TRAFFIC IMPACT STUDY

CROWSNEST

Castle Pines, CO

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DATE:
November 4, 2025
Revised: January 15, 2026
Revised: February 9, 2026
Revised: February 17, 2026
Revised: February 24, 2026

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Executive Summary

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 750 acres of private property and public property (right-of-way) and is identified as Douglas County Parcel Numbers 2349-084-00-001, 2349-083-00-003, 2349-082-00-003, 2349-082-00-001, 2349-080-00-019, 2349-080-00-031, 2349-090-00-010, 2349-080-00-003, 2349-070-00-023, 2349-080-00-026, 2349-080-01-002, 2349-080-00-015. It is generally located on either side of Crowfoot Valley Road, south of Chambers Road, and west of Bayou Gulch Road. The site location is shown on Figure 1-1. It is currently zoned A1 Agricultural by Douglas County and is being used for agricultural purposes and open lands. The Applicant proposes to change the Property's zoning, upon annexation, to the City zone district of PD Planned Development.

The study area for the project includes intersections that could be affected by the proposed development:

- Crowfoot Valley Rd/Stroh Rd
- Crowfoot Valley Rd/S Chambers Rd
- Crowfoot Valley Rd/N Pinery Pkwy
- Crowfoot Valley Rd/Pradera Pkwy
- Crowfoot Valley Rd/Macanta Blvd
- Crowfoot Valley Rd/Sapphire Pointe Blvd
- Proposed Site Accesses

Description of Proposed Development

The Applicant, Ventana Capital, seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. The primary access points will be from Crowfoot Valley Road to the northwest and southeast, aligning with existing access points of adjacent developments where feasible.

Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours. Existing queues remain within their respective storage lengths with the exception of the westbound left turn movement at the Crowfoot Valley Rd/Stroh Rd intersection which exceeds its queue during the PM peak hour.

- Under background future conditions, without the development of the subject site, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS "D" or better during the 2028 and 2030 weekday AM and PM peak hours. During 2045 conditions, the signalized intersections are expected to operate at LOS "F" during weekday AM and PM peak hours with the exception of the Crowfoot Valley Rd/Sapphire Pointe Blvd intersection which is expected to operate at LOS "A" during the 2045 peak hours. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain within their respective storage lengths with the exception of the following:

  - Westbound left movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2028 PM, 2030 PM, and 2045 AM and PM peak hours,
  - Northbound right movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2045 AM and PM peak hours,
  - Westbound right movement at Crowfoot Valley Rd/Pinery Pkwy intersection during the 2045 AM and PM peak hours,
  - Eastbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
  - Eastbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
  - Northbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour, and
  - Southbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour

- The proposed site development would generate, upon completion and full occupancy:

  Phase 1 (2028):
  - 1,439 net new weekday AM peak hour vehicle trips,
  - 2,617 net new weekday PM peak hour vehicle trips, and
  - 28,401 net new weekday daily trips

  Phase 1+2 (2030):
  - 1,890 net new weekday AM peak hour vehicle trips,
  - 3,217 net new weekday PM peak hour vehicle trips, and
  - 34,258 net new weekday daily trips

  Phase 1+2+3 (2045):
  - 2,674 net new weekday AM peak hour vehicle trips,
  - 4,258 net new weekday PM peak hour vehicle trips, and
  - 44,435 net new weekday daily trips

- Under total future conditions, with the implemented improvements studied herein, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the weekday AM and PM peak hours with the exception of the following:
  - Crowfoot Valley Rd/Stroh Rd intersection which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the 2045 PM peak hour,
  - Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/N Pinery Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/Pradera Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/Macanta Blvd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours, and
  - Crowfoot Valley Rd/Access Road 3 which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the PM peak hour.

The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain within their respective storage lengths with the exception of the eastbound left, eastbound right, and northbound left movements at the Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 peak hours, consistent with background conditions.

- Per discussions with the reviewer, the effort to estimate the background traffic related exclusively to the regional traffic pattern shift (expected with the Canyonside Boulevard connection to Crowfoot Valley Road in 2040) likely results in double counting for some of the regional growth from developments and some of the Crowsnest site generated trips. This double counting likely yields higher peak hour volumes which results in a more conservative analysis of the traffic operations. Considering the highly conservative nature of this analysis this TIS still provides an estimate of the incremental impact of site-generated trips traveling within the study area roadway network. The recommendations in this TIS remain relevant for the Principal Arterial classification and related cross section, intersection spacing, and type of intersection control. Refinement of the future background traffic estimates are encouraged for subsequent TIS' that will be prepared as the site development effort progresses. The maximum amount of development permitted may be determined with regard to the ability of the study area intersections to meet the City's standards for peak hour traffic operations at time of site plan and refined analysis.

Recommendations

A Recommended Improvements Summary can be found in Table 6-3. These improvements are listed below and should be evaluated at site plan for further refinement. Intersection spacing and road design should adhere to the applicable design standards. Specifically, the full movement signalized roadway intersections should be spaced at ½ mile spacing minimum. Additional partial movement access should be evaluated at time of site plan when specific internal roadway layouts and uses are known.

Study intersections in the long range (2040/2045) study years are expected to reach or exceed capacity if the redistribution of traffic occurs consistent with the background FHU study (Canyons Improvements). As these improvements, growth, and development occur, study updates should be undertaken to ensure appropriate capacity improvements are identified and implemented.

Phase 1 Improvements (2028)

Crowfoot Valley Road/Stroh Rd

- Dual westbound left turn lanes

Crowfoot Valley Road/S Chambers Rd

- Two northbound through lanes
- Two southbound through lanes
- Two eastbound through lanes
- Two westbound through lanes
- Designated eastbound channelized right turn lane
- Designated westbound channelized right turn lane
- Dual northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Pradera Pkwy

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Macanta Blvd

- Two southbound through lanes

The addition of the proposed intersections including:

- Crowfoot Valley Rd/Access Road 2
- Crowfoot Valley Rd/Access Road 3
- Crowfoot Valley Rd/Access Road 4

The buildout of the full four-lane cross section along the length of the annexation

Phase 2 Improvements (2030)

Crowfoot Valley Road/Stroh Rd

- Channelization of eastbound right turn lane

Crowfoot Valley Road/Access Road 2

- East leg addition (right-out only)
- Northbound right turn lane

Crowfoot Valley Road/Access Road 3

- East leg addition (left turn lane & right turn lane)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 4

- East leg addition (right-out only)
- Northbound right turn lane

Phase 3 Improvements (2045)

Crowfoot Valley Road/Stroh Rd

- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/S Chambers Rd

- Triple northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Dual eastbound left turn lanes

Crowfoot Valley Road/Pradera Parkway

- Dual eastbound left turn lanes

Canyons Improvements (2040)

The following improvements were shown in the Canyons TIS and would be constructed by 2040:

Crowfoot Valley Road/Macanta Blvd

- Signalization
- West leg addition (dual left turn lanes, one through lane, and one right turn lane)
- Dual northbound left turn lane
- Southbound right turn lane
- Westbound through lane addition

Crowfoot Valley Road/Sapphire Pointe Blvd

- Signalization
- Two southbound through lanes

I. Introduction

Overview

This report presents the results of a Traffic Impact Study (TIS) conducted in support of an annexation and planned development (PD) applications. Currently the site is vacant.

Per the requirements of Chapter 6 of the Roadway Design and Construction Standards, a TIS is required to support the proposed project.

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 750 acres of private property and public property (right-of-way) and is identified as Douglas County Parcel Numbers 2349-084-00-001, 2349-083-00-003, 2349-082-00-003, 2349-082-00-001, 2349-080-00-019, 2349-080-00-031, 2349-090-00-010, 2349-080-00-003, 2349-070-00-023, 2349-080-00-026, 2349-080-01-002, 2349-080-00-015. It is generally located on either side of Crowfoot Valley Road, south of Chambers Road, and west of Bayou Gulch Road. The site location is shown on Figure 1-1. It is currently zoned A1 Agricultural by Douglas County and is being used for agricultural purposes and open lands. The Applicant proposes to change the Property's zoning, upon annexation, to the City zone district of PD Planned Development.

The Applicant, Ventana Capital, seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. The primary access points will be from Crowfoot Valley Road to the northwest and southeast, aligning with existing access points of adjacent developments where feasible. The proposed uses are generally consistent with the land use designations of nearby and similar locations within Castle Pines shown on the Future Land Use Map of the 2021 Comprehensive Plan. A reduction of the Applicant's proposed conceptual site plan is provided in Figure 1-2. A full-size copy of the plan is provided in Appendix A.

Tasks undertaken in the course of this study included the following:

1. Reviewed the Applicant's proposed development plans and other background data.

2. Conducted a virtual field reconnaissance of existing roadway and intersection geometries, traffic controls, and speed limits.

3. Collected weekday AM/PM peak hour turning movement counts as well as Average Daily Traffic (ADT) counts at the key intersections and segments.

4. Analyzed existing levels of service at each of the key study intersections based on the methodologies set forth in the Highway Capacity Guidelines (HCM) 7th Edition and reports generated by Synchro as reported by Synchro version 12.

5. Forecasted background future traffic volumes based on baseline traffic counts, regional traffic growth, and pipeline developments for all study years.

6. Estimated the number of AM and PM peak hour trips that would be generated by the proposed use based on the Institute of Transportation Engineers (ITE) Trip Generation 12th Edition rates/equations and methodologies.

7. Prepared AM and PM peak hour total future traffic forecasts based on background traffic forecasts plus site traffic assignments for Phase 1 (2028), Phase 2 (2030), and Phase 3 (2045) scenarios.

8. Calculated total future levels of service for each of the key study intersections based on projected total future traffic forecasts and future intersection geometries.

9. Identified roadway improvements required for intersections and roadway segments to accommodate future traffic volumes as necessary.

Sources of data for this analysis included the ITE Trip Generation, 12th edition, the Highway Capacity Guidelines HCM 7th, Synchro 12, Ventana Capital, City of Castle Pines Roadway Design and Construction Standards, Castle Pines, Colorado, and the files/library of Galloway.

Site Description and Access

Site Conditions
The terrain proximate to and surrounding the site is generally classified as “level”.

Proposed Site Access
Access to the site would be provided by new intersections and connections to Crowfoot Valley Drive. Specifically, three new full movement signalized intersections with ½ mile spacing will be provided as well as opportunities for partial movement access can be provided as detailed herein.

Nearby Uses
The subject property is adjacent to developed and developing neighborhoods to the:

North: Parker Municipal Area (developed/developing)
South: Canyons Planned Development (under construction) and Pinery Separated Urban Area
East: Parker Municipal Area and Pinery Separated Urban Area
West: Castle Park Ranch (estate development)

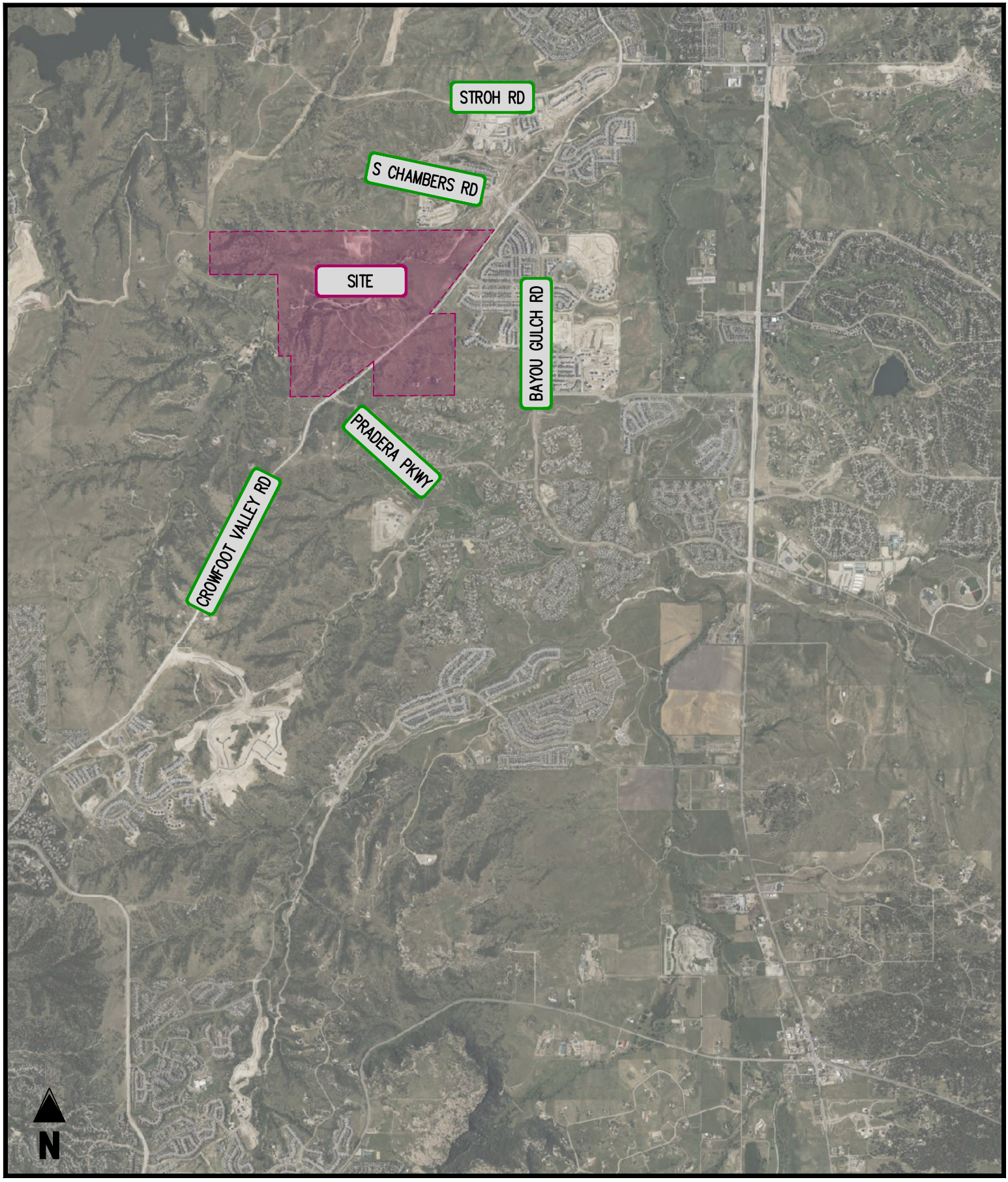
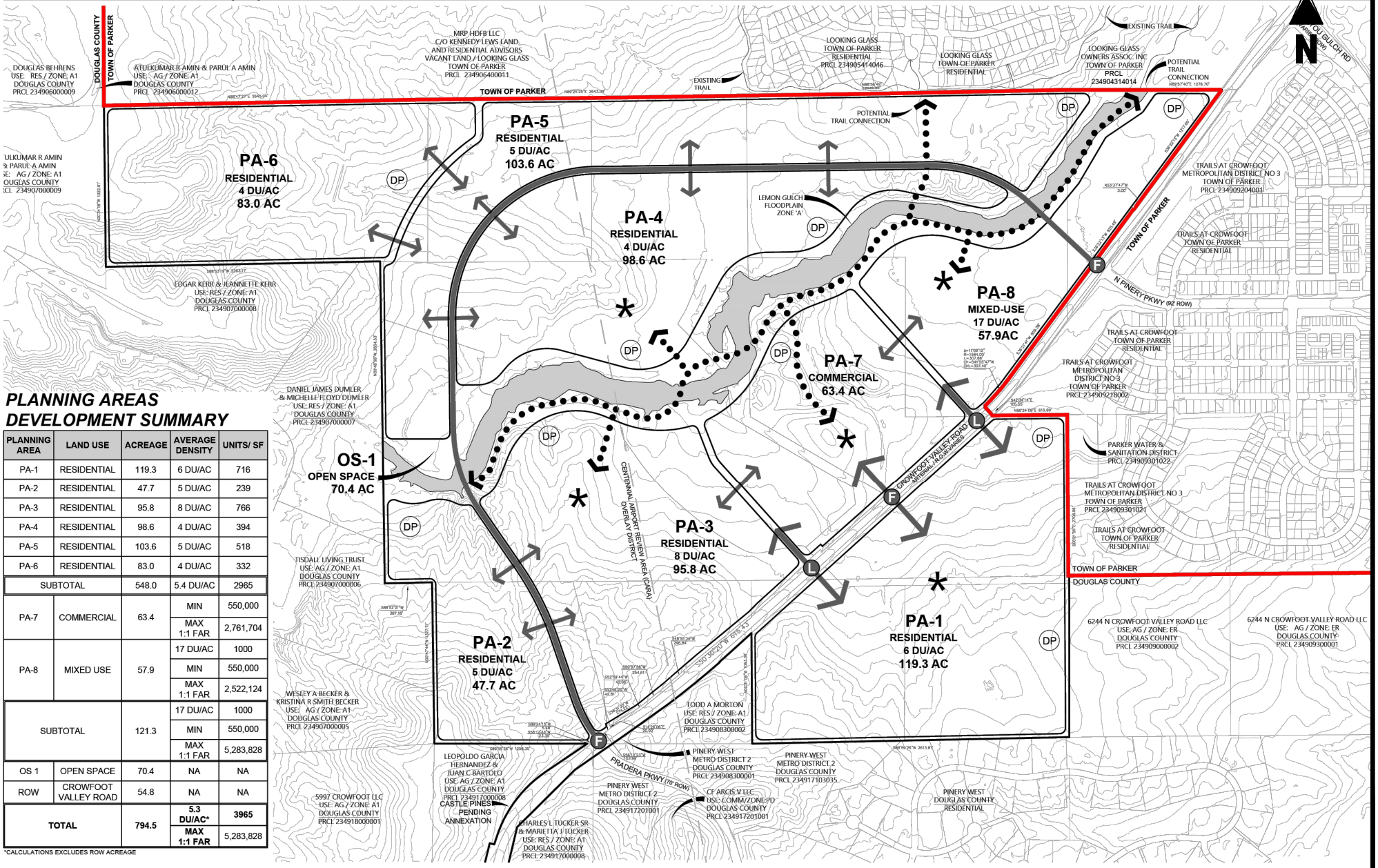


FIGURE 1-1
SITE LOCATION

CROWSNEST
CASTLE PINES, CO

PLANNED DEVELOPMENT (PD) PLAN



PLANNING AREAS DEVELOPMENT SUMMARY

PLANNING AREA	LAND USE	ACREAGE	AVERAGE DENSITY	UNITS/ SF
PA-1	RESIDENTIAL	119.3	6 DU/AC	716
PA-2	RESIDENTIAL	47.7	5 DU/AC	239
PA-3	RESIDENTIAL	95.8	8 DU/AC	766
PA-4	RESIDENTIAL	98.6	4 DU/AC	394
PA-5	RESIDENTIAL	103.6	5 DU/AC	518
PA-6	RESIDENTIAL	83.0	4 DU/AC	332
SUBTOTAL		548.0	5.4 DU/AC	2965
PA-7	COMMERCIAL	63.4	MIN	550,000
			MAX 1:1 FAR	2,761,704
PA-8	MIXED USE	57.9	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	2,522,124
SUBTOTAL		121.3	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	5,283,828
OS 1	OPEN SPACE	70.4	NA	NA
ROW	CROWFOOT VALLEY ROAD	54.8	NA	NA
TOTAL		**794.5**	**5.3 DU/AC***	**3965**
			MAX 1:1 FAR	5,283,828

*CALCULATIONS EXCLUDES ROW ACREAGE

FIGURE 1-2
SITE PLAN

CROWSNEST
CASTLE PINES, CO

II. Background Information

Study Area

The study area was determined by a review of intersections that would experience a significant portion of turning movement volumes generated by the site. This was confirmed via a scoping meeting held on November 10, 2025. As such, the traffic study focuses primarily on the following intersections:

Study Intersections

- Crowfoot Valley Rd/Stroh Rd
- Crowfoot Valley Rd/S Chambers Rd
- Crowfoot Valley Rd/N Pinery Pkwy
- Crowfoot Valley Rd/Pradera Pkwy
- Crowfoot Valley Rd/Macanta Blvd
- Crowfoot Valley Rd/Sapphire Pointe Blvd
- Proposed Site Accesses

The study intersections, as well as additional study assumptions, were provided via a base assumptions form and confirmed in the aforementioned meeting held on November 10 2025. The base assumptions form is provided as Appendix B.

Study Assumptions

For purposes of this analysis only, the proposed project was analyzed in three distinct phases to provide guidance to infrastructure requirements. It was assumed that Phase 1 would be built and operational in the study year 2028, Phase 2 would be built out in the year 2030, and a long-range analysis referred to as Phase 3 for study year 2045 was conducted.

Study Methodology

Synchro software version 12 was used to evaluate levels of service at each of the study intersections during the weekday AM and PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections analyzed herein were taken from the Highway Capacity Manual (HCM) 7th and reports generated by Synchro. Level of service descriptions are included in Appendix C.

The heavy vehicle (%HV) factor from the turning movement counts were used for the analysis. A default %HV factor of 2% was used for all new/proposed movements in the study area.

Existing Roadway Network

Regional access to the subject site is provided by Crowfoot Valley Rd, S Chambers Rd, Bayou Gulch Rd, N Pinery Pkwy, and Pradera Pkwy. Figure 2-1 depicts existing lane use and traffic controls in the vicinity of the subject site. The following provides a description of each of the roadways within the study network.

Crowfoot Valley Rd
Crowfoot Valley Rd is constructed as a two-lane section with turn lanes at major intersections. The posted speed limit is 50 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway is designed with on-street bike facilities. The intersection with Chambers Road/Bayou Gulch Road operates under signalized control. The roadway provides southwest/northeast connection throughout the area.

S Chambers Rd
S Chambers Rd is constructed as a three-lane roadway with turn lanes at major intersections. The posted speed limit is 45 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway provides north/south regional connection through the area.

Bayou Gulch Rd
Bayou Gulch Rd is constructed as a two-lane roadway with a posted speed limit of 40 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway provides north/south regional connection through the area.

N Pinery Pkwy
N Pinery Pkwy is constructed as a two-lane divided roadway with a posted speed limit of 35 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Collector. The intersections along the roadway operate under stop control and provide access to residential neighborhoods.

Pradera Pkwy
Pradera Pkwy is constructed as a two-lane roadway with a posted speed limit of 40 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Collector. The intersections along the roadway operate under stop control and provide access to residential neighborhoods.

Driveway Accesses
Additional driveways exist on Crowfoot Valley Rd for residential use and church land use. These driveways were not studied within this analysis as they are expected to have minimal inbound/outbound volumes, and all site trips are expected to be through movements at the driveways.

