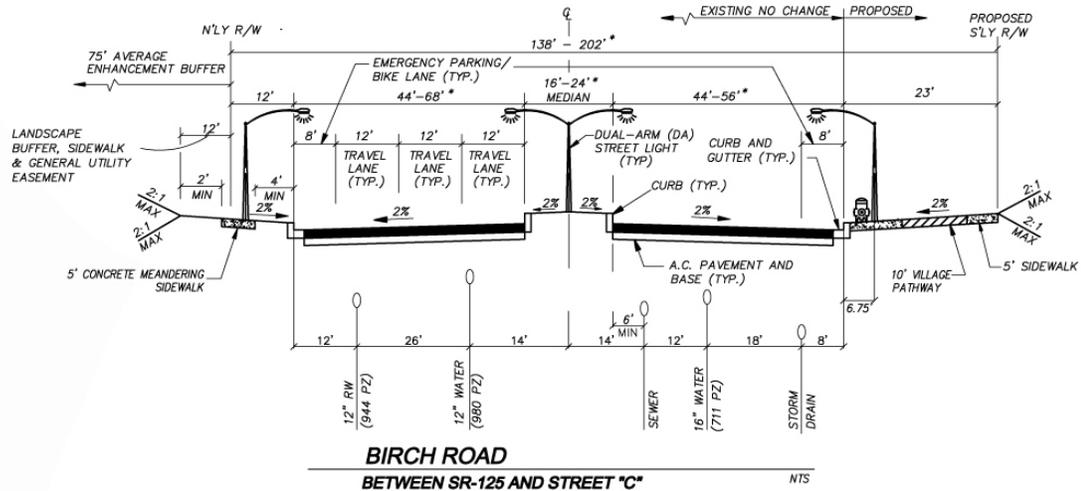
Eastern Urban Center OTAY RANCH

Source: PDC
Urban Design: RTKL
Cinti Land Planning
San Diego, CA (619) 223-7408



Exhibit III-12

Street Sections Birch Road



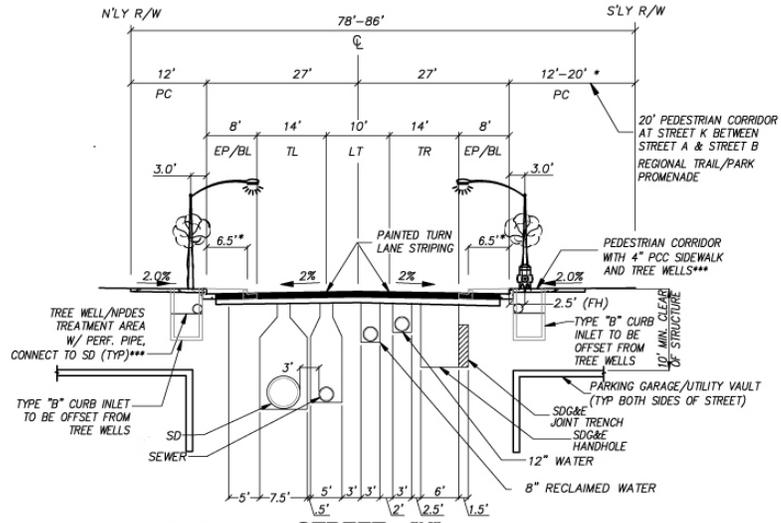
**Eastern Urban Center
OTAY RANCH**

Source: PDC
Urban Design: RTKL
Cinti Land Planning
San Diego, CA (619) 223-7408

Exhibit III-13

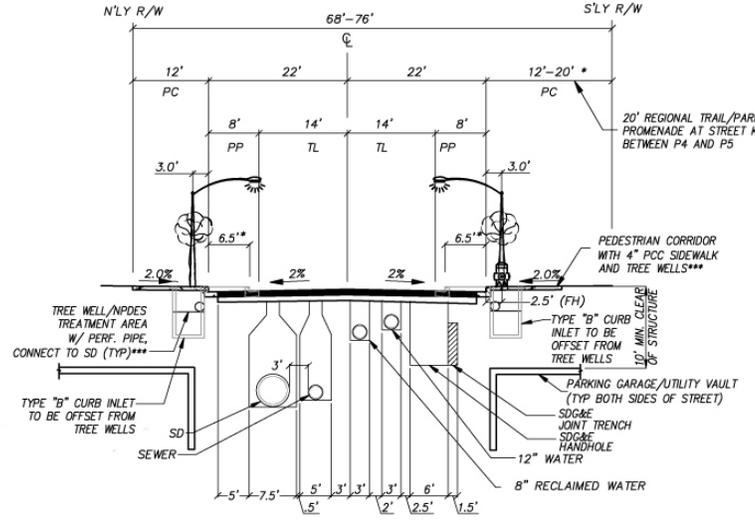
Street Sections

Streets "K-1" & "K-2"



K-1 **STREET "K"**
 2 LANE CORE - (25 MPH)
 PUBLIC STREET NTS

*** WIDTH OF TREE WELLS PER LANDSCAPE PLAN, DEPTH OF GARAGE TO BE DETERMINED AT TIME OF THE IMPROVEMENT PLAN REVIEW



K-2 **STREET "K"**
 2 LANE CORE - (25 MPH)
 PUBLIC STREET NTS

*** WIDTH OF TREE WELLS PER LANDSCAPE PLAN, DEPTH OF GARAGE TO BE DETERMINED AT TIME OF THE IMPROVEMENT PLAN REVIEW



Source: PDC
 Urban Design: RTKL
 Cinti Land Planning
 San Diego, CA (619) 223-7408

Exhibit III-24

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Regulating Plan Building Setbacks



-  0' setback
-  0'-5' setback
-  0'-10' setback
-  0'-15'+ setback

Note: Setbacks shall be measured from the street right-of-way or property line. Refer to text for additional description of setback standards.



Eastern Urban Center OTAY RANCH



Exhibit III-52



Engineers & Planners
Traffic
Transportation
Parking

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

Pasadena
Irvine
San Diego
Woodland Hills

September 28, 2017

Mr. Todd Galarneau
Meridian Development
9988 Hibert Street, Suite 210
San Diego, CA 92131

LLG Reference: 3-17-2786

Subject: **Avant Street Removal**
City of Chula Vista

Dear Todd:

INTRODUCTION

Linscott, Law & Greenspan, Engineers (LLG) has prepared this letter report to summarize our analysis results of the Avant Street Removal project (herein referred to as the "Project"). The Project is located within the Eastern Urban Center (EUC) and proposes to close Avant Street between Millenia Avenue and Orion Boulevard. **Figure 1** shows the study area.

The study area includes the following intersections:

- 1) Avant Street / Millenia Avenue
- 2) Avant Street / Orion Boulevard
- 3) Hunte Parkway / Millenia Avenue
- 4) Hunte Parkway / Orion Boulevard

APPROACH & METHODOLOGY

To establish a baseline, or Pre-Project condition, the traffic volumes and intersection configurations presented in the *Otay Ranch Village 9* traffic impact study dated March 8, 2013 prepared by RBF and the *Closure of Street B between Street K and Street M in the EUC* letter report dated October 7, 2014, from Darnell & Associates was utilized. **Attachment A** contains these documents. **Figure 2** depicts the Pre-Project traffic volumes, and **Figure 3** depicts the intersection configuration assumed in the analysis. It should be noted that the current land uses are less intense than what prior studies had utilized. Therefore, the baseline traffic volumes used in the analysis are considered to be conservative.

To determine the effects of the Project on the study area, Avant Street is assumed to be closed to eastbound and westbound thru traffic. However access would be maintained to the lots B1 & B2 via a driveway or cul-de-sac. It is also assumed that access to the 180 multi-family dwelling units is via Strata Street and access to the Park and School site is via Strata Street or Orion Avenue. These assumptions are

Philip M. Linscott, PE (1924-2000)
Jack M. Greenspan, PE (Ret.)
William A. Law, PE (Ret.)
Paul W. Wilkinson, PE
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE

An LG2WB Company Founded 1966

consistent with the 2014 Darnell & Associates study. The inset in *Figure 3* depicts the Post-Project conditions.

Utilizing land use information for Lot B1 & B2 from the *Sectional Planning Area Plan for Village 9* (see *Attachment B* for excerpts), the Project traffic volumes were estimated and redistributed. *Figure 4* depicts the Post-Project traffic volumes.

Significance Criteria

Traffic impacts are defined as either project-specific impacts or cumulative impacts. Project-specific impacts are those impacts for which the addition of project trips result in an identifiable degradation in the level of service (LOS) on freeway segments, roadway segments, or intersections, triggering the need for specific project-related improvement strategies. Cumulative impacts are those in which the project trips contribute to a poor level of service, at a nominal level.

For long-term intersection analysis (study horizon year 5 and later), the following significance criteria is applied:

- a. Project-specific impact if all the following criteria are met:
 - i. Level of service is LOS E or LOS F.
 - ii. Project trips comprise 5% or more of entering volume.
- b. Cumulative impact if only (i) is met.

ANALYSIS RESULTS

Table 1 tabulates the Pre- & Post-Project intersection operations. *Attachment C* contains the analysis worksheets. As seen in *Table 1*, the study intersections continue to operate at acceptable LOS D or better as a result of the removal of Avant Street. Therefore, no significant traffic impact is identified.

CONCLUSION

Based on the analysis results and significance criteria, the removal of Avant Street will not create any additional impacts.

Please call if you have any questions. Thank you.

Sincerely,

Linscott, Law & Greenspan, Engineers



K.C. Yellapu, P.E.
Associate Principal



Erika Carino, E.I.T.
Transportation Engineer II

cc: File

**Table 1
 Intersection Operations**

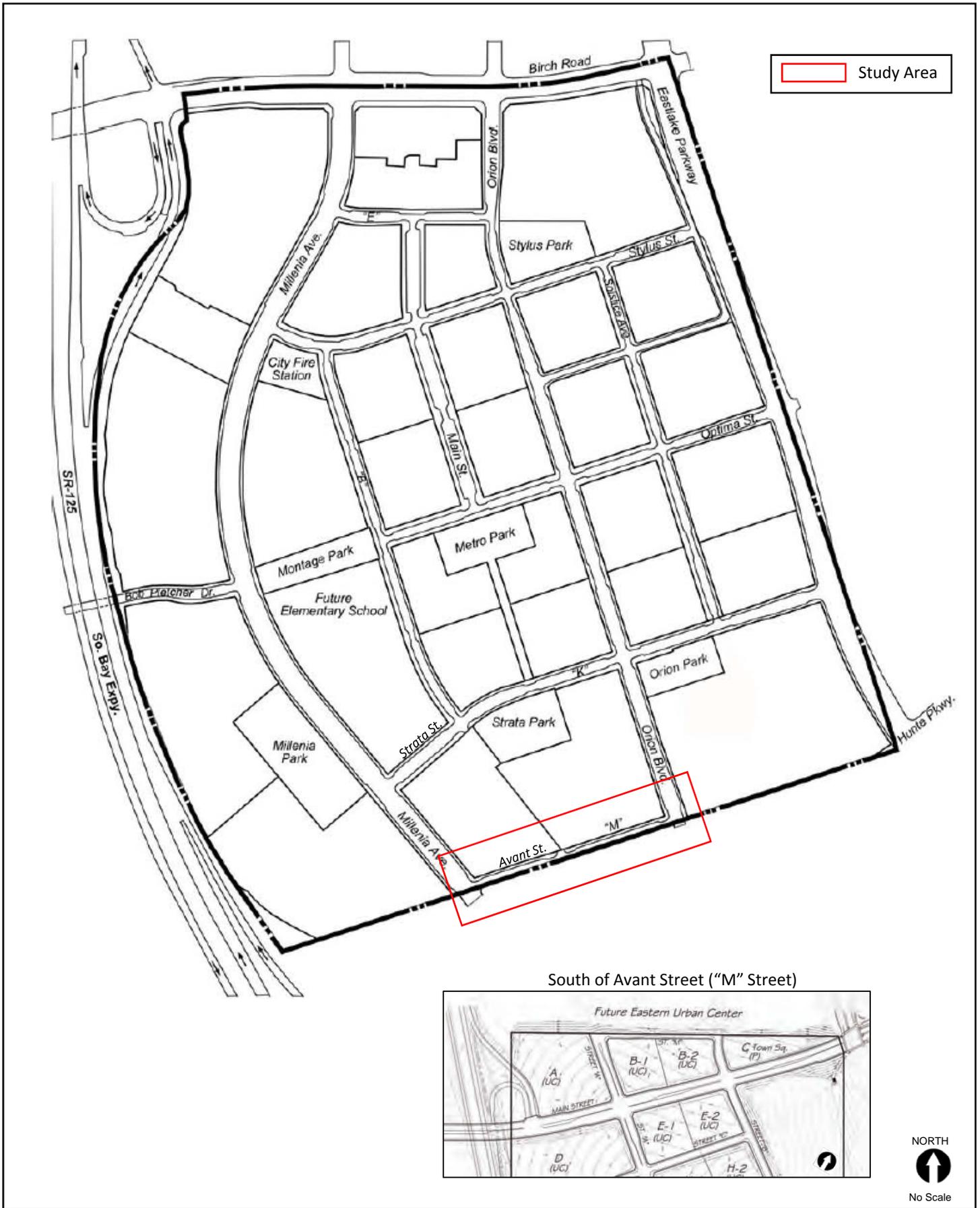
Intersection	Control Type	Peak Hour	Pre-Project (w/ Avant Street)		Post-Project (w/o Avant Street)		Δ^c
			Delay ^a	LOS ^b	Delay	LOS	
1. Millenia Ave / Avant St	Signal	AM	7.9	A	7.0	A	(0.9)
		PM	14.8	B	14.2	B	(0.6)
2. Orion Ave / Avant St	Signal	AM	2.7	A	1.2	A	(1.5)
		PM	4.8	A	1.0	A	(3.8)
3. Millenia Ave / Main St-Hunte Pkwy	Signal	AM	50.6	D	52.2	D	1.6
		PM	49.3	D	53.3	D	4.0
4. Orion Ave / Main St-Hunte Pkwy	Signal	AM	53.1	D	52.2	D	(1.0)
		PM	52.5	D	49.2	D	(3.3)

Footnotes:

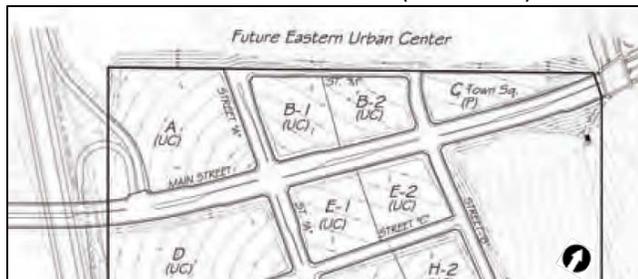
- a. Average delay expressed in seconds per vehicle.
- b. Level of Service
- c. Denotes a project-induced change in delay.

