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The Hills at Lorson Ranch
Traffic Impact Analysis - Full TIS
(LSC #204050)
May 27, 2020

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Engineering Review

07/10/2020 7:38:06 PM

dsdrice

JeffRice@elpasoco.com

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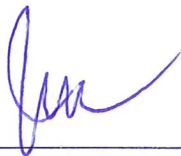
EPC Planning & Community
Development Department

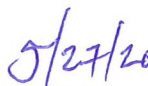
See Checklist



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.





Date



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May 26, 2020

Mr. Jeff Mark
President
The Landhuis Company
212 North Wahsatch Avenue, Suite 301
Colorado Springs, CO 80903

RE: The Hills at Lorson Ranch
El Paso County, CO
Traffic Impact Analysis
LSC #204050

Dear Mr. Mark,

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed Hills at Lorson Ranch residential development. As shown in Figure 1, the site is located within the Lorson Ranch development in El Paso County, Colorado.

REPORT CONTENTS

This report has been prepared to address the project's traffic impact at the proposed access points and adjacent intersections.

This report contains the following:

- The existing street and traffic conditions in the site's vicinity including the street widths, lane geometries, traffic controls, and existing traffic counts at key area intersections.
- The projected future background traffic volumes, which include estimates of traffic from other area development projects and increases in through traffic on the adjacent arterial streets.
- The estimated average weekday and peak-hour trip generation.
- The estimated directional distribution of site-generated trips and the projected site-generated traffic volumes.
- Estimates of the resulting total traffic volumes on the adjacent streets and intersections.
- The projected levels of service at the site access point and adjacent intersections.

LAND USE AND ACCESS

Land Use

The Hills at Lorson Ranch is planned to include 465 lots for single family homes. Figure 2 shows the proposed site plan.

514?

Street Connections

As part of this development Fontaine Boulevard and Lorson Boulevard are planned to be extended east to a new north-south collector (Collector "A"). A new east-west collector (Collection "B") is planned to be constructed between Lamprey Drive and the future Collector "A". Access to the site is proposed to Lorson Boulevard, Lamprey Drive, Collector "A" and Collector "B". Figure 2 shows the proposed access spacing.

add names

Pedestrian and Bicycle Route Analysis

Grand Mountain K-8 School is located just east of the site. The subdivision streets will include sidewalks and connecting streets within Lorson Ranch also have sidewalks. Trail corridors are planned along the powerline easement, the East Fork of Jimmy Camp Creek, and along Jimmy Camp Creek. Also, Marksheffel Road and Fontaine Boulevard have paved shoulders to accommodate cyclists. Lorson Boulevard has been constructed with wider travel lanes (and a striped left-turn median) to allow for shared lane use with experienced cyclists (the adjacent sidewalk will accommodate children and families, as well as cyclists less experienced at cycling in traffic).

west

RECENT AREA TRAFFIC STUDIES

Appendix Table 1 includes a list of other recent traffic studies conducted by LSC within the Lorson Ranch development and in the vicinity.

This site was previously included in the *Lorson Ranch Sketch Plan Amendment 2 Traffic Impact and Access Analysis* (TIA) by LSC Transportation Consultants, Inc. dated December 17, 2018 as traffic analysis zones 36, 43 and 44. The sketch plan TIA assumed these zones would be developed with 627 residential dwelling units (423 multi-family dwelling units and 204 lots for single family homes). This is 162 more residential dwelling units than are currently proposed.

STREET AND TRAFFIC CONDITIONS

Area Streets

The adjacent streets are shown in Figure 1 and are described below. Copies of the 2016 El Paso County Major Transportation Corridors Plan (MTCP) 2040 Roadway Plan and 2016 MTCP 2060

Corridor Preservation Plan with the site location identified on them have been attached to this report.

- **Marksheffel Road** extends north from the Link Road/C&S Road intersection in Fountain, Colorado to north of Woodmen Road. Marksheffel Road is shown as a future four-lane Expressway on the County Major Transportation Corridors Plan (MTCP). The posted speed limit on Marksheffel Road at Fontaine Boulevard is 45 miles per hour (mph). The PPRTA has completed the Marksheffel Road upgrade between Mesa Ridge Parkway and Bradley Road. This included intersection improvements at the Fontaine Boulevard intersection.
- **Fontaine Boulevard** is designated as a four-lane Urban Principal Arterial east of Marksheffel Road and has been constructed as such from Marksheffel Road east to Old Glory Drive/Stingray Lane. Fontaine Boulevard has recently been constructed east of Old Glory/Drive/Stingray Lane adjacent to the Lorson Ranch East development as an interim Urban Non-Residential Collector Street within 100 feet of right-of-way. As part of this development, Fontaine Boulevard will be extended east from its current terminus adjacent to the site with the same interim cross section and right-of-way. The posted speed limit on Fontaine Boulevard is 35 mph just east of (and a short distance west of) Marksheffel Road. The speed limit increases to 45 mph just east of the bridge over Jimmy Camp Creek and then decreases back to 35 mph just east of Old Glory (east)/Stingray.
- **Lorson Boulevard** currently extends east from Marksheffel Road to Lamprey Drive. Lorson Boulevard is classified as an Urban Non-Residential Collector Street (modified for a 44-foot street width rather than the standard 52-foot street width) with an 80-foot-wide right-of-way between Marksheffel Road and Stingray Lane and as an Urban Residential Collector Street (modified for a 44-foot street width rather than the standard 52-foot street width) with a 64- to 72-foot-wide right-of-way between Stingray Lane and Lamprey Drive. As part of this development, Lorson Boulevard will be constructed east of Lamprey Drive adjacent to the site as a standard Urban Residential Collector with a 60-foot-wide right-of-way.

Recent Traffic Volumes

Figure 3 shows the recent traffic volumes at the intersections of Old Glory (west)/Fontaine, Old Glory (east)/Stingray/Fontaine and Old Glory/Lorson. As of the date of this report, the Lorson Boulevard bridges over Jimmy Camp Creek and the east tributary have recently been opened to the public. The traffic counts at the intersection of Lorson/Old Glory were conducted in March 2020 following the opening of the bridge. The traffic counts at the intersections of Old Glory (west)/Fontaine, Old Glory (east)/Stingray/Fontaine and Old Glory/Lorson were conducted in October 2019 **prior** to the bridge opening. The traffic count reports are attached.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from “A” to “F.” LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 1 shows the level of service delay ranges.

Table 1: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) ⁽¹⁾
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The intersections of Old Glory (west)/Fontaine, Old Glory (east)/Stingray/Fontaine and Old Glory/Lorson have been analyzed based on the unsignalized intersection analysis procedures from the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board.

The northbound and southbound left-turn and through movements at the intersection of Fontaine/Old Glory (west) are currently operating at LOS E or F during both the morning and afternoon peak hours.

All movements at the intersection of Fontaine/Old Glory (east)/Stingray are currently operating at LOS C or better during the peak hours.

All movements at the intersection of Lorson/Old Glory are currently operating at LOS A during the peak hours.

BACKGROUND TRAFFIC

Background traffic is the traffic estimated to be on the roadways without the Hills at Lorson Ranch traffic. The short-term background traffic volumes are shown in Figure 4. The background traffic

volumes are based on the existing traffic volumes shown in Figure 3 with a portion of the volumes assumed to be rerouted with the construction of Lorson Boulevard from Marksheffel Road to Lamprey Drive, including crossing both the Jimmy Camp Creek main channel and east tributary. The short-term background traffic also includes additional traffic generated by buildout of the approved Lorson Ranch subdivisions including Lorson Ranch East, Ponderosa at Lorson Ranch Filing 3 and Creekside at Lorson Ranch, but assumes zero traffic generated by the Hills at Lorson Ranch.

Figure 5 shows the projected 2040 background traffic volumes. The 2040 background traffic volumes are based on estimates of traffic projected to be generated at buildout of the Lorson Ranch Sketch Plan (excluding the traffic projected to be generated by the Hills at Lorson Ranch) and traffic volumes shown in the Marksheffel Road South Corridor Preservation Plan dated July 2014. Appendix Tables 2 and 3 show the trip generation estimates for all existing and future land uses assumed to be built out by 2040 in the Lorson Ranch development. The 2040 background volumes also assume full buildout of the street network within Lorson Ranch, but assume Meridian Road has not been extended south to Fontaine Boulevard.

TRIP GENERATION

The site-generated vehicle-trips were estimated using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 2 shows the average weekday and peak-hour trip generation estimates. Table 2 also shows a comparison of the trip generation estimate for this same area, assumed in the *Lorson Ranch Sketch Plan Amendment 2 Traffic Impact Analysis* by LSC dated December 17, 2019.

The site is projected to generate about 4,390 new vehicle-trips on the average weekday, with about half entering and half exiting the site. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 86 vehicles would enter and 258 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 290 vehicles would enter and 170 vehicles would exit the site.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of the site-generated traffic volumes on the street and roadway system serving the site is one of the most important factors in determining the site's traffic impacts. Figure 6 shows the external trip distribution estimates (external to Lorson Ranch). The directional distribution estimates have been based on the location of the site with respect to the regional residential employment, commercial, and activity centers; the land use proposed; the access/roadway connections assumed; the roadway network; and the most recent traffic counts conducted at the intersection of Marksheffel/Fontaine. The number of external vehicle trips were based on the internal trip estimates shown in Appendix Table 2.

Figure 7 shows the site-generated traffic volume estimates, respectively. These volumes were determined by first assigning the internal vehicle trips to the street network based on the location of the existing Grand Mountain School located northeast of the intersection of Fontaine Boulevard and Lamprey Drive and the future retail sites located near the intersection of Fontaine Boulevard and Carriage Meadows Drive.

The external vehicle trips were then assigned to the street network by applying the trip distribution percentages (from Figure 6) to the external trip generation estimates. The internal and external site-generated traffic volumes were then summed to determine the total site-generated traffic volumes.

BUILDOUT TOTAL TRAFFIC

Figure 8 shows the short-term total traffic volumes. These volumes are the sum of the short-term background traffic volumes (from Figure 4) plus the site-generated traffic volumes (from Figure 7).

Figure 9 shows the 2040 total traffic volumes. These volumes are the sum of the 2040 background traffic volumes (from Figure 5) plus the site-generated traffic volumes (from Figure 7).

PROJECTED LEVELS OF SERVICE

The key area intersections and the access points have been analyzed to determine the projected levels of service for the short-term and 2040 background and total traffic volumes based on the signalized method of analysis from Synchro and the unsignalized method of analysis procedures outlined in the Highway Capacity Manual, 6th Edition by the Transportation Research Board. The level of service reports are attached. The results of the analysis are shown Table 3.

Fontaine/Old Glory (West)

The northbound and southbound left-turn and through movements at the intersection of Fontaine/Old Glory (west) are currently operating at LOS E or F, during both the morning and afternoon peak hours. If this intersection were to be converted to all-way, stop sign control all movements are projected to operate at LOS C or better during the peak hours. By 2040, the westbound movements are projected to operate at LOS F during the morning peak hour and the eastbound movements are projected to operate at LOS F during the afternoon peak hour. It will likely be necessary to convert this intersection to either traffic signal control or reconstruct it as a two-lane modern roundabout to maintain an acceptable level of service.

Fontaine/Old Glory (East)/Stingray

The northbound and southbound left-turn movements at the intersection of Fontaine/Old Glory (east)/Stingray are projected to operate at LOS E or F during the morning and afternoon peak

hours, based on the short-term total traffic volumes. If this intersection were to be converted to all-way, stop sign control all movements are projected to operate at LOS A during the peak hours. By 2040, some of the westbound movements are projected to operate at LOS F during the morning peak hour and some of the eastbound movements are projected to operate at LOS F during the afternoon peak hour. It will likely be necessary to convert this intersection to either traffic signal control or reconstruct it as a two-lane modern roundabout to maintain an acceptable level of service.

Lorson/Marksheffel

Unsignalized (Stop Sign-Controlled) and Signalized Intersection Traffic Control

Based on the projected short-term total traffic volumes the westbound left-turn movement at the intersection of Marksheffel/Lorson is projected to operate at LOS F during the morning and afternoon peak hours, if this intersection remains a conventional, stop sign-controlled, full-movement intersection.

Alternative Intersection Configuration/Traffic Control

The following are two potential alternatives to a conventional full-movement intersection (stop sign-controlled or signal-controlled, for which analysis results are presented in the preceding paragraph). These include modern roundabout and “channelized T” type intersections.

Modern Roundabout Intersection

A modern roundabout intersection at Lorson/Marksheffel (hypothetically) would initially be a single-lane roundabout, but would need to be designed to be expandable to a two-lane roundabout.

All of the approaches at the intersection of Marksheffel/Lorson are projected to operate at LOS A during the peak hours, based on the short-term total traffic volumes, assuming a single-lane roundabout. By 2040, it was assumed that the intersection would be expanded to a two-lane roundabout. Based on the 2040 total traffic volumes, the westbound approach is projected to operate at LOS C during the peak hour.

Advantages

- The overall intersection delay is projected to be slightly lower with a two-lane roundabout than with traffic signal control.
- Generally, modern roundabouts have safety advantages over a signal-controlled intersection. This is because crashes tend to be lower speed, there are fewer conflict points, and the types (angle) of crashes tend to be those which generally result in less

severe accidents. Granted, as a conventional T intersection (which would be the case until (and if) a fourth leg is added to this intersection) this intersection. Conventional T intersections have significantly fewer conflict points than a four-leg conventional intersection.

- A roundabout may be more aesthetically appealing than a traditional signal-controlled intersection and have generally lower traffic noise levels.
- Long-term operation and maintenance cost is likely to be lower with a roundabout than a traffic signal.

Disadvantages

- The travel speed through the intersection compared with a signalized intersection during the signal green phase would be slower for through traffic on Marksheffel Road. This may affect travel times along the corridor if, in the future, other Marksheffel intersections to the north and south are controlled by a series of coordinated traffic signals. However, the average intersection delay should be factored into the overall corridor travel time. This analysis may show no overall disadvantage.

Channelized-T Intersection

The channelized-T type intersection allows for an intersection with generally lower overall and side-street delay than with a conventional T intersection and with fewer stops for the through traffic on the major roadway when compared to a conventional signalized T intersection. An example of a channelized-T-type intersection is at the intersection of US Highway 24 and Garrett Road near Falcon (El Paso County). That particular intersection is signalized with a “directional signal,” but a channelized-T can also operate as an unsignalized intersection with stop sign control on the minor street. Whether signalized or unsignalized, the raised median configuration would allow for “free” (no stopping) movement for the southbound through movement through the intersection. The westbound left turn would cross the northbound lanes and into a channelized southbound left-turn acceleration lane for merging into southbound through traffic.

Based on the projected short-term morning peak-hour traffic volumes and assuming a conventional T intersection, the projected delay for the westbound left-turn movement at the intersection of Marksheffel/Lorson is 89.9 seconds per vehicle (LOS F). If the intersection were constructed with a channelized-T, the delay for this movement is projected to be 34.9 seconds per vehicle (LOS D). By 2040, the delay for this movement is projected to be LOS F during the morning peak hour even with the channelized-T. If the channelized-T intersection were signalized with a “directional signal,” the delay for the westbound left-turn movement is projected to be 18.9 seconds (LOS B).

Advantages

- The intersection of Marksheffel/Lorson could likely operate at a satisfactory level of service as a stop sign-controlled intersection for longer as an unsignalized, channelized-T intersection than if it were to remain a conventional T intersection.
- Once signal control would be required to maintain an acceptable level of service, the channelized-T configuration would result in lower delay for through traffic especially for the southbound traffic which would operate freely. The overall intersection delay is projected to be lower with a channelized-T intersection. Based on the 2040 total morning peak-hour volumes, the projected overall intersection delay is 6.8 seconds per vehicle (LOS A) with a signal-controlled channelized-T intersection and 10.5 seconds per vehicle (LOS B) with a conventional signal-controlled intersection. Based on the 2040 total afternoon peak-hour volumes, the projected overall intersection delay is 5.7 seconds per vehicle (LOS A) with a signal-controlled channelized T intersection and 8.9 seconds per vehicle (LOS A) with a conventional signal-controlled intersection.
- There is the potential, depending on the time of day and traffic volumes, to allow for a longer side-street signal phase, due to one-way signal progression and no red phase for southbound traffic.

Disadvantages

- The channelized-T configuration would only work on an interim basis prior to the addition of a potential fourth leg of this intersection. It is anticipated that development of the Singer property on the west side of Marksheffel Road would result in a request for a full-movement-capable, fourth/west leg of this intersection. If/when that occurs, many of the channelized-T improvements would need to be removed or modified.
- The channelized-T configuration may be confusing for some drivers and the merging movement into southbound traffic requires a more complex movement than with a signal. However, most motorists entering the intersection from the east would be regular users and would quickly learn to navigate the intersection.
- A channelized-T intersection would require the construction of raised channelizing medians on Marksheffel Road and the ongoing maintenance of those medians.
- The section of Marksheffel Road between Lorson Boulevard and Poa Annua would need to be designed to accommodate a southbound left-turn acceleration lane from Lorson Boulevard, a taper, and a southbound left-turn lane approaching Poa Annua. Based on a posted speed limit of 55 mph, the El Paso County Engineering Criteria Manual (ECM) requires a 960-foot-long acceleration lane plus a 222-foot taper. Based on a design speed of 60 mph, the ECM requires a 290-foot-long left-turn lane approach Poa Annua plus 50

to 75 feet of storage length. The total length of the acceleration lane, taper, and left-turn lane would be between 1,522 and 1,547 feet. The total distance between Lorson Boulevard and Poa Annua street is about 1,025 feet centerline to centerline. The construction of a channelized-T intersection would therefore require a deviation(s) to the ECM.

- A channelized-T can be more difficult for pedestrians than a conventional signalized intersection. However, there may be ways to better accommodate pedestrians – such as adding a pedestrian-only phase for southbound traffic. More research would be needed regarding pedestrian accommodation.

Fontaine/Lamprey

The intersection of Fontaine/Lamprey was recently constructed as a modern one-lane roundabout. All movements at this intersection are projected to operate at LOS D or better during the peak hours, based on the projected short-term and 2040 total traffic volumes.

Fontaine/Collector “A”

The future intersection of Fontaine/Collector “A” is projected to operate at LOS B or better for all movements during the peak hours as a two-way, stop sign-controlled intersection, based on the projected short-term total traffic volumes. By 2040, the northbound left-turn movement is projected to operate at LOS F during the morning peak hour. If this intersection were to be converted to all-way, stop sign control, all movements are projected to operate at LOS B or better, based on the projected 2040 total traffic volumes.

Site Access Points and Collector/Collector Intersections

All of the site access points to Lamprey, Collector “B”, Collector “A”, and Lorson are projected to operate at LOS B or better during the peak hours for all movements as two-way, stop sign-controlled intersections, based on the projected short-term and 2040 total traffic volumes.

The intersections of Lamprey/Collector “B”, Collector “B”/Collector “A”, Lorson/Old Glory, Lorson/Lamprey and Lorson/Collector “A” are projected to operate at LOS D or better during the peak hours for all movements as two-way, stop sign-controlled intersections based on the projected short-term and 2040 total traffic volumes.

ROADWAY CLASSIFICATIONS

Figure 10 shows the estimated recommended street classifications for the Lorson Ranch streets.

ROADWAY IMPROVEMENT FEE

This project will be required to participate in the El Paso County Road Improvement Fee Program. The Hills at Lorson Ranch will join the ten-mil PID. The ten-mil PID building permit fee portion associated with this option is \$1,221 per single-family dwelling unit. Based on 465 lots, the total building permit fee would be \$567,765.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

- The site is projected to generate about 4,390 new vehicle-trips on the average weekday, with about half entering and half exiting the site. During the morning peak hour, about 86 vehicles would enter and 258 vehicles would exit the site. During the afternoon peak hour, about 290 vehicles would enter and 170 vehicles would exit the site.

Projected Levels of Service

- To maintain an acceptable level of service (LOS D or better), the intersections of Fontaine/Old Glory (west) and Fontaine/Old Glory (east)/Stingray should be converted to all-way, stop sign control in the short-term future. These intersections may need to be converted to traffic signal control or reconstructed as two-lane modern roundabouts in the long-term future.
- The intersection of Marksheffel/Lorson is projected to operate at LOS F for the westbound left-turn movement during the morning and afternoon peak hours in the short term, if this intersection remains a conventional, stop sign-controlled, full-movement intersection. Alternative intersection control options for this intersection are discussed in the level of service section above.
- The intersection of Fontaine/Lamprey was recently constructed as a modern one-lane roundabout. All movements at this intersection are projected to operate at LOS D or better during the peak hours, based on the projected short-term and 2040 total traffic volumes.
- The future intersection of Fontaine/Collector "A" is projected to operate at LOS B or better for all movements during the peak hours as a two-way, stop sign-controlled intersection, based on the projected short-term total traffic volumes. By 2040, the northbound left-turn movement is projected to operate at LOS F during the morning peak hour. If this intersection were to be converted to all-way, stop sign control, all movements are projected to operate at LOS B or better based on the projected 2040 total traffic volumes.
- All other intersections analyzed are projected to operate at a satisfactory level of service as two-way, stop sign-controlled intersections.

Collector B Striping

Collector B and potentially Collector A at intersection #10 could potentially be striped with a single dual yellow centerline stripe instead of a center painted two-way left-turn "median." The through and left-turning volumes are projected to be relatively low.

Recommended Improvements

A list of all improvements in the vicinity of the site is presented in Table 4.

* * * * *

We trust this traffic impact analysis will assist you in gaining approval of the proposed The Hills at Lorson Ranch residential development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By _____
Jeffrey C. Hodsdon, P.E.
Principal

JCH:KDF:jas

Enclosures: Tables 2-4
Appendix Tables 1-3
Figures 1-10
Traffic Count Reports
Level of Service Reports
MTCP Maps

[Move to beginning of report](#)

CONTENTS

REPORT CONTENTS 1

LAND USE AND ACCESS 2

 Land Use 2

 Street Connections..... 2

 Pedestrian and Bicycle Route Analysis 2

RECENT AREA TRAFFIC STUDIES 2

STREET AND TRAFFIC CONDITIONS 2

 Area Streets 2

 Recent Traffic Volumes 3

 Existing Levels of Service 4

BACKGROUND TRAFFIC 4

TRIP GENERATION 5

TRIP DISTRIBUTION AND ASSIGNMENT..... 5

BUILDOUT TOTAL TRAFFIC 6

PROJECTED LEVELS OF SERVICE 6

 Fontaine/Old Glory (West) 6

 Fontaine/Old Glory (East)/Stingray 6

 Lorson/Marksheffel..... 7

 Fontaine/Lamprey..... 10

 Fontaine/Collector “A” 10

 Site Access Points and Collector/Collector Intersections 10

ROADWAY CLASSIFICATIONS 10

ROADWAY IMPROVEMENT FEE..... 11

CONCLUSIONS AND RECOMMENDATIONS 11

 Trip Generation 11

 Projected Levels of Service..... 11

 Collector B Striping..... 12

 Recommended Improvements..... 12

Enclosures: Tables 2-4..... 12

 Appendix Tables 1-3..... 12

 Figures 1-10 12

 Traffic Count Reports 12

 Level of Service Reports 12

 MTCP Maps..... 12

Tables 2-4



**Table 2
Trip Generation Estimate
The Hills**

Traffic Analysis Zone	Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates ⁽¹⁾					Total Trips Generated				
				Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour	
					In	Out	In	Out		In	Out	In	Out
Trip Generation Estimate Based on the Currently Proposed Plan													
43	210	Single-Family Detached Housing	92 DU ⁽²⁾	9.44	0.19	0.56	0.62	0.37	868	17	51	57	34
44	210	Single-Family Detached Housing	98 DU	9.44	0.19	0.56	0.62	0.37	925	18	54	61	36
36	210	Single-Family Detached Housing	275 DU	9.44	0.19	0.56	0.62	0.37	2,596	51	153	172	101
			465 DU						4,390	86	258	290	170
Trip Generation Estimate for the Same Area From the Lorson Ranch Sketch Plan Amendment 2 Traffic Impact Analysis by LSC December 17, 2018													
43	210	Multifamily Housing (Low-Rise)	176 DU	7.32	0.11	0.35	0.35	0.21	1,288	19	62	62	36
44	210	Multifamily Housing (Low-Rise)	247 DU	7.32	0.11	0.35	0.35	0.21	1,808	26	87	87	51
36	210	Single-Family Detached Housing	204 DU	9.44	0.19	0.56	0.62	0.37	1,926	38	113	127	75
			627 DU						5,022	82	263	276	162
									-633	4	-5	14	8

Notes:

(1) Source: "Trip Generation, 10th Edition, 2017" by the Institute of Transportation Engineers (ITE)

(2) DU = dwelling unit

Source: LSC Transportation Consultants, Inc.

May-20

Table 3
Page 1 of 2
Level of Service Analysis
The Hills at Lorson Ranch

Intersection	Traffic Control	Movement	Existing Traffic		Short-Term Background Traffic		Short-Term Total Traffic		2040 Background Traffic		2040 Total Traffic			
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
1 Old Glory (West)/Fontaine	TWSC	Northbound Left	F	F	F	F	F	F	---	---	---	---		
		Northbound Through	D	E	E	F	F	F	---	---	---	---		
		Northbound Right	A	A	A	B	C	B	---	---	---	---		
		Eastbound Left	B	A	A	A	A	B	---	---	---	---		
		Westbound Left	A	A	A	A	A	B	---	---	---	---		
		Southbound Left	E	E	F	F	F	F	---	---	---	---		
	AWSC	Southbound Through	D	E	E	F	F	F	---	---	---	---		
		Southbound Right	B	A	B	B	C	B	---	---	---	---		
		Eastbound Left	---	---	---	---	A	B	B	D	B	F		
		Eastbound Through	---	---	---	---	A	A	A	C	A	F		
		Eastbound Right	---	---	---	---	A	A	A	A	A	F		
		Westbound Left	---	---	---	---	A	A	F	A	F	A		
		Westbound Through	---	---	---	---	B	A	F	B	F	D		
		Westbound Right	---	---	---	---	A	A	F	A	F	A		
		Northbound Left	---	---	---	---	B	A	D	C	C	E		
		Northbound Through	---	---	---	---	A	A	A	A	A	A		
		Northbound Right	---	---	---	---	A	A	A	A	A	A		
		Southbound Left	---	---	---	---	A	A	A	A	A	A		
		Southbound Through	---	---	---	---	A	A	A	B	B	A		
		Southbound Right	---	---	---	---	C	A	C	A	C	B		
	Overall	---	---	---	---	B	A	F	C	F	F			
	Roundabout	Eastbound Left/Through	---	---	---	---	---	---	---	---	A	B		
		Eastbound Through/Right	---	---	---	---	---	---	---	---	A	C		
		Westbound Left/Through	---	---	---	---	---	---	---	---	C	B		
		Westbound Through/Right	---	---	---	---	---	---	---	---	C	B		
		Northbound Left/Through/Right	---	---	---	---	---	---	---	---	B	D		
		Southbound Left/Through/Right	---	---	---	---	---	---	---	---	A	A		
	Overall	---	---	---	---	---	---	---	---	---	B	B		
	Signal	Eastbound Left	---	---	---	---	---	---	---	---	C	C		
		Eastbound Through	---	---	---	---	---	---	---	---	B	B		
		Eastbound Right	---	---	---	---	---	---	---	---	A	A		
		Westbound Left	---	---	---	---	---	---	---	---	B	A		
		Westbound Through	---	---	---	---	---	---	---	---	C	C		
		Westbound Right	---	---	---	---	---	---	---	---	A	A		
		Northbound Left	---	---	---	---	---	---	---	---	D	D		
		Northbound Through	---	---	---	---	---	---	---	---	D	D		
		Northbound Right	---	---	---	---	---	---	---	---	A	A		
		Southbound Left	---	---	---	---	---	---	---	---	C	D		
		Southbound Through	---	---	---	---	---	---	---	---	D	D		
		Southbound Right	---	---	---	---	---	---	---	---	C	B		
Overall		---	---	---	---	---	---	---	---	---	C	B		
2 Old Glory (East)/Stingray/Fontaine		TWSC	Northbound Left	C	B	D	C	E	D	F	F	F	F	
	Northbound Through/Right		B	A	B	B	B	C	B	D	C	F		
	Eastbound Left		A	A	A	A	A	A	B	A	B	A		
	Westbound Left		A	A	A	A	A	A	A	B	A	B		
	Southbound Left		C	B	E	C	F	E	F	F	F	F		
	Southbound Through		C	B	C	C	D	D	E	F	F	F		
	AWSC	Southbound Right	A	A	B	A	B	B	B	B	B	B		
		Eastbound Left	---	---	---	---	A	A	---	---	A	E		
		Eastbound Through	---	---	---	---	A	A	---	---	A	F		
		Eastbound Right	---	---	---	---	A	A	---	---	A	D		
		Westbound Left	---	---	---	---	A	A	---	---	F	A		
		Westbound Through	---	---	---	---	A	A	---	---	F	A		
		Westbound Right	---	---	---	---	A	A	---	---	F	A		
		Northbound Left	---	---	---	---	A	A	---	---	A	A		
		Northbound Through/Right	---	---	---	---	A	A	---	---	A	A		
		Southbound Left	---	---	---	---	A	A	---	---	A	A		
		Southbound Through	---	---	---	---	A	A	---	---	A	A		
		Southbound Right	---	---	---	---	A	A	---	---	A	A		
		Overall	---	---	---	---	A	A	---	---	F	E		
		Roundabout	Eastbound Left/Through	---	---	---	---	---	---	---	---	A	A	
	Eastbound Through/Right		---	---	---	---	---	---	---	---	A	A		
	Westbound Left/Through		---	---	---	---	---	---	---	---	A	A		
	Westbound Through/Right		---	---	---	---	---	---	---	---	A	A		
	Northbound Left/Through/Right		---	---	---	---	---	---	---	---	A	A		
	Southbound Left/Through/Right		---	---	---	---	---	---	---	---	B	A		
	Overall	---	---	---	---	---	---	---	---	---	A	A		
	Signal	Eastbound Left	---	---	---	---	---	---	---	---	A	A		
		Eastbound Through	---	---	---	---	---	---	---	---	A	C		
		Eastbound Right	---	---	---	---	---	---	---	---	A	A		
		Westbound Left	---	---	---	---	---	---	---	---	A	A		
		Westbound Through	---	---	---	---	---	---	---	---	A	A		
		Westbound Right	---	---	---	---	---	---	---	---	A	A		
		Northbound Left	---	---	---	---	---	---	---	---	D	D		
		Northbound Through/Right	---	---	---	---	---	---	---	---	B	C		
		Southbound Left	---	---	---	---	---	---	---	---	D	D		
		Southbound Through	---	---	---	---	---	---	---	---	D	D		
		Southbound Right	---	---	---	---	---	---	---	---	A	B		
		Overall	---	---	---	---	---	---	---	---	---	B	B	
		3 Lamprey/Fontaine	Roundabout	Eastbound	---	---	A	A	A	A	A	B	A	C
				Westbound	---	---	A	A	A	A	B	A	C	B
Northbound	---			---	A	A	A	A	A	A	B	A		
Southbound	---			---	A	A	A	A	B	A	B	A		
Overall	---			---	A	A	A	A	A	B	B	C		
4 Lamprey/PA B	TWSC	Northbound	---	---	---	---	A	A	---	---	A	A		
		Westbound	---	---	---	---	A	A	---	---	A	A		
5 Lamprey/Collector B	TWSC	Northbound	---	---	---	---	---	---	A	A	A	A		
		Eastbound	---	---	---	---	---	---	A	A	A	A		
		Westbound	---	---	---	---	---	---	A	A	A	A		
		Southbound	---	---	---	---	---	---	A	A	A	A		

Table 3
Page 2 of 2
Level of Service Analysis
The Hills at Lorson Ranch

Intersection	Traffic Control	Movement	Existing Traffic		Short-Term Background Traffic		Short-Term Total Traffic		2040 Background Traffic		2040 Total Traffic		
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
6 PA B/Collector B	TWSC	Northbound	---	---	---	---	A	A	---	---	A	A	
		Westbound	---	---	---	---	A	A	---	---	A	A	
7 PA C/PA D/Collector B	TWSC	Northbound	---	---	---	---	A	A	---	---	A	A	
		Eastbound	---	---	---	---	A	A	A	A	A	A	
		Westbound	---	---	---	---	A	A	---	---	A	A	
		Southbound	---	---	---	---	---	---	A	A	A	A	
8 Collector A/Collector B	TWSC	Northbound	---	---	---	---	---	---	A	A	A	A	
		Eastbound	---	---	---	---	---	---	A	A	A	A	
9 Collector A/PA C/PA D	TWSC	Northbound Left	---	---	---	---	A	A	---	---	A	A	
		Eastbound	---	---	---	---	A	A	---	---	A	A	
		Westbound	---	---	---	---	---	---	A	B	B	B	
		Southbound Left	---	---	---	---	---	---	A	A	A	A	
10 Collector A/Fontaine	TWSC	Northbound Left	---	---	---	---	A	A	C	D	E	F	
		Northbound Through	---	---	---	---	A	A	B	C	B	C	
		Northbound Right	---	---	---	---	---	---	A	A	A	A	
		Eastbound Left	---	---	---	---	A	A	A	A	A	A	
		Westbound Left	---	---	---	---	---	---	A	A	A	A	
		Southbound Left	---	---	---	---	---	---	---	---	B	C	
		Southbound Through	---	---	---	---	A	B	B	C	B	C	
		Southbound Right	---	---	---	---	A	A	A	A	B	A	
	AWSC	Northbound Left	---	---	---	---	---	---	---	---	B	B	
		Northbound Through	---	---	---	---	---	---	---	---	A	A	
		Northbound Right	---	---	---	---	---	---	---	---	A	A	
		Eastbound Left	---	---	---	---	---	---	---	---	B	C	
		Eastbound Through	---	---	---	---	---	---	---	---	A	B	
		Eastbound Right	---	---	---	---	---	---	---	---	A	B	
		Westbound Left	---	---	---	---	---	---	---	---	A	B	
		Westbound Through	---	---	---	---	---	---	---	---	B	B	
		Westbound Right	---	---	---	---	---	---	---	---	A	A	
		Southbound Left	---	---	---	---	---	---	---	---	A	B	
Southbound Through	---	---	---	---	---	---	---	---	A	A			
Southbound Right	---	---	---	---	---	---	---	---	B	A			
Overall	---	---	---	---	---	---	---	---	---	B	B		
11 Collector A/PA E/PA F	TWSC	Northbound Left	---	---	---	---	A	A	---	---	A	A	
		Eastbound	---	---	---	---	A	A	---	---	B	B	
		Westbound	---	---	---	---	---	---	A	A	A	A	
		Southbound Left	---	---	---	---	---	---	A	A	A	A	
12 Collector A/PA G/PA H	TWSC	Northbound Left	---	---	---	---	A	A	---	---	A	A	
		Eastbound	---	---	---	---	A	A	---	---	B	B	
		Westbound	---	---	---	---	---	---	A	A	A	B	
		Southbound Left	---	---	---	---	---	---	A	A	A	A	
13 Lorson/Marksheffel	TWSC	Westbound Left	---	---	---	---	E	F	F	F	---	---	
		Westbound Right	---	---	---	---	B	B	B	B	---	---	
		Southbound Left	---	---	---	---	A	B	A	B	---	---	
	TWSC With Channelized "T"	Westbound Left	---	---	---	---	---	---	D	D	F	F	
		Westbound Right	---	---	---	---	---	---	B	B	B	B	
		Southbound Left	---	---	---	---	---	---	A	B	A	B	
	Roundabout	Westbound Left	---	---	---	---	---	---	C	B	C	B	
		Westbound Right	---	---	---	---	---	---	---	---	A	A	
		Northbound Through	---	---	---	---	---	---	A	C	A	A	
		Northbound Right	---	---	---	---	---	---	---	---	A	A	
		Southbound Left/Through	---	---	---	---	---	---	B	B	C	C	
	Overall	---	---	---	---	---	---	B	B	---	---	B	B
	Signal	Westbound Left	---	---	---	---	---	---	---	---	D	D	
		Westbound Right	---	---	---	---	---	---	A	A	A	A	
		Northbound Through	---	---	---	---	---	---	A	A	A	A	
		Northbound Right	---	---	---	---	---	---	A	A	A	A	
Southbound Left		---	---	---	---	---	---	A	A	A	A		
Overall	---	---	---	---	---	---	---	---	A	A	A	A	
B	B	B	B	B	B	B	B	B	B	B			
14 Lorson/Old Glory	TWSC	Eastbound Left	A	A	A	A	A	A	A	A	A	A	
		Southbound Left	A	A	B	B	B	B	B	C	B	D	
		Southbound Right	A	A	A	A	B	A	B	A	B	B	
15 Lorson/Lamprey	TWSC	Eastbound Left	---	---	A	A	A	A	A	A	A	A	
		Southbound Left	---	---	B	A	B	B	B	B	B	B	
		Southbound Right	---	---	A	A	A	A	A	A	B	A	
16 Lorson/PA G	TWSC	Eastbound Left	---	---	---	---	A	A	---	---	A	A	
		Southbound	---	---	---	---	A	A	---	---	A	A	
17 Lorson/Collector A	TWSC	Eastbound Left	---	---	---	---	---	---	A	A	A	A	
		Southbound Left	---	---	---	---	---	---	B	B	B	B	
		Southbound Right	---	---	---	---	---	---	A	A	A	A	

Table 4
Page 1 of 2
The Hills at Lorson Ranch
Roadway Improvements

Item #	Improvement	Improvement Description With Details	Trigger	Timing	Responsibility
Roadway Segment Improvements					
1	Roadway Segment	Construct Fontaine Boulevard from its existing terminus to Collector "A" as an interim 2-Lane Urban Non-Residential Collector in 100' right-of-way	With this development	With this development	Lorson Ranch
2	Roadway Segment	Construct Lorson Boulevard from Lamprey Drive to Collector "A" as an Urban Residential Collector with 64' - 72' of right-of-way	With this development	With this development	Lorson Ranch
3	Roadway Segment	Construct Collector "A" from Lorson Boulevard to Collector "B" as an Urban Residential Collector with 64' to 72' of right-of-way	With this development	With this development	Lorson Ranch
4	Roadway Segment	Construct Collector "B" from Lamprey Drive to Collector "A" as an Urban Residential Collector with 60' of right-of-way	With this development	With this development	Lorson Ranch
Intersection #1 Old Glory (West)/Fontaine					
5	Traffic Control Change	Convert from Two-Way, Stop-Sign Control to All-Way, Stop-Sign Control	When the level of service for any movement degrades below LOS D (Currently warranted)	With this development	Lorson Ranch
6	Traffic Control Change	Convert from All-Way, Stop-Sign Control to Signal Control or Modern Roundabout	When the level of service for any movement degrades below LOS D and/or traffic signal warrants are met	Buildout of Lorson Ranch	Lorson Ranch
Intersection #2 Old Glory (East)/Stingray/Fontaine					
7	Traffic Control Change	Convert from Two-Way, Stop-Sign Control to All-Way, Stop-Sign Control	When the level of service for any movement degrades below LOS D	With this development	Lorson Ranch
8	Traffic Control Change	Convert from All-Way, Stop-Sign Control to Signal Control or Modern Roundabout	When the level of service for any movement degrades below LOS D and/or traffic signal warrants are met	Buildout of Lorson Ranch	Lorson Ranch
Intersection #3 Lamprey/Fontaine					
No improvements anticipated in the 2040 planning horizon					
Intersection #4 Lamprey/PA B					
9	Eastbound right-turn deceleration lane	Eastbound right-turn deceleration lane on Lamprey approaching site access	right turn volume > 50 vehicles per hour		NOT REQUIRED
10	Westbound left-turn lane	Westbound left-turn lane on Lamprey approaching the site access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour		NOT REQUIRED
Intersection #5 Lamprey/Collector "B"					
11	Eastbound left-turn lane	Eastbound left-turn lane on Lamprey approaching Collector "B"	left turn volume > 25 vehicles per hour		NOT REQUIRED
12	Eastbound right-turn deceleration lane	Eastbound right-turn deceleration lane on Lamprey approaching Collector "B"	right turn volume > 50 vehicles per hour	Not Required (Reserve ROW for future right-turn lane if needed)	Lorson Ranch
13	Northbound left-turn lane	Northbound left-turn lane on Collector "B" approaching Lamprey	left turn volume > 25 vehicles per hour		NOT REQUIRED
14	Northbound right-turn deceleration lane	Northbound right-turn deceleration lane on Collector "B" approaching Lamprey	right turn volume > 50 vehicles per hour		NOT REQUIRED
15	Southbound left-turn lane	Southbound left-turn lane on Collector "B" approaching Lamprey (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour		NOT REQUIRED
16	Southbound right-turn deceleration lane	Southbound right-turn deceleration lane on Collector "B" approaching Lamprey	right turn volume > 50 vehicles per hour	Not Required (Reserve ROW for future right-turn lane if needed)	Lorson Ranch
Intersection #6 Collector "B"/PA B					
17	Southeastbound right-turn deceleration lane	Southeastbound right-turn deceleration lane on Collector "B" approaching site access	right turn volume > 50 vehicles per hour		NOT REQUIRED
18	Northwestbound left-turn lane	Northwestbound left-turn lane on Lamprey approaching the site access	left turn volume > 25 vehicles per hour		NOT REQUIRED
Intersection #7 Collector "B"/PA C/PA D					
19	Southeastbound left-turn lane	Southeastbound left-turn lane on Collector "B" approaching future access	left turn volume > 25 vehicles per hour		NOT REQUIRED
20	Southeastbound right-turn deceleration lane	Southeastbound right-turn deceleration lane on Collector "B" approaching site access	right turn volume > 50 vehicles per hour		NOT REQUIRED
21	Northwestbound left-turn lane	Northwestbound left-turn lane on Collector "B" approaching site access	left turn volume > 25 vehicles per hour		NOT REQUIRED
22	Northwestbound right-turn deceleration lane	Northwestbound right-turn deceleration lane on Collector "B" approaching future access	right turn volume > 50 vehicles per hour		NOT REQUIRED
Intersection #8 Collector "B"/Collector "A"					
23	Southeastbound left-turn lane	Southeastbound left-turn lane on Collector "B" approaching Collector "A"	left turn volume > 25 vehicles per hour		NOT REQUIRED
24	Northwestbound left-turn lane	Northeastbound left-turn lane on Collector "A" approaching Collector "B"	left turn volume > 25 vehicles per hour		NOT REQUIRED
Intersection #9 Collector "A"/PA B/PA D					
25	Southbound left-turn lane	Southbound left-turn lane on Collector "A" approaching future access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	NOT REQUIRED short left-turn bay recommended to match the northbound left-turn lane (will be included with street construction/in the cross section)	Lorson Ranch
26	Southbound right-turn deceleration lane	Southbound right-turn deceleration lane on Collector "A" approaching site access	right turn volume > 50 vehicles per hour		NOT REQUIRED
27	Northbound left-turn lane	Northbound left-turn lane on Collector "A" approaching site access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch
28	Northbound right-turn deceleration lane	Northbound right-turn deceleration lane on Collector "A" approaching future access	right turn volume > 50 vehicles per hour	Include with street construction	Lorson Ranch