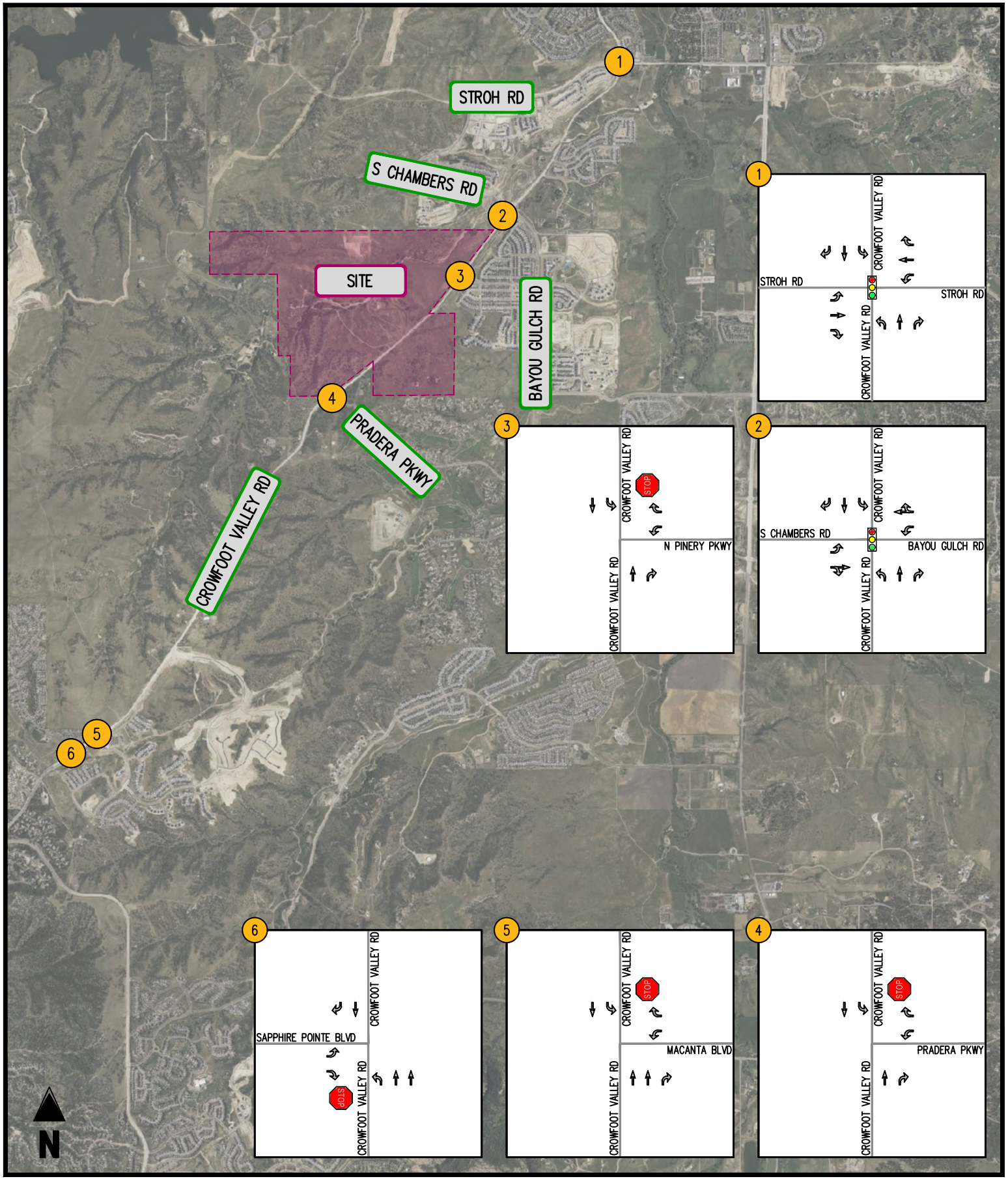


FIGURE 2-1
EXISTING LANE USE AND TRAFFIC CONTROL

CROWSNEST
CASTLE PINES, CO

III. Analysis of Existing Conditions

Traffic Volumes

24 hour average daily traffic (ADT) counts along Crowfoot Valley Road as well as Weekday AM and PM peak hour traffic volume counts were conducted on Wednesday October 8, 2025, and Tuesday November 18, 2025 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM at the study intersections by IDAX Data Solutions. The AM and PM peak hours of the network were found to be 7:15 AM to 8:15 AM and 4:30 PM to 5:30 PM, therefore the counted volumes from those hours were used for each of the intersections and balanced between each intersection to create consistency. Volumes were only increased in order to balance the trips between intersections to create a conservative analysis.

The existing volumes are summarized in Figure 3-1. Copies of traffic counts are included in Appendix D. Existing peak hour factors (PHF) were also computed by approach from the traffic counts and applied to the analysis with a minimum of 0.85 and a maximum of 0.92.

Operational Analysis

Capacity/level of service (LOS) analyses were conducted at the study intersections based on the existing lane use and traffic controls shown in Figure 2-1 and existing baseline vehicular traffic volumes shown in Figure 3-1. The capacity analysis results are presented in Appendix E and summarized in Table 3-1 and in Figure 3-2.

As shown in Table 3-1, the intersections in the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours.

Existing Intersection Queues

An analysis of intersection 95th-percentile queues was performed at key locations. The results of the queuing analysis, as reported by Synchro, are summarized in Table 3-2. As shown in the table, queues are contained within their effective storage with the exception of the westbound left movement at the Crowfoot Valley Rd/Stroh Rd intersection during the PM peak hour.

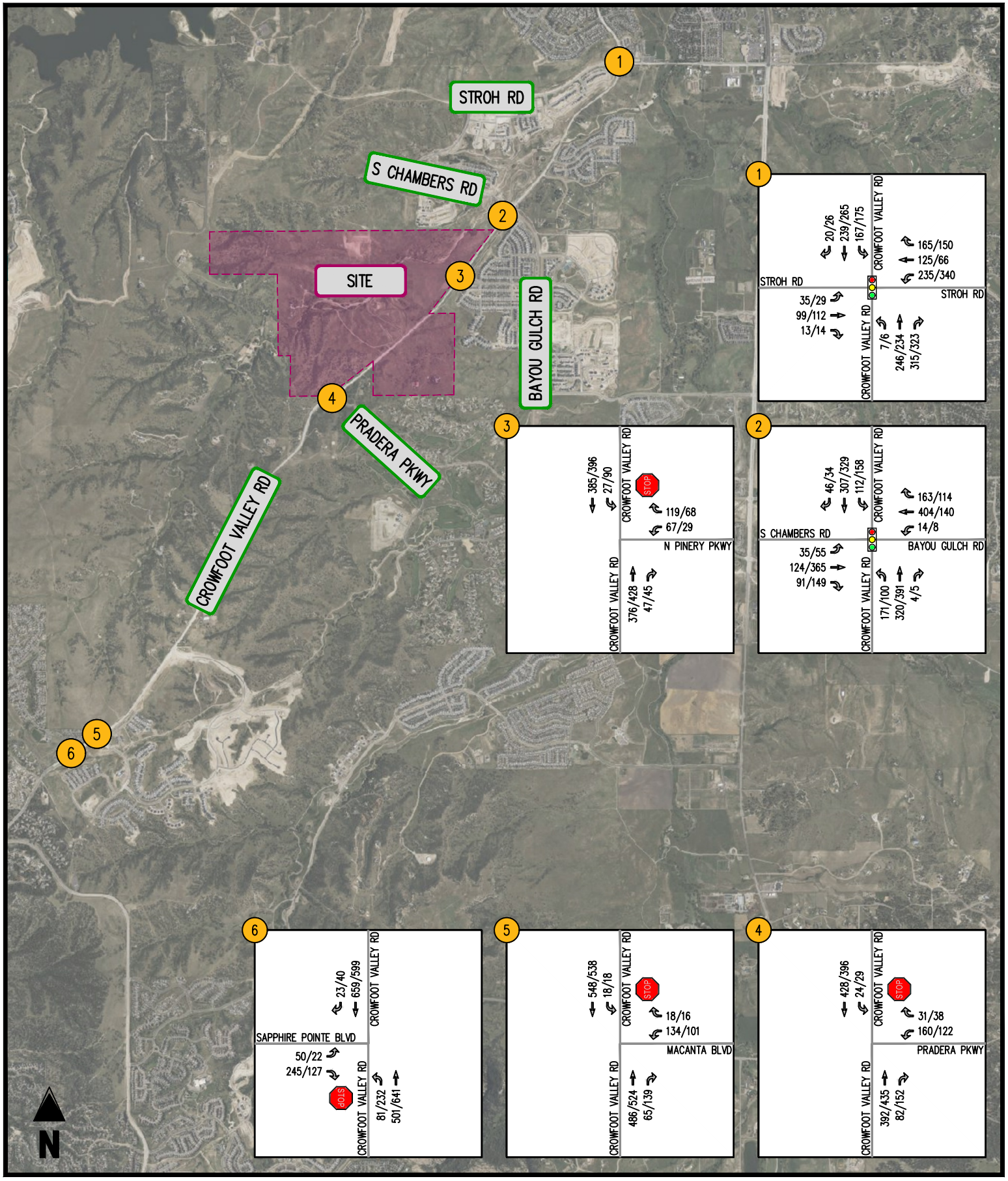


FIGURE 3-1
EXISTING VOLUMES

CROWSNEST
CASTLE PINES, CO

A/A INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

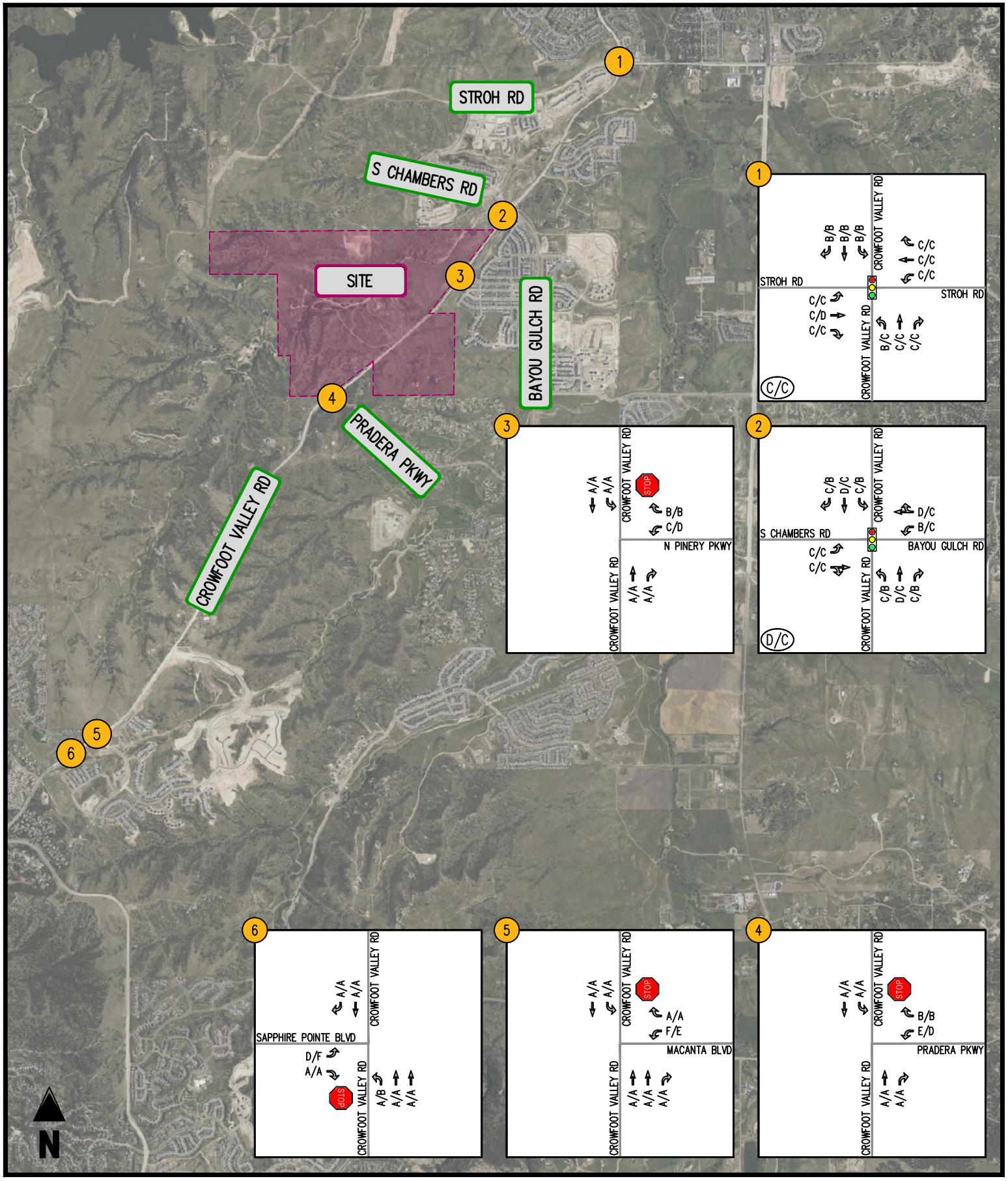


FIGURE 3-2
EXISTING LOS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

Table 3-1
Crowsnest - Castle Pines, CO
Existing Intersection Level of Service Summary [1] [2]

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025 AM Peak Hour	Existing 2025 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	C (29.3)	C (33.8)
		Stroh Rd	EBT	C (31.9)	D (37.3)
			EBR	C (28.8)	C (33.4)
			WBL	C (28.9)	C (32.7)
		Stroh Rd	WBT	C (24.7)	C (24.0)
			WBR	C (26.8)	C (26.1)
			NBL	B (16.6)	C (20.2)
		Crowfoot Valley Rd	NBT	C (20.8)	C (24.8)
			NBR	C (24.9)	C (30.8)
			SBL	B (14.1)	B (17.2)
		Crowfoot Valley Rd	SBT	B (15.8)	B (19.3)
			SBR	B (13.4)	B (16.2)
		Overall		**C (23.0)**	**C (26.8)**
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	C (27.0)	C (23.3)
			EBTR	C (21.0)	C (32.3)
		Bayou Gulch Rd	WBL	B (19.2)	C (24.6)
			WBTR	D (45.9)	C (31.6)
			NBL	C (31.4)	B (18.2)
		Crowfoot Valley Rd	NBT	D (42.7)	C (30.2)
			NBR	C (30.7)	B (19.5)
			SBL	C (31.4)	B (19.2)
		Crowfoot Valley Rd	SBT	D (48.3)	C (24.4)
			SBR	C (34.9)	B (18.4)
		Overall		**D (40.6)**	**C (27.5)**
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	C [22.9]	D [28.1]
			WBR	B [12.5]	B [12.3]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.5]	A [9.0]
			SBT	A [0.0]	A [0.0]
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	E [43.9]	D [34.8]
			WBR	B [11.4]	B [11.9]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.4]	A [8.5]
			SBT	A [0.0]	A [0.0]
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	F [62.2]	E [47.9]
			WBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.8]	A [9.2]
			SBT	A [0.0]	A [0.0]
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	D [33.4]	F [60.5]
			EBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	NBL	A [9.6]	B [10.6]
			NBT	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]
			SBR	A [0.0]	A [0.0]

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 3-2
Crowsnest - Castle Pines, CO
Existing Intersection Queueing Summary [1]

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2025 AM Peak Hour	Existing 2025 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	225	62	61
		S Chambers Rd	EBT	-	140	178
			EBR	350	0	0
			WBL	350	267	415
		Bayou Gulch Rd	WBT	-	146	87
			WBR	600	56	52
			NBL	250	13	14
		Crowfoot Valley Rd	NBT	-	269	307
			NBR	500	72	84
			SBL	450	134	175
		Crowfoot Valley Rd	SBT	-	226	301
			SBR	-	0	0
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	550	46	70
			EBTR	-	248	822
		Bayou Gulch Rd	WBL	300	24	17
			WBTR	-	925	323
			NBL	500	166	91
		Crowfoot Valley Rd	NBT	-	402	484
			NBR	400	0	0
			SBL	550	112	138
		Crowfoot Valley Rd	SBT	-	418	384
			SBR	350	10	0
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	-	28	15
			WBR	215	23	13
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	440	0	0
		Crowfoot Valley Rd	SBL	500	3	10
			SBT	-	0	0
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	-	118	78
			WBR	250	5	8
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	880	0	0
		Crowfoot Valley Rd	SBL	450	3	3
			SBT	-	0	0
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	265	120	80
			WBR	-	0	0
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	575	0	0
		Crowfoot Valley Rd	SBL	575	3	3
			SBT	-	0	0
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	265	30	25
			EBR	-	0	0
		Crowfoot Valley Rd	NBL	600	8	30
			NBT	-	0	0
		Crowfoot Valley Rd	SBT	-	0	0
			SBR	250	0	0

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

IV. Analysis of Future Conditions without Site Development

Methodology

The future traffic forecasts, without the proposed new use, were developed for 2028, 2030, and 2045 conditions based on a composite of existing baseline traffic volumes, pipeline developments, and regional traffic growth.

Regional Growth

Increases in traffic associated with regional growth were estimated at 2.0% per year compounded for all movements on Crowfoot Valley Rd, Stroh Rd, and Chambers Rd/Bayou Gulch Rd up to 2028, 2030, and 2045. This growth accounts for increases in traffic resulting from influences outside of the immediate study area. The resulting increases in volumes within the study area are reflected in Figure 4-1 for 2028 conditions, Figure 4-2 for 2030 conditions, and Figure 4-3 for 2045 conditions.

Pipeline Developments

To account for projected traffic from nearby developments not yet built, trip assignments from the nearby Canyons pipeline development were included for 2045 conditions. This development would not connect to Crowfoot Valley Rd until 2040, therefore only the 2040 development plan was considered within this analysis. The Canyons TIS expected regional traffic shifts in 2040 with the connection of Canyonside Blvd and Crowfoot Valley Rd. Thus, the additional volumes were calculated and grown to 2045 conditions which were then added to background 2045 conditions.

The location of the pipeline development in relation to the Applicant's property is shown in Figure 4-4. The intersections of Crowfoot Valley Rd/Macanta Blvd and Crowfoot Valley Rd/Sapphire Pointe Blvd were identified to warrant signalization and additional turn lanes by the pipeline development. The proposed lane use and traffic control for those intersections shown in the pipeline TIS was used for the background future and total future 2045 conditions. Background future lane use and traffic control for 2045 is shown in Figure 4-5.

Pipeline development site trips were obtained from the supporting TIS completed by FHU and dated March 2025 and are shown in Figure 4-6. Improvements associated with the pipeline development were assumed complete by 2045, consistent with the approved TIS. Relevant excerpts from the pipeline TIS are included in Appendix F.

Per discussions with the reviewer, the effort to estimate the background traffic related exclusively to the regional traffic pattern shift (expected with the Canyonside Boulevard connection to Crowfoot Valley Road in 2040) likely results in double counting for some of the regional growth from developments and some of the Crowsnest site generated trips. This double counting likely yields higher peak hour volumes which results in a more conservative analysis of the traffic operations. Refinement of the future background traffic estimates are encouraged for subsequent studies that will be prepared as the site development effort progresses.

Background Future Traffic Forecasts

The existing traffic forecasts depicted in Figure 3-1, the regional growth shown in Figure 4-1 (2028), Figure 4-2 (2030), and Figure 4-3 (2045), and the pipeline development site trips shown in Figure 4-6 (2045) were added together to yield the background future traffic forecasts shown in Figure 4-7 (2028), Figure 4-8 (2030), and Figure 4-9 (2045).

Background Future Levels of Service

Capacity analyses of 2028, 2030, and 2045 future traffic conditions without the proposed development are provided in Appendix G and summarized in Table 4-1. The forecasted levels of service are also depicted graphically in Figure 4-10 for 2028 conditions, Figure 4-11 for 2030 conditions, and Figure 4-12 for 2045 conditions.

As shown in Table 4-1, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the 2028 and 2030 weekday AM and PM peak hours. During 2045 conditions all intersections are expected to operate at LOS “F” during the weekday AM and PM peak hours with the exception of the Crowfoot Valley Rd/Sapphire Point Blvd intersection which is expected to operate at LOS “A” during the 2045 AM and PM peak hours. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours.

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queuing analysis are summarized in Table 4-2.

As shown in the table, queues within the study network will generally increase due to regional traffic growth. All queues are expected to be contained in their effective storage with the exception of the following:

- Westbound left movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2028 PM, 2030 PM, and 2045 AM and PM peak hours,
- Northbound right movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2045 AM and PM peak hours,
- Westbound right movement at Crowfoot Valley Rd/Pinery Pkwy intersection during the 2045 AM and PM peak hours,
- Eastbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
- Eastbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
- Northbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour, and
- Southbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour.

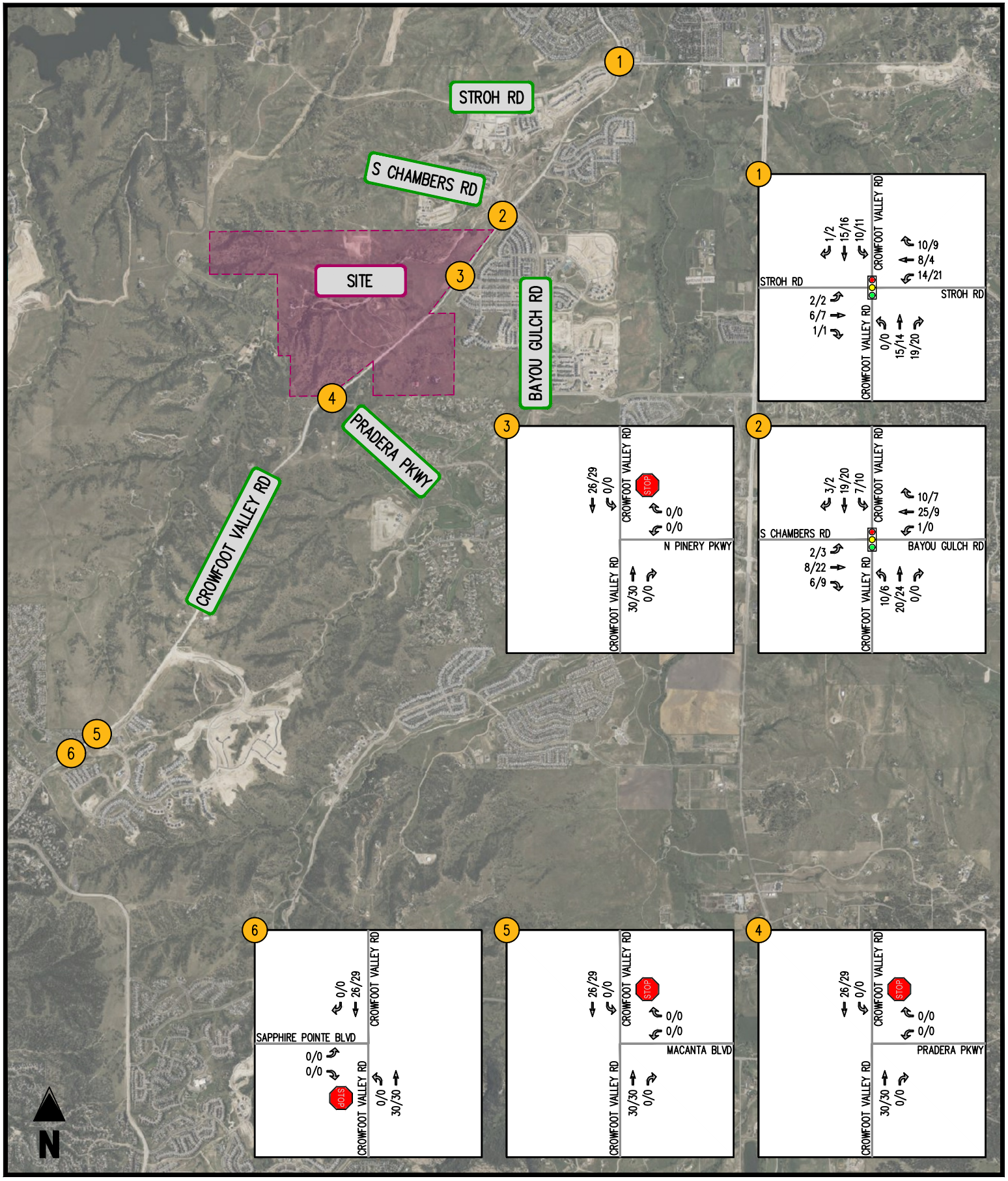


FIGURE 4-1
BACKGROUND GROWTH 2028

CROWSNEST
CASTLE PINES, CO

A/A INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

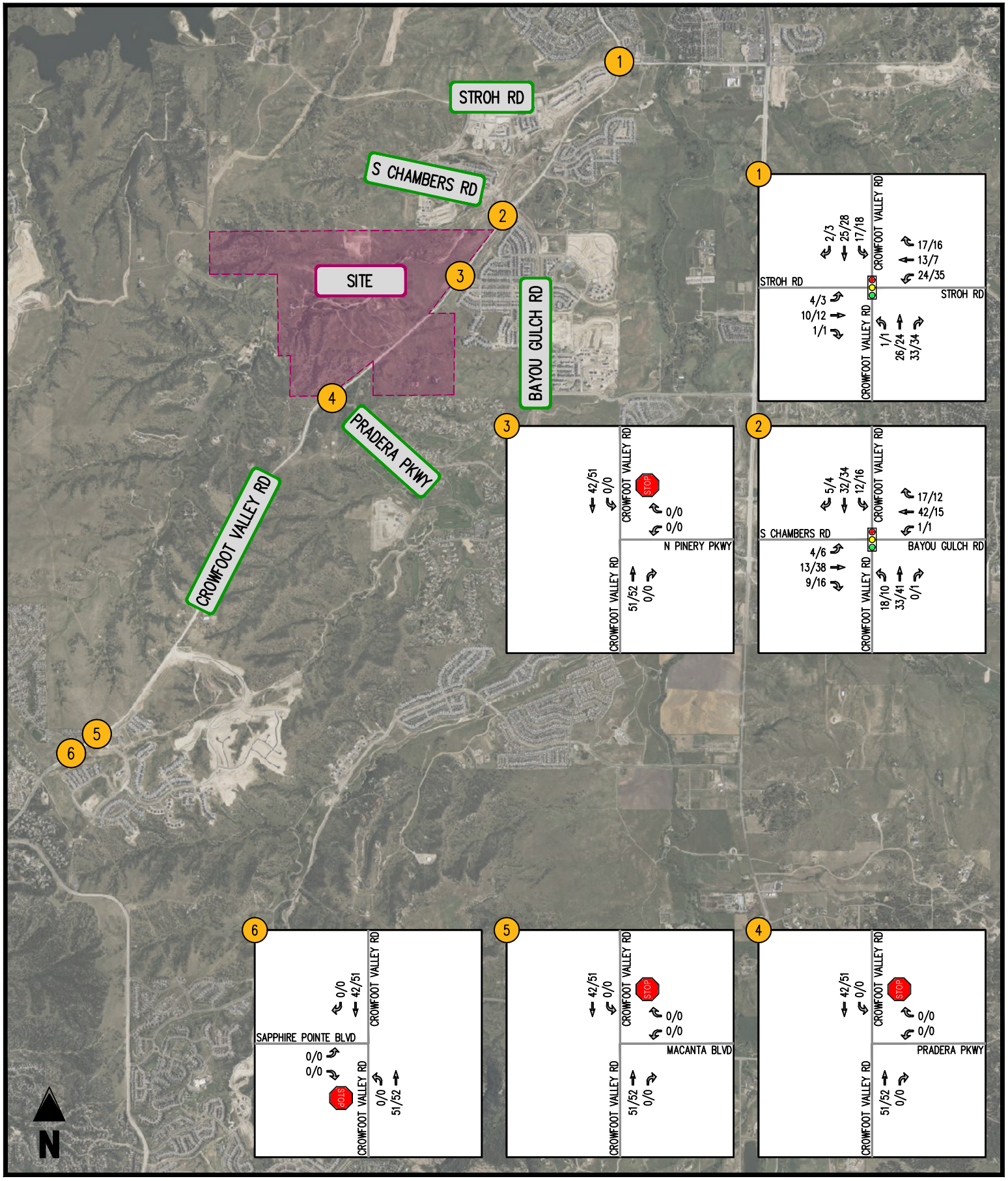


FIGURE 4-2
BACKGROUND GROWTH 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

