

**LEVEL 3
TRANSPORTATION IMPACT STUDY**

**For
Sunset Pointe Subdivision**

Fruita, Colorado

July 2, 2007

Revised April 30, 2008

PREPARED FOR:

Vista Engineering Corp.

David Chase

605 28 ¼ Road, Suite B

Grand Junction, CO 81506

970.243.2242

PREPARED BY:

Drexel, Barrell & Co.

123 North 7th Street, Suite 300

Grand Junction, CO 80151

970.257.1350

Contact: Brad Jones, PE

Drexel Barrell Project Number: J1005



Statement of Engineering Qualifications

William C. Fox, P.E. has over twenty years of extensive traffic and transportation engineering experience. He has completed numerous transportation studies throughout the State of Colorado. Mr. Fox is a licensed Professional Engineer in the State of Colorado.

TRANSPORTATION IMPACT STUDY
Sunset Pointe Subdivision

Table of Contents

1.0 Project Description.....4

2.0 Existing Transportation System.....5

3.0 Project-Generated Traffic6

4.0 Projected Background Traffic Growth8

5.0 Projected Total Traffic Conditions.....8

6.0 Site Design and Traffic Circulation Evaluation.....8

7.0 Transportation Impact Analysis9

8.0 Recommendations.....11

9.0 Conclusions12

Tables and Figures

- Table 1: Trip Generation
- Table 2: Level of Service Summary
- Figure 1: Site Plan
- Figure 2: Project Generated Traffic Distribution
- Figure 3: Project Generated Traffic
- Figure 4: Year 2007 Existing Traffic
- Figure 5: Growth Rate
- Figure 6: Year 2008 Background Traffic
- Figure 7: Year 2008 Total Traffic
- Figure 8: Year 2030 Background Traffic
- Figure 9: Year 2030 Total Traffic

Appendices

- Reference Documents
- Traffic Counts
- Synchro Calculations, Version 5

1.0 Project Description

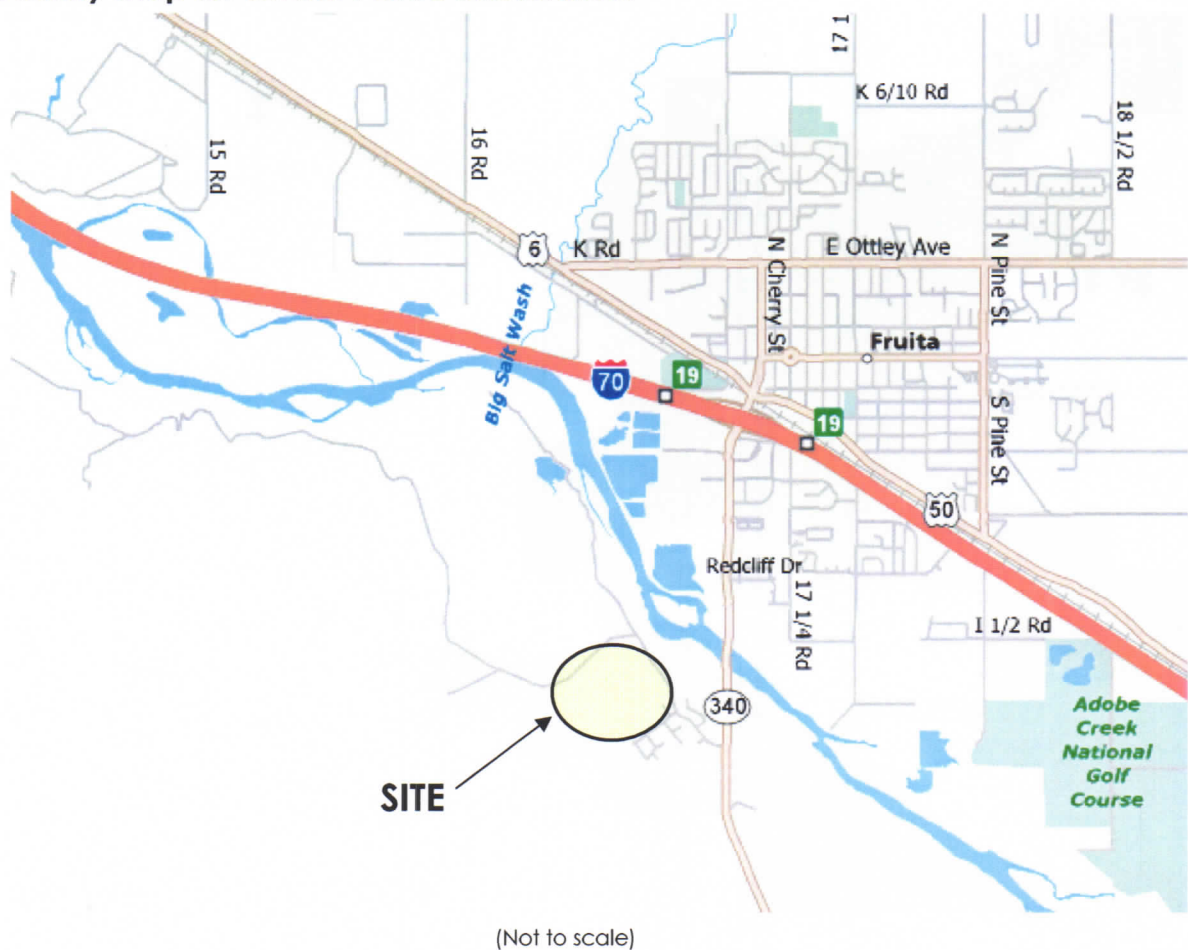
This traffic study examines the effects of project-generated traffic on the existing and proposed roadway system in the vicinity of the proposed Sunset Pointe Subdivision. This analysis includes impacts for the projected buildout Year 2008 and long-range planning Year 2030.

Sunset Pointe is a proposed 131.7-acre development located within the City of Fruita. The site is located on the west side of State Highway 340, 1.2 miles to the south of I-70.

The proposed development is anticipated to be subdivided into 122 single-family lots.

A map of the surrounding area is shown below:

Vicinity map for Sunset Pointe Subdivision.



A detailed site plan is illustrated in **Figure 1**.

2.0 Existing Transportation System

State Highway 340: State Highway 340 runs from the center of Fruita, south across the Colorado River and then east towards Grand Junction. It is classified by the Colorado Department of Transportation (CDOT) as an R-A, Rural Regional Highway. There is one lane in each direction in this area. The speed limit in the vicinity of this project is 55 mph. Paved shoulder width in this area varies from between four and six feet.



Kings View Road: Kings View Road is a City street in the vicinity of the proposed Sunset Pointe Subdivision, and provides access to SH 340 for the development. The posted speed limit is 25 mph. Kings View Road also provides access to City of Fruita and Bureau of Land Management (BLM) recreational areas to the north and west of the development. Kings View Road is approximately 1.25 miles to the south of I-70 via SH 340.



Snooks Bottom: Snooks Bottom is a 110-acre riverfront open space project, currently under development by the City of Fruita, adjacent to Kings View Road. It has yet to be opened to the public. The access to this property is anticipated to share an intersection with the proposed northern site access of the development.



Adjacent land uses consist primarily of open space owned by either the City of Fruita or the Bureau of Land Management. The City controlled land consists of the previously mentioned Snooks Bottom property. Immediately to the south of the proposed development are both existing single-family homes and BLM owned public lands. The northern boundary of Colorado National Monument, controlled by the National Parks Service, is approximately one mile to the south of the proposed development. West of the development, the McInnis Canyons National Conservation Area, which includes the Black Ridge Canyons Wilderness, is also controlled by the BLM. To the east across SH 340 is an adventure outfitter providing horseback and rafting tours. A map showing the location of the nearby federally owned land can be seen in the **Appendix**.

Grand Valley Transit operates one bus line in the vicinity of Sunset Pointe. Route 8 stops at the intersection of Jurassic Avenue and SH 340, 1.1 miles north of the intersection of Kings View Road and SH 340. No other transit facilities exist in the area. A display of the route can be seen in the **Appendix**.

No off-street pedestrian or bicycle facilities appear to exist along SH 340 in the vicinity of the proposed development. SH 340 has four-foot paved shoulders south of the Kings View intersection, and 6 paved shoulders north of this area. Kings View Road does not have paved shoulders.

3.0 Project-Generated Traffic

3.1 Trip Generation

Per the Institute of Transportation Engineers' *Trip Generation Manual, 7th Edition*, the proposed single-family homes are classified as Single-Family Detached Housing (Land Use Code 210). The site is anticipated to generate 1168 trips on an average weekday and 1232 trips on an average Saturday. 22 inbound trips and 68 outbound trips are expected in the weekday morning peak hour. The site is anticipated to generate 77 inbound trips and 46 outbound trips in the evening peak hour. The Saturday peak hour is expected to generate 63 inbound and 53 outbound trips. Please refer to **Table 1**, at the end of this report, for the trip generation estimate of the subject property.

3.2 Trip Distribution

Based upon the project location and discussion with the City Engineer, it is anticipated that twenty-five percent of project-generated traffic will exit the site via the west site access. Of this, twenty-four percent is anticipated to turn right on Kings View Road towards SH 340. The remaining one percent using this access is expected to turn left at Kings View Road, headed towards BLM recreational land adjacent to the property.

Sixty-six percent of traffic is expected to use the northern site access. Of this sixty-five percent is expected to leave the site by making a right turn onto Kings View Road towards SH 340, the remaining one percent turning left on Kings View Road, headed towards BLM recreational land adjacent to the property .

Four percent of traffic is expected to be generated via the east cul-de-sac and the two additional lots on Squire Court, all of which are expected to make the left turn towards SH 340.

Five percent of traffic is anticipated to be generated by the lots adjoining the extension of Fowler Drive to the west. All of this traffic is anticipated to turn right towards SH 340.

A total of ninety-eight percent of traffic leaving the site is expected to use the intersection of Kings View Road and SH 340. Of this ninety-three percent is expected to turn north on SH 340, towards I-70 and the City of Fruita. The remaining five percent is expected to turn right towards Colorado National Monument and Grand Junction.

Please refer to **Figure 2** for a detailed distribution.

3.2 Traffic Assignment

The assignment of project-generated traffic onto the existing roadway network is illustrated in **Figure 3**. The volumes were derived by applying the trip distribution percentages in **Figures 2** to the trip generation estimates in **Table 1**.

4.0 Projected Background Traffic Growth

Per direction from the City of Fruita, peak hour turning movement data were analyzed for the intersection of State Highway 340 and Kings View Road.

Turning Movements counts were conducted by Vista Engineering on Wednesday, January 31, 2007, and Saturday, February 3, 2007 for the intersections of Kings View Road/SH 340 and Kings View Road/Snooks Bottom, the results of which are illustrated in **Figure 4**. Complete printouts of all traffic counts can be found in the **Appendix** of this report.

A 2.26 percent growth rate was calculated for the traffic on State Highway 340 using growth projections obtained from CDOT. This growth rate was also applied to the movements associated with the west leg of the Kings View Road intersection, to account for potential increases in the recreational land accessible via Kings View Road. The movements to which this growth rate was applied can be seen in **Figure 5**. The resulting Year 2008 background traffic volumes are depicted in **Figure 6**. Projected Year 2030 background traffic volumes are illustrated in **Figure 8**.