Table 4
Page 2 of 2
The Hills at Lorson Ranch
Roadway Improvements

Item #	Improvement	Improvement Description With Details	Trigger	Timing	Responsibility
Intersection #10 Fontaine/Collector "A"					
29	Eastbound left-turn lane	Eastbound left-turn lane on Fontaine approaching Collector "A" (recommended length: 355' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch
30	Eastbound right-turn deceleration lane	Eastbound right-turn deceleration lane on Fontaine approaching Collector "A" (recommended length: 155' turn lane plus 200' taper)	right turn volume > 50 vehicles per hour	With this development	Lorson Ranch
31	Westbound left-turn lane	Westbound left-turn lane on Fontaine approaching Collector "A" (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	NOT REQUIRED A left-turn lane is included in the standard Urban Non-Residential Collector Cross Section	Lorson Ranch
32	Westbound right-turn deceleration lane	Westbound right-turn deceleration lane on Fontaine approaching Collector "A" (recommended length: 155' turn lane plus 200' taper)	right turn volume > 50 vehicles per hour	NOT REQUIRED - but will be included	Lorson Ranch
33	Northbound left-turn lane	Northbound left-turn lane on Collector "A" approaching Fontaine (recommended length: 355' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch
34	Northbound right-turn deceleration lane	Northbound right-turn deceleration lane on Collector "A" approaching Fontaine (recommended length: 155' turn lane plus 200' taper)	right turn volume > 50 vehicles per hour	NOT REQUIRED - but will be included	Lorson Ranch
35	Southbound left-turn lane	Southbound left-turn lane on Collector "A" approaching Fontaine (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	NOT REQUIRED short left-turn bay recommended to match the northbound left-turn lane (will be included with street construction/in the cross section)	Lorson Ranch
36	Southbound right-turn deceleration lane	Southbound right-turn deceleration lane on Collector "A" approaching Fontaine (recommended length: 155' turn lane plus 200' taper)	right turn volume > 50 vehicles per hour	With this development	Lorson Ranch
37	Traffic Control Change	Convert from Two-Way, Stop-Sign Control to All-Way, Stop-Sign Control	When the level of service for any movement degrades below LOS D	Buildout of Lorson Ranch	Lorson Ranch
Intersection #11 Collector "A"/PA E/PA F					
38	Southbound left-turn lane	Southbound left-turn lane on Collector "A" approaching future access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	Include with street construction	Lorson Ranch
39	Southbound right-turn deceleration lane	Southbound right-turn deceleration lane on Collector "A" approaching site access	right turn volume > 50 vehicles per hour	NOT REQUIRED	
40	Northbound left-turn lane	Northbound left-turn lane on Collector "A" approaching site access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch
41	Northbound right-turn deceleration lane	Northbound right-turn deceleration lane on Collector "A" approaching future access	right turn volume > 50 vehicles per hour	NOT REQUIRED	
Intersection #12 Collector "A"/PA G/PA H					
42	Southbound left-turn lane	Southbound left-turn lane on Collector "A" approaching future access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	Include with street construction	Lorson Ranch
43	Southbound right-turn deceleration lane	Southbound right-turn deceleration lane on Collector "A" approaching site access	right turn volume > 50 vehicles per hour	NOT REQUIRED	
44	Northbound left-turn lane	Northbound left-turn lane on Collector "A" approaching site access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	NOT REQUIRED but needed to match southbound left-turn lane	Lorson Ranch
45	Northbound right-turn deceleration lane	Northbound right-turn deceleration lane on Collector "A" approaching future access	right turn volume > 50 vehicles per hour	NOT REQUIRED	
Intersection #13 Lorson/Marksheffel					
46	Traffic Control Change	Convert to channelized "T" intersection or modern roundabout	When the level of service for any movement degrades below LOS D	With this development	Lorson Ranch
47	Traffic Control Change	Convert to signal controlled channelized "T" intersection or standard signal control	When the level of service for any movement degrades below LOS D and/or traffic signal warrants are met	Buildout of Lorson Ranch	Lorson Ranch
Intersection #14 Old Glory/Lorson					
No improvements anticipated in the 2040 planning horizon					
Intersection #15 Lamprey/Lorson					
48	Westbound right-turn deceleration lane	Westbound right-turn deceleration lane on Lorson approaching Lamprey (recommended length: 155' turn lane plus 200' taper)	right turn volume > 50 vehicles per hour	Buildout of Lorson Ranch	Lorson Ranch
Intersection #16 Lorson/PA G					
49	Westbound right-turn deceleration lane	Westbound right-turn deceleration lane on Lorson approaching site access	right turn volume > 50 vehicles per hour	NOT REQUIRED	
50	Eastbound left-turn lane	Eastbound left-turn lane on Lorson approaching the site access (recommended length: 205' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch
Intersection #17 Lorson/Collector "A"					
51	Westbound right-turn deceleration lane	Westbound right-turn deceleration lane on Lorson approaching Collector "A"	right turn volume > 50 vehicles per hour	NOT REQUIRED - but will be included	Lorson Ranch
52	Southbound left-turn lane	Southbound left-turn lane on Collector "A" approaching Lorson (recommended length: 205 plus 200' taper)	left turn volume > 25 vehicles per hour	NOT REQUIRED - but will be included	Lorson Ranch
53	Eastbound left-turn lane	Eastbound left-turn lane on Lorson approaching Collector "A" (recommended length: 355' turn lane plus 200' taper)	left turn volume > 25 vehicles per hour	With this development	Lorson Ranch

Appendix Tables 1-3



Appendix Table 1
Area Traffic Impact Studies by LSC
The Hills at Lorson Ranch

Study	Date
Lorson Ranch Sketch Plan Amendment 2 Traffic Impact and Access Analysis	December 17, 2018
Carriage Meadows South at Lorson Ranch Filing No. 1 Updated Traffic Impact Analysis	August 14, 2017
Carriage Meadows North at Lorson Ranch Filing No. 1 Updated Traffic Impact Analysis	January 29, 2017
Lorson Ranch East Updated Traffic Impact and Access Analysis	November 9, 2017
Lorson Ranch East Filing No. 1 Transportation Memorandum	May 2, 2018
Lorson Ranch East Filing No. 2 Transportation Memorandum	September 24, 2018
Lorson Ranch East Filing No. 3 Transportation Memorandum	January 22, 2019
Lorson Ranch East Filing No. 4 Transportation Memorandum	March 12, 2019
Lorson Ranch PK-8 School Traffic Impact and Access Analysis	October 4, 2018
Creekside at Lorson Ranch Filing No. 1 Traffic Impact and Access Analysis	October 28, 2018
Creekside at Lorson Ranch Filing No. 1 Transportation Memorandum	April 26, 2019
Carriage Meadows Townhomes Traffic Impact Analysis	February 25, 2020
Fontaine/Old Glory Intersection Analysis	February 27, 2020
Ponderosa at Lorson Ranch Filing No. 3 Transportation Memorandum	February 27, 2020
The Glen at Widefield Filing Nos. 11 & 12	March 11, 2020
Creekside South at Lorson Ranch Updated Transportation Memorandum	May 5, 2020
<i>Source: LSC Transportation Consultants, Inc. (May 2020)</i>	

**Appendix Table 2
The Hills at Lorson Ranch
Lorson Ranch Trip Generation Estimate**

Traffic Zone		Land Use Data					Trip Generation Rates ⁽¹⁾				Raw ITE Trip Generation (Individual Driveway Trips)					School Internal Trips ⁽²⁾					Retail Internal Trips ⁽³⁾					Pass-by ⁽³⁾ (%)	Pass-by Trips					Total New External Trips						
											Daily		AM Peak Hour		PM Peak Hour		Daily		AM Peak Hour		PM Peak Hour		Daily		AM Peak Hour		PM Peak Hour		Daily		AM Peak Hour		PM Peak Hour		Daily		AM Peak Hour	
							In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In		Out	In	Out	In	Out	In	Out	In	Out	In	Out	
RESIDENTIAL																																						
All Residential North of Lorson Boulevard "Between the Creeks"																																						
8	Ponderosa	Single-Family Detached Housing	210	102	DU ⁽⁴⁾	9.44	0.19	0.56	0.62	0.37	963	19	57	64	37	27	2	5	1	1	100	0	2	5	2	0%	0	0	0	0	0	0	0	836	17	50	58	34
9	Ponderosa	Single-Family Detached Housing	210	102	DU	9.44	0.19	0.56	0.62	0.37	963	19	57	64	37	27	2	5	1	1	100	0	2	5	2	0%	0	0	0	0	0	0	0	836	17	50	58	34
10	Meadows Fil 1	Single-Family Detached Housing	210	97	DU	9.44	0.19	0.56	0.62	0.37	916	18	54	60	36	25	2	4	1	1	95	0	2	5	2	0%	0	0	0	0	0	0	0	796	16	48	54	33
11	Meadows Fil 3	Single-Family Detached Housing	210	51	DU	9.44	0.19	0.56	0.62	0.37	481	9	28	32	19	13	1	2	1	0	50	0	1	2	1	0%	0	0	0	0	0	0	0	418	8	25	29	18
12	Meadows Fil 3	Single-Family Detached Housing	210	87	DU	9.44	0.19	0.56	0.62	0.37	821	16	48	54	32	23	2	4	1	0	86	0	1	4	2	0%	0	0	0	0	0	0	0	712	14	43	49	30
3	The Meadows Fil 2	Single-Family Detached Housing	210	109	DU	9.44	0.19	0.56	0.62	0.37	1,029	20	60	68	40	28	2	5	1	1	107	1	2	5	2	0%	0	0	0	0	0	0	0	894	17	53	62	37
13	Allegiant Fil 1	Single-Family Detached Housing	210	97	DU	9.44	0.19	0.56	0.62	0.37	916	18	54	60	36	25	2	4	1	1	95	0	2	5	2	0%	0	0	0	0	0	0	0	796	16	48	54	33
5	Buffalo Crossing	Single-Family Detached Housing	210	204	DU	9.44	0.19	0.56	0.62	0.37	1,926	38	113	127	75	53	5	9	2	1	201	1	3	10	5	0%	0	0	0	0	0	0	0	1,672	32	101	115	69
	Townhomes at Lorson Ranch	Multifamily Housing	220	46	DU	7.32	0.11	0.35	0.35	0.21	337	5	16	16	10	9	1	2	0	0	35	0	1	2	1	0%	0	0	0	0	0	0	0	293	4	13	14	9
6	Pioneer Landing	Single-Family Detached Housing	210	59	DU	9.44	0.19	0.56	0.62	0.37	557	11	33	37	22	15	1	3	1	0	58	0	1	3	1	0%	0	0	0	0	0	0	0	484	10	29	33	21
7	Pioneer Landing	Single-Family Detached Housing	210	59	DU	9.44	0.19	0.56	0.62	0.37	557	11	33	37	22	15	1	3	1	0	58	0	1	3	1	0%	0	0	0	0	0	0	0	484	10	29	33	21
15	Meadows Future Fil 4 West	Single-Family Detached Housing	210	110	DU	9.44	0.19	0.56	0.62	0.37	1,038	20	61	69	40	29	2	5	1	1	108	1	2	5	2	0%	0	0	0	0	0	0	0	901	17	54	63	37
16	Meadows Future Fil 4 East	Single-Family Detached Housing	210	126	DU	9.44	0.19	0.56	0.62	0.37	1,189	23	70	79	46	33	3	6	1	1	124	1	2	6	3	0%	0	0	0	0	0	0	0	1,032	19	62	72	42
18	Ponderosa Fil 3	Multifamily Housing	220	90	DU	7.32	0.11	0.35	0.35	0.21	659	10	32	32	19	18	2	3	1	0	69	0	1	3	2	0%	0	0	0	0	0	0	0	572	8	28	28	17
39	Pioneer Landing Fil 2	Single-Family Detached Housing	210	170	DU	9.44	0.19	0.56	0.62	0.37	1,605	31	94	106	62	44	4	8	2	1	167	1	3	8	4	0%	0	0	0	0	0	0	0	1,394	26	83	96	57
Total All Residential "Between the Creeks"			1,509	DU							13,957	268	810	905	533	384	32	68	16	9	1,453	5	26	71	32							12,120	231	716	818	492		
Residential Adjacent to Marksheffel																																						
1	Carriage Meadows North	Single-Family Detached Housing	210	155	DU	9.44	0.19	0.56	0.62	0.37	1,463	29	86	97	57	40	3	7	2	1	152	1	2	8	3	0%	0	0	0	0	0	0	0	1,271	25	77	87	53
147	Carriage Meadows Town Homes	Multifamily Housing	220	49	DU	7.32	0.11	0.35	0.35	0.21	359	5	17	17	10	10	1	2	0	0	37	0	1	2	1	0%	0	0	0	0	0	0	0	312	4	14	15	9
47	Carriage Meadows South	Single-Family Detached Housing	210	86	DU	9.44	0.19	0.56	0.62	0.37	812	16	48	54	32	22	2	4	1	0	85	0	1	4	2	0%	0	0	0	0	0	0	0	705	14	43	49	30
247		Single-Family Detached Housing	210	51	DU	9.44	0.19	0.56	0.62	0.37	481	9	28	32	19	13	1	2	1	0	50	0	1	2	1	0%	0	0	0	0	0	0	0	418	8	25	29	18
347		Single-Family Detached Housing	210	97	DU	9.44	0.19	0.56	0.62	0.37	916	18	54	60	36	25	2	4	1	1	95	0	2	5	2	0%	0	0	0	0	0	0	0	796	16	48	54	33
Total All Residential Adjacent to Marksheffel			438	DU							4,031	77	233	260	154	110	9	19	5	2	419	1	7	21	9							3,502	67	207	234	143		
Cumulative Total			1,947	DU							17,988	345	1,043	1,165	687	494	41	87	21	11	1,872	6	33	92	41							15,622	298	923	1,052	635		
Lorson Ranch East																																						
42	North of Fontaine	Single-Family Detached Housing	210	277	DU	9.44	0.19	0.56	0.62	0.37	2,615	51	154	173	101	72	6	13	3	2	272	1	4	13	6	0%	0	0	0	0	0	0	0	2,271	44	137	157	93
37	East of Lamprey	Single-Family Detached Housing	210	122	DU	9.44	0.19	0.56	0.62	0.37	1,152	23	68	76	45	32	3	6	1	1	120	1	2	6	3	0%	0	0	0	0	0	0	0	1,000	19	60	69	41
27	West of Lamprey	Single-Family Detached Housing	210	303	DU	9.44	0.19	0.56	0.62	0.37	2,860	56	168	189	111	79	7	14	3	2	298	1	5	15	7	0%	0	0	0	0	0	0	0	2,483	48	149	171	102
127	South of Lorson - West	Single-Family Detached Housing	210	76	DU	9.44	0.19	0.56	0.62	0.37	717	14	42	47	28	20	2	4	1	0	75	0	1	4	2	0%	0	0	0	0	0	0	0	622	12	37	42	26
227	South of Lorson - East	Single-Family Detached Housing	210	48	DU	9.44	0.19	0.56	0.62	0.37	453	9	27	30	18	13	1	2	0	0	47	0	1	2	1	0%	0	0	0	0	0	0	0	393	8	24	28	17
Lorson Ranch East			826	DU							7,797	153	459	515	303	216	19	39	8	5	812	3	13	40	19							6,769	131	407	467	279		
Cumulative Total			2,773	DU							25,785	498	1,502	1,680	990	710	60	126	29	16	2,684	9	46	132	60							22,391	362	1,123	1,285	771		
Creekside at Lorson Ranch																																						
26	Creekside East (Filing 1)	Single-Family Detached Housing	210	97	DU	9.44	0.19	0.56	0.62	0.37	916	18	54	60	36	25	2	4	1	1	95	0	2	5	2	0%	0	0	0	0	0	0	0	796	16	48	54	33
126	Creekside West (Filing 1)	Single-Family Detached Housing	210	138	DU	9.44	0.19	0.56	0.62	0.37	1,303	26	77	86	51	36	3	6	1	1	136	1	2	7	3	0%	0	0	0	0	0	0	0	1,131	22	69	78	47
327	Creekside South Tract B	Multifamily Housing	220	97	DU	7.32	0.11	0.35	0.35	0.21	710	10	34	34	20	20	2	3	1	0	74	0	1	4	2	0%	0	0	0	0	0	0	0	616	8	30	29	18
	Creekside South	Single-Family Detached Housing	210	200	DU	9.44	0.19	0.56	0.62	0.37	1,888	37	111	125	73	52	4	9	2	1	197	1	3	10	4	0%	0	0	0	0	0	0	0	1,639	32	99	113	68
Creekside at Lorson Ranch			532	DU							4,817	91	276	305	180	133	11	22	5	3	502	2	8	26	11							4,182	78	246	274	166		

Figures 1-10



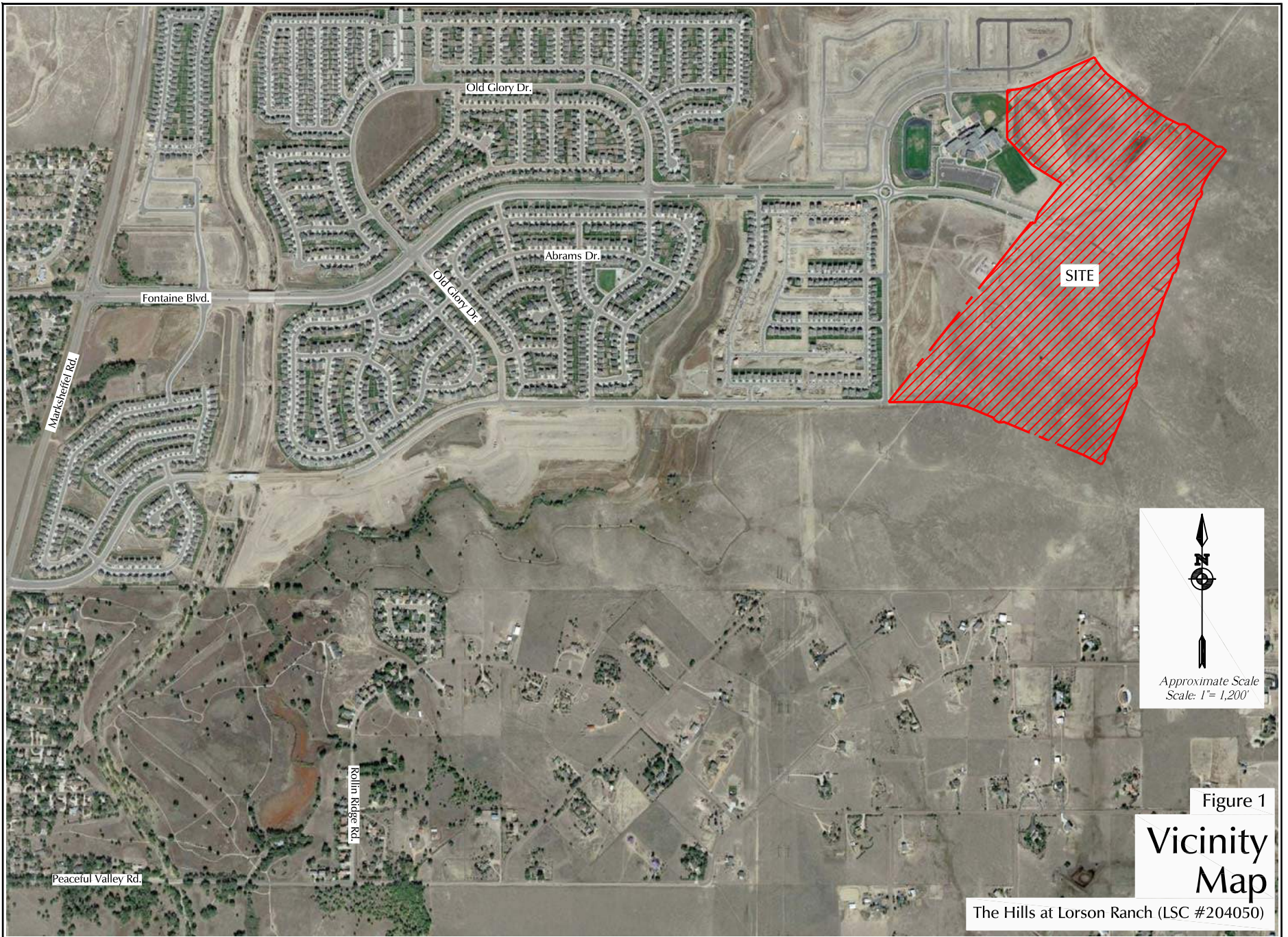


Figure 1

Vicinity Map

The Hills at Lorson Ranch (LSC #204050)

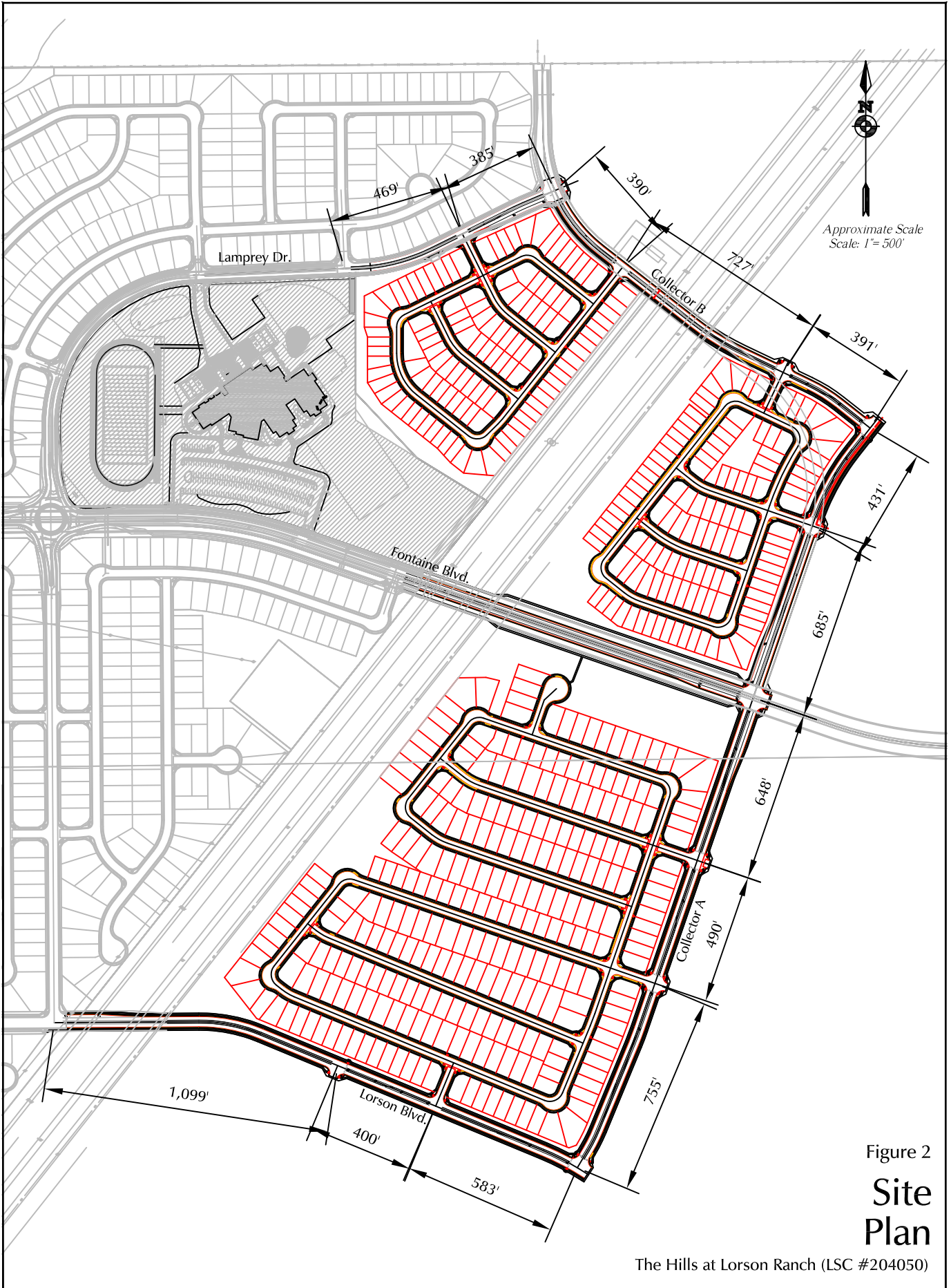
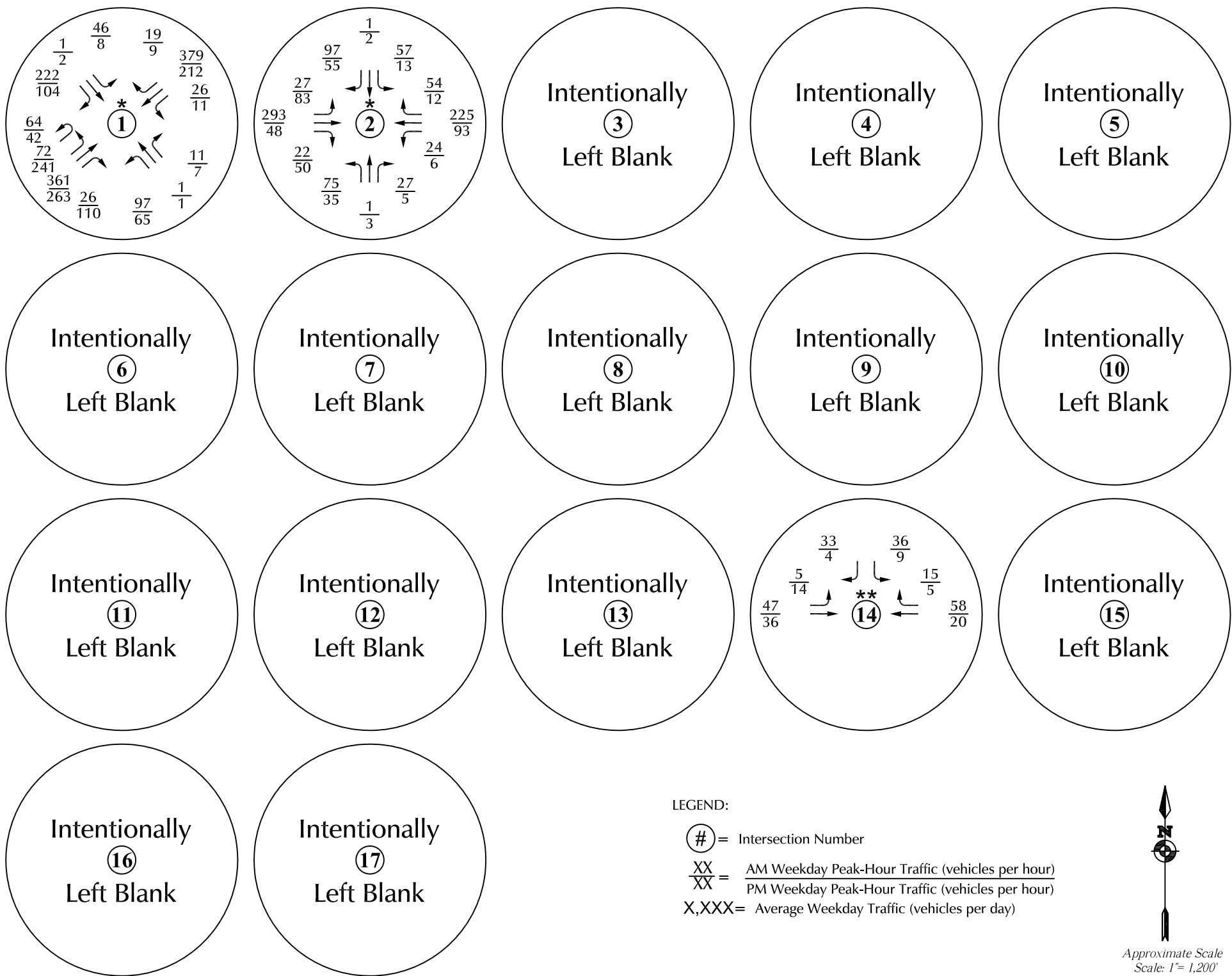


Figure 2
Site Plan

The Hills at Lorson Ranch (LSC #204050)

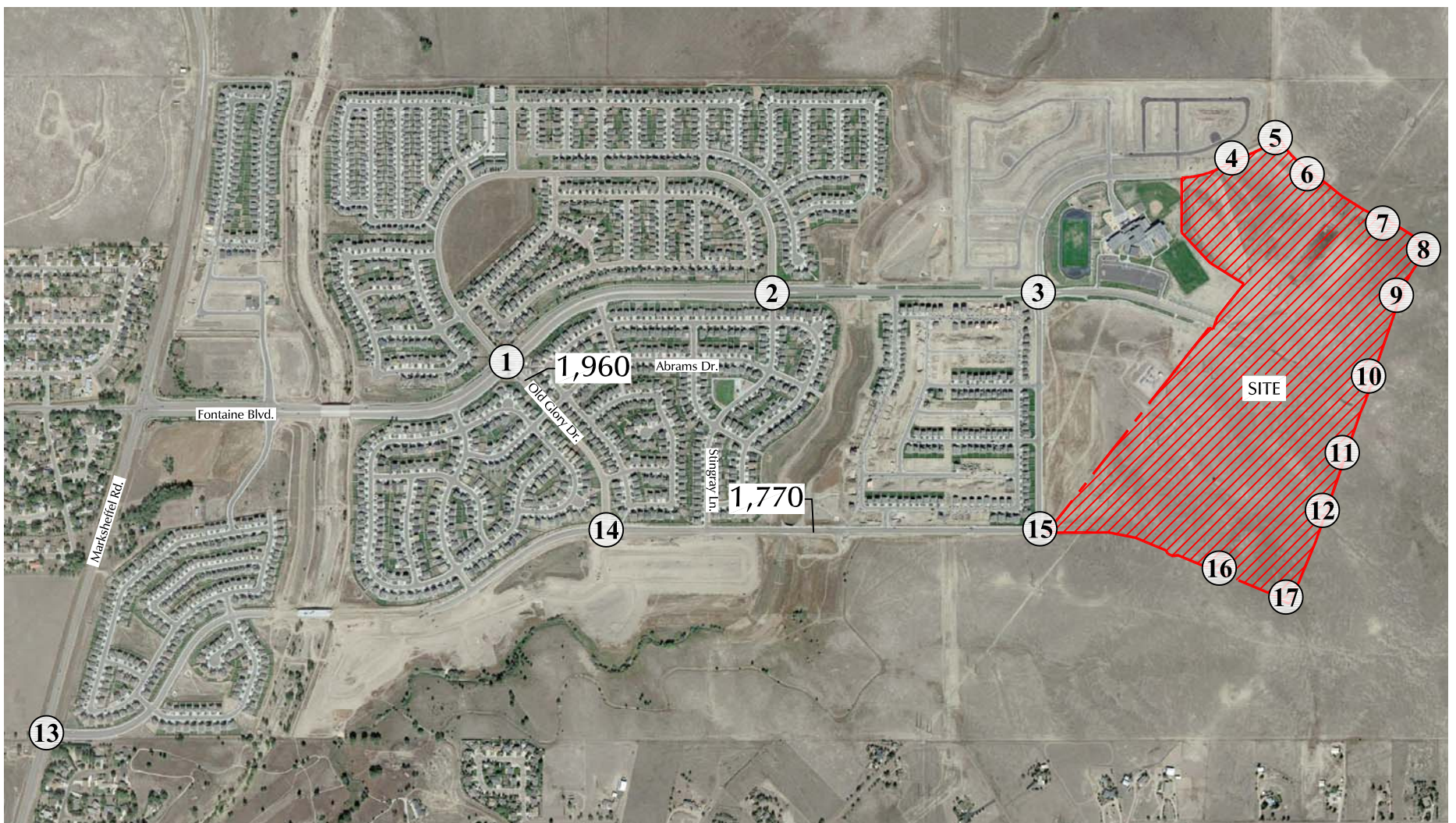


LEGEND:

- ① = Intersection Number
- $\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$
- X,XXX = Average Weekday Traffic (vehicles per day)



Approximate Scale
Scale: 1" = 1,200'



* Based on counts by LSC Oct 2019 (prior to completion of Lorson Boulevard across the east tributary).

** Based on counts by LSC March 2020 (following the completion of Lorson Boulevard across the east tributary)

Figure 3a
Existing Traffic

The Hills at Lorson Ranch (LSC #204050)

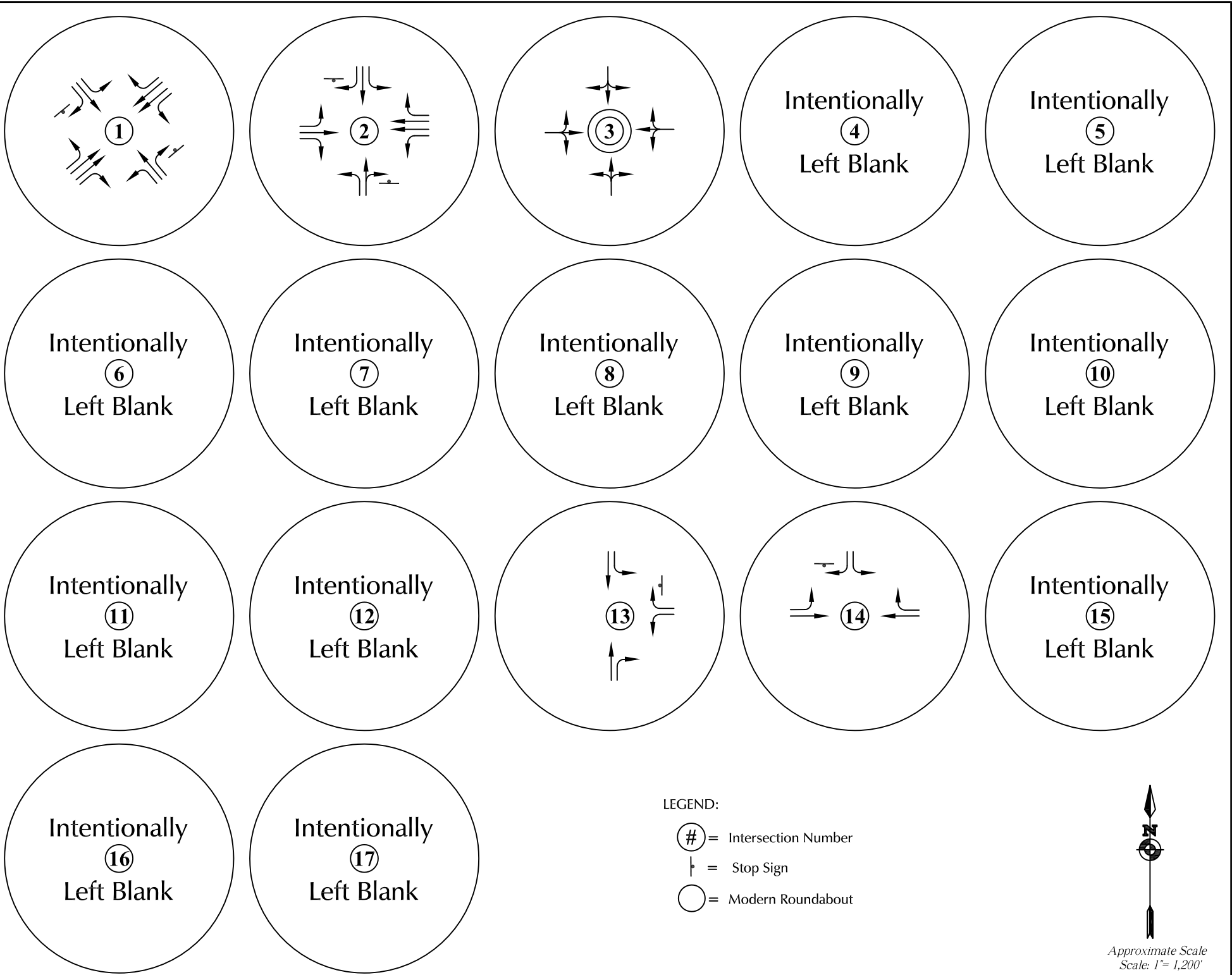


Figure 3b
**Existing Lane
 Geometry and Traffic Control**
 The Hills at Lorson Ranch (LSC #204050)

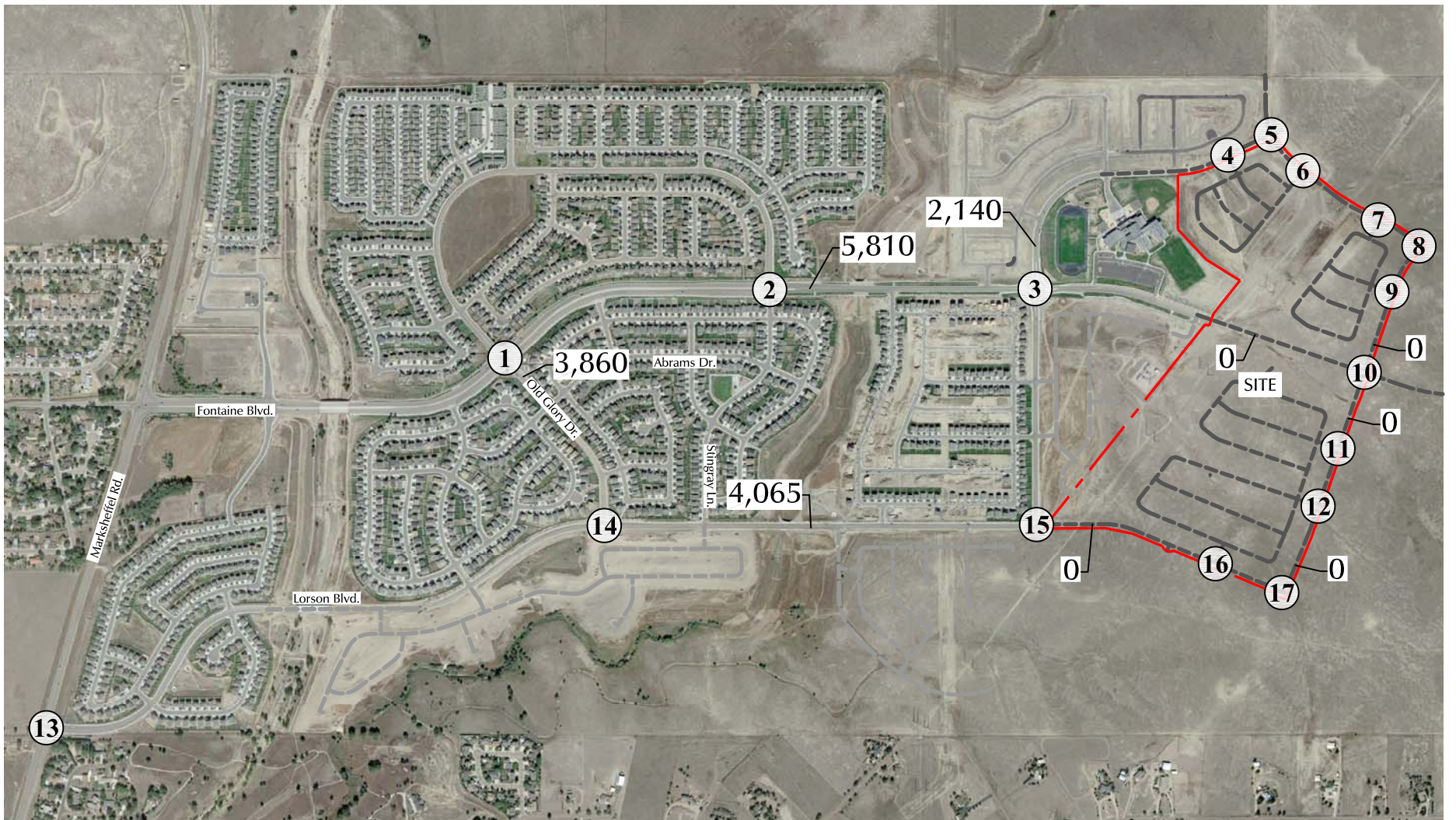
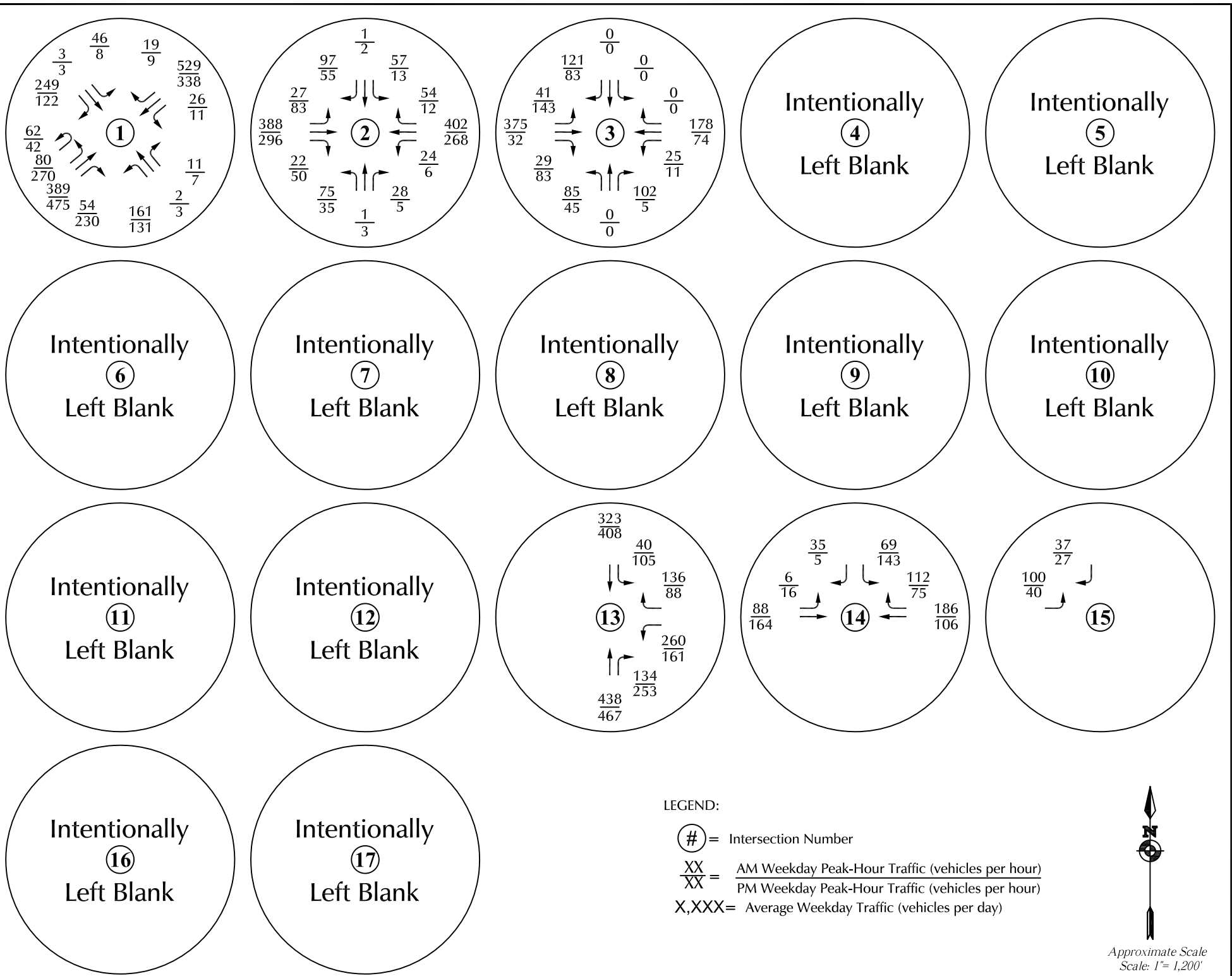