**SIGNALIZED
 DELAY/LOS THRESHOLDS**

Delay	LOS
0.0 < 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
> 80.1	F



South of Avant Street ("M" Street)



NORTH



No Scale

AM / PM  AM / PM Intersection Peak Hour Volumes

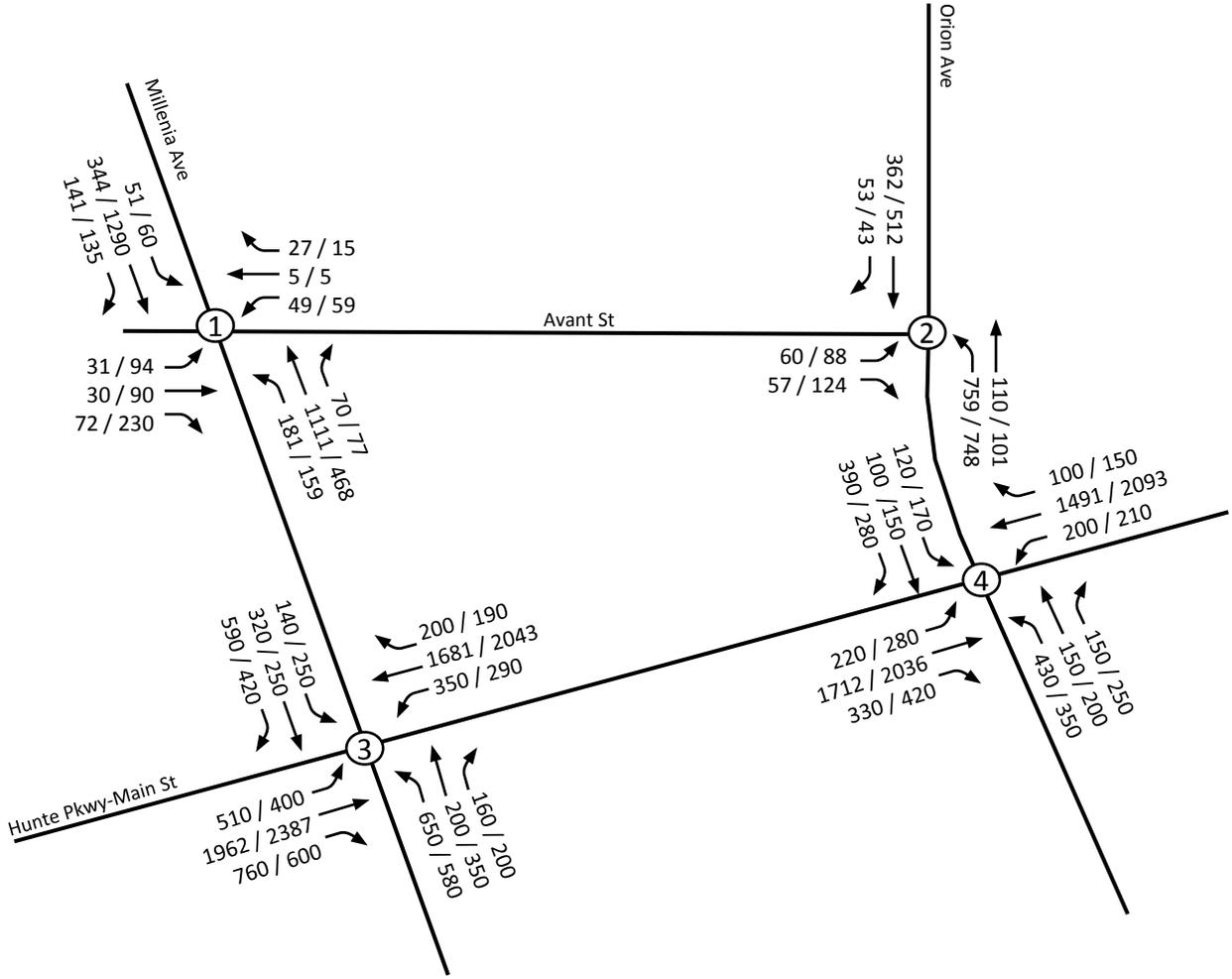
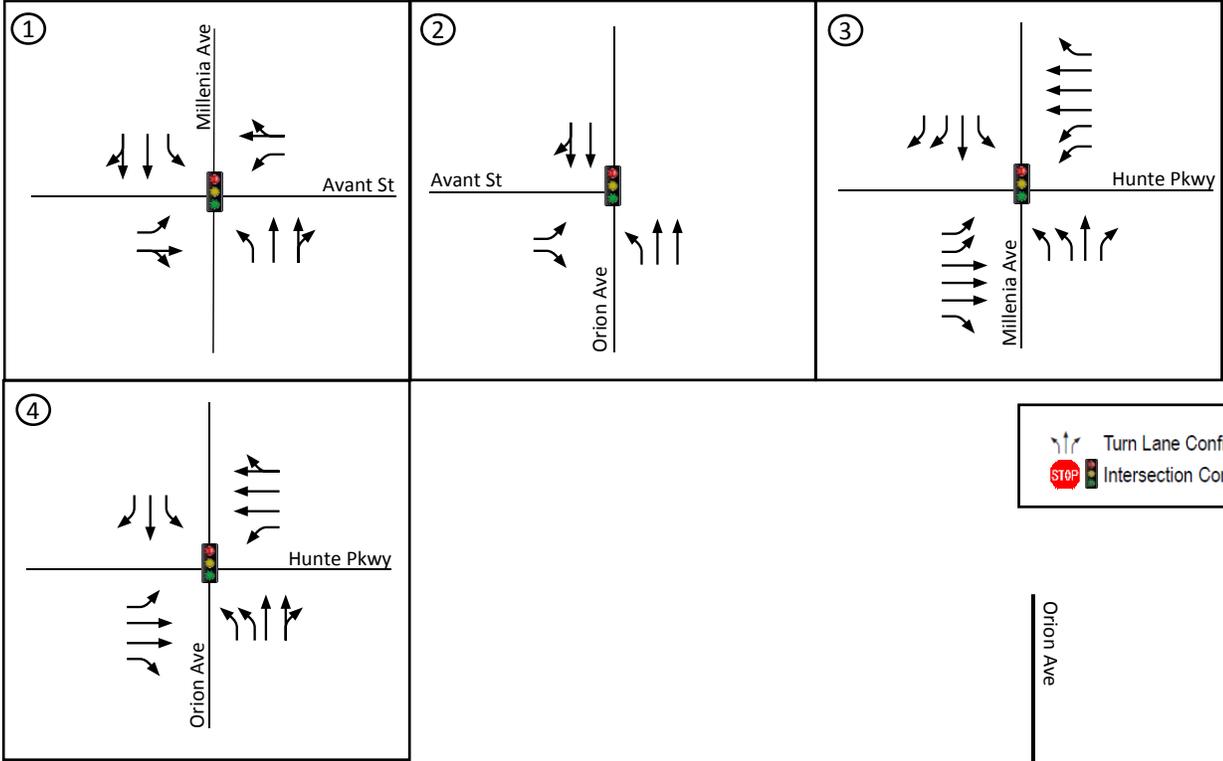
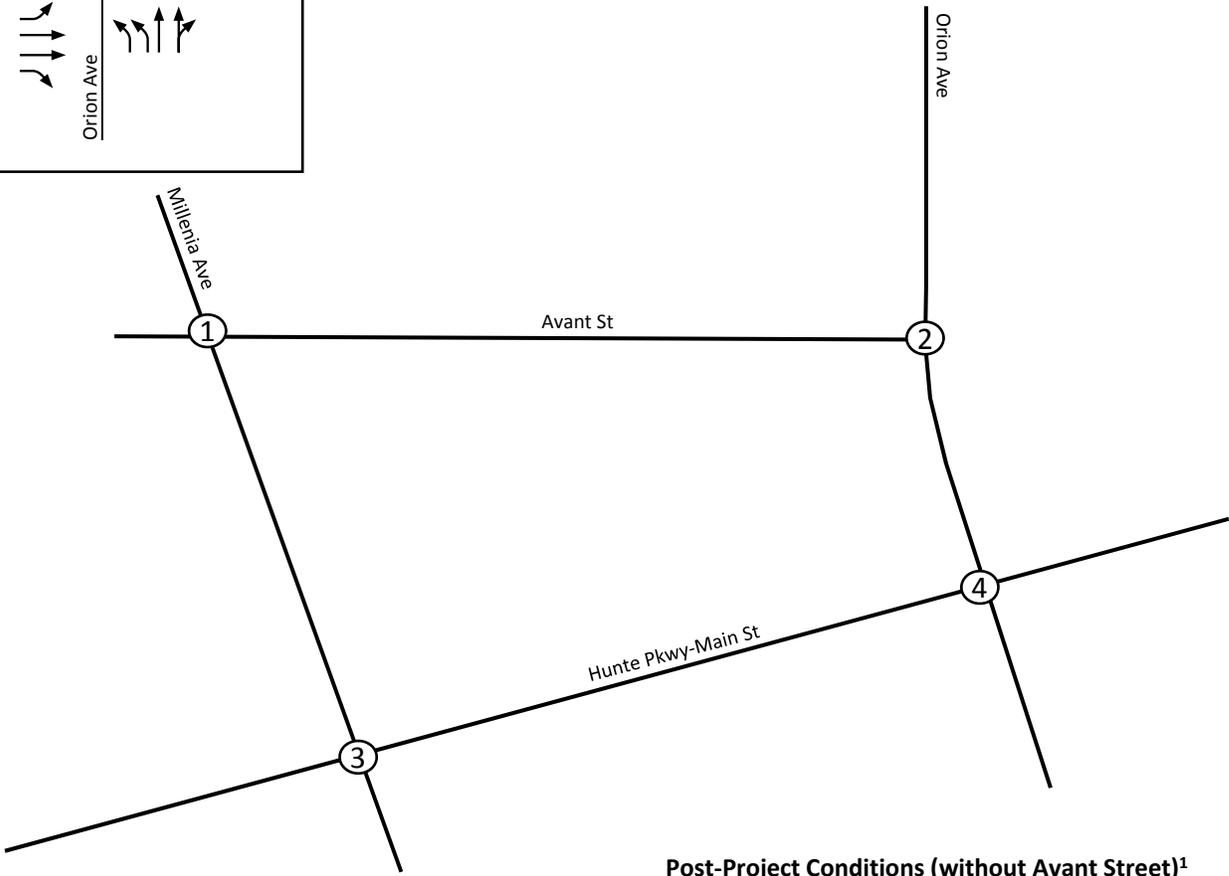