The area surrounding the Sunset Pointe Subdivision is primarily public lands, and is used frequently during the summer months as a recreational area. Consequentially, Kings View Road and State Highway 340 are expected to have higher traffic volumes during the summer than what was observed during the counts taken this winter. This difference was not factored into the analysis.

5.0 Projected Total Traffic Conditions

When the assigned project-generated traffic is added to the projected background traffic growth, the total expected traffic on the road facilities can be determined. The total expected traffic on the road system in the vicinity of Sunset Pointe in Year 2008 can be seen in **Figure 7**. Correspondingly, Year 2030 Total traffic can be seen in **Figure 9**.

6.0 Site Design and Traffic Circulation Evaluation

A detailed site plan of the proposed Sunset Pointe Subdivision is illustrated in **Figure 1**. Three new access points are proposed for this subdivision on Kings View Road. The western access point and northern access point provide connection for 110 of the 122 proposed lots. Four of the lots are accessed via a cul-de-sac near the eastern edge of the property. The remainder of the

proposed housing will be accessible via existing roads, Squire Court and Fowler Drive. Fowler Drive will be extended to the west to accommodate five of the lots. Each of the three proposed access points is anticipated to be two-way stop controlled.

Sidewalks are proposed for one side of the two roadways within the development which do not dead-end, allowing for pedestrian circulation within the subdivision. No bicycle specific facilities are proposed within the development. Several pedestrian paths and trailheads exist in the area, allowing for recreational pedestrian access. There are no dedicated bicycle or pedestrian facilities along Kings View Road, however, the low speeds and vehicular volumes make it conducive to bicycle use. The paved shoulders along SH 340 provide for bicycle connectivity with the commercial and retail districts within the City of Fruita.

7.0 Transportation Impact Analysis

The impacts of the proposed Sunset Pointe Subdivision were determined by performing peak-hour analyses utilizing SYNCHRO 5 software. SYNCHRO is traffic analysis software that utilizes the Highway Capacity Manual methodology.

The results are reported as Levels of Service (LOS) and can range from free-flow conditions (LOS A) to congested conditions (LOS F).

2000 Highway Capacity Manual LOS Definitions for unsignalized intersections:

STOP-CONTROLLED INTERSECTION		
LOS	Expected Delay to Minor Street Traffic	Average Control Delay (s/veh)
A	Little or no delay.	0-10
B	Short traffic delays.	>10-15
C	Average traffic delays.	>15-25
D	Long traffic delays.	>25-35
E	Very long traffic delays.	>35-50
F	When volume exceeds the capacity of the lane, extreme delays will be encountered with queuing that may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improving the intersection.	>50

Levels of Service calculations were performed for the State Highway 340/Kings View Road intersection, Kings View Road/West Site Access intersection and Kings View Road/Snooks Bottom Access intersection. Level

of Service analyses included morning, evening and Saturday peak-hour periods for Years 2008 and Year 2030 background and total traffic.

7.1 Levels of Service

State Highway 340 and Kings View Road: This unsignalized, east-west stop-controlled intersection is anticipated to operate at an overall level of service B or higher with or without the addition of project-generated traffic through Year 2030.

Kings View Road and West Site Access: This unsignalized, northbound stop-controlled intersection is anticipated to operate at an overall level of service A with or without the addition of project-generated traffic through Year 2030.

Kings View Road and Snooks Bottom Access: This unsignalized, northeast-southwest stop-controlled intersection is anticipated to operate at an overall level of service A with or without the addition of project-generated traffic through Year 2030.

A summary of the Level of Service anticipated under both the Year 2007 and Year 2030 can be seen in **Table 2**. The complete analysis of the intersections can be seen in the **Appendix**.

7.2 State Highway 340 Auxiliary Turn Lanes

State Highway 340 is classified as an R-A, Regional Highway. According to Section 3.8 of the State *Highway Access Code*, auxiliary left turn lanes on State Highway 340 are required if peak hour turning movements exceed 10 vehicles per hour. Existing counts taken in January, 2007 show that there are currently 9 northbound left turns during the Saturday peak hour. Due to the recreational opportunities available along Kings View Road, it can be assumed that a northbound left turn lane would be warranted during summer months due to background traffic.

In addition, an auxiliary right deceleration lane on State Highway 340 is required if peak hour turning volumes exceed 25 vehicles per hour. This threshold has been met by existing traffic in both the evening and Saturday peak hours.

The sunset Pointe subdivision will add traffic to both the northbound left and southbound right movements which have exceeded the thresholds for turn lanes. The following table illustrates the percent contribution of anticipated project generated traffic to the northbound left and southbound right turning movements of the State Highway 340 / Kings View Rd intersection in Year 2008:

Year 2008 Project Generated Contribution to Turning Movements

	BACKGROUND TRAFFIC			P-GEN TRAFFIC			AM CONTRIBUTION	PM CONTRIBUTION	SAT CONTRIBUTION	TOTAL PEAK HOUR CONTRIBUTION
	AM	PM	SAT	AM	PM	SAT				
Northbound Left	0	4	9	1	4	3	100%	50%	25%	38%
Southbound Right	12	31	26	20	72	59	63%	70%	69%	69%

7.3 State Highway 340 Access Permit

The Sunset Pointe subdivision is estimated to add a total of 121 inbound and outbound trips in the evening peak hour to the western leg of the State Highway 340 / Kings View Road intersection. The intersection currently has 66 inbound and outbound trips on the western leg of this intersection during the evening peak hour. Therefore, Sunset Pointe is adding approximately 180 percent more traffic to the western leg of the intersection. A revised State Highway Access Permit will be required per Section 2.6(3) of the *State Highway Access Code*. The addition of the project-generated traffic from Sunset Pointe is not anticipated to require any additional turn lanes other than those assumed as part of this study.

8.0 Recommendations

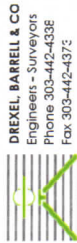
It is recommended that a northbound left turn lane and a southbound right turn lane be constructed at the intersection of King's View Road and State Highway 340. The southbound auxiliary right turn lane is justified by existing traffic. It is expected that the northbound auxiliary left turn would be presently justified during the summer months, but project-generated traffic is anticipated to justify this lane during winter.

Site distances at the three intersections evaluated appear to be acceptable.

A State Highway Access Permit from the Colorado Department of Transportation will likely be necessary due to the additional traffic that Sunset Pointe is adding to the Kings View access to State Highway 340.

9.0 Conclusions

The roadway system serving the Sunset Pointe Development will be easily able to accommodate the projected traffic through the long-range planning horizon, assuming that the recommendations made as part of this report are followed.



DREXEL, BARRELL & CO
 Engineers - Surveyors
 Phone 303-442-4338
 Fax 303-442-4373

PROJECT NAME:
 DATE:
 REVISED:

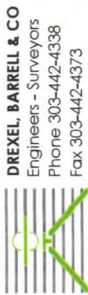
Sunset Pointe
 2-JUH07

PROJECT NUMBER: J1005
 PREPARED BY: CSV

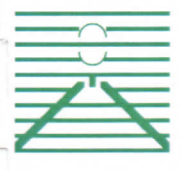
**Table 1 - Sunset Pointe
 Estimated Project-Generated Traffic¹**

ITE Code	Units	Trip Generation Rates			Avg. Weekday	Avg. Saturday	Average Weekday		AM Peak-Hour		PM Peak-Hour		SAT Peak-Hour							
		AM	PM	Sat			Trips	Trips	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound				
Single Family Units Phase 1 2007																				
West Section																				
#210 Residential Single-Family Detached	29	0.75	1.01	0.94	9.57	10.1	278	293	25%	5	75%	16	18	37%	11	63%	15	46%	13	
North Section																				
#210 Residential Single-Family Detached	82	0.75	1.01	0.94	9.57	10.1	785	828	25%	15	75%	46	52	37%	31	63%	42	46%	35	
East Section																				
#210 Residential Single-Family Detached	5	0.75	1.01	0.94	9.57	10.1	48	51	25%	1	75%	3	3	37%	2	63%	3	46%	2	
South Section																				
#210 Residential Single-Family Detached	6	0.75	1.01	0.94	9.57	10.1	57	61	25%	1	75%	3	4	37%	2	63%	3	46%	3	
Project Total	122						1168	1232		22		68	77		46		63		53	

¹ Values obtained from Trip Generation, 7th Edition, Volume 2, Institute of Transportation Engineers, 2003



Intersection	Traffic Control	Level of Service (LOS) Analyses														
		Year 2007			Year 2008			Year 2009			Year 2030					
		Existing Traffic			Background Traffic			Total Traffic			Background Traffic			Total Traffic		
AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT		
Kings View Rd/SH 340	Stop	B	B	A	B	B	B	B	B	B	B	B	B	B	B	B
		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Kings View Rd/West Access		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kings View Rd/North Access		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