Figure 4a
**Short-Term
 Background Traffic**
 The Hills at Lorson Ranch (LSC #204050)

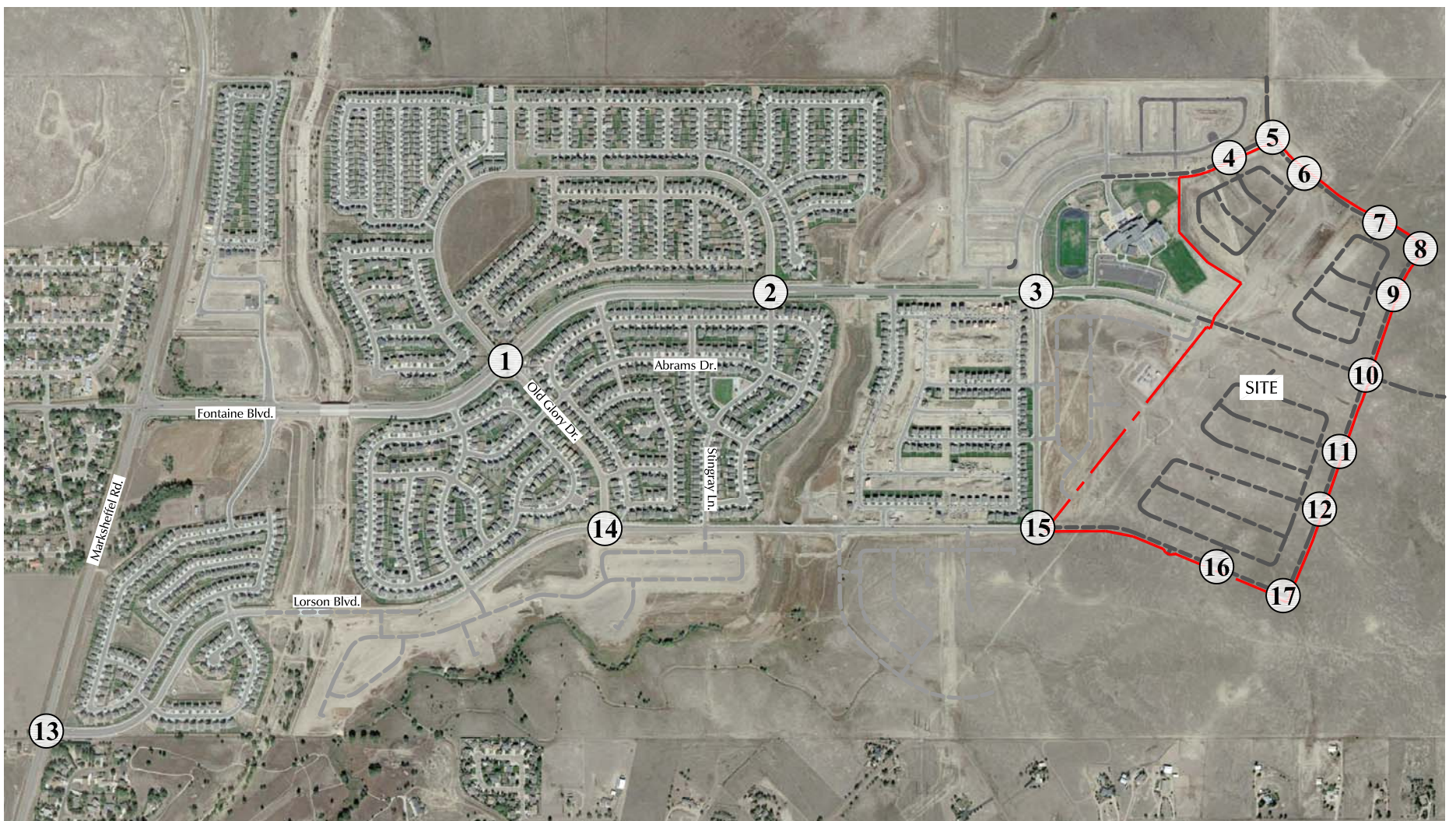
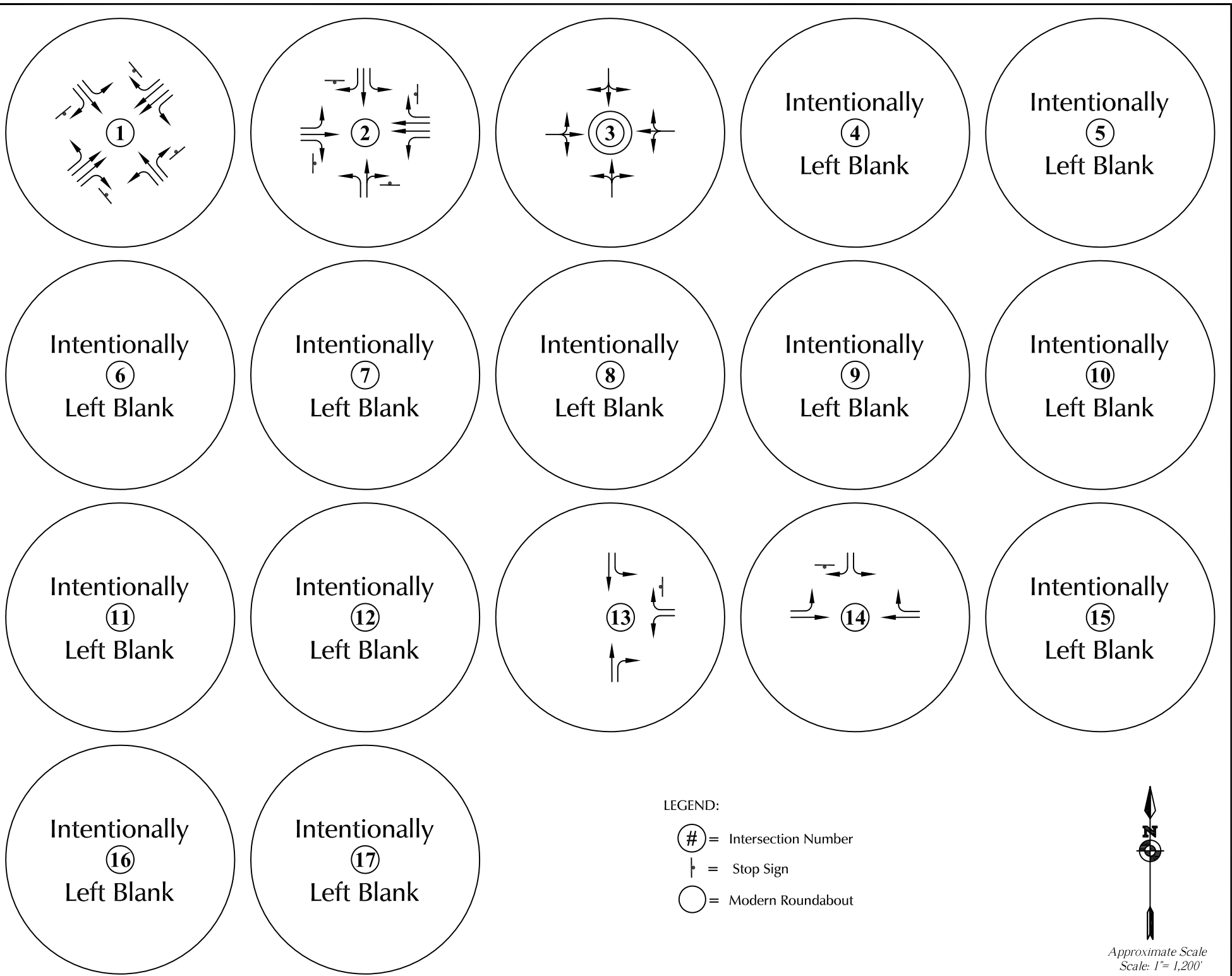


Figure 4b
**Short-Term Background Lane
 Geometry and Traffic Control**
 The Hills at Lorson Ranch (LSC #204050)

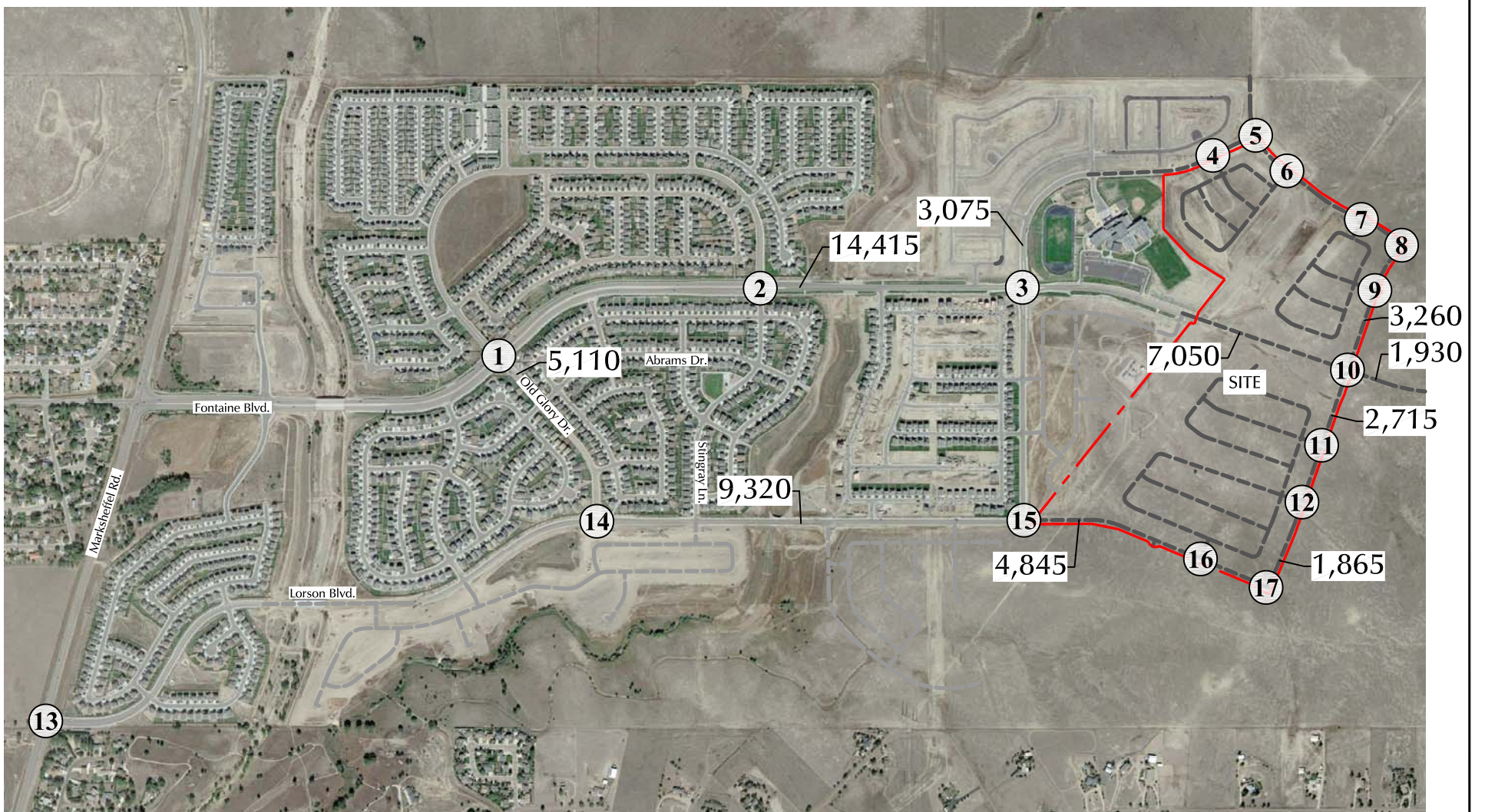
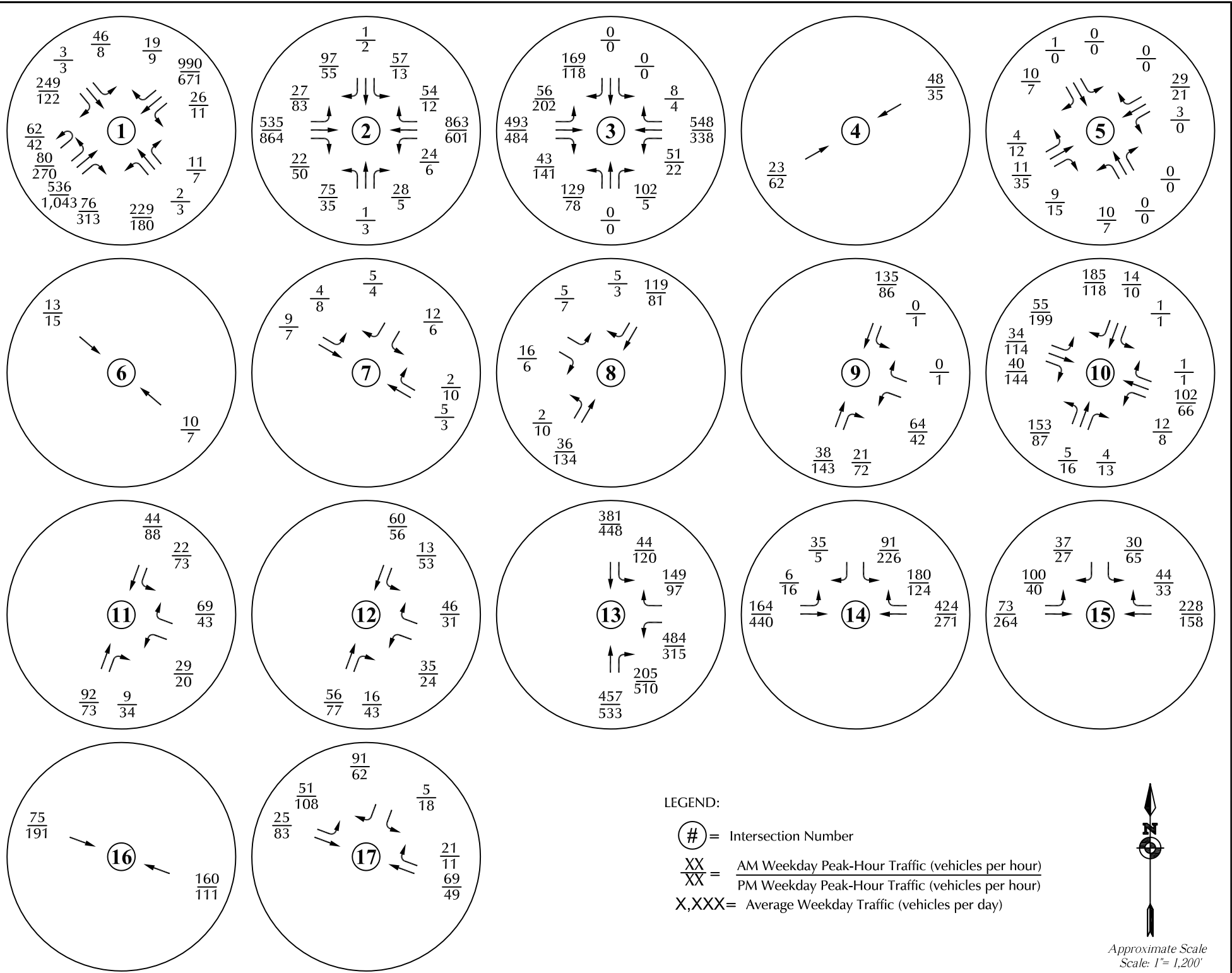


Figure 5a
**Year 2040
 Background Traffic**
 The Hills at Lorson Ranch (LSC #204050)

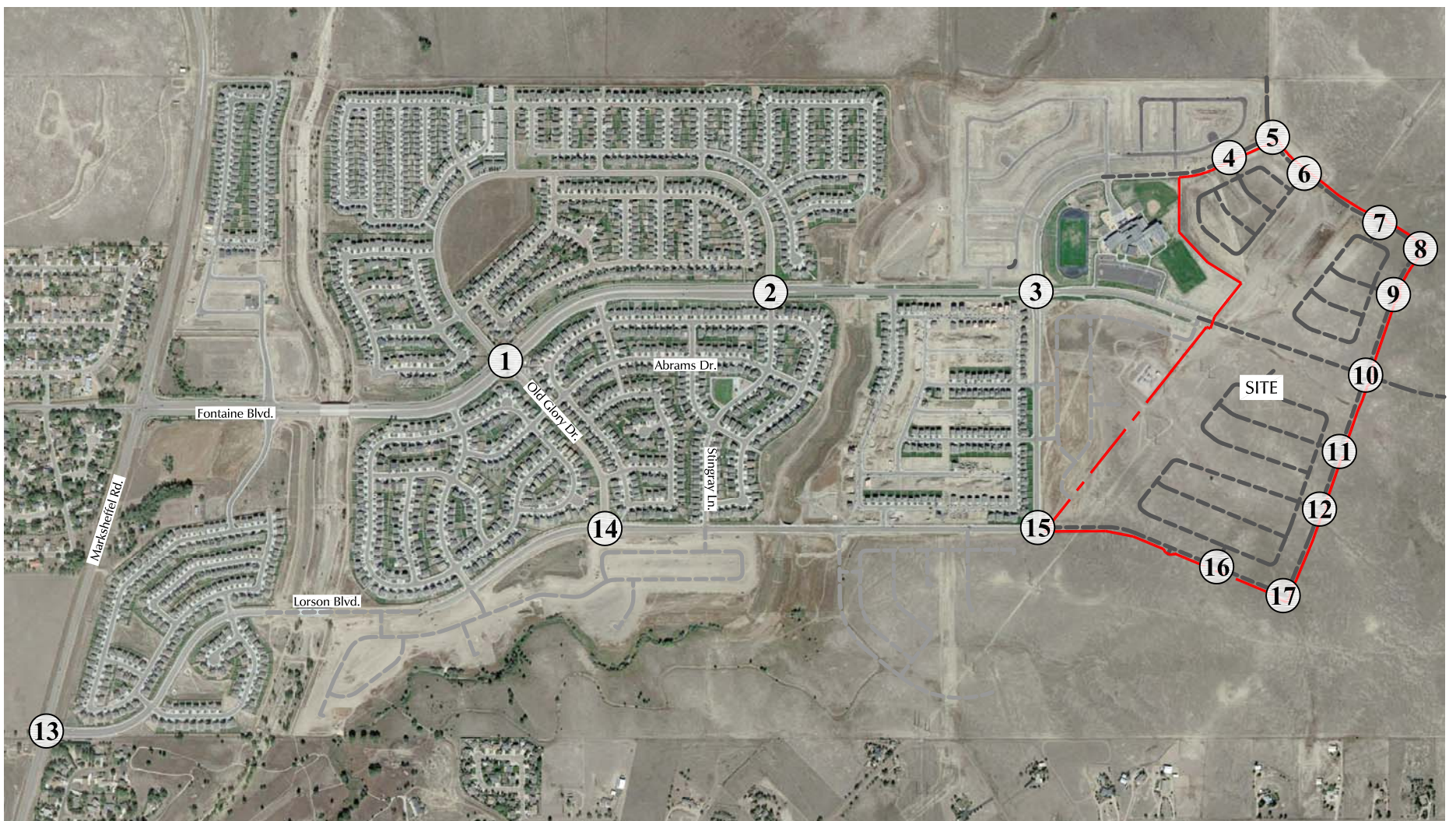
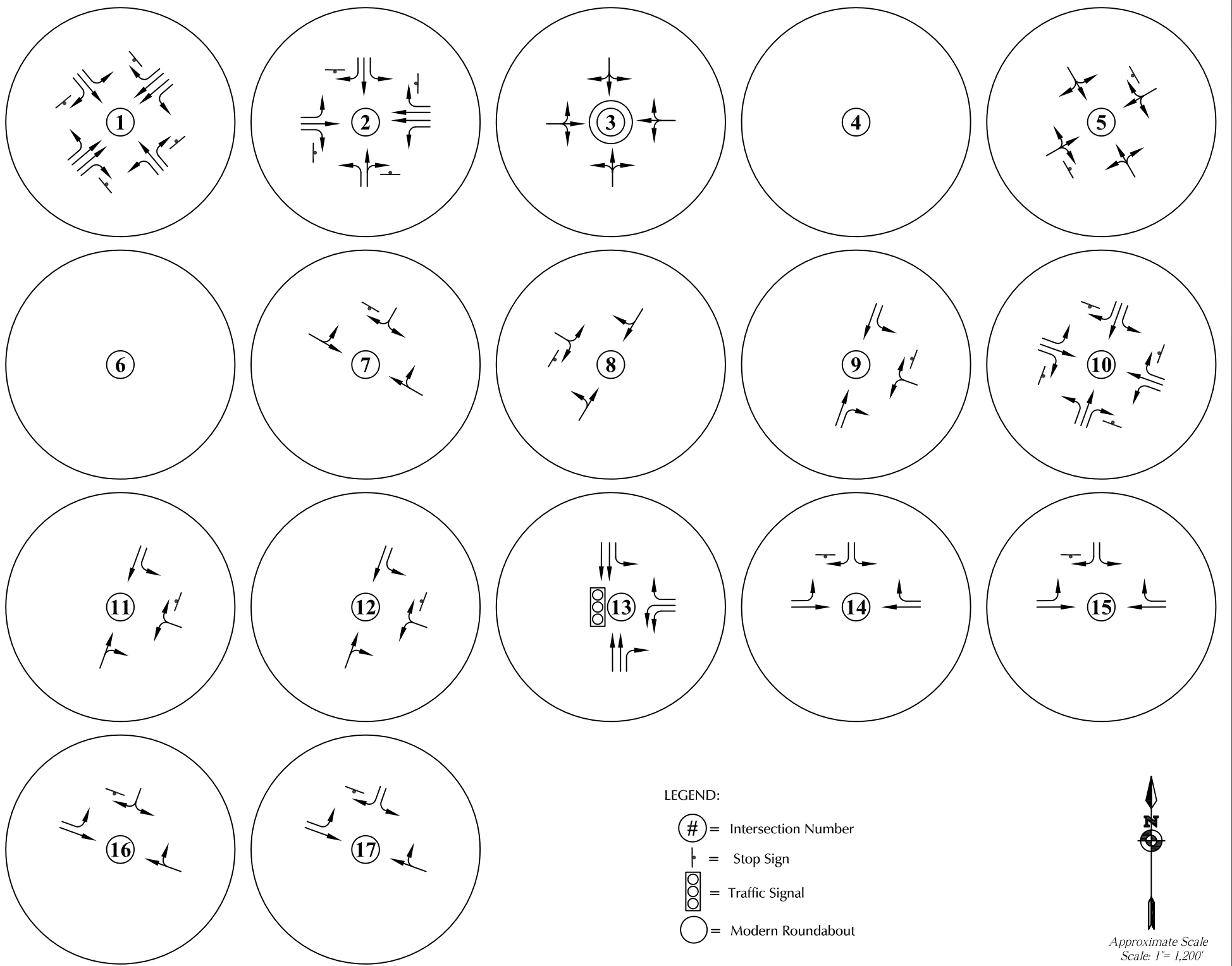


Figure 5b
**Year 2040 Background Lane
 Geometry and Traffic Control**
 The Hills at Lorson Ranch (LSC #204050)



* Assumes no trip distribution east or north of the greater Lorson Ranch boundary within the 20-year horizon.

Figure 6

Directional Distribution of Site-Generated Traffic

The Hills at Lorson Ranch (LSC #204050)

LEGEND:

 = Percent Directional Distribution

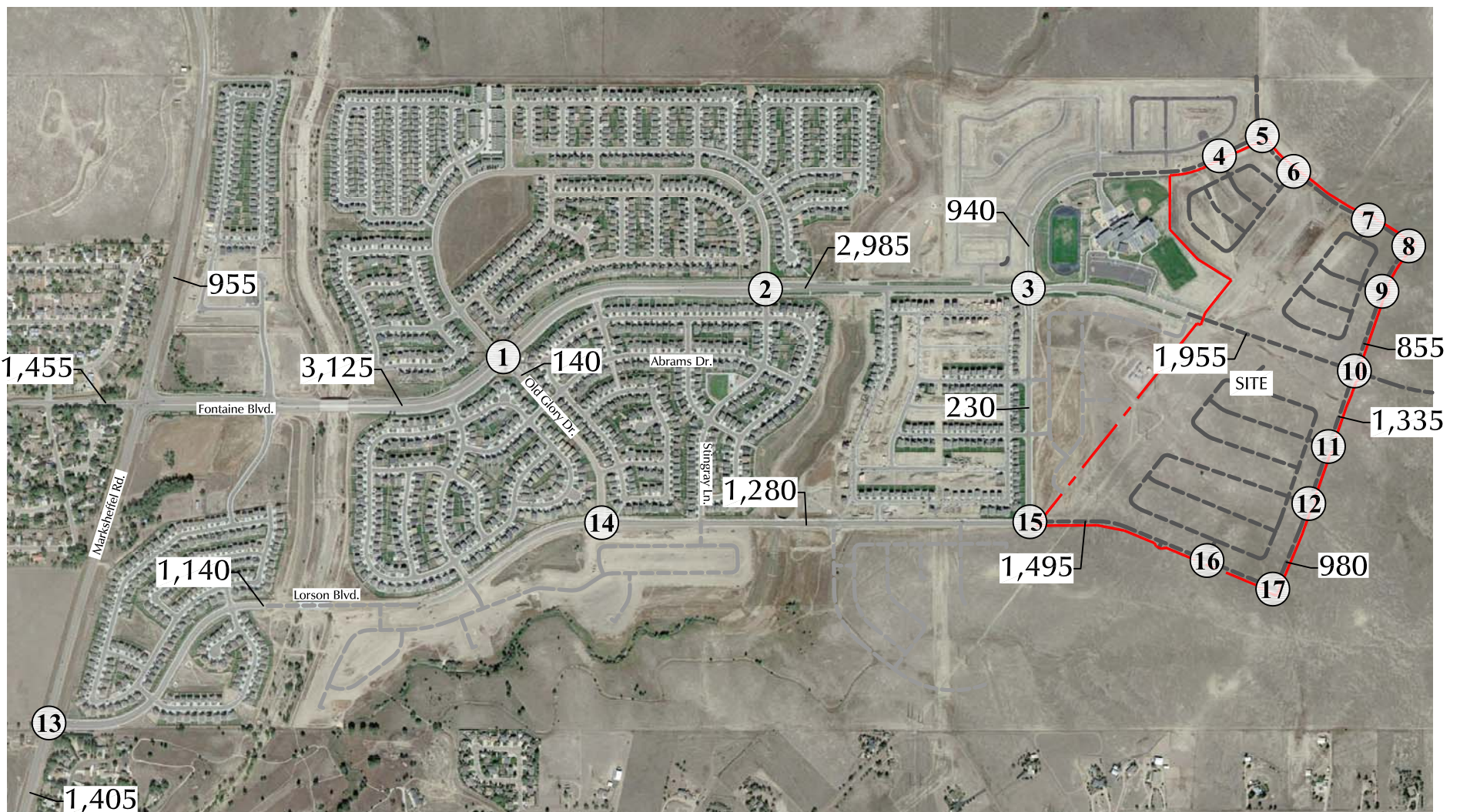
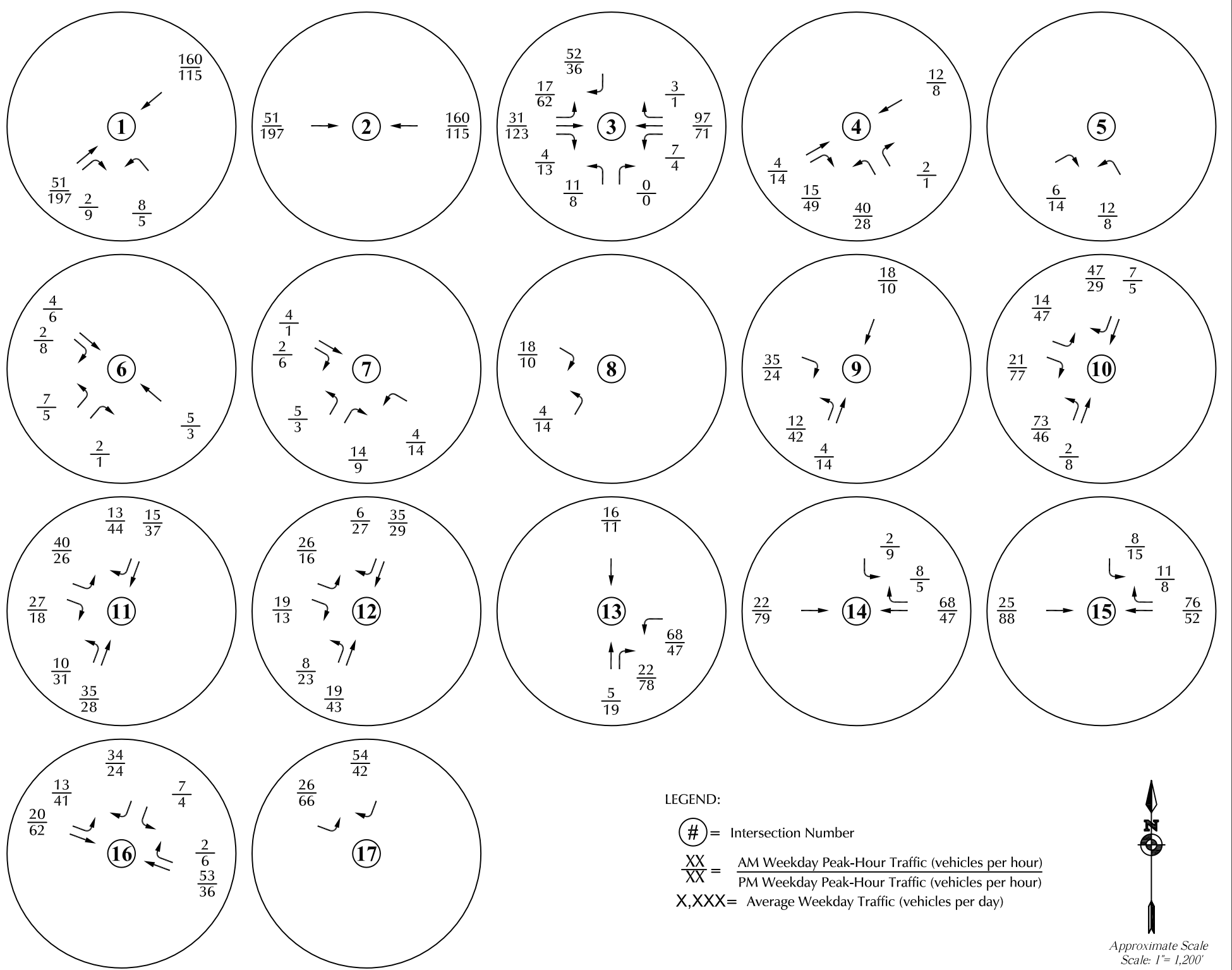


Figure 7
Assignment of Site-Generated Traffic
 The Hills at Lorson Ranch (LSC #204050)

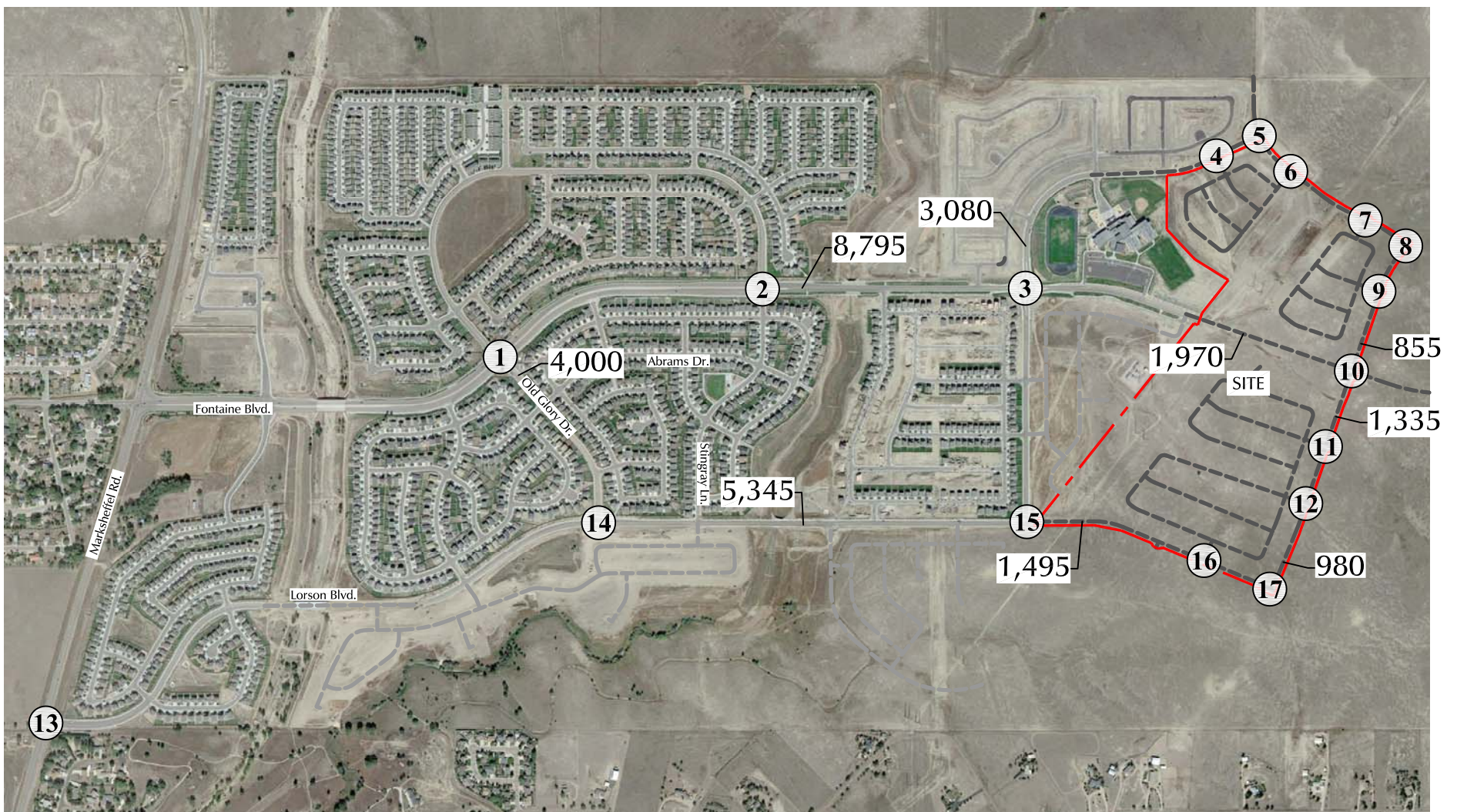
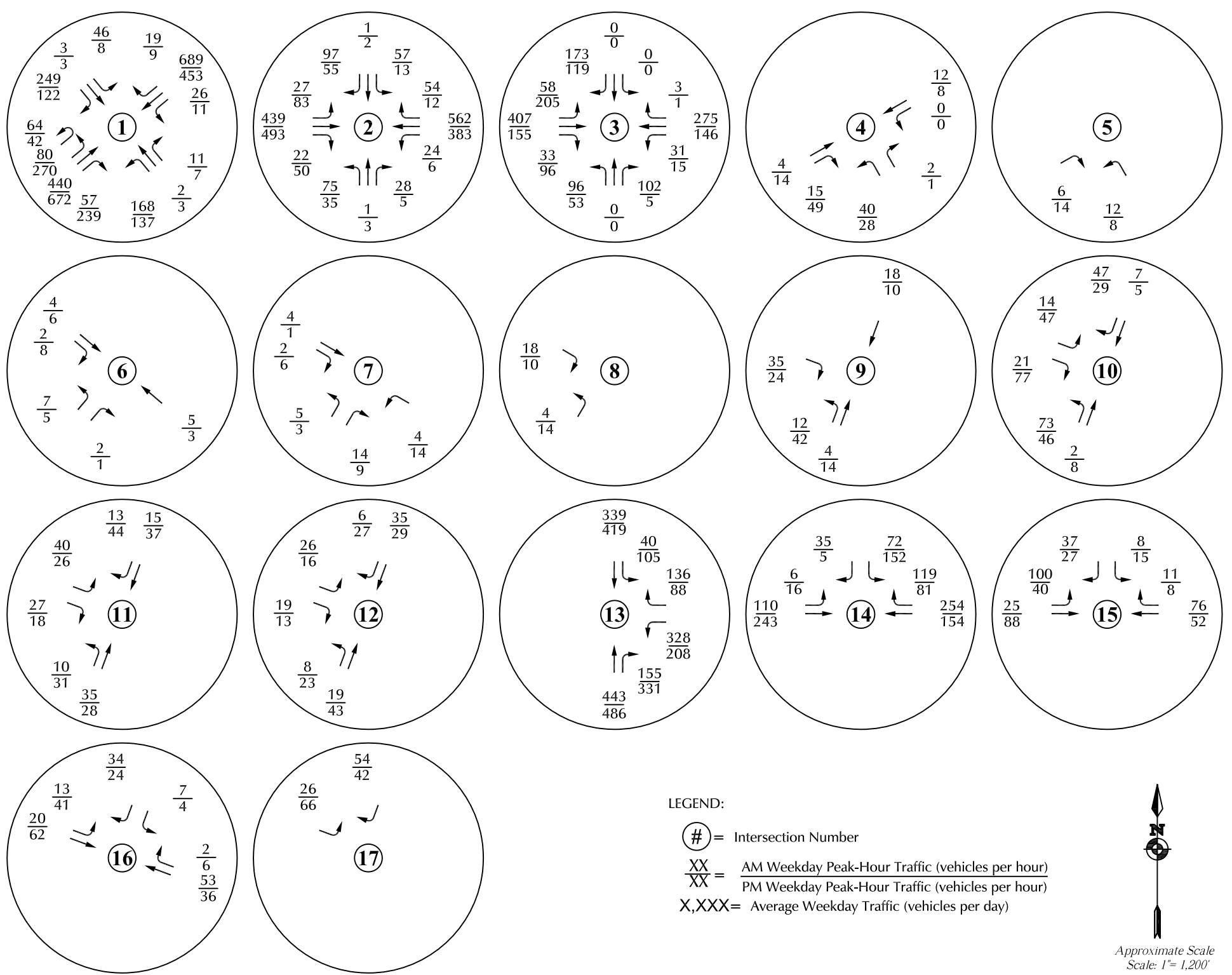


Figure 8a
**Short-Term
Total Traffic**

The Hills at Lorson Ranch (LSC #204050)