Figure 2

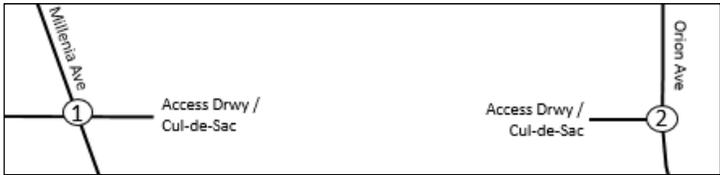
Pre-Project Traffic Volumes



Turn Lane Configurations
 Intersection Control



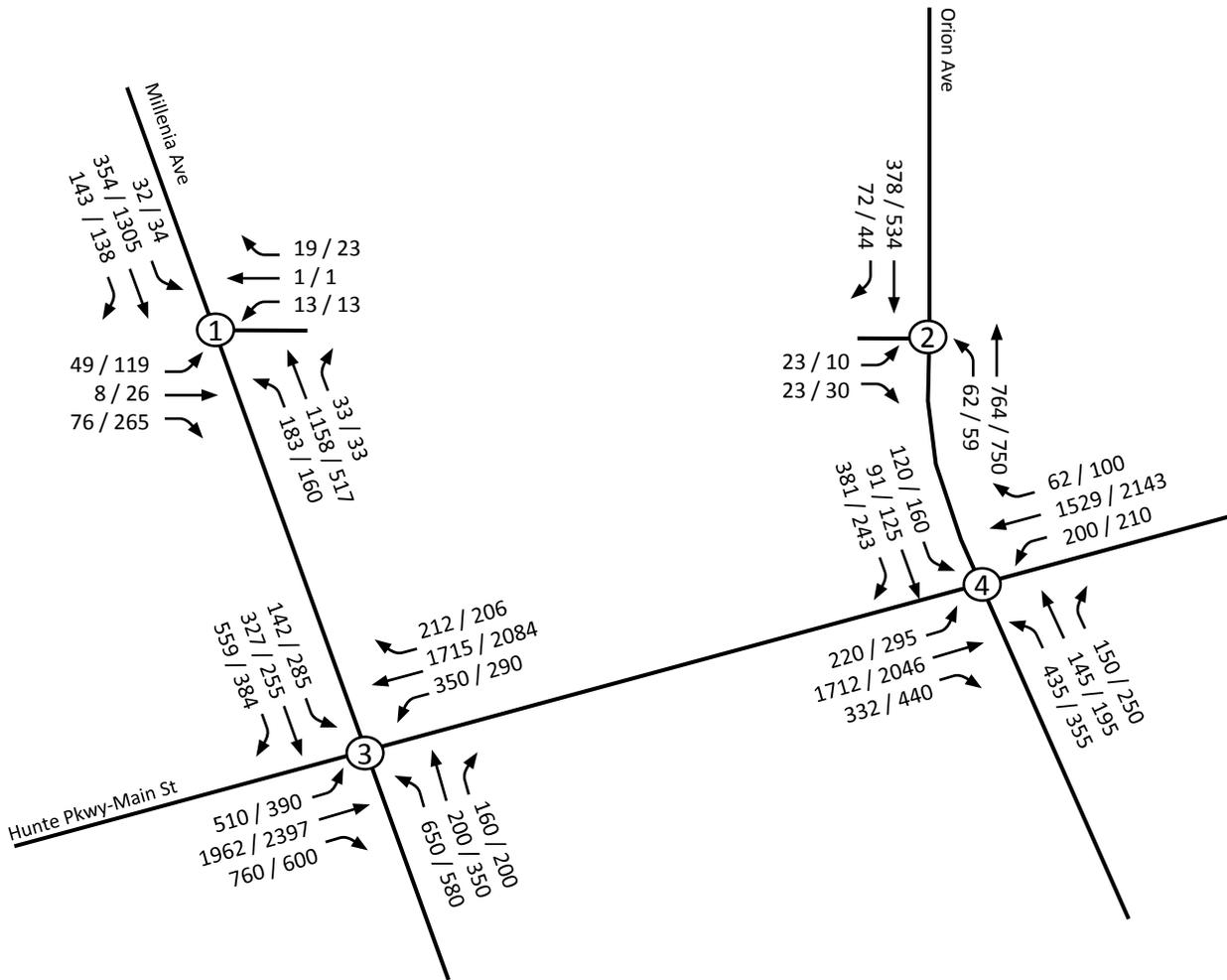
Post-Project Conditions (without Avant Street)¹



Footnote:
 1. For post-project conditions, no intersection configuration changes were assumed.



AM / PM Intersection Peak Hour Volumes



Post-Project Traffic Volumes

ATTACHMENT A

OTAY RANCH VILLAGE 9 TRAFFIC IMPACT ANALYSIS REPORT

Prepared for
City of Chula Vista

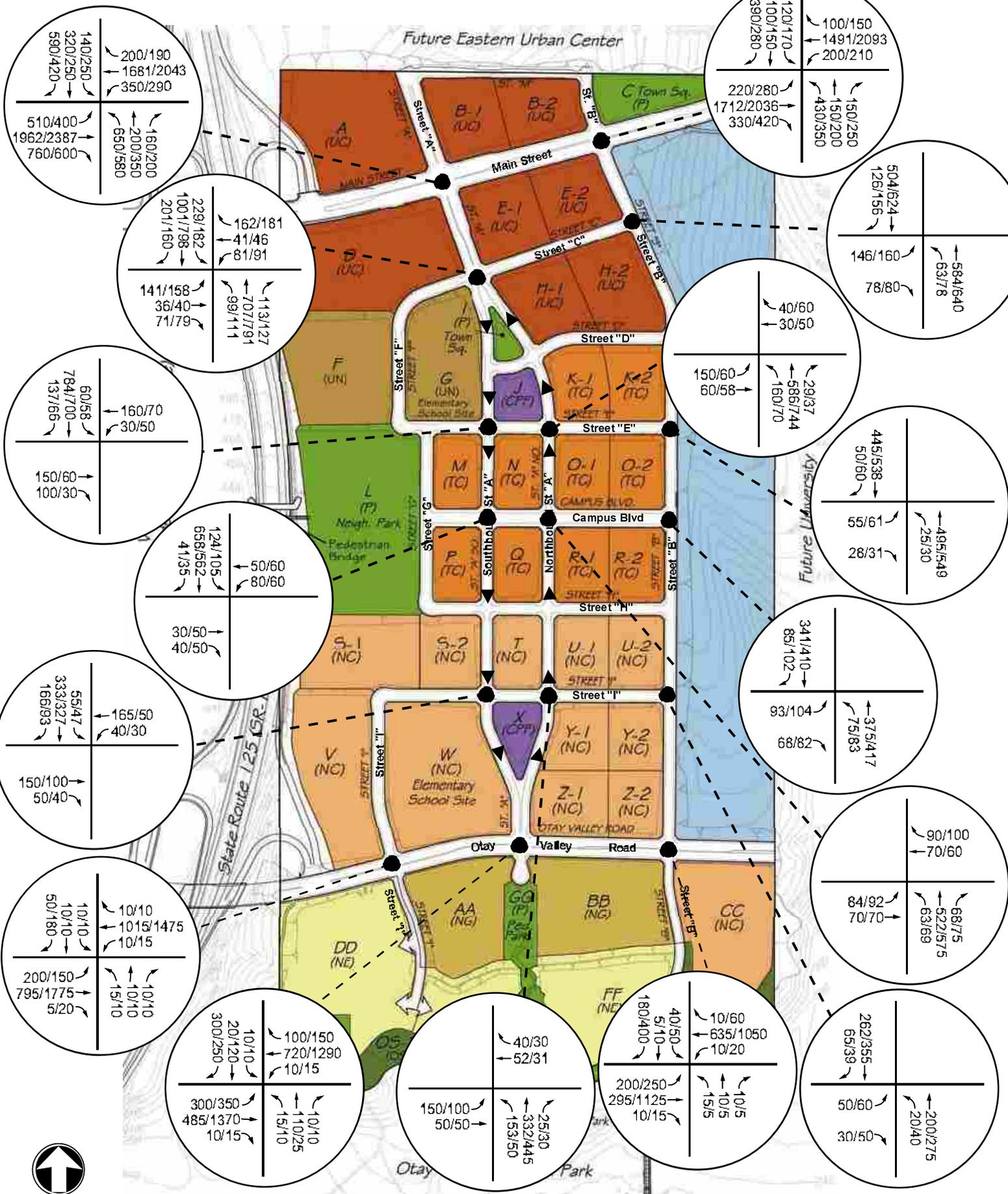
Prepared by



5050 Avenida Encinas, Suite 260, Carlsbad, CA 92008
CONTACT: DAWN WILSON 760.476.9193 dwilson@rbf.com
55-100535.001



Final Draft Submittal: March 8, 2013



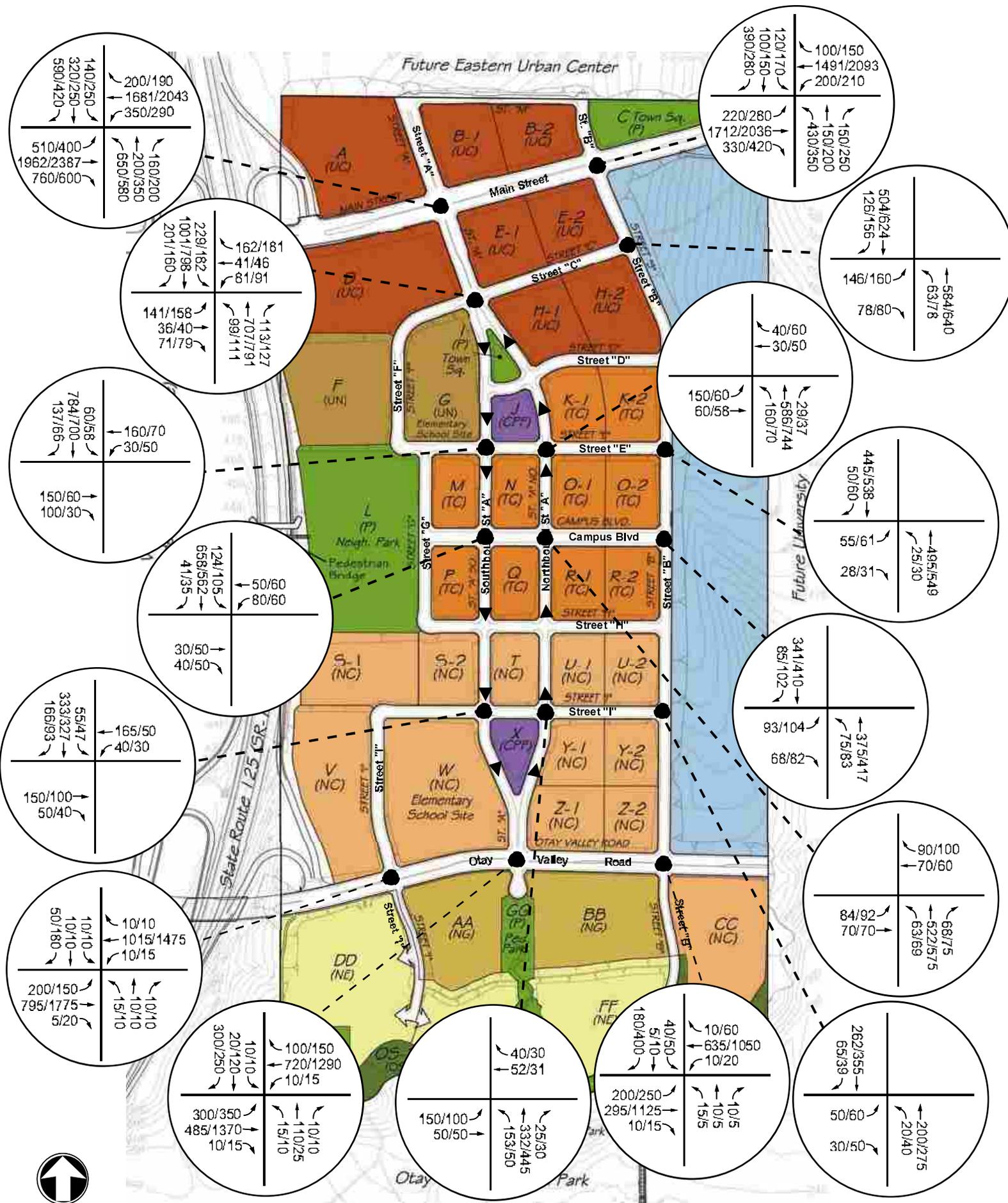
NOT TO SCALE



55-100535.001 MARCH 2012

**VILLAGE 9 INTERNAL INTERSECTIONS
2030 PEAK HOUR TRAFFIC VOLUMES**

EXHIBIT 38



NOT TO SCALE



55-100535.001 MARCH 2012

**VILLAGE 9 INTERNAL INTERSECTIONS
2030 PEAK HOUR TRAFFIC VOLUMES**

EXHIBIT 38

Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

October 7, 2014

Mr. Todd Galarneau
McMillian Companies
P.O. Box 85104
San Diego, CA 92186

D&A Ref. No: 111206

Subject: Closure of Street B between Street K and Street M in the EUC.

Dear Mr. Galarneau:

The approved Millenia SPA Plan and Tentative Map had contemplated that Street "B" (Montage Avenue) in Millenia would provide a direct circulation connection to Hunte Parkway (Main Street) across the Otay Land Company ownership.

With the recent approval of the Otay Land Company's Village 9 SPA plan and Tentative Map, which replaced the couplet design for Hunte Parkway with a standard prime arterial section (this deleting the Street B intersection on Hunte Parkway) McMillin has requested an evaluation of the impact to the Millenia street systems which would result from the removal of Street "B" (Montage Avenue) between "K" Street (Strata Street) and Street "M" (Avant Street) in the Millenia plan.

In accordance with your request I have evaluated the removal of Street B between Street K and Street M. Figure 1 presents the study area. To perform the analysis I utilized the buildout volumes presented in the Addendum to the Focused Buildout Traffic for the proposed Eastern Urban Center Dated June 9, 2008 from Fehr & Peers/Kaku Associates and Darnell & Associates, Inc. I assembled the buildout traffic volumes from the report for the following intersections:

- Street K/ Street A;
- Street K / Street B
- Street M/Street A; and
- Street M/ Street B.

The traffic volumes are presented on Figure 2. The volumes on Figure 2 present the future volumes with Street B stopping at Street M. The volumes assume that access to Lot 25 and the park site will be provided at the Street "B" and Street "K" intersection.

The next step in the analysis process required revising the volumes on Figure 2 to reflect the closure of Street B between Street K and Street M. The traffic counts adjustment included traffic to be generated by up to 180 multi-family dwelling units using the access at Street B/Street K intersection. Traffic to/from the Park site was determined nominal and traffic to/from the school was assumed to occur on Street K east of Street B and/or Street C south of Street K.