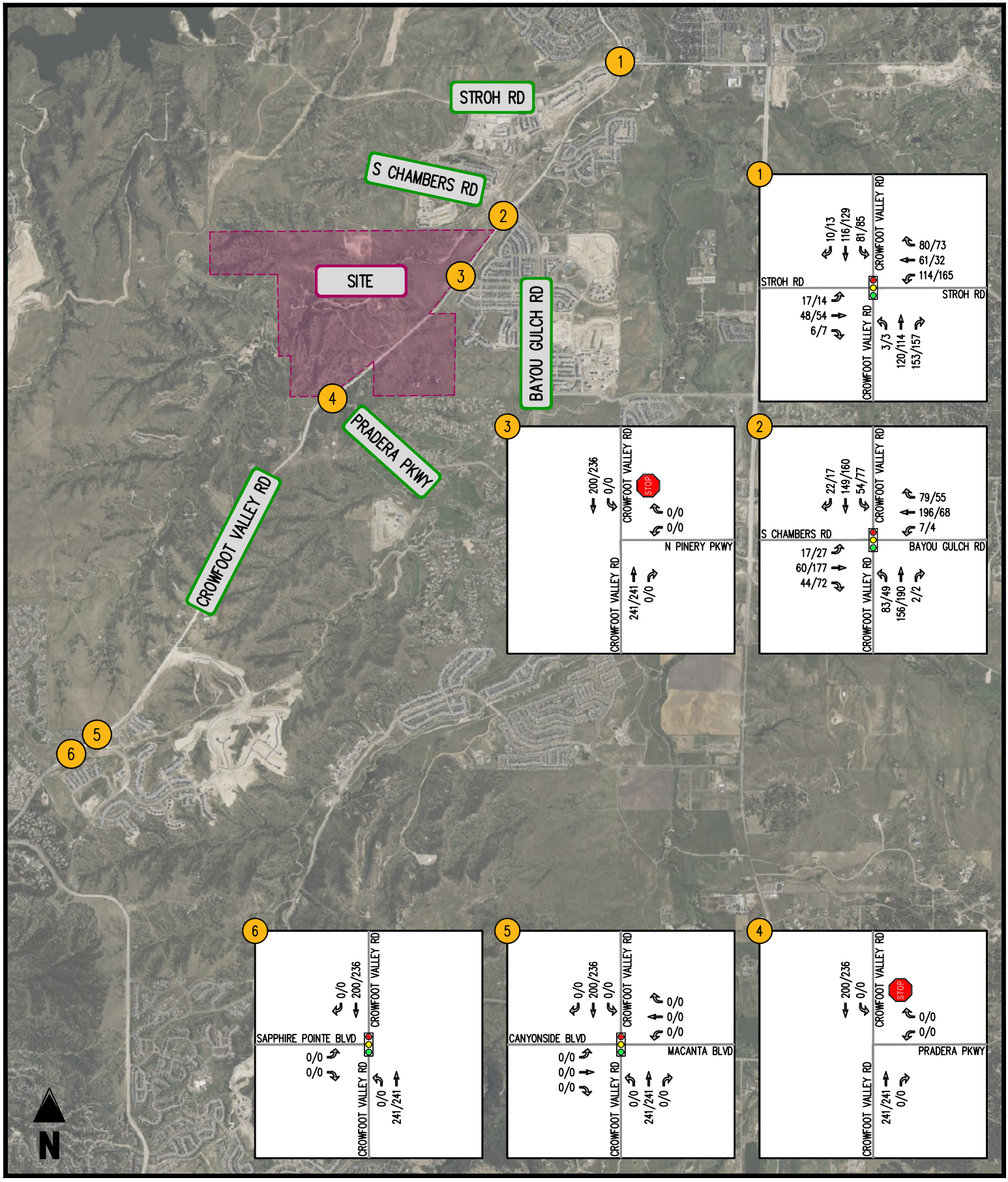


FIGURE 4-3
BACKGROUND GROWTH 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

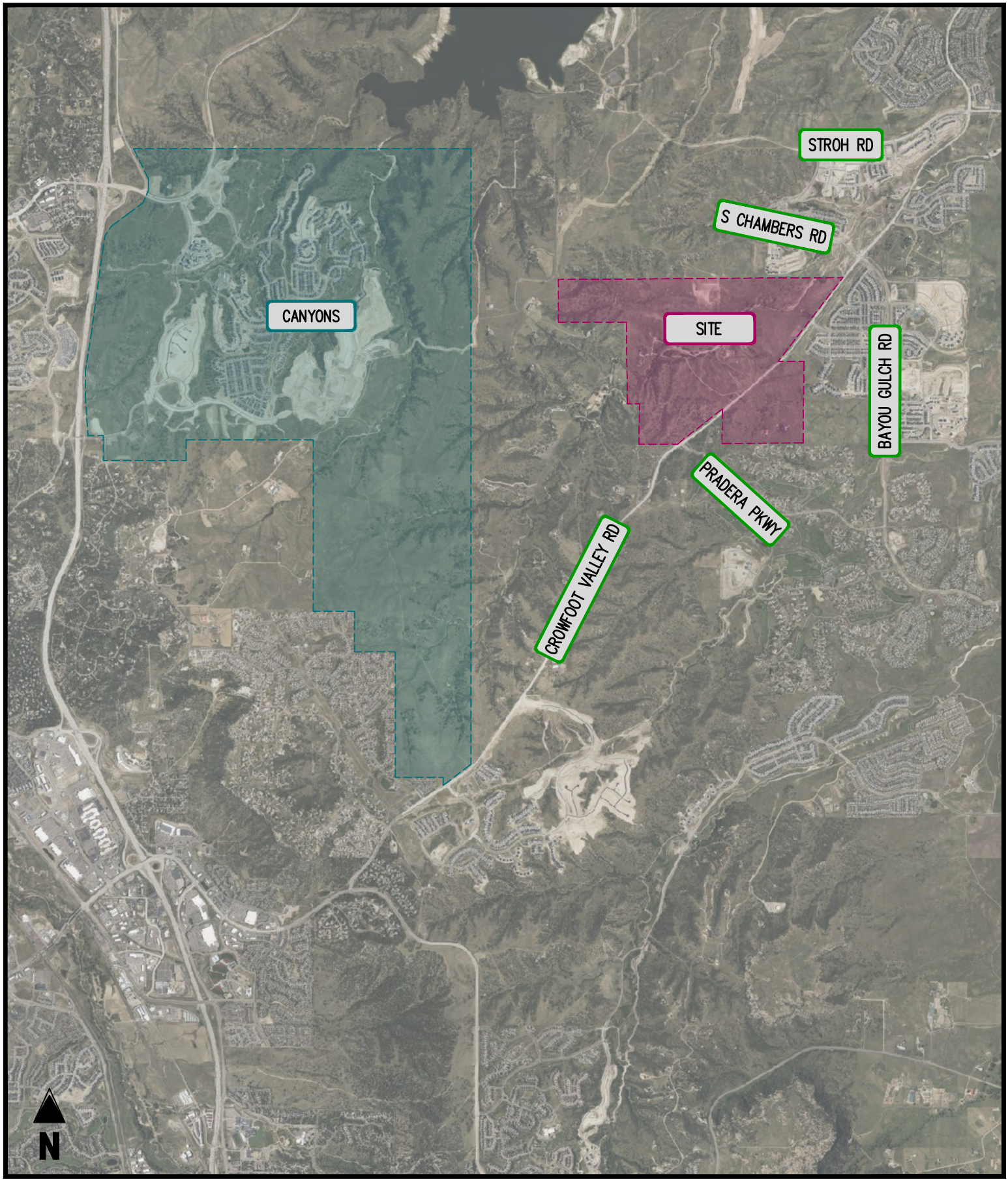


FIGURE 4-4
PIPELINE LOCATION

CROWSNEST
CASTLE PINES, CO

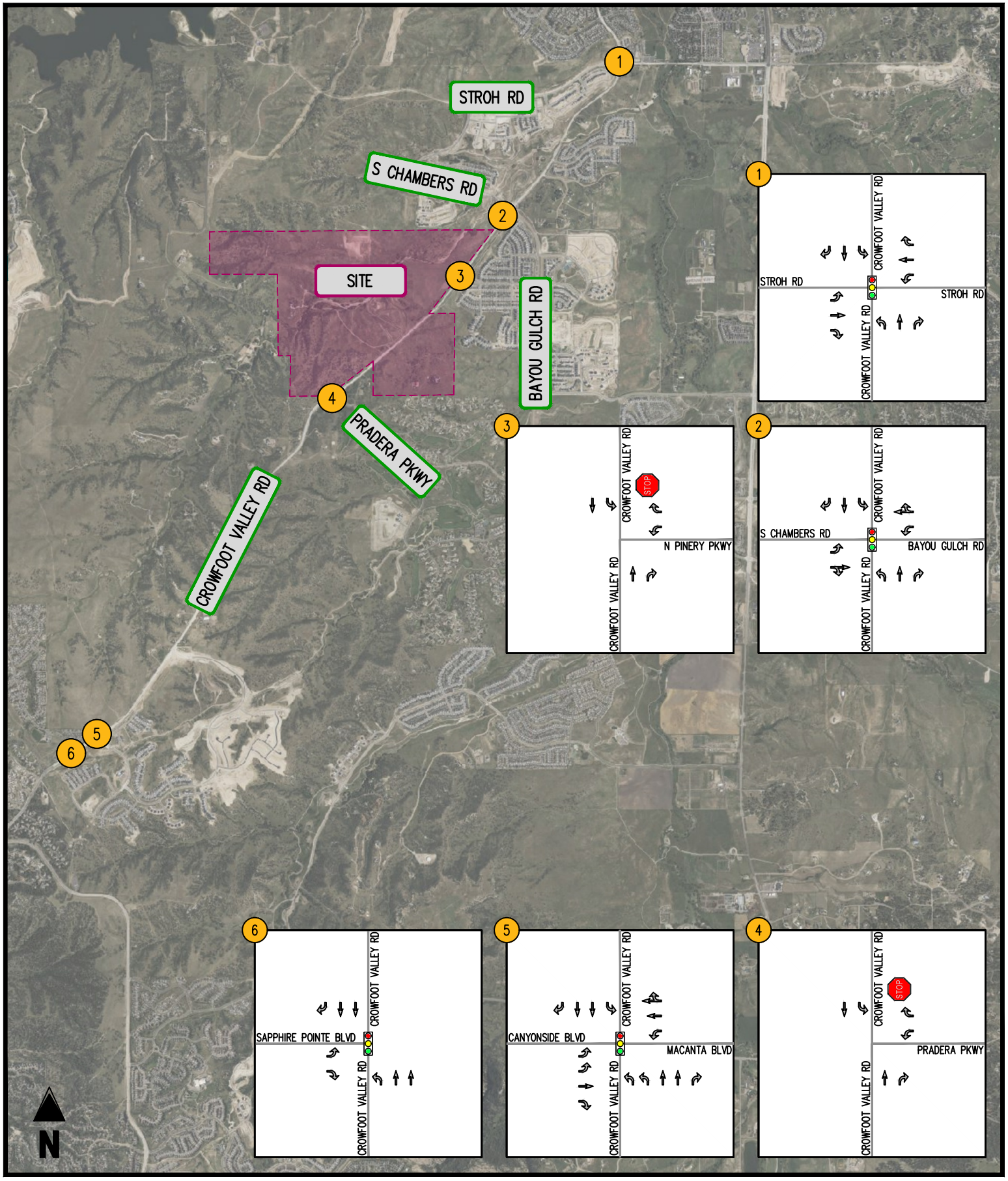


FIGURE 4-5
BACKGROUND FUTURE LANE USE AND TRAFFIC CONTROL 2045

MOVEMENT
SIGNALIZED INTERSECTION
STOP STOP SIGN
YIELD SIGN

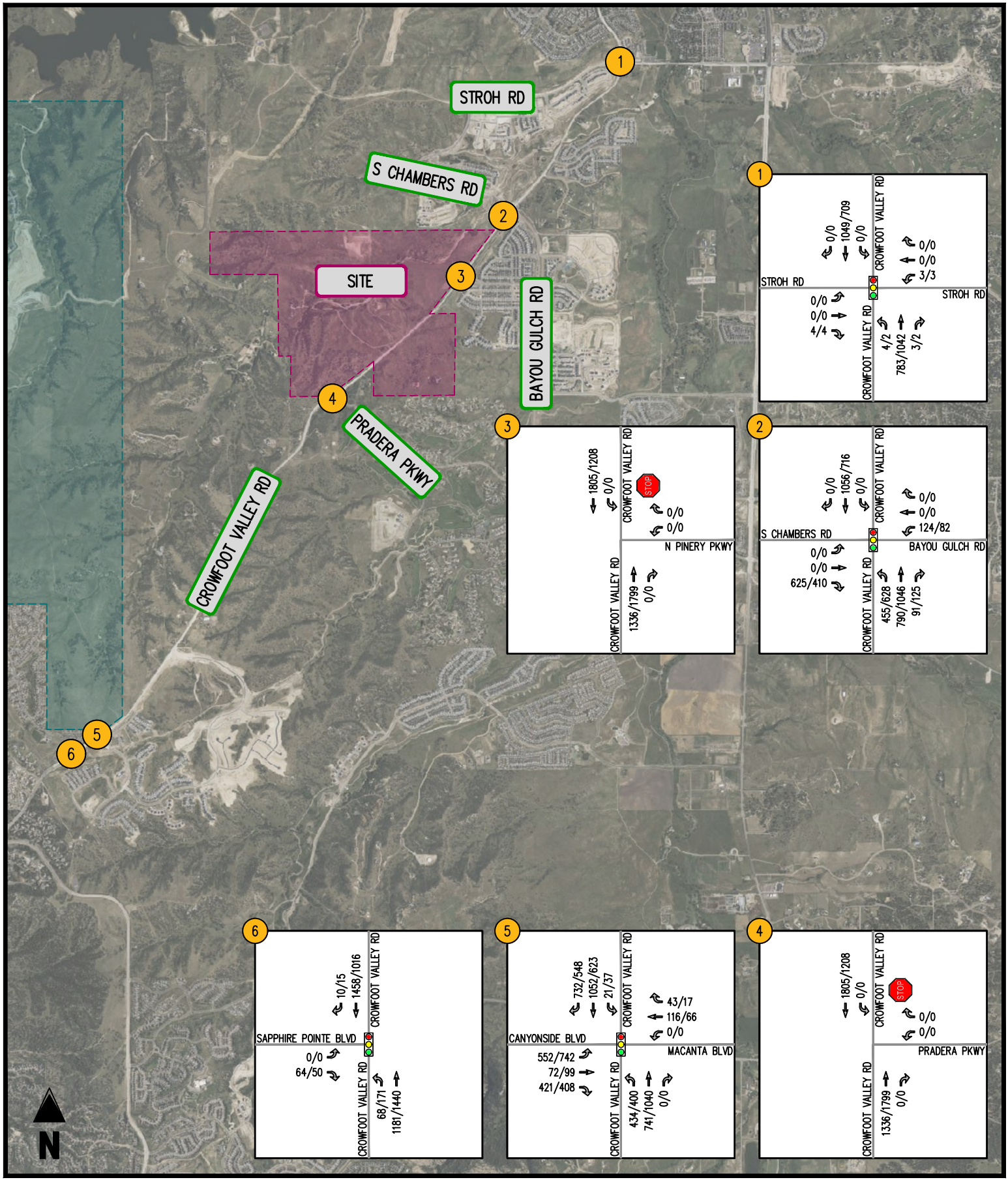


FIGURE 4-6
PIPELINE SITE TRIPS 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