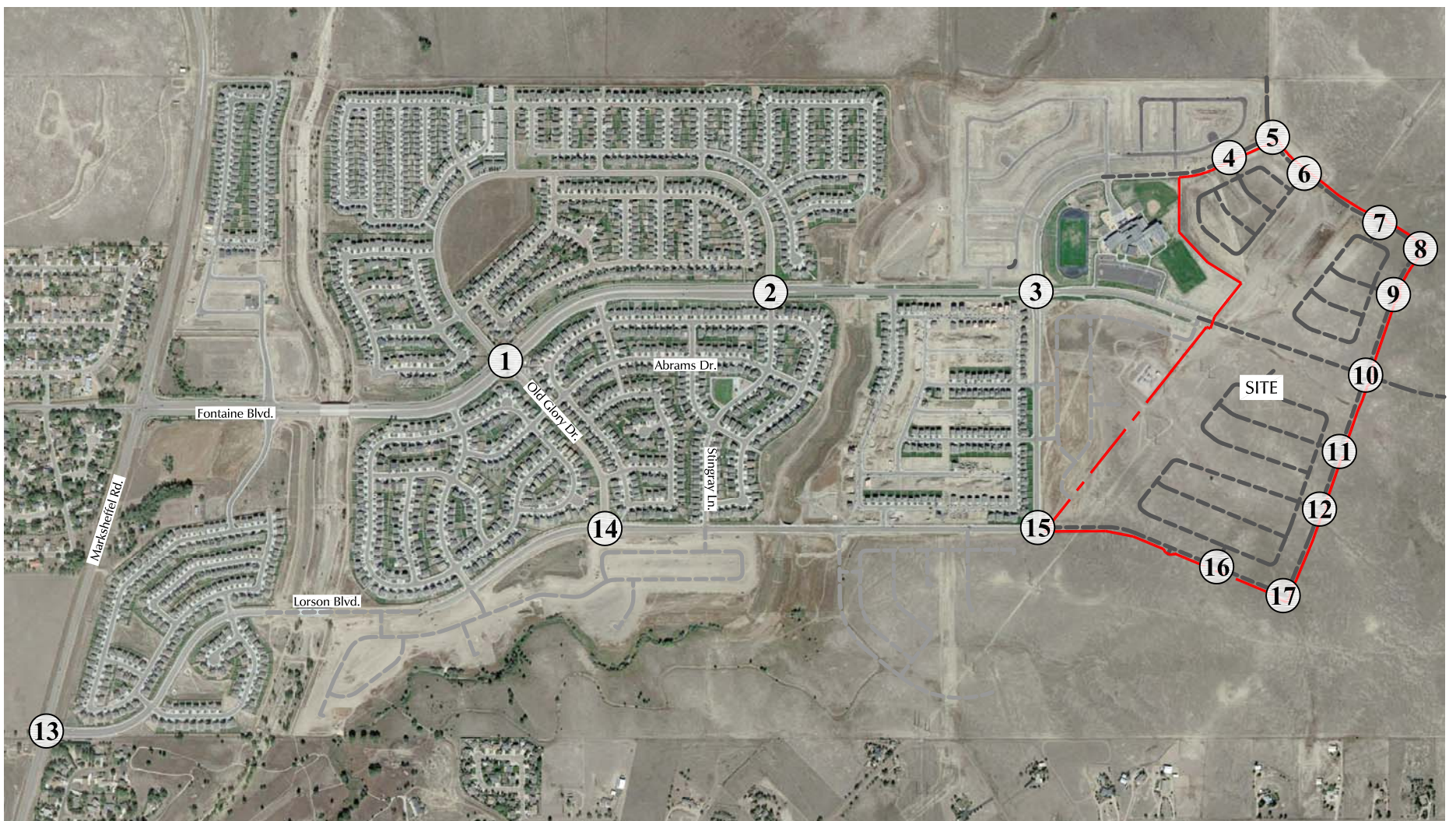
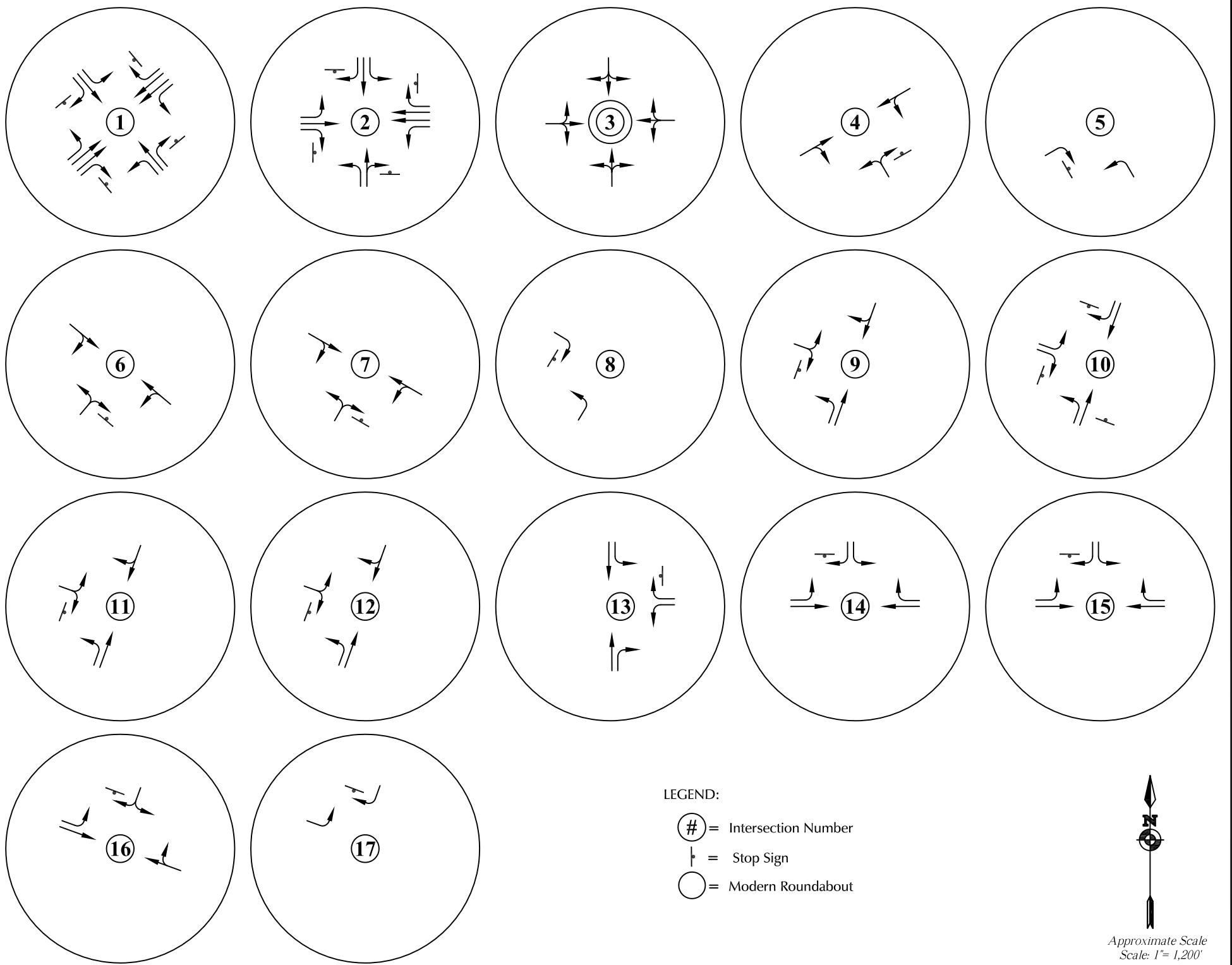


Figure 8b
**Short-Term Total Lane
 Geometry and Traffic Control**
 The Hills at Lorson Ranch (LSC #204050)

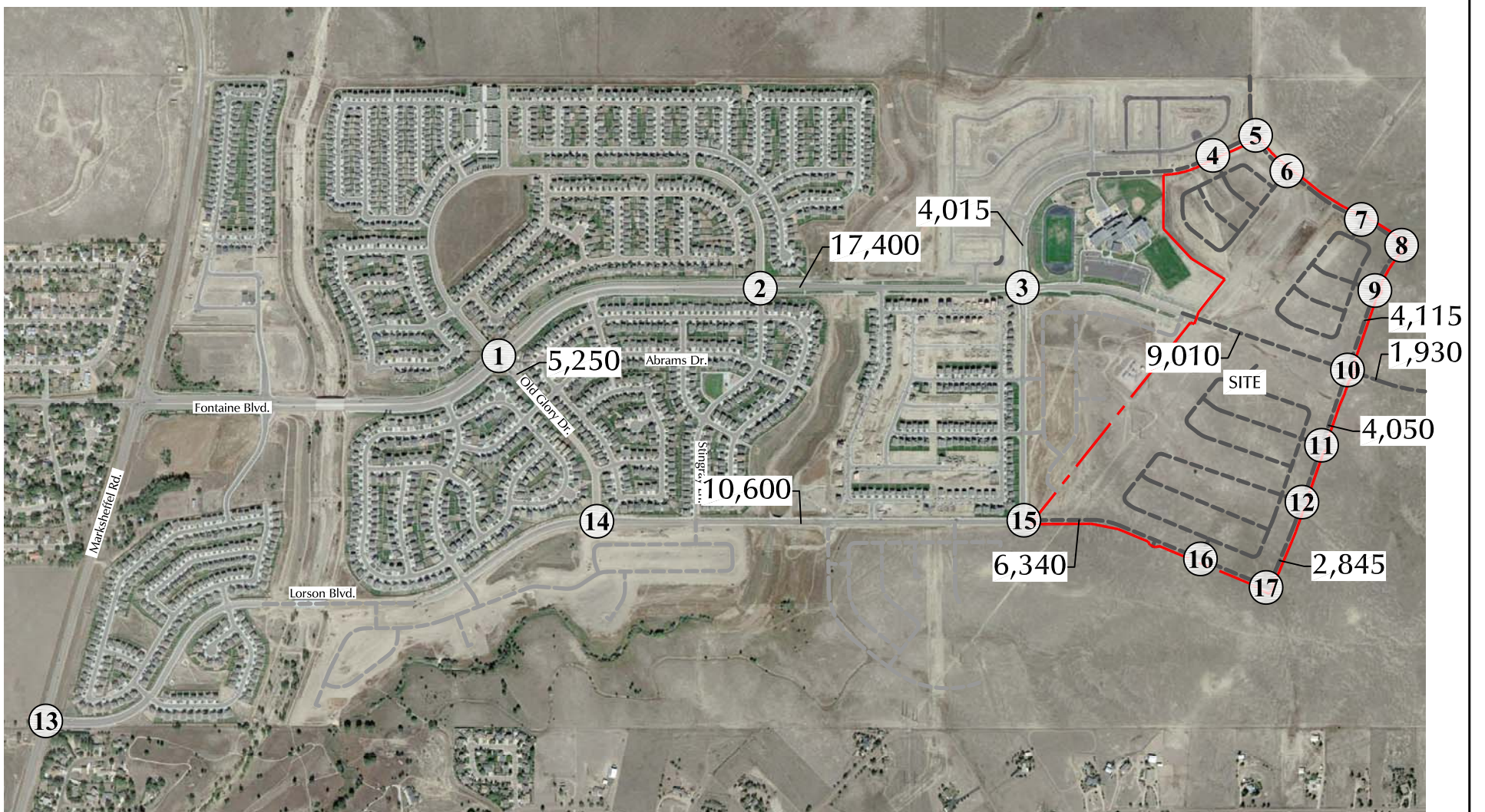
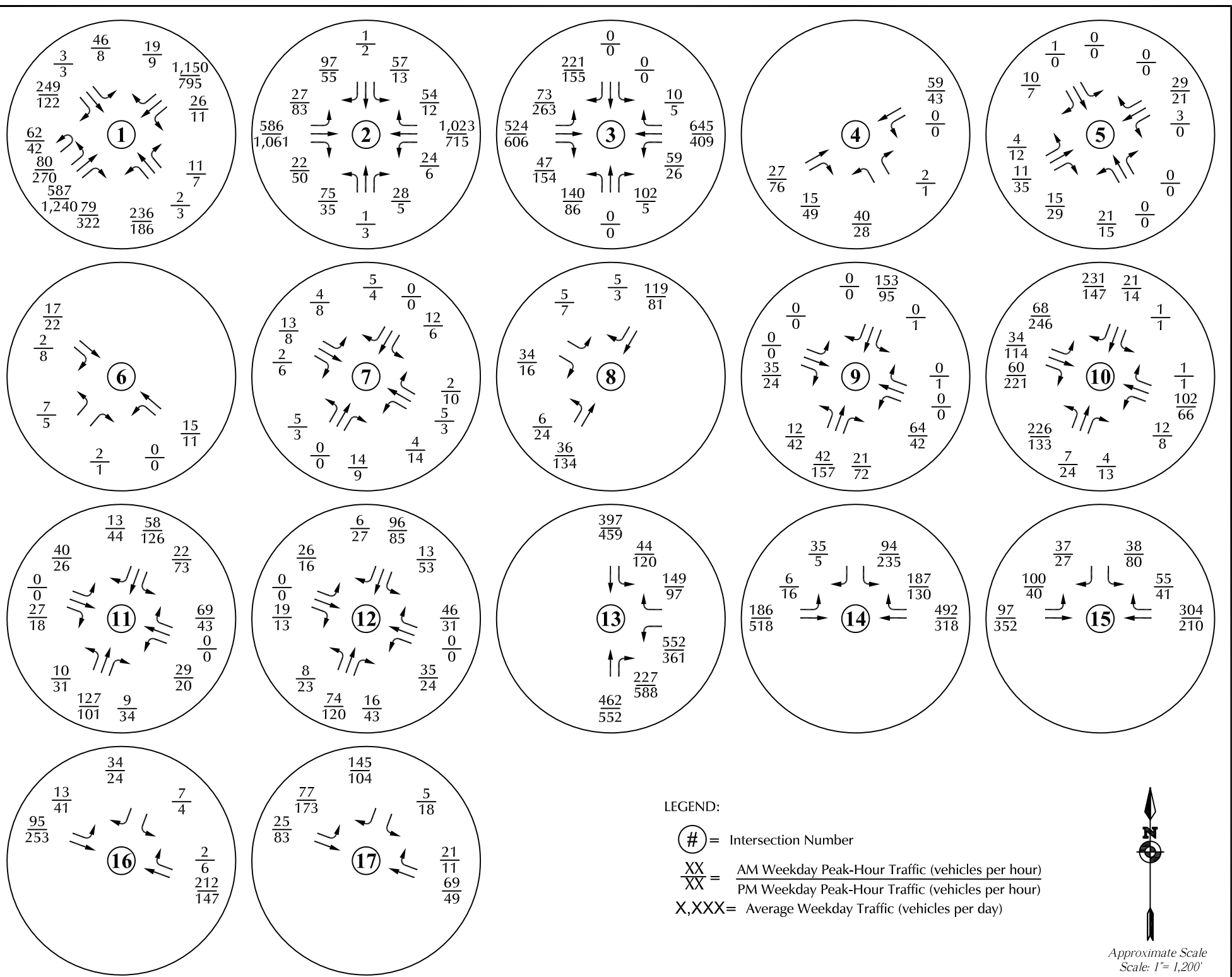


Figure 9a
**Year 2040
 Total Traffic**
 The Hills at Lorson Ranch (LSC #204050)

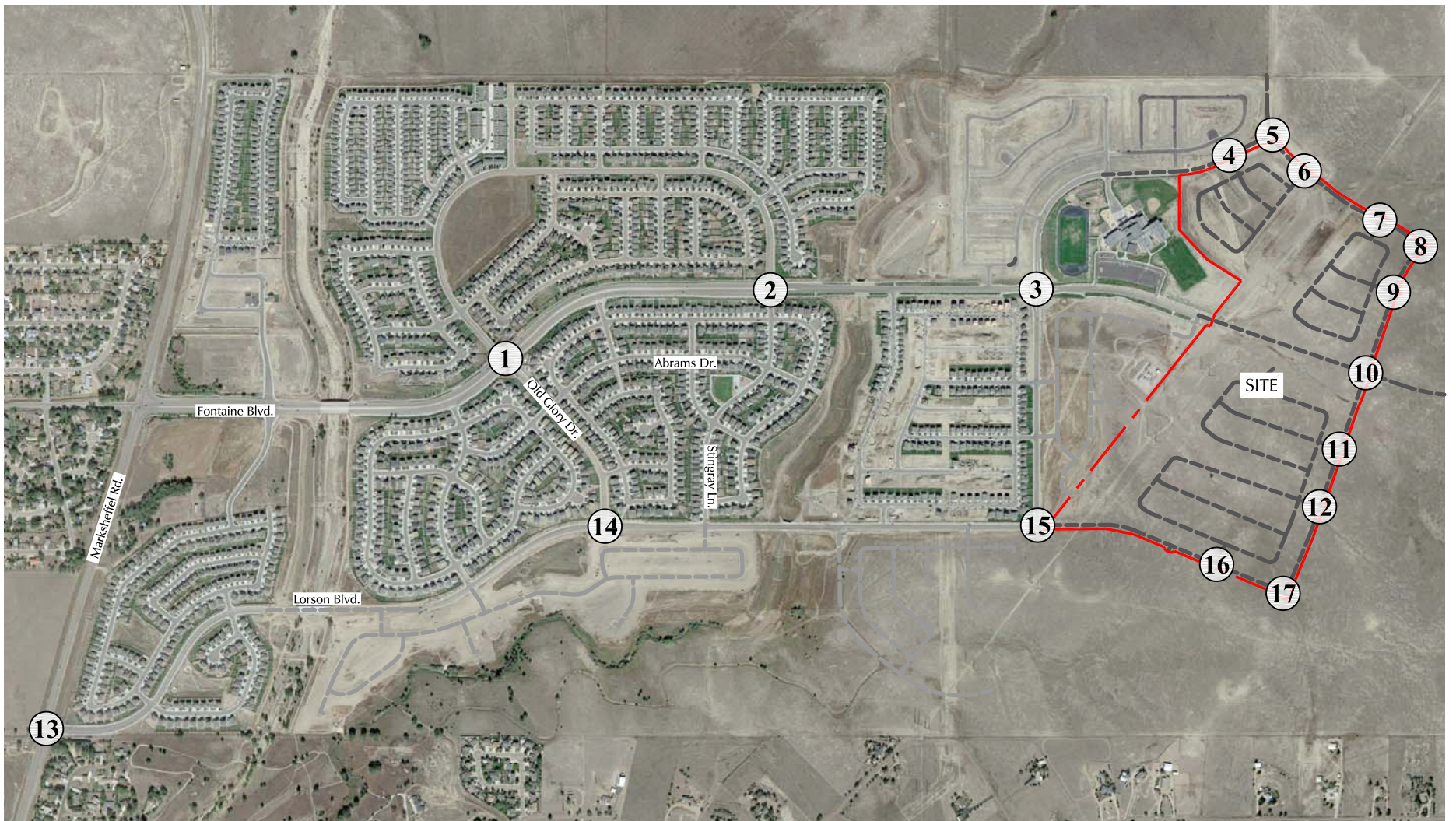
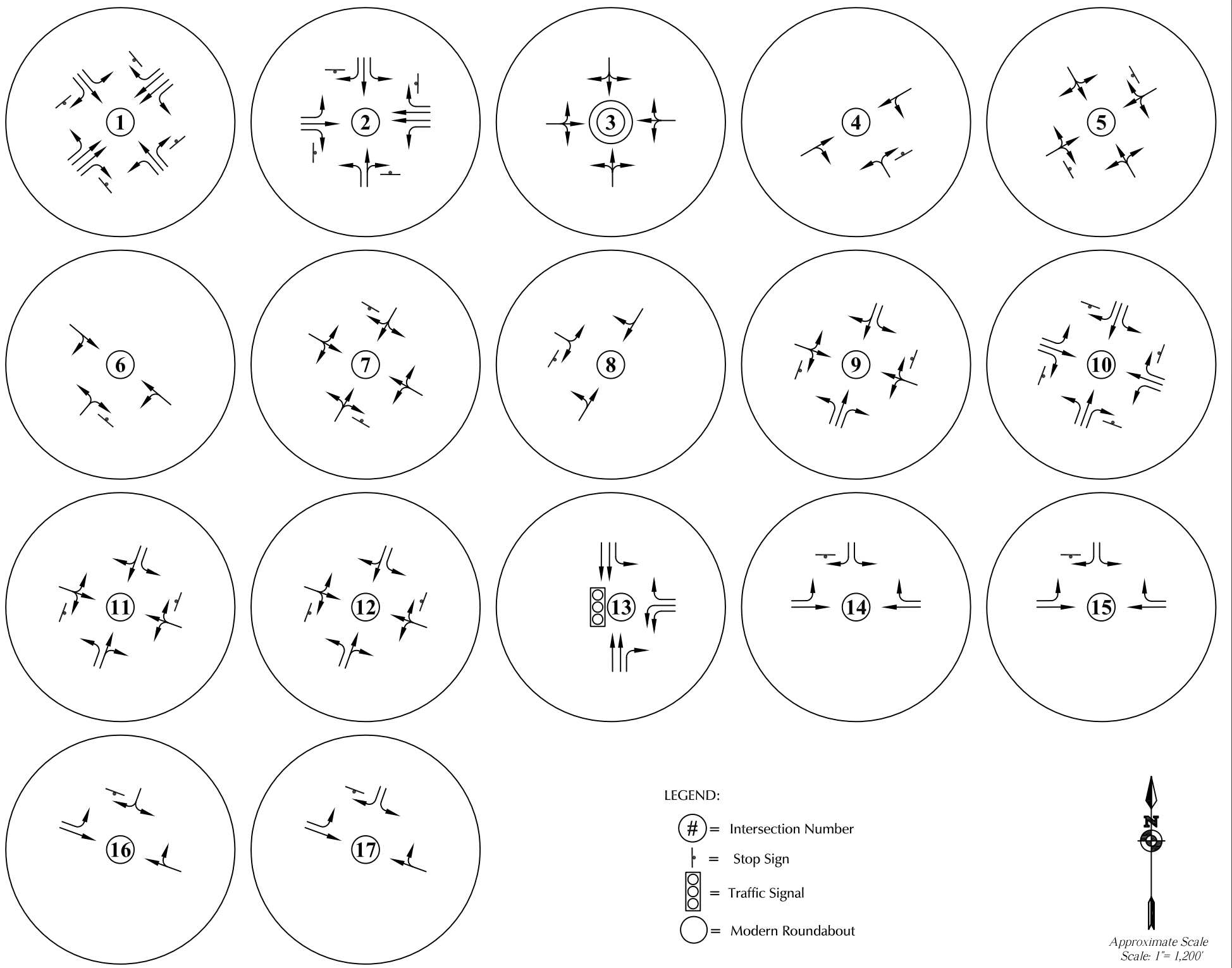
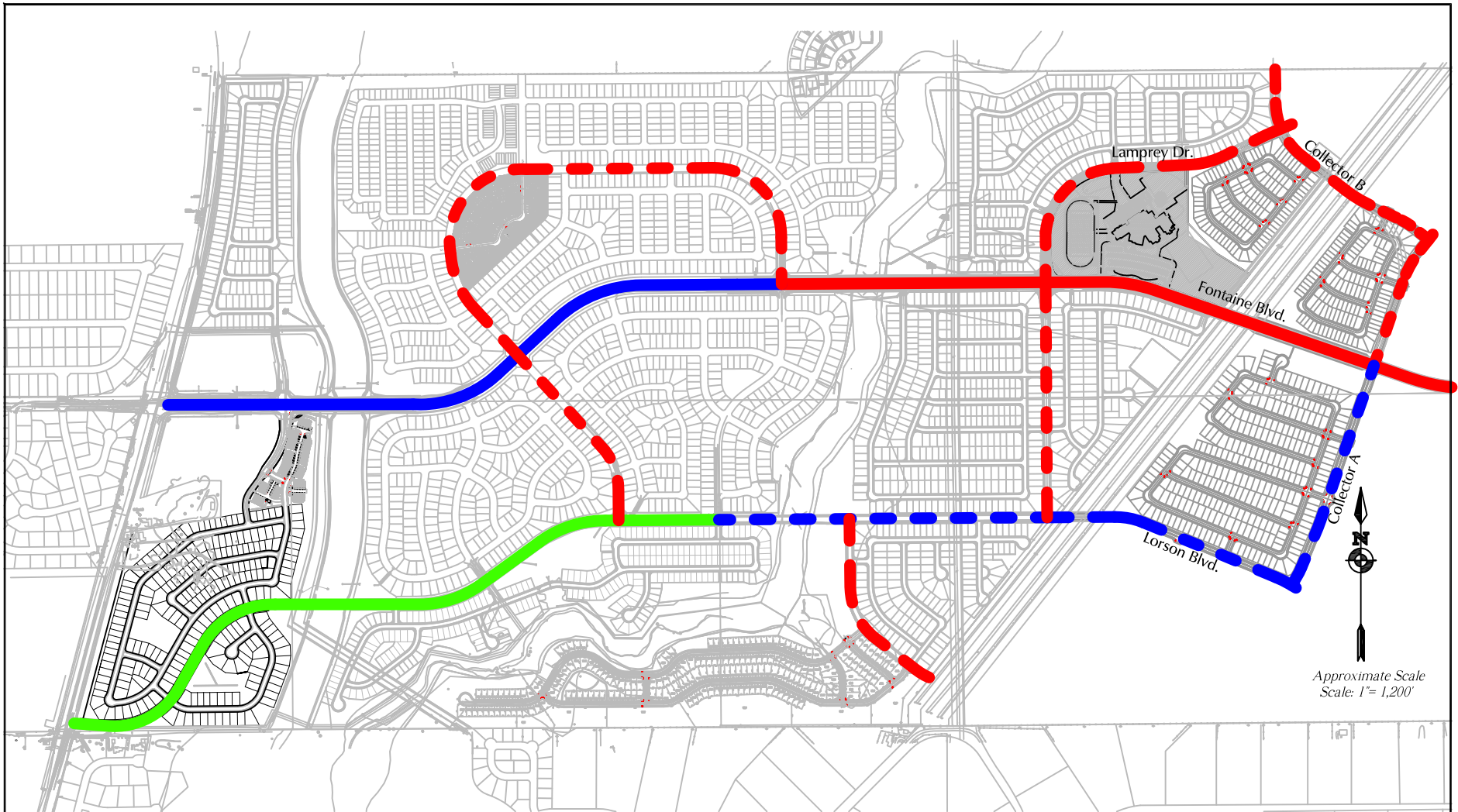


Figure 9b
**Year 2040 Total Lane
 Geometry and Traffic Control**
 The Hills at Lorson Ranch (LSC #204050)



LEGEND:






-  = 4-Lane Principal Arterial
-  = 4-Lane Principal Arterial (Ultimate Classification) Interim/Lorson Buildout 2-Lane Urban Non-Residential Collector in 100' R.O.W.
-  = Urban Non-Residential Collector (80' Wide R.O.W.) with Modified Street Cross Section
-  = Urban Residential Collector (64'to 72' R.O.W.)
-  = Urban Residential Collector (60' R.O.W.)

Figure 10
Street Classifications
 The Hills at Lorson Ranch (LSC #204050)

Traffic Counts





LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
 719-633-2868

File Name : Old Glory Dr - Fountain Blvd AM
 Site Code : 184181
 Start Date : 10/9/2019
 Page No : 1

Groups Printed- Unshifted

Start Time	Old Glory Dr Southbound					Fountain Blvd Westbound					Old Glory Dr Northbound					Fountain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	U-Turn	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	U-Turn	App. Total	
06:30 AM	0	0	14	0	14	0	14	0	0	14	5	0	0	0	5	6	3	1	0	10	43
06:35 AM	1	0	23	0	24	0	13	0	0	13	13	0	1	0	14	5	8	2	7	22	73
06:40 AM	0	0	28	0	28	1	21	0	0	22	10	0	1	0	11	4	8	2	8	22	83
06:45 AM	0	0	25	0	25	0	14	0	0	14	12	0	0	0	12	3	11	2	8	24	75
06:50 AM	0	0	19	0	19	0	23	0	0	23	15	1	0	0	16	3	20	1	10	34	92
06:55 AM	0	0	30	0	30	0	24	0	0	24	8	0	0	0	8	4	29	3	5	41	103
Total	1	0	139	0	140	1	109	0	0	110	63	1	2	0	66	25	79	11	38	153	469
07:00 AM	1	0	24	0	25	0	19	0	0	19	10	0	1	0	11	6	26	1	10	43	98
07:05 AM	1	0	21	0	22	0	28	0	0	28	11	0	0	0	11	4	31	1	4	40	101
07:10 AM	1	0	15	10	26	0	42	0	0	42	5	0	0	3	8	7	16	1	8	32	108
07:15 AM	2	0	16	4	22	0	17	0	0	17	13	0	1	1	15	7	16	0	7	30	84
07:20 AM	9	0	18	2	29	0	19	0	0	19	1	0	2	2	5	5	55	2	2	64	117
07:25 AM	13	0	21	1	35	4	35	2	1	42	7	0	2	1	10	7	67	1	1	76	163
07:30 AM	15	1	15	0	31	6	43	2	0	51	11	0	0	0	11	5	44	3	5	57	150
07:35 AM	4	0	19	0	23	8	54	0	0	62	6	0	3	0	9	8	28	2	5	43	137
07:40 AM	0	0	10	0	10	5	38	10	0	53	4	0	1	0	5	10	15	3	3	31	99
07:45 AM	0	0	14	1	15	3	37	5	0	45	6	0	1	0	7	6	14	8	4	32	99
07:50 AM	0	0	14	0	14	3	15	0	0	18	3	0	1	0	4	10	13	0	5	28	64
07:55 AM	0	0	11	0	11	0	12	0	0	12	5	0	0	0	5	6	21	1	1	29	57
Total	46	1	198	18	263	29	359	19	1	408	82	0	12	7	101	81	346	23	55	505	1277
08:00 AM	1	0	12	0	13	2	16	1	0	19	3	0	0	0	3	3	13	1	5	22	57
08:05 AM	0	0	13	1	14	0	17	0	0	17	0	0	0	0	0	7	19	1	5	32	63
08:10 AM	0	0	12	0	12	0	10	0	0	10	8	0	0	0	8	6	17	1	1	25	55
08:15 AM	1	0	20	0	21	0	17	1	0	18	9	0	0	0	9	11	9	1	2	23	71
08:20 AM	0	0	19	0	19	0	27	0	0	27	7	0	0	0	7	6	10	4	7	27	80
08:25 AM	0	0	18	0	18	0	17	1	0	18	9	0	0	0	9	8	7	4	2	21	66
Grand Total	49	1	431	19	500	32	572	22	1	627	181	1	14	7	203	147	500	46	115	808	2138
Apprch %	9.8	0.2	86.2	3.8		5.1	91.2	3.5	0.2		89.2	0.5	6.9	3.4		18.2	61.9	5.7	14.2		
Total %	2.3	0	20.2	0.9	23.4	1.5	26.8	1	0	29.3	8.5	0	0.7	0.3	9.5	6.9	23.4	2.2	5.4	37.8	

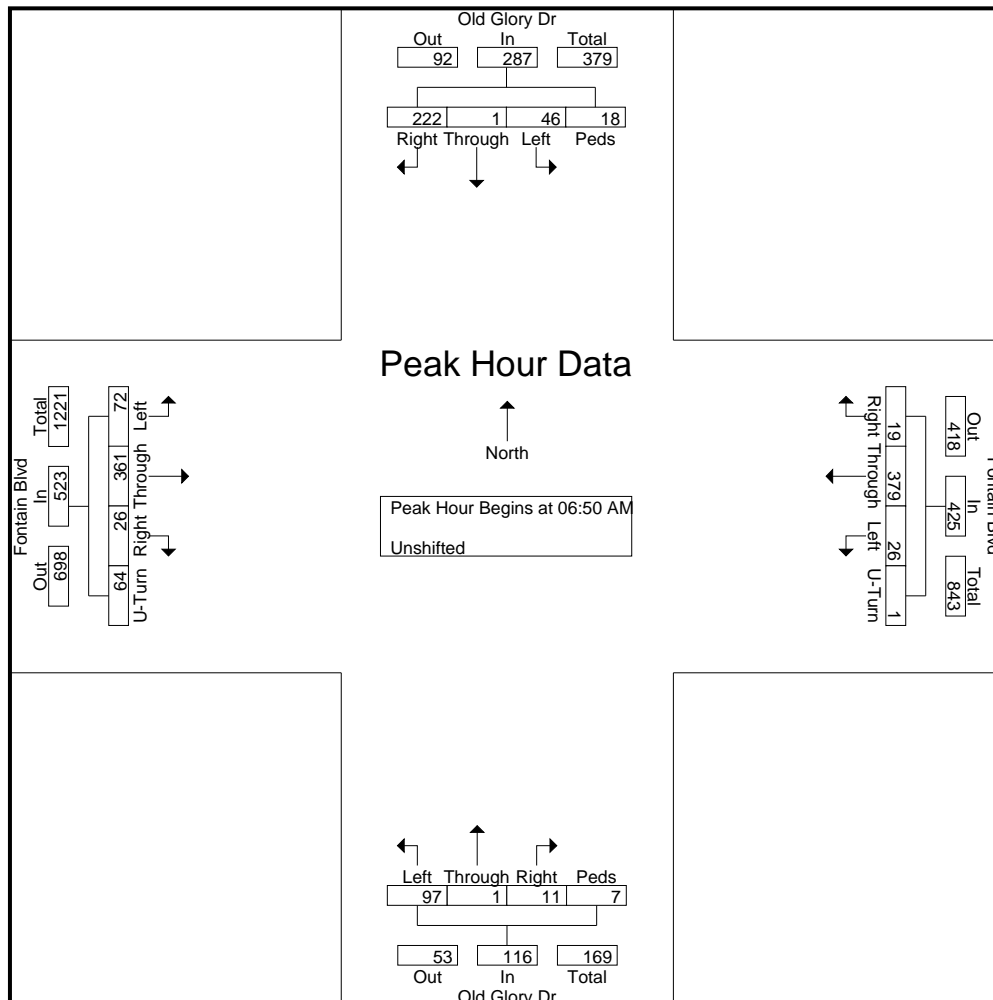


LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
 719-633-2868

File Name : Old Glory Dr - Fontain Blvd AM
 Site Code : 184181
 Start Date : 10/9/2019
 Page No : 2

Start Time	Old Glory Dr Southbound					Fontain Blvd Westbound					Old Glory Dr Northbound					Fontain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	U-Turn	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	U-Turn	App. Total	
Peak Hour Analysis From 06:30 AM to 08:25 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:50 AM																					
06:50 AM	0	0	19	0	19	0	23	0	0	23	15	1	0	0	16	3	20	1	10	34	92
06:55 AM	0	0	30	0	30	0	24	0	0	24	8	0	0	0	8	4	29	3	5	41	103
07:00 AM	1	0	24	0	25	0	19	0	0	19	10	0	1	0	11	6	26	1	10	43	98
07:05 AM	1	0	21	0	22	0	28	0	0	28	11	0	0	0	11	4	31	1	4	40	101
07:10 AM	1	0	15	10	26	0	42	0	0	42	5	0	0	3	8	7	16	1	8	32	108
07:15 AM	2	0	16	4	22	0	17	0	0	17	13	0	1	1	15	7	16	0	7	30	84
07:20 AM	9	0	18	2	29	0	19	0	0	19	1	0	2	2	5	5	55	2	2	64	117
07:25 AM	13	0	21	1	35	4	35	2	1	42	7	0	2	1	10	7	67	1	1	76	163
07:30 AM	15	1	15	0	31	6	43	2	0	51	11	0	0	0	11	5	44	3	5	57	150
07:35 AM	4	0	19	0	23	8	54	0	0	62	6	0	3	0	9	8	28	2	5	43	137
07:40 AM	0	0	10	0	10	5	38	10	0	53	4	0	1	0	5	10	15	3	3	31	99
07:45 AM	0	0	14	1	15	3	37	5	0	45	6	0	1	0	7	6	14	8	4	32	99
Total Volume	46	1	222	18	287	26	379	19	1	425	97	1	11	7	116	72	361	26	64	523	1351
% App. Total	16	0.3	77.4	6.3		6.1	89.2	4.5	0.2		83.6	0.9	9.5	6		13.8	69	5	12.2		
PHF	.256	.083	.617	.150	.683	.271	.585	.158	.083	.571	.539	.083	.306	.194	.604	.600	.449	.271	.533	.573	.691





LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210

Colorado Springs, CO 80905

719-633-2868

File Name : Old Glory Dr - Fontain Blvd Mid-PM

Site Code : 184181

Start Date : 10/16/2019

Page No : 1

Groups Printed- Unshifted

Start Time	Old Glory Dr Southbound					Fontain Blvd Westbound					Old Glory Dr Northbound					Fontain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
02:00 PM	0	0	21	0	21	0	27	1	0	28	8	0	0	0	8	19	31	14	4	68	125
02:15 PM	3	0	24	0	27	0	20	0	0	20	13	0	3	0	16	22	49	8	5	84	147
02:30 PM	7	1	15	0	23	1	30	1	0	32	13	0	1	0	14	22	62	9	8	101	170
02:45 PM	10	1	22	0	33	0	24	0	0	24	17	2	5	0	24	31	84	15	5	135	216
Total	20	2	82	0	104	1	101	2	0	104	51	2	9	0	62	94	226	46	22	388	658
03:00 PM	6	0	20	0	26	12	65	13	0	90	12	0	5	0	17	42	61	16	4	123	256
03:15 PM	1	0	28	0	29	16	97	19	0	132	15	0	0	0	15	40	45	15	3	103	279
03:30 PM	1	2	19	0	22	2	52	1	0	55	13	0	1	0	14	52	41	16	8	117	208
03:45 PM	2	1	19	0	22	3	41	2	0	46	15	0	1	0	16	56	50	14	7	127	211
Total	10	3	86	0	99	33	255	35	0	323	55	0	7	0	62	190	197	61	22	470	954
04:00 PM	3	0	32	0	35	2	25	1	0	28	14	1	2	0	17	53	45	19	14	131	211
04:15 PM	0	0	26	0	26	2	39	1	0	42	11	0	0	0	11	60	69	18	7	154	233
04:30 PM	1	2	19	0	22	3	32	0	0	35	11	3	1	0	15	54	50	14	3	121	193
04:45 PM	2	1	27	0	30	2	35	1	0	38	13	0	4	0	17	69	77	26	4	176	261
Total	6	3	104	0	113	9	131	3	0	143	49	4	7	0	60	236	241	77	28	582	898
05:00 PM	3	0	25	0	28	7	86	6	0	99	19	1	3	0	23	59	87	34	9	189	339
05:15 PM	1	0	27	0	28	1	52	1	0	54	21	0	0	0	21	54	39	26	14	133	236
05:30 PM	2	1	25	0	28	1	39	1	0	41	12	0	0	0	12	59	60	24	15	158	239
05:45 PM	0	1	27	0	28	2	57	1	0	60	13	0	0	0	13	56	70	27	6	159	260
Total	6	2	104	0	112	11	234	9	0	254	65	1	3	0	69	228	256	111	44	639	1074
Grand Total	42	10	376	0	428	54	721	49	0	824	220	7	26	0	253	748	920	295	116	2079	3584
Apprch %	9.8	2.3	87.9	0		6.6	87.5	5.9	0		87	2.8	10.3	0		36	44.3	14.2	5.6		
Total %	1.2	0.3	10.5	0	11.9	1.5	20.1	1.4	0	23	6.1	0.2	0.7	0	7.1	20.9	25.7	8.2	3.2	58	

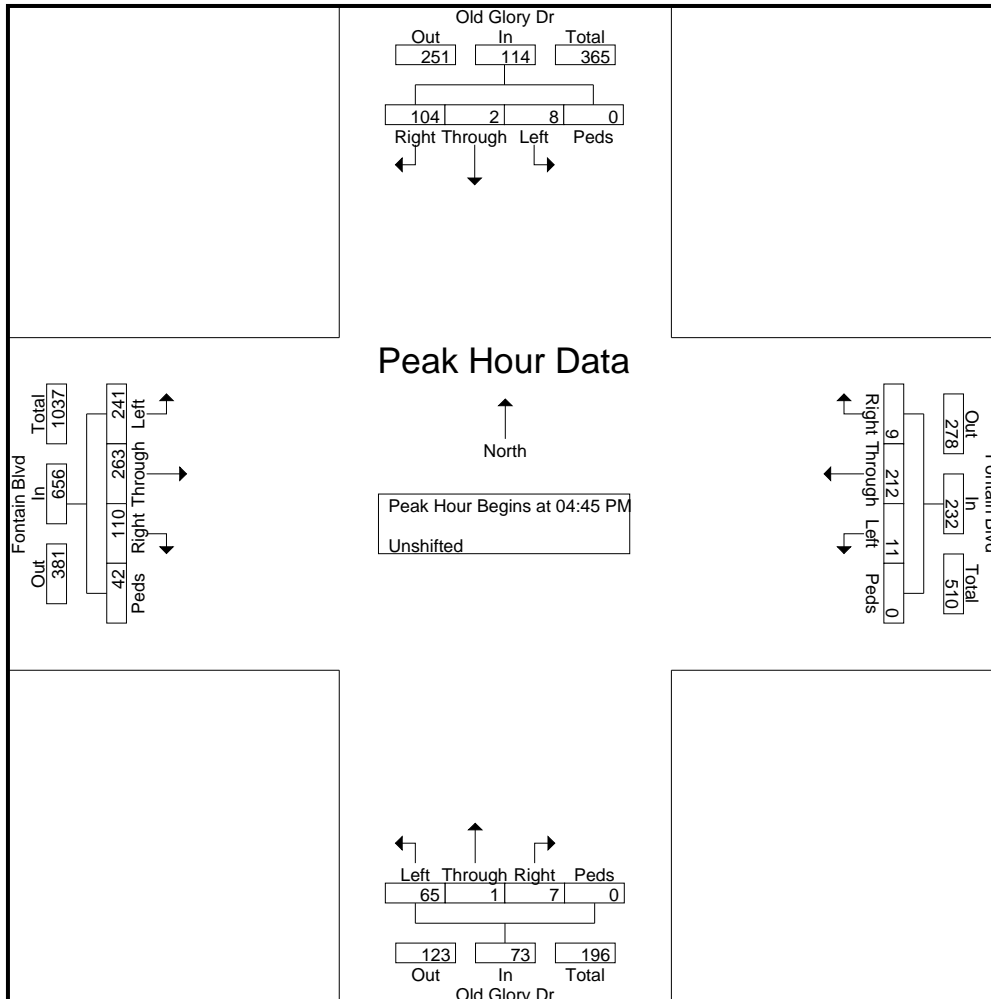


LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
 719-633-2868

File Name : Old Glory Dr - Fontain Blvd Mid-PM
 Site Code : 184181
 Start Date : 10/16/2019
 Page No : 2