2870 FOURTH AVENUE / SUITE A /

SAN DIEGO, CA 92103

PHONE: 619-233-9373 / FAX: 619-233-4034 E-mail:

The final step in the analysis was to calculate the AM/PM peak hour delay and Level of Service at the four (4) intersections discussed above. The intersection Level of Service was calculated using Synchro 6 software. The results of the analysis are presented on Table 1. Copies of the Synchro Worksheets are attached.

Review of Table 1 Shows that each intersection will operate at LOS "D" or better for with and without Street B between Street M and Street K. Further review of Table 1 shows that with Street B, the Street M/Street A intersection will operate at LOS "D" in the PM peak hour and without Street B will operate at LOS "C". At the Street A/Street K intersection the PM peak hour LOS is "D" with Street B and LOS "D" without Street B.

Table 1								
Intersection	Preferred Alternative with Street B				Preferred Alternative with Street B Closed (From "K" St. To "M" St.)			
	AM Peak		PM Peak		AM Peak		PM Peak	
	veh/ delay	LOS	veh/ delay	LOS	veh/ delay	LOS	veh/ delay	LOS
Street "M" at Street "A"	18.1	B	43.0	D	14.9	B	25.2	C
Street "M" at Street "B"	6.8	A	7.8	A	8.7	A	8.2	A
Street "K" at Street "A"	23.4	C	47.0	D	28.1	C	27.1	D
Street "K" at Street "B"	11.3	B	28.4	C	12.9	B	22.1	C

In summary the removal of Street B between Street K and Street M will not create any impacts and each of the intersections will operate at LOS "D" or better.

Please feel free to contact our office should you have any questions or comments.

Sincerely,

DARNELL & ASSOCIATES, INC.



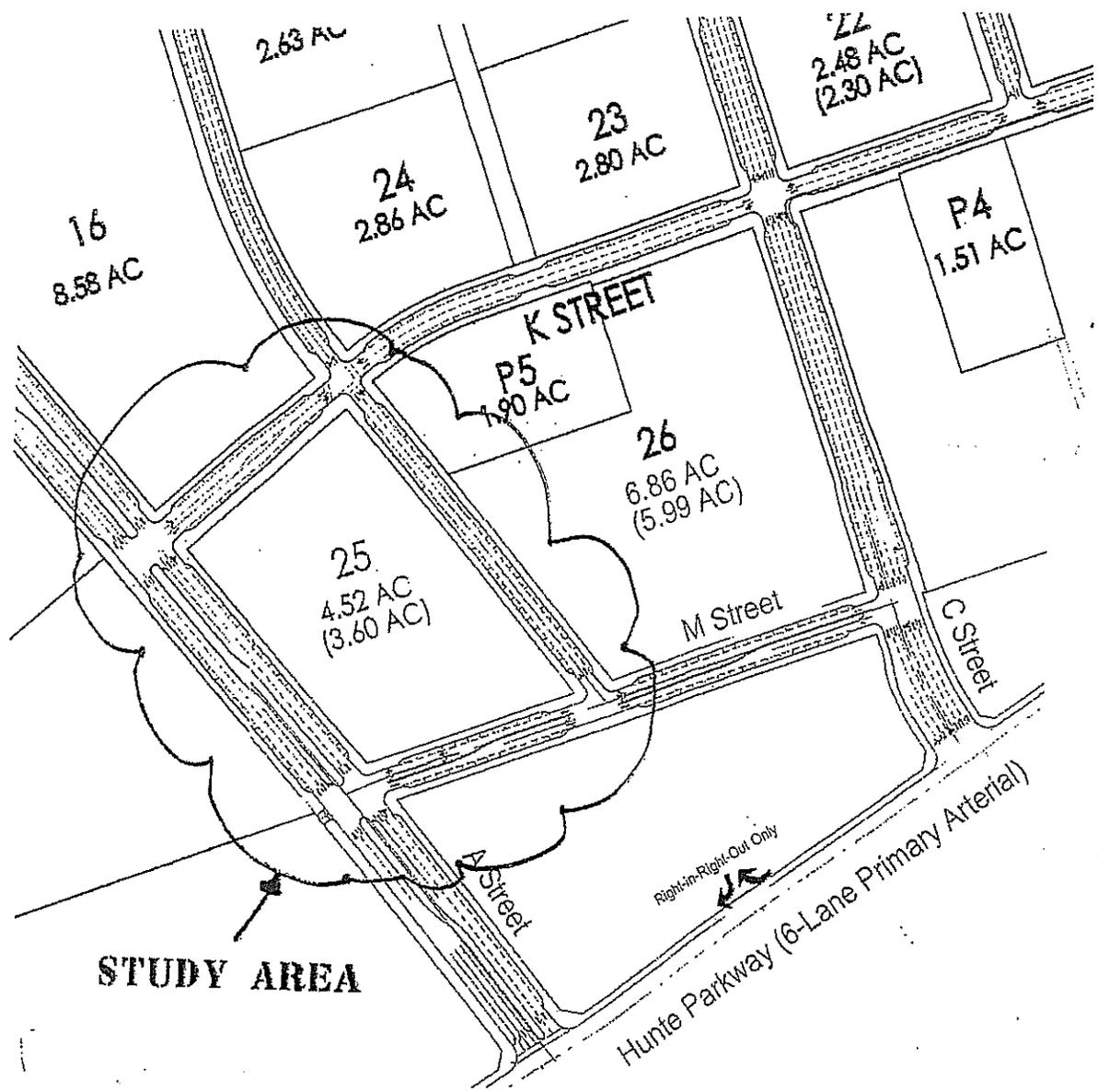
Bill E. Darnell, P.E.

RCE: 22338



10/7/2014

DATE

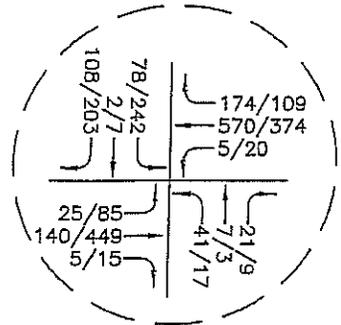
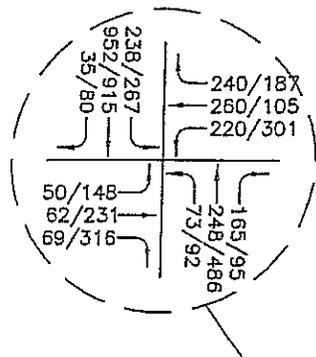


STUDY AREA

Darnell & ASSOCIATES, INC.

111206 - BB.dwg 8-14-13

**FIGURE 1
STUDY AREA**

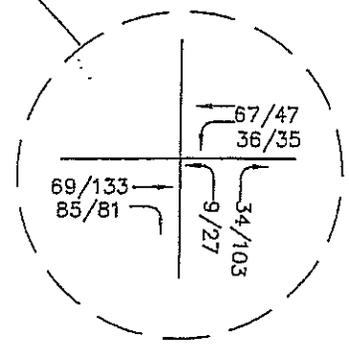
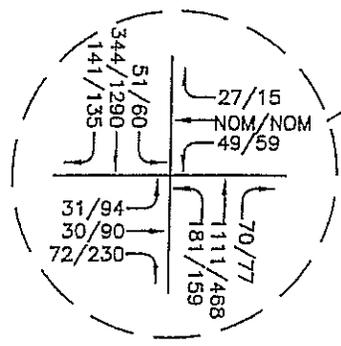


K STREET

A STREET

B STREET

M STREET



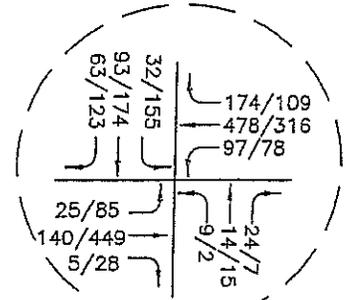
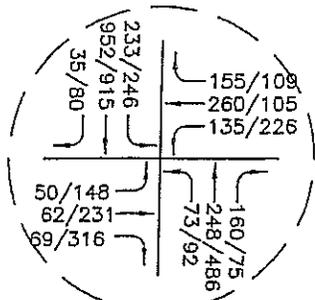
LEGEND

- XX/YY- AM/PM PEAK TRAFFIC
- TRAVEL LANE

Darnell & ASSOCIATES, INC.

111206 - BB.dwg 8-14-13 JAM

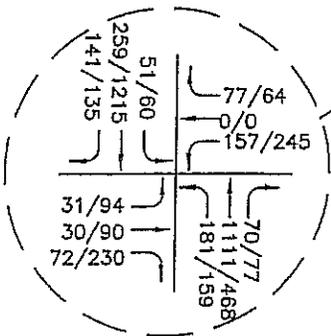
FIGURE 2
Target (Preferred Alternative) with
B Street Traffic Volumes



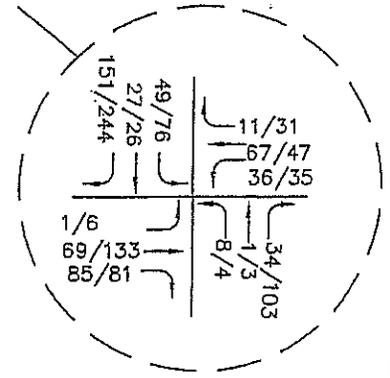
K STREET

A STREET

B STREET



M STREET



LEGEND

XX/YY- AM/PM PEAK TRAFFIC

→ - TRAVEL LANE

Darnell & ASSOCIATES, INC.

111206 - BB.dwg 8-14-13 JAM

FIGURE 3

Target (Preferred Alternative) with B Street Closed from K Street to M Street Traffic Volumes

ATTACHMENTS

- SYNCHRO WORKSHEETS WITH Street B
- SYNCHRO WORKSHEETS WITHOUT Street B

Target (Preferred Alternative) - AM
Lanes, Volumes, Timings

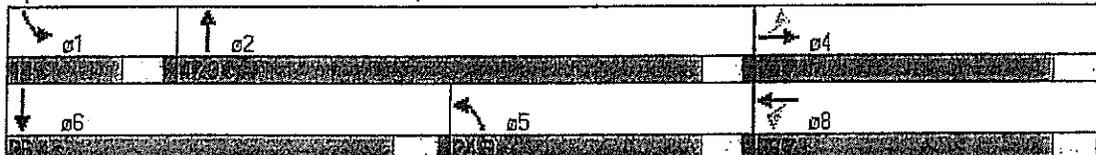
3: Street M & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Fr't		0.894			0.850			0.991			0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1665	0	1770	1583	0	1770	3507	0	1770	3352	0
Flt Permitted	0.704			0.683			0.950			0.950		
Satd. Flow (perm)	1311	1665	0	1272	1583	0	1770	3507	0	1770	3352	0
Satd. Flow (RTOR)		76			250			10			125	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	31	30	72	157	0	77	181	1111	70	51	259	141
Adj. Flow (vph)	33	32	76	165	0	81	191	1169	74	54	273	148
Lane Group Flow (vph)	33	108	0	165	81	0	191	1243	0	54	421	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Total Split (s)	28.7	28.7	0.0	28.7	28.7	0.0	24.9	47.3	0.0	14.0	36.4	0.0
Act Effct Green (s)	16.5	16.5		16.5	16.5		34.6	57.4		8.3	26.9	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.38	0.64		0.09	0.30	
v/c Ratio	0.14	0.29		0.71	0.16		0.28	0.56		0.33	0.39	
Control Delay	29.3	13.0		50.1	0.7		19.9	12.8		43.0	20.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.2		0.0	0.0	
Total Delay	29.3	13.0		50.1	0.7		19.9	13.0		43.0	20.2	
LOS	C	B		D	A		B	B		D	C	
Approach Delay		16.8			33.9			13.9			22.8	
Approach LOS		B			C			B			C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 59 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 18.1
 Intersection Capacity Utilization 61.6%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 3: Street M & Street A



Target (Preferred Alternative) - PM
Lanes, Volumes, Timings

3: Street M & Street A

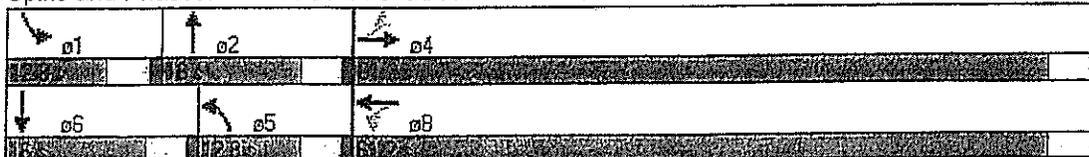
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frnt		0.892			0.850			0.953			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1662	0	1770	1583	0	1770	3373	0	1770	3486	0
Flt Permitted	0.713			0.523			0.950			0.950		
Satd. Flow (perm)	1328	1662	0	974	1583	0	1770	3373	0	1770	3486	0
Satd. Flow (RTOR)		242			641			68			11	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	94	90	230	245	0	64	159	168	77	60	1215	135
Adj. Flow (vph)	99	95	242	258	0	67	167	177	81	63	1279	142
Lane Group Flow (vph)	99	337	0	258	67	0	167	258	0	63	1421	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Total Split (s)	61.2	61.2	0.0	61.2	61.2	0.0	12.8	16.0	0.0	12.8	16.0	0.0
Act Effct Green (s)	32.8	32.8		32.8	32.8		8.8	38.1		9.1	36.4	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.10	0.42		0.10	0.40	
v/c Ratio	0.20	0.44		0.73	0.07		0.97	0.18		0.35	1.00	
Control Delay	17.5	6.6		34.8	0.1		103.2	16.6		42.2	54.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.5	6.6		34.8	0.1		103.2	16.6		42.2	54.6	
LOS	B	A		C	A		F	B		D	D	
Approach Delay		9.1			27.6			50.6			54.0	
Approach LOS		A			C			D			D	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 59 (66%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay: 43.0
 Intersection Capacity Utilization 92.5%
 Analysis Period (min) 15