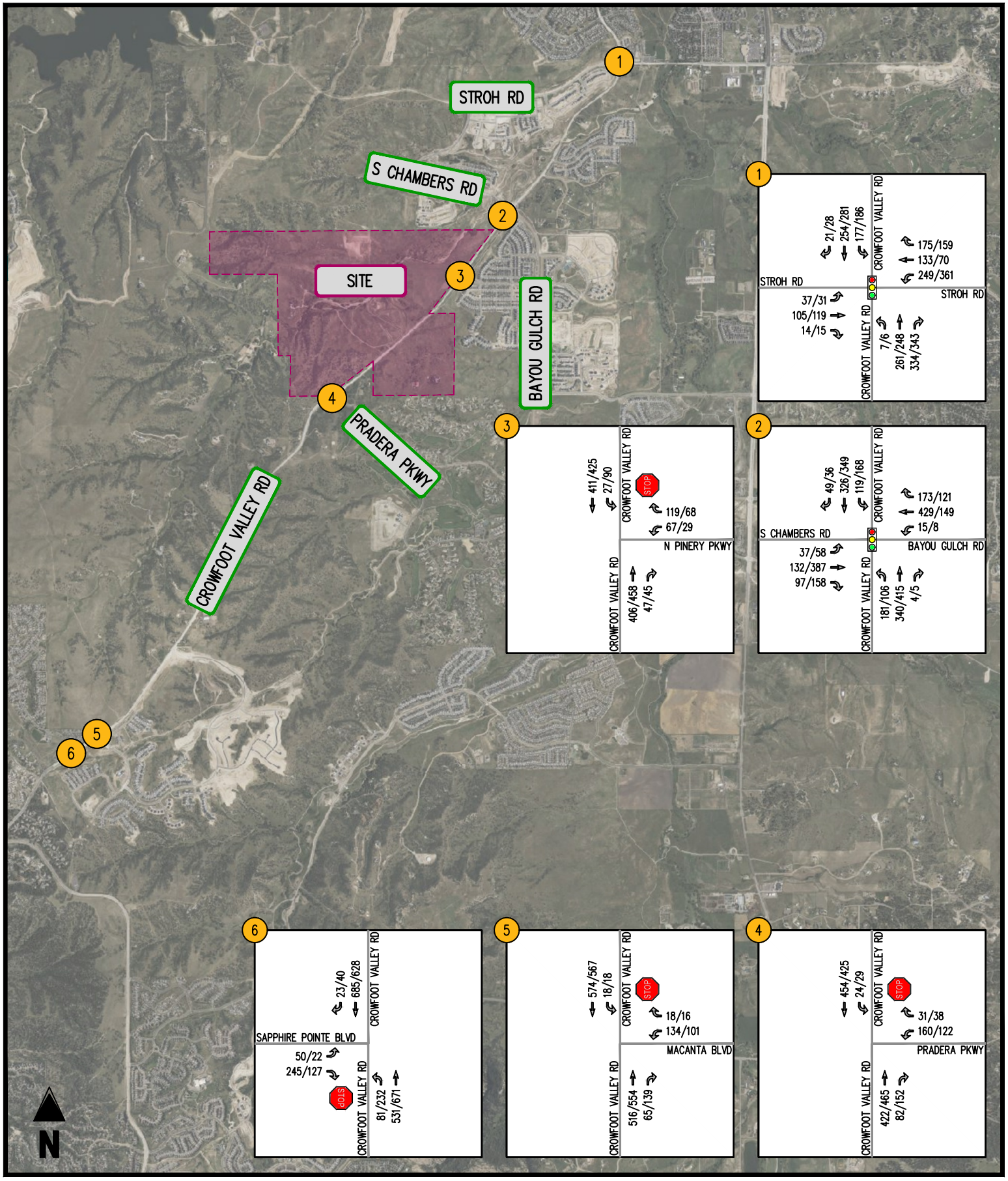


FIGURE 4-7
BACKGROUND FUTURE FORECASTS 2028

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

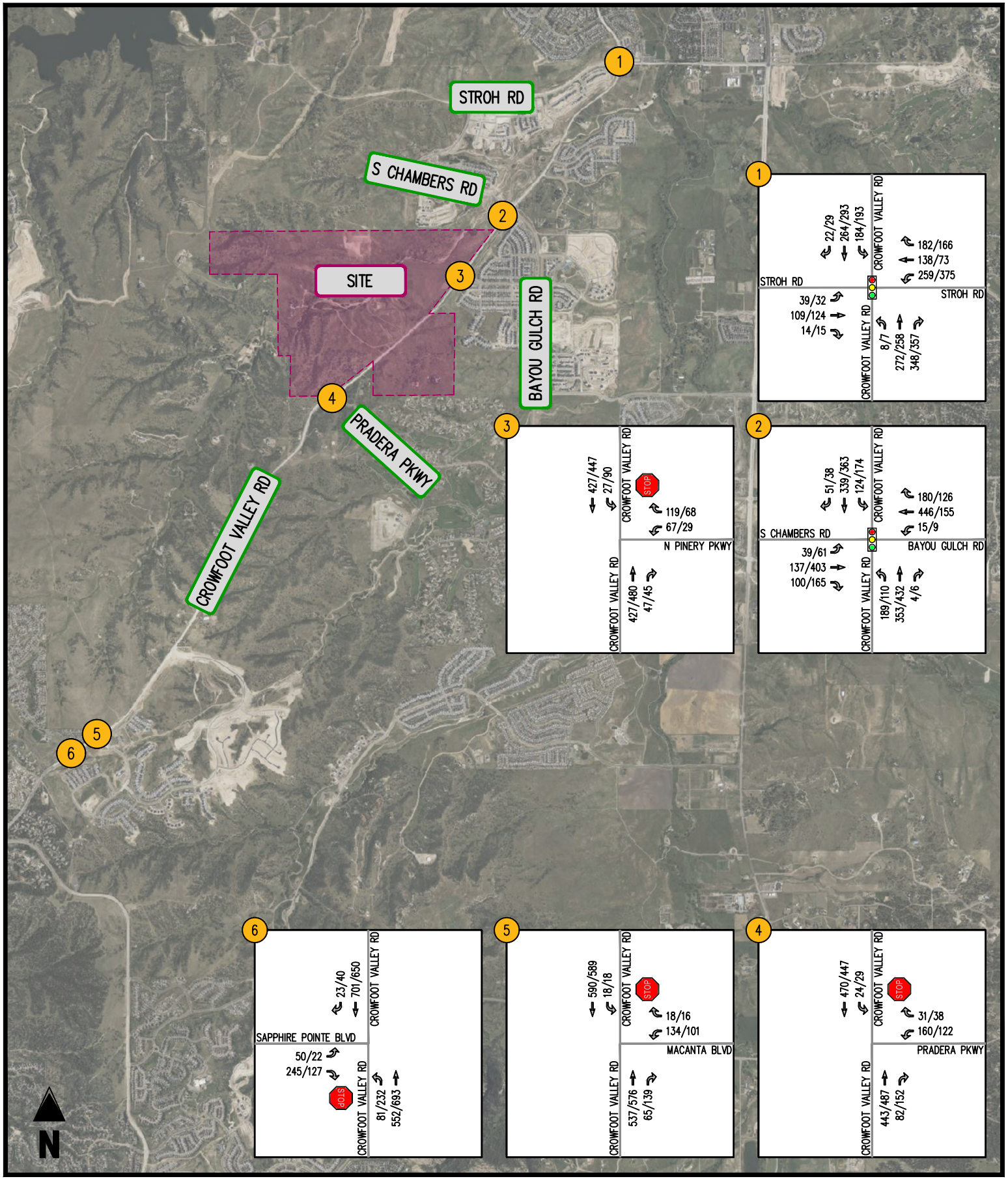


FIGURE 4-8
BACKGROUND FUTURE FORECASTS 2030

CROWSNEST
CASTLE PINES, CO

A/A INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

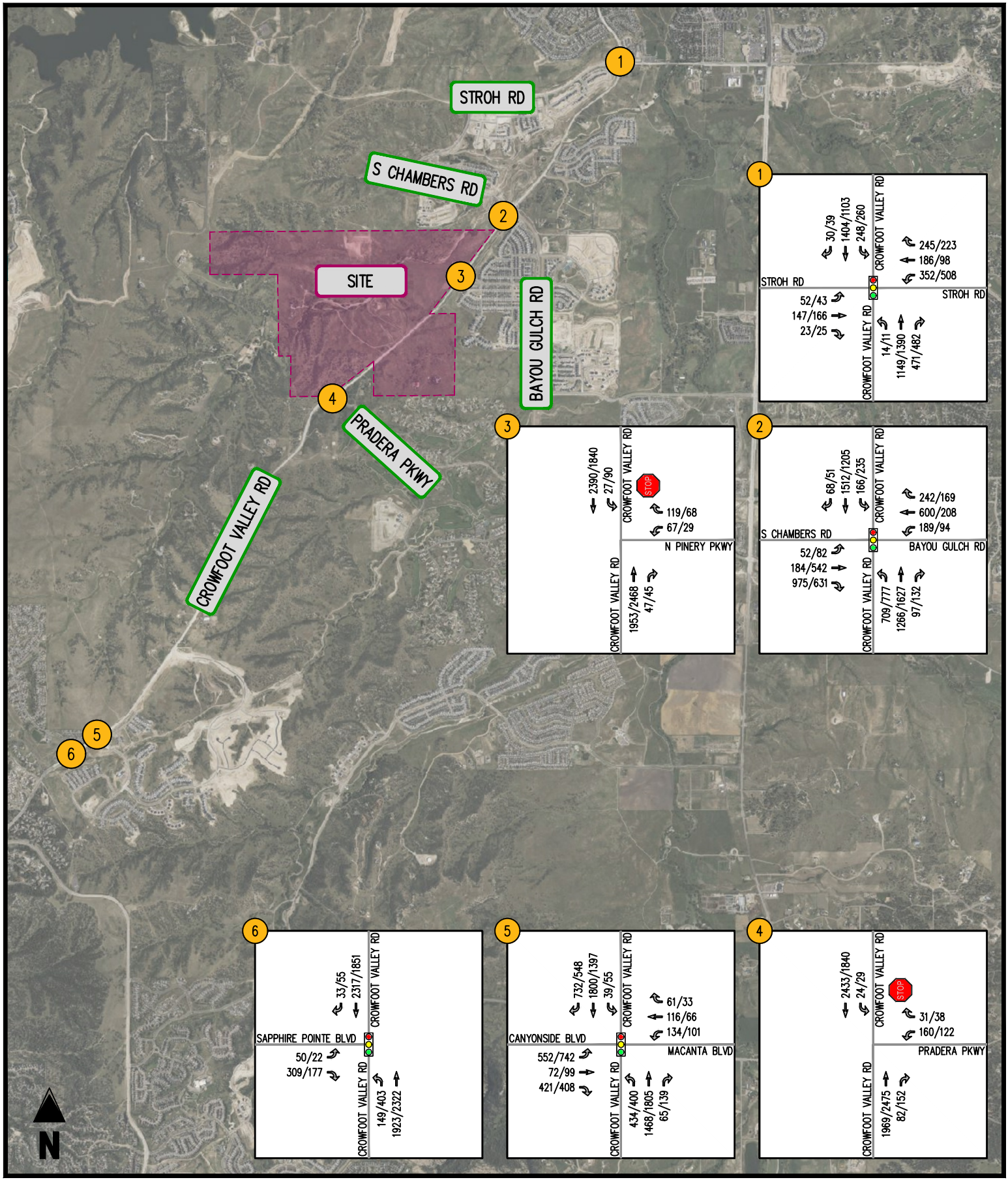


FIGURE 4-9
BACKGROUND FUTURE FORECASTS 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

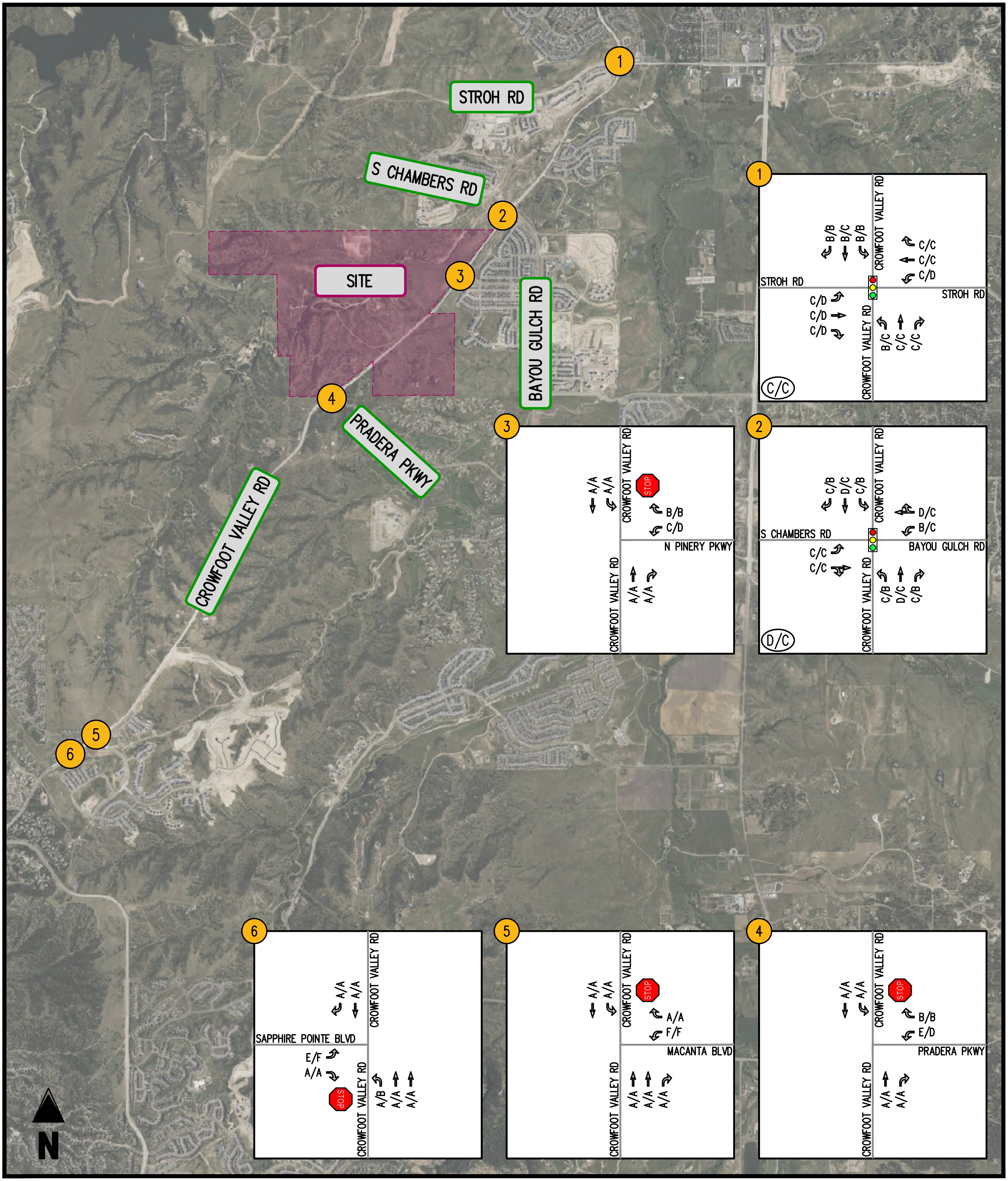


FIGURE 4-10
BACKGROUND LEVELS OF SERVICE 2028

CROWSNEST
CASTLE PINES, CO

A/A INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)
MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

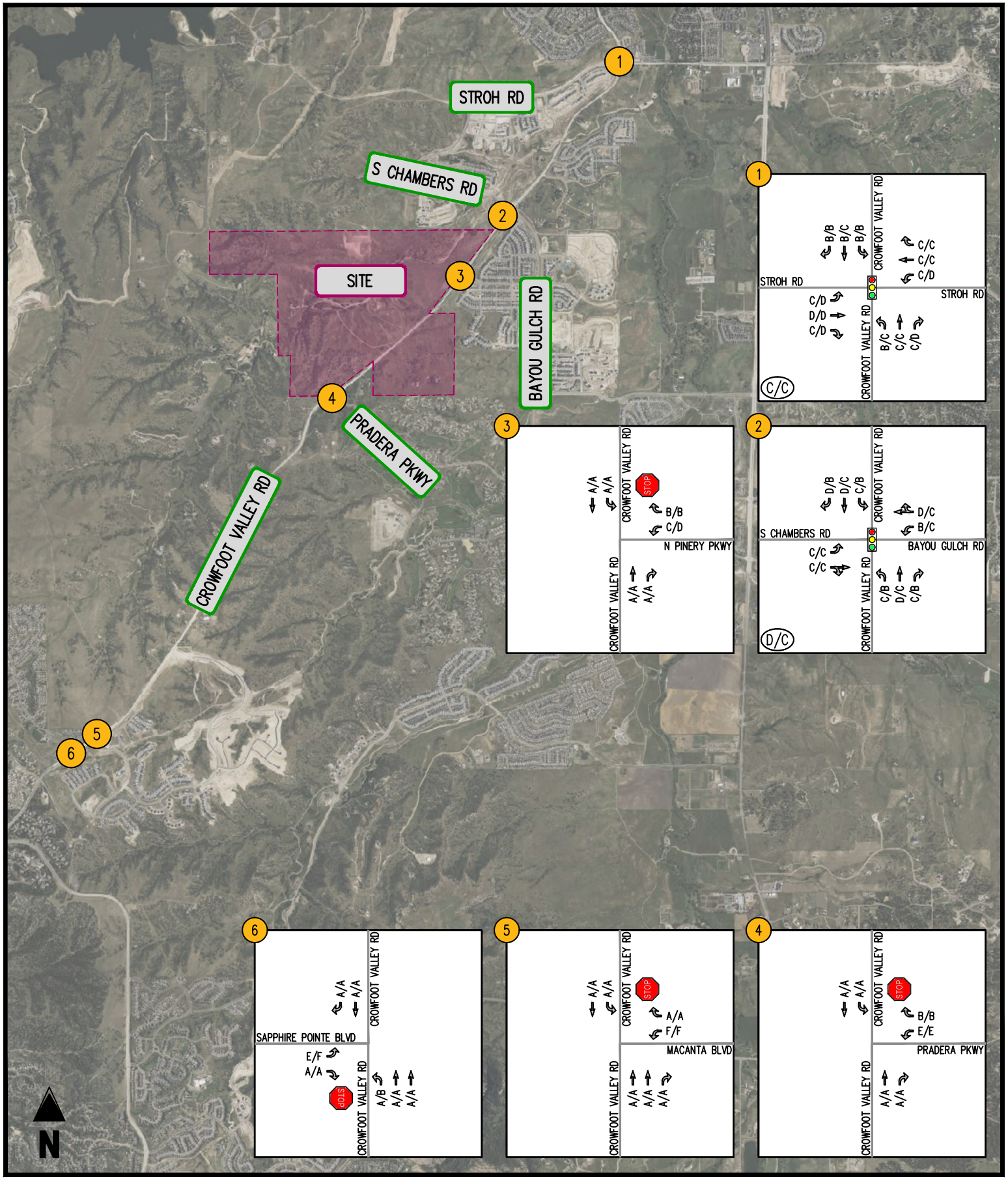


FIGURE 4-11
BACKGROUND LEVELS OF SERVICE 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

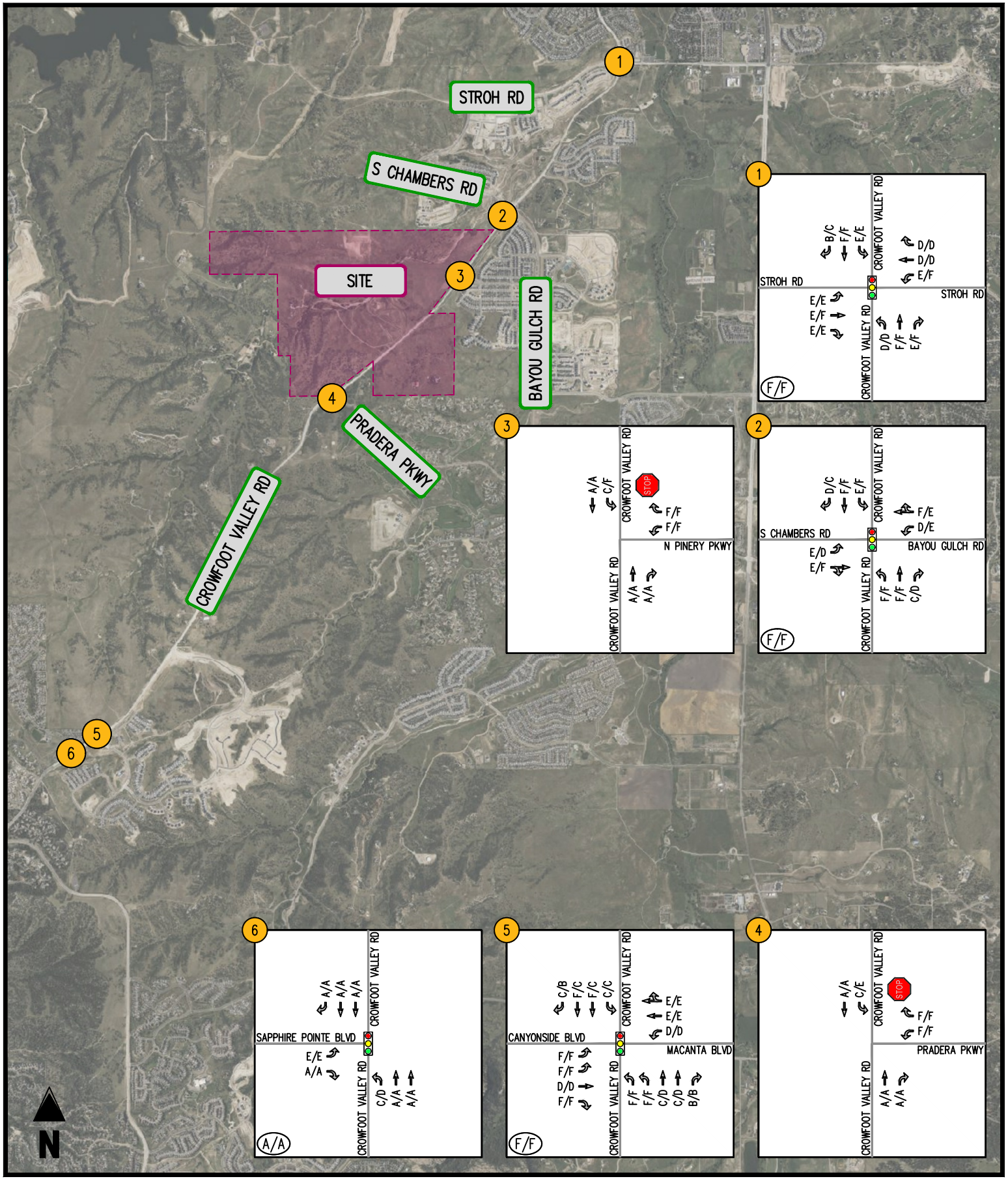


FIGURE 4-12
BACKGROUND LEVELS OF SERVICE 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

Table 4-1
Crowsnest - Castle Pines, CO
Background Future Intersection Level of Service Summary [1] [2]

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025 AM Peak Hour	Existing 2025 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Background 2030 AM Peak Hour	Background 2030 PM Peak Hour	Background 2045 AM Peak Hour	Background 2045 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	C (29.3)	C (33.8)	C (30.9)	D (36.8)	C (32.4)	D (39.1)	E (62.4)	E (70.3)
		Stroh Rd	EBT	C (31.9)	D (37.3)	C (33.7)	D (40.8)	D (35.3)	D (43.5)	E (69.7)	F (85.0)
			EBR	C (28.8)	C (33.4)	C (30.3)	D (36.3)	C (31.7)	D (38.7)	E (61.2)	E (69.5)
			WBL	C (28.9)	C (32.7)	C (30.4)	D (35.4)	C (31.8)	D (37.6)	E (67.5)	F (119.0)
		Stroh Rd	WBT	C (24.7)	C (24.0)	C (25.8)	C (25.6)	C (26.9)	C (26.9)	D (49.0)	D (46.0)
			WBR	C (26.8)	C (26.1)	C (28.0)	C (28.0)	C (29.2)	C (29.4)	D (53.8)	D (51.9)
			NBL	B (16.6)	C (20.2)	B (17.3)	C (21.5)	B (17.7)	C (22.5)	D (38.9)	D (47.8)
		Crowfoot Valley Rd	NBT	C (20.8)	C (24.8)	C (21.9)	C (26.6)	C (22.6)	C (28.0)	F (414.8)	F (749.6)
			NBR	C (24.9)	C (30.8)	C (26.6)	C (33.3)	C (27.7)	D (35.4)	E (57.6)	F (107.2)
			SBL	B (14.1)	B (17.2)	B (14.8)	B (18.5)	B (15.3)	B (19.6)	E (61.1)	E (79.8)
		Crowfoot Valley Rd	SBT	B (15.8)	B (19.3)	B (16.4)	C (20.5)	B (16.9)	C (21.6)	F (340.0)	F (240.5)
			SBR	B (13.4)	B (16.2)	B (13.8)	B (17.1)	B (14.1)	B (17.9)	B (19.7)	C (26.4)
		Overall		**C (23.0)**	**C (26.8)**	**C (24.2)**	**C (28.9)**	**C (25.2)**	**C (30.6)**	**F (244.9)**	**F (339.6)**
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	C (27.0)	C (23.3)	C (25.9)	C (22.9)	C (28.3)	C (23.8)	E (58.2)	D (49.5)
			EBTR	C (21.0)	C (32.3)	C (20.5)	C (31.6)	C (21.4)	C (33.2)	E (56.2)	F (144.3)
		Bayou Gulch Rd	WBL	B (19.2)	C (24.6)	B (18.8)	C (24.1)	B (19.6)	C (25.1)	D (43.7)	E (56.2)
			WBTR	D (45.9)	C (31.6)	D (43.1)	C (31.0)	D (49.1)	C (32.2)	F (381.3)	E (71.1)
			NBL	C (31.4)	B (18.2)	C (30.5)	B (17.9)	C (32.3)	B (18.6)	F (861.1)	F (967.2)
		Crowfoot Valley Rd	NBT	D (42.7)	C (30.2)	D (41.6)	C (29.6)	D (44.0)	C (31.0)	F (367.0)	F (677.0)
			NBR	C (30.7)	B (19.5)	C (30.0)	B (19.2)	C (31.5)	B (19.9)	C (31.0)	D (36.0)
			SBL	C (31.4)	B (19.2)	C (30.6)	B (18.8)	C (32.3)	B (19.7)	E (78.5)	F (97.0)
		Crowfoot Valley Rd	SBT	D (48.3)	C (24.4)	D (47.0)	C (23.9)	D (49.8)	C (24.9)	F (638.2)	F (423.2)
			SBR	C (34.9)	B (18.4)	C (34.0)	B (18.1)	D (35.7)	B (18.7)	D (35.8)	C (34.6)
		Overall		**D (40.6)**	**C (27.5)**	**D (39.0)**	**C (26.9)**	**D (42.4)**	**C (28.2)**	**F (476.0)**	**F (489.5)**
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	C [22.9]	D [28.1]	C [22.0]	D [26.6]	C [23.3]	D [28.4]	F [45416.6]	F [75801.9]
			WBR	B [12.5]	B [12.3]	B [12.3]	B [12.2]	B [12.6]	B [12.4]	F [613.6]	F [995.9]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.5]	A [9.0]	A [8.5]	A [8.9]	A [8.6]	A [9.0]	C [22.0]	F [70.6]
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	E [43.9]	D [34.8]	E [42.4]	D [34.4]	E [48.0]	E [38.6]	F [108451.3]	F [84002.4]
			WBR	B [11.4]	B [11.9]	B [11.4]	B [11.9]	B [11.6]	B [12.1]	F [120.2]	F [554.6]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.4]	A [8.5]	A [8.4]	A [8.5]	A [8.4]	A [8.6]	C [21.2]	E [35.2]
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	F [62.2]	E [47.9]	F [77.2]	F [57.4]	F [89.8]	F [66.3]	-	-
			WBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBL	A [8.8]	A [9.2]	A [8.9]	A [9.3]	A [9.0]	A [9.4]	-	-
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
Canyons TIS Improvements:	SIGNAL		EBL	-	-	-	-	-	-	F (146.0)	F (353.3)
- Signalization		Canyonside Blvd	EBT	-	-	-	-	-	-	D (51.2)	D (51.2)
- West Leg Addition			EBR	-	-	-	-	-	-	F (146.8)	F (143.1)
- Dual northbound left turn lane addition		Macanta Blvd	WBL	-	-	-	-	-	-	D (50.6)	D (51.3)
- Southbound right turn lane addition			WBTR	-	-	-	-	-	-	E (58.6)	E (57.0)
- Westbound through lane addition			NBL	-	-	-	-	-	-	F (171.3)	F (206.9)
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	C (26.6)	D (41.3)
			NBR	-	-	-	-	-	-	B (14.1)	B (14.5)
			SBL	-	-	-	-	-	-	C (23.2)	C (33.4)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	F (115.0)	C (34.6)
			SBR	-	-	-	-	-	-	C (25.6)	B (16.1)
		Overall		-	-	-	-	-	-	**F (85.8)**	**F (96.0)**
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	D [33.4]	F [60.5]	E [36.2]	F [66.8]	E [38.3]	F [72.3]	-	-
			EBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBL	A [9.6]	B [10.6]	A [9.8]	B [10.8]	A [9.9]	B [10.9]	-	-
			NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
Canyons TIS Improvements:	SIGNAL	Sapphire Pointe Blvd	EBL	-	-	-	-	-	-	E (77.8)	E (76.9)
- Signalization			EBR	-	-	-	-	-	-	A (0.0)	A (0.0)
- Two southbound through lanes		Crowfoot Valley Rd	NBL	-	-	-	-	-	-	C (21.4)	D (51.2)
			NBT	-	-	-	-	-	-	A (4.1)	A (5.5)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	A (0.5)	A (1.0)
			SBR	-	-	-	-	-	-	A (0.0)	A (0.0)
		Overall		-	-	-	-	-	-	**A (3.6)**	**A (7.9)**