Start Time	Old Glory Dr Southbound					Fontain Blvd Westbound					Old Glory Dr Northbound					Fontain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
Peak Hour Analysis From 2:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:45:00 PM																					
4:45:00 PM	2	1	27	0	30	2	35	1	0	38	13	0	4	0	17	69	77	26	4	176	261
5:00:00 PM	3	0	25	0	28	7	86	6	0	99	19	1	3	0	23	59	87	34	9	189	339
5:15:00 PM	1	0	27	0	28	1	52	1	0	54	21	0	0	0	21	54	39	26	14	133	236
5:30:00 PM	2	1	25	0	28	1	39	1	0	41	12	0	0	0	12	59	60	24	15	158	239
Total Volume	8	2	104	0	114	11	212	9	0	232	65	1	7	0	73	241	263	110	42	656	1075
% App. Total	7	1.8	91.2	0		4.7	91.4	3.9	0		89	1.4	9.6	0		36.7	40.1	16.8	6.4		
PHF	.667	.500	.963	.000	.950	.393	.616	.375	.000	.586	.774	.250	.438	.000	.793	.873	.756	.809	.700	.868	.793





LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
 719-633-2868

File Name : Stingray Ln - Fontaine Blvd AM
 Site Code : 00184181
 Start Date : 9/5/2019
 Page No : 1

Groups Printed- Unshifted

Start Time	Old Glory Dr Southbound					Fontain Blvd Westbound					Stingray Ln Northbound					Fontaine Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
06:30 AM	0	0	3	0	3	0	4	0	0	4	1	0	0	0	1	0	9	0	0	9	17
06:35 AM	0	0	4	0	4	0	2	1	0	3	2	0	0	0	2	0	11	0	0	11	20
06:40 AM	1	0	7	0	8	0	3	0	0	3	4	0	0	0	4	0	17	1	0	18	33
06:45 AM	0	0	6	0	6	0	5	0	0	5	6	0	0	0	6	0	19	0	0	19	36
06:50 AM	2	0	8	0	10	0	5	0	0	5	5	0	0	0	5	0	22	0	0	22	42
06:55 AM	1	0	9	1	11	1	4	1	0	6	7	0	1	0	8	1	26	4	0	31	56
Total	4	0	37	1	42	1	23	2	0	26	25	0	1	0	26	1	104	5	0	110	204
07:00 AM	2	0	8	1	11	0	6	0	2	8	12	0	0	3	15	2	8	1	1	12	46
07:05 AM	1	0	12	3	16	0	3	0	4	7	8	0	0	1	9	4	10	0	0	14	46
07:10 AM	4	0	13	11	28	0	4	1	4	9	14	0	0	0	14	1	10	2	1	14	65
07:15 AM	9	0	3	28	40	0	4	0	0	4	7	0	2	10	19	3	23	0	0	26	89
07:20 AM	10	0	8	8	26	0	10	1	1	12	5	0	6	3	14	0	30	1	0	31	83
07:25 AM	9	0	13	9	31	4	21	7	0	32	0	0	4	1	5	5	67	3	0	75	143
07:30 AM	13	0	9	1	23	3	36	7	0	46	8	0	9	4	21	1	48	3	0	52	142
07:35 AM	3	0	6	1	10	4	33	7	0	44	4	0	4	0	8	3	43	4	0	50	112
07:40 AM	2	0	8	0	10	6	47	7	0	60	7	1	0	0	8	0	11	0	1	12	90
07:45 AM	3	1	4	3	11	2	43	20	0	65	1	0	0	0	1	4	8	3	0	15	92
07:50 AM	0	0	4	1	5	4	14	3	0	21	2	0	1	0	3	3	9	1	1	14	43
07:55 AM	1	0	2	1	4	1	11	2	0	14	7	0	0	0	7	4	11	1	0	16	41
Total	57	1	90	67	215	24	232	55	11	322	75	1	26	22	124	30	278	19	4	331	992
08:00 AM	1	0	8	0	9	1	5	0	0	6	9	0	0	0	9	5	11	2	0	18	42
08:05 AM	1	0	6	0	7	0	3	0	0	3	4	0	2	0	6	2	7	3	0	12	28
08:10 AM	1	0	3	0	4	0	3	0	0	3	2	0	2	0	4	5	9	0	0	14	25
08:15 AM	0	0	7	1	8	1	5	2	3	11	3	1	0	0	4	4	5	0	1	10	33
08:20 AM	0	0	5	0	5	1	13	2	0	16	2	0	0	0	2	3	6	0	0	9	32
08:25 AM	0	1	4	1	6	1	7	2	0	10	5	0	0	0	5	2	4	0	0	6	27
Grand Total	64	2	160	70	296	29	291	63	14	397	125	2	31	22	180	52	424	29	5	510	1383
Apprch %	21.6	0.7	54.1	23.6		7.3	73.3	15.9	3.5		69.4	1.1	17.2	12.2		10.2	83.1	5.7	1		
Total %	4.6	0.1	11.6	5.1	21.4	2.1	21	4.6	1	28.7	9	0.1	2.2	1.6	13	3.8	30.7	2.1	0.4	36.9	

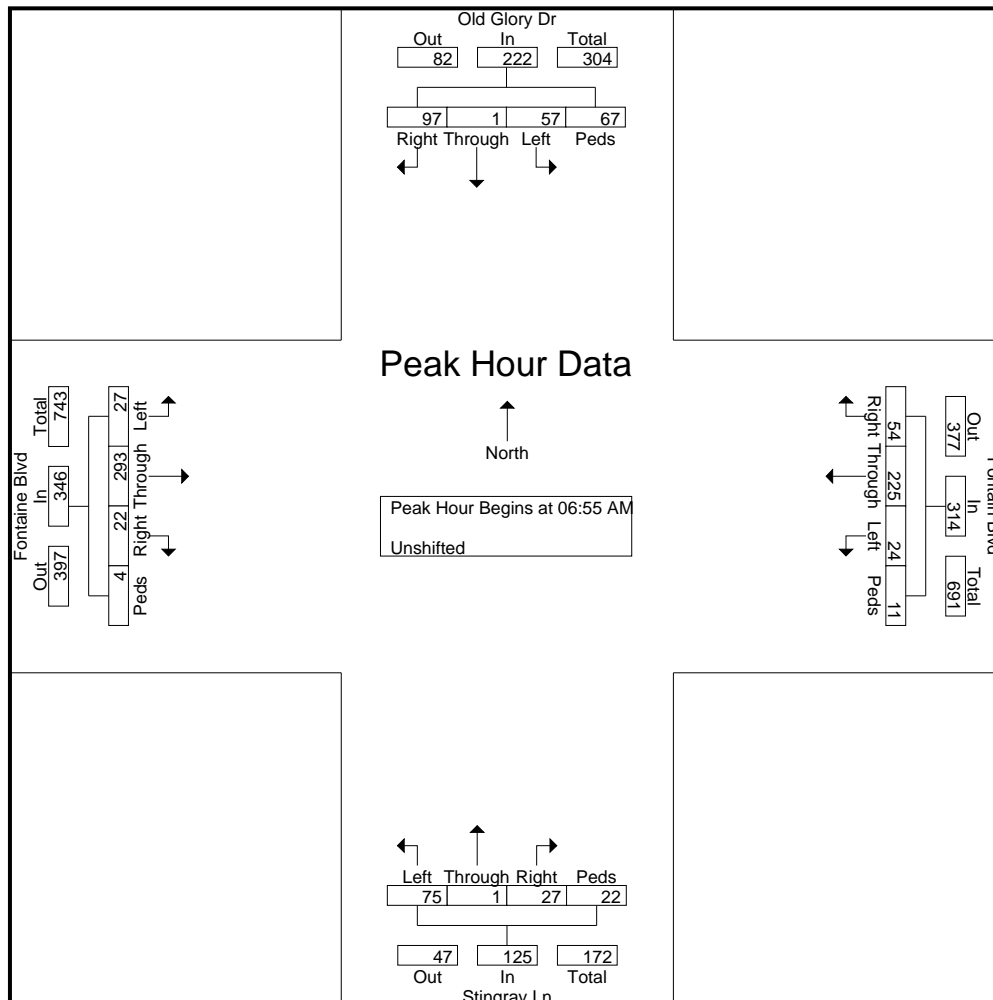


LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
 719-633-2868

File Name : Stingray Ln - Fontaine Blvd AM
 Site Code : 00184181
 Start Date : 9/5/2019
 Page No : 2

Start Time	Old Glory Dr Southbound					Fontain Blvd Westbound					Stingray Ln Northbound					Fontaine Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 08:25 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:55 AM																					
06:55 AM	1	0	9	1	11	1	4	1	0	6	7	0	1	0	8	1	26	4	0	31	56
07:00 AM	2	0	8	1	11	0	6	0	2	8	12	0	0	3	15	2	8	1	1	12	46
07:05 AM	1	0	12	3	16	0	3	0	4	7	8	0	0	1	9	4	10	0	0	14	46
07:10 AM	4	0	13	11	28	0	4	1	4	9	14	0	0	0	14	1	10	2	1	14	65
07:15 AM	9	0	3	28	40	0	4	0	0	4	7	0	2	10	19	3	23	0	0	26	89
07:20 AM	10	0	8	8	26	0	10	1	1	12	5	0	6	3	14	0	30	1	0	31	83
07:25 AM	9	0	13	9	31	4	21	7	0	32	0	0	4	1	5	5	67	3	0	75	143
07:30 AM	13	0	9	1	23	3	36	7	0	46	8	0	9	4	21	1	48	3	0	52	142
07:35 AM	3	0	6	1	10	4	33	7	0	44	4	0	4	0	8	3	43	4	0	50	112
07:40 AM	2	0	8	0	10	6	47	7	0	60	7	1	0	0	8	0	11	0	1	12	90
07:45 AM	3	1	4	3	11	2	43	20	0	65	1	0	0	0	1	4	8	3	0	15	92
07:50 AM	0	0	4	1	5	4	14	3	0	21	2	0	1	0	3	3	9	1	1	14	43
Total Volume	57	1	97	67	222	24	225	54	11	314	75	1	27	22	125	27	293	22	4	346	1007
% App. Total	25.7	0.5	43.7	30.2		7.6	71.7	17.2	3.5		60	0.8	21.6	17.6		7.8	84.7	6.4	1.2		
PHF	.365	.083	.622	.199	.463	.333	.399	.225	.229	.403	.446	.083	.250	.183	.496	.450	.364	.458	.333	.384	.587





LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210

Colorado Springs, CO 80905

719-633-2868

File Name : Stingray Ln - Fontaine Blvd MID-PM

Site Code : 00144600

Start Date : 8/28/2019

Page No : 1

Groups Printed- Unshifted

Start Time	Stingray Ln Southbound					Fontaine Blvd Westbound					Old Glory Dr Northbound					Fontain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
02:15 PM	1	0	2	0	3	0	3	0	0	3	3	0	1	0	4	2	9	1	0	12	22
02:20 PM	1	0	1	0	2	0	4	0	0	4	6	0	1	0	7	2	12	1	0	15	28
02:25 PM	5	0	3	0	8	0	5	0	0	5	4	0	1	0	5	6	11	1	1	19	37
02:30 PM	8	0	3	1	12	0	9	0	0	9	1	0	0	0	1	6	17	1	0	24	46
02:35 PM	10	0	3	1	14	0	6	0	1	7	1	0	1	0	2	2	19	3	1	25	48
02:40 PM	7	1	4	0	12	0	5	1	0	6	1	0	1	0	2	2	16	0	0	18	38
02:45 PM	8	0	3	0	11	0	3	1	0	4	2	0	3	0	5	2	22	3	0	27	47
02:50 PM	8	0	2	0	10	0	3	1	0	4	3	0	2	0	5	1	22	3	0	26	45
02:55 PM	10	0	4	2	16	0	5	1	0	6	2	0	3	0	5	4	27	3	0	34	61
Total	58	1	25	4	88	0	43	4	1	48	23	0	13	0	36	27	155	16	2	200	372
03:00 PM	4	0	1	0	5	0	5	0	0	5	1	1	4	0	6	8	24	2	0	34	50
03:05 PM	1	0	2	0	3	0	15	7	0	22	3	0	0	0	3	5	16	1	0	22	50
03:10 PM	0	0	3	5	8	4	42	13	1	60	2	0	1	0	3	1	12	2	0	15	86
03:15 PM	0	0	4	16	20	6	45	22	6	79	3	0	0	8	11	2	13	2	0	17	127
03:20 PM	1	0	1	22	24	6	49	16	8	79	0	1	0	2	3	4	11	3	0	18	124
03:25 PM	2	0	4	2	8	0	13	1	3	17	0	0	0	5	5	5	9	1	0	15	45
03:30 PM	1	0	3	0	4	0	20	4	0	24	1	0	0	1	2	11	13	5	0	29	59
03:35 PM	1	0	4	2	7	1	13	3	0	17	1	0	0	0	1	5	6	3	0	14	39
03:40 PM	0	0	0	0	0	0	8	0	0	8	2	0	1	3	6	11	14	5	2	32	46
03:45 PM	2	0	5	2	9	0	13	1	0	14	2	0	0	1	3	5	4	6	0	15	41
03:50 PM	0	0	5	0	5	0	11	2	0	13	3	0	0	0	3	10	9	7	1	27	48
03:55 PM	1	0	4	0	5	0	13	1	0	14	5	0	0	0	5	7	3	5	0	15	39
Total	13	0	36	49	98	17	247	70	18	352	23	2	6	20	51	74	134	42	3	253	754
04:00 PM	0	0	1	0	1	0	8	0	0	8	4	0	0	0	4	2	5	3	0	10	23
04:05 PM	0	0	5	0	5	0	8	1	0	9	2	0	0	0	2	5	2	3	1	11	27
04:10 PM	0	0	2	0	2	0	7	0	0	7	1	0	0	0	1	9	6	5	0	20	30
04:15 PM	0	0	4	0	4	0	6	0	0	6	2	1	0	0	3	3	6	4	0	13	26
04:20 PM	0	0	1	0	1	0	14	0	0	14	1	0	0	0	1	8	8	4	0	20	36
04:25 PM	1	1	4	0	6	0	12	0	0	12	2	1	0	0	3	6	8	1	0	15	36
04:30 PM	1	0	3	0	4	0	14	0	0	14	3	0	0	0	3	5	4	3	0	12	33
04:35 PM	1	0	4	0	5	0	12	0	0	12	4	0	0	0	4	9	7	6	0	22	43
04:40 PM	1	0	3	0	4	0	5	0	0	5	2	0	0	0	2	7	5	1	0	13	24
04:45 PM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	7	4	2	0	13	20
04:50 PM	3	1	5	0	9	0	6	1	0	7	2	0	0	0	2	3	7	6	0	16	34
04:55 PM	0	0	4	1	5	0	7	0	0	7	2	0	1	0	3	10	4	5	0	19	34
Total	7	2	38	1	48	0	104	2	0	106	25	2	1	0	28	74	66	43	1	184	366
05:00 PM	2	0	4	0	6	0	8	2	0	10	3	1	1	0	5	5	5	4	0	14	35
05:05 PM	1	0	4	0	5	0	10	4	0	14	2	0	0	0	2	7	7	8	0	22	43
05:10 PM	1	1	4	1	7	1	6	0	0	7	3	0	0	0	3	5	6	2	1	14	31
05:15 PM	1	0	7	1	9	2	5	0	0	7	5	0	1	0	6	7	2	6	1	16	38



LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210

Colorado Springs, CO 80905

719-633-2868

File Name : Stingray Ln - Fontaine Blvd MID-PM

Site Code : 00144600

Start Date : 8/28/2019

Page No : 2

Groups Printed- Unshifted

Start Time	Stingray Ln Southbound					Fontaine Blvd Westbound					Old Glory Dr Northbound					Fontain Blvd Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
05:20 PM	1	0	3	0	4	0	3	0	0	3	2	0	1	0	3	7	4	3	0	14	24
05:25 PM	1	0	5	0	6	1	6	1	0	8	4	0	1	0	5	12	0	1	0	13	32
05:30 PM	0	0	8	0	8	1	6	0	0	7	4	0	0	1	5	7	1	3	0	11	31
05:35 PM	1	0	4	1	6	0	9	2	0	11	3	1	0	3	7	7	3	6	0	16	40
05:40 PM	2	0	5	0	7	1	22	2	0	25	5	1	0	0	6	6	5	4	0	15	53
05:45 PM	0	0	4	7	11	1	29	8	0	38	2	0	1	0	3	6	5	6	1	18	70
05:50 PM	0	0	3	2	5	1	9	1	0	11	2	0	0	0	2	9	9	5	1	24	42
05:55 PM	0	0	7	1	8	0	11	3	4	18	1	0	1	1	3	11	2	4	0	17	46
Total	10	1	58	13	82	8	124	23	4	159	36	3	6	5	50	89	49	52	4	194	485
06:00 PM	0	0	1	0	1	0	11	1	0	12	3	0	0	0	3	2	3	3	0	8	24
06:05 PM	0	0	2	0	2	0	7	0	2	9	3	0	0	2	5	10	2	2	0	14	30
06:10 PM	0	0	2	0	2	0	6	1	0	7	2	0	0	0	2	5	3	2	0	10	21
06:15 PM	0	0	2	1	3	0	8	1	0	9	1	0	0	1	2	7	2	2	0	11	25
Grand Total	88	4	164	68	324	25	550	102	25	702	116	7	26	28	177	288	414	162	10	874	2077
Apprch %	27.2	1.2	50.6	21		3.6	78.3	14.5	3.6		65.5	4	14.7	15.8		33	47.4	18.5	1.1		
Total %	4.2	0.2	7.9	3.3	15.6	1.2	26.5	4.9	1.2	33.8	5.6	0.3	1.3	1.3	8.5	13.9	19.9	7.8	0.5	42.1	

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 719-633-2868

File Name : Old Glory Dr - Larson Blvd AM
 Site Code : 144600
 Start Date : 3/11/2020
 Page No : 1

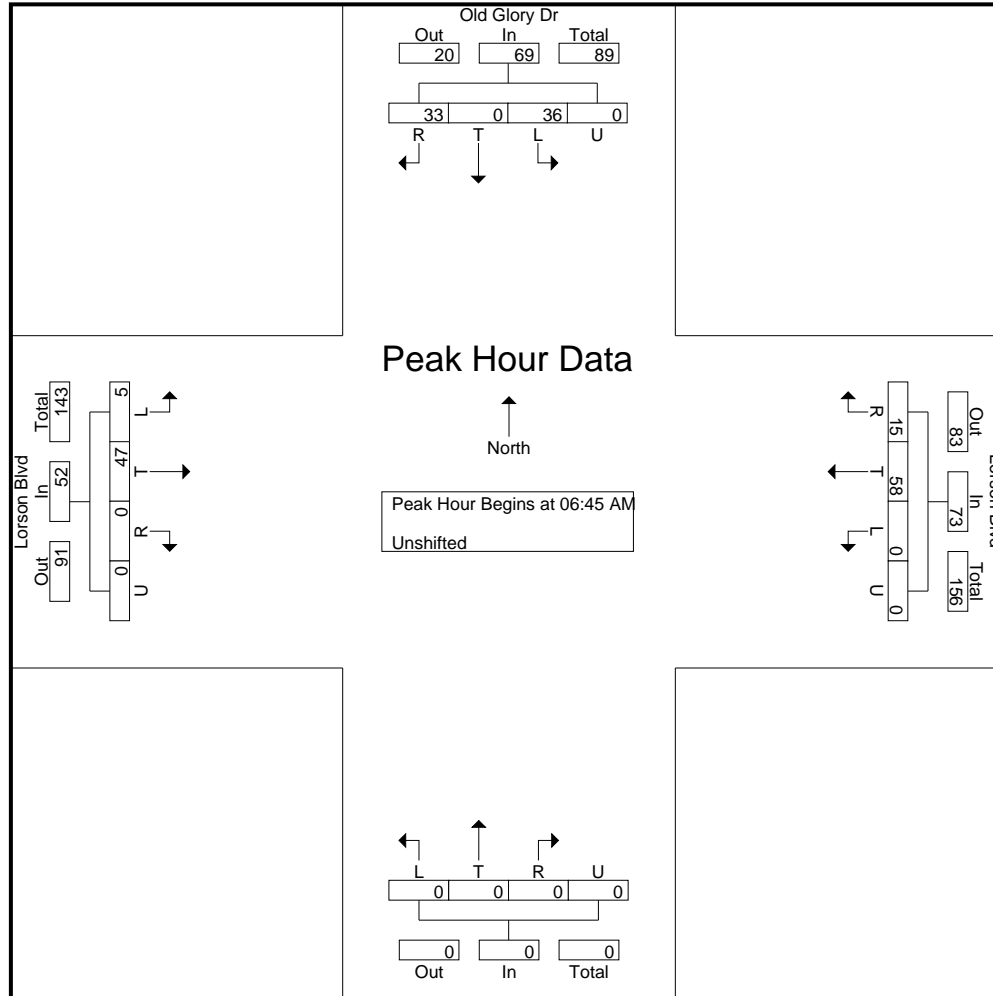
Groups Printed- Unshifted

Start Time	Old Glory Dr Southbound					Lorson Blvd Westbound					Northbound					Lorson Blvd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	3	0	3	0	6	0	3	0	0	3	0	0	0	0	0	1	5	0	0	6	15
06:45 AM	2	0	9	0	11	0	6	1	0	7	0	0	0	0	0	0	2	0	0	2	20
Total	5	0	12	0	17	0	9	1	0	10	0	0	0	0	0	1	7	0	0	8	35
07:00 AM	4	0	13	0	17	0	7	2	0	9	0	0	0	0	0	3	8	0	0	11	37
07:15 AM	27	0	8	0	35	0	24	5	0	29	0	0	0	0	0	1	34	0	0	35	99
07:30 AM	3	0	3	0	6	0	21	7	0	28	0	0	0	0	0	1	3	0	0	4	38
07:45 AM	3	0	2	0	5	0	7	0	0	7	0	0	0	0	0	1	3	0	0	4	16
Total	37	0	26	0	63	0	59	14	0	73	0	0	0	0	0	6	48	0	0	54	190
08:00 AM	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	1	7	0	0	8	12
08:15 AM	0	0	6	0	6	0	7	2	0	9	0	0	0	0	0	2	3	0	0	5	20
Grand Total	42	0	45	0	87	0	77	18	0	95	0	0	0	0	0	10	65	0	0	75	257
Apprch %	48.3	0	51.7	0		0	81.1	18.9	0		0	0	0	0		13.3	86.7	0	0		
Total %	16.3	0	17.5	0	33.9	0	30	7	0	37	0	0	0	0	0	3.9	25.3	0	0	29.2	

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 Site Code : 144600
 Start Date : 3/11/2020
 Page No : 3



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File Name : Old Glory Dr - Larson Blvd PM
 Site Code : 144600
 Start Date : 3/11/2020
 Page No : 1

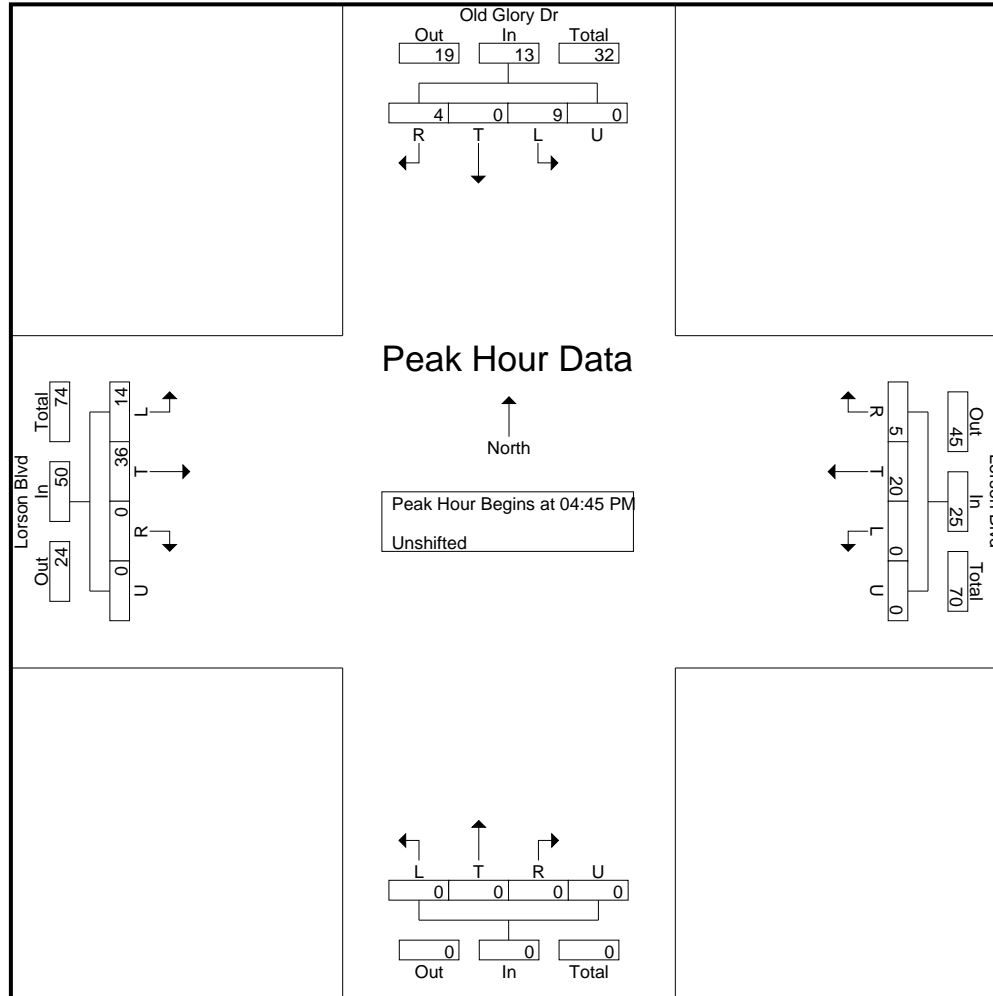
Groups Printed- Unshifted

Start Time	Old Glory Dr Southbound					Lorson Blvd Westbound					Northbound					Lorson Blvd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	3	0	1	0	4	0	2	0	0	2	0	0	0	0	0	2	5	0	0	7	13
04:15 PM	7	0	0	0	7	0	5	2	0	7	0	0	0	0	0	3	6	0	0	9	23
04:30 PM	2	0	2	0	4	0	2	0	0	2	0	0	0	0	0	5	5	0	0	10	16
04:45 PM	3	0	2	0	5	0	5	1	0	6	0	0	0	0	0	0	10	0	0	10	21
Total	15	0	5	0	20	0	14	3	0	17	0	0	0	0	0	10	26	0	0	36	73
05:00 PM	4	0	0	0	4	0	4	2	0	6	0	0	0	0	0	7	9	0	0	16	26
05:15 PM	1	0	1	0	2	0	7	1	0	8	0	0	0	0	0	4	10	0	0	14	24
05:30 PM	1	0	1	0	2	0	4	1	0	5	0	0	0	0	0	3	7	0	0	10	17
05:45 PM	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	2	6	0	0	8	14
Total	7	0	2	0	9	0	20	4	0	24	0	0	0	0	0	16	32	0	0	48	81
Grand Total	22	0	7	0	29	0	34	7	0	41	0	0	0	0	0	26	58	0	0	84	154
Apprch %	75.9	0	24.1	0		0	82.9	17.1	0		0	0	0	0		31	69	0	0		
Total %	14.3	0	4.5	0	18.8	0	22.1	4.5	0	26.6	0	0	0	0	0	16.9	37.7	0	0	54.5	

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 Start Date : 3/11/2020
 Page No : 3



Levels of Service



HCM 6th TWSC
1: Old Glory Dr & Fontaine Blvd

Existing Traffic
AM Peak Hour

Intersection													
Int Delay, s/veh	20.9												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	64	72	361	26	26	379	19	97	1	11	46	3	222
Future Vol, veh/h	64	72	361	26	26	379	19	97	1	11	46	3	222
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	85	425	31	31	446	22	114	1	13	54	4	261

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	446	468	0	0	456	0	0	1032	1275	213	1041	1284	223
Stage 1	-	-	-	-	-	-	-	745	745	-	508	508	-
Stage 2	-	-	-	-	-	-	-	287	530	-	533	776	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	749	1090	-	-	1101	-	-	187	166	792	184	164	780
Stage 1	-	-	-	-	-	-	-	372	419	-	516	537	-
Stage 2	-	-	-	-	-	-	-	696	525	-	498	406	-
Platoon blocked, %			-	-	-	-	-						
Mov Cap-1 Maneuver	733	733	-	-	1101	-	-	~ 99	126	792	146	125	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 99	126	-	146	125	-
Stage 1	-	-	-	-	-	-	-	291	328	-	404	522	-
Stage 2	-	-	-	-	-	-	-	447	510	-	382	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0.5	194.7	17.5
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	99	126	792	733	-	-	1101	-	-	146	125	780
HCM Lane V/C Ratio	1.153	0.009	0.016	0.218	-	-	0.028	-	-	0.371	0.028	0.335
HCM Control Delay (s)	217.3	33.8	9.6	11.3	-	-	8.4	-	-	43.5	34.6	11.9
HCM Lane LOS	F	D	A	B	-	-	A	-	-	E	D	B
HCM 95th %tile Q(veh)	7.6	0	0.1	0.8	-	-	0.1	-	-	1.6	0.1	1.5

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	5	47	58	15	36	33
Future Vol, veh/h	5	47	58	15	36	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	55	68	18	42	39

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	86	0	-	0	135 68
Stage 1	-	-	-	-	68 -
Stage 2	-	-	-	-	67 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1510	-	-	-	859 995
Stage 1	-	-	-	-	955 -
Stage 2	-	-	-	-	956 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1510	-	-	-	856 995
Mov Cap-2 Maneuver	-	-	-	-	825 -
Stage 1	-	-	-	-	951 -
Stage 2	-	-	-	-	956 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1510	-	-	-	825	995
HCM Lane V/C Ratio	0.004	-	-	-	0.051	0.039
HCM Control Delay (s)	7.4	-	-	-	9.6	8.8
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

HCM 6th TWSC
1: Old Glory Dr & Fontaine Blvd

Existing Traffic
PM Peak Hour

Intersection													
Int Delay, s/veh	9.8												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↕↕	↕	↕	↕↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	42	241	263	110	11	212	9	65	1	7	8	2	104
Future Vol, veh/h	42	241	263	110	11	212	9	65	1	7	8	2	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	284	309	129	13	249	11	76	1	8	9	2	122

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	249	260	0	0	438	0	0	1127	1261	155	1096	1379	125
Stage 1	-	-	-	-	-	-	-	975	975	-	275	275	-
Stage 2	-	-	-	-	-	-	-	152	286	-	821	1104	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	997	1302	-	-	1118	-	-	159	169	863	168	143	902
Stage 1	-	-	-	-	-	-	-	270	328	-	708	681	-
Stage 2	-	-	-	-	-	-	-	835	674	-	335	285	-
Platoon blocked, %			-	-	-	-	-						
Mov Cap-1 Maneuver	1216	1216	-	-	1118	-	-	106	121	863	129	103	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	106	121	-	129	103	-
Stage 1	-	-	-	-	-	-	-	196	238	-	514	673	-
Stage 2	-	-	-	-	-	-	-	711	666	-	240	207	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.9	0.4	89.2	11.9
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	106	121	863	1216	-	-	1118	-	-	129	103	902
HCM Lane V/C Ratio	0.721	0.01	0.01	0.274	-	-	0.012	-	-	0.073	0.023	0.136
HCM Control Delay (s)	98.6	35	9.2	9.1	-	-	8.3	-	-	35.1	40.8	9.6
HCM Lane LOS	F	E	A	A	-	-	A	-	-	E	E	A
HCM 95th %tile Q(veh)	3.8	0	0	1.1	-	-	0	-	-	0.2	0.1	0.5

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	14	36	20	5	9	4
Future Vol, veh/h	14	36	20	5	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	42	24	6	11	5

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	30	0	0
Stage 1	-	-	24
Stage 2	-	-	74
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1583	-	901
Stage 1	-	-	999
Stage 2	-	-	949
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1583	-	892
Mov Cap-2 Maneuver	-	-	841
Stage 1	-	-	989
Stage 2	-	-	949

Approach	EB	WB	SB
HCM Control Delay, s	2	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1583	-	-	-	841	1052
HCM Lane V/C Ratio	0.01	-	-	-	0.013	0.004
HCM Control Delay (s)	7.3	-	-	-	9.3	8.4
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0	0

Intersection

Int Delay, s/veh 95.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑	↗	↖	↑↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	144	389	54	26	529	19	161	2	11	46	3	249
Future Vol, veh/h	144	389	54	26	529	19	161	2	11	46	3	249
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	169	458	64	31	622	22	189	2	13	54	4	293

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	644	0	0	522
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	-	4.14
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22
Pot Cap-1 Maneuver	937	-	-	1041
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	937	-	-	1041
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0.4	\$ 850	23.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	69	96	774	937	-	-	1041	-	-	105	91	685
HCM Lane V/C Ratio	2.745	0.025	0.017	0.181	-	-	0.029	-	-	0.515	0.039	0.428
HCM Control Delay (s)	\$ 917.4	43.4	9.7	9.7	-	-	8.6	-	-	71.1	46.2	14.1
HCM Lane LOS	F	E	A	A	-	-	A	-	-	F	E	B
HCM 95th %tile Q(veh)	18.8	0.1	0.1	0.7	-	-	0.1	-	-	2.3	0.1	2.1

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	27	388	22	24	402	54	75	1	28	57	1	97
Future Vol, veh/h	27	388	22	24	402	54	75	1	28	57	1	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	456	26	28	473	64	88	1	33	67	1	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	537	0	0	482	0	0	813	1113	456	1079	1075	237
Stage 1	-	-	-	-	-	-	520	520	-	529	529	-
Stage 2	-	-	-	-	-	-	293	593	-	550	546	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1029	-	-	1079	-	-	283	208	603	184	219	765
Stage 1	-	-	-	-	-	-	538	531	-	502	526	-
Stage 2	-	-	-	-	-	-	691	493	-	518	517	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1029	-	-	1079	-	-	230	196	603	166	207	765
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	196	-	166	207	-
Stage 1	-	-	-	-	-	-	521	515	-	486	512	-
Stage 2	-	-	-	-	-	-	571	480	-	473	501	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.4			25			21.7		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	230	563	1029	-	-	1079	-	-	166	207	765
HCM Lane V/C Ratio	0.384	0.061	0.031	-	-	0.026	-	-	0.404	0.006	0.149
HCM Control Delay (s)	30.1	11.8	8.6	-	-	8.4	-	-	40.7	22.5	10.5
HCM Lane LOS	D	B	A	-	-	A	-	-	E	C	B
HCM 95th %tile Q(veh)	1.7	0.2	0.1	-	-	0.1	-	-	1.8	0	0.5

Intersection				
Intersection Delay, s/veh	6.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	523	238	220	142
Demand Flow Rate, veh/h	534	243	224	145
Vehicles Circulating, veh/h	30	151	499	345
Vehicles Exiting, veh/h	460	572	65	49
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.6	4.9	7.4	5.2
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	534	243	224	145
Cap Entry Lane, veh/h	1338	1183	829	971
Entry HV Adj Factor	0.980	0.979	0.982	0.979
Flow Entry, veh/h	523	238	220	142
Cap Entry, veh/h	1311	1158	815	950
V/C Ratio	0.399	0.205	0.270	0.149
Control Delay, s/veh	6.6	4.9	7.4	5.2
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	1

Intersection						
Int Delay, s/veh	10.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	260	136	438	134	40	323
Future Vol, veh/h	260	136	438	134	40	323
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	400	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	306	160	515	158	47	380

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	989	515	0	0	673
Stage 1	515	-	-	-	-
Stage 2	474	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 274	560	-	-	918
Stage 1	600	-	-	-	-
Stage 2	626	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 260	560	-	-	918
Mov Cap-2 Maneuver	381	-	-	-	-
Stage 1	569	-	-	-	-
Stage 2	626	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.3	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	381	560	918
HCM Lane V/C Ratio	-	-	0.803	0.286	0.051
HCM Control Delay (s)	-	-	43.4	14	9.1
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	7	1.2	0.2

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	6	88	186	112	69	35
Future Vol, veh/h	6	88	186	112	69	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	104	219	132	81	41

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	351	0	-	0	337 219
Stage 1	-	-	-	-	219 -
Stage 2	-	-	-	-	118 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1208	-	-	-	658 821
Stage 1	-	-	-	-	817 -
Stage 2	-	-	-	-	907 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1208	-	-	-	654 821
Mov Cap-2 Maneuver	-	-	-	-	685 -
Stage 1	-	-	-	-	812 -
Stage 2	-	-	-	-	907 -

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1208	-	-	-	685	821
HCM Lane V/C Ratio	0.006	-	-	-	0.119	0.05
HCM Control Delay (s)	8	-	-	-	11	9.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.2

Intersection						
Int Delay, s/veh	7.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↑	↗	↘	↗
Traffic Vol, veh/h	100	0	0	0	0	37
Future Vol, veh/h	100	0	0	0	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	118	0	0	0	0	44

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1	0	-	0	237
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	236
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1622	-	-	-	751
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	803
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1622	-	-	-	696
Mov Cap-2 Maneuver	-	-	-	-	625
Stage 1	-	-	-	-	947
Stage 2	-	-	-	-	803

Approach	EB	WB	SB
HCM Control Delay, s	7.4	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1622	-	-	-	-	1084
HCM Lane V/C Ratio	0.073	-	-	-	-	0.04
HCM Control Delay (s)	7.4	-	-	-	0	8.5
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Intersection

Int Delay, s/veh 102

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑	↗	↖	↑↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	312	475	230	11	338	9	131	3	7	8	3	122
Future Vol, veh/h	312	475	230	11	338	9	131	3	7	8	3	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	367	559	271	13	398	11	154	4	8	9	4	144

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	409	0	830	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	2.22	-
Pot Cap-1 Maneuver	1146	-	798	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1146	-	798	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0.3	\$ 1156.6	16.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	46	59	717	1146	-	-	798	-	-	65	40	809
HCM Lane V/C Ratio	3.35	0.06	0.011	0.32	-	-	0.016	-	-	0.145	0.088	0.177
HCM Control Delay (s)	\$ 1242.7	69.9	10.1	9.6	-	-	9.6	-	-	69.5	103.5	10.4
HCM Lane LOS	F	F	B	A	-	-	A	-	-	F	F	B
HCM 95th %tile Q(veh)	16.9	0.2	0	1.4	-	-	0	-	-	0.5	0.3	0.6

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	83	296	50	6	268	12	35	3	5	13	2	55
Future Vol, veh/h	83	296	50	6	268	12	35	3	5	13	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	348	59	7	315	14	41	4	6	15	2	65

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	329	0	0	407	0	0	717	887	348	908	932	158
Stage 1	-	-	-	-	-	-	544	544	-	329	329	-
Stage 2	-	-	-	-	-	-	173	343	-	579	603	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1229	-	-	1150	-	-	331	282	694	243	266	860
Stage 1	-	-	-	-	-	-	522	518	-	659	646	-
Stage 2	-	-	-	-	-	-	812	637	-	500	487	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1229	-	-	1150	-	-	284	258	694	223	243	860
Mov Cap-2 Maneuver	-	-	-	-	-	-	284	258	-	223	243	-
Stage 1	-	-	-	-	-	-	480	477	-	606	642	-
Stage 2	-	-	-	-	-	-	744	633	-	453	448	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.6			0.2			18.7			12.2		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	284	425	1229	-	-	1150	-	-	223	243	860
HCM Lane V/C Ratio	0.145	0.022	0.079	-	-	0.006	-	-	0.069	0.01	0.075
HCM Control Delay (s)	19.8	13.7	8.2	-	-	8.2	-	-	22.3	20	9.5
HCM Lane LOS	C	B	A	-	-	A	-	-	C	C	A
HCM 95th %tile Q(veh)	0.5	0.1	0.3	-	-	0	-	-	0.2	0	0.2

Intersection				
Intersection Delay, s/veh	4.3			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	304	100	59	98
Demand Flow Rate, veh/h	310	102	60	100
Vehicles Circulating, veh/h	13	225	210	156
Vehicles Exiting, veh/h	243	45	113	171
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.6	4.1	3.7	3.8
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	310	102	60	100
Cap Entry Lane, veh/h	1362	1097	1114	1177
Entry HV Adj Factor	0.981	0.983	0.983	0.980
Flow Entry, veh/h	304	100	59	98
Cap Entry, veh/h	1336	1078	1095	1153
V/C Ratio	0.228	0.093	0.054	0.085
Control Delay, s/veh	4.6	4.1	3.7	3.8
LOS	A	A	A	A
95th %tile Queue, veh	1	0	0	0