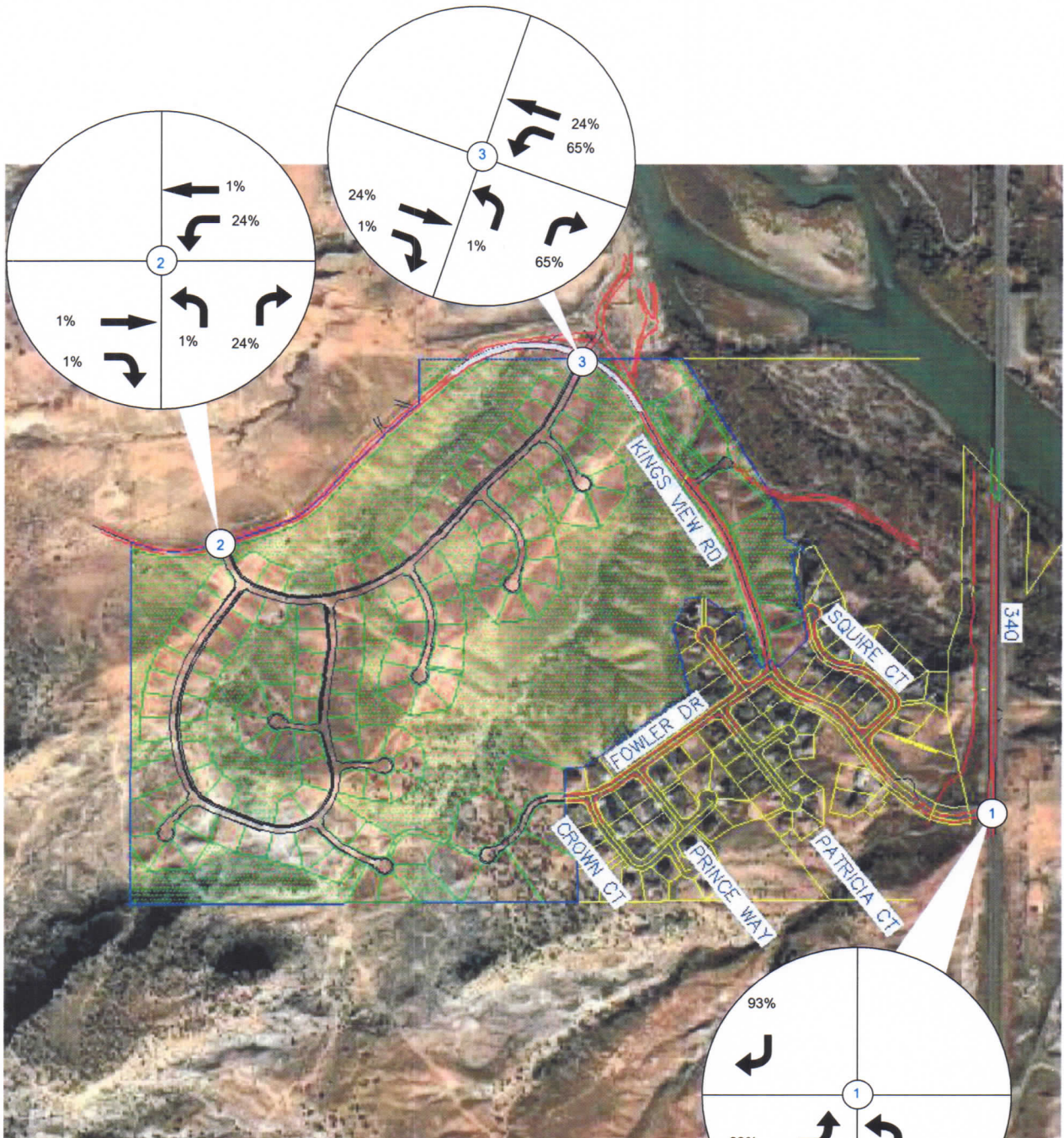
**SITE PLAN
SUNSET POINTE SUBDIVISION
FRUITA, COLORADO**

Drexel, Barrell & Co.
Engineers • Surveyors

DATE:
13/02/2007
JOB NO:
J-1005

DWG. NO.
FIGURE 01

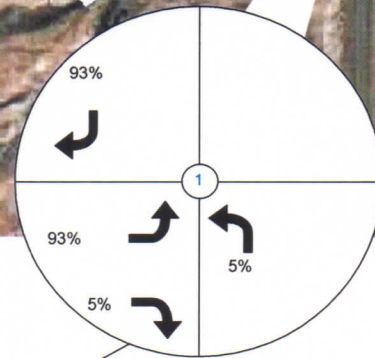
Figure 2: Project Generated Traffic Distribution



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488

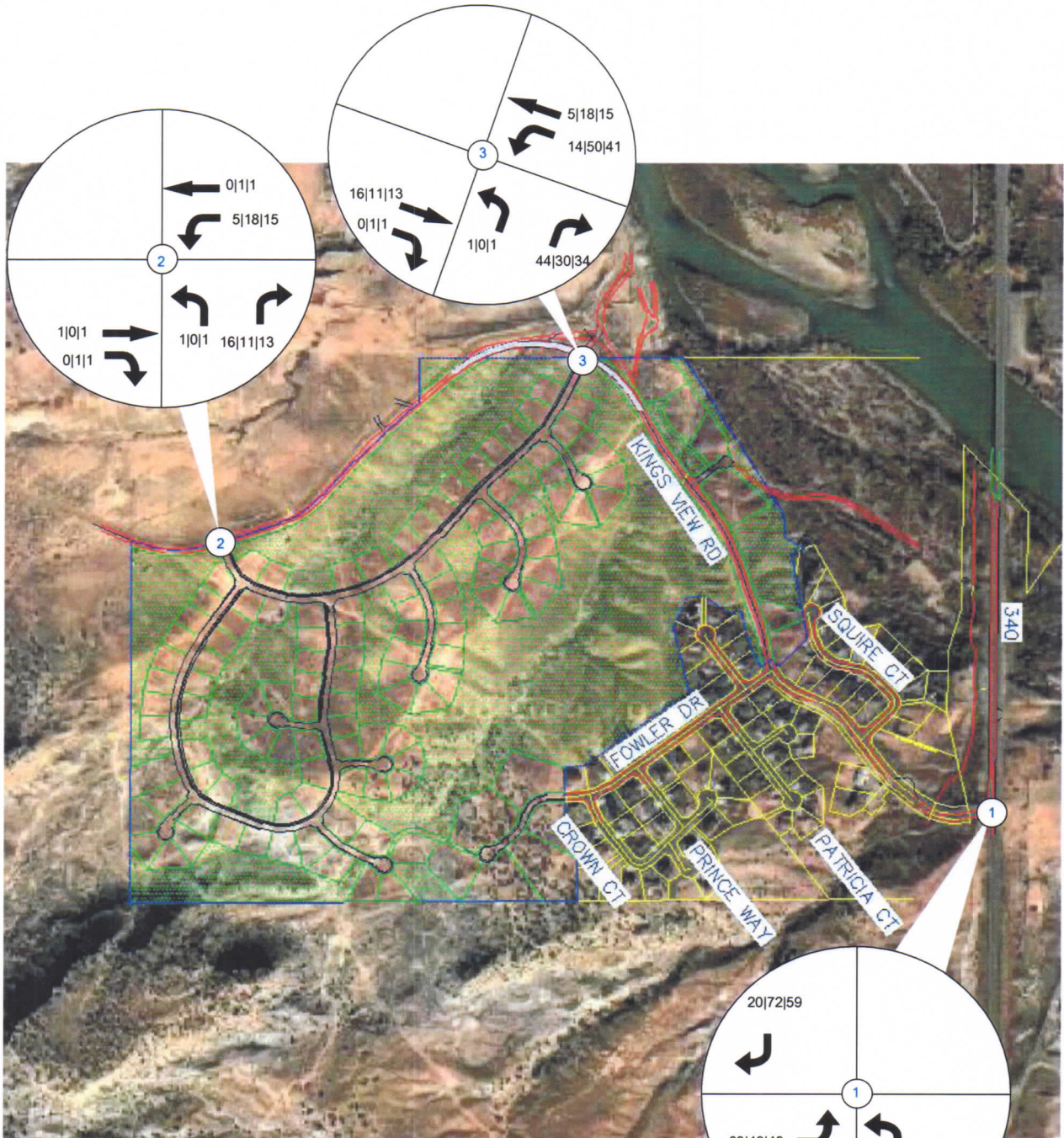


LEGEND :

Turning Movements



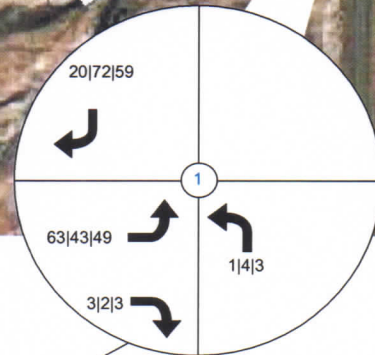
Figure 3: Project Generated Traffic



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488



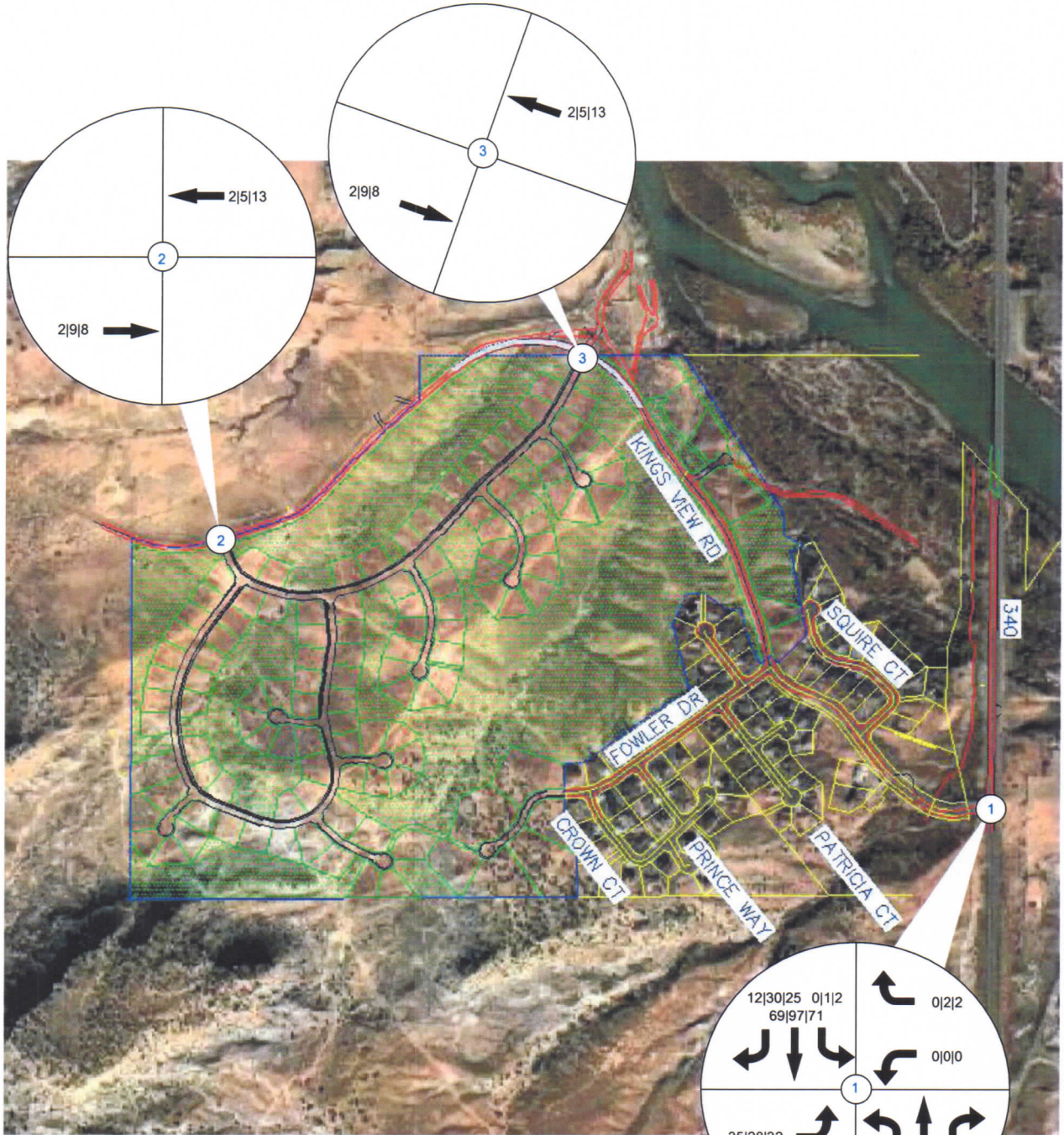
LEGEND :

AM | PM | SAT (turning movement counts)