Intersection LOS: D
 ICU Level of Service F

Splits and Phases: 3: Street M & Street A



Target (Preferred Alternative) - AM
 HCM Unsignalized Intersection Capacity Analysis

4: Street M & Street B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	69	85	36	67	11	8	1	34	49	27	151
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1	73	89	38	71	12	8	1	36	52	28	159
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)								390			783	
pX, platoon unblocked												
vC, conflicting volume	294	265	108	373	326	19	187			37		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	294	265	108	373	326	19	187			37		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	88	91	92	88	99	99			97		
cM capacity (veh/h)	572	616	946	467	569	1059	1387			1574		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	163	120	45	239								
Volume Left	1	38	8	52								
Volume Right	89	12	36	159								
cSH	761	556	1387	1574								
Volume to Capacity	0.21	0.22	0.01	0.03								
Queue Length 95th (ft)	20	20	0	3								
Control Delay (s)	11.0	13.3	1.5	1.8								
Lane LOS	B	B	A	A								
Approach Delay (s)	11.0	13.3	1.5	1.8								
Approach LOS	B	B										
Intersection Summary												
Average Delay			6.8									
Intersection Capacity Utilization			44.0%		ICU Level of Service				A			
Analysis Period (min)			15									

Target (Preferred Alternative) - PM
 HCM Unsignalized Intersection Capacity Analysis

4: Street M & Street B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	133	81	35	47	3	24	3	103	76	26	244
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	6	140	85	37	49	3	25	3	108	80	27	257
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								390			783	
pX, platoon unblocked												
vC, conflicting volume	452	478	156	579	552	57	284			112		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452	478	156	579	552	57	284			112		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	69	90	87	88	100	98			95		
cM capacity (veh/h)	443	451	890	277	409	1009	1278			1478		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	232	89	137	364								
Volume Left	6	37	25	80								
Volume Right	85	3	108	257								
cSH	551	348	1278	1478								
Volume to Capacity	0.42	0.26	0.02	0.05								
Queue Length 95th (ft)	52	25	2	4								
Control Delay (s)	16.2	18.9	1.6	2.0								
Lane LOS	C	C	A	A								
Approach Delay (s)	16.2	18.9	1.6	2.0								
Approach LOS	C	C										
Intersection Summary												
Average Delay			7.8									
Intersection Capacity Utilization			54.1%		ICU Level of Service				A			
Analysis Period (min)			15									

Target (Preferred Alternative) - AM
Lanes, Volumes, Timings

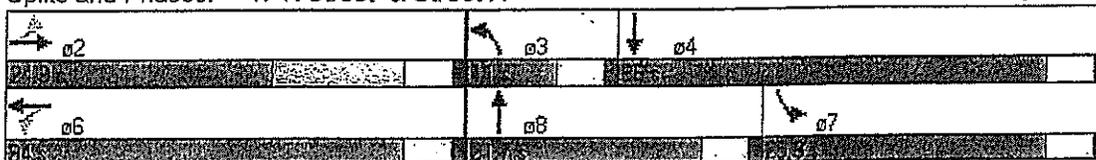
1: K Street & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.921			0.944			0.941			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1716	0	1770	1758	0	1770	3330	0	1770	3522	0
Flt Permitted	0.299			0.664			0.950			0.950		
Satd. Flow (perm)	557	1716	0	1237	1758	0	1770	3330	0	1770	3522	0
Satd. Flow (RTOR)		73			42			165			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	50	62	69	135	260	155	73	248	160	233	952	35
Adj. Flow (vph)	53	65	73	142	274	163	77	261	168	245	1002	37
Lane Group Flow (vph)	53	138	0	142	437	0	77	429	0	245	1039	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6								
Total Split (s)	24.3	24.3	0.0	34.0	34.0	0.0	11.0	21.7	0.0	25.3	36.0	0.0
Act Effct Green (s)	30.0	30.0		30.0	30.0		6.8	17.7		21.3	34.2	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.08	0.22		0.26	0.42	
v/c Ratio	0.26	0.20		0.31	0.64		0.52	0.50		0.53	0.70	
Control Delay	21.9	9.7		20.5	24.2		48.4	19.0		30.4	22.9	
Queue Delay	0.0	0.0		0.1	0.0		0.0	0.0		0.0	0.6	
Total Delay	21.9	9.8		20.7	24.2		48.4	19.0		30.4	23.5	
LOS	C	A		C	C		D	B		C	C	
Approach Delay		13.1			23.4			23.5			24.8	
Approach LOS		B			C			C			C	

Intersection Summary

Cycle Length: 81
 Actuated Cycle Length: 81
 Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 23.4
 Intersection Capacity Utilization 71.3%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 1: K Street & Street A



Target (Preferred Alternative) - PM
Lanes, Volumes, Timings

1: K Street & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frts		0.913			0.924			0.980			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1701	0	1770	1721	0	1770	3468	0	1770	3497	0
Flt Permitted	0.603			0.292			0.950			0.950		
Satd. Flow (perm)	1123	1701	0	544	*1684	0	1770	*3486	0	1770	*3497	0
Satd. Flow (RTOR)		133			101			21			13	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	148	231	316	226	105	109	92	486	75	246	915	80
Adj. Flow (vph)	151	236	322	231	107	111	94	496	77	251	934	82
Lane Group Flow (vph)	151	558	0	231	218	0	94	573	0	251	1016	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6								
Total Split (s)	39.0	39.0	0.0	39.0	39.0	0.0	8.9	18.1	0.0	14.7	23.9	0.0
Act Effct Green (s)	31.5	31.5		31.5	31.5		4.9	16.6		10.8	24.6	
Actuated g/C Ratio	0.44	0.44		0.44	0.44		0.07	0.23		0.15	0.35	
v/c Ratio	0.30	0.67		0.95	0.27		0.79	0.69		0.93	0.83	
Control Delay	14.2	16.0		70.9	7.3		77.9	29.9		75.3	31.6	
Queue Delay	0.0	0.6		20.5	0.0		0.0	0.0		0.0	1.6	
Total Delay	14.2	16.7		91.4	7.3		77.9	29.9		75.3	33.2	
LOS	B	B		F	A		E	C		E	C	
Approach Delay		16.1			50.6			36.7			41.5	
Approach LOS		B			D			D			D	

Intersection Summary

Cycle Length: 71.8

Actuated Cycle Length: 71

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 36.0

Intersection LOS: D

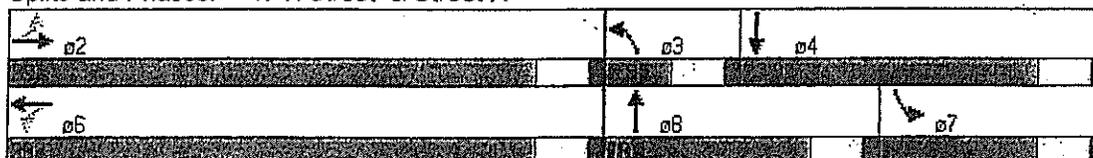
Intersection Capacity Utilization 90.3%

ICU Level of Service E

Analysis Period (min) 15

* User Entered Value

Splits and Phases: 1: K Street & Street A



Target (Preferred Alternative) - AM
Lanes, Volumes, Timings

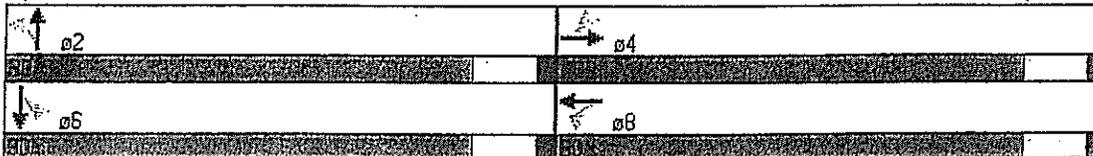
2: Street K & Street B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.996			0.969			0.931			0.955	
Fl _t Protected		0.993			0.994			0.991			0.991	
Satd. Flow (prot)	0	1842	0	0	1794	0	0	1719	0	0	1763	0
Fl _t Permitted		0.889			0.932			0.955			0.956	
Satd. Flow (perm)	0	1649	0	0	1682	0	0	1656	0	0	1701	0
Satd. Flow (RTOR)		3			32			25			53	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	25	140	5	97	478	174	9	14	24	32	93	63
Adj. Flow (vph)	26	147	5	102	503	183	9	15	25	34	98	66
Lane Group Flow (vph)	0	178	0	0	788	0	0	49	0	0	198	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Act Effct Green (s)		41.1			41.1			10.9			10.9	
Actuated g/C Ratio		0.68			0.68			0.18			0.18	
v/c Ratio		0.16			0.68			0.15			0.56	
Control Delay		4.2			10.0			13.0			22.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.2			10.0			13.0			22.2	
LOS		A			A			B			C	
Approach Delay		4.2			10.0			13.0			22.2	
Approach LOS		A			A			B			C	

Intersection Summary

Cycle Length: 60
 Actuated Cycle Length: 60
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 11.3
 Intersection Capacity Utilization 73.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 2: Street K & Street B



Target (Preferred Alternative) - PM
Lanes, Volumes, Timings

2: Street K & Street B

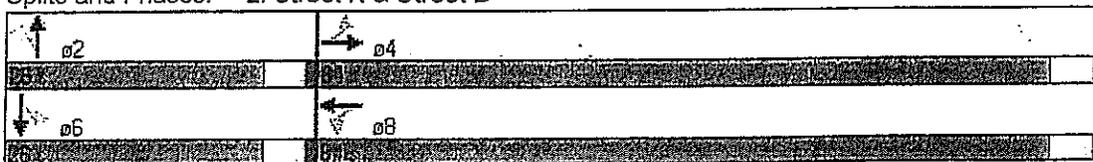
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t		0.993			0.976			0.962			0.963	
Fl _t Protected		0.995			0.985			0.996			0.983	
Satd. Flow (prot)	0	1840	0	0	1791	0	0	1785	0	0	1763	0
Fl _t Permitted		0.889			0.712			0.975			0.876	
Satd. Flow (perm)	0	1644	0	0	1294	0	0	1747	0	0	1571	0
Satd. Flow (RTOR)		7			27			7			20	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	58	449	28	178	316	109	2	15	7	155	174	123
Adj. Flow (vph)	61	473	29	187	333	115	2	16	7	163	183	129
Lane Group Flow (vph)	0	563	0	0	635	0	0	25	0	0	475	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	64.0	64.0	0.0	64.0	64.0	0.0	26.0	26.0	0.0	26.0	26.0	0.0
Act Effct Green (s)		36.5			36.5			23.1			23.1	
Actuated g/C Ratio		0.54			0.54			0.34			0.34	
v/c Ratio		0.64			0.90			0.04			0.87	
Control Delay		13.3			29.1			18.8			44.2	
Queue Delay		0.3			0.4			0.0			0.8	
Total Delay		13.6			29.4			18.8			45.0	
LOS		B			C			B			D	
Approach Delay		13.6			29.4			18.8			45.0	
Approach LOS		B			C			B			D	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 68
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 28.4
 Intersection Capacity Utilization 103.5%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service G

Splits and Phases: 2: Street K & Street B



Target (Preferred Alternative) with B St. closed from K St. to M St. - AM
 Lanes, Volumes, Timings

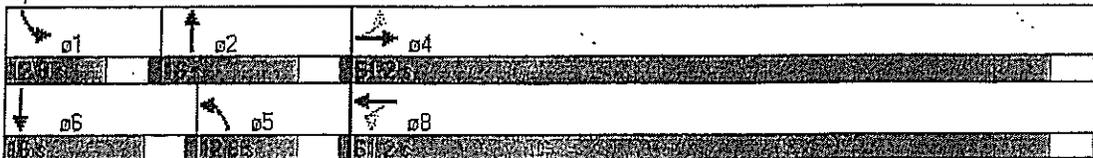
3: Street M & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.894			0.850			0.991			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1665	0	1770	1583	0	1770	3507	0	1770	3518	0
Flt Permitted	0.739			0.687			0.950			0.950		
Satd. Flow (perm)	1377	1665	0	1280	1583	0	1770	3507	0	1770	3518	0
Satd. Flow (RTOR)		76			545			6			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	31	30	72	49	0	27	181	1111	70	51	344	14
Adj. Flow (vph)	33	32	76	52	0	28	191	1169	74	54	362	15
Lane Group Flow (vph)	33	108	0	52	28	0	191	1243	0	54	377	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Total Split (s)	61.2	61.2	0.0	61.2	61.2	0.0	12.8	16.0	0.0	12.8	16.0	0.0
Act Effect Green (s)	9.1	9.1		9.1	9.1		10.3	31.2		8.4	20.2	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.21	0.64		0.15	0.41	
v/c Ratio	0.14	0.31		0.24	0.04		0.51	0.56		0.20	0.26	
Control Delay	14.5	8.6		16.1	0.1		18.2	16.4		16.8	10.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.5	8.6		16.1	0.1		18.2	16.4		16.8	10.6	
LOS	B	A		B	A		B	B		B	B	
Approach Delay		10.0			10.5			16.6			11.4	
Approach LOS		A			B			B			B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 49
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.56
 Intersection Signal Delay: 14.9
 Intersection Capacity Utilization 55.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 3: Street M & Street A