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 4-2
Crowsnest - Castle Pines, CO
Background Future Intersection Queueing Summary [1]

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2025 AM Peak Hour	Existing 2025 PM Peak Hour	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Background 2030 AM Peak Hour	Background 2030 PM Peak Hour	Background 2045 AM Peak Hour	Background 2045 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	225	62	61	69	66	73	69	116	99
		Stroh Rd	EBT	-	140	178	157	195	168	205	279	312
			EBR	350	0	0	0	0	0	0	0	0
			WBL	350	267	415	299	465	326	501	621	1097
		Stroh Rd	WBT	-	146	87	162	95	175	101	301	169
			WBR	600	56	52	58	55	61	57	81	78
			NBL	250	13	14	13	14	15	16	25	21
		Crowfoot Valley Rd	NBT	-	269	307	304	338	330	355	2812	3525
			NBR	500	72	84	77	87	79	89	543	671
			SBL	450	134	175	151	192	163	201	389	434
		Crowfoot Valley Rd	SBT	-	226	301	252	330	271	348	3158	2354
			SBR	-	0	0	0	0	0	0	0	0
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	550	46	70	48	71	51	77	78	114
			EBTR	-	248	822	258	867	278	959	2275	2949
		Bayou Gulch Rd	WBL	300	24	17	24	18	25	20	232	141
			WBTR	-	925	323	976	336	1067	364	1924	602
			NBL	500	166	91	174	96	181	98	1935	2082
		Crowfoot Valley Rd	NBT	-	402	484	426	512	445	540	3016	3938
			NBR	400	0	0	0	0	0	0	69	110
			SBL	550	112	138	117	146	122	149	268	465
		Crowfoot Valley Rd	SBT	-	418	384	439	404	462	424	3718	2780
			SBR	350	10	0	13	0	16	1	35	13
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	-	28	15	25	15	28	15	285	148
			WBR	215	23	13	20	10	20	13	305	220
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	0	0
			NBR	440	0	0	0	0	0	0	0	0
		Crowfoot Valley Rd	SBL	500	3	10	3	8	3	8	10	95
			SBT	-	0	0	0	0	0	0	0	0
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	-	118	78	108	70	118	78	608	478
			WBR	250	5	8	5	5	5	5	55	123
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	0	0
			NBR	880	0	0	0	0	0	0	0	0
		Crowfoot Valley Rd	SBL	450	3	3	3	3	3	3	8	20
			SBT	-	0	0	0	0	0	0	0	0
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	265	120	80	138	90	150	100	-	-
			WBR	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	-	-
			NBR	575	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	SBL	575	3	3	3	3	3	3	-	-
			SBT	-	0	0	0	0	0	0	-	-
Canyons TIS Improvements:	SIGNAL		EBL	200	-	-	-	-	-	-	427	635
- Signalization		Canyonside Blvd	EBT	-	-	-	-	-	-	-	112	145
- West Leg Addition			EBR	200	-	-	-	-	-	-	514	334
- Dual northbound left turn lane addition			WBL	300	-	-	-	-	-	-	158	117
- Southbound right turn lane addition		Macanta Blvd	WBTR	-	-	-	-	-	-	-	100	58
- Westbound through lane addition			NBL	300	-	-	-	-	-	-	374	262
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	426	1158
			NBR	575	-	-	-	-	-	-	0	11
			SBL	575	-	-	-	-	-	-	26	40
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	1168	848
			SBR	300	-	-	-	-	-	-	486	179
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	265	30	25	33	28	35	30	-	-
			EBR	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	NBL	600	8	30	8	30	10	30	-	-
			NBT	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	SBT	-	0	0	0	0	0	0	-	-
			SBR	250	0	0	0	0	0	0	-	-
Canyons TIS Improvements:	SIGNAL	Sapphire Pointe Blvd	EBL	265	-	-	-	-	-	-	82	47
- Signalization			EBR	-	-	-	-	-	-	-	431	73
- Two southbound through lanes		Crowfoot Valley Rd	NBL	700	-	-	-	-	-	-	236	530
			NBT	-	-	-	-	-	-	-	578	808
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	1052	1025
			SBR	250	-	-	-	-	-	-	0	1

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

V. Site Analysis

Overview

Due to the size of the proposed development, the study intersections and roadway segments will need to be improved phased coincident with the proposed development. The development program is forecasted herein and analyzed for future scenarios to determine the required improvements and roadway sizing that would be needed for each of the development scenarios.

Proposed Development

The Applicant seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. For purposes of this study, the site is assumed to be complete and occupied in three phases. The following use and development programs were analyzed:

Build-Out 2028 Phase 1:

1,005	DU	Single Family Detached Housing
1,000	DU	Multifamily Housing (Low-Rise)
550,000	SF	Retail

Build-Out 2030 Phase 2:

716	DU	Single Family Detached Housing

Build-Out 2045 Phase 3:

1,244	DU	Single Family Detached Housing

Proposed Site Access

As shown on the Applicant's conceptual plan (Figure 1-2), ultimate access to the development is proposed via three full movement signalized intersections provided at ½ mile spacing and aligned with existing roadway intersections where possible. Additional partial access is contemplated to provide necessary additional access to the commercial and multifamily planning areas where increased access is necessary to support development. Further refinement of access will be provided during the site plan stages. Proposed lane use and traffic control are shown in Figure 5-1 (Phase 1 2028), Figure 5-2 (Phase 2 2030) and Figure 5-3 (Phase 3 2045). Improvements assumed and analyzed later in this report are represented within these Figures.

Trip Generation

Overview

Trip generation estimates for the weekday AM and PM peak hours, as well as the weekday average daily traffic (ADT), were derived from the standard ITE Trip Generation Manual rates/equations, as published in the 12th edition. The trip generation analysis is presented in Table 5-1.

Internal Capture

Due to the mixed-use nature of the proposed development and the neighboring uses, it is assumed that a number of trips would be shared between the uses. These are trips that are going from one use on site to another use on site and should not be counted as separate trips for each use. An internal capture reduction of 10% was applied to the trip generation analysis.

Pass-by Trips
According to ITE, in some cases the driveway volumes at a particular land use are different from the amount of traffic added to the adjacent street system. Uses such as shopping centers establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trips are those trips which are made as intermediate stops on the way to a primary destination. An example of a pass-by trip would be one in which a driver stops at a supermarket on their way home from work.

The proposed use would experience pass-by trips consistent with the primary uses located on site. In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the trip generation analysis:

- Shopping Center: 0% AM / 19% PM

As shown in Table 5-1, the site in total is anticipated to generate 306 weekday PM peak hour pass-by trips. Therefore, these trips would be drawn from the existing road network and assigned to the future site entrances accordingly.

Net Site Trips
The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-1. As shown in the table, the site would generate upon completion and full occupancy:

Phase 1 (2028):

- 1,439 net new weekday AM peak hour vehicle trips,
- 2,617 net new weekday PM peak hour vehicle trips, and
- 28,401 net new weekday daily trips

Phase 1+2 (2030):

- 1,890 net new weekday AM peak hour vehicle trips,
- 3,217 net new weekday PM peak hour vehicle trips, and
- 34,258 net new weekday daily trips

Phase 1+2+3 (2045):

- 2,674 net new weekday AM peak hour vehicle trips,
- 4,258 net new weekday PM peak hour vehicle trips, and
- 44,435 net new weekday daily trips

Site Trip Distributions
The distribution of the anticipated trips generated by the completion of the proposed development was based on an examination of existing traffic counts and local knowledge. Existing travel patterns indicate the following distribution is appropriate in the forecasting of future site traffic:

Residential:

- To/from the north on Crowfoot Valley Road: 20%
- To/from the east on Stroh Rd: 15%
- To/from the west on Stroh Rd: 5%
- To/from the west on Chambers Rd: 25%
- To/from the east on Bayou Gulch Rd: 5%
- To/from the east on Pradera Pkwy: 5%
- To/from the south on Crowfoot Valley Road: 25%

Commercial:

- To/from the north on Crowfoot Valley Road: 20%
- To/from the east on Stroh Rd: 15%
- To/from the west on Stroh Rd: 5%
- To/from the west on Chambers Rd: 25%
- To/from the east on Bayou Gulch Rd: 5%
- To/from the east on N Pinery Pkwy: 5%
- To/from the east on Pradera Pkwy: 5%
- To/from the south on Crowfoot Valley Road: 20%

Site Trip Assignments

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distributions. The trips assignments are depicted in Figure 5-4 for Phase 1 Residential Trips, Figure 5-5 for Phase 1 Commercial net new trips, Figure 5-6 for Phase 1 Commercial Pass-by trips, Figure 5-7 for Phase 2 trips, and Figure 5-8 for Phase 3 trips.

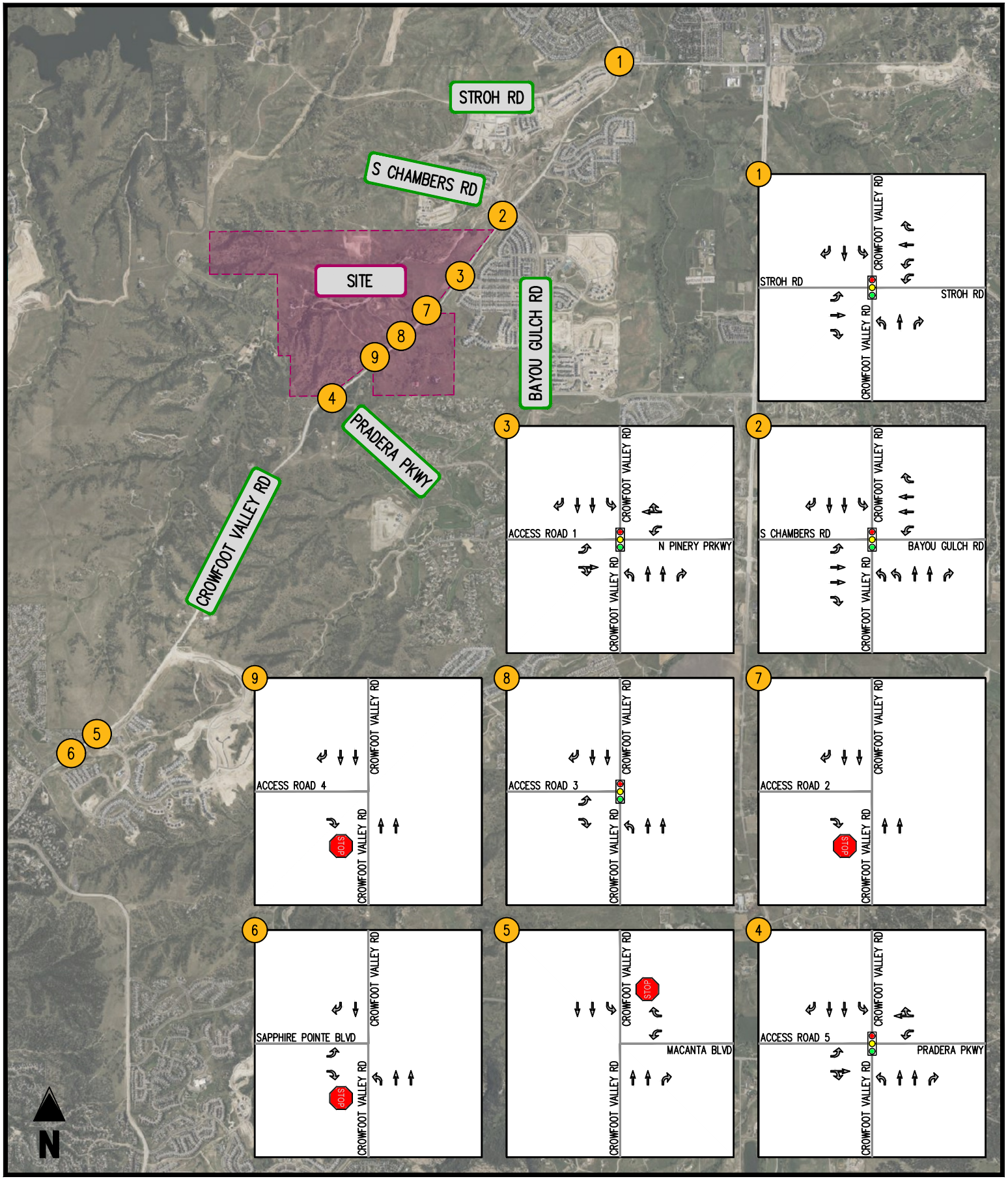


FIGURE 5-1
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL: PHASE 1-2028

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

CROWSNEST
CASTLE PINES, CO

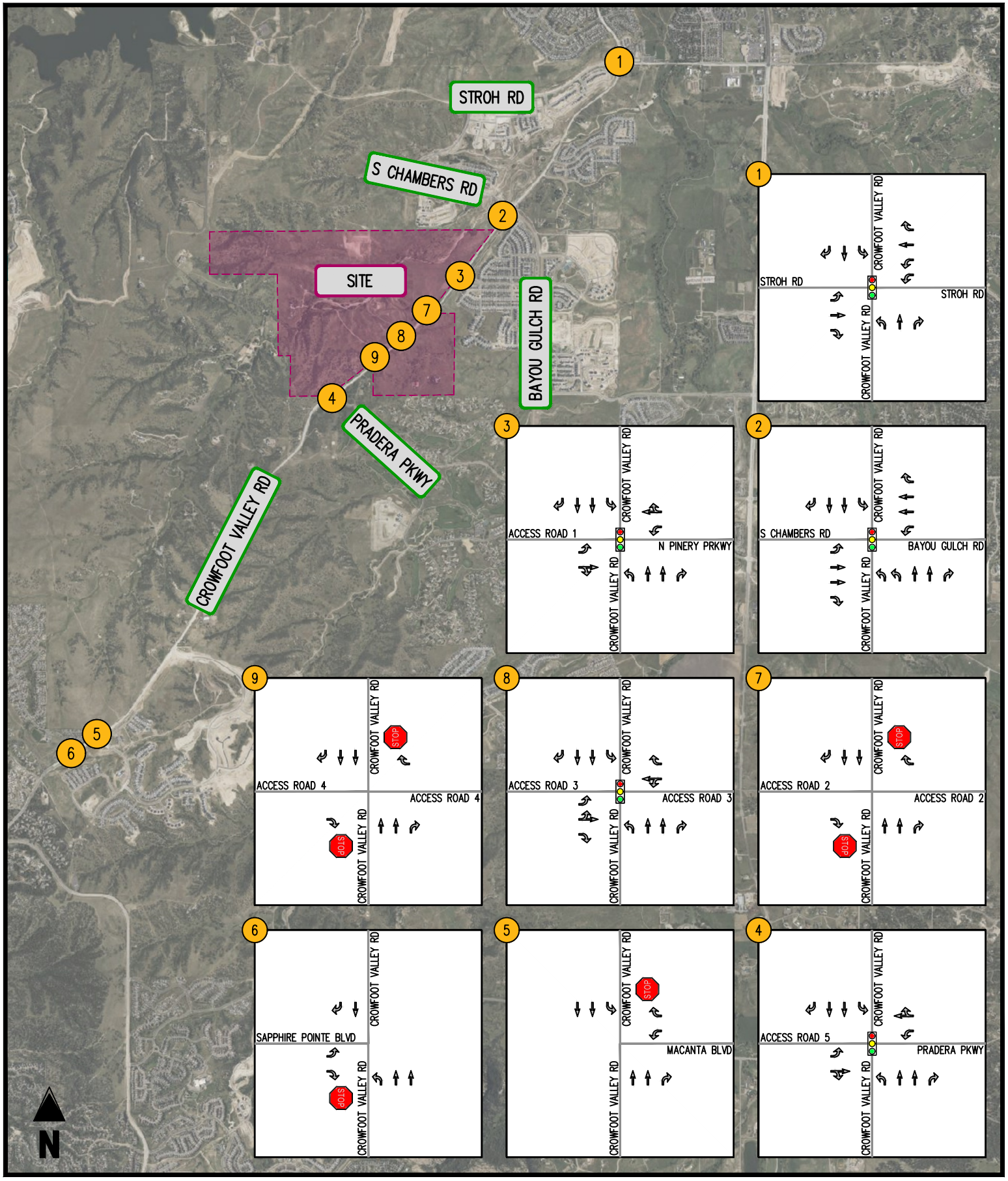


FIGURE 5-2
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL: PHASE 2-2030

CROWSNEST
CASTLE PINES, CO

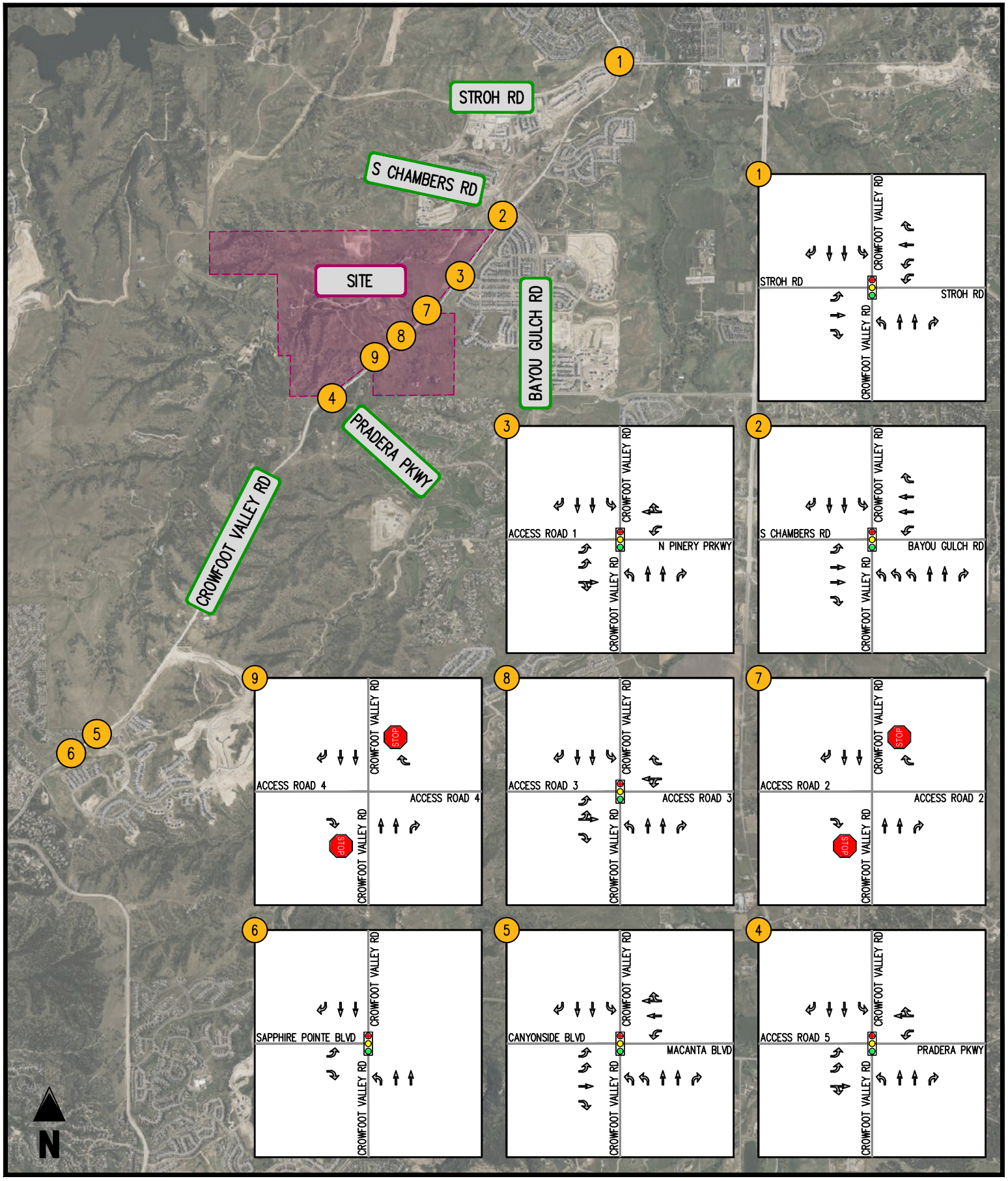


FIGURE 5-3
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL: PHASE 3-2045

MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

CROWSNEST
CASTLE PINES, CO

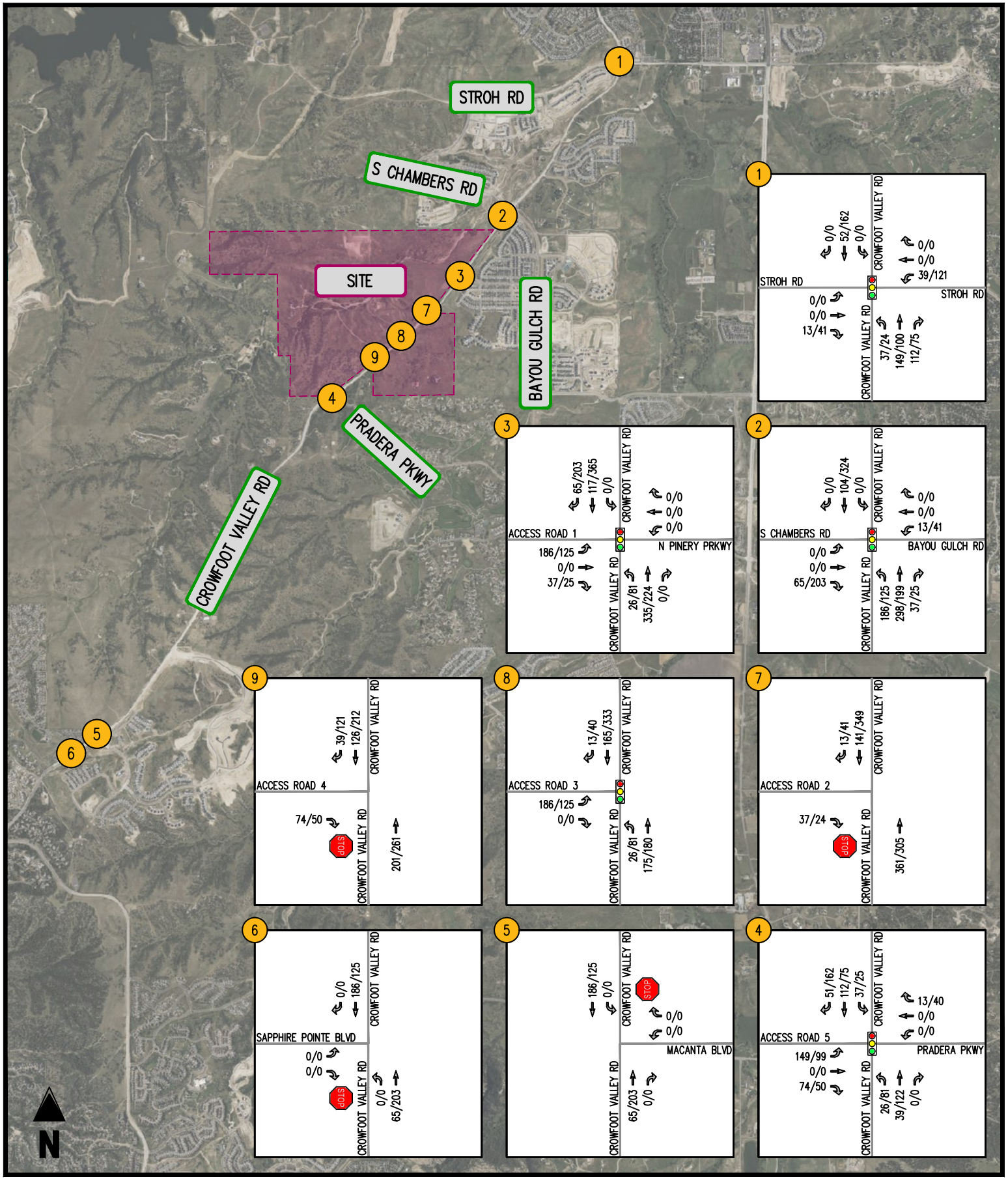


FIGURE 5-4
PHASE 1 (2028) RESIDENTIAL SITE TRIPS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)
MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