Turning Movements



Figure 4: Year 2007 Existing Traffic



Drexel, Barrell & Co.
 1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488

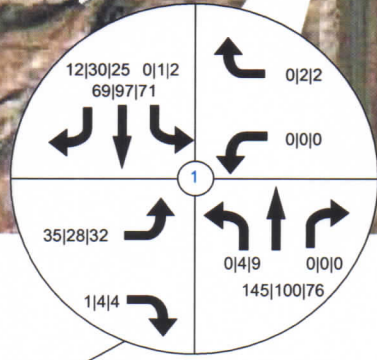
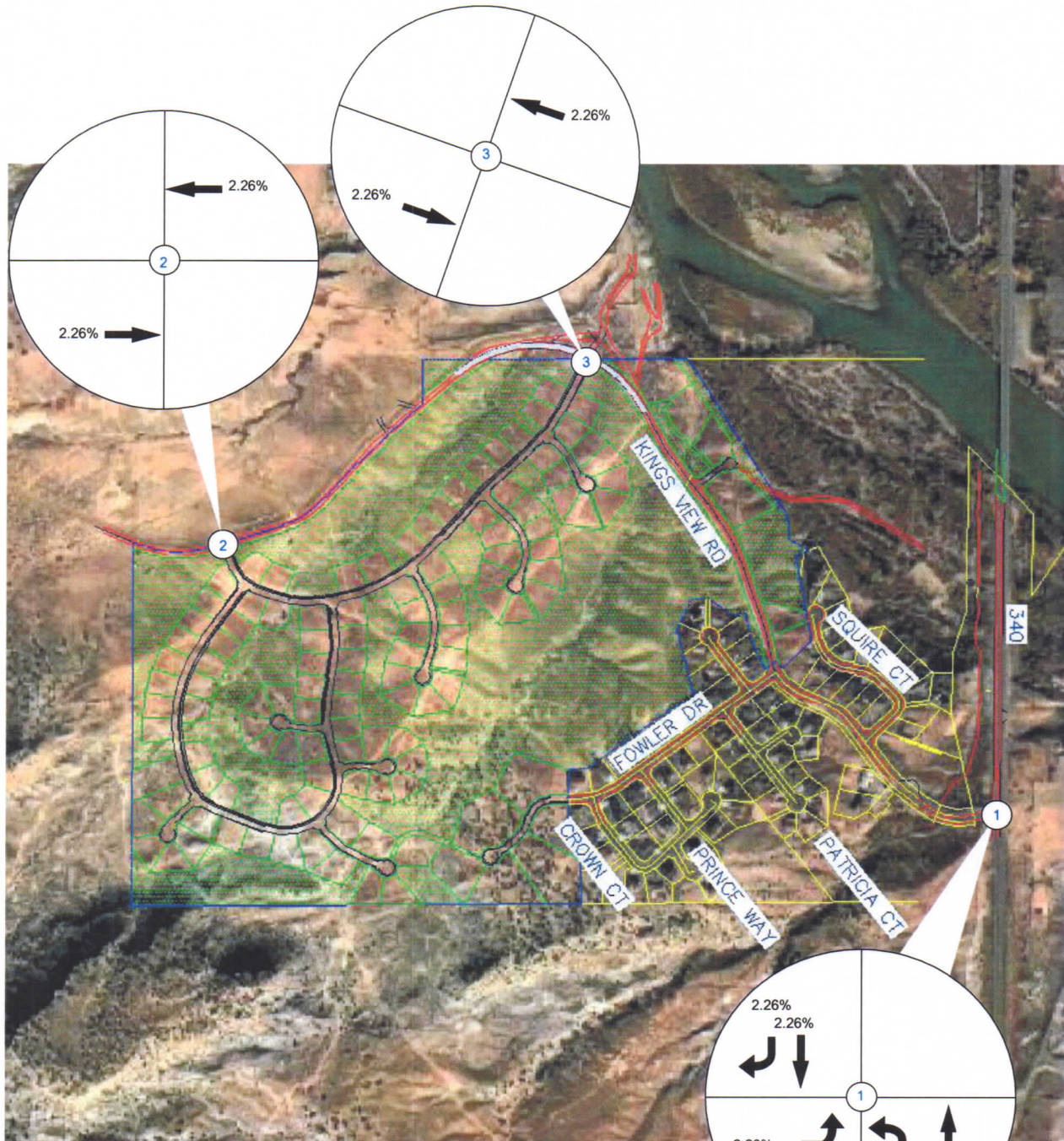


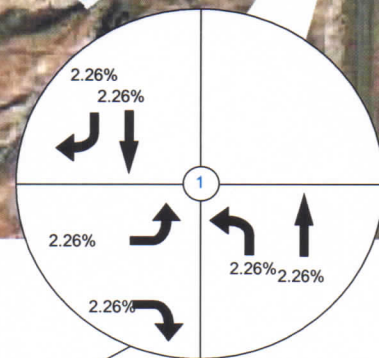
Figure 5: Growth Rate



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488

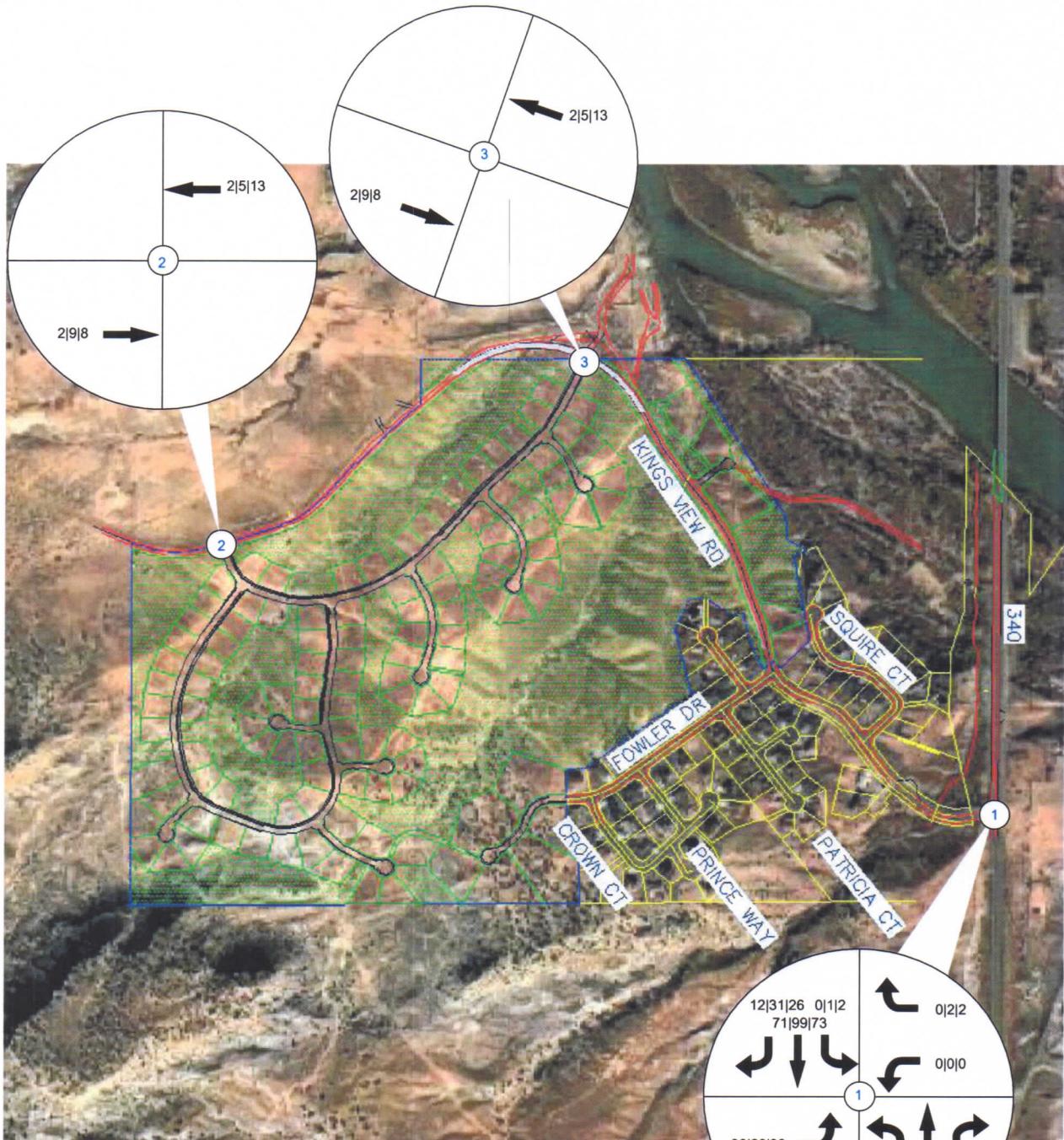


LEGEND :

Turning Movements



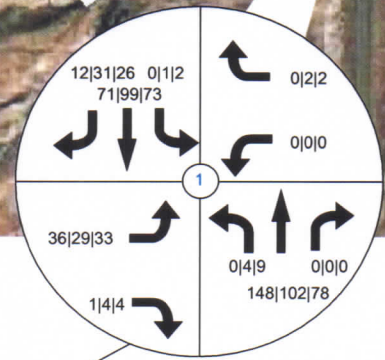
Figure 6: Year 2008 Background Traffic



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488



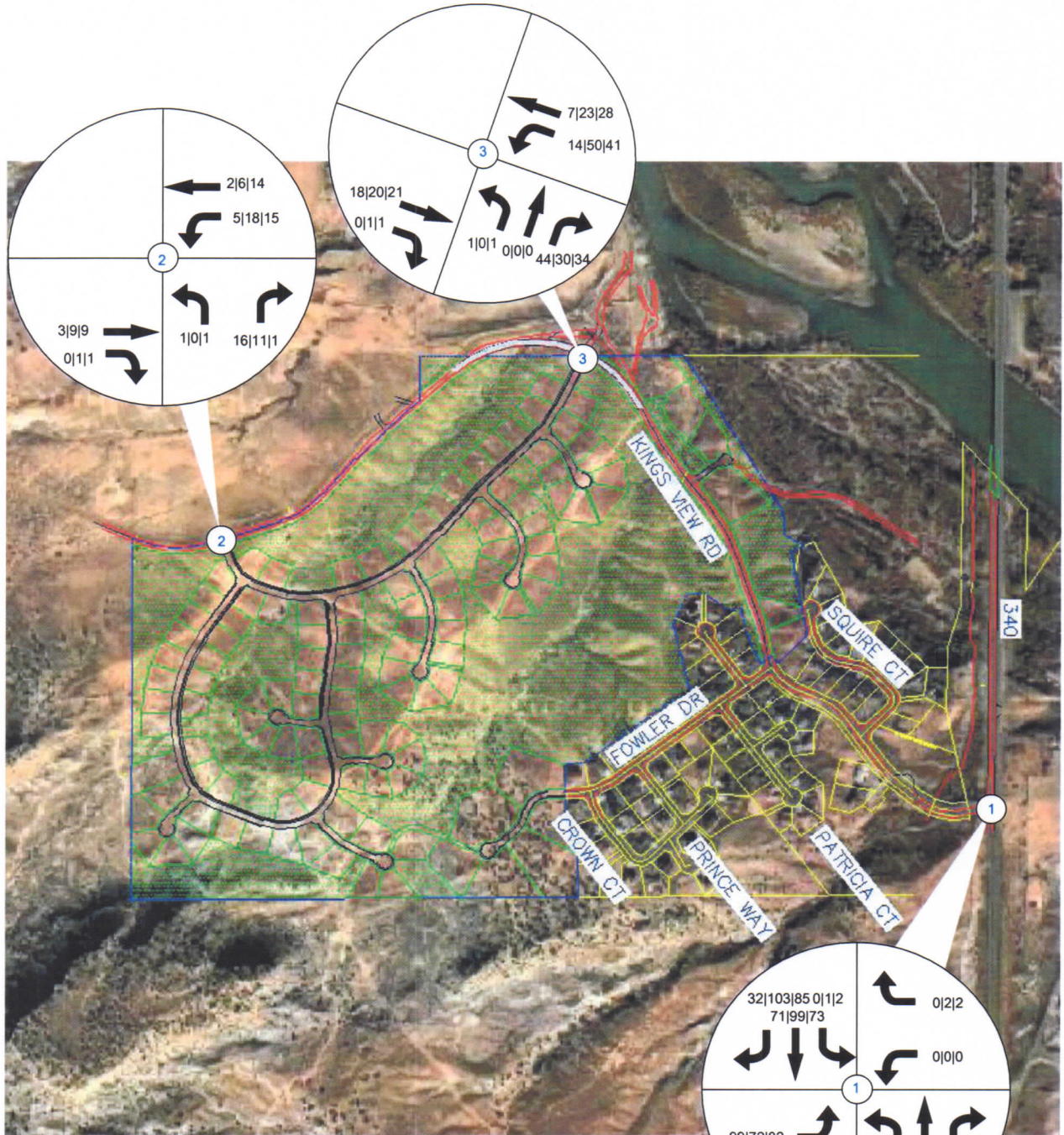
LEGEND :