Target (Preferred Alternative) with B St. closed from K St. to M St. -PM
 Lanes, Volumes, Timings

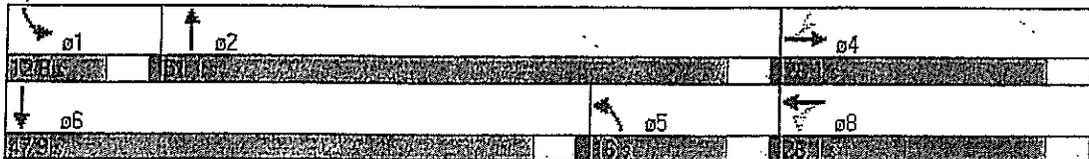
3: Street M & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.892			0.850			0.979			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1662	0	1770	1583	0	1770	3465	0	1770	3490	0
Flt Permitted	0.747			0.264			0.950			0.950		
Satd. Flow (perm)	1391	1662	0	492	1583	0	1770	3465	0	1770	3490	0
Satd. Flow (RTOR)		135			448			31			17	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	94	90	230	59	0	15	159	468	77	60	1290	135
Adj. Flow (vph)	99	95	242	62	0	16	167	493	81	63	1358	142
Lane Group Flow (vph)	99	337	0	62	16	0	167	574	0	63	1500	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Total Split (s)	26.1	26.1	0.0	26.1	26.1	0.0	16.0	51.1	0.0	12.8	47.9	0.0
Act Effct Green (s)	15.2	15.2		15.2	15.2		10.8	44.7		8.1	39.9	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.14	0.59		0.10	0.53	
v/c Ratio	0.35	0.76		0.63	0.02		0.68	0.28		0.35	0.81	
Control Delay	32.1	30.2		58.3	0.1		50.1	9.3		43.1	21.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	3.8	
Total Delay	32.1	30.2		58.3	0.1		50.1	9.3		43.1	25.1	
LOS	C	C		E	A		D	A		D	C	
Approach Delay		30.6			46.3			18.5			25.8	
Approach LOS		C			D			B			C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 75.2
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 25.2
 Intersection Capacity Utilization 84.3%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 3: Street M & Street A



Target (Preferred Alternative) with B St. closed from K St. to M St. - AM
 HCM Unsignalized Intersection Capacity Analysis

4: Street M & Street B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	69	85	36	67	0	9	0	34	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	73	89	38	71	0	9	0	36	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)								390			783	
pX, platoon unblocked												
vC, conflicting volume	72	55	0	163	37	18	0			36		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	72	55	0	163	37	18	0			36		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	91	92	94	92	100	99			100		
cM capacity (veh/h)	857	832	1085	684	850	1061	1623			1575		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	162	108	45	0								
Volume Left	0	38	9	0								
Volume Right	89	0	36	0								
cSH	955	784	1623	1700								
Volume to Capacity	0.17	0.14	0.01	0.00								
Queue Length 95th (ft)	15	12	0	0								
Control Delay (s)	9.5	10.3	1.5	0.0								
Lane LOS	A	B	A									
Approach Delay (s)	9.5	10.3	1.5	0.0								
Approach LOS	A	B										
Intersection Summary												
Average Delay			8.7									
Intersection Capacity Utilization			27.7%		ICU Level of Service				A			
Analysis Period (min)			15									

Target (Preferred Alternative) with B St. closed from K St. to M St. -PM
 HCM Unsignalized Intersection Capacity Analysis

4: Street M & Street B

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	133	81	35	47	0	27	0	103	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	140	85	37	49	0	28	0	108	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)								390			783	
pX, platoon unblocked												
vC, conflicting volume	136	165	0	266	111	54	0			108		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	136	165	0	266	111	54	0			108		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	80	92	93	94	100	98			100		
cM capacity (veh/h)	784	715	1085	530	765	1013	1623			1482		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	225	86	137	0								
Volume Left	0	37	28	0								
Volume Right	85	0	108	0								
cSH	821	644	1623	1700								
Volume to Capacity	0.27	0.13	0.02	0.00								
Queue Length 95th (ft)	28	12	1	0								
Control Delay (s)	11.0	11.5	1.6	0.0								
Lane LOS	B	B	A									
Approach Delay (s)	11.0	11.5	1.6	0.0								
Approach LOS	B	B										
Intersection Summary												
Average Delay			8.2									
Intersection Capacity Utilization			34.2%		ICU Level of Service				A			
Analysis Period (min)			15									

Target (Preferred Alternative) with B St. closed from K St. to M St. - AM
Lanes, Volumes, Timings

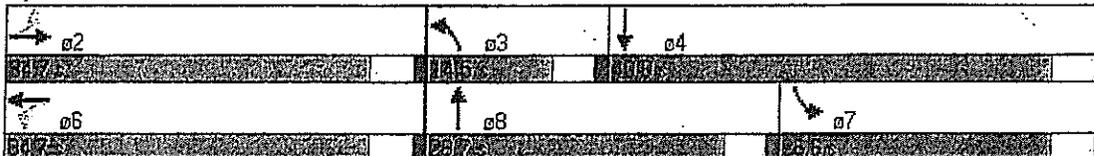
1: K Street & Street A

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.921			0.928			0.940			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1716	0	1770	1729	0	1770	3327	0	1770	3522	0
Flt Permitted	0.155			0.649			0.950			0.950		
Satd. Flow (perm)	289	1716	0	1209	1729	0	1770	3327	0	1770	3522	0
Satd. Flow (RTOR)		68			56			174			5	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	50	62	69	220	260	240	73	248	165	238	952	35
Adj. Flow (vph)	53	65	73	232	274	253	77	261	174	251	1002	37
Lane Group Flow (vph)	53	138	0	232	527	0	77	435	0	251	1039	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6								
Total Split (s)	34.7	34.7	0.0	34.7	34.7	0.0	14.5	28.7	0.0	26.6	40.8	0.0
Act Effct Green (s)	26.6	26.6		26.6	26.6		8.9	25.2		18.8	37.9	
Actuated g/C Ratio	0.32	0.32		0.32	0.32		0.10	0.30		0.23	0.46	
v/c Ratio	0.57	0.23		0.60	0.89		0.42	0.38		0.62	0.64	
Control Delay	51.3	12.6		31.5	43.2		44.1	15.9		36.9	21.8	
Queue Delay	0.0	0.0		0.4	0.0		0.0	0.0		0.0	0.4	
Total Delay	51.3	12.7		32.0	43.2		44.1	15.9		36.9	22.2	
LOS	D	B		C	D		D	B		D	C	
Approach Delay		23.4			39.8			20.2			25.0	
Approach LOS		C			D			C			C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 82.9
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 28.1
 Intersection Capacity Utilization 76.5%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service D

Splits and Phases: 1: K Street & Street A



Target (Preferred Alternative) with B St. closed from K St. to M St. -PM
 Lanes, Volumes, Timings

1: K Street & Street A

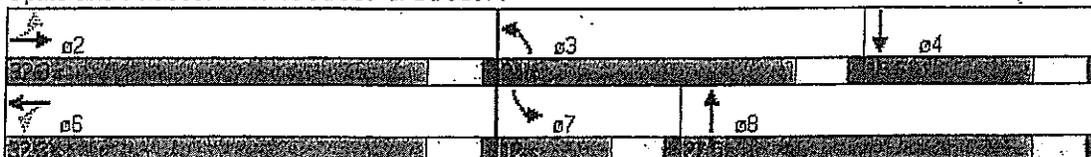
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.913			0.904			0.975			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	*1770	*1701	0	*1770	*1684	0	*1770	*3486	0	*1770	*3487	0
Flt Permitted	0.484			0.205			0.950			0.950		
Satd. Flow (perm)	*1770	*1701	0	*1770	*1684	0	*1770	*3486	0	*1770	*3487	0
Satd. Flow (RTOR)		113			148			34			11	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	148	231	316	301	105	187	92	486	95	267	915	80
Adj. Flow (vph)	151	236	322	307	107	191	94	496	97	272	934	82
Lane Group Flow (vph)	151	558	0	307	298	0	94	593	0	272	1016	0
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6								
Total Split (s)	32.3	32.3	0.0	32.3	32.3	0.0	24.0	27.5	0.0	12.0	15.5	0.0
Act Effct Green (s)	22.7	22.7		22.7	22.7		9.1	23.7		8.1	25.0	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.13	0.36		0.12	0.38	
v/c Ratio	0.25	0.85		0.51	0.44		0.40	0.47		1.27	0.77	
Control Delay	16.3	29.7		20.3	10.2		32.4	18.1		183.3	27.9	
Queue Delay	0.0	2.9		0.3	0.0		0.0	0.3		0.0	0.4	
Total Delay	16.3	32.6		20.6	10.2		32.4	18.3		183.3	28.3	
LOS	B	C		C	B		C	B		F	C	
Approach Delay		29.1			15.5			20.3			61.0	
Approach LOS		C			B			C			E	

Intersection Summary

Cycle Length: 71.8
 Actuated Cycle Length: 66.5
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.27
 Intersection Signal Delay: 37.3
 Intersection Capacity Utilization 94.5%
 Analysis Period (min) 15
 * User Entered Value

Intersection LOS: D
 ICU Level of Service F

Splits and Phases: 1: K Street & Street A



Target (Preferred Alternative) with B St. closed from K St. to M St. - AM
 Lanes, Volumes, Timings

2: Street K & Street B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fit		0.996			0.969			0.959			0.922	
Fit Protected		0.993						0.971			0.980	
Satd. Flow (prot)	0	1842	0	0	1805	0	0	1735	0	0	1683	0
Fit Permitted		0.873			0.999			0.786			0.846	
Satd. Flow (perm)	0	1620	0	0	1803	0	0	1404	0	0	1453	0
Satd. Flow (RTOR)		3			35			22			73	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	25	140	5	5	570	174	41	7	21	78	2	108
Adj. Flow (vph)	26	147	5	5	600	183	43	7	22	82	2	114
Lane Group Flow (vph)	0	178	0	0	788	0	0	72	0	0	198	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	63.3	63.3	0.0	63.3	63.3	0.0	26.7	26.7	0.0	26.7	26.7	0.0
Act Effct Green (s)		24.9			24.9			10.7			10.7	
Actuated g/C Ratio		0.56			0.56			0.24			0.24	
v/c Ratio		0.20			0.78			0.21			0.49	
Control Delay		5.3			13.3			15.2			16.9	
Queue Delay		0.0			0.1			0.0			0.0	
Total Delay		5.3			13.4			15.2			16.9	
LOS		A			B			B			B	
Approach Delay		5.3			13.4			15.2			16.9	
Approach LOS		A			B			B			B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 44.8
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 12.9
 Intersection Capacity Utilization 60.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 2: Street K & Street B

02	04
06	08

Target (Preferred Alternative) with B St. closed from K St. to M St. -PM
 Lanes, Volumes, Timings

2: Street K & Street B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.971			0.960			0.939	
Flt Protected		0.992			0.998			0.971			0.974	
Satd. Flow (prot)	0	1840	0	0	1805	0	0	1736	0	0	1704	0
Flt Permitted		0.856			0.972			0.790			0.816	
Satd. Flow (perm)	0	1588	0	0	1758	0	0	1413	0	0	1427	0
Satd. Flow (RTOR)		3			32			9			44	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Volume (vph)	85	449	15	20	374	109	17	3	9	242	7	203
Adj. Flow (vph)	89	473	16	21	394	115	18	3	9	255	7	214
Lane Group Flow (vph)	0	578	0	0	530	0	0	30	0	0	476	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	63.3	63.3	0.0	63.3	63.3	0.0	26.7	26.7	0.0	26.7	26.7	0.0
Act Effct Green (s)		25.5			25.5			23.3			23.3	
Actuated g/C Ratio		0.45			0.45			0.41			0.41	
v/c Ratio		0.81			0.66			0.05			0.78	
Control Delay		22.9			15.1			12.2			28.6	
Queue Delay		0.2			0.1			0.0			0.8	
Total Delay		23.1			15.2			12.2			29.4	
LOS		C			B			B			C	
Approach Delay		23.1			15.2			12.2			29.4	
Approach LOS		C			B			B			C	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 57.1
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 22.1
 Intersection Capacity Utilization 97.4%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service F.