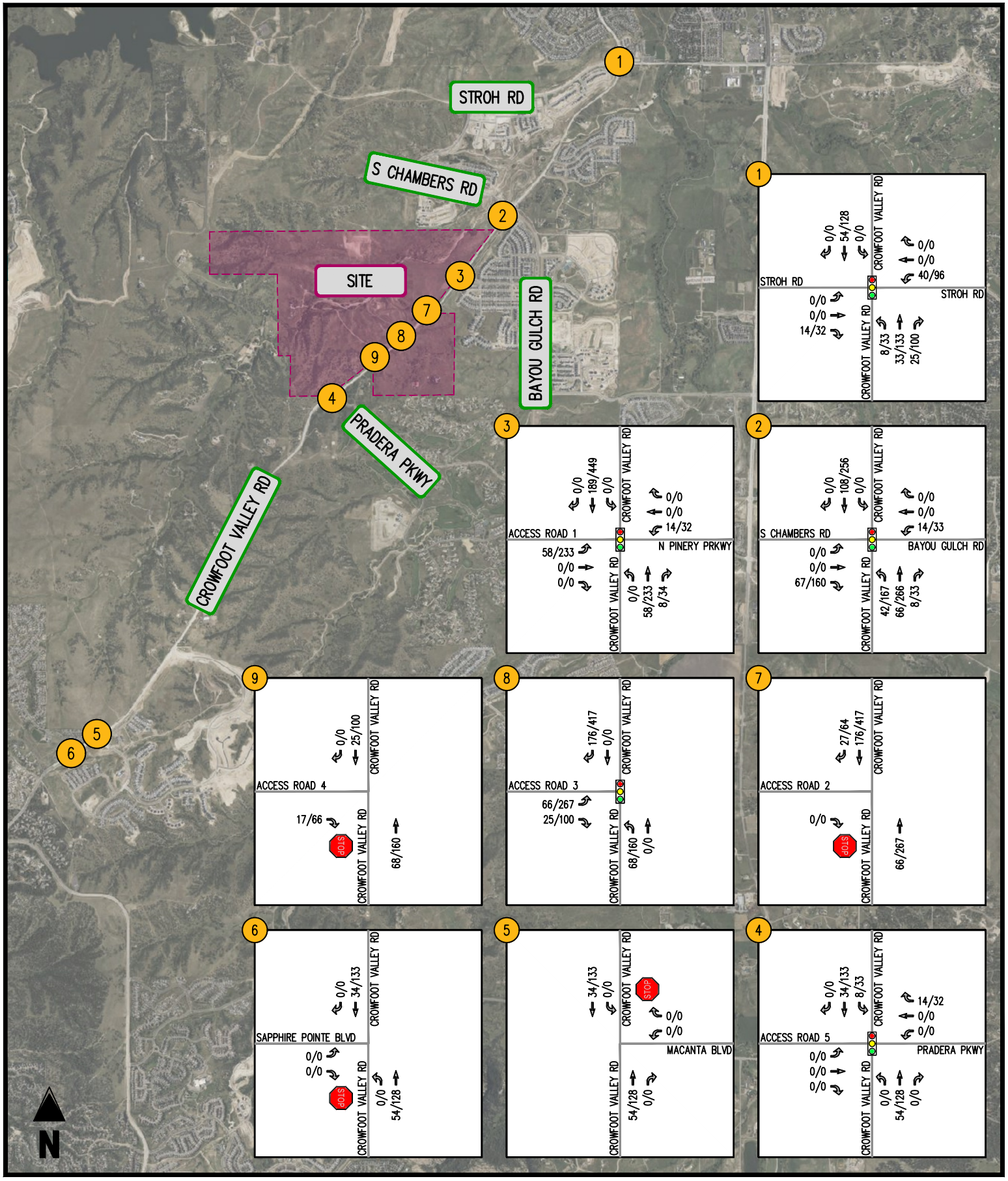


FIGURE 5-5
PHASE 1 (2028) COMMERCIAL SITE TRIPS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

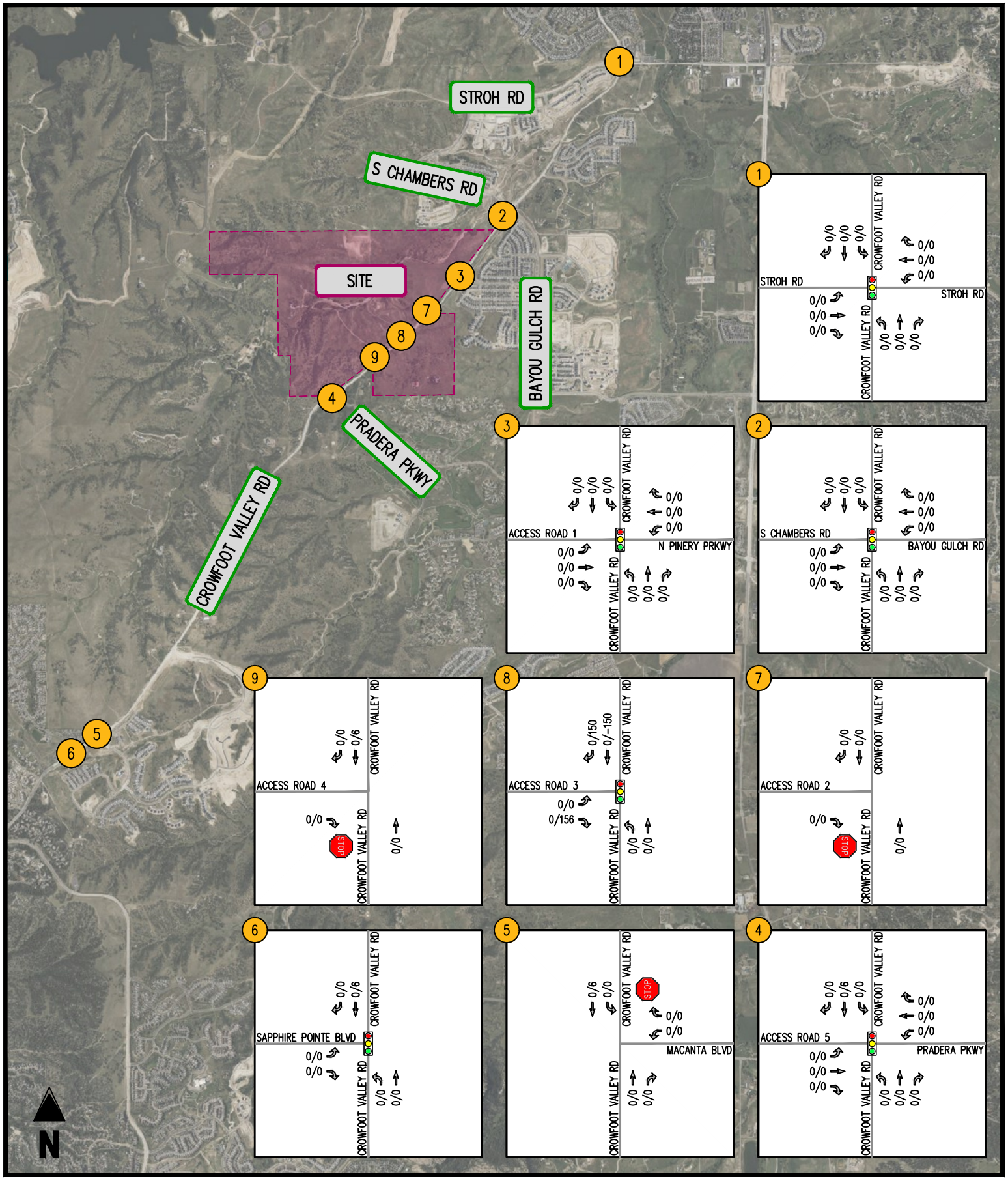


FIGURE 5-6
PHASE 1 (2028) COMMERCIAL PASS-BY TRIPS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)
MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

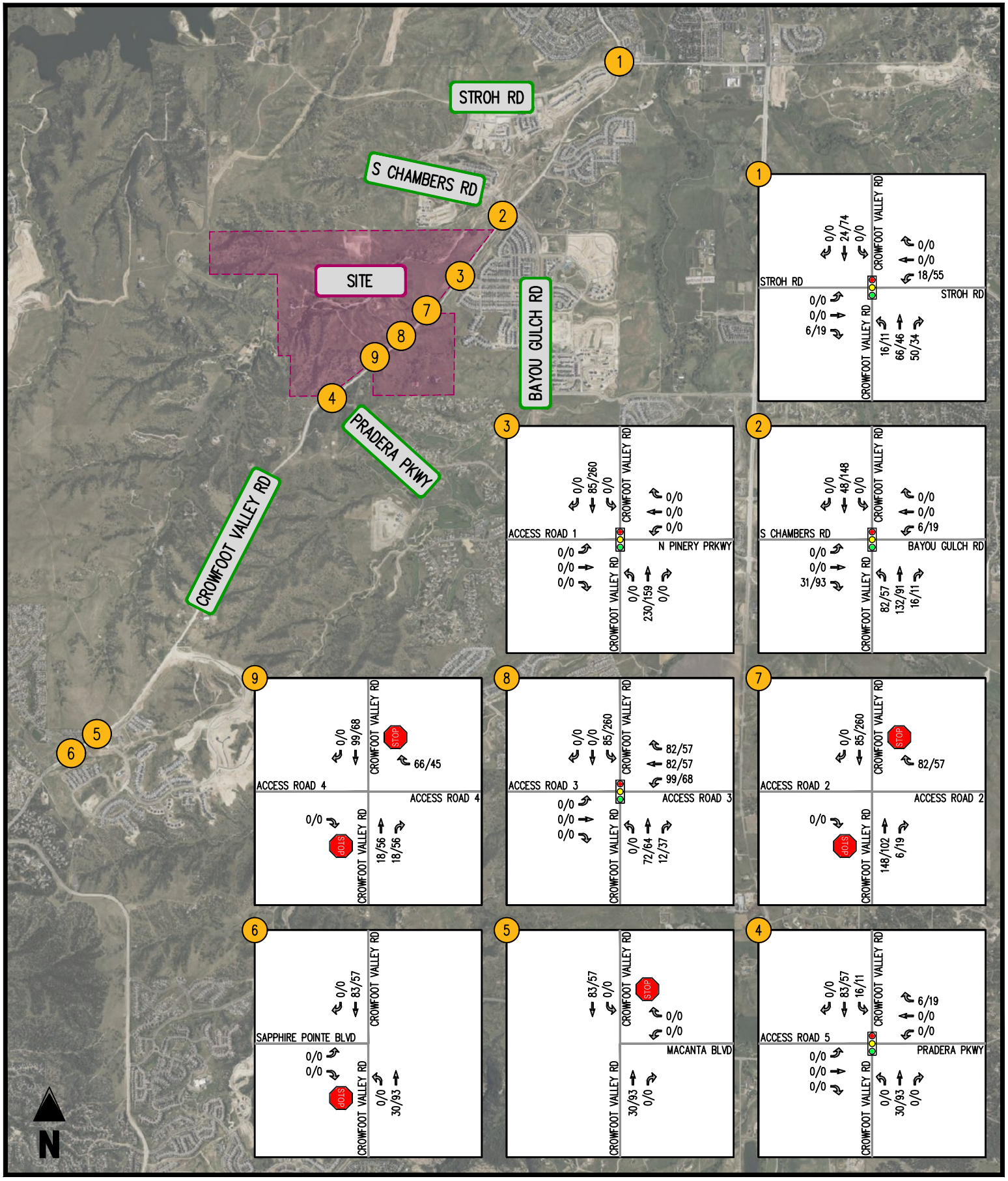


FIGURE 5-7
PHASE 2 (2030) SITE TRIPS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

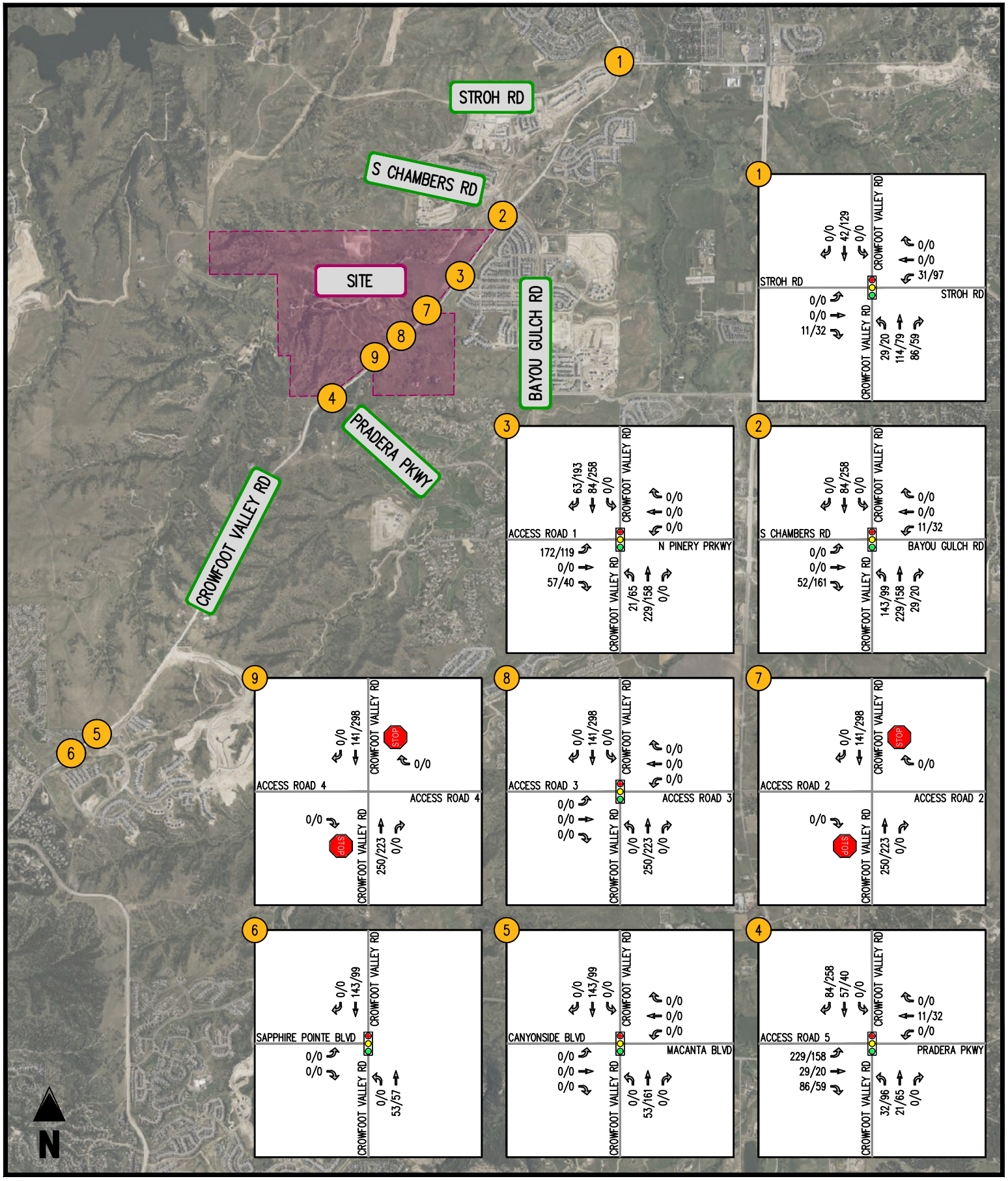


FIGURE 5-8
PHASE 3 (2045) SITE TRIPS

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

Table 5-1

Crowsnest - Castle Pines, CO

Site Trip Generation [1]

Land Use	Land Use Code	Amount	Units	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Average Daily Trips
Phase 1										
Single-Family Detached Housing	210	1,005	DU	190	514	704	579	356	935	9,135
			Internal Capture (10%)	(19)	(51)	(70)	(58)	(36)	(94)	(914)
			External Trips	**171**	**463**	**634**	**521**	**320**	**841**	**8,221**
Multifamily Housing (Low-Rise)	220	1,000	DU	98	312	410	322	198	520	6,210
			Internal Capture (10%)	(10)	(31)	(41)	(32)	(20)	(52)	(621)
			External Trips	**88**	**281**	**369**	**290**	**178**	**468**	**5,589**
Shopping Center (>150K)	820	550,000	SF	300	184	484	879	914	1,793	20,015
			Internal Capture (10%)	(30)	(18)	(48)	(88)	(91)	(179)	(2,002)
			External Trips	**270**	**166**	**436**	**791**	**823**	**1,614**	**18,013**
			Pass-by (AM 0%/PM 19%)	-	-	-	*(150)*	*(156)*	*(306)*	*(3,422)*
Net New Shopping Center Trips				**270**	**166**	**436**	**641**	**667**	**1,308**	**14,591**
Net New Phase 1 Residential Trips				**259**	**744**	**1,003**	**811**	**498**	**1,309**	**13,810**
Net New Phase 1 Trips				**529**	**910**	**1,439**	**1,452**	**1,165**	**2,617**	**28,401**
Phase 2										
Single-Family Detached Housing	210	716	DU	135	366	501	413	253	666	6,508
			Internal Capture (10%)	(14)	(37)	(50)	(41)	(25)	(67)	(651)
			External Trips	**121**	**329**	**451**	**372**	**228**	**600**	**5,857**
Net New Phase 1 + Phase 2 Trips				**650**	**1,239**	**1,890**	**1,824**	**1,393**	**3,217**	**34,258**
Phase 3										
Single-Family Detached Housing	210	1,244	DU	235	636	871	717	440	1,157	11,308
			Internal Capture (10%)	(24)	(64)	(87)	(72)	(44)	(116)	(1,131)
			External Trips	**211**	**572**	**784**	**645**	**396**	**1,041**	**10,177**
Net New Phase 1 + Phase 2 + Phase 3 Trips				**861**	**1,811**	**2,674**	**2,469**	**1,789**	**4,258**	**44,435**

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 12th Edition

VI. Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

The Phase 1 (2028), Phase 2 (2030), and Phase 3 (2045) total future traffic forecasts associated with the proposed development were developed by combining the background future forecasts shown in Figure 4-7 (2028), Figure 4-8 (2030), and Figure 4-9 (2045), and the site trip assignments shown in Figure 5-4, Figure 5-5, Figure 5-6, Figure 5-7, and Figure 5-8. The resulting total future traffic forecasts are provided in Figure 6-1 for 2028 conditions, Figure 6-2 for 2030 conditions and Figure 6-3 for 2045 conditions.

Total Future Levels of Service with Proposed Development

Future levels of service with the proposed development plan were estimated at key study intersections based on the future traffic volumes shown in Figure 6-1 (2028), Figure 6-2 (2030), and Figure 6-3 (2045), the total future lane use in Figure 5-1 (2028), Figure 5-2 (2030) and Figure 5-3 (2045), and the HCM 7th methodologies for signalized and unsignalized intersections. The results of these analyses are provided in Appendix H and presented in Table 6-1. Total future levels of service are also presented graphically in Figure 6-4 (2028), Figure 6-5 (2030), and Figure 6-6 (2045).

As shown in Table 6-1, Under total future conditions, with the implemented improvements studied herein, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the 2028 and 2030 weekday AM and PM peak hours. The Castle Pines signalized intersection movements are forecasted to operate at acceptable LOS “D” or better during the 2028 and 2030 weekday peak hours with the exception of the following:

- Crowfoot Valley Rd/N Pinery Pkwy
  - Eastbound left turn movement is expected to operate at LOS “F” during the PM peak hours,
  - Eastbound through/right movement is expected to operate at LOS “E” during the PM peak hours,
  - Westbound through/right movement is expected to operate at LOS “E” during the 2028 PM peak hour and the 2030 AM and PM peak hours,
- Crowfoot Valley Rd/Pradera Pkwy
  - Eastbound left turn movement is expected to operate at LOS “E” during the PM peak hours,
  - Eastbound through/right movement is expected to operate at LOS “E” during the 2028 PM peak hour and the 2030 AM and PM peak hours,
  - Westbound through/right movement is expected to operate at LOS “E” during the PM peak hours, and
- Crowfoot Valley Rd/Access Road 3
  - Eastbound left or eastbound left/through movement is expected to operate at LOS “E” during the PM peak hours.

During the 2045 conditions, the signalized intersections are forecasted to operate at overall LOS “D” or better with the exception of the following:

- Crowfoot Valley Rd/Stroh Rd intersection which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the 2045 PM peak hour,
- Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
- Crowfoot Valley Rd/N Pinery Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,

- Crowfoot Valley Rd/Pradera Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
- Crowfoot Valley Rd/Macanta Blvd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours, and
- Crowfoot Valley Rd/Access Road 3 which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the PM peak hour.

The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. These intersections should continue to be monitored and the timing of improvements should be assessed as development in the area progresses.

It should be noted that per discussions with the reviewer, the effort to estimate the background traffic related exclusively to the regional traffic pattern shift (expected with the Canyonside Boulevard connection to Crowfoot Valley Road in 2040) likely results in double counting for some of the regional growth from developments and some of the Crowsnest site generated trips. This double counting likely yields higher peak hour volumes which results in a more conservative analysis of the traffic operations. Even if the background volumes are slightly high, this TIS still provides an estimate of the incremental impact of site-generated trips traveling within the study area roadway network. The recommendations in this TIS remain relevant for the Principal Arterial classification and related cross section, intersection spacing, and type of intersection control. Refinement of the future background traffic estimates are encouraged for subsequent studies that will be prepared as the site development effort progresses. The maximum amount of development permitted may be determined with regard to the ability of the study area intersections to meet the City's standards for peak hour traffic operations.

Total Future Queuing

Total future queues were forecasted using Synchro. The results of the queuing analysis are summarized in Table 6-2. The forecasted queues are expected to be accommodated with the proposed storage lengths with the exception of the eastbound left, eastbound right, and northbound left movements at the Crowfoot Valley Rd/Macanta Blvd intersection during 2045 conditions, consistent with background conditions.

Roadway Sections

Also represented within the figures and analysis are the roadway segments and widening that would be necessary to accommodate each scenario. The roadway section for Crowfoot Valley Rd will be governed by the Principal Arterial classification which requires two through lanes per direction along the length of the annexation.