AM | PM | SAT (turning movement counts)

Turning Movements

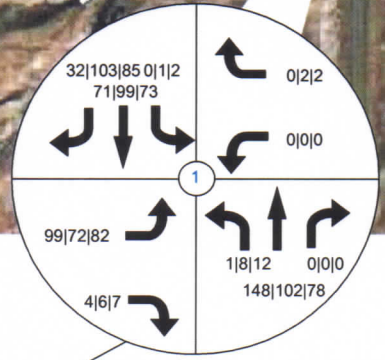


Figure 7: Year 2008 Total Traffic




Drexel, Barrell & Co.
 1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488

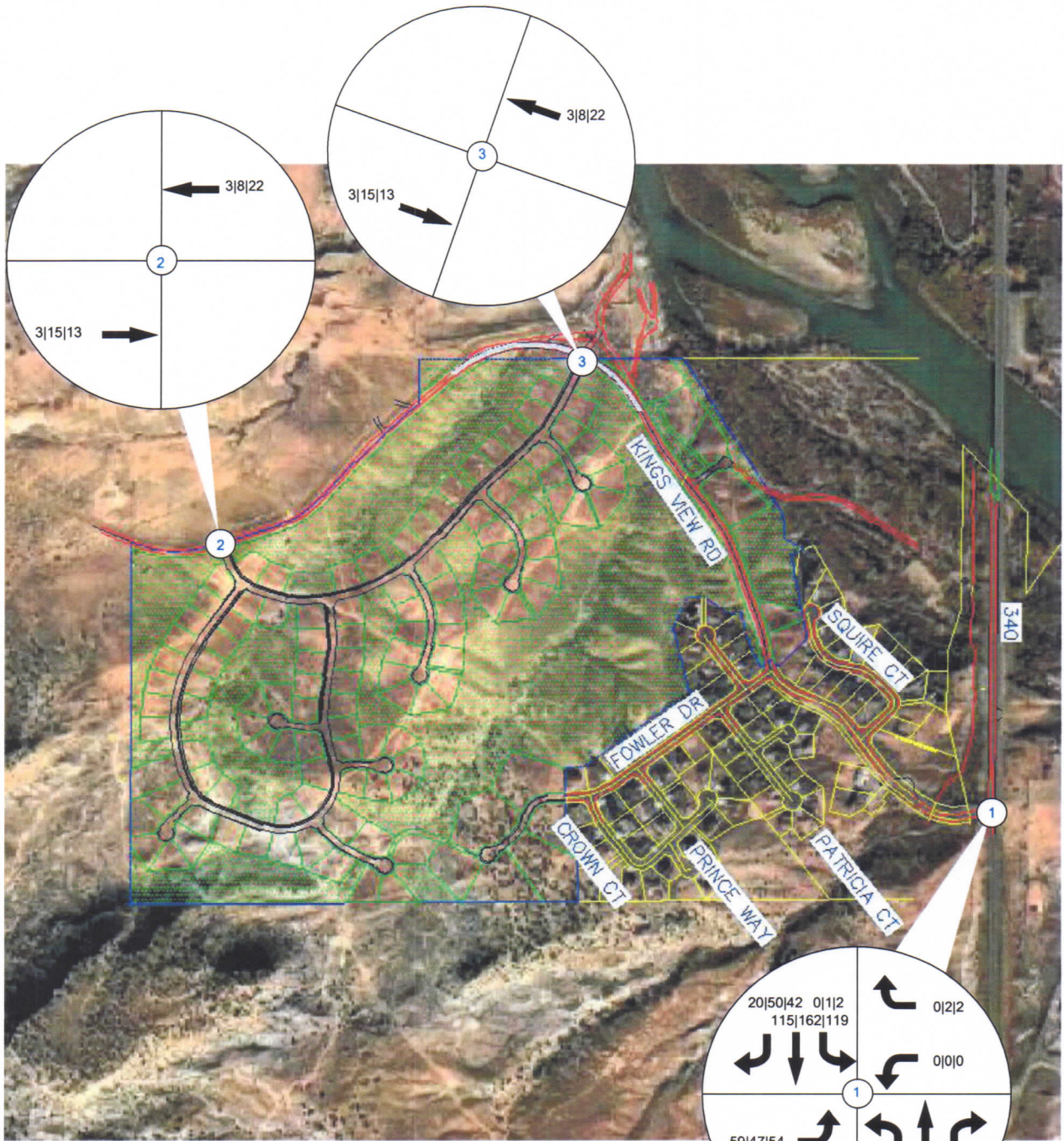


AM | PM | SAT (turning movement counts)

Turning Movements



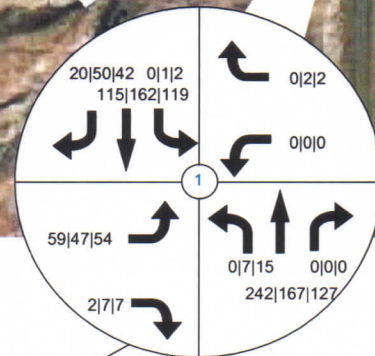
Figure 8: Year 2030 Background Traffic



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488



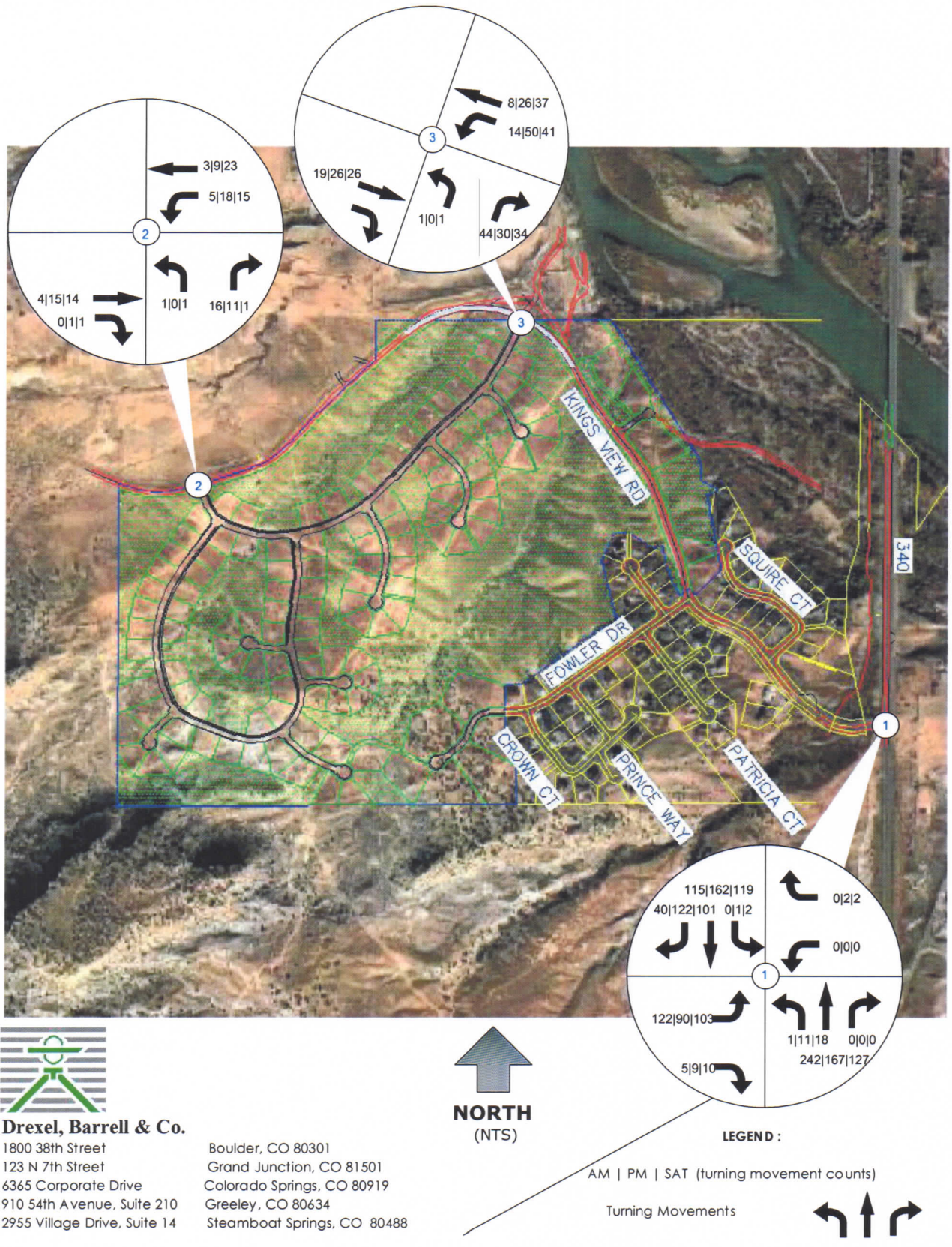
LEGEND :

AM | PM | SAT (turning movement counts)

Turning Movements



Figure 9: Year 2030 Total Traffic



Drexel, Barrell & Co.