Intersection						
Int Delay, s/veh	7.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	161	88	467	253	105	408
Future Vol, veh/h	161	88	467	253	105	408
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	400	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	189	104	549	298	124	480

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1277	549	0	0	847
Stage 1	549	-	-	-	-
Stage 2	728	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 184	535	-	-	790
Stage 1	579	-	-	-	-
Stage 2	478	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 155	535	-	-	790
Mov Cap-2 Maneuver	255	-	-	-	-
Stage 1	488	-	-	-	-
Stage 2	478	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.7	0	2.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	255	535	790	-
HCM Lane V/C Ratio	-	-	0.743	0.194	0.156	-
HCM Control Delay (s)	-	-	51.1	13.3	10.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	5.3	0.7	0.6	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	16	164	106	75	143	5
Future Vol, veh/h	16	164	106	75	143	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	193	125	88	168	6

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	213	0	-	0	356 125
Stage 1	-	-	-	-	125 -
Stage 2	-	-	-	-	231 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1357	-	-	-	642 926
Stage 1	-	-	-	-	901 -
Stage 2	-	-	-	-	807 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1357	-	-	-	633 926
Mov Cap-2 Maneuver	-	-	-	-	666 -
Stage 1	-	-	-	-	888 -
Stage 2	-	-	-	-	807 -

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1357	-	-	-	666	926
HCM Lane V/C Ratio	0.014	-	-	-	0.253	0.006
HCM Control Delay (s)	7.7	-	-	-	12.2	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	1	0

Intersection

Int Delay, s/veh 7.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	40	0	0	0	0	27
Future Vol, veh/h	40	0	0	0	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	0	0	0	0	32

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	1	0	-	0	95
Stage 1	-	-	-	-	1
Stage 2	-	-	-	-	94
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1622	-	-	-	905
Stage 1	-	-	-	-	1022
Stage 2	-	-	-	-	930
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1622	-	-	-	879
Mov Cap-2 Maneuver	-	-	-	-	806
Stage 1	-	-	-	-	992
Stage 2	-	-	-	-	930

Approach

	EB	WB	SB
HCM Control Delay, s	7.3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1622	-	-	-	-	1084
HCM Lane V/C Ratio	0.029	-	-	-	-	0.029
HCM Control Delay (s)	7.3	-	-	-	0	8.4
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.1

HCM 6th TWSC
1: Old Glory Dr & Fontaine Blvd

Short-Term Total Traffic
AM Peak Hour

Intersection													
Int Delay, s/veh	213												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	64	80	440	57	26	689	19	168	2	11	46	3	249
Future Vol, veh/h	64	80	440	57	26	689	19	168	2	11	46	3	249
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	94	518	67	31	811	22	198	2	13	54	4	293

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	811	833	0	0	585	0	0	1326	1751	259	1471	1796	406
Stage 1	-	-	-	-	-	-	-	856	856	-	873	873	-
Stage 2	-	-	-	-	-	-	-	470	895	-	598	923	-
Critical Hdwy	6.44	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.52	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	439	796	-	-	986	-	~ 114	85	740	89	79	594	-
Stage 1	-	-	-	-	-	-	-	319	373	-	311	366	-
Stage 2	-	-	-	-	-	-	-	543	357	-	456	347	-
Platoon blocked, %			-	-	-	-	-						
Mov Cap-1 Maneuver	410	410	-	-	986	-	~ 36	48	740	56	45	594	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 36	48	-	56	45	-	-
Stage 1	-	-	-	-	-	-	~ 187	219	-	183	355	-	-
Stage 2	-	-	-	-	-	-	264	346	-	260	204	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.3	\$ 2081.8	50.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	36	48	740	410	-	-	986	-	-	56	45	594
HCM Lane V/C Ratio	5.49	0.049	0.017	0.413	-	-	0.031	-	-	0.966	0.078	0.493
HCM Control Delay (s)	\$ 2241.2	83.8	10	19.8	-	-	8.8	-	-	229.1	91.7	16.8
HCM Lane LOS	F	F	B	C	-	-	A	-	-	F	F	C
HCM 95th %tile Q(veh)	23.4	0.2	0.1	2	-	-	0.1	-	-	4.4	0.2	2.7

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	9.7	7.0	3.0	6.7	12.6	4.4	13.3	6.9	3.6	6.5	9.4	17.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	All
Stop Del/Veh (s)	11.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	8.0	5.5	2.6	4.5	7.6	3.5	8.2	6.0	3.4	7.3	4.5	9.0

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	All
Stop Del/Veh (s)	7.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	7.1	5.7	2.7	4.0	7.0	2.8	7.8	4.3	3.6	7.2	8.2	6.7

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	All
Stop Del/Veh (s)	6.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	7.2	5.5	2.7	6.8	7.7	2.6	9.1		3.3	6.4	9.2	7.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	All
Stop Del/Veh (s)	7.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	8.3	6.1	2.8	5.7	9.2	3.6	10.0	8.8	3.5	6.8	7.8	10.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	8.3

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	27	439	22	24	562	54	75	1	28	57	1	97
Future Vol, veh/h	27	439	22	24	562	54	75	1	28	57	1	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	516	26	28	661	64	88	1	33	67	1	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	725	0	0	542	0	0	967	1361	516	1327	1323	331
Stage 1	-	-	-	-	-	-	580	580	-	717	717	-
Stage 2	-	-	-	-	-	-	387	781	-	610	606	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	876	-	-	1025	-	-	221	148	558	122	156	666
Stage 1	-	-	-	-	-	-	499	499	-	388	433	-
Stage 2	-	-	-	-	-	-	609	404	-	481	486	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	876	-	-	1025	-	-	173	139	558	109	146	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	139	-	109	146	-
Stage 1	-	-	-	-	-	-	481	481	-	374	421	-
Stage 2	-	-	-	-	-	-	489	393	-	435	468	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.3			36.5			37		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	173	505	876	-	-	1025	-	-	109	146	666
HCM Lane V/C Ratio	0.51	0.068	0.036	-	-	0.028	-	-	0.615	0.008	0.171
HCM Control Delay (s)	45.7	12.6	9.3	-	-	8.6	-	-	80.4	29.9	11.5
HCM Lane LOS	E	B	A	-	-	A	-	-	F	D	B
HCM 95th %tile Q(veh)	2.5	0.2	0.1	-	-	0.1	-	-	3	0	0.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Stop Del/Veh (s)	3.9	6.4	2.3	3.6	4.0	2.6	5.0	3.4	4.7		2.7	4.7

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Stop Del/Veh (s)	4.2	4.1	2.1	3.2	3.4	2.2	4.1	3.9	4.1	2.6	3.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	5.1	4.6	2.3	4.2	3.6	2.4	4.6		4.1	4.8		2.7

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	All
Stop Del/Veh (s)	3.9

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Stop Del/Veh (s)	3.2	4.3	2.1	3.8	3.2	2.3	4.1		3.9	4.2	2.7	3.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	4.2	5.0	2.3	3.8	3.6	2.5	4.6	3.6	4.0	4.5		2.7

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	4.1

Total Zone Performance By Interval

Interval Start	7:00	7:15	7:30	7:45	All
Stop Del/Veh (s)	270.9	179.2	156.5	187.8	638.5

Intersection				
Intersection Delay, s/veh	7.2			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	586	366	233	204
Demand Flow Rate, veh/h	598	373	237	208
Vehicles Circulating, veh/h	39	184	558	484
Vehicles Exiting, veh/h	653	611	79	73
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.3	6.4	8.2	7.0
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	598	373	237	208
Cap Entry Lane, veh/h	1326	1144	781	842
Entry HV Adj Factor	0.981	0.980	0.983	0.981
Flow Entry, veh/h	586	366	233	204
Cap Entry, veh/h	1300	1121	768	826
V/C Ratio	0.451	0.326	0.303	0.247
Control Delay, s/veh	7.3	6.4	8.2	7.0
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	1

Intersection

Int Delay, s/veh 5.2

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	4	15	0	12	40	2
Future Vol, veh/h	4	15	0	12	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	18	0	14	47	2

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	23	0	28	14
Stage 1	-	-	-	-	14	-
Stage 2	-	-	-	-	14	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1592	-	987	1066
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1592	-	987	1066
Mov Cap-2 Maneuver	-	-	-	-	911	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1009	-

Approach EB WB NB

HCM Control Delay, s 0 0 9.1
HCM LOS A

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h)	917	-	-	1592	-
HCM Lane V/C Ratio	0.054	-	-	-	-
HCM Control Delay (s)	9.1	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	4	2	0	5	7	2
Future Vol, veh/h	4	2	0	5	7	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	2	0	6	8	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	7	0	12
Stage 1	-	-	-	-	6
Stage 2	-	-	-	-	6
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1614	-	1008
Stage 1	-	-	-	-	1017
Stage 2	-	-	-	-	1017
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1614	-	1008
Mov Cap-2 Maneuver	-	-	-	-	924
Stage 1	-	-	-	-	1017
Stage 2	-	-	-	-	1017

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	954	-	-	1614	-
HCM Lane V/C Ratio	0.011	-	-	-	-
HCM Control Delay (s)	8.8	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	6.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	2	4	0	5	14
Future Vol, veh/h	4	2	4	0	5	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	2	5	0	6	16

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	7	0	16
Stage 1	-	-	-	-	6
Stage 2	-	-	-	-	10
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1614	-	1002
Stage 1	-	-	-	-	1017
Stage 2	-	-	-	-	1013
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1614	-	999
Mov Cap-2 Maneuver	-	-	-	-	917
Stage 1	-	-	-	-	1014
Stage 2	-	-	-	-	1013

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1030	-	-	1614	-
HCM Lane V/C Ratio	0.022	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	0	35	12	4	18	0
Future Vol, veh/h	0	35	12	4	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	105	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	41	14	5	21	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	54	21	21	0	0
Stage 1	21	-	-	-	-
Stage 2	33	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	954	1056	1595	-	-
Stage 1	1002	-	-	-	-
Stage 2	989	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	945	1056	1595	-	-
Mov Cap-2 Maneuver	880	-	-	-	-
Stage 1	993	-	-	-	-
Stage 2	989	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	5.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1595	-	1056	-	-
HCM Lane V/C Ratio	0.009	-	0.039	-	-
HCM Control Delay (s)	7.3	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗	↘	↑	↗	↘	↑	↗
Traffic Vol, veh/h	14	0	21	0	0	0	73	2	0	0	7	47
Future Vol, veh/h	14	0	21	0	0	0	73	2	0	0	7	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	-	0	-	0	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	25	0	0	0	86	2	0	0	8	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	25	0	0	65	33	0	47	58	1
Stage 1	-	-	-	-	-	-	32	32	-	1	1	-
Stage 2	-	-	-	-	-	-	33	1	-	46	57	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1589	-	-	929	860	-	954	833	1084
Stage 1	-	-	-	-	-	-	984	868	-	1022	895	-
Stage 2	-	-	-	-	-	-	983	895	-	968	847	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1622	-	-	1589	-	-	869	851	-	-	825	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	869	851	-	-	825	-
Stage 1	-	-	-	-	-	-	974	859	-	1012	895	-
Stage 2	-	-	-	-	-	-	924	895	-	956	839	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0	9.6	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	869	851	-	1622	-	-	1589	-	-	-	825	1084
HCM Lane V/C Ratio	0.099	0.003	-	0.01	-	-	-	-	-	-	0.01	0.051
HCM Control Delay (s)	9.6	9.2	0	7.2	-	-	0	-	-	0	9.4	8.5
HCM Lane LOS	A	A	A	A	-	-	A	-	-	A	A	A
HCM 95th %tile Q(veh)	0.3	0	-	0	-	-	0	-	-	-	0	0.2

Intersection						
Int Delay, s/veh	4.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	27	10	35	15	13
Future Vol, veh/h	40	27	10	35	15	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	205	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	32	12	41	18	15

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	91	26	33	0	0
Stage 1	26	-	-	-	-
Stage 2	65	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	909	1050	1579	-	-
Stage 1	997	-	-	-	-
Stage 2	958	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	902	1050	1579	-	-
Mov Cap-2 Maneuver	902	-	-	-	-
Stage 1	989	-	-	-	-
Stage 2	958	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1579	-	956	-	-
HCM Lane V/C Ratio	0.007	-	0.082	-	-
HCM Control Delay (s)	7.3	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	26	19	8	19	35	6
Future Vol, veh/h	26	19	8	19	35	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	205	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	22	9	22	41	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	85	45	48	0	0
Stage 1	45	-	-	-	-
Stage 2	40	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	916	1025	1559	-	-
Stage 1	977	-	-	-	-
Stage 2	982	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	911	1025	1559	-	-
Mov Cap-2 Maneuver	860	-	-	-	-
Stage 1	971	-	-	-	-
Stage 2	982	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1559	-	923	-	-
HCM Lane V/C Ratio	0.006	-	0.057	-	-
HCM Control Delay (s)	7.3	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	22.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	328	136	444	156	40	339
Future Vol, veh/h	328	136	444	156	40	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	400	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	386	160	522	184	47	399

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1015	522	0	0	706
Stage 1	522	-	-	-	-
Stage 2	493	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 264	555	-	-	892
Stage 1	595	-	-	-	-
Stage 2	614	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 250	555	-	-	892
Mov Cap-2 Maneuver	~ 372	-	-	-	-
Stage 1	563	-	-	-	-
Stage 2	614	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68.3	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	372	555	892
HCM Lane V/C Ratio	-	-	1.037	0.288	0.053
HCM Control Delay (s)	-	-	90.8	14.1	9.3
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	12.9	1.2	0.2

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	12.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	328	136	442	155	40	0
Future Vol, veh/h	328	136	442	155	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	386	160	520	182	47	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	614	520	0	0	702	0
Stage 1	520	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	455	556	-	-	895	-
Stage 1	597	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	431	556	-	-	895	-
Mov Cap-2 Maneuver	488	-	-	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.8	0	9.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	488	556	895	-
HCM Lane V/C Ratio	-	-	0.791	0.288	0.053	-
HCM Control Delay (s)	-	-	34.9	14.1	9.2	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	7.2	1.2	0.2	-

Intersection			
Intersection Delay, s/veh	12.1		
Intersection LOS	B		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	546	703	446
Demand Flow Rate, veh/h	557	717	455
Vehicles Circulating, veh/h	531	48	394
Vehicles Exiting, veh/h	234	801	694
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	17.7	8.8	10.2
Approach LOS	C	A	B
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	557	717	455
Cap Entry Lane, veh/h	803	1314	923
Entry HV Adj Factor	0.980	0.980	0.980
Flow Entry, veh/h	546	703	446
Cap Entry, veh/h	787	1288	905
V/C Ratio	0.694	0.546	0.493
Control Delay, s/veh	17.7	8.8	10.2
LOS	C	A	B
95th %tile Queue, veh	6	3	3

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	6	110	254	119	72	35
Future Vol, veh/h	6	110	254	119	72	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	129	299	140	85	41

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	439	0	0
Stage 1	-	-	299
Stage 2	-	-	143
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1121	-	573
Stage 1	-	-	752
Stage 2	-	-	884
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1121	-	570
Mov Cap-2 Maneuver	-	-	623
Stage 1	-	-	747
Stage 2	-	-	884

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1121	-	-	-	623	741
HCM Lane V/C Ratio	0.006	-	-	-	0.136	0.056
HCM Control Delay (s)	8.2	-	-	-	11.7	10.1
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0.2

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	100	25	76	11	8	37
Future Vol, veh/h	100	25	76	11	8	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	118	29	89	13	9	44

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	102	0	-	0	354 89
Stage 1	-	-	-	-	89 -
Stage 2	-	-	-	-	265 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1490	-	-	-	644 969
Stage 1	-	-	-	-	934 -
Stage 2	-	-	-	-	779 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1490	-	-	-	593 969
Mov Cap-2 Maneuver	-	-	-	-	591 -
Stage 1	-	-	-	-	860 -
Stage 2	-	-	-	-	779 -

Approach	EB	WB	SB
HCM Control Delay, s	6.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1490	-	-	-	591	969
HCM Lane V/C Ratio	0.079	-	-	-	0.016	0.045
HCM Control Delay (s)	7.6	-	-	-	11.2	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0	0.1

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	20	53	2	7	34
Future Vol, veh/h	13	20	53	2	7	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	105	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	24	62	2	8	40

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	64	0	-	0	117 63
Stage 1	-	-	-	-	63 -
Stage 2	-	-	-	-	54 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1538	-	-	-	879 1002
Stage 1	-	-	-	-	960 -
Stage 2	-	-	-	-	969 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1538	-	-	-	870 1002
Mov Cap-2 Maneuver	-	-	-	-	832 -
Stage 1	-	-	-	-	950 -
Stage 2	-	-	-	-	969 -

Approach

	EB	WB	SB
HCM Control Delay, s	2.9	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1538	-	-	-	968
HCM Lane V/C Ratio	0.01	-	-	-	0.05
HCM Control Delay (s)	7.4	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection

Int Delay, s/veh 204

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑↑	↗	↖	↑↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	312	672	239	11	453	9	137	3	7	8	3	122
Future Vol, veh/h	312	672	239	11	453	9	137	3	7	8	3	122
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	800	-	800	350	-	350	170	-	0	185	-	340
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	367	791	281	13	533	11	161	4	8	9	4	144

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	544	0	0	1072
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	-	4.14
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22
Pot Cap-1 Maneuver	1021	-	-	646
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1021	-	-	646
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.7	0.2	\$ 2698.9	22.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	24	33	603	1021	-	-	646	-	-	39	22	731
HCM Lane V/C Ratio	6.716	0.107	0.014	0.36	-	-	0.02	-	-	0.241	0.16	0.196
HCM Control Delay (s)	\$ 2892.6	126.8	11.1	10.5	-	-	10.7	-	-	124.5	197.7	11.1
HCM Lane LOS	F	F	B	B	-	-	B	-	-	F	F	B
HCM 95th %tile Q(veh)	20.1	0.3	0	1.7	-	-	0.1	-	-	0.8	0.5	0.7

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	14.7	7.3	3.7	4.9	7.8	4.3	8.7	6.0	4.9	4.3	9.2	6.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	All
Stop Del/Veh (s)	8.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	13.7	5.4	3.5	4.5	6.2	2.4	8.3		4.3	5.2		4.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	All
Stop Del/Veh (s)	6.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	7.9	5.7	2.9	6.8	5.4	3.6	6.6	4.9	3.0	4.8	2.6	4.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	All
Stop Del/Veh (s)	5.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	9.0	5.5	3.0	6.0	6.0	6.6	6.9	7.9	2.6	7.2	5.6	4.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	All
Stop Del/Veh (s)	5.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	12.1	6.2	3.4	5.9	6.6	4.5	7.9	6.5	3.5	5.1	6.0	5.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	6.9

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	83	493	50	6	383	12	35	3	5	13	2	55
Future Vol, veh/h	83	493	50	6	383	12	35	3	5	13	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	580	59	7	451	14	41	4	6	15	2	65

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	465	0	0	639	0	0	1017	1255	580	1276	1300	226
Stage 1	-	-	-	-	-	-	776	776	-	465	465	-
Stage 2	-	-	-	-	-	-	241	479	-	811	835	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	1095	-	-	943	-	-	204	171	513	133	161	778
Stage 1	-	-	-	-	-	-	389	407	-	548	562	-
Stage 2	-	-	-	-	-	-	742	554	-	372	382	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1095	-	-	943	-	-	171	155	513	120	146	778
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	155	-	120	146	-
Stage 1	-	-	-	-	-	-	354	371	-	499	558	-
Stage 2	-	-	-	-	-	-	672	550	-	332	348	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	1.1		0.1		30		16	
HCM LOS					D		C	

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	171	275	1095	-	-	943	-	-	120	146	778
HCM Lane V/C Ratio	0.241	0.034	0.089	-	-	0.007	-	-	0.127	0.016	0.083
HCM Control Delay (s)	32.6	18.6	8.6	-	-	8.8	-	-	39.3	30.1	10
HCM Lane LOS	D	C	A	-	-	A	-	-	E	D	B
HCM 95th %tile Q(veh)	0.9	0.1	0.3	-	-	0	-	-	0.4	0	0.3

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	3.6	4.1	2.2	3.5	3.3	2.5	4.1	3.6	3.9	3.6	2.8	2.7

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	All
Stop Del/Veh (s)	3.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	2.8	2.8	2.1	4.4	3.0	2.7	3.3	2.9	3.2	3.6		2.4

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	All
Stop Del/Veh (s)	2.9

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	2.9	3.0	2.2	3.2	3.0	2.6	3.7	3.0	3.3	3.0	2.0	2.5

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	All
Stop Del/Veh (s)	3.0

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	3.0	3.4	2.0	3.5	2.9	2.4	3.9		2.6	4.8		2.4

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	All
Stop Del/Veh (s)	3.1

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	3.1	3.5	2.2	3.1	3.1	2.3	3.9	3.5	3.2	3.6	3.2	2.5

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	3.2

Intersection				
Intersection Delay, s/veh	5.9			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	536	190	68	140
Demand Flow Rate, veh/h	547	193	69	143
Vehicles Circulating, veh/h	18	309	432	255
Vehicles Exiting, veh/h	380	192	133	247
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.6	5.5	4.8	4.7
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	547	193	69	143
Cap Entry Lane, veh/h	1355	1007	888	1064
Entry HV Adj Factor	0.981	0.982	0.986	0.979
Flow Entry, veh/h	536	190	68	140
Cap Entry, veh/h	1328	989	875	1042
V/C Ratio	0.404	0.192	0.078	0.134
Control Delay, s/veh	6.6	5.5	4.8	4.7
LOS	A	A	A	A
95th %tile Queue, veh	2	1	0	0

Intersection

Int Delay, s/veh 2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	14	49	0	8	28	1
Future Vol, veh/h	14	49	0	8	28	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	58	0	9	33	1

Major/Minor

	Major1	Major2	Minor1		
Conflicting Flow All	0	0	74	0	54
Stage 1	-	-	-	-	45
Stage 2	-	-	-	-	9
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1526	-	954
Stage 1	-	-	-	-	977
Stage 2	-	-	-	-	1014
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1526	-	954
Mov Cap-2 Maneuver	-	-	-	-	886
Stage 1	-	-	-	-	977
Stage 2	-	-	-	-	1014

Approach

	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt

	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	890	-	-	1526	-
HCM Lane V/C Ratio	0.038	-	-	-	-
HCM Control Delay (s)	9.2	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	8	0	3	5	1
Future Vol, veh/h	6	8	0	3	5	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	9	0	4	6	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	16	0	16
Stage 1	-	-	-	-	12
Stage 2	-	-	-	-	4
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1602	-	1002
Stage 1	-	-	-	-	1011
Stage 2	-	-	-	-	1019
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1602	-	1002
Mov Cap-2 Maneuver	-	-	-	-	920
Stage 1	-	-	-	-	1011
Stage 2	-	-	-	-	1019

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	942	-	-	1602	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 6.2

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	1	6	14	0	3	9
Future Vol, veh/h	1	6	14	0	3	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	7	16	0	4	11

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	8	0	37	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	975	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1612	-	965	1078
Mov Cap-2 Maneuver	-	-	-	-	888	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	991	-

Approach EB WB NB

HCM Control Delay, s	0	7.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h)	1023	-	-	1612	-
HCM Lane V/C Ratio	0.014	-	-	0.01	-
HCM Control Delay (s)	8.6	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection

Int Delay, s/veh 5.7

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations						
Traffic Vol, veh/h	0	24	42	14	10	0
Future Vol, veh/h	0	24	42	14	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	105	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	28	49	16	12	0

Major/Minor Minor2 Major1 Major2

Conflicting Flow All	126	12	12	0	-	0
Stage 1	12	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	869	1069	1607	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	843	1069	1607	-	-	-
Mov Cap-2 Maneuver	785	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach EB NB SB

HCM Control Delay, s 8.5 5.5 0
HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h)	1607	-	1069	-	-
HCM Lane V/C Ratio	0.031	-	0.026	-	-
HCM Control Delay (s)	7.3	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↗	↘	↗	↗	↘	↗	↗	↘	↗	↗
Traffic Vol, veh/h	47	0	77	0	0	1	46	8	0	1	5	29
Future Vol, veh/h	47	0	77	0	0	1	46	8	0	1	5	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	-	0	-	0	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	0	91	0	0	1	54	9	0	1	6	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1	0	0	91	0	0	131	111	0	160	201	0
Stage 1	-	-	-	-	-	-	110	110	-	0	0	-
Stage 2	-	-	-	-	-	-	21	1	-	160	201	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1622	-	-	1504	-	-	841	779	-	806	695	-
Stage 1	-	-	-	-	-	-	895	804	-	-	-	-
Stage 2	-	-	-	-	-	-	998	895	-	842	735	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1622	-	-	1504	-	-	753	-	-	671	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	753	-	-	671	-	-
Stage 1	-	-	-	-	-	-	865	777	-	-	-	-
Stage 2	-	-	-	-	-	-	998	895	-	804	710	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.8	0	-	-
HCM LOS	-	-	-	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	-	753	-	1622	-	-	1504	-	-	-	671	-
HCM Lane V/C Ratio	-	0.012	-	0.034	-	-	-	-	-	-	0.009	-
HCM Control Delay (s)	-	9.8	0	7.3	-	-	0	-	-	-	10.4	-
HCM Lane LOS	-	A	A	A	-	-	A	-	-	-	B	-
HCM 95th %tile Q(veh)	-	0	-	0.1	-	-	0	-	-	-	0	-

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	18	31	28	37	44
Future Vol, veh/h	26	18	31	28	37	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	205	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	21	36	33	44	52

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	175	70	96	0	0
Stage 1	70	-	-	-	-
Stage 2	105	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	815	993	1498	-	-
Stage 1	953	-	-	-	-
Stage 2	919	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	795	993	1498	-	-
Mov Cap-2 Maneuver	795	-	-	-	-
Stage 1	930	-	-	-	-
Stage 2	919	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	3.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	866	-	-
HCM Lane V/C Ratio	0.024	-	0.06	-	-
HCM Control Delay (s)	7.5	-	9.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑	↑	
Traffic Vol, veh/h	16	13	23	43	29	27
Future Vol, veh/h	16	13	23	43	29	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	205	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	15	27	51	34	32

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	155	50	66	0	0
Stage 1	50	-	-	-	-
Stage 2	105	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	836	1018	1536	-	-
Stage 1	972	-	-	-	-
Stage 2	919	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	821	1018	1536	-	-
Mov Cap-2 Maneuver	792	-	-	-	-
Stage 1	955	-	-	-	-
Stage 2	919	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	2.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1536	-	880	-	-
HCM Lane V/C Ratio	0.018	-	0.039	-	-
HCM Control Delay (s)	7.4	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection

Int Delay, s/veh 14

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	207	88	486	331	105	420
Future Vol, veh/h	207	88	486	331	105	420
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	400	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	244	104	572	389	124	494

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1314	572	0	0	961	0
Stage 1	572	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 174	520	-	-	716	-
Stage 1	565	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	~ 144	520	-	-	716	-
Mov Cap-2 Maneuver	245	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	471	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	73.8	0	2.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	245	520	716	-
HCM Lane V/C Ratio	-	-	0.994	0.199	0.173	-
HCM Control Delay (s)	-	-	99.4	13.6	11.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	9.5	0.7	0.6	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	7.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	208	88	486	331	105	0
Future Vol, veh/h	208	88	486	331	105	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	245	104	572	389	124	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	820	572	0	0	961	0
Stage 1	572	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	345	520	-	-	716	-
Stage 1	565	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	285	520	-	-	716	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	467	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26	0	11.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	373	520	716	-
HCM Lane V/C Ratio	-	-	0.656	0.199	0.173	-
HCM Control Delay (s)	-	-	31.3	13.6	11.1	0
HCM Lane LOS	-	-	D	B	B	A
HCM 95th %tile Q(veh)	-	-	4.5	0.7	0.6	-

Intersection			
Intersection Delay, s/veh	14.8		
Intersection LOS	B		
Approach	WB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	349	961	617
Demand Flow Rate, veh/h	356	980	629
Vehicles Circulating, veh/h	583	126	250
Vehicles Exiting, veh/h	523	753	689
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	11.3	18.3	11.2
Approach LOS	B	C	B
Lane	Left	Left	Left
Designated Moves	LR	TR	LT
Assumed Moves	LR	TR	LT
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	356	980	629
Cap Entry Lane, veh/h	761	1213	1069
Entry HV Adj Factor	0.980	0.980	0.981
Flow Entry, veh/h	349	961	617
Cap Entry, veh/h	746	1189	1049
V/C Ratio	0.468	0.808	0.588
Control Delay, s/veh	11.3	18.3	11.2
LOS	B	C	B
95th %tile Queue, veh	3	9	4

Intersection

Int Delay, s/veh 3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	16	243	153	81	152	5
Future Vol, veh/h	16	243	153	81	152	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	286	180	95	179	6

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	275	0	-	0	504
Stage 1	-	-	-	-	180
Stage 2	-	-	-	-	324
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1288	-	-	-	528
Stage 1	-	-	-	-	851
Stage 2	-	-	-	-	733
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1288	-	-	-	520
Mov Cap-2 Maneuver	-	-	-	-	585
Stage 1	-	-	-	-	838
Stage 2	-	-	-	-	733

Approach

	EB	WB	SB
HCM Control Delay, s	0.5	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1288	-	-	-	585	863
HCM Lane V/C Ratio	0.015	-	-	-	0.306	0.007
HCM Control Delay (s)	7.8	-	-	-	13.8	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	1.3	0

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	40	88	52	8	15	27
Future Vol, veh/h	40	88	52	8	15	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	104	61	9	18	32

Major/Minor

	Major1	Major2	Minor2		
Conflicting Flow All	70	0	-	0	259 61
Stage 1	-	-	-	-	61 -
Stage 2	-	-	-	-	198 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1531	-	-	-	730 1004
Stage 1	-	-	-	-	962 -
Stage 2	-	-	-	-	835 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1531	-	-	-	707 1004
Mov Cap-2 Maneuver	-	-	-	-	700 -
Stage 1	-	-	-	-	932 -
Stage 2	-	-	-	-	835 -

Approach

	EB	WB	SB
HCM Control Delay, s	2.3	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1531	-	-	-	700	1004
HCM Lane V/C Ratio	0.031	-	-	-	0.025	0.032
HCM Control Delay (s)	7.4	-	-	-	10.3	8.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	62	36	6	4	24
Future Vol, veh/h	41	62	36	6	4	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	105	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	73	42	7	5	28

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	49	0	-	0	215 46
Stage 1	-	-	-	-	46 -
Stage 2	-	-	-	-	169 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1558	-	-	-	773 1023
Stage 1	-	-	-	-	976 -
Stage 2	-	-	-	-	861 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1558	-	-	-	749 1023
Mov Cap-2 Maneuver	-	-	-	-	728 -
Stage 1	-	-	-	-	946 -
Stage 2	-	-	-	-	861 -

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1558	-	-	-	967
HCM Lane V/C Ratio	0.031	-	-	-	0.034
HCM Control Delay (s)	7.4	-	-	-	8.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection												
Int Delay, s/veh	11.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Vol, veh/h	27	535	22	24	863	54	75	1	28	57	1	97
Future Vol, veh/h	27	535	22	24	863	54	75	1	28	57	1	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	582	24	26	938	59	82	1	30	62	1	105

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	997	0	0	606	0	0	1162	1689	582	1658	1654	469
Stage 1	-	-	-	-	-	-	640	640	-	990	990	-
Stage 2	-	-	-	-	-	-	522	1049	-	668	664	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	692	-	-	970	-	-	161	93	512	71	98	542
Stage 1	-	-	-	-	-	-	463	469	-	265	323	-
Stage 2	-	-	-	-	-	-	507	303	-	447	457	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	692	-	-	970	-	-	122	87	512	63	91	542
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	87	-	63	91	-
Stage 1	-	-	-	-	-	-	444	449	-	254	314	-
Stage 2	-	-	-	-	-	-	396	295	-	402	438	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.2			61.6			88.5		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	122	438	692	-	-	970	-	-	63	91	542
HCM Lane V/C Ratio	0.668	0.072	0.042	-	-	0.027	-	-	0.983	0.012	0.195
HCM Control Delay (s)	80	13.9	10.4	-	-	8.8	-	-	217.5	45	13.2
HCM Lane LOS	F	B	B	-	-	A	-	-	F	E	B
HCM 95th %tile Q(veh)	3.6	0.2	0.1	-	-	0.1	-	-	4.8	0	0.7

Intersection				
Intersection Delay, s/veh	9.7			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	644	660	251	184
Demand Flow Rate, veh/h	657	673	256	188
Vehicles Circulating, veh/h	56	205	609	807
Vehicles Exiting, veh/h	939	660	104	71
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.2	11.1	9.3	10.3
Approach LOS	A	B	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	657	673	256	188
Cap Entry Lane, veh/h	1303	1120	741	606
Entry HV Adj Factor	0.981	0.981	0.980	0.979
Flow Entry, veh/h	644	660	251	184
Cap Entry, veh/h	1278	1098	727	593
V/C Ratio	0.504	0.601	0.345	0.310
Control Delay, s/veh	8.2	11.1	9.3	10.3
LOS	A	B	A	B
95th %tile Queue, veh	3	4	2	1

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	11	9	3	29	0	10	1	0	1	1	10
Future Vol, veh/h	4	11	9	3	29	0	10	1	0	1	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	12	10	3	32	0	11	1	0	1	1	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	48	32	7	43	37	1	12	0	0	1	0	0
Stage 1	9	9	-	23	23	-	-	-	-	-	-	-
Stage 2	39	23	-	20	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	953	861	1075	960	855	1084	1607	-	-	1622	-	-
Stage 1	1012	888	-	995	876	-	-	-	-	-	-	-
Stage 2	976	876	-	999	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	921	854	1075	935	848	1084	1607	-	-	1622	-	-
Mov Cap-2 Maneuver	921	854	-	935	848	-	-	-	-	-	-	-
Stage 1	1005	887	-	988	870	-	-	-	-	-	-	-
Stage 2	934	870	-	976	883	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.9		9.4		6.6		0.6	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	938	855	1622	-	-
HCM Lane V/C Ratio	0.007	-	-	0.028	0.041	0.001	-	-
HCM Control Delay (s)	7.3	0	-	8.9	9.4	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	4	9	5	2	12	5
Future Vol, veh/h	4	9	5	2	12	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	10	5	2	13	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	7	0	-	0	24
Stage 1	-	-	-	-	6
Stage 2	-	-	-	-	18
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1614	-	-	-	992
Stage 1	-	-	-	-	1017
Stage 2	-	-	-	-	1005
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1614	-	-	-	990
Mov Cap-2 Maneuver	-	-	-	-	911
Stage 1	-	-	-	-	1015
Stage 2	-	-	-	-	1005

Approach	EB	WB	SB
HCM Control Delay, s	2.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1614	-	-	-	954
HCM Lane V/C Ratio	0.003	-	-	-	0.019
HCM Control Delay (s)	7.2	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	16	2	36	119	5
Future Vol, veh/h	5	16	2	36	119	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	17	2	39	129	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	175	132	134	0	-	0
Stage 1	132	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	815	917	1451	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	979	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	814	917	1451	-	-	-
Mov Cap-2 Maneuver	792	-	-	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	979	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1451	-	884	-	-
HCM Lane V/C Ratio	0.001	-	0.026	-	-
HCM Control Delay (s)	7.5	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	64	0	38	21	0	135
Future Vol, veh/h	64	0	38	21	0	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	105	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	0	41	23	0	147

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	188	41	0	0	64	0
Stage 1	41	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	801	1030	-	-	1538	-
Stage 1	981	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	801	1030	-	-	1538	-
Mov Cap-2 Maneuver	781	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	880	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	781	1538
HCM Lane V/C Ratio	-	-	0.089	-
HCM Control Delay (s)	-	-	10.1	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection												
Int Delay, s/veh	9.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Vol, veh/h	55	34	40	12	102	1	153	5	4	1	14	185
Future Vol, veh/h	55	34	40	12	102	1	153	5	4	1	14	185
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	155	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	37	43	13	111	1	166	5	4	1	15	201

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	112	0	0	80	0	0	403	295	37	320	337	111
Stage 1	-	-	-	-	-	-	157	157	-	137	137	-
Stage 2	-	-	-	-	-	-	246	138	-	183	200	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1478	-	-	1518	-	-	558	616	1035	633	584	942
Stage 1	-	-	-	-	-	-	845	768	-	866	783	-
Stage 2	-	-	-	-	-	-	758	782	-	819	736	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1478	-	-	1518	-	-	413	585	1035	603	555	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	413	585	-	603	555	-
Stage 1	-	-	-	-	-	-	810	737	-	830	776	-
Stage 2	-	-	-	-	-	-	579	775	-	777	706	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.2			0.8			19			10		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	413	585	1035	1478	-	-	1518	-	-	603	555	942
HCM Lane V/C Ratio	0.403	0.009	0.004	0.04	-	-	0.009	-	-	0.002	0.027	0.213
HCM Control Delay (s)	19.5	11.2	8.5	7.5	-	-	7.4	-	-	11	11.7	9.9
HCM Lane LOS	C	B	A	A	-	-	A	-	-	B	B	A
HCM 95th %tile Q(veh)	1.9	0	0	0.1	-	-	0	-	-	0	0.1	0.8

Intersection						
Int Delay, s/veh	4.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	69	92	9	22	44
Future Vol, veh/h	29	69	92	9	22	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	75	100	10	24	48

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	201	105	0	0	110
Stage 1	105	-	-	-	-
Stage 2	96	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	788	949	-	-	1480
Stage 1	919	-	-	-	-
Stage 2	928	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	775	949	-	-	1480
Mov Cap-2 Maneuver	766	-	-	-	-
Stage 1	904	-	-	-	-
Stage 2	928	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	2.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	886	1480
HCM Lane V/C Ratio	-	-	0.12	0.016
HCM Control Delay (s)	-	-	9.6	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Intersection						
Int Delay, s/veh	3.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	46	56	16	13	60
Future Vol, veh/h	35	46	56	16	13	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	50	61	17	14	65

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	163	70	0	0	78
Stage 1	70	-	-	-	-
Stage 2	93	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	828	993	-	-	1520
Stage 1	953	-	-	-	-
Stage 2	931	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	821	993	-	-	1520
Mov Cap-2 Maneuver	799	-	-	-	-
Stage 1	944	-	-	-	-
Stage 2	931	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	1.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	899	1520
HCM Lane V/C Ratio	-	-	0.098	0.009
HCM Control Delay (s)	-	-	9.4	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Timings
13: Marksheffel Rd & Lorson Blvd

2040 Background Traffic
AM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	484	149	457	205	44	381
Future Volume (vph)	484	149	457	205	44	381
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	19.6	19.6	65.1	65.1	65.1	65.1
Actuated g/C Ratio	0.21	0.21	0.69	0.69	0.69	0.69
v/c Ratio	0.74	0.36	0.39	0.19	0.09	0.32
Control Delay	41.9	7.3	7.9	1.3	6.3	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.9	7.3	7.9	1.3	6.3	7.3
LOS	D	A	A	A	A	A
Approach Delay	33.7		5.9			7.2
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 94.8	
Natural Cycle: 50	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 54.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 13: Marksheffel Rd & Lorson Blvd



Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	6	164	424	180	91	35
Future Vol, veh/h	6	164	424	180	91	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	178	461	196	99	38

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	657	0	-	0	653 461
Stage 1	-	-	-	-	461 -
Stage 2	-	-	-	-	192 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	931	-	-	-	432 600
Stage 1	-	-	-	-	635 -
Stage 2	-	-	-	-	841 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	931	-	-	-	429 600
Mov Cap-2 Maneuver	-	-	-	-	514 -
Stage 1	-	-	-	-	630 -
Stage 2	-	-	-	-	841 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	931	-	-	-	514	600
HCM Lane V/C Ratio	0.007	-	-	-	0.192	0.063
HCM Control Delay (s)	8.9	-	-	-	13.7	11.4
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0.2

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	100	73	228	44	30	37
Future Vol, veh/h	100	73	228	44	30	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	79	248	48	33	40

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	296	0	-	0	545 248
Stage 1	-	-	-	-	248 -
Stage 2	-	-	-	-	297 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1265	-	-	-	499 791
Stage 1	-	-	-	-	793 -
Stage 2	-	-	-	-	754 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1265	-	-	-	456 791
Mov Cap-2 Maneuver	-	-	-	-	518 -
Stage 1	-	-	-	-	725 -
Stage 2	-	-	-	-	754 -

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1265	-	-	-	518	791
HCM Lane V/C Ratio	0.086	-	-	-	0.063	0.051
HCM Control Delay (s)	8.1	-	-	-	12.4	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.3	-	-	-	0.2	0.2

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↗		↖	↗
Traffic Vol, veh/h	51	25	69	21	5	91
Future Vol, veh/h	51	25	69	21	5	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	-	205	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	27	75	23	5	99

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	98	0	-	0	224 87
Stage 1	-	-	-	-	87 -
Stage 2	-	-	-	-	137 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1495	-	-	-	764 971
Stage 1	-	-	-	-	936 -
Stage 2	-	-	-	-	890 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1495	-	-	-	736 971
Mov Cap-2 Maneuver	-	-	-	-	728 -
Stage 1	-	-	-	-	901 -
Stage 2	-	-	-	-	890 -

Approach	EB	WB	SB
HCM Control Delay, s	5	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1495	-	-	-	728	971
HCM Lane V/C Ratio	0.037	-	-	-	0.007	0.102
HCM Control Delay (s)	7.5	-	-	-	10	9.1
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0.3

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	10.7	6.5	3.2	5.4	33.6	3.4	14.7		3.4	6.2	6.0	12.4