Improvements Summary

A summary of improvements required is provided for ease of reference. As detailed herein, each phase would require additional improvements to both intersections and roadway sections. Table 6-3 provides a summary of those improvements.

Crowfoot Valley Rd Driveways

Existing driveways to residential uses exist on Crowfoot Valley Rd in the vicinity of the subject site. These driveways were not studied within this analysis as they are expected to have minimal inbound/outbound volumes, and all site trips are expected to be through movements at the driveways. Existing infrastructure

along Crowfoot Valley Rd will be further studied during design phases for the improvements along this corridor.

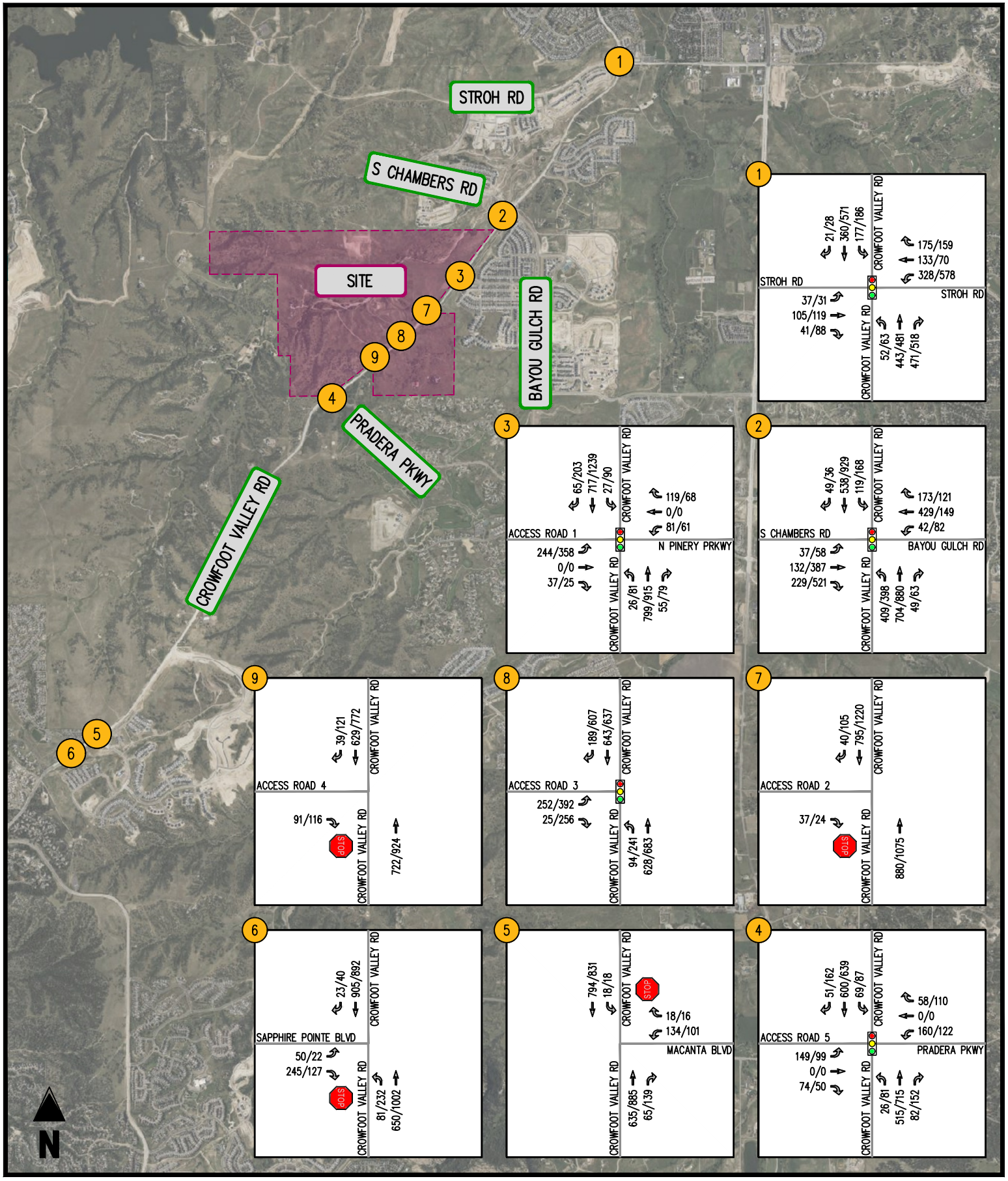


FIGURE 6-1
TOTAL FUTURE FORECASTS 2028

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

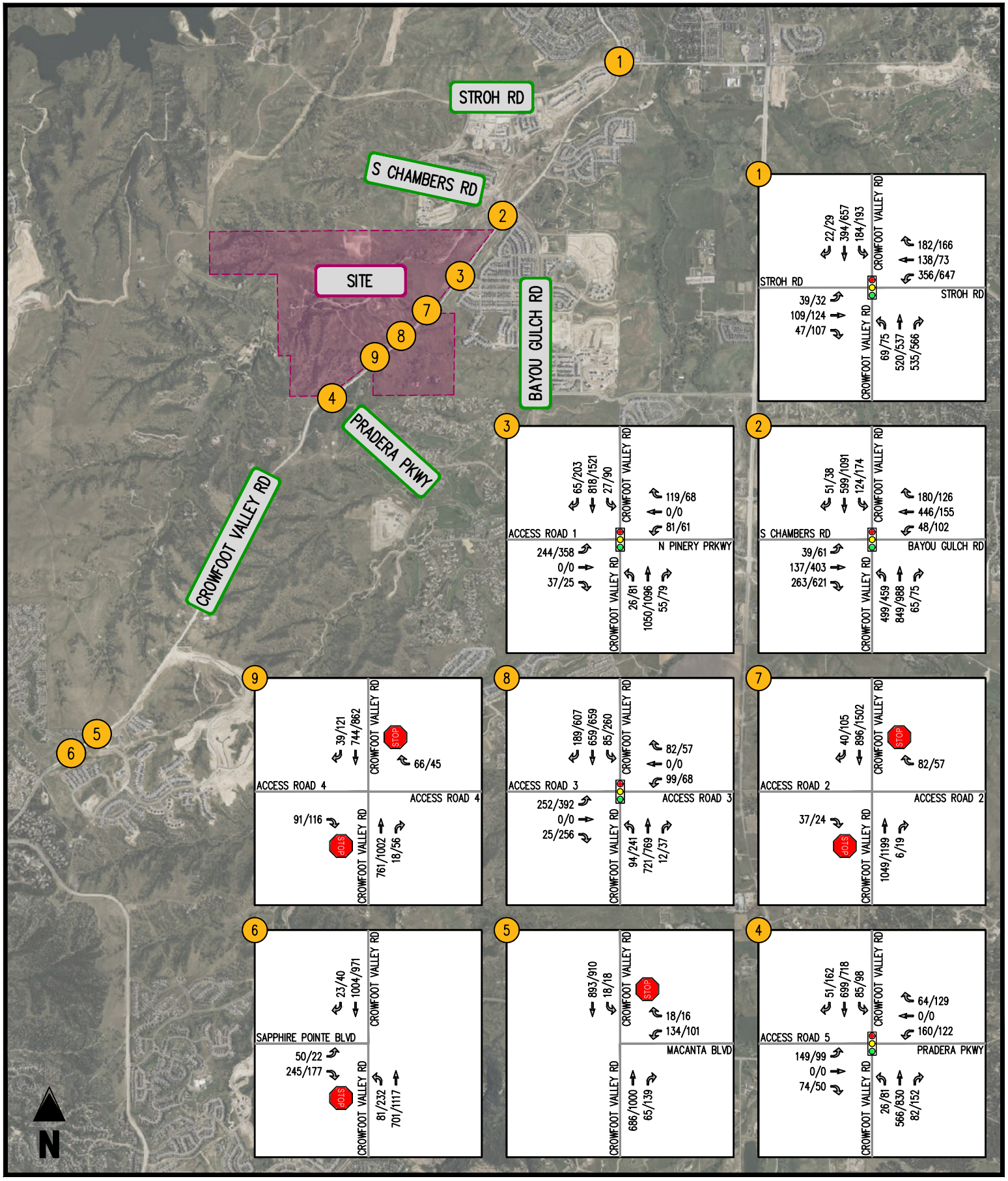


FIGURE 6-2
TOTAL FUTURE FORECASTS 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

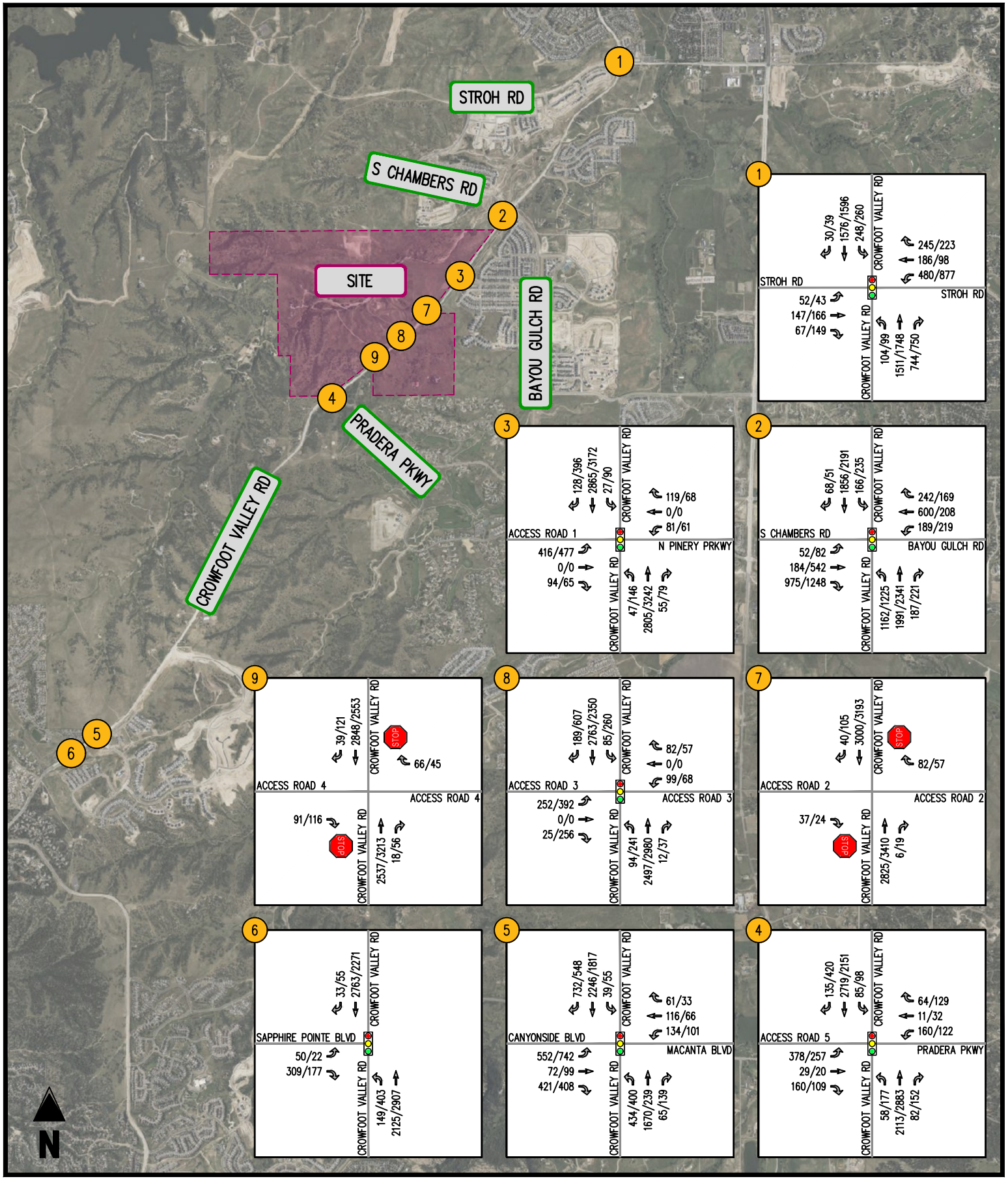


FIGURE 6-3
TOTAL FUTURE FORECASTS 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

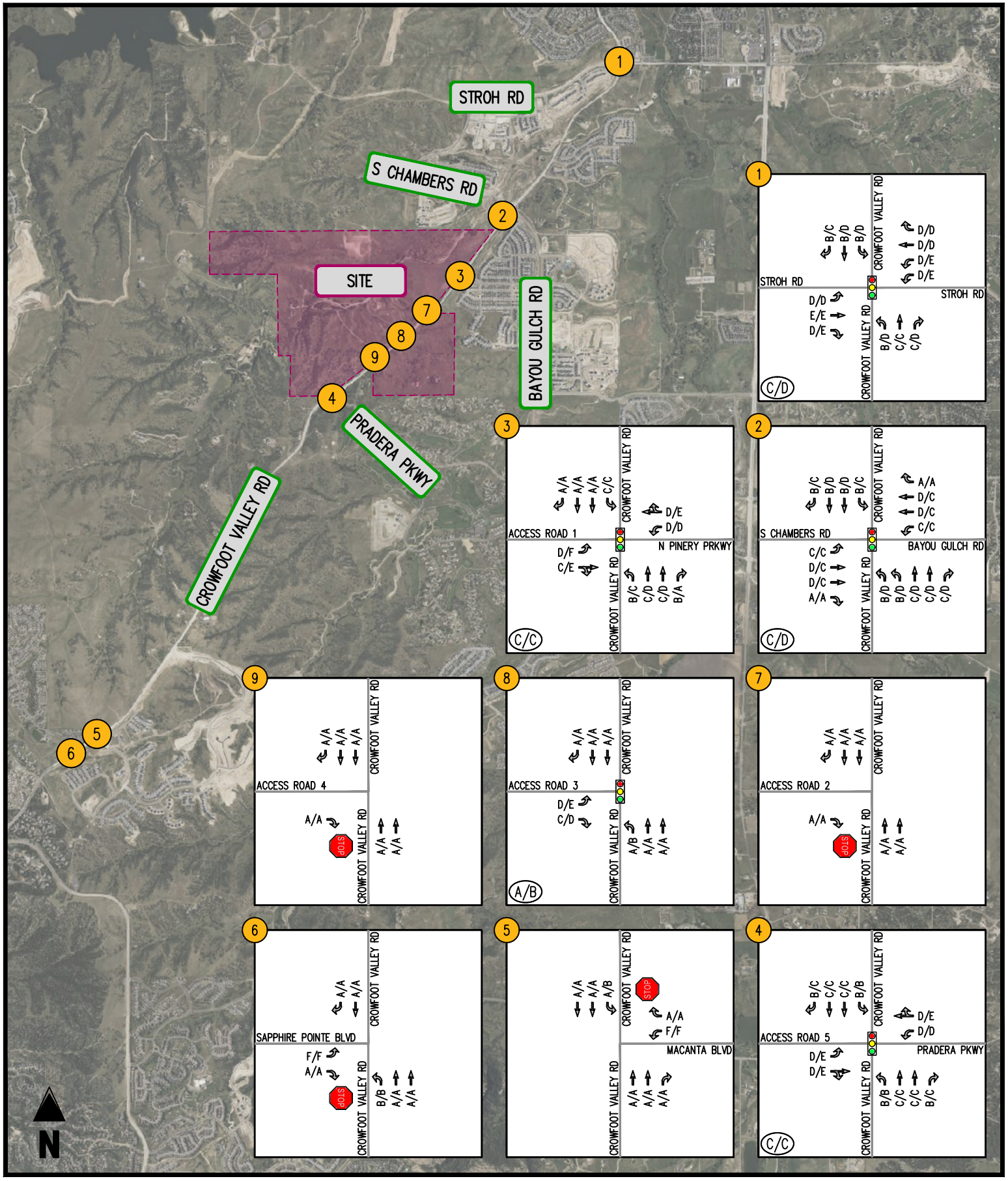


FIGURE 6-4
TOTAL FUTURE LEVELS OF SERVICE 2028

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

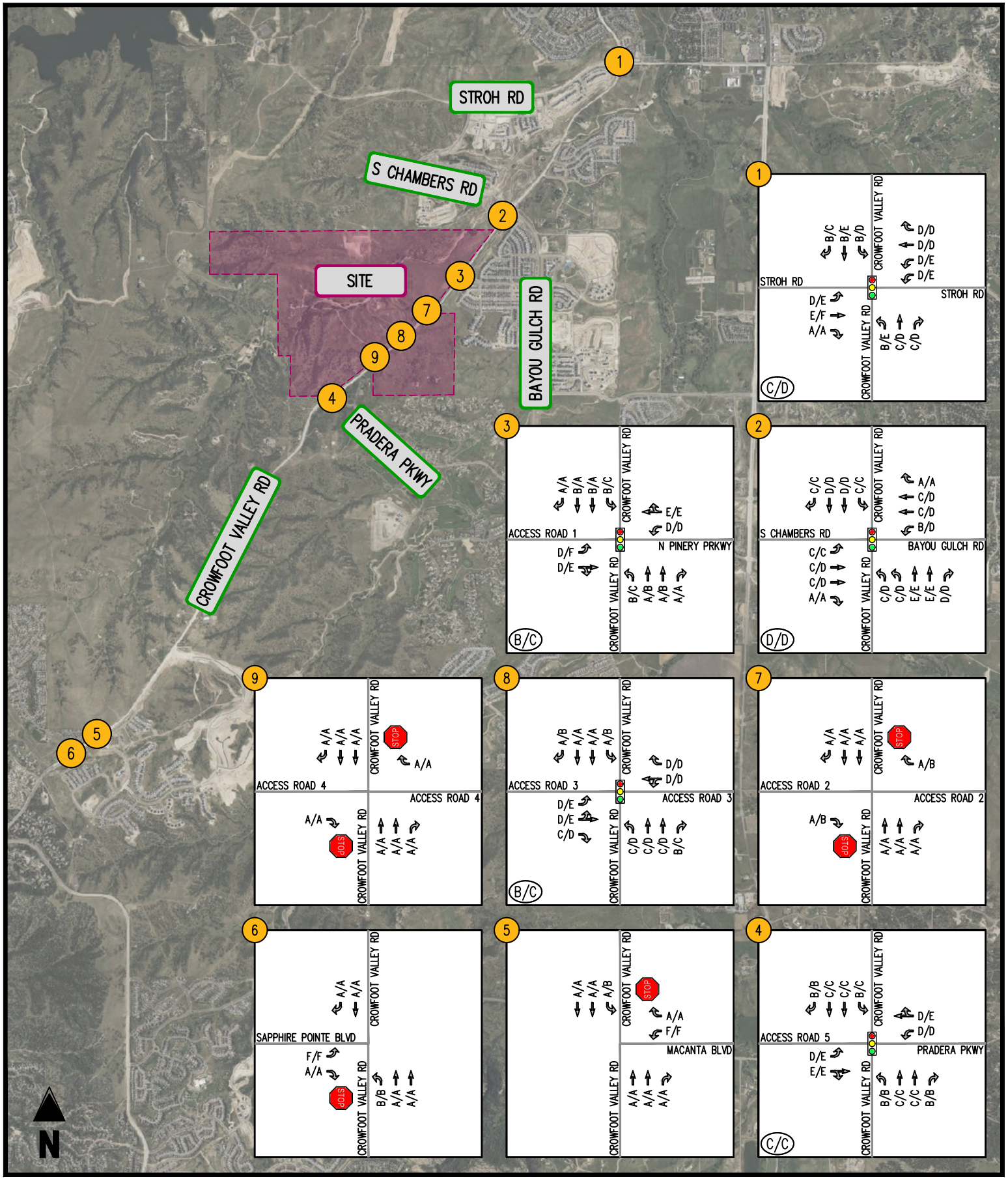


FIGURE 6-5
TOTAL FUTURE LEVELS OF SERVICE 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP STOP SIGN

YIELD SIGN

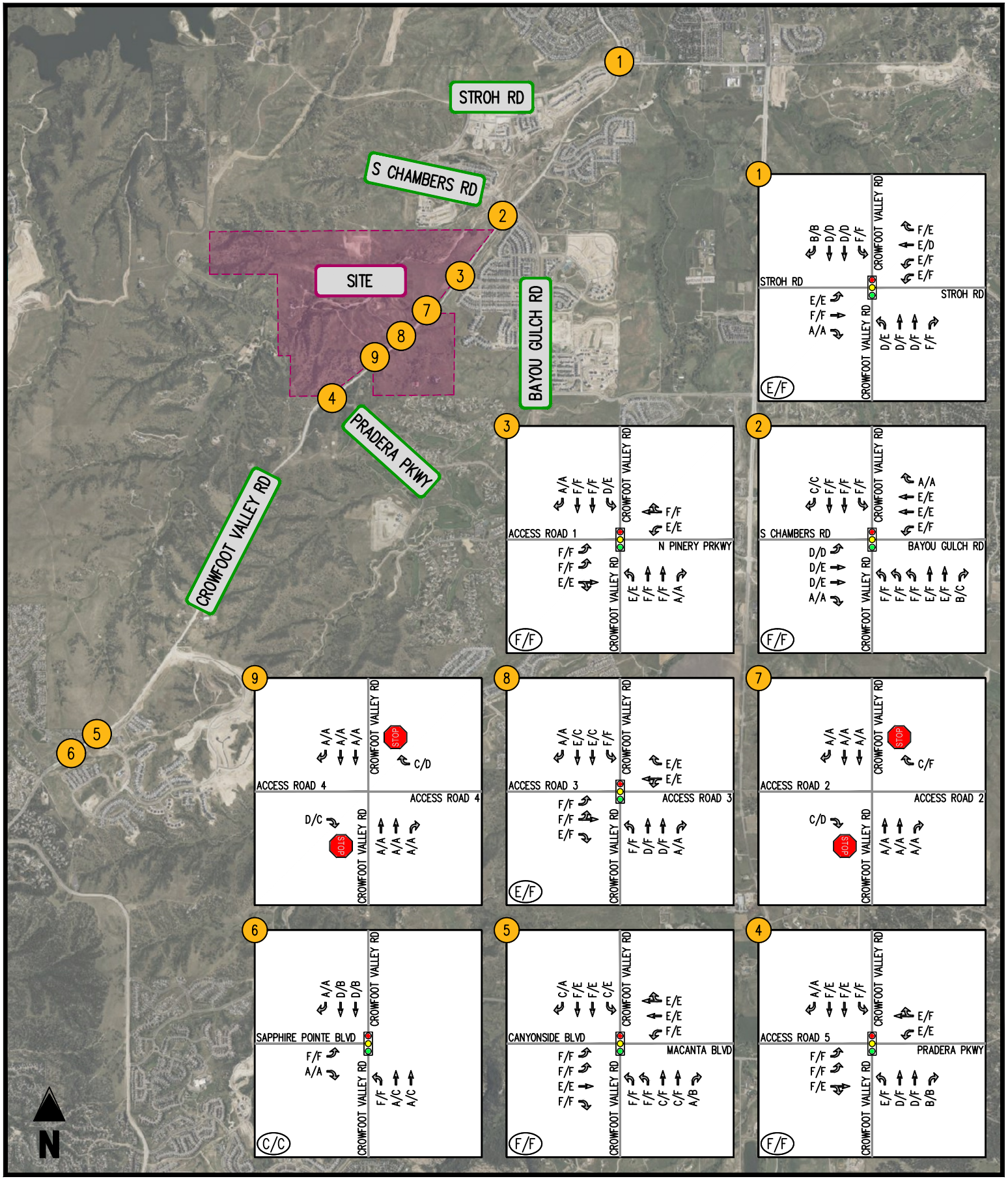


FIGURE 6-6
TOTAL FUTURE LEVELS OF SERVICE 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS

0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

MOVEMENT

SIGNALIZED INTERSECTION

STOP SIGN

YIELD SIGN

Table 6-1
Crowsnest - Castle Pines, CO
Total Future Intersection Level of Service Summary [1] [2]