1800 38th Street
 123 N 7th Street
 6365 Corporate Drive
 910 54th Avenue, Suite 210
 2955 Village Drive, Suite 14

Boulder, CO 80301
 Grand Junction, CO 81501
 Colorado Springs, CO 80919
 Greeley, CO 80634
 Steamboat Springs, CO 80488



Appendix

Reference Documents



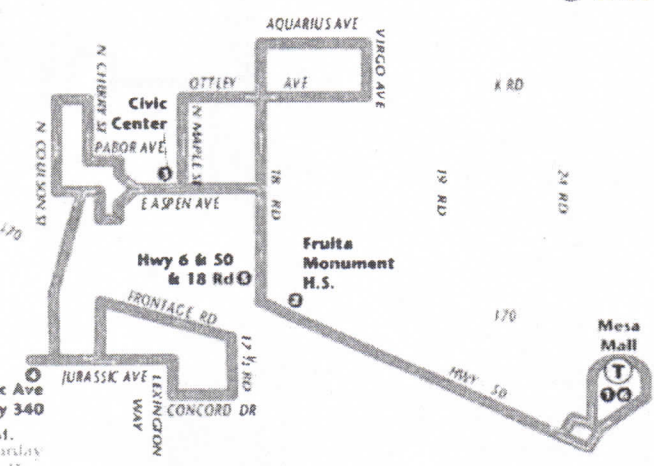
8

Fruita

X CLOSE

	MESA MALL DEPART	FRUITA	MONUMENT HS ASPEN AVE @ CIVIC LIGHTER	JURASSIC AVE & HWY 50	HWY 6 & 50 @ 18 RD	ARRIVE MESA MALL
	1	2	3	4	5	6
	5:00	5:11	5:22	5:27	5:37	5:50
	6:00	6:11	6:22	6:27	6:37	6:50
	7:00	7:11	7:22	7:27	7:37	7:50
	8:00	8:11	8:22	8:27	8:37	8:50
	9:00	9:11	9:22	9:27	9:37	9:50
	10:00	10:11	10:22	10:27	10:37	10:50
	11:00	11:11	11:22	11:27	11:37	11:50
	12:00	12:11	12:22	12:27	12:37	12:50
	1:00	1:11	1:22	1:27	1:37	1:50
	2:00	2:11	2:22	2:27	2:37	2:50
	3:00	3:11	3:22	3:27	3:37	3:50
	4:00	4:11	4:22	4:27	4:37	4:50
	5:00	5:11	5:22	5:27	5:37	5:50
	6:00	6:11	6:22	6:27	6:37	6:50

**Jurassic Ave
& Hwy 340**
 Bold = P.M.
 Red = Saturday
 Operating Hours



Appendix

Traffic Counts

Sunset Point P.U.D.

Fruita, Colorado

AM Peak Hour Traffic Counts

Wednesday, January 31, 2007

State Hwy 340 @ King's View Rd.	South Bound			North Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
7:00 - 7:15 am	3	15	0	0	61	0
7:15 - 7:30 am	5	22	0	0	33	0
7:30 - 7:45 am	2	17	0	0	23	0
7:45 - 8:00 am	2	15	0	0	28	0
8:00 - 8:15 am	1	14	1	0	24	0
8:15 - 8:30 am	2	14	0	0	7	0
8:30 - 8:45 am	3	7	0	0	14	0
8:45 - 9:00 am	1	13	2	0	20	0
Total 2 Hr. Counts	19	117	3	0	210	0
Peak 1 Hr. Counts	12	69	0	0	145	0

Kings View Road @ State Hwy 340	East Bound			West Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
7:00 - 7:15 am	0	0	13	0	0	0
7:15 - 7:30 am	1	0	10	0	0	0
7:30 - 7:45 am	0	0	7	0	0	0
7:45 - 8:00 am	0	0	5	0	0	0
8:00 - 8:15 am	1	1	8	0	0	0
8:15 - 8:30 am	0	0	6	1	0	0
8:30 - 8:45 am	1	0	7	0	0	0
8:45 - 9:00 am	2	0	3	1	0	0
Total 2 Hr. Counts	5	1	59	2	0	0
Peak 1 Hr. Counts	1	0	35	0	0	0

Kings View Road @ Snook's Bottom	East Bound			West Bound		
	---	Thru Lane	Left Turn	Right Turn	Thru Lane	---
7:00 - 7:15 am	---	0	0	0	0	---
7:15 - 7:30 am	---	0	0	0	1	---
7:30 - 7:45 am	---	1	0	0	0	---
7:45 - 8:00 am	---	1	0	0	1	---
8:00 - 8:15 am	---	0	0	0	1	---
8:15 - 8:30 am	---	1	0	0	1	---
8:30 - 8:45 am	---	3	0	0	1	---
8:45 - 9:00 am	---	0	0	0	0	---
Total 2 Hr. Counts	---	6	0	0	5	---
Peak 1 Hr. Counts	---	2	0	0	2	---

Sunset Point P.U.D.

Fruita, Colorado

PM Peak Hour Traffic Counts

Wednesday, January 31, 2007

State Hwy 340 @ King's View Rd.	South Bound			North Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
4:00 - 4:15 pm	12	16	0	0	25	0
4:15 - 4:30 pm	10	24	0	0	22	0
4:30 - 4:45 pm	6	25	1	0	27	3
4:45 - 5:00 pm	7	24	0	0	29	1
5:00 - 5:15 pm	7	24	0	0	22	0
5:15 - 5:30 pm	16	21	0	0	23	0
5:30 - 5:45 pm	10	17	0	0	29	0
5:45 - 6:00 pm	4	25	0	0	19	0
Total 2 Hr. Counts	72	176	1	0	196	4
Peak 1 Hr. Counts	30	97	1	0	100	4

Kings View Road @ State Hwy 340	East Bound			West Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
4:00 - 4:15 pm	0	0	2	0	0	0
4:15 - 4:30 pm	1	0	7	0	0	0
4:30 - 4:45 pm	2	0	9	1	0	0
4:45 - 5:00 pm	1	0	8	1	0	0
5:00 - 5:15 pm	0	0	4	0	0	0
5:15 - 5:30 pm	0	0	4	0	0	0
5:30 - 5:45 pm	0	0	4	0	0	0
5:45 - 6:00 pm	0	0	1	0	0	0
Total 2 Hr. Counts	4	0	39	2	0	0
Peak 1 Hr. Counts	4	0	28	2	0	0

Kings View Road @ Snook's Bottom	East Bound			West Bound		
	---	Thru Lane	Left Turn	Right Turn	Thru Lane	---
4:00 - 4:15 pm	---	0	0	0	2	---
4:15 - 4:30 pm	---	3	0	0	1	---
4:30 - 4:45 pm	---	5	0	0	2	---
4:45 - 5:00 pm	---	1	0	0	0	---
5:00 - 5:15 pm	---	0	0	0	2	---
5:15 - 5:30 pm	---	4	0	0	1	---
5:30 - 5:45 pm	---	0	0	0	2	---
5:45 - 6:00 pm	---	0	0	0	1	---
Total 2 Hr. Counts	---	13	0	0	11	---
Peak 1 Hr. Counts	---	9	0	0	5	---

Sunset Point P.U.D.

Fruita, Colorado

Saturday Traffic Counts

Saturday, February 3, 2007

State Hwy 340 @ King's View Rd.	South Bound			North Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
10:00 - 10:15 am	8	10	0	0	17	0
10:15 - 10:30 am	5	14	0	0	10	3
10:30 - 10:45 am	5	21	0	0	20	3
10:45 - 11:00 am	6	12	0	0	23	2
11:00 - 11:15 am	8	9	0	0	15	1
11:15 - 11:30 am	4	15	0	1	29	0
11:30 - 11:45 am	4	15	0	0	13	3
11:45 - 12:00 pm	8	15	1	0	21	2
12:00 - 12:15 pm	7	19	0	0	20	1
12:15 - 12:30 pm	6	22	1	0	22	3
12:30 - 12:45 pm	4	15	0	0	14	1
12:45 - 1:00 pm	15	19	1	0	20	1
1:00 - 1:15 pm	6	15	0	0	18	3
1:15 - 1:30 pm	16	12	0	0	13	4
1:30 - 1:45 pm	3	25	0	0	6	0
1:45 - 2:00 pm	4	12	1	0	25	2
Total 4 Hr. Counts	109	250	4	1	286	29
Peak 1 Hr. Counts	25	71	2	0	76	9

Kings View Road @ State Hwy 340	East Bound			West Bound		
	Right Turn	Thru Lane	Left Turn	Right Turn	Thru Lane	Left Turn
10:00 - 10:15 am	1	0	11	0	0	0
10:15 - 10:30 am	1	0	4	0	0	0
10:30 - 10:45 am	4	0	13	0	0	0
10:45 - 11:00 am	1	0	4	0	0	0
11:00 - 11:15 am	1	0	10	0	0	0
11:15 - 11:30 am	0	0	5	0	0	0
11:30 - 11:45 am	1	0	9	1	0	0
11:45 - 12:00 pm	1	0	4	0	0	0
12:00 - 12:15 pm	1	0	9	1	0	0
12:15 - 12:30 pm	1	0	10	0	0	0
12:30 - 12:45 pm	1	0	4	0	0	0
12:45 - 1:00 pm	1	0	3	0	0	0
1:00 - 1:15 pm	4	0	7	0	0	0
1:15 - 1:30 pm	4	0	7	0	0	0
1:30 - 1:45 pm	0	0	3	0	0	0
1:45 - 2:00 pm	2	0	9	0	0	0
Total 4 Hr. Counts	24	0	112	2	0	0
Peak 1 Hr. Counts	4	0	32	2	0	0

Saturday Traffic Counts (con't)

Saturday, February 3, 2007

Kings View Road @ Snook's Bottom	East Bound			West Bound		
	---	Thru Lane	Left Turn	Right Turn	Thru Lane	---
10:00 - 10:15 am	---	2	0	0	2	---
10:15 - 10:30 am	---	3	0	0	2	---
10:30 - 10:45 am	---	8	0	0	5	---
10:45 - 11:00 am	---	1	0	0	1	---
11:00 - 11:15 am	---	2	0	0	4	---
11:15 - 11:30 am	---	2	0	0	3	---
11:30 - 11:45 am	---	2	0	0	2	---
11:45 - 12:00 pm	---	1	0	0	5	---
12:00 - 12:15 pm	---	3	0	0	3	---
12:15 - 12:30 pm	---	2	0	0	3	---
12:30 - 12:45 pm	---	4	0	0	4	---
12:45 - 1:00 pm	---	2	0	0	4	---
1:00 - 1:15 pm	---	3	0	0	5	---
1:15 - 1:30 pm	---	4	0	0	5	---
1:30 - 1:45 pm	---	1	0	0	5	---
1:45 - 2:00 pm	---	6	0	0	3	---
Total 4 Hr. Counts	---	46	0	0	56	---
Peak 1 Hr. Counts	---	8	0	0	13	---

Appendix

Synchro Calculations

Version 5.0

- State Highway 340/Kings View Rd
 - Kings View Rd/West Site Access
- Kings View Rd/North (Snooks Bottom) Site Access



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)	35	0	1	0	0	0	0	145	0	0	69	12
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
Hourly flow rate (veh/h)	38	0	1	0	0	0	0	158	0	0	75	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	239	239	82	240	246	158	88			158		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	95	100	100	100	100	100	100			100		
cM capacity (veh/h)	715	662	978	713	657	888	1508			1422		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	39	0	158	88
Volume Left	38	0	0	0
Volume Right	1	0	0	13
cSH	720	1700	1508	1422
Volume to Capacity	0.05	0.00	0.00	0.00
Queue Length (ft)	4	0	0	0
Control Delay (s)	10.3	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	10.3	0.0	0.0	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization	18.3%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	26	1	50	26	0	0	0	30	0	0	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
Hourly flow rate (veh/h)	0	28	1	54	28	0	0	0	33	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
vC, conflicting volume	28			29			166	166	29	198	166	28
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	97	100	100	100
cM capacity (veh/h)	1585			1584			778	702	1046	717	701	1047