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	All
Stop Del/Veh (s)	19.8

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	11.9	9.6	3.1	23.6	84.7	22.7	26.3		4.5	9.2		22.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	All
Stop Del/Veh (s)	45.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	11.6	8.7	3.2	65.0	134.7	69.0	30.7	5.4	4.2	7.5	7.4	16.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	All
Stop Del/Veh (s)	70.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	11.0	8.9	4.0	35.9	125.8	49.5	27.2	6.5	4.1	8.1	11.7	21.0

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	All
Stop Del/Veh (s)	65.3

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	11.6	8.8	3.5	35.5	109.7	42.7	25.5	8.1	4.0	7.8	9.8	18.7

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	54.7

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	83	864	50	6	601	12	35	3	5	13	2	55
Future Vol, veh/h	83	864	50	6	601	12	35	3	5	13	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	939	54	7	653	13	38	3	5	14	2	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	666	0	0	993	0	0	1461	1799	939	1817	1840	327
Stage 1	-	-	-	-	-	-	1119	1119	-	667	667	-
Stage 2	-	-	-	-	-	-	342	680	-	1150	1173	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	921	-	-	694	-	-	98	80	319	54	75	669
Stage 1	-	-	-	-	-	-	250	281	-	415	456	-
Stage 2	-	-	-	-	-	-	647	450	-	240	265	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	921	-	-	694	-	-	80	71	319	47	67	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	71	-	47	67	-
Stage 1	-	-	-	-	-	-	226	253	-	374	451	-
Stage 2	-	-	-	-	-	-	580	446	-	210	239	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.1			75.7			31		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	80	138	921	-	-	694	-	-	47	67	669
HCM Lane V/C Ratio	0.476	0.063	0.098	-	-	0.009	-	-	0.301	0.032	0.089
HCM Control Delay (s)	85.5	32.8	9.3	-	-	10.2	-	-	111.7	60.5	10.9
HCM Lane LOS	F	D	A	-	-	B	-	-	F	F	B
HCM 95th %tile Q(veh)	2	0.2	0.3	-	-	0	-	-	1	0.1	0.3

Intersection				
Intersection Delay, s/veh	10.0			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	898	392	90	133
Demand Flow Rate, veh/h	916	399	92	136
Vehicles Circulating, veh/h	24	316	759	482
Vehicles Exiting, veh/h	594	535	180	233
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.7	8.1	7.5	6.0
Approach LOS	B	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	916	399	92	136
Cap Entry Lane, veh/h	1346	1000	636	844
Entry HV Adj Factor	0.980	0.982	0.978	0.978
Flow Entry, veh/h	898	392	90	133
Cap Entry, veh/h	1319	981	622	825
V/C Ratio	0.680	0.399	0.145	0.161
Control Delay, s/veh	11.7	8.1	7.5	6.0
LOS	B	A	A	A
95th %tile Queue, veh	6	2	1	1

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	35	21	0	21	0	10	1	0	1	0	7
Future Vol, veh/h	12	35	21	0	21	0	10	1	0	1	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	38	23	0	23	0	11	1	0	1	0	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	41	29	4	60	33	1	8	0	0	1	0	0
Stage 1	6	6	-	23	23	-	-	-	-	-	-	-
Stage 2	35	23	-	37	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	963	864	1080	936	860	1084	1612	-	-	1622	-	-
Stage 1	1016	891	-	995	876	-	-	-	-	-	-	-
Stage 2	981	876	-	978	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	938	857	1080	880	853	1084	1612	-	-	1622	-	-
Mov Cap-2 Maneuver	938	857	-	880	853	-	-	-	-	-	-	-
Stage 1	1009	890	-	988	870	-	-	-	-	-	-	-
Stage 2	949	870	-	915	886	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.2		9.3		6.6		0.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	931	853	1622	-	-
HCM Lane V/C Ratio	0.007	-	-	0.079	0.027	0.001	-	-
HCM Control Delay (s)	7.2	0	-	9.2	9.3	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	11	10	5	10	6	6
Future Vol, veh/h	11	10	5	10	6	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	11	5	11	7	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	16	0	-	0	46 11
Stage 1	-	-	-	-	11 -
Stage 2	-	-	-	-	35 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1602	-	-	-	964 1070
Stage 1	-	-	-	-	1012 -
Stage 2	-	-	-	-	987 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1602	-	-	-	956 1070
Mov Cap-2 Maneuver	-	-	-	-	885 -
Stage 1	-	-	-	-	1004 -
Stage 2	-	-	-	-	987 -

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1602	-	-	-	969
HCM Lane V/C Ratio	0.007	-	-	-	0.013
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	10	6	10	128	77	5
Future Vol, veh/h	10	6	10	128	77	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	11	139	84	5

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	248	87	89	0	0
Stage 1	87	-	-	-	-
Stage 2	161	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	740	971	1506	-	-
Stage 1	936	-	-	-	-
Stage 2	868	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	734	971	1506	-	-
Mov Cap-2 Maneuver	739	-	-	-	-
Stage 1	929	-	-	-	-
Stage 2	868	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1506	-	812	-	-
HCM Lane V/C Ratio	0.007	-	0.021	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	42	1	138	72	1	83
Future Vol, veh/h	42	1	138	72	1	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	105	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	1	150	78	1	90

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	242	150	0	0	228
Stage 1	150	-	-	-	-
Stage 2	92	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	746	896	-	-	1340
Stage 1	878	-	-	-	-
Stage 2	932	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	745	896	-	-	1340
Mov Cap-2 Maneuver	751	-	-	-	-
Stage 1	877	-	-	-	-
Stage 2	932	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	754	1340
HCM Lane V/C Ratio	-	-	0.062	0.001
HCM Control Delay (s)	-	-	10.1	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection												
Int Delay, s/veh	7.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Vol, veh/h	193	114	144	8	66	1	87	16	13	1	10	115
Future Vol, veh/h	193	114	144	8	66	1	87	16	13	1	10	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	155	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	210	124	157	9	72	1	95	17	14	1	11	125

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	281	0	0	703	635	124	728	791	72
Stage 1	-	-	-	-	-	-	544	544	-	90	90	-
Stage 2	-	-	-	-	-	-	159	91	-	638	701	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1527	-	-	1282	-	-	352	396	927	339	322	990
Stage 1	-	-	-	-	-	-	523	519	-	917	820	-
Stage 2	-	-	-	-	-	-	843	820	-	465	441	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1527	-	-	1282	-	-	266	339	927	286	276	990
Mov Cap-2 Maneuver	-	-	-	-	-	-	266	339	-	286	276	-
Stage 1	-	-	-	-	-	-	451	447	-	790	814	-
Stage 2	-	-	-	-	-	-	722	814	-	380	380	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.3			0.8			22.6			10		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	266	339	927	1527	-	-	1282	-	-	286	276	990
HCM Lane V/C Ratio	0.356	0.051	0.015	0.137	-	-	0.007	-	-	0.004	0.039	0.126
HCM Control Delay (s)	25.8	16.2	8.9	7.7	-	-	7.8	-	-	17.6	18.6	9.2
HCM Lane LOS	D	C	A	A	-	-	A	-	-	C	C	A
HCM 95th %tile Q(veh)	1.5	0.2	0	0.5	-	-	0	-	-	0	0.1	0.4

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	43	73	34	73	88
Future Vol, veh/h	20	43	73	34	73	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	47	79	37	79	96

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	352	98	0	0	116	0
Stage 1	98	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	646	958	-	-	1473	-
Stage 1	926	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	611	958	-	-	1473	-
Mov Cap-2 Maneuver	623	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	818	1473
HCM Lane V/C Ratio	-	-	0.084	0.054
HCM Control Delay (s)	-	-	9.8	7.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	31	77	43	53	56
Future Vol, veh/h	24	31	77	43	53	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	34	84	47	58	61

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	285	108	0	0	131
Stage 1	108	-	-	-	-
Stage 2	177	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	705	946	-	-	1454
Stage 1	916	-	-	-	-
Stage 2	854	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	677	946	-	-	1454
Mov Cap-2 Maneuver	686	-	-	-	-
Stage 1	879	-	-	-	-
Stage 2	854	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	812	1454
HCM Lane V/C Ratio	-	-	0.074	0.04
HCM Control Delay (s)	-	-	9.8	7.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Timings
13: Marksheffel Rd & Lorson Blvd

2040 Background Traffic
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	315	97	533	510	120	448
Future Volume (vph)	315	97	533	510	120	448
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effect Green (s)	14.0	14.0	65.1	65.1	65.1	65.1
Actuated g/C Ratio	0.16	0.16	0.73	0.73	0.73	0.73
v/c Ratio	0.63	0.31	0.43	0.42	0.24	0.36
Control Delay	40.6	9.5	6.2	1.5	5.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	9.5	6.2	1.5	5.7	5.6
LOS	D	A	A	A	A	A
Approach Delay	33.3		3.9			5.6
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 89.1
 Natural Cycle: 50
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 10.4
 Intersection Capacity Utilization 56.2%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 13: Marksheffel Rd & Lorson Blvd



Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	16	440	271	124	226	5
Future Vol, veh/h	16	440	271	124	226	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	478	295	135	246	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	430	0	-	0	807 295
Stage 1	-	-	-	-	295 -
Stage 2	-	-	-	-	512 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1129	-	-	-	351 744
Stage 1	-	-	-	-	755 -
Stage 2	-	-	-	-	602 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1129	-	-	-	346 744
Mov Cap-2 Maneuver	-	-	-	-	452 -
Stage 1	-	-	-	-	744 -
Stage 2	-	-	-	-	602 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1129	-	-	-	452	744
HCM Lane V/C Ratio	0.015	-	-	-	0.543	0.007
HCM Control Delay (s)	8.2	-	-	-	22	9.9
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	3.2	0

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	40	264	158	33	65	27
Future Vol, veh/h	40	264	158	33	65	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	287	172	36	71	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	208	0	-	0	545 172
Stage 1	-	-	-	-	172 -
Stage 2	-	-	-	-	373 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1363	-	-	-	499 872
Stage 1	-	-	-	-	858 -
Stage 2	-	-	-	-	696 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1363	-	-	-	483 872
Mov Cap-2 Maneuver	-	-	-	-	545 -
Stage 1	-	-	-	-	831 -
Stage 2	-	-	-	-	696 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1363	-	-	-	545	872
HCM Lane V/C Ratio	0.032	-	-	-	0.13	0.034
HCM Control Delay (s)	7.7	-	-	-	12.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.1

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑	↗		↙	↗
Traffic Vol, veh/h	108	83	49	11	18	62
Future Vol, veh/h	108	83	49	11	18	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	-	205	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	90	53	12	20	67

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	65	0	-	0	383 59
Stage 1	-	-	-	-	59 -
Stage 2	-	-	-	-	324 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1537	-	-	-	620 1007
Stage 1	-	-	-	-	964 -
Stage 2	-	-	-	-	733 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1537	-	-	-	573 1007
Mov Cap-2 Maneuver	-	-	-	-	558 -
Stage 1	-	-	-	-	891 -
Stage 2	-	-	-	-	733 -

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1537	-	-	-	558	1007
HCM Lane V/C Ratio	0.076	-	-	-	0.035	0.067
HCM Control Delay (s)	7.5	-	-	-	11.7	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Stop Del/Veh (s)	15.1	13.1	4.0	6.3	8.5	3.7	11.1	4.9	6.6	10.1	7.6	10.7

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	28.7	24.3	4.3	5.5	13.5	4.1	16.5	4.1	5.0	7.8	4.8	7.0

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	All
Stop Del/Veh (s)	18.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	25.5	24.3	4.1	5.8	10.5	4.1	15.2	6.0	5.3	11.6	9.7	6.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	All
Stop Del/Veh (s)	17.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	34.8	21.3	3.9	7.4	13.4	4.3	16.2	5.5	5.1	8.6		8.4

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	All
Stop Del/Veh (s)	17.9

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	27.4	22.0	4.2	6.8	12.1	4.4	15.2	7.8	5.6	8.3	10.3	7.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	16.8

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	864	50	6	601	12	35	3	5	13	2	55
Future Vol, veh/h	83	864	50	6	601	12	35	3	5	13	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	939	54	7	653	13	38	3	5	14	2	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	666	0	0	993	0	0	1461	1799	939	1817	1840	327
Stage 1	-	-	-	-	-	-	1119	1119	-	667	667	-
Stage 2	-	-	-	-	-	-	342	680	-	1150	1173	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	921	-	-	694	-	-	98	80	319	54	75	669
Stage 1	-	-	-	-	-	-	250	281	-	415	456	-
Stage 2	-	-	-	-	-	-	647	450	-	240	265	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	921	-	-	694	-	-	80	71	319	47	67	669
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	71	-	47	67	-
Stage 1	-	-	-	-	-	-	226	253	-	374	451	-
Stage 2	-	-	-	-	-	-	580	446	-	210	239	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.1			75.7			31		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	80	138	921	-	-	694	-	-	47	67	669
HCM Lane V/C Ratio	0.476	0.063	0.098	-	-	0.009	-	-	0.301	0.032	0.089
HCM Control Delay (s)	85.5	32.8	9.3	-	-	10.2	-	-	111.7	60.5	10.9
HCM Lane LOS	F	D	A	-	-	B	-	-	F	F	B
HCM 95th %tile Q(veh)	2	0.2	0.3	-	-	0	-	-	1	0.1	0.3

Intersection				
Intersection Delay, s/veh	10.0			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	898	392	90	133
Demand Flow Rate, veh/h	916	399	92	136
Vehicles Circulating, veh/h	24	316	759	482
Vehicles Exiting, veh/h	594	535	180	233
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	11.7	8.1	7.5	6.0
Approach LOS	B	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	916	399	92	136
Cap Entry Lane, veh/h	1346	1000	636	844
Entry HV Adj Factor	0.980	0.982	0.978	0.978
Flow Entry, veh/h	898	392	90	133
Cap Entry, veh/h	1319	981	622	825
V/C Ratio	0.680	0.399	0.145	0.161
Control Delay, s/veh	11.7	8.1	7.5	6.0
LOS	B	A	A	A
95th %tile Queue, veh	6	2	1	1

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	35	21	0	21	0	10	1	0	1	0	7
Future Vol, veh/h	12	35	21	0	21	0	10	1	0	1	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	38	23	0	23	0	11	1	0	1	0	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	41	29	4	60	33	1	8	0	0	1	0	0
Stage 1	6	6	-	23	23	-	-	-	-	-	-	-
Stage 2	35	23	-	37	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	963	864	1080	936	860	1084	1612	-	-	1622	-	-
Stage 1	1016	891	-	995	876	-	-	-	-	-	-	-
Stage 2	981	876	-	978	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	938	857	1080	880	853	1084	1612	-	-	1622	-	-
Mov Cap-2 Maneuver	938	857	-	880	853	-	-	-	-	-	-	-
Stage 1	1009	890	-	988	870	-	-	-	-	-	-	-
Stage 2	949	870	-	915	886	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.2		9.3		6.6		0.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	931	853	1622	-	-
HCM Lane V/C Ratio	0.007	-	-	0.079	0.027	0.001	-	-
HCM Control Delay (s)	7.2	0	-	9.2	9.3	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	11	10	5	10	6	6
Future Vol, veh/h	11	10	5	10	6	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	11	5	11	7	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	16	0	-	0	46 11
Stage 1	-	-	-	-	11 -
Stage 2	-	-	-	-	35 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1602	-	-	-	964 1070
Stage 1	-	-	-	-	1012 -
Stage 2	-	-	-	-	987 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1602	-	-	-	956 1070
Mov Cap-2 Maneuver	-	-	-	-	885 -
Stage 1	-	-	-	-	1004 -
Stage 2	-	-	-	-	987 -

Approach	EB	WB	SB
HCM Control Delay, s	3.8	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1602	-	-	-	969
HCM Lane V/C Ratio	0.007	-	-	-	0.013
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	10	6	10	128	77	5
Future Vol, veh/h	10	6	10	128	77	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	7	11	139	84	5

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	248	87	89	0	0
Stage 1	87	-	-	-	-
Stage 2	161	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	740	971	1506	-	-
Stage 1	936	-	-	-	-
Stage 2	868	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	734	971	1506	-	-
Mov Cap-2 Maneuver	739	-	-	-	-
Stage 1	929	-	-	-	-
Stage 2	868	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1506	-	812	-	-
HCM Lane V/C Ratio	0.007	-	0.021	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	42	1	138	72	1	83
Future Vol, veh/h	42	1	138	72	1	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	105	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	1	150	78	1	90

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	242	150	0	0	228
Stage 1	150	-	-	-	-
Stage 2	92	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	746	896	-	-	1340
Stage 1	878	-	-	-	-
Stage 2	932	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	745	896	-	-	1340
Mov Cap-2 Maneuver	751	-	-	-	-
Stage 1	877	-	-	-	-
Stage 2	932	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	754	1340
HCM Lane V/C Ratio	-	-	0.062	0.001
HCM Control Delay (s)	-	-	10.1	7.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection												
Int Delay, s/veh	7.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	193	114	144	8	66	1	87	16	13	1	10	115
Future Vol, veh/h	193	114	144	8	66	1	87	16	13	1	10	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	155	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	210	124	157	9	72	1	95	17	14	1	11	125

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	281	0	0	703	635	124	728	791	72
Stage 1	-	-	-	-	-	-	544	544	-	90	90	-
Stage 2	-	-	-	-	-	-	159	91	-	638	701	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1527	-	-	1282	-	-	352	396	927	339	322	990
Stage 1	-	-	-	-	-	-	523	519	-	917	820	-
Stage 2	-	-	-	-	-	-	843	820	-	465	441	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1527	-	-	1282	-	-	266	339	927	286	276	990
Mov Cap-2 Maneuver	-	-	-	-	-	-	266	339	-	286	276	-
Stage 1	-	-	-	-	-	-	451	447	-	790	814	-
Stage 2	-	-	-	-	-	-	722	814	-	380	380	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.3			0.8			22.6			10		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	266	339	927	1527	-	-	1282	-	-	286	276	990
HCM Lane V/C Ratio	0.356	0.051	0.015	0.137	-	-	0.007	-	-	0.004	0.039	0.126
HCM Control Delay (s)	25.8	16.2	8.9	7.7	-	-	7.8	-	-	17.6	18.6	9.2
HCM Lane LOS	D	C	A	A	-	-	A	-	-	C	C	A
HCM 95th %tile Q(veh)	1.5	0.2	0	0.5	-	-	0	-	-	0	0.1	0.4

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	43	73	34	73	88
Future Vol, veh/h	20	43	73	34	73	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	47	79	37	79	96

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	352	98	0	0	116	0
Stage 1	98	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	646	958	-	-	1473	-
Stage 1	926	-	-	-	-	-
Stage 2	788	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	611	958	-	-	1473	-
Mov Cap-2 Maneuver	623	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	818	1473
HCM Lane V/C Ratio	-	-	0.084	0.054
HCM Control Delay (s)	-	-	9.8	7.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		P		Y	↑
Traffic Vol, veh/h	24	31	77	43	53	56
Future Vol, veh/h	24	31	77	43	53	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	205	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	34	84	47	58	61

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	285	108	0	0	131
Stage 1	108	-	-	-	-
Stage 2	177	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	705	946	-	-	1454
Stage 1	916	-	-	-	-
Stage 2	854	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	677	946	-	-	1454
Mov Cap-2 Maneuver	686	-	-	-	-
Stage 1	879	-	-	-	-
Stage 2	854	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	812	1454
HCM Lane V/C Ratio	-	-	0.074	0.04
HCM Control Delay (s)	-	-	9.8	7.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Timings
13: Marksheffel Rd & Lorson Blvd

2040 Background Traffic
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	315	97	533	510	120	448
Future Volume (vph)	315	97	533	510	120	448
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	14.0	14.0	65.1	65.1	65.1	65.1
Actuated g/C Ratio	0.16	0.16	0.73	0.73	0.73	0.73
v/c Ratio	0.63	0.31	0.43	0.42	0.24	0.36
Control Delay	40.6	9.5	6.2	1.5	5.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	9.5	6.2	1.5	5.7	5.6
LOS	D	A	A	A	A	A
Approach Delay	33.3		3.9			5.6
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 89.1
 Natural Cycle: 50
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 10.4
 Intersection Capacity Utilization 56.2%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 13: Marksheffel Rd & Lorson Blvd



Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	16	440	271	124	226	5
Future Vol, veh/h	16	440	271	124	226	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	478	295	135	246	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	430	0	-	0	807 295
Stage 1	-	-	-	-	295 -
Stage 2	-	-	-	-	512 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1129	-	-	-	351 744
Stage 1	-	-	-	-	755 -
Stage 2	-	-	-	-	602 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1129	-	-	-	346 744
Mov Cap-2 Maneuver	-	-	-	-	452 -
Stage 1	-	-	-	-	744 -
Stage 2	-	-	-	-	602 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1129	-	-	-	452	744
HCM Lane V/C Ratio	0.015	-	-	-	0.543	0.007
HCM Control Delay (s)	8.2	-	-	-	22	9.9
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	3.2	0

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	40	264	158	33	65	27
Future Vol, veh/h	40	264	158	33	65	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	287	172	36	71	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	208	0	-	0	545 172
Stage 1	-	-	-	-	172 -
Stage 2	-	-	-	-	373 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1363	-	-	-	499 872
Stage 1	-	-	-	-	858 -
Stage 2	-	-	-	-	696 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1363	-	-	-	483 872
Mov Cap-2 Maneuver	-	-	-	-	545 -
Stage 1	-	-	-	-	831 -
Stage 2	-	-	-	-	696 -

Approach	EB	WB	SB
HCM Control Delay, s	1	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1363	-	-	-	545	872
HCM Lane V/C Ratio	0.032	-	-	-	0.13	0.034
HCM Control Delay (s)	7.7	-	-	-	12.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.1

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↗		↘	↗
Traffic Vol, veh/h	108	83	49	11	18	62
Future Vol, veh/h	108	83	49	11	18	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	-	205	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	90	53	12	20	67

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	65	0	-	0	383 59
Stage 1	-	-	-	-	59 -
Stage 2	-	-	-	-	324 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1537	-	-	-	620 1007
Stage 1	-	-	-	-	964 -
Stage 2	-	-	-	-	733 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1537	-	-	-	573 1007
Mov Cap-2 Maneuver	-	-	-	-	558 -
Stage 1	-	-	-	-	891 -
Stage 2	-	-	-	-	733 -

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1537	-	-	-	558	1007
HCM Lane V/C Ratio	0.076	-	-	-	0.035	0.067
HCM Control Delay (s)	7.5	-	-	-	11.7	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	13.6	12.3	8.8	3.2	20.6	85.3	16.6	22.8	4.1	3.3	8.3	10.3

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	SBR	All
Stop Del/Veh (s)	14.2	45.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	13.2	13.7	11.2	3.1	143.6	226.2	128.4	32.5	6.9	5.9	9.2	7.7

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	SBR	All
Stop Del/Veh (s)	25.1	115.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	15.5	15.2	8.4	3.2	217.1	328.7	318.3	31.7	2.4	5.3	6.6	

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	SBR	All
Stop Del/Veh (s)	23.4	173.7

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	13.7	13.6	9.5	3.2	231.6	323.7	309.0	24.9	4.2	2.9	8.7	10.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	SBR	All
Stop Del/Veh (s)	20.3	177.4

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	14.5	14.3	9.8	3.4	173.0	325.2	201.3	29.1	5.9	4.3	8.5	7.5

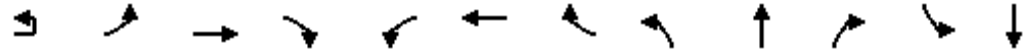
1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	SBR	All
Stop Del/Veh (s)	21.7	150.2

Intersection								
Intersection Delay, s/veh	10.5							
Intersection LOS	B							
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		1	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	878		1299		271		324	
Demand Flow Rate, veh/h	896		1325		276		330	
Vehicles Circulating, veh/h	83		421		859		1634	
Vehicles Exiting, veh/h	1605		714		120		112	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	6.1		15.5		11.0		2.1	
Approach LOS	A		C		B		A	
Lane	Left	Right	Left	Right	Left	Left	Bypass	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								Free
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000		
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535		
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	276	
Entry Flow, veh/h	421	475	623	702	276	54	1938	
Cap Entry Lane, veh/h	1251	1323	916	993	684	354	0.980	
Entry HV Adj Factor	0.980	0.980	0.980	0.981	0.982	0.980	271	
Flow Entry, veh/h	413	465	611	688	271	53	1900	
Cap Entry, veh/h	1226	1296	898	974	672	347	0.143	
V/C Ratio	0.337	0.359	0.680	0.707	0.403	0.153	0.0	
Control Delay, s/veh	6.1	6.1	15.5	15.6	11.0	13.0	A	
LOS	A	A	C	C	B	B	0	
95th %tile Queue, veh	2	2	6	6	2	1		

Timings
1: Old Glory Dr & Fontaine Blvd

2040 Total Traffic
AM Peak Hour

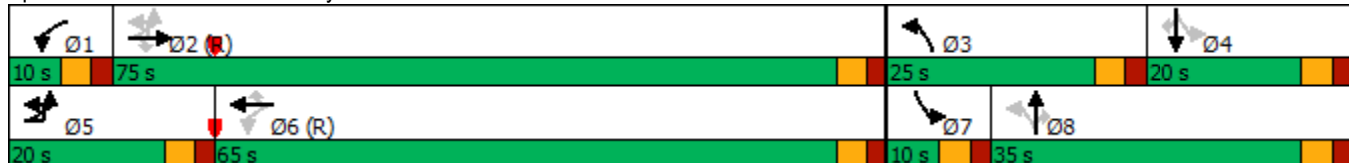


Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕	↗	↖	↕	↗	↖	↕	↗	↖	↕
Traffic Volume (vph)	62	80	587	79	26	1150	19	236	2	11	46	3
Future Volume (vph)	62	80	587	79	26	1150	19	236	2	11	46	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases	2	2		2	6		6	8		8	4	
Detector Phase	5	5	2	2	1	6	6	3	8	8	7	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0
Minimum Split (s)	10.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0
Total Split (s)	20.0	20.0	75.0	75.0	10.0	65.0	65.0	25.0	35.0	35.0	10.0	20.0
Total Split (%)	15.4%	15.4%	57.7%	57.7%	7.7%	50.0%	50.0%	19.2%	26.9%	26.9%	7.7%	15.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)		81.1	75.1	75.1	70.3	65.2	65.2	30.9	24.9	24.9	28.0	15.0
Actuated g/C Ratio		0.62	0.58	0.58	0.54	0.50	0.50	0.24	0.19	0.19	0.22	0.12
v/c Ratio		0.64	0.31	0.09	0.06	0.70	0.02	0.68	0.01	0.03	0.14	0.01
Control Delay		27.4	15.5	0.4	10.8	28.5	0.1	53.3	40.0	0.1	34.7	51.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		27.4	15.5	0.4	10.8	28.5	0.1	53.3	40.0	0.1	34.7	51.3
LOS		C	B	A	B	C	A	D	D	A	C	D
Approach Delay			16.1			27.6			50.9			35.1
Approach LOS			B			C			D			D

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 109 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 27.1
 Intersection LOS: C
 Intersection Capacity Utilization 84.8%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 1: Old Glory Dr & Fontaine Blvd



Timings
1: Old Glory Dr & Fontaine Blvd

2040 Total Traffic
AM Peak Hour

Lane Group	SBR
Lane Configurations	7
Traffic Volume (vph)	249
Future Volume (vph)	249
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	23.0
Total Split (s)	20.0
Total Split (%)	15.4%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	15.0
Actuated g/C Ratio	0.12
v/c Ratio	0.78
Control Delay	35.0
Queue Delay	0.0
Total Delay	35.0
LOS	C
Approach Delay	
Approach LOS	
Intersection Summary	

HCM 6th TWSC
2: Stingray Dr/Old Glory Dr & Fontaine Blvd

2040 Total Traffic
AM Peak Hour

Intersection												
Int Delay, s/veh	19.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗		↖	↑	↗
Traffic Vol, veh/h	27	586	22	24	1023	54	75	1	28	57	1	97
Future Vol, veh/h	27	586	22	24	1023	54	75	1	28	57	1	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	637	24	26	1112	59	82	1	30	62	1	105

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1171	0	0	661	0	0	1304	1918	637	1887	1883	556
Stage 1	-	-	-	-	-	-	695	695	-	1164	1164	-
Stage 2	-	-	-	-	-	-	609	1223	-	723	719	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	594	-	-	925	-	-	127	67	476	~ 48	70	475
Stage 1	-	-	-	-	-	-	432	443	-	207	268	-
Stage 2	-	-	-	-	-	-	450	251	-	417	432	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	594	-	-	925	-	-	92	62	476	~ 42	65	475
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	62	-	~ 42	65	-
Stage 1	-	-	-	-	-	-	411	421	-	197	260	-
Stage 2	-	-	-	-	-	-	339	244	-	370	411	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			0.2			109.5			178.4		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	92	387	594	-	-	925	-	-	42	65	475
HCM Lane V/C Ratio	0.886	0.081	0.049	-	-	0.028	-	-	1.475	0.017	0.222
HCM Control Delay (s)	146	15.1	11.4	-	-	9	-	-	\$ 459	61.3	14.7
HCM Lane LOS	F	C	B	-	-	A	-	-	F	F	B
HCM 95th %tile Q(veh)	4.9	0.3	0.2	-	-	0.1	-	-	6.2	0.1	0.8

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	5.3	7.5	2.4	3.9	4.8	3.1	4.9	3.9	4.5	5.2		2.8

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 7:00

Movement	All
Stop Del/Veh (s)	5.4

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 7:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Stop Del/Veh (s)	5.2	9.5	3.0	4.0	8.6	3.6	5.8		4.0	5.4	3.7	8.0

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	4.3	8.8	2.9	33.2	75.2	44.4	8.4	2.4	4.1	5.5		4.5

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 7:30

Movement	All
Stop Del/Veh (s)	42.3

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	5.3	9.2	2.3	82.1	126.4	77.3	7.8	6.7	4.1	7.2	3.5	3.3

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 7:45

Movement	All
Stop Del/Veh (s)	69.8

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	5.0	9.1	2.6	28.3	55.7	29.4	6.9	4.7	4.1	6.0	6.2	3.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	32.3

Intersection							
Intersection Delay, s/veh	7.5						
Intersection LOS	A						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		1		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	690		1197		113		168
Demand Flow Rate, veh/h	704		1221		116		171
Vehicles Circulating, veh/h	91		115		743		1245
Vehicles Exiting, veh/h	1325		744		52		91
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	5.3		8.1		6.5		13.1
Approach LOS	A		A		A		B
Lane	Left	Right	Left	Right	Left	Left	
Designated Moves	LT	TR	LT	TR	LTR	LTR	
Assumed Moves	LT	TR	LT	TR	LTR	LTR	
RT Channelized							
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	
Entry Flow, veh/h	331	373	574	647	116	171	
Cap Entry Lane, veh/h	1241	1314	1214	1288	755	493	
Entry HV Adj Factor	0.980	0.981	0.980	0.980	0.974	0.982	
Flow Entry, veh/h	324	366	562	634	113	168	
Cap Entry, veh/h	1217	1289	1190	1263	735	484	
V/C Ratio	0.267	0.284	0.473	0.502	0.154	0.347	
Control Delay, s/veh	5.4	5.3	8.1	8.2	6.5	13.1	
LOS	A	A	A	A	A	B	
95th %tile Queue, veh	1	1	3	3	1	2	

Timings
2: Stingray Dr/Old Glory Dr & Fontaine Blvd

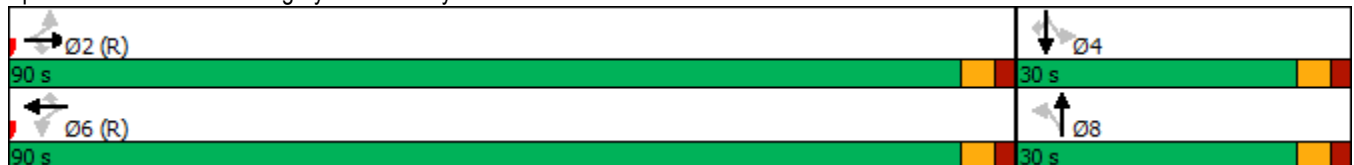
2040 Total Traffic
AM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗	↖	↑	↗
Traffic Volume (vph)	27	586	22	24	1023	54	75	1	57	1	97
Future Volume (vph)	27	586	22	24	1023	54	75	1	57	1	97
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		2			6			8		4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	2	2	2	6	6	6	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	23.0	23.0	23.0
Total Split (s)	90.0	90.0	90.0	90.0	90.0	90.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max	Max
Act Effct Green (s)	85.0	85.0	85.0	85.0	85.0	85.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.71	0.71	0.71	0.71	0.71	0.71	0.21	0.21	0.21	0.21	0.21
v/c Ratio	0.10	0.48	0.02	0.06	0.44	0.05	0.28	0.09	0.22	0.00	0.25
Control Delay	6.5	9.2	2.0	5.7	8.1	1.4	43.0	14.1	41.8	38.0	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.5	9.2	2.0	5.7	8.1	1.4	43.0	14.1	41.8	38.0	9.0
LOS	A	A	A	A	A	A	D	B	D	D	A
Approach Delay		8.9			7.7			35.1		21.3	
Approach LOS		A			A			D		C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 24 (20%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 10.6
 Intersection Capacity Utilization 51.0%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 2: Stingray Dr/Old Glory Dr & Fontaine Blvd



Intersection				
Intersection Delay, s/veh	12.5			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	700	776	263	240
Demand Flow Rate, veh/h	714	791	268	245
Vehicles Circulating, veh/h	65	236	662	935
Vehicles Exiting, veh/h	1115	694	117	92
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.1	15.5	10.3	15.0
Approach LOS	A	C	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	714	791	268	245
Cap Entry Lane, veh/h	1291	1085	702	532
Entry HV Adj Factor	0.980	0.981	0.981	0.980
Flow Entry, veh/h	700	776	263	240
Cap Entry, veh/h	1265	1064	689	521
V/C Ratio	0.553	0.729	0.382	0.461
Control Delay, s/veh	9.1	15.5	10.3	15.0
LOS	A	C	B	B
95th %tile Queue, veh	4	7	2	2

Intersection

Int Delay, s/veh 2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	15	0	59	40	2
Future Vol, veh/h	27	15	0	59	40	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	0	64	43	2

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	45
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.12	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.218	-
Pot Cap-1 Maneuver	-	1563	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1563	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	904	-	-	1563	-
HCM Lane V/C Ratio	0.051	-	-	-	-
HCM Control Delay (s)	9.2	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	11	15	3	29	0	21	1	0	1	1	10
Future Vol, veh/h	4	11	15	3	29	0	21	1	0	1	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	12	16	3	32	0	23	1	0	1	1	11

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	72	56	7	70	61	1	12	0	0	1	0	0
Stage 1	9	9	-	47	47	-	-	-	-	-	-	-
Stage 2	63	47	-	23	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	919	835	1075	922	830	1084	1607	-	-	1622	-	-
Stage 1	1012	888	-	967	856	-	-	-	-	-	-	-
Stage 2	948	856	-	995	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	882	822	1075	888	818	1084	1607	-	-	1622	-	-
Mov Cap-2 Maneuver	882	822	-	888	818	-	-	-	-	-	-	-
Stage 1	998	887	-	953	844	-	-	-	-	-	-	-
Stage 2	900	844	-	966	883	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9		9.6		6.9		0.6	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	941	824	1622	-	-
HCM Lane V/C Ratio	0.014	-	-	0.035	0.042	0.001	-	-
HCM Control Delay (s)	7.3	0	-	9	9.6	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection

Int Delay, s/veh 1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	2	0	15	7	2
Future Vol, veh/h	17	2	0	15	7	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	2	0	16	8	2

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	20
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1596
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1596
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	995	-	-	1596	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	8.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	13	2	4	5	2	5	0	14	12	0	5
Future Vol, veh/h	4	13	2	4	5	2	5	0	14	12	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	14	2	4	5	2	5	0	15	13	0	5

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	7	0	0	16	0	0	40	38	15	45	38	6
Stage 1	-	-	-	-	-	-	23	23	-	14	14	-
Stage 2	-	-	-	-	-	-	17	15	-	31	24	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1614	-	-	1602	-	-	964	854	1065	957	854	1077
Stage 1	-	-	-	-	-	-	995	876	-	1006	884	-
Stage 2	-	-	-	-	-	-	1002	883	-	986	875	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1614	-	-	1602	-	-	954	849	1065	939	849	1077
Mov Cap-2 Maneuver	-	-	-	-	-	-	954	849	-	939	849	-
Stage 1	-	-	-	-	-	-	992	873	-	1003	881	-
Stage 2	-	-	-	-	-	-	994	880	-	969	872	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	1.5		2.6		8.6		8.8	
HCM LOS					A		A	

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1033	1614	-	-	1602	-	-	976
HCM Lane V/C Ratio	0.02	0.003	-	-	0.003	-	-	0.019
HCM Control Delay (s)	8.6	7.2	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	5	34	6	36	119	5
Future Vol, veh/h	5	34	6	36	119	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	37	7	39	129	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	185	132	134	0	-	0
Stage 1	132	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	804	917	1451	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	800	917	1451	-	-	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1451	-	900	-	-
HCM Lane V/C Ratio	0.004	-	0.047	-	-
HCM Control Delay (s)	7.5	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↑	↖	↗	↖	↖
Traffic Vol, veh/h	0	0	35	64	0	0	12	42	21	0	153	0
Future Vol, veh/h	0	0	35	64	0	0	12	42	21	0	153	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	155	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	38	70	0	0	13	46	23	0	166	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	250	261	166	257	238	46	166	0	0	69	0	0
Stage 1	166	166	-	72	72	-	-	-	-	-	-	-
Stage 2	84	95	-	185	166	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	703	644	878	696	663	1023	1412	-	-	1532	-	-
Stage 1	836	761	-	938	835	-	-	-	-	-	-	-
Stage 2	924	816	-	817	761	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	698	638	878	661	657	1023	1412	-	-	1532	-	-
Mov Cap-2 Maneuver	698	638	-	661	657	-	-	-	-	-	-	-
Stage 1	828	761	-	930	827	-	-	-	-	-	-	-
Stage 2	915	809	-	782	761	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.3		11.1		1.2		0	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1412	-	-	878	661	1532	-	-
HCM Lane V/C Ratio	0.009	-	-	0.043	0.105	-	-	-
HCM Control Delay (s)	7.6	-	-	9.3	11.1	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.4	0	-	-

Intersection												
Int Delay, s/veh	15.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↗	↘	↗	↗	↘	↗	↗	↘	↗	↗
Traffic Vol, veh/h	68	34	60	12	102	1	226	7	4	1	21	231
Future Vol, veh/h	68	34	60	12	102	1	226	7	4	1	21	231
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	155	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	37	65	13	111	1	246	8	4	1	23	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	112	0	0	102	0	0	460	323	37	361	387	111
Stage 1	-	-	-	-	-	-	185	185	-	137	137	-
Stage 2	-	-	-	-	-	-	275	138	-	224	250	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1478	-	-	1490	-	-	512	595	1035	595	547	942
Stage 1	-	-	-	-	-	-	817	747	-	866	783	-
Stage 2	-	-	-	-	-	-	731	782	-	779	700	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1478	-	-	1490	-	-	347	560	1035	560	515	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	347	560	-	560	515	-
Stage 1	-	-	-	-	-	-	776	710	-	823	776	-
Stage 2	-	-	-	-	-	-	516	775	-	729	665	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.2			0.8			35.8			10.4		
HCM LOS							E			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	347	560	1035	1478	-	-	1490	-	-	560	515	942
HCM Lane V/C Ratio	0.708	0.014	0.004	0.05	-	-	0.009	-	-	0.002	0.044	0.267
HCM Control Delay (s)	37	11.5	8.5	7.6	-	-	7.4	-	-	11.4	12.3	10.2
HCM Lane LOS	E	B	A	A	-	-	A	-	-	B	B	B
HCM 95th %tile Q(veh)	5.2	0	0	0.2	-	-	0	-	-	0	0.1	1.1

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	68	34	60	12	102	1	226	7	4	1	21	231
Future Vol, veh/h	68	34	60	12	102	1	226	7	4	1	21	231
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	37	65	13	111	1	246	8	4	1	23	251
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	10	10.9	14.4	11.4
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	7	4	68	34	60	12	102	1	1	21
LT Vol	226	0	0	68	0	0	12	0	0	1	0
Through Vol	0	7	0	0	34	0	0	102	0	0	21
RT Vol	0	0	4	0	0	60	0	0	1	0	0
Lane Flow Rate	246	8	4	74	37	65	13	111	1	1	23
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.45	0.013	0.007	0.143	0.066	0.104	0.026	0.202	0.002	0.002	0.039
Departure Headway (Hd)	6.601	6.101	5.401	6.964	6.464	5.764	7.065	6.565	5.865	6.672	6.172
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	586	661	514	553	620	506	545	609	536	580
Service Time	4.343	3.843	3.143	4.714	4.214	3.514	4.816	4.316	3.616	4.414	3.914
HCM Lane V/C Ratio	0.451	0.014	0.006	0.144	0.067	0.105	0.026	0.204	0.002	0.002	0.04
HCM Control Delay	14.7	8.9	8.2	10.9	9.7	9.2	10	11	8.6	9.4	9.2
HCM Lane LOS	B	A	A	B	A	A	A	B	A	A	A
HCM 95th-tile Q	2.3	0	0	0.5	0.2	0.3	0.1	0.7	0	0	0.1