Splits and Phases: 2: Street K & Street B

02	04
06	08

ATTACHMENT B



Sectional Planning Area Plan



Village 9

Otay Ranch, City of Chula Vista, California

As Adopted June 3, 2014 by Resolution No. 2014-091 with
Form-based Code regulations adopted by Ordinance No.3311

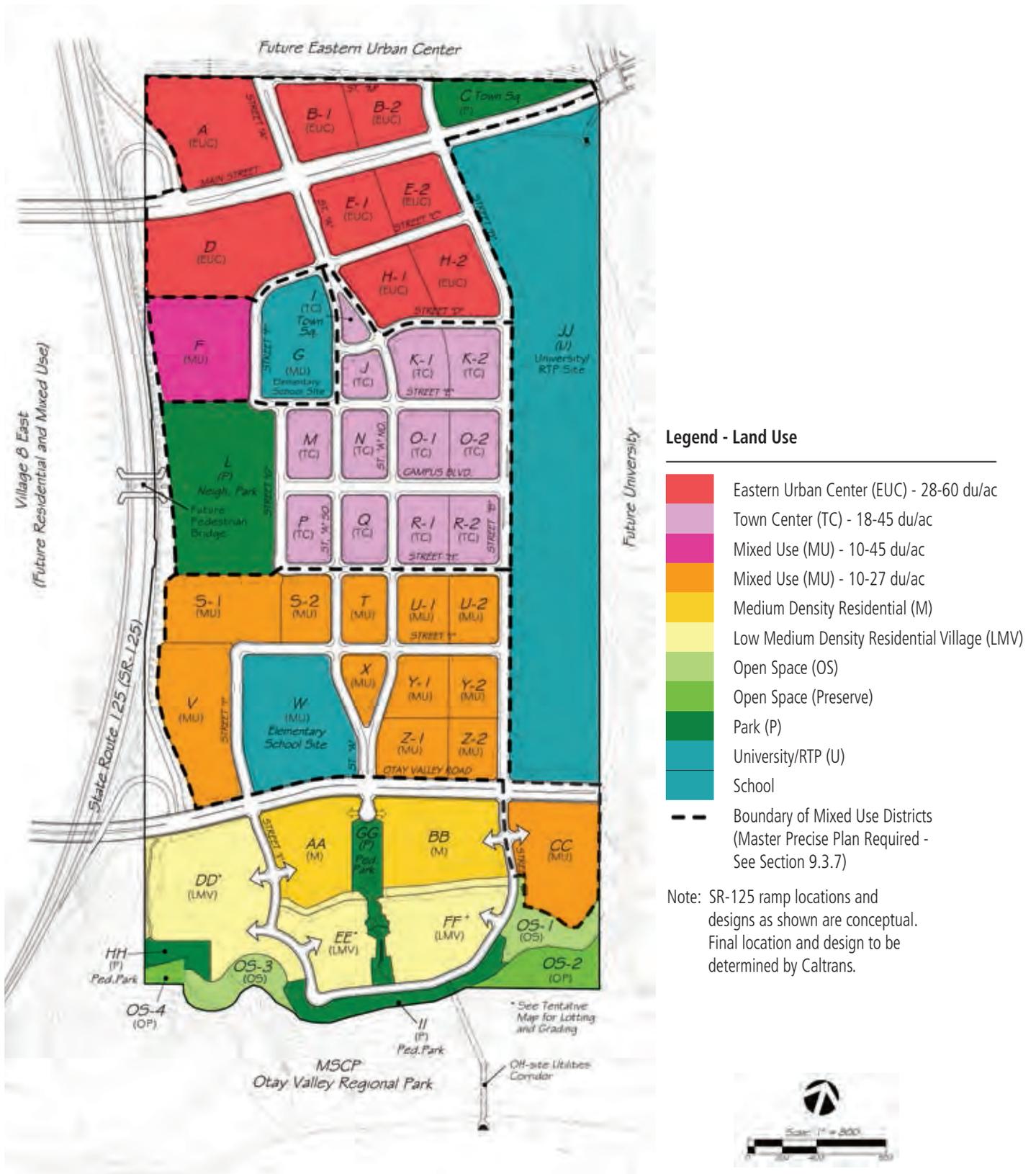


Exhibit 2.1 - Site Utilization Plan

Table 2.1 - Site Utilization Summary

Commercial and Residential Land Use					Public, Quasi Public, and Other Uses				
Eastern Urban Center (EUC) - 28- 60 du/ac					Community Purpose Facility (CPF)⁽³⁾				
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾	Target Range C'ml Sq.Ft. (K) ⁽²⁾⁽⁶⁾	Planning Area	Land Use	Gross Acres	Transect ⁽¹⁾	Description
A	9.5	T-5: UC	380	78-235	J	TC	2.3	SD: CPF	CPF
B-1	4.6	T-5: UC	183	38-115	X	MU	2.7	SD: CPF	CPF
B-2	3.9	T-5: UC	136	34-101	Subtotal		5.0		
D	11.2	T-5: UC	448	94-278	Potential School (S) Sites⁽⁴⁾				
E-1	4.6	T-5: UC	183	40-115	Planning Area	Land Use	Gross Acres	Transect ⁽¹⁾	Description
E-2	4.2	T-5: UC	168	34-101	G	MU	7.9	T-4: UN	Elementary
H-1	4.7	T-5: UC	188	38-115	W	MU	11.9	T-3: NC	Elementary
H-2	5.6	T-5: UC	226	44-130	Subtotal		19.8		
Subtotal	48.3		1,912	400-1,190	Parks (P)				
Town Center (TC) - 18-45 du/ac					Planning Area	Land Use	Gross Acres	Transect ⁽¹⁾	Description
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾	Target Range C'ml Sq.Ft. (K) ⁽²⁾⁽⁷⁾	C	P	3.6	SD: P	Town Square
K-1	3.7	T-4: TC	148	0	I	TC	1.5	SD: P	Town Square
K-2	3.8	T-4: TC	152	0	L	P	14.8	SD: P	Neighborhood
M	3.6	T-4: TC	80	10-29	GG	P	2.9	SD: P	Pedestrian
N	3.5	T-4: TC	57	20-52	HH	P	1.3	SD: P	Pedestrian
O-1	3.6	T-4: TC	80	10-29	II	P	3.4	SD: P	Pedestrian
O-2	3.6	T-4: TC	80	10-29	Subtotal		27.5		
P	3.6	T-4: TC	80	10-29	Open Space (OS)				
Q	3.5	T-4: TC	57	20-52	Planning Area	Land Use	Gross Acres	Transect ⁽¹⁾	Description
R-1	3.6	T-4: TC	80	10-29	OS-1	OS	2.8	T-1: OS	Open Space
R-2	3.6	T-4: TC	80	10-29	OS-2	CVOSP ⁽⁵⁾	3.3	T-1: OP	Preserve
Subtotal	36.1		894	100-278	OS-3	OS	2.8	T-1: OS	Open Space
Mixed Use (MU) - 10-45 du/ac					OS-4	CVOSP ⁽⁵⁾	0.7	T-1: OP	Preserve
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾	Target Range C'ml Sq.Ft. (K) ⁽²⁾	Subtotal		9.6		
F	8.2	T-4: UN	136	0	Other				
G ⁽²⁾	--	T-4: UN	0	0	Planning Area	Land Use	Gross Acres	Transect ⁽¹⁾	Description
Subtotal	8.2		136	0	JJ	U	50.0	SD: U	University/RTP
Mixed Use (MU) - 10-27 du/ac					Arterials		17.9		Right-of-Way
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾	Target Range C'ml Sq.Ft. (K) ⁽²⁾⁽⁸⁾	SR-125		8.2		Right-of-Way
S-1	6.3	T-3: NC	104	0	Subtotal		76.1		
S-2	3.5	T-3: NC	58	0	TOTAL		138.0 Acres		
T	3.4	T-3: NC	34	0-32					
U-1	3.5	T-3: NC	58	0	Notes:				
U-2	3.5	T-3: NC	58	0	(1) Transects are defined in Chapter 3.				
V	8.6	TT-3: NC	142	0	(2) See Chapter 9 regarding Intensity Transfers and minimum retail/commercial square footage requirement.				
W ⁽²⁾	--	T-3: NC	0	0	(3) As defined by CVMC Chapter 19.48.				
Y-1	3.3	T-3: NC	54	0	(4) School sites will revert to mixed use if sites are not accepted by the school district.				
Y-2	3.0	T-3: NC	50	0	(5) Chula Vista Open Space Preserve.				
Z-1	3.7	T-3: NC	61	0	(6) 390,000 square feet of office and 10,000 square feet of retail for the low range; 1,140,000 square feet of office and 50,000 square feet of retail for the high range; excludes live/work.				
Z-2	2.7	T-3: NC	45	0	(7) 10,000 square feet of office and 90,000 square feet of retail for the low range; 10,000 square feet of office and 268,000 square feet of retail for the high range; excludes live/work.				
CC	7.7	T-3: NC	128	0	(8) 32,000 square feet of retail for the high range.				
Subtotal	49.2		792	0-32					
Medium Density Residential (M) - 6-11 du.ac									
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾						
AA	6.8	T-2: NG	72						
BB	8.4	T-2: NG	89						
Subtotal	15.2		161						
Low Medium Density Residential Village (LMV) - 3-6 du.ac									
Planning Area	Gross Acres	Transect ⁽¹⁾	Target D.U. ⁽²⁾						
DD	12.2	T-2: NE	47						
EE	7.1	T-2: NE	26						
FF	8.8	T-2: NE	32						
Subtotal	28.1		105						
TOTAL	185.1 Acres		4,000	500K - 1,500 K⁽³⁾					

SPA Total Area: 323.1 Gross Acres

ATTACHMENT C

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Millennia Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.465
Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 35 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Lanes for North Bound, South Bound, East Bound, and West Bound.

Table for Volume Module with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume for each approach.

Table for Saturation Flow Module with columns for Sat/Lane, Adjustment, Lanes, Final Sat. for each approach.

Table for Capacity Analysis Module with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Uniform Del, IncremntDel, InitQueueDel, Delay Adj, Delay/Veh, User Del Adj, Adj Del/Veh, LOS by Move, HCM2kAvgQ for each approach.

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Orion Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.270
Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 2.7
Optimal Cycle: 25 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Lanes for Orion Avenue and Avant Street.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Uniform Del, IncremntDel, InitQueueDel, Delay Adj, Delay/Veh, User Del Adj, Adj Del/Veh, LOS by Move, HCM2kAvgQ.

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Main St-Hunte Pkwy / Millennia Ave

Cycle (sec): 120 Critical Vol./Cap. (X): 0.969
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 50.6
Optimal Cycle: 180 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns representing different traffic movements and 10 rows of adjustment factors like Base Vol, Growth Adj, etc.

Saturation Flow Module table with 12 columns and 4 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns and 10 rows showing Vol/Sat, Crit Moves, Green/Cycle, Delay/Veh, etc.

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Main St-Hunte Pkwy / Orion Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 1.053
Loss Time (sec): 2 (Y+R=4.0 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: 180 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns and 12 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with 12 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns and 10 rows including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User Del Adj, Adj Del/Veh, LOS by Move, and HCM2kAvgQ.

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

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

 Intersection #1 Millennia Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.754
 Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 14.8
 Optimal Cycle: 76 Level Of Service: B

Street Name:	Millennia Avenue						Avant Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	159	468	77	60	1290	135	94	90	230	59	5	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	159	468	77	60	1290	135	94	90	230	59	5	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	173	509	84	65	1402	147	102	98	250	64	5	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	509	84	65	1402	147	102	98	250	64	5	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	173	509	84	65	1402	147	102	98	250	64	5	16

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.91	0.91	0.93	0.92	0.91	0.71	0.87	0.86	0.23	0.87	0.85
Lanes:	1.00	1.72	0.28	1.00	1.81	0.19	1.00	0.28	0.72	1.00	0.25	0.75
Final Sat.:	1769	2972	489	1769	3157	330	1342	461	1177	439	407	1221

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.10	0.17	0.17	0.04	0.44	0.44	0.08	0.21	0.21	0.15	0.01	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.48	0.48	0.24	0.59	0.59	0.28	0.28	0.28	0.28	0.28	0.28
Volume/Cap:	0.75	0.35	0.35	0.16	0.75	0.75	0.27	0.75	0.75	0.52	0.05	0.05
Uniform Del:	25.2	9.7	9.7	18.2	9.1	9.1	16.8	19.7	19.7	18.1	15.7	15.7
IncrementDel:	13.3	0.1	0.1	0.2	1.6	1.6	0.4	6.9	6.9	3.8	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	38.5	9.8	9.8	18.4	10.8	10.8	17.1	26.6	26.6	22.0	15.7	15.7
User Del Adj:	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 Del/Veh:	38.5	9.8	9.8	18.4	10.8	10.8	17.1	26.6	26.6	22.0	15.7	15.7
LOS by Move:	D	A	A	B	B	B	B	C	C	C	B	B
HCM2kAvgQ:	5	4	4	1	13	13	2	8	8	2	0	0

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

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Orion Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.316
Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 4.8
Optimal Cycle: 27 Level Of Service: A

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Lanes for Orion Avenue and Avant Street.

Table for Volume Module showing Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Volume.

Table for Saturation Flow Module showing Sat/Lane, Adjustment, Lanes, Final Sat.

Table for Capacity Analysis Module showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Uniform Del, IncremntDel, InitQueueDel, Delay Adj, Delay/Veh, User Del Adj, Adj Del/Veh, LOS by Move, HCM2kAvgQ.

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Main St-Hunte Pkwy / Millennia Ave

Cycle (sec): 120 Critical Vol./Cap. (X): 0.991
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 49.3
Optimal Cycle: 180 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns representing different traffic movements and 10 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Saturation Flow Module table with 12 columns and 4 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns and 10 rows showing Vol/Sat, Crit Moves, Green/Cycle, etc.