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	83	33	0
Volume Left	0	54	0	0
Volume Right	1	0	33	0
cSH	1585	1584	1046	1700
Volume to Capacity	0.00	0.03	0.03	0.00
Queue Length (ft)	0	3	2	0
Control Delay (s)	0.0	4.9	8.6	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	4.9	8.6	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay		4.7	
Intersection Capacity Utilization	21.2%	ICU Level of Service	A

HCM Unsignalized Intersection Capacity Analysis

3: Kings View Road & SH 340

H:\J1005\Traffic\Submittal 4-24-08\Synchro\2007 Existing SAT.sy6

4/25/2008



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)	32	0	4	0	0	2	9	76	0	2	71	25
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
Hourly flow rate (veh/h)	35	0	4	0	0	2	10	83	0	2	77	27
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	199	197	91	202	211	83	104			83		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	95	100	100	100	100	100	99			100		
cM capacity (veh/h)	753	693	967	749	681	977	1487			1515		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	39	2	92	107
Volume Left	35	0	10	2
Volume Right	4	2	0	27
cSH	772	977	1487	1515
Volume to Capacity	0.05	0.00	0.01	0.00
Queue Length (ft)	4	0	0	0
Control Delay (s)	9.9	8.7	0.8	0.2
Lane LOS	A	A	A	A
Approach Delay (s)	9.9	8.7	0.8	0.2
Approach LOS	A	A		

Intersection Summary			
Average Delay		2.1	
Intersection Capacity Utilization	15.9%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	21	1	41	28	0	1	0	34	0	0	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
Hourly flow rate (veh/h)	0	23	1	45	30	0	1	0	37	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
vC, conflicting volume	30			24			143	143	23	180	143	30
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	96	100	100	100
cM capacity (veh/h)	1582			1591			809	727	1053	738	727	1044
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	24	75	38	0								
Volume Left	0	45	1	0								
Volume Right	1	0	37	0								
cSH	1582	1591	1044	1700								
Volume to Capacity	0.00	0.03	0.04	0.00								
Queue Length (ft)	0	2	3	0								
Control Delay (s)	0.0	4.4	8.6	0.0								
Lane LOS		A	A	A								
Approach Delay (s)	0.0	4.4	8.6	0.0								
Approach LOS			A	A								
Intersection Summary												
Average Delay			4.8									
Intersection Capacity Utilization			16.2%		ICU Level of Service				A			

HCM Unsignalized Intersection Capacity Analysis

3: Kings View Road & SH 340

H:\J1005\Traffic\Submittal 4-24-08\Synchro\2008 Background PM.sy6

4/25/2008



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)	29	0	4	0	0	2	4	102	0	1	99	31
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
Hourly flow rate (veh/h)	32	0	4	0	0	2	4	111	0	1	108	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	232	229	108	234	263	111	141			111		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	96	100	100	100	100	100	100			100		
cM capacity (veh/h)	720	668	946	716	640	942	1442			1479		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	36	2	4	111	109	34
Volume Left	32	0	4	0	1	0
Volume Right	4	2	0	0	0	34
cSH	741	942	1442	1700	1479	1700
Volume to Capacity	0.05	0.00	0.00	0.07	0.00	0.02
Queue Length (ft)	4	0	0	0	0	0
Control Delay (s)	10.1	8.8	7.5	0.0	0.1	0.0
Lane LOS	B	A	A		A	
Approach Delay (s)	10.1	8.8	0.3		0.1	
Approach LOS	B	A				

Intersection Summary		
Average Delay		1.4
Intersection Capacity Utilization	22.5%	ICU Level of Service
		A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	18	0	14	7	0	1	0	44	0	0	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
Hourly flow rate (veh/h)	0	20	0	15	8	0	1	0	48	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
vC, conflicting volume	8			20			58	58	20	105	58	8
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	95	100	100	100
cM capacity (veh/h)	1613			1597			932	825	1058	829	825	1075
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	20	23	49	0								
Volume Left	0	15	1	0								
Volume Right	0	0	48	0								
cSH	1613	1597	1055	1700								
Volume to Capacity	0.00	0.01	0.05	0.00								
Queue Length (ft)	0	1	4	0								
Control Delay (s)	0.0	4.9	8.6	0.0								
Lane LOS		A	A	A								
Approach Delay (s)	0.0	4.9	8.6	0.0								
Approach LOS			A	A								
Intersection Summary												
Average Delay			5.8									
Intersection Capacity Utilization			13.3%		ICU Level of Service				A			

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)	99	0	4	0	0	0	1	148	0	0	71	32
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
Hourly flow rate (veh/h)	108	0	4	0	0	0	1	161	0	0	77	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	240	240	77	245	275	161	112			161		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	85	100	100	100	100	100	100			100		
cM capacity (veh/h)	714	661	984	706	632	884	1478			1418		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	112	0	1	161	77	35
Volume Left	108	0	1	0	0	0
Volume Right	4	0	0	0	0	35
cSH	721	1700	1478	1700	1418	1700
Volume to Capacity	0.16	0.00	0.00	0.09	0.00	0.02
Queue Length (ft)	14	0	0	0	0	0
Control Delay (s)	10.9	0.0	7.4	0.0	0.0	0.0
Lane LOS	B	A	A			
Approach Delay (s)	10.9	0.0	0.0		0.0	
Approach LOS	B	A				

Intersection Summary		
Average Delay		3.2
Intersection Capacity Utilization	21.4%	ICU Level of Service
		A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	15	1	18	9	0	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	16	1	20	10	0	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
vC, conflicting volume			17		66	17
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1600		928	1062

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	17	29	12
Volume Left	0	20	0
Volume Right	1	0	12
cSH	1700	1600	1062
Volume to Capacity	0.01	0.01	0.01
Queue Length (ft)	0	1	1
Control Delay (s)	0.0	4.9	8.4
Lane LOS		A	A
Approach Delay (s)	0.0	4.9	8.4
Approach LOS			A

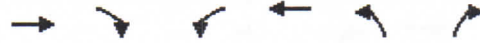
Intersection Summary			
Average Delay		4.2	
Intersection Capacity Utilization	13.3%	ICU Level of Service	A



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)	82	0	7	0	0	2	12	78	0	2	73	85
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
Hourly flow rate (veh/h)	89	0	8	0	0	2	13	85	0	2	79	92
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	197	195	79	202	287	85	172			85		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	88	100	99	100	100	100	99			100		
cM capacity (veh/h)	754	693	981	744	616	974	1405			1512		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	97	2	13	85	82	92
Volume Left	89	0	13	0	2	0
Volume Right	8	2	0	0	0	92
cSH	768	974	1405	1700	1512	1700
Volume to Capacity	0.13	0.00	0.01	0.05	0.00	0.05
Queue Length (ft)	11	0	1	0	0	0
Control Delay (s)	10.4	8.7	7.6	0.0	0.2	0.0
Lane LOS	B	A	A		A	
Approach Delay (s)	10.4	8.7	1.0		0.1	
Approach LOS	B	A				

Intersection Summary		
Average Delay		3.1
Intersection Capacity Utilization	23.5%	ICU Level of Service A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↕			↕		↕
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	9	1	15	14	1	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	10	1	16	15	1	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						None
Median storage (veh)						
vC, conflicting volume			11		58	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1608		939	1071

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	11	32	15
Volume Left	0	16	1
Volume Right	1	0	14
cSH	1700	1608	1060
Volume to Capacity	0.01	0.01	0.01
Queue Length (ft)	0	1	1
Control Delay (s)	0.0	3.8	8.4
Lane LOS		A	A
Approach Delay (s)	0.0	3.8	8.4
Approach LOS			A

Intersection Summary			
Average Delay		4.3	
Intersection Capacity Utilization	13.3%	ICU Level of Service	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	↩
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	3	0	5	2	1	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	3	0	5	2	1	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
vC, conflicting volume			3		16	3
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			1619		999	1081

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	3	8	18
Volume Left	0	5	1
Volume Right	0	0	17
cSH	1700	1619	1075
Volume to Capacity	0.00	0.00	0.02
Queue Length (ft)	0	0	1
Control Delay (s)	0.0	5.2	8.4
Lane LOS		A	A
Approach Delay (s)	0.0	5.2	8.4
Approach LOS			A

Intersection Summary			
Average Delay		6.6	
Intersection Capacity Utilization	13.3%	ICU Level of Service	A



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)	122	0	5	0	0	0	1	242	0	0	115	40
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
Hourly flow rate (veh/h)	133	0	5	0	0	0	1	263	0	0	125	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None					None						
Median storage (veh)												
vC, conflicting volume	390	390	125	396	434	263	168			263		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	77	100	99	100	100	100	100			100		
cM capacity (veh/h)	569	545	926	561	515	776	1409			1301		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	138	0	1	263	125	43
Volume Left	133	0	1	0	0	0
Volume Right	5	0	0	0	0	43
cSH	577	1700	1409	1700	1301	1700
Volume to Capacity	0.24	0.00	0.00	0.15	0.00	0.03
Queue Length (ft)	23	0	0	0	0	0
Control Delay (s)	13.2	0.0	7.6	0.0	0.0	0.0
Lane LOS	B	A	A			
Approach Delay (s)	13.2	0.0	0.0		0.0	
Approach LOS	B	A				

Intersection Summary		
Average Delay		3.2
Intersection Capacity Utilization	28.2%	ICU Level of Service A

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)	90	0	9	0	0	2	11	167	0	1	162	122
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
Hourly flow rate (veh/h)	98	0	10	0	0	2	12	182	0	1	176	133
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	386	384	176	393	516	182	309			182		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	83	100	99	100	100	100	99			100		
cM capacity (veh/h)	567	544	867	555	458	861	1252			1394		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	108	2	12	182	177	133						
Volume Left	98	0	12	0	1	0						
Volume Right	10	2	0	0	0	133						
cSH	585	861	1252	1700	1394	1700						
Volume to Capacity	0.18	0.00	0.01	0.11	0.00	0.08						
Queue Length (ft)	17	0	1	0	0	0						
Control Delay (s)	12.5	9.2	7.9	0.0	0.1	0.0						
Lane LOS	B	A	A		A							
Approach Delay (s)	12.5	9.2	0.5		0.0							
Approach LOS	B	A										
Intersection Summary												
Average Delay			2.4									
Intersection Capacity Utilization			31.1%		ICU Level of Service				A			