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	40	0	27	29	0	69	10	127	9	22	58	13
Future Vol, veh/h	40	0	27	29	0	69	10	127	9	22	58	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	205	-	-	205	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	29	32	0	75	11	138	10	24	63	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	321	288	70	298	290	143	77	0	0	148	0	0
Stage 1	118	118	-	165	165	-	-	-	-	-	-	-
Stage 2	203	170	-	133	125	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	632	622	993	654	620	905	1522	-	-	1434	-	-
Stage 1	887	798	-	837	762	-	-	-	-	-	-	-
Stage 2	799	758	-	870	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	569	607	993	623	605	905	1522	-	-	1434	-	-
Mov Cap-2 Maneuver	569	607	-	623	605	-	-	-	-	-	-	-
Stage 1	881	784	-	831	757	-	-	-	-	-	-	-
Stage 2	727	753	-	830	779	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	10.2	0.5	1.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1522	-	-	687	798	1434	-	-
HCM Lane V/C Ratio	0.007	-	-	0.106	0.133	0.017	-	-
HCM Control Delay (s)	7.4	-	-	10.9	10.2	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.5	0.1	-	-

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	26	0	19	35	0	46	8	74	16	13	96	6
Future Vol, veh/h	26	0	19	35	0	46	8	74	16	13	96	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	205	-	-	205	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	21	38	0	50	9	80	17	14	104	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	268	251	108	253	246	89	111	0	0	97	0	0
Stage 1	136	136	-	107	107	-	-	-	-	-	-	-
Stage 2	132	115	-	146	139	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	685	652	946	700	656	969	1479	-	-	1496	-	-
Stage 1	867	784	-	898	807	-	-	-	-	-	-	-
Stage 2	871	800	-	857	782	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	642	642	946	677	646	969	1479	-	-	1496	-	-
Mov Cap-2 Maneuver	642	642	-	677	646	-	-	-	-	-	-	-
Stage 1	862	777	-	893	802	-	-	-	-	-	-	-
Stage 2	821	795	-	830	775	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	10.2		9.9		0.6		0.8	
HCM LOS	B		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1479	-	-	743	817	1496	-	-
HCM Lane V/C Ratio	0.006	-	-	0.066	0.108	0.009	-	-
HCM Control Delay (s)	7.4	-	-	10.2	9.9	7.4	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.4	0	-	-

Intersection						
Int Delay, s/veh	45.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗		↘
Traffic Vol, veh/h	552	149	462	227	44	0
Future Vol, veh/h	552	149	462	227	44	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	581	157	486	239	46	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	578	486	0	0	725	0
Stage 1	486	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 478	581	-	-	878	-
Stage 1	618	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 453	581	-	-	878	-
Mov Cap-2 Maneuver	~ 506	-	-	-	-	-
Stage 1	586	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	93.2	0	9.3
HCM LOS	F		














Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	506	581	878	-
HCM Lane V/C Ratio	-	-	1.148	0.27	0.053	-
HCM Control Delay (s)	-	-	114.7	13.5	9.3	0
HCM Lane LOS	-	-	F	B	A	A
HCM 95th %tile Q(veh)	-	-	20.2	1.1	0.2	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection					
Intersection Delay, s/veh	11.6				
Intersection LOS	B				
Approach	WB		NB		SB
Entry Lanes	2		2		1
Conflicting Circle Lanes	1		1		1
Adj Approach Flow, veh/h	762		749		480
Demand Flow Rate, veh/h	777		764		490
Vehicles Circulating, veh/h	512		49		612
Vehicles Exiting, veh/h	301		1053		677
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000		1.000		1.000
Approach Delay, s/veh	13.9		5.6		17.5
Approach LOS	B		A		C
Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LT
Assumed Moves	L	TR	LT	R	LT
RT Channelized					
Lane Util	0.788	0.212	0.670	0.330	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
Entry Flow, veh/h	612	165	512	252	490
Cap Entry Lane, veh/h	891	891	1358	1358	739
Entry HV Adj Factor	0.980	0.982	0.980	0.980	0.980
Flow Entry, veh/h	600	162	502	247	480
Cap Entry, veh/h	874	875	1332	1331	725
V/C Ratio	0.687	0.185	0.377	0.186	0.663
Control Delay, s/veh	16.1	6.0	6.2	4.2	17.5
LOS	C	A	A	A	C
95th %tile Queue, veh	6	1	2	1	5

Timings
13: Marksheffel Rd & Lorson Blvd

2040 Total Traffic
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 					
Traffic Volume (vph)	552	149	462	227	44	397
Future Volume (vph)	552	149	462	227	44	397
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	21.6	21.6	65.1	65.1	65.1	65.1
Actuated g/C Ratio	0.22	0.22	0.67	0.67	0.67	0.67
v/c Ratio	0.78	0.34	0.40	0.22	0.09	0.34
Control Delay	43.3	7.0	8.7	1.4	6.8	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	7.0	8.7	1.4	6.8	8.1
LOS	D	A	A	A	A	A
Approach Delay	35.6		6.3			8.0
Approach LOS	D		A			A

Intersection Summary

Cycle Length: 100
 Actuated Cycle Length: 96.7
 Natural Cycle: 50
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 17.9
 Intersection Capacity Utilization 56.7%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 13: Marksheffel Rd & Lorson Blvd



Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	6	186	492	187	94	35
Future Vol, veh/h	6	186	492	187	94	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	202	535	203	102	38

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	738	0	-	0	751 535
Stage 1	-	-	-	-	535 -
Stage 2	-	-	-	-	216 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	868	-	-	-	378 545
Stage 1	-	-	-	-	587 -
Stage 2	-	-	-	-	820 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	868	-	-	-	375 545
Mov Cap-2 Maneuver	-	-	-	-	471 -
Stage 1	-	-	-	-	582 -
Stage 2	-	-	-	-	820 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	868	-	-	-	471	545
HCM Lane V/C Ratio	0.008	-	-	-	0.217	0.07
HCM Control Delay (s)	9.2	-	-	-	14.7	12.1
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8	0.2

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	100	97	304	55	38	37
Future Vol, veh/h	100	97	304	55	38	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	105	330	60	41	40

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	390	0	-	0	653 330
Stage 1	-	-	-	-	330 -
Stage 2	-	-	-	-	323 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1169	-	-	-	432 712
Stage 1	-	-	-	-	728 -
Stage 2	-	-	-	-	734 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1169	-	-	-	392 712
Mov Cap-2 Maneuver	-	-	-	-	472 -
Stage 1	-	-	-	-	660 -
Stage 2	-	-	-	-	734 -

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1169	-	-	-	472	712
HCM Lane V/C Ratio	0.093	-	-	-	0.088	0.056
HCM Control Delay (s)	8.4	-	-	-	13.4	10.4
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	95	212	2	7	34
Future Vol, veh/h	13	95	212	2	7	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	105	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	103	230	2	8	37

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	232	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1336	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1336	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1336	-	-	-	780
HCM Lane V/C Ratio	0.011	-	-	-	0.057
HCM Control Delay (s)	7.7	-	-	-	9.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	77	25	69	21	5	145
Future Vol, veh/h	77	25	69	21	5	145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	-	205	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	27	75	23	5	158

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	98	0	-	0	282 87
Stage 1	-	-	-	-	87 -
Stage 2	-	-	-	-	195 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1495	-	-	-	708 971
Stage 1	-	-	-	-	936 -
Stage 2	-	-	-	-	838 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1495	-	-	-	668 971
Mov Cap-2 Maneuver	-	-	-	-	666 -
Stage 1	-	-	-	-	884 -
Stage 2	-	-	-	-	838 -

Approach	EB	WB	SB
HCM Control Delay, s	5.7	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1495	-	-	-	666	971
HCM Lane V/C Ratio	0.056	-	-	-	0.008	0.162
HCM Control Delay (s)	7.6	-	-	-	10.5	9.4
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0	0.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	35.8	37.4	47.0	3.9	7.2	17.2	4.6	22.9	4.5	6.4	12.6	7.3

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	SBR	All
Stop Del/Veh (s)	8.3	30.6

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	82.9	69.6	130.5	14.8	7.8	37.8	4.7	25.2	3.9	7.9	10.1	12.5

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	SBR	All
Stop Del/Veh (s)	10.6	76.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	126.6	111.0	227.3	51.0	5.8	25.7	6.2	39.6	5.2	8.2	6.8	8.2

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	SBR	All
Stop Del/Veh (s)	10.4	126.1

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	87.4	89.9	240.8	64.4	7.7	16.3	4.3	14.7	5.7	9.1	14.3	

1: Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	SBR	All
Stop Del/Veh (s)	9.5	123.8

1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Stop Del/Veh (s)	91.5	84.2	192.9	33.5	8.1	25.9	4.8	26.2	6.4	6.3	11.0	10.0

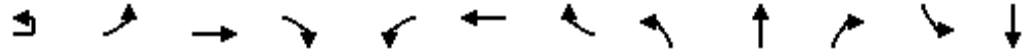
1: Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	SBR	All
Stop Del/Veh (s)	10.0	99.3

Intersection								
Intersection Delay, s/veh	14.6							
Intersection LOS	B							
Approach	EB		WB		NB		SB	
Entry Lanes	2		2		1		1	
Conflicting Circle Lanes	2		2		2		2	
Adj Approach Flow, veh/h	2037		875		213		145	
Demand Flow Rate, veh/h	2078		892		217		148	
Vehicles Circulating, veh/h	24		555		1730		1135	
Vehicles Exiting, veh/h	1123		1392		372		312	
Ped Vol Crossing Leg, #/h	0		0		0		0	
Ped Cap Adj	1.000		1.000		1.000		1.000	
Approach Delay, s/veh	14.9		11.6		34.3		0.6	
Approach LOS	B		B		D		A	
Lane	Left	Right	Left	Right	Left	Left	Bypass	
Designated Moves	LT	TR	LT	TR	LTR	LT	R	
Assumed Moves	LT	TR	LT	TR	LTR	LT	R	
RT Channelized								Free
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000		
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535		
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	136	
Entry Flow, veh/h	977	1101	419	473	217	12	1938	
Cap Entry Lane, veh/h	1320	1391	810	886	326	541	0.980	
Entry HV Adj Factor	0.980	0.981	0.981	0.980	0.981	0.995	133	
Flow Entry, veh/h	957	1080	411	464	213	12	1900	
Cap Entry, veh/h	1294	1364	795	869	320	538	0.070	
V/C Ratio	0.740	0.791	0.517	0.534	0.665	0.022	0.0	
Control Delay, s/veh	13.9	15.7	11.9	11.5	34.3	6.9	A	
LOS	B	C	B	B	D	A	0	
95th %tile Queue, veh	7	9	3	3	4	0		

Timings
1: Old Glory Dr & Fontaine Blvd

2040 Total Traffic
PM Peak Hour

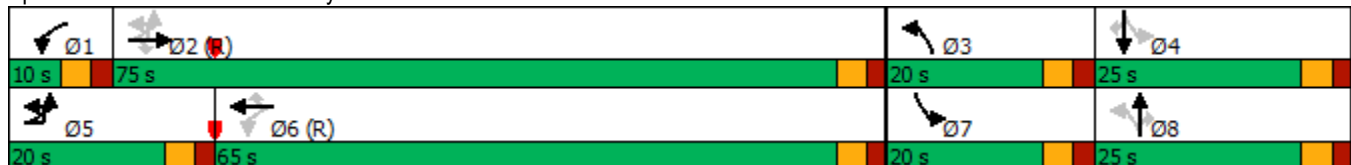


Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔	↕	↗	↖	↕	↗	↖	↕	↗	↖	↕
Traffic Volume (vph)	42	270	1240	322	11	785	9	186	3	7	8	3
Future Volume (vph)	42	270	1240	322	11	785	9	186	3	7	8	3
Turn Type	pm+pt	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases	2	2		2	6		6	8		8	4	
Detector Phase	5	5	2	2	1	6	6	3	8	8	7	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0
Minimum Split (s)	10.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0
Total Split (s)	20.0	20.0	75.0	75.0	10.0	65.0	65.0	20.0	25.0	25.0	20.0	25.0
Total Split (%)	15.4%	15.4%	57.7%	57.7%	7.7%	50.0%	50.0%	15.4%	19.2%	19.2%	15.4%	19.2%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)		85.7	81.2	81.2	69.3	63.5	63.5	34.3	31.9	31.9	21.1	15.0
Actuated g/C Ratio		0.66	0.62	0.62	0.53	0.49	0.49	0.26	0.25	0.25	0.16	0.12
v/c Ratio		0.77	0.61	0.31	0.06	0.49	0.01	0.55	0.01	0.02	0.04	0.01
Control Delay		23.9	17.2	2.1	9.8	24.2	0.0	46.0	40.3	0.0	36.1	51.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		23.9	17.2	2.1	9.8	24.2	0.0	46.0	40.3	0.0	36.1	51.3
LOS		C	B	A	A	C	A	D	D	A	D	D
Approach Delay			15.7			23.7			44.2			13.8
Approach LOS			B			C			D			B

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 109 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.7
 Intersection LOS: B
 Intersection Capacity Utilization 78.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 1: Old Glory Dr & Fontaine Blvd



Timings
1: Old Glory Dr & Fontaine Blvd

2040 Total Traffic
PM Peak Hour

Lane Group	SBR
Lane Configurations	
Traffic Volume (vph)	122
Future Volume (vph)	122
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Detector Phase	4
Switch Phase	
Minimum Initial (s)	15.0
Minimum Split (s)	23.0
Total Split (s)	25.0
Total Split (%)	19.2%
Yellow Time (s)	3.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	5.0
Lead/Lag	Lag
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	15.0
Actuated g/C Ratio	0.12
v/c Ratio	0.43
Control Delay	11.5
Queue Delay	0.0
Total Delay	11.5
LOS	B
Approach Delay	
Approach LOS	
Intersection Summary	

Intersection												
Int Delay, s/veh	6.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑↑	↗	↙	↗		↙	↑	↗
Traffic Vol, veh/h	83	1061	50	6	715	12	35	3	5	13	2	55
Future Vol, veh/h	83	1061	50	6	715	12	35	3	5	13	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	275	-	275	150	-	150	0	-	-	0	-	280
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	1153	54	7	777	13	38	3	5	14	2	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	790	0	0	1207	0	0	1737	2137	1153	2155	2178	389
Stage 1	-	-	-	-	-	-	1333	1333	-	791	791	-
Stage 2	-	-	-	-	-	-	404	804	-	1364	1387	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	828	-	-	576	-	-	62	49	239	30	46	610
Stage 1	-	-	-	-	-	-	189	222	-	350	400	-
Stage 2	-	-	-	-	-	-	595	395	-	182	209	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	828	-	-	576	-	-	49	43	239	25	40	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	49	43	-	25	40	-
Stage 1	-	-	-	-	-	-	168	198	-	312	395	-
Stage 2	-	-	-	-	-	-	527	390	-	156	186	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.1			169			61.3		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	49	88	828	-	-	576	-	-	25	40	610
HCM Lane V/C Ratio	0.776	0.099	0.109	-	-	0.011	-	-	0.565	0.054	0.098
HCM Control Delay (s)	196.1	50.3	9.9	-	-	11.3	-	-	266.1	100.1	11.5
HCM Lane LOS	F	F	A	-	-	B	-	-	F	F	B
HCM 95th %tile Q(veh)	3.2	0.3	0.4	-	-	0	-	-	1.7	0.2	0.3

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	20.2	52.6	13.9	4.5	3.3	2.3	5.1	3.8	3.0	4.0		2.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #1 5:00

Movement	All
Stop Del/Veh (s)	29.4

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	35.0	80.7	33.9	4.0	3.7	2.9	4.7	3.9	4.2	4.9	2.5	2.7

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #2 5:15

Movement	All
Stop Del/Veh (s)	43.0

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #3 5:30

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Stop Del/Veh (s)	30.3	75.3	30.0	4.1	3.4	3.1	5.0	3.4	5.7	5.3	2.5	2.5	42.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	31.8	78.4	32.5	2.7	3.6	2.2	5.4	3.3	3.7	4.8		2.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Interval #4 5:45

Movement	All
Stop Del/Veh (s)	42.4

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Stop Del/Veh (s)	31.3	77.1	29.2	3.6	3.6	2.5	5.2	4.8	5.1	4.8	5.4	2.6

2: Stingray Dr/Old Glory Dr & Fontaine Blvd Performance by movement Entire Run

Movement	All
Stop Del/Veh (s)	41.3

HCM 6th Roundabout
 2: Stingray Dr/Old Glory Dr & Fontaine Blvd

2040 Total Traffic
 PM Peak Hour

Intersection							
Intersection Delay, s/veh	7.1						
Intersection LOS	A						
Approach	EB		WB		NB		SB
Entry Lanes	2		2		1		1
Conflicting Circle Lanes	2		2		2		2
Adj Approach Flow, veh/h	1297		797		46		76
Demand Flow Rate, veh/h	1323		813		47		77
Vehicles Circulating, veh/h	23		134		1282		839
Vehicles Exiting, veh/h	893		1195		64		108
Ped Vol Crossing Leg, #/h	0		0		0		0
Ped Cap Adj	1.000		1.000		1.000		1.000
Approach Delay, s/veh	7.7		6.1		9.0		6.4
Approach LOS	A		A		A		A
Lane	Left	Right	Left	Right	Left	Left	
Designated Moves	LT	TR	LT	TR	LTR	LTR	
Assumed Moves	LT	TR	LT	TR	LTR	LTR	
RT Channelized							
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	
Entry Flow, veh/h	622	701	382	431	47	77	
Cap Entry Lane, veh/h	1322	1393	1193	1267	478	696	
Entry HV Adj Factor	0.980	0.981	0.981	0.981	0.977	0.987	
Flow Entry, veh/h	610	687	375	423	46	76	
Cap Entry, veh/h	1295	1366	1171	1243	467	687	
V/C Ratio	0.471	0.503	0.320	0.340	0.098	0.111	
Control Delay, s/veh	7.6	7.8	6.1	6.1	9.0	6.4	
LOS	A	A	A	A	A	A	
95th %tile Queue, veh	3	3	1	2	0	0	

Timings
2: Stingray Dr/Old Glory Dr & Fontaine Blvd

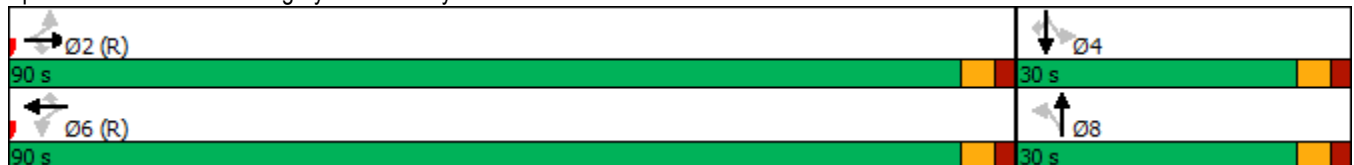
2040 Total Traffic
PM Peak Hour

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑↑	↗	↖	↗	↖	↑	↗
Traffic Volume (vph)	83	1061	50	6	715	12	35	3	13	2	55
Future Volume (vph)	83	1061	50	6	715	12	35	3	13	2	55
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	NA	Perm
Protected Phases		2			6			8		4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	2	2	2	6	6	6	8	8	4	4	4
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	24.0	24.0	23.0	23.0	23.0
Total Split (s)	90.0	90.0	90.0	90.0	90.0	90.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag											
Lead-Lag Optimize?											
Recall Mode	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max	Max
Act Effct Green (s)	85.0	85.0	85.0	85.0	85.0	85.0	25.0	25.0	25.0	25.0	25.0
Actuated g/C Ratio	0.71	0.71	0.71	0.71	0.71	0.71	0.21	0.21	0.21	0.21	0.21
v/c Ratio	0.20	0.87	0.05	0.06	0.31	0.01	0.13	0.02	0.05	0.01	0.16
Control Delay	7.3	22.8	1.5	6.8	6.9	1.7	40.1	27.1	38.7	38.0	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	22.8	1.5	6.8	6.9	1.7	40.1	27.1	38.7	38.0	10.7
LOS	A	C	A	A	A	A	D	C	D	D	B
Approach Delay		20.8			6.8			37.9		16.6	
Approach LOS		C			A			D		B	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 24 (20%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 16.0
 Intersection LOS: B
 Intersection Capacity Utilization 81.1%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: Stingray Dr/Old Glory Dr & Fontaine Blvd



Intersection				
Intersection Delay, s/veh	15.8			
Intersection LOS	C			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	1112	478	98	168
Demand Flow Rate, veh/h	1134	488	100	171
Vehicles Circulating, veh/h	29	387	964	578
Vehicles Exiting, veh/h	720	677	199	297
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	19.7	10.9	9.8	7.3
Approach LOS	C	B	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	1134	488	100	171
Cap Entry Lane, veh/h	1340	930	516	765
Entry HV Adj Factor	0.980	0.980	0.980	0.982
Flow Entry, veh/h	1112	478	98	168
Cap Entry, veh/h	1313	911	506	752
V/C Ratio	0.847	0.525	0.194	0.223
Control Delay, s/veh	19.7	10.9	9.8	7.3
LOS	C	B	A	A
95th %tile Queue, veh	11	3	1	1

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	76	49	0	43	28	1
Future Vol, veh/h	76	49	0	43	28	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	53	0	47	30	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	136	0	157
Stage 1	-	-	-	-	110
Stage 2	-	-	-	-	47
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1448	-	834
Stage 1	-	-	-	-	915
Stage 2	-	-	-	-	975
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1448	-	834
Mov Cap-2 Maneuver	-	-	-	-	808
Stage 1	-	-	-	-	915
Stage 2	-	-	-	-	975

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	812	-	-	1448	-
HCM Lane V/C Ratio	0.039	-	-	-	-
HCM Control Delay (s)	9.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection												
Int Delay, s/veh	8.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	35	29	0	21	0	15	1	0	1	0	7
Future Vol, veh/h	12	35	29	0	21	0	15	1	0	1	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	38	32	0	23	0	16	1	0	1	0	8

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	51	39	4	74	43	1	8	0	0	1	0	0
Stage 1	6	6	-	33	33	-	-	-	-	-	-	-
Stage 2	45	33	-	41	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	948	853	1080	916	849	1084	1612	-	-	1622	-	-
Stage 1	1016	891	-	983	868	-	-	-	-	-	-	-
Stage 2	969	868	-	974	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	921	844	1080	852	840	1084	1612	-	-	1622	-	-
Mov Cap-2 Maneuver	921	844	-	852	840	-	-	-	-	-	-	-
Stage 1	1006	890	-	973	859	-	-	-	-	-	-	-
Stage 2	934	859	-	904	886	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.2		9.4		6.8		0.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	934	840	1622	-	-
HCM Lane V/C Ratio	0.01	-	-	0.088	0.027	0.001	-	-
HCM Control Delay (s)	7.3	0	-	9.2	9.4	7.2	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection

Int Delay, s/veh 1.1

Movement EBT EBR WBL WBT NBL NBR

Lane Configurations						
Traffic Vol, veh/h	22	8	0	11	5	1
Future Vol, veh/h	22	8	0	11	5	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	9	0	12	5	1

Major/Minor Major1 Major2 Minor1

Conflicting Flow All	0	0	33	0	41	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	12	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1579	-	970	1046
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	1011	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1579	-	970	1046
Mov Cap-2 Maneuver	-	-	-	-	899	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	1011	-

Approach EB WB NB

HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt NBLn1 EBT EBR WBL WBT

Capacity (veh/h)	921	-	-	1579	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	8	6	14	3	10	3	0	9	6	0	4
Future Vol, veh/h	8	8	6	14	3	10	3	0	9	6	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	9	7	15	3	11	3	0	10	7	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	14	0	0	16	0	0	72	75	13	75	73	9
Stage 1	-	-	-	-	-	-	31	31	-	39	39	-
Stage 2	-	-	-	-	-	-	41	44	-	36	34	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1604	-	-	1602	-	-	919	815	1067	915	817	1073
Stage 1	-	-	-	-	-	-	986	869	-	976	862	-
Stage 2	-	-	-	-	-	-	974	858	-	980	867	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1604	-	-	1602	-	-	905	803	1067	897	805	1073
Mov Cap-2 Maneuver	-	-	-	-	-	-	905	803	-	897	805	-
Stage 1	-	-	-	-	-	-	980	864	-	970	854	-
Stage 2	-	-	-	-	-	-	961	850	-	965	862	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.6			3.8			8.6			8.8		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1021	1604	-	-	1602	-	-	960
HCM Lane V/C Ratio	0.013	0.005	-	-	0.009	-	-	0.011
HCM Control Delay (s)	8.6	7.3	0	-	7.3	0	-	8.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	7	16	24	134	81	3
Future Vol, veh/h	7	16	24	134	81	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	17	26	146	88	3

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	288	90	91	0	0
Stage 1	90	-	-	-	-
Stage 2	198	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	702	968	1504	-	-
Stage 1	934	-	-	-	-
Stage 2	835	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	689	968	1504	-	-
Mov Cap-2 Maneuver	701	-	-	-	-
Stage 1	916	-	-	-	-
Stage 2	835	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1504	-	867	-	-
HCM Lane V/C Ratio	0.017	-	0.029	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↑	↖	↗	↖	↖
Traffic Vol, veh/h	0	0	24	42	0	1	42	157	72	1	95	0
Future Vol, veh/h	0	0	24	42	0	1	42	157	72	1	95	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	105	-	155	105	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	26	46	0	1	46	171	78	1	103	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	408	446	103	381	368	171	103	0	0	249	0	0
Stage 1	105	105	-	263	263	-	-	-	-	-	-	-
Stage 2	303	341	-	118	105	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	554	507	952	577	561	873	1489	-	-	1317	-	-
Stage 1	901	808	-	742	691	-	-	-	-	-	-	-
Stage 2	706	639	-	887	808	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	540	491	952	548	543	873	1489	-	-	1317	-	-
Mov Cap-2 Maneuver	540	491	-	548	543	-	-	-	-	-	-	-
Stage 1	873	807	-	719	670	-	-	-	-	-	-	-
Stage 2	683	619	-	862	807	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	12.1	1.2	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	952	553	1317	-	-
HCM Lane V/C Ratio	0.031	-	-	0.027	0.085	0.001	-	-
HCM Control Delay (s)	7.5	-	-	8.9	12.1	7.7	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.3	0	-	-

Intersection												
Int Delay, s/veh	12.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Vol, veh/h	246	114	221	8	66	1	133	24	13	1	14	147
Future Vol, veh/h	246	114	221	8	66	1	133	24	13	1	14	147
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	205	-	155	205	-	155	205	-	155	205	-	155
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	267	124	240	9	72	1	145	26	14	1	15	160

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	364	0	0	836	749	124	888	988	72
Stage 1	-	-	-	-	-	-	658	658	-	90	90	-
Stage 2	-	-	-	-	-	-	178	91	-	798	898	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1527	-	-	1195	-	-	287	341	927	264	247	990
Stage 1	-	-	-	-	-	-	453	461	-	917	820	-
Stage 2	-	-	-	-	-	-	824	820	-	380	358	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1527	-	-	1195	-	-	196	279	927	208	202	990
Mov Cap-2 Maneuver	-	-	-	-	-	-	196	279	-	208	202	-
Stage 1	-	-	-	-	-	-	374	380	-	757	813	-
Stage 2	-	-	-	-	-	-	673	813	-	288	295	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.3			0.9			52.1			10.7		
HCM LOS							F			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	196	279	927	1527	-	-	1195	-	-	208	202	990
HCM Lane V/C Ratio	0.738	0.094	0.015	0.175	-	-	0.007	-	-	0.005	0.075	0.161
HCM Control Delay (s)	62.2	19.2	8.9	7.9	-	-	8	-	-	22.4	24.3	9.3
HCM Lane LOS	F	C	A	A	-	-	A	-	-	C	C	A
HCM 95th %tile Q(veh)	4.8	0.3	0	0.6	-	-	0	-	-	0	0.2	0.6

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑	↗	↖	↑	↗
Traffic Vol, veh/h	246	114	221	8	66	1	133	24	13	1	14	147
Future Vol, veh/h	246	114	221	8	66	1	133	24	13	1	14	147
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	267	124	240	9	72	1	145	26	14	1	15	160
Number of Lanes	1	1	1	1	1	1	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	12.6	10.8	12.4	11.3
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	133	24	13	246	114	221	8	66	1	1	14
LT Vol	133	0	0	246	0	0	8	0	0	1	0
Through Vol	0	24	0	0	114	0	0	66	0	0	14
RT Vol	0	0	13	0	0	221	0	0	1	0	0
Lane Flow Rate	145	26	14	267	124	240	9	72	1	1	15
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.295	0.05	0.024	0.481	0.206	0.352	0.018	0.14	0.002	0.002	0.029
Departure Headway (Hd)	7.346	6.846	6.146	6.482	5.982	5.282	7.505	7.005	6.305	7.423	6.923
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	489	522	581	556	600	680	476	510	565	481	516
Service Time	5.101	4.601	3.901	4.225	3.725	3.025	5.27	4.77	4.07	5.18	4.68
HCM Lane V/C Ratio	0.297	0.05	0.024	0.48	0.207	0.353	0.019	0.141	0.002	0.002	0.029
HCM Control Delay	13.2	10	9.1	15.1	10.3	10.9	10.4	10.9	9.1	10.2	9.9
HCM Lane LOS	B	A	A	C	B	B	B	B	A	B	A
HCM 95th-tile Q	1.2	0.2	0.1	2.6	0.8	1.6	0.1	0.5	0	0	0.1

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	26	0	18	20	0	43	31	101	34	73	126	44
Future Vol, veh/h	26	0	18	20	0	43	31	101	34	73	126	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	205	-	-	205	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	20	22	0	47	34	110	37	79	137	48

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	539	534	161	526	540	129	185	0	0	147	0	0
Stage 1	319	319	-	197	197	-	-	-	-	-	-	-
Stage 2	220	215	-	329	343	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	453	452	884	462	449	921	1390	-	-	1435	-	-
Stage 1	693	653	-	805	738	-	-	-	-	-	-	-
Stage 2	782	725	-	684	637	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	404	417	884	425	414	921	1390	-	-	1435	-	-
Mov Cap-2 Maneuver	404	417	-	425	414	-	-	-	-	-	-	-
Stage 1	676	617	-	786	720	-	-	-	-	-	-	-
Stage 2	724	708	-	632	602	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	11	1.4	2.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1390	-	-	519	672	1435	-	-
HCM Lane V/C Ratio	0.024	-	-	0.092	0.102	0.055	-	-
HCM Control Delay (s)	7.7	-	-	12.6	11	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0.2	-	-

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	16	0	13	24	0	31	23	120	43	53	85	27
Future Vol, veh/h	16	0	13	24	0	31	23	120	43	53	85	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	205	-	-	205	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	14	26	0	34	25	130	47	58	92	29

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	444	450	107	434	441	154	121	0	0	177	0	0
Stage 1	223	223	-	204	204	-	-	-	-	-	-	-
Stage 2	221	227	-	230	237	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	524	504	947	532	510	892	1467	-	-	1399	-	-
Stage 1	780	719	-	798	733	-	-	-	-	-	-	-
Stage 2	781	716	-	773	709	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	482	475	947	501	481	892	1467	-	-	1399	-	-
Mov Cap-2 Maneuver	482	475	-	501	481	-	-	-	-	-	-	-
Stage 1	767	690	-	784	721	-	-	-	-	-	-	-
Stage 2	739	704	-	730	680	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	11.1		10.9		0.9		2.5	
HCM LOS	B		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	618	665	1399	-	-
HCM Lane V/C Ratio	0.017	-	-	0.051	0.09	0.041	-	-
HCM Control Delay (s)	7.5	-	-	11.1	10.9	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0.1	-	-

Intersection						
Int Delay, s/veh	23.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗		↘
Traffic Vol, veh/h	361	97	552	588	120	0
Future Vol, veh/h	361	97	552	588	120	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	250	-	250	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	380	102	581	619	126	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	833	581	0	0	1200
Stage 1	581	-	-	-	-
Stage 2	252	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 339	514	-	-	582
Stage 1	559	-	-	-	-
Stage 2	790	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 266	514	-	-	582
Mov Cap-2 Maneuver	~ 352	-	-	-	-
Stage 1	438	-	-	-	-
Stage 2	790	-	-	-	-














Approach	WB	NB	SB
HCM Control Delay, s	86.3	0	12.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	352	514	582
HCM Lane V/C Ratio	-	-	1.08	0.199	0.217
HCM Control Delay (s)	-	-	105.8	13.7	12.9
HCM Lane LOS	-	-	F	B	B
HCM 95th %tile Q(veh)	-	-	13.8	0.7	0.8

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
13: Marksheffel Rd & Lorson Blvd

2040 Total Traffic
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	 					
Traffic Volume (vph)	361	97	552	588	120	459
Future Volume (vph)	361	97	552	588	120	459
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	30.0	30.0	70.0	70.0	70.0	70.0
Total Split (%)	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Max	Max	Max	Max
Act Effct Green (s)	15.6	15.6	65.1	65.1	65.1	65.1
Actuated g/C Ratio	0.17	0.17	0.72	0.72	0.72	0.72
v/c Ratio	0.66	0.29	0.45	0.49	0.25	0.37
Control Delay	40.8	8.9	7.1	1.8	6.5	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	8.9	7.1	1.8	6.5	6.3
LOS	D	A	A	A	A	A
Approach Delay	34.0		4.4			6.4
Approach LOS	C		A			A

Intersection Summary

Cycle Length: 100	
Actuated Cycle Length: 90.7	
Natural Cycle: 55	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 11.1	Intersection LOS: B
Intersection Capacity Utilization 58.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 13: Marksheffel Rd & Lorson Blvd



Intersection					
Intersection Delay, s/veh	10.8				
Intersection LOS	B				
Approach	WB		NB		SB
Entry Lanes	2		2		1
Conflicting Circle Lanes	1		1		1
Adj Approach Flow, veh/h	497		1239		629
Demand Flow Rate, veh/h	507		1264		642
Vehicles Circulating, veh/h	612		133		400
Vehicles Exiting, veh/h	785		909		719
Ped Vol Crossing Leg, #/h	0		0		0
Ped Cap Adj	1.000		1.000		1.000
Approach Delay, s/veh	10.1		8.4		16.3
Approach LOS	B		A		C
Lane	Left	Right	Left	Right	Left
Designated Moves	L	TR	LT	R	LT
Assumed Moves	L	TR	LT	R	LT
RT Channelized					
Lane Util	0.789	0.211	0.484	0.516	1.000
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.609
Critical Headway, s	4.544	4.544	4.544	4.544	4.976
Entry Flow, veh/h	400	107	612	652	642
Cap Entry Lane, veh/h	814	814	1258	1258	918
Entry HV Adj Factor	0.980	0.981	0.980	0.980	0.980
Flow Entry, veh/h	392	105	600	639	629
Cap Entry, veh/h	797	798	1234	1233	899
V/C Ratio	0.492	0.132	0.486	0.518	0.700
Control Delay, s/veh	11.3	5.8	8.1	8.6	16.3
LOS	B	A	A	A	C
95th %tile Queue, veh	3	0	3	3	6

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	16	518	318	130	235	5
Future Vol, veh/h	16	518	318	130	235	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	563	346	141	255	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	487	0	-	0	943
Stage 1	-	-	-	-	346
Stage 2	-	-	-	-	597
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1076	-	-	-	291
Stage 1	-	-	-	-	716
Stage 2	-	-	-	-	550
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1076	-	-	-	286
Mov Cap-2 Maneuver	-	-	-	-	403
Stage 1	-	-	-	-	705
Stage 2	-	-	-	-	550

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	27.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1076	-	-	-	403	697
HCM Lane V/C Ratio	0.016	-	-	-	0.634	0.008
HCM Control Delay (s)	8.4	-	-	-	28.2	10.2
HCM Lane LOS	A	-	-	-	D	B
HCM 95th %tile Q(veh)	0	-	-	-	4.2	0

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	40	352	210	41	80	27
Future Vol, veh/h	40	352	210	41	80	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	155	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	383	228	45	87	29

Major/Minor

	Major1	Major2	Minor2
Conflicting Flow All	273	0	697
Stage 1	-	-	228
Stage 2	-	-	469
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1290	-	407
Stage 1	-	-	810
Stage 2	-	-	630
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1290	-	394
Mov Cap-2 Maneuver	-	-	478
Stage 1	-	-	783
Stage 2	-	-	630

Approach

	EB	WB	SB
HCM Control Delay, s	0.8	0	13
HCM LOS			B

Minor Lane/Major Mvmt

	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1290	-	-	-	478	811
HCM Lane V/C Ratio	0.034	-	-	-	0.182	0.036
HCM Control Delay (s)	7.9	-	-	-	14.2	9.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7	0.1

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	253	147	6	4	24
Future Vol, veh/h	41	253	147	6	4	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	105	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	275	160	7	4	26

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	167	0	-	0	529 164
Stage 1	-	-	-	-	164 -
Stage 2	-	-	-	-	365 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1411	-	-	-	510 881
Stage 1	-	-	-	-	865 -
Stage 2	-	-	-	-	702 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1411	-	-	-	494 881
Mov Cap-2 Maneuver	-	-	-	-	552 -
Stage 1	-	-	-	-	837 -
Stage 2	-	-	-	-	702 -

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1411	-	-	-	812
HCM Lane V/C Ratio	0.032	-	-	-	0.037
HCM Control Delay (s)	7.6	-	-	-	9.6
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↗		↘	↗
Traffic Vol, veh/h	173	83	49	11	18	104
Future Vol, veh/h	173	83	49	11	18	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	205	-	-	-	205	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	188	90	53	12	20	113

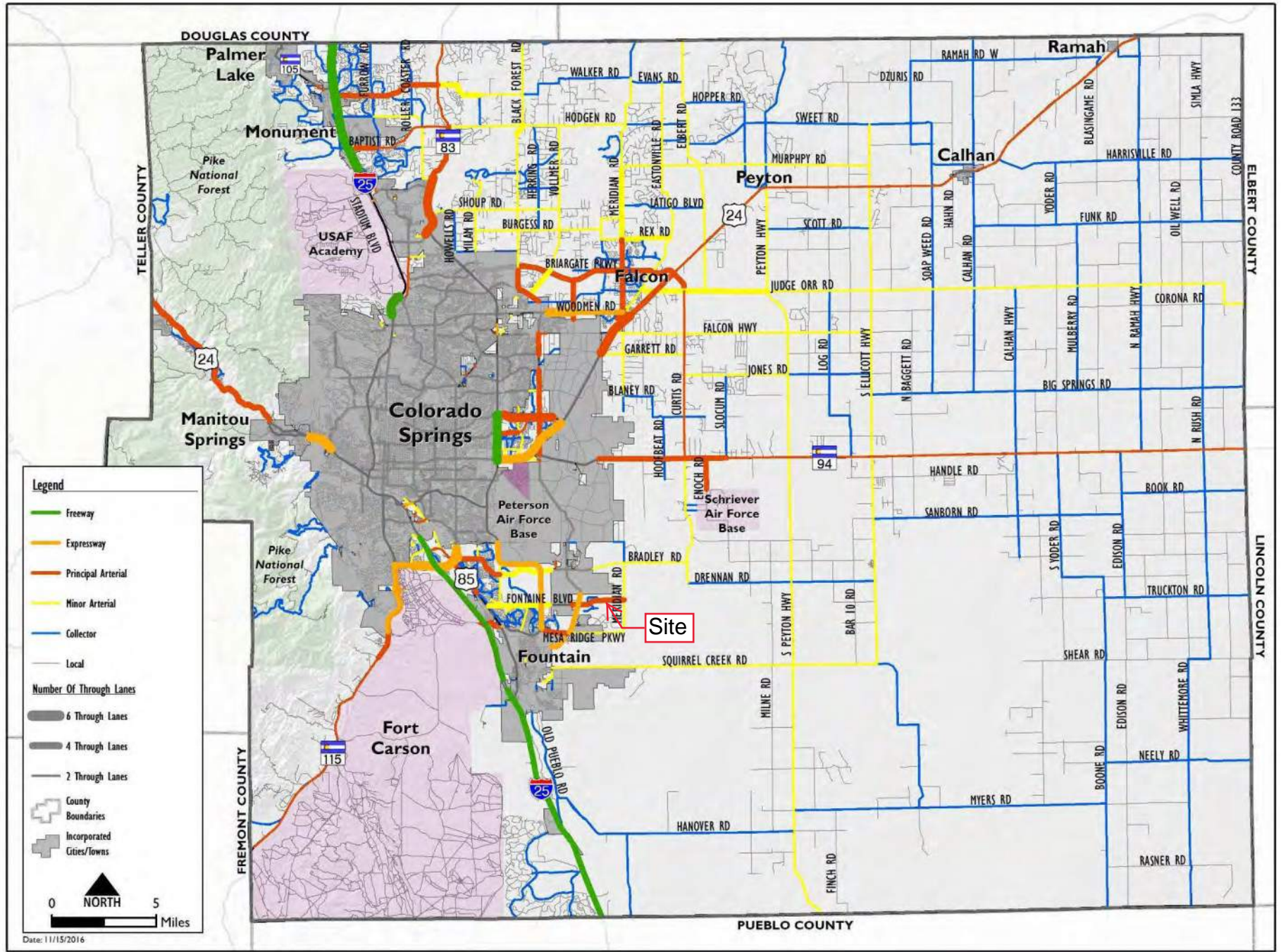
Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	65	0	-	0	525 59
Stage 1	-	-	-	-	59 -
Stage 2	-	-	-	-	466 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1537	-	-	-	513 1007
Stage 1	-	-	-	-	964 -
Stage 2	-	-	-	-	632 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1537	-	-	-	450 1007
Mov Cap-2 Maneuver	-	-	-	-	405 -
Stage 1	-	-	-	-	846 -
Stage 2	-	-	-	-	632 -

Approach	EB	WB	SB
HCM Control Delay, s	5.2	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1537	-	-	-	405	1007
HCM Lane V/C Ratio	0.122	-	-	-	0.048	0.112
HCM Control Delay (s)	7.7	-	-	-	14.3	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.4	-	-	-	0.2	0.4

MTCP Maps





Map 14: 2040 Roadway Plan (Classification and Lanes)

Map 17: 2060 Corridor Preservation