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

OLC Parcels B & C - Internal Access
 2030 With Project Conditions
 PM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

 Intersection #4 Main St-Hunte Pkwy / Orion Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 1.058
 Loss Time (sec): 2 (Y+R=4.0 sec) Average Delay (sec/veh): 52.5
 Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2	0	1	1	0	1	1	0	2	1	0	2

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	350	200	250	170	150	280	280	2036	420	210	2093	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	200	250	170	150	280	280	2036	420	210	2093	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	380	217	272	185	163	304	304	2213	457	228	2275	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	217	272	185	163	304	304	2213	457	228	2275	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	380	217	272	185	163	304	304	2213	457	228	2275	163

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.87	0.87	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.80	0.20
Final Sat.:	3502	1655	1655	1805	1900	1615	1805	3610	1615	1805	4792	343

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.11	0.13	0.16	0.10	0.09	0.19	0.17	0.61	0.28	0.13	0.47	0.47
Crit Moves:	****			****			****			****		
Green/Cycle:	0.10	0.17	0.17	0.11	0.18	0.18	0.18	0.58	0.68	0.12	0.52	0.52
Volume/Cap:	1.06	0.76	0.95	0.95	0.48	1.06	0.92	1.06	0.41	1.06	0.92	0.92
Delay/Veh:	108.4	44.6	68.2	94.2	38.0	110.2	70.0	58.1	7.3	121.3	28.2	28.2
User Del Adj:	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 Del/Veh:	108.4	44.6	68.2	94.2	38.0	110.2	70.0	58.1	7.3	121.3	28.2	28.2
LOS by Move:	F	D	E	F	D	F	E	E	A	F	C	C
HCM2kAvgQ:	11	9	13	9	5	16	13	49	6	13	30	30

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

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Millennia Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.445
 Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 7.0
 Optimal Cycle: 34 Level Of Service: A

Street Name:	Millennia Avenue						Avant Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	183	1158	33	32	354	143	49	8	76	13	1	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	1158	33	32	354	143	49	8	76	13	1	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	199	1259	36	35	385	155	53	9	83	14	1	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	199	1259	36	35	385	155	53	9	83	14	1	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	199	1259	36	35	385	155	53	9	83	14	1	21

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.93	0.93	0.93	0.89	0.88	0.67	0.85	0.83	0.52	0.84	0.82
Lanes:	1.00	1.94	0.06	1.00	1.42	0.58	1.00	0.09	0.91	1.00	0.05	0.95
Final Sat.:	1769	3426	98	1769	2404	971	1265	150	1423	985	78	1481

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.11	0.37	0.37	0.02	0.16	0.16	0.04	0.06	0.06	0.01	0.01	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.36	0.79	0.79	0.08	0.51	0.51	0.13	0.13	0.13	0.13	0.13	0.13
Volume/Cap:	0.31	0.46	0.46	0.24	0.31	0.31	0.34	0.46	0.46	0.11	0.11	0.11
Uniform Del:	13.8	2.1	2.1	25.7	8.4	8.4	24.0	24.4	24.4	23.3	23.3	23.3
IncrementDel:	0.3	0.1	0.1	0.8	0.1	0.1	1.3	1.7	1.7	0.4	0.3	0.3
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	14.1	2.2	2.2	26.5	8.5	8.5	25.2	26.1	26.1	23.7	23.5	23.5
User Del Adj:	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 Del/Veh:	14.1	2.2	2.2	26.5	8.5	8.5	25.2	26.1	26.1	23.7	23.5	23.5
LOS by Move:	B	A	A	C	A	A	C	C	C	C	C	C
HCM2kAvgQ:	3	5	5	1	3	3	1	2	2	0	0	0

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

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Orion Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.251
 Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 1.2
 Optimal Cycle: 25 Level Of Service: A

Street Name:	Orion Avenue						Avant Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	0	0	5	5	5	0	5	0	0	0
Lanes:	1	0	2	0	0	1	1	0	0	0	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	62	764	0	0	378	72	23	0	23	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	764	0	0	378	72	23	0	23	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	67	830	0	0	411	78	25	0	25	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	830	0	0	411	78	25	0	25	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	67	830	0	0	411	78	25	0	25	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.45	0.93	1.00	1.00	0.91	0.90	0.93	1.00	0.83	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.68	0.32	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	858	3538	0	0	2898	552	1769	0	1569	0	0	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.08	0.23	0.00	0.00	0.14	0.14	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.92	0.92	0.00	0.00	0.92	0.92	0.08	0.00	0.08	0.00	0.00	0.00
Volume/Cap:	0.09	0.26	0.00	0.00	0.15	0.15	0.17	0.00	0.19	0.00	0.00	0.00
Uniform Del:	0.2	0.3	0.0	0.0	0.2	0.2	25.6	0.0	25.6	0.0	0.0	0.0
IncrementDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.7	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.3	0.3	0.0	0.0	0.3	0.3	26.1	0.0	26.3	0.0	0.0	0.0
User Del Adj:	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 Del/Veh:	0.3	0.3	0.0	0.0	0.3	0.3	26.1	0.0	26.3	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	1	0	0	1	1	1	0	1	0	0	0

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

OLC Parcels B & C - Internal Access
 2030 With Project Conditions
 AM Peak Hour

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

 Intersection #3 Main St-Hunte Pkwy / Millennia Ave

Cycle (sec): 120 Critical Vol./Cap. (X): 0.971
 Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 52.2
 Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2	0	1	0	1	0	2	0	3	0	1	2

Volume Module:

Base Vol:	650	200	160	142	327	559	510	1962	760	350	1715	212
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	650	200	160	142	327	559	510	1962	760	350	1715	212
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	707	217	174	154	355	608	554	2133	826	380	1864	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	707	217	174	154	355	608	554	2133	826	380	1864	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	707	217	174	154	355	608	554	2133	826	380	1864	230

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	1.00	0.75	0.92	0.91	0.85	0.92	0.91	0.85
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3502	1900	1615	1805	1900	2842	3502	5187	1615	3502	5187	1615

Capacity Analysis Module:

Vol/Sat:	0.20	0.11	0.11	0.09	0.19	0.21	0.16	0.41	0.51	0.11	0.36	0.14
Crit Moves:	****			****			****			****		
Green/Cycle:	0.21	0.23	0.23	0.17	0.19	0.36	0.16	0.42	0.63	0.11	0.37	0.37
Volume/Cap:	0.97	0.50	0.47	0.50	0.97	0.60	0.97	0.98	0.81	0.98	0.97	0.39
Delay/Veh:	73.5	41.2	40.9	46.3	87.4	32.7	80.3	48.0	22.0	92.0	51.5	28.2
User Del Adj:	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 Del/Veh:	73.5	41.2	40.9	46.3	87.4	32.7	80.3	48.0	22.0	92.0	51.5	28.2
LOS by Move:	E	D	D	D	F	C	F	D	C	F	D	C
HCM2kAvgQ:	18	7	6	6	18	11	15	34	25	11	30	6

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Main St-Hunte Pkwy / Orion Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 1.048
Loss Time (sec): 2 (Y+R=4.0 sec) Average Delay (sec/veh): 52.2
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2	0	1	1	0	1	1	0	2	1	0	2

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	435	145	150	120	91	381	220	1712	332	200	1529	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	435	145	150	120	91	381	220	1712	332	200	1529	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	473	158	163	130	99	414	239	1861	361	217	1662	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	473	158	163	130	99	414	239	1861	361	217	1662	67
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	473	158	163	130	99	414	239	1861	361	217	1662	67

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.88	0.88	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.88	0.12
Final Sat.:	3502	1668	1668	1805	1900	1615	1805	3610	1615	1805	4955	201

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.14	0.09	0.10	0.07	0.05	0.26	0.13	0.52	0.22	0.12	0.34	0.34
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.22	0.22	0.16	0.24	0.24	0.17	0.49	0.62	0.11	0.43	0.43
Volume/Cap:	1.05	0.44	0.45	0.46	0.21	1.05	0.77	1.05	0.36	1.05	0.77	0.77
Delay/Veh:	99.2	34.3	34.5	39.5	30.3	96.3	50.8	60.7	9.5	120.0	25.7	25.7
User Del Adj:	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 Del/Veh:	99.2	34.3	34.5	39.5	30.3	96.3	50.8	60.7	9.5	120.0	25.7	25.7
LOS by Move:	F	C	C	D	C	F	D	E	A	F	C	C
HCM2kAvgQ:	13	5	5	4	2	20	9	41	5	12	18	18

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

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Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 Millennia Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.749
 Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 14.2
 Optimal Cycle: 74 Level Of Service: B

Street Name:	Millennia Avenue						Avant Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	5	5	5	5	5	5	5	5	5	5
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	160	517	33	34	1305	138	119	26	265	13	1	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	517	33	34	1305	138	119	26	265	13	1	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	174	562	36	37	1418	150	129	28	288	14	1	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	562	36	37	1418	150	129	28	288	14	1	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	174	562	36	37	1418	150	129	28	288	14	1	25

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.92	0.92	0.93	0.92	0.91	0.70	0.85	0.82	0.24	0.84	0.82
Lanes:	1.00	1.88	0.12	1.00	1.81	0.19	1.00	0.09	0.91	1.00	0.04	0.96
Final Sat.:	1769	3295	210	1769	3154	333	1324	140	1430	460	65	1489

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.10	0.17	0.17	0.02	0.45	0.45	0.10	0.20	0.20	0.03	0.02	0.02
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.49	0.49	0.24	0.60	0.60	0.27	0.27	0.27	0.27	0.27	0.27
Volume/Cap:	0.75	0.35	0.35	0.09	0.75	0.75	0.36	0.75	0.75	0.11	0.06	0.06
Uniform Del:	25.1	9.4	9.4	17.7	8.7	8.7	17.8	20.1	20.1	16.6	16.3	16.3
IncrementDel:	12.7	0.1	0.1	0.1	1.5	1.5	0.6	7.3	7.3	0.4	0.1	0.1
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	37.8	9.5	9.5	17.8	10.3	10.3	18.4	27.4	27.4	17.0	16.4	16.4
User Del Adj:	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 Del/Veh:	37.8	9.5	9.5	17.8	10.3	10.3	18.4	27.4	27.4	17.0	16.4	16.4
LOS by Move:	D	A	A	B	B	B	B	C	C	B	B	B
HCM2kAvgQ:	5	4	4	1	13	13	2	7	7	0	0	0

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

Level Of Service Computation Report
 2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Orion Avenue / Avant Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.251
 Loss Time (sec): 0 (Y+R=5.0 sec) Average Delay (sec/veh): 1.0
 Optimal Cycle: 25 Level Of Service: A

Street Name:	Orion Avenue						Avant Street					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Control:	Permitted			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	5	5	0	0	5	5	5	0	5	0	0	0
Lanes:	1	0	2	0	0	1	1	0	0	0	0	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	59	750	0	0	534	44	10	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	750	0	0	534	44	10	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	64	815	0	0	580	48	11	0	33	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	815	0	0	580	48	11	0	33	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	64	815	0	0	580	48	11	0	33	0	0	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.39	0.93	1.00	1.00	0.92	0.92	0.93	1.00	0.83	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	741	3538	0	0	3232	266	1769	0	1569	0	0	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.09	0.23	0.00	0.00	0.18	0.18	0.01	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****			****			****			****		
Green/Cycle:	0.92	0.92	0.00	0.00	0.92	0.92	0.08	0.00	0.08	0.00	0.00	0.00
Volume/Cap:	0.09	0.25	0.00	0.00	0.20	0.20	0.07	0.00	0.25	0.00	0.00	0.00
Uniform Del:	0.2	0.3	0.0	0.0	0.3	0.3	25.4	0.0	25.7	0.0	0.0	0.0
IncrementDel:	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.0	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.3	0.3	0.0	0.0	0.3	0.3	25.6	0.0	26.8	0.0	0.0	0.0
User Del Adj:	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 Del/Veh:	0.3	0.3	0.0	0.0	0.3	0.3	25.6	0.0	26.8	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	C	A	C	A	A	A
HCM2kAvgQ:	0	1	0	0	1	1	0	0	1	0	0	0

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Main St-Hunte Pkwy / Millennia Ave

Cycle (sec): 120 Critical Vol./Cap. (X): 1.015
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 53.3
Optimal Cycle: 180 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2	0	1	0	1	0	2	0	3	0	1	2

Volume Module:

Base Vol:	580	350	200	285	255	384	390	2397	600	290	2084	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	580	350	200	285	255	384	390	2397	600	290	2084	206
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	630	380	217	310	277	417	424	2605	652	315	2265	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	630	380	217	310	277	417	424	2605	652	315	2265	224
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	630	380	217	310	277	417	424	2605	652	315	2265	224

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	1.00	0.75	0.92	0.91	0.85	0.92	0.91	0.85
Lanes:	2.00	1.00	1.00	1.00	1.00	2.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3502	1900	1615	1805	1900	2842	3502	5187	1615	3502	5187	1615

Capacity Analysis Module:

Vol/Sat:	0.18	0.20	0.13	0.17	0.15	0.15	0.12	0.50	0.40	0.09	0.44	0.14
Crit Moves:	****			****			****			****		
Green/Cycle:	0.20	0.20	0.20	0.17	0.16	0.29	0.13	0.49	0.70	0.09	0.46	0.46
Volume/Cap:	0.89	1.01	0.68	1.01	0.89	0.51	0.96	1.01	0.58	1.01	0.96	0.30
Delay/Veh:	59.8	98.5	50.6	105.2	74.5	35.9	83.6	51.9	10.0	109.6	41.5	20.8
User Del Adj:	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 Del/Veh:	59.8	98.5	50.6	105.2	74.5	35.9	83.6	51.9	10.0	109.6	41.5	20.8
LOS by Move:	E	F	D	F	E	D	F	D	A	F	D	C
HCM2kAvgQ:	15	20	9	17	13	8	12	44	12	10	35	5

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

OLC Parcels B & C - Internal Access
2030 With Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Main St-Hunte Pkwy / Orion Ave

Cycle (sec): 100 Critical Vol./Cap. (X): 1.037
Loss Time (sec): 2 (Y+R=4.0 sec) Average Delay (sec/veh): 49.2
Optimal Cycle: 180 Level Of Service: D

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 12 columns and 12 rows including Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with 12 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 12 columns and 10 rows including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User Del Adj, Adj Del/Veh, LOS by Move, and HCM2kAvgQ.

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