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)	103	0	10	0	0	2	18	127	0	2	119	101
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
Hourly flow rate (veh/h)	112	0	11	0	0	2	20	138	0	2	129	110
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC1, conflicting volume	313	311	129	322	421	138	239			138		
vC2, stage 2 conf vol												
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 %	82	100	99	100	100	100	99			100		
cM capacity (veh/h)	630	594	920	616	516	910	1328			1446		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	123	2	20	138	132	110
Volume Left	112	0	20	0	2	0
Volume Right	11	2	0	0	0	110
cSH	648	910	1328	1700	1446	1700
Volume to Capacity	0.19	0.00	0.01	0.08	0.00	0.06
Queue Length (ft)	17	0	1	0	0	0
Control Delay (s)	11.8	9.0	7.8	0.0	0.1	0.0
Lane LOS	B	A	A		A	
Approach Delay (s)	11.8	9.0	1.0		0.1	
Approach LOS	B	A				

Intersection Summary		
Average Delay		3.1
Intersection Capacity Utilization	27.5%	ICU Level of Service
		A



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)	54	0	7	0	0	2	15	127	0	2	119	42
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
Hourly flow rate (veh/h)	59	0	8	0	0	2	16	138	0	2	129	46
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	307	304	129	312	350	138	175			138		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	91	100	99	100	100	100	99			100		
cM capacity (veh/h)	638	601	920	629	567	910	1401			1446		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	66	2	16	138	132	46
Volume Left	59	0	16	0	2	0
Volume Right	8	2	0	0	0	46
cSH	661	910	1401	1700	1446	1700
Volume to Capacity	0.10	0.00	0.01	0.08	0.00	0.03
Queue Length (ft)	8	0	1	0	0	0
Control Delay (s)	11.1	9.0	7.6	0.0	0.1	0.0
Lane LOS	B	A	A		A	
Approach Delay (s)	11.1	9.0	0.8		0.1	
Approach LOS	B	A				

Intersection Summary		
Average Delay		2.2
Intersection Capacity Utilization	24.3%	ICU Level of Service
		A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	↩
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	9	1	18	6	0	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	10	1	20	7	0	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None		
Median storage (veh)						
vC, conflicting volume			11		56	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		100	99
cM capacity (veh/h)			1608		940	1071

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	11	26	12
Volume Left	0	20	0
Volume Right	1	0	12
cSH	1700	1608	1071
Volume to Capacity	0.01	0.01	0.01
Queue Length (ft)	0	1	1
Control Delay (s)	0.0	5.5	8.4
Lane LOS		A	A
Approach Delay (s)	0.0	5.5	8.4
Approach LOS			A

Intersection Summary			
Average Delay		5.0	
Intersection Capacity Utilization	13.3%		ICU Level of Service
			A



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)	59	0	2	0	0	0	0	242	0	0	115	20
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
Hourly flow rate (veh/h)	64	0	2	0	0	0	0	263	0	0	125	22
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	388	388	125	390	410	263	147			263		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	89	100	100	100	100	100	100			100		
cM capacity (veh/h)	571	547	926	568	532	776	1435			1301		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	66	0	0	263	125	22
Volume Left	64	0	0	0	0	0
Volume Right	2	0	0	0	0	22
cSH	578	1700	1700	1700	1301	1700
Volume to Capacity	0.11	0.00	0.00	0.15	0.00	0.01
Queue Length (ft)	10	0	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	12.0	0.0	0.0		0.0	
Approach LOS	B	A				

Intersection Summary		
Average Delay		1.7
Intersection Capacity Utilization	24.2%	ICU Level of Service A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	↩
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	4	0	5	3	1	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	4	0	5	3	1	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage (veh)						
vC, conflicting volume			4		18	4
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			1617		996	1079
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	4	9	18			
Volume Left	0	5	1			
Volume Right	0	0	17			
cSH	1700	1617	1074			
Volume to Capacity	0.00	0.00	0.02			
Queue Length (ft)	0	0	1			
Control Delay (s)	0.0	4.5	8.4			
Lane LOS		A	A			
Approach Delay (s)	0.0	4.5	8.4			
Approach LOS			A			
Intersection Summary						
Average Delay			6.2			
Intersection Capacity Utilization			13.3%		ICU Level of Service	A



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)	72	0	6	0	0	2	8	102	0	1	99	103
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
Hourly flow rate (veh/h)	78	0	7	0	0	2	9	111	0	1	108	112
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	240	238	108	245	350	111	220			111		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	89	100	99	100	100	100	99			100		
cM capacity (veh/h)	708	658	946	701	570	942	1350			1479		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	85	2	9	111	109	112
Volume Left	78	0	9	0	1	0
Volume Right	7	2	0	0	0	112
cSH	722	942	1350	1700	1479	1700
Volume to Capacity	0.12	0.00	0.01	0.07	0.00	0.07
Queue Length (ft)	10	0	0	0	0	0
Control Delay (s)	10.6	8.8	7.7	0.0	0.1	0.0
Lane LOS	B	A	A		A	
Approach Delay (s)	10.6	8.8	0.6		0.0	
Approach LOS	B	A				

Intersection Summary		
Average Delay		2.3
Intersection Capacity Utilization	26.1%	ICU Level of Service
		A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↖			↗	↖	↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	14	1	15	23	1	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	15	1	16	25	1	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage (veh)						
vC, conflicting volume						
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)						
tC, 2 stage (s)						
tF (s)						
p0 queue free %						
cM capacity (veh/h)						

None

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	16	41	15
Volume Left	0	16	1
Volume Right	1	0	14
cSH	1700	1601	1052
Volume to Capacity	0.01	0.01	0.01
Queue Length (ft)	0	1	1
Control Delay (s)	0.0	2.9	8.5
Lane LOS		A	A
Approach Delay (s)	0.0	2.9	8.5
Approach LOS			A

Intersection Summary			
Average Delay		3.4	
Intersection Capacity Utilization	13.3%	ICU Level of Service	A



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)	33	0	4	0	0	2	9	78	0	2	73	26
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
Hourly flow rate (veh/h)	36	0	4	0	0	2	10	85	0	2	79	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
vC, conflicting volume	190	188	79	192	216	85	108			85		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	95	100	100	100	100	100	99			100		
cM capacity (veh/h)	763	701	981	759	676	974	1483			1512		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	40	2	10	85	82	28
Volume Left	36	0	10	0	2	0
Volume Right	4	2	0	0	0	28
cSH	782	974	1483	1700	1512	1700
Volume to Capacity	0.05	0.00	0.01	0.05	0.00	0.02
Queue Length (ft)	4	0	0	0	0	0
Control Delay (s)	9.9	8.7	7.4	0.0	0.2	0.0
Lane LOS	A	A	A		A	
Approach Delay (s)	9.9	8.7	0.8		0.2	
Approach LOS	A	A				

Intersection Summary		
Average Delay		2.0
Intersection Capacity Utilization	21.1%	ICU Level of Service
		A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	20	1	50	23	0	0	0	30	0	0	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
Hourly flow rate (veh/h)	0	22	1	54	25	0	0	0	33	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
vC, conflicting volume	25			23			156	156	22	189	157	25
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			100	100	97	100	100	100
cM capacity (veh/h)	1589			1592			789	711	1055	728	710	1051

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	23	79	33	0
Volume Left	0	54	0	0
Volume Right	1	0	33	0
cSH	1589	1592	1055	1700
Volume to Capacity	0.00	0.03	0.03	0.00
Queue Length (ft)	0	3	2	0
Control Delay (s)	0.0	5.1	8.5	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	5.1	8.5	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay		5.1	
Intersection Capacity Utilization	21.0%		ICU Level of Service
			A



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)	36	0	1	0	0	0	0	148	0	0	71	12
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
Hourly flow rate (veh/h)	39	0	1	0	0	0	0	161	0	0	77	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
vC, conflicting volume	238	238	77	239	251	161	90			161		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	95	100	100	100	100	100	100			100		
cM capacity (veh/h)	716	663	984	714	652	884	1505			1418		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	40	0	0	161	77	13
Volume Left	39	0	0	0	0	0
Volume Right	1	0	0	0	0	13
cSH	722	1700	1700	1700	1418	1700
Volume to Capacity	0.06	0.00	0.00	0.09	0.00	0.01
Queue Length (ft)	4	0	0	0	0	0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	10.3	0.0	0.0		0.0	
Approach LOS	B	A				

Intersection Summary		
Average Delay		1.4
Intersection Capacity Utilization	18.5%	ICU Level of Service A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	19	0	14	8	0	1	0	44	0	0	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
Hourly flow rate (veh/h)	0	21	0	15	9	0	1	0	48	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
vC, conflicting volume	9			21			60	60	21	108	60	9
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	95	100	100	100
cM capacity (veh/h)	1611			1595			929	823	1057	826	823	1073

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	21	24	49	0
Volume Left	0	15	1	0
Volume Right	0	0	48	0
cSH	1611	1595	1054	1700
Volume to Capacity	0.00	0.01	0.05	0.00
Queue Length (ft)	0	1	4	0
Control Delay (s)	0.0	4.7	8.6	0.0
Lane LOS		A	A	A
Approach Delay (s)	0.0	4.7	8.6	0.0
Approach LOS			A	A

Intersection Summary			
Average Delay		5.7	
Intersection Capacity Utilization	13.3%	ICU Level of Service	A

HCM Unsignalized Intersection Capacity Analysis



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)	28	0	4	0	0	2	4	100	0	1	97	30
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
Hourly flow rate (veh/h)	30	0	4	0	0	2	4	109	0	1	105	33
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None				None						
Median storage (veh)												
vC, conflicting volume	243	241	122	246	258	109	138			109		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
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 %	96	100	100	100	100	100	100			100		
cM capacity (veh/h)	707	658	929	703	644	945	1446			1482		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	35	2	113	139
Volume Left	30	0	4	1
Volume Right	4	2	0	33
cSH	729	945	1446	1482
Volume to Capacity	0.05	0.00	0.00	0.00
Queue Length (ft)	4	0	0	0
Control Delay (s)	10.2	8.8	0.3	0.1
Lane LOS	B	A	A	A
Approach Delay (s)	10.2	8.8	0.3	0.1
Approach LOS	B	A		

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization	17.7%		ICU Level of Service
			A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		⇄			⇄			⇄			⇄		
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Volume (veh/h)	0	26	1	41	37	0	1	0	34	0	0	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	
Hourly flow rate (veh/h)	0	28	1	45	40	0	1	0	37	0	0	0	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type							None						
Median storage veh													
vC, conflicting volume	40	29					158	158	29	195	159	40	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
tC, single (s)	4.1	4.1					7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)													
tF (s)	2.2	2.2					3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	100	97					100	100	96	100	100	100	
cM capacity (veh/h)	1569	1584					790	713	1046	721	713	1031	
Direction, Lane #													
	EB 1	WB 1	NB 1	SB 1									
Volume Total	29	85	38	0									
Volume Left	0	45	1	0									
Volume Right	1	0	37	0									
cSH	1569	1584	1037	1700									
Volume to Capacity	0.00	0.03	0.04	0.00									
Queue Length (ft)	0	2	3	0									
Control Delay (s)	0.0	4.0	8.6	0.0									
Lane LOS		A	A	A									
Approach Delay (s)	0.0	4.0	8.6	0.0									
Approach LOS			A	A									
Intersection Summary													
Average Delay		4.4											
Intersection Capacity Utilization		18.2%		ICU Level of Service				A					