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Background 2030 AM Peak Hour	Background 2030 PM Peak Hour	Background 2045 AM Peak Hour	Background 2045 PM Peak Hour	Phase 1 Total Future 2028 AM Peak Hour	Phase 1 Total Future 2028 PM Peak Hour	Phase 2 Total Future 2030 AM Peak Hour	Phase 2 Total Future 2030 PM Peak Hour	Phase 3 Total Future 2045 AM Peak Hour	Phase 3 Total Future 2045 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	C (30.9)	D (36.8)	C (32.4)	D (39.1)	E (62.4)	E (70.3)	-	-	-	-	-	-
		Stroh Rd	EBT	C (33.7)	D (40.8)	D (35.3)	D (43.5)	E (69.7)	F (85.0)	-	-	-	-	-	-
			EBR	C (30.3)	D (36.3)	C (31.7)	D (38.7)	E (61.2)	E (69.5)	-	-	-	-	-	-
			WBL	C (30.4)	D (35.4)	C (31.8)	D (37.6)	E (67.5)	F (119.0)	-	-	-	-	-	-
		Stroh Rd	WBT	C (25.8)	C (25.6)	C (26.9)	C (26.9)	D (49.0)	D (46.0)	-	-	-	-	-	-
			WBR	C (28.0)	C (28.0)	C (29.2)	C (29.4)	D (53.8)	D (51.9)	-	-	-	-	-	-
			NBL	B (17.3)	C (21.5)	B (17.7)	C (22.5)	D (38.9)	D (47.8)	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	C (21.9)	C (26.6)	C (22.6)	C (28.0)	F (414.8)	F (749.6)	-	-	-	-	-	-
			NBR	C (26.6)	C (33.3)	C (27.7)	D (35.4)	E (57.6)	F (107.2)	-	-	-	-	-	-
			SBL	B (14.8)	B (18.5)	B (15.3)	B (19.6)	E (61.1)	E (79.8)	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	B (16.4)	C (20.5)	B (16.9)	C (21.6)	F (340.0)	F (240.5)	-	-	-	-	-	-
			SBR	B (13.8)	B (17.1)	B (14.1)	B (17.9)	B (19.7)	C (26.4)	-	-	-	-	-	-
		Overall		**C (24.2)**	**C (28.9)**	**C (25.2)**	**C (30.6)**	**F (244.9)**	**F (339.6)**	-	-	-	-	-	-
	Phase 1 Improvements:		EBL	-	-	-	-	-	-	D (43.7)	D (52.4)	D (46.3)	E (60.8)	E (68.3)	E (69.8)
	- Dual westbound left turn lanes	Stroh Rd	EBT	-	-	-	-	-	-	E (59.0)	E (77.3)	E (67.2)	F (87.0)	F (130.9)	F (204.6)
	Phase 2 Improvements:		EBR	-	-	-	-	-	-	D (44.2)	E (66.6)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	- Channelization of eastbound right turn lane		WBL	-	-	-	-	-	-	D (41.1)	E (58.6)	D (43.7)	E (68.3)	E (74.0)	F (160.4)
	Phase 3 Improvements:	Stroh Rd	WBT	-	-	-	-	-	-	D (39.9)	D (40.5)	D (42.0)	D (45.1)	E (62.8)	D (50.4)
	- Two northbound and southbound through lanes		WBR	-	-	-	-	-	-	D (44.8)	D (44.5)	D (47.3)	D (49.4)	F (103.6)	E (59.8)
			NBL	-	-	-	-	-	-	B (13.4)	D (43.4)	B (13.9)	E (55.3)	D (35.6)	E (55.9)
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	C (21.9)	C (31.2)	C (23.5)	D (37.3)	D (45.7)	F (121.5)
			NBR	-	-	-	-	-	-	C (26.6)	D (40.2)	C (28.4)	D (50.5)	F (84.9)	F (102.6)
			SBL	-	-	-	-	-	-	B (15.2)	D (53.7)	B (19.3)	D (41.7)	F (120.9)	F (266.5)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	B (17.4)	D (53.8)	B (18.5)	E (59.8)	D (38.3)	D (49.7)
			SBR	-	-	-	-	-	-	B (12.9)	C (25.0)	B (13.3)	C (25.4)	B (16.9)	B (19.7)
		Overall		-	-	-	-	-	-	**C (29.2)**	**D (48.6)**	**C (30.9)**	**D (54.6)**	**E (60.8)**	**F (108.5)**
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL		EBL	C (25.9)	C (22.9)	C (28.3)	C (23.8)	E (58.2)	D (49.5)	-	-	-	-	-	-
		S Chambers Rd	EBTR	C (20.5)	C (31.6)	C (21.4)	C (33.2)	E (56.2)	F (144.3)	-	-	-	-	-	-
			WBL	B (18.8)	C (24.1)	B (19.6)	C (25.1)	D (43.7)	E (56.2)	-	-	-	-	-	-
		Bayou Gulch Rd	WBTR	D (43.1)	C (31.0)	D (49.1)	C (32.2)	F (381.3)	E (71.1)	-	-	-	-	-	-
			NBL	C (30.5)	B (17.9)	C (32.3)	B (18.6)	F (861.1)	F (967.2)	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	D (41.6)	C (29.6)	D (44.0)	C (31.0)	F (367.0)	F (677.0)	-	-	-	-	-	-
			NBR	C (30.0)	B (19.2)	C (31.5)	B (19.9)	C (31.0)	D (36.0)	-	-	-	-	-	-
			SBL	C (30.6)	B (18.8)	C (32.3)	B (19.7)	E (78.5)	F (97.0)	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	D (47.0)	C (23.9)	D (49.8)	C (24.9)	F (638.2)	F (423.2)	-	-	-	-	-	-
			SBR	C (34.0)	B (18.1)	D (35.7)	B (18.7)	D (35.8)	C (34.6)	-	-	-	-	-	-
		Overall		**D (39.0)**	**C (26.9)**	**D (42.4)**	**C (28.2)**	**F (476.0)**	**F (489.5)**	-	-	-	-	-	-
	Phase 1 Improvements:		EBL	-	-	-	-	-	-	C (33.0)	C (24.7)	C (20.1)	C (32.7)	D (52.5)	D (50.2)
	- Two northbound and southbound through lanes		EBT	-	-	-	-	-	-	D (35.2)	C (30.8)	C (22.3)	D (40.7)	D (52.6)	E (71.1)
	- Two eastbound and westbound through lanes		EBR	-	-	-	-	-	-	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	- Designated eastbound channelized right turn lane		WBL	-	-	-	-	-	-	C (31.7)	C (25.3)	B (19.5)	D (36.6)	E (66.8)	F (349.9)
	- Designated westbound channelized right turn lane	Bayou Gulch Rd	WBT	-	-	-	-	-	-	D (40.5)	C (27.5)	C (25.0)	D (36.5)	E (71.0)	E (55.5)
	- Dual northbound left turn lanes		WBR	-	-	-	-	-	-	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	Phase 3 Improvements:		NBL	-	-	-	-	-	-	B (14.1)	D (38.8)	C (34.7)	D (53.8)	F (307.3)	F (420.5)
	- Triple northbound left turn lanes	Crowfoot Valley Rd	NBT	-	-	-	-	-	-	C (30.8)	D (54.0)	E (55.4)	E (55.8)	E (78.4)	F (189.3)
			NBR	-	-	-	-	-	-	C (23.2)	D (38.7)	D (36.3)	D (39.3)	B (17.8)	C (28.3)
			SBL	-	-	-	-	-	-	B (15.0)	C (34.7)	C (33.7)	C (34.2)	F (240.6)	F (372.6)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	B (18.8)	D (47.9)	D (44.6)	D (48.6)	F (186.5)	F (263.6)
			SBR	-	-	-	-	-	-	B (15.9)	C (29.6)	C (33.1)	C (29.4)	C (26.6)	C (24.7)
		Overall		-	-	-	-	-	-	**C (26.2)**	**D (43.3)**	**D (40.4)**	**D (48.1)**	**F (150.6)**	**F (240.9)**
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP		WBL	C [22.0]	D [26.6]	C [23.3]	D [28.4]	F [4541 6.6]	F [75801.9]	-	-	-	-	-	-
		N Pinery Pkwy	WBR	B [12.3]	B [12.2]	B [12.6]	B [12.4]	F [613.6]	F [995.9]	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
			SBL	A [8.5]	A [8.9]	A [8.6]	A [9.0]	C [22.0]	F [70.6]	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
	Phase 1 Improvements:		EBL	-	-	-	-	-	-	D (37.6)	F (110.1)	D (41.5)	F (127.7)	F (240.1)	F (332.9)
	- Signalization	Access Road 1	EBTR	-	-	-	-	-	-	C (34.0)	E (61.3)	D (36.2)	E (73.6)	E (64.6)	E (67.9)
	- West Leg Addition		WBL	-	-	-	-	-	-	D (36.8)	D (39.3)	D (39.3)	D (45.5)	E (60.7)	E (67.1)
	- Northbound left turn lane addition	N Pinery Pkwy	WBTR	-	-	-	-	-	-	D (51.7)	E (65.9)	E (55.2)	E (77.2)	F (93.1)	F (87.1)
	- Southbound right turn lane addition		NBL	-	-	-	-	-	-	B (16.2)	C (23.1)	B (16.5)	C (23.1)	E (64.9)	E (73.7)
	- Two northbound & southbound through lanes	Crowfoot Valley Rd	NBT	-	-	-	-	-	-	C (21.5)	D (35.2)	A (1.3)	B (19.0)	F (138.3)	F (283.3)
	Phase 3 Improvements:		NBR	-	-	-	-	-	-	B (15.7)	A (3.6)	A (0.2)	A (1.7)	A (0.1)	A (2.7)
	- Dual eastbound left turn lanes		SBL	-	-	-	-	-	-	C (22.2)	C (24.5)	B (18.1)	C (22.8)	D (39.4)	E (63.4)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	A (8.8)	A (4.8)	B (16.7)	A (5.1)	F (202.9)	F (269.7)
			SBR	-	-	-	-	-	-	A (2.7)	A (1.1)	A (4.5)	A (0.5)	A (1.8)	A (2.1)
		Overall		-	-	-	-	-	-	**C (20.8)**	**C (29.0)**	**B (14.8)**	**C (24.6)**	**F (165.1)**	**F (252.0)**
4 Crowfoot Valley Rd/Pradera Pkwy	STOP		WBL	E [42.4]	D [34.4]	E [48.0]	E [38.6]	F [108451.3]	F [84002.4]	-	-	-	-	-	-
		Pradera Pkwy	WBR	B [11.4]	B [11.9]	B [11.6]	B [12.1]	F [120.2]	F [554.6]	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
			SBL	A [8.4]	A [8.5]	A [8.4]	A [8.6]	C [21.2]	E [56.2]	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
	Phase 1 Improvements:		EBL	-	-	-	-	-	-	D (38.9)	E (66.8)	D (41.5)	E (56.4)	F (127.3)	F (90.5)
	- Signalization	Access Road 5	EBTR	-	-	-	-	-	-	D (52.9)	E (65.9)	E (56.4)	E (62.5)	F (170.0)	E (72.2)
	- West Leg Addition		WBL	-	-	-	-	-	-	D (38.9)	D (54.8)	D (41.5)	D (53.9)	E (70.1)	E (58.0)
	- Northbound left turn lane addition	Pradera Pkwy	WBTR	-	-	-	-	-	-	D (46.9)	E (63.5)	D (50.9)	E (73.5)	E (69.8)	F (106.4)
	- Southbound right turn lane addition		NBL	-	-	-	-	-	-	B (14.6)	B (12.6)	B (16.0)	B (19.8)	E (72.5)	F (158.4)
	- Two northbound & southbound through lanes	Crowfoot Valley Rd	NBT	-	-	-	-	-	-	C (27.8)	C (25.2)	C (26.6)	C (28.5)	D (46.1)	F (209.4)
	Phase 3 Improvements:		NBR	-	-	-	-	-	-	B (12.1)	C (21.6)	B (11.0)	B (12.5)	B (10.8)	B (11.3)
	- Dual eastbound left turn lanes		SBL	-	-	-	-	-	-	B (13.4)	B (15.5)	B (14.4)	C (22.5)	F (106.2)	F (158.0)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	C (27.1)	C (24.2)	C (26.6)	C (22.0)	F (184.6)	E (79.5)
			SBR	-	-	-	-	-	-	B (11.0)	C (21.8)	B (10.1)	B (10.4)	A (3.9)	A (8.2)
		Overall		-	-	-	-	-	-	**C (29.2)**	**C (29.8)**	**C (29.1)**	**C (29.3)**	**F (118.6)**	**F (134.4)**
5 Crowfoot Valley Rd/Macanta Blvd	STOP		WBL	F [77.2]	F [57.4]	F [89.8]	F [66.3]	-	-	F [73.3]	F [135.6]	F [112.7]	F [247.8]	-	-
		Macanta Blvd	WBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			SBL	A [8.9]	A [9.3]	A [9.0]	A [9.4]	-	-	A [9.4]	B [11.0]	A [9.6]	B [11.7]	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
	Canyons TIS Improvements:		EBL	-	-	-	-	F (146.0)	F (353.3)	-	-	-	-	F (265.9)	F (217.9)
	- Signalization	Canyonside Blvd	EBT	-	-	-	-	D (51.2)	D (51.2)	-	-	-	-	E (59.8)	E (62.6)
	- West Leg Addition		EBR	-	-	-	-	F (146.8)	F (143.1)	-	-	-	-	F (132.3)	F (163.6)
	- Dual northbound left turn lane addition		WBL	-	-	-	-	D (50.6)	D (51.3)	-	-	-	-	F (100.0)	E (78.1)
	- Southbound right turn lane addition	Macanta Blvd	WBTR	-	-	-	-	E (58.6)	E (57.0)	-	-	-	-	E (70.4)	E (76.7)
	- Westbound through lane addition		NBL	-	-	-	-	F (171.3)	F (206.9)	-	-	-	-	F (256.9)	F (249.6)
		Crowfoot Valley Rd	NBT	-	-	-	-	C (26.6)	D (41.3)	-	-	-	-	C (30.4)	F (248.3)
			NBR	-	-	-	-	B (14.1)	B (14.5)	-	-	-	-	A (5.7)	B (10.8)
			SBL	-	-	-	-	C (23.2)	C (33.4)	-	-	-	-	C (29.1)	E (62.5)
		Crowfoot Valley Rd	SBT	-	-	-	-	F (115.0)	C (34.6)	-	-	-	-	F (182.5)	E (56.2)
			SBR	-	-	-	-	C (25.6)	B (16.1)	-	-	-	-	C (20.7)	A (3.5)
		Overall		-	-	-	-	**F (85.8)**	**F (96.0)**	-	-	-	-	**F (125.6)**	**F (154.8)**
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP		EBL	E [36.2]	F [66.8]	E [38.3]	F [72.3]	-	-	F [71.1]	F [219.0]	F [103.3]	F [336.7]	-	-
		Sapphire Pointe Blvd	EBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBL	A [9.8]	B [10.8]	A [9.9]	B [10.9]	-	-	B [11.0]	B [13.3]	B [11.7]	B [14.4]	-	-
			NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
	Canyons TIS Improvements:		EBL	-	-	-	-	E (77.8)	E (76.9)	-	-	-	-	F (91.8)	F (96.1)
	- Signalization	Sapphire Pointe Blvd	EBR	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	A (0.0)	A (0.0)
	- Two southbound through lanes		NBL	-	-	-	-	C (21.4)	D (51.2)	-	-	-	-	F (88.4)	F (130.1)
		Crowfoot Valley Rd	NBT	-	-	-	-	A (4.1)	A (5.5)	-	-	-	-	A (4.7)	C (20.1)
			SBT	-	-	-	-	A (0.5)	A (1.0)	-	-	-	-	D (44.2)	B (10.7)
		Crowfoot Valley Rd	SBR	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	A (0.0)	A (0.0)
		Overall		-	-	-	-	**A (3.6)**	**A (7.9)**	-	-	-	-	**C (29.3)**	**C (24.2)**
7 Crowfoot Valley Rd/Access Road 2	STOP	Access Road 2	EBR	-	-	-	-	-	-	A [9.3]	A [9.9]	-	-	-	-
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
			SBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
		Crowfoot Valley Rd	SBR	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
	Phase 2 Improvements:	Access Road 2	EBR	-	-	-	-	-	-	-	-	A [9.5]	B [10.8]	C [24.0]	D [27.3]
	- East leg addition	Access Road 2	WBR	-	-	-	-	-	-	-	-	A [10.0]	B [10.3]	C [23.5]	F [61.8]
	- Northbound right turn lane addition	Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			SBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
8 Crowfoot Valley Rd/Access Road 3	SIGNAL	Access Road 3	EBL	-	-	-	-	-	-	D (47.0)	E (56.6)	-	-	-	-
			EBR	-	-	-	-	-	-	C (34.5)	D (41.8)	-	-	-	-
		Crowfoot Valley Rd	NBL	-	-	-	-	-	-	A (4.7)	B (10.7)	-	-	-	-
			NBT	-	-	-	-	-	-	A (4.7)	A (9.2)	-	-	-	-
			SBT	-	-	-	-	-	-	A (0.4)	A (0.5)	-	-	-	-
		Crowfoot Valley Rd	SBR	-	-	-	-	-	-	A (0.4)	A (6.6)	-	-	-	-
		Overall		-	-	-	-	-	-	**A (9.0)**	**B (16.3)**	-	-	-	-
	Phase 2 Improvements:		EBLT	-	-	-	-	-	-	-	-	D (45.8)	E (57.4)	F (219.8)	F (215.2)
	- East Leg Addition	Access Road 3	EBR	-	-	-	-	-	-	-	-	C (34.7)	D (52.2)	E (62.1)	F (170.4)
	- Eastbound left turn lane addition		WBLT	-	-	-	-	-	-	-	-	D (37.4)	D (44.2)	E (67.6)	E (62.5)
	- Northbound right turn lane addition	Access Road 3	WBR	-	-	-	-	-	-	-	-	D (36.5)	D (42.7)	E (66.0)	E (60.3)
	- Southbound left turn lane addition		NBL	-	-	-	-	-	-	-	-	C (23.0)	D (46.3)	F (129.5)	F (165.2)
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	C (26.8)	D (44.6)	D (37.9)	F (189.5)
			NBR	-	-	-	-	-	-	-	-	B (19.8)	C (32.5)	A (4.6)	A (8.9)
			SBL	-	-	-	-	-	-	-	-	A (9.4)	B (19.7)	F (128.3)	F (258.5)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	-	A (0.4)	A (4.8)	E (56.5)	C (33.1)
			SBR	-	-	-	-	-	-	-	-	A (0.5)	B (12.6)	A (0.3)	A (2.5)
		Overall		-	-	-	-	-	-	-	-	**B (19.0)**	**C (31.0)**	**E (56.3)**	**F (122.4)**
9 Crowfoot Valley Rd/Access Road 4	STOP	Access Road 4	EBR	-	-	-	-	-	-	A [9.4]	A [9.8]	-	-	-	-
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
			SBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
		Crowfoot Valley Rd	SBR	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
	Phase 2 Improvements:	Access Road 4	EBR	-	-	-	-	-	-	-	-	A [9.6]	A [10.0]	D [25.9]	C [20.4]
	- East Leg Addition	Access Road 4	WBR	-	-	-	-	-	-	-	-	A [9.4]	A [9.8]	C [17.4]	D [33.5]
	- Northbound right turn lane addition	Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			SBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 6-2
Crowsnest - Castle Pines, CO
Total Future Intersection Queueing Summary [1]

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Background 2028 AM Peak Hour	Background 2028 PM Peak Hour	Background 2030 AM Peak Hour	Background 2030 PM Peak Hour	Background 2045 AM Peak Hour	Background 2045 PM Peak Hour	Phase 1 Total Future 2028 AM Peak Hour	Phase 1 Total Future 2028 PM Peak Hour	Phase 2 Total Future 2030 AM Peak Hour	Phase 2 Total Future 2030 PM Peak Hour	Phase 3 Total Future 2045 AM Peak Hour	Phase 3 Total Future 2045 PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL		EBL	225	69	66	73	69	116	99	-	-	-	-	-	-
		Stroh Rd	EBT	-	157	195	168	205	279	312	-	-	-	-	-	-
			EBR	350	0	0	0	0	0	0	-	-	-	-	-	-
			WBL	350	299	465	326	501	621	1097	-	-	-	-	-	-
		Stroh Rd	WBT	-	162	95	175	101	301	169	-	-	-	-	-	-
			WBR	600	58	55	61	57	81	78	-	-	-	-	-	-
			NBL	250	13	14	15	16	25	21	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	-	304	338	330	355	2812	3525	-	-	-	-	-	-
			NBR	500	77	87	79	89	543	671	-	-	-	-	-	-
			SBL	450	151	192	163	201	389	434	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	-	252	330	271	348	3158	2354	-	-	-	-	-	-
			SBR	-	0	0	0	0	0	0	-	-	-	-	-	-
Phase 1 Improvements:	SIGNAL		EBL	225	-	-	-	-	-	-	57	59	63	67	106	93
- Dual westbound left turn lanes		Stroh Rd	EBT	-	-	-	-	-	-	-	151	202	171	223	322	393
Phase 2 Improvements:			EBR	350	-	-	-	-	-	-	0	0	0	0	0	0
- Channelization of eastbound right turn lane			WBL	800	-	-	-	-	-	-	146	311	166	406	360	757
Phase 3 Improvements:		Stroh Rd	WBT	-	-	-	-	-	-	-	136	92	146	106	287	151
- Two northbound and southbound through lanes			WBR	600	-	-	-	-	-	-	55	54	58	61	137	144
			NBL	250	-	-	-	-	-	-	12	11	7	67	67	42
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	432	86	471	724	406	291
			NBR	500	-	-	-	-	-	-	0	68	387	299	36	10
			SBL	550	-	-	-	-	-	-	104	148	111	223	439	542
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	285	544	327	773	932	1080
			SBR	-	-	-	-	-	-	-	0	0	0	0	0	0
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL		EBL	550	48	71	51	77	78	114	-	-	-	-	-	-
		S Chambers Rd	EBTR	-	258	867	278	959	2275	2949	-	-	-	-	-	-
			WBL	300	24	18	25	20	232	141	-	-	-	-	-	-
		Bayou Gulch Rd	WBTR	-	976	336	1067	364	1924	602	-	-	-	-	-	-
			NBL	500	174	96	181	98	1935	2082	-	-	-	-	-	-
		Crowfoot Valley Rd	NBT	-	426	512	445	540	3016	3938	-	-	-	-	-	-
			NBR	400	0	0	0	0	69	110	-	-	-	-	-	-
			SBL	550	117	146	122	149	268	465	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	-	439	404	462	424	3718	2780	-	-	-	-	-	-
			SBR	350	13	0	16	1	35	13	-	-	-	-	-	-
Phase 1 Improvements:	SIGNAL		EBL	550	-	-	-	-	-	-	38	60	35	77	80	115
- Two northbound and southbound through lanes		S Chambers Rd	EBT	-	-	-	-	-	-	-	62	182	58	232	127	373
- Two eastbound and westbound through lanes			EBR	300	-	-	-	-	-	-	0	0	0	0	0	26
- Designated eastbound channelized right turn lane			WBL	500	-	-	-	-	-	-	43	79	41	119	247	462
- Designated westbound channelized right turn lane		Bayou Gulch Rd	WBT	-	-	-	-	-	-	-	184	75	174	94	412	144
			WBR	300	-	-	-	-	-	-	0	0	0	0	0	0
			NBL	500	-	-	-	-	-	-	54	156	195	213	473	434
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	214	328	436	457	920	926
			NBR	400	-	-	-	-	-	-	3	8	8	32	22	39
			SBL	550	-	-	-	-	-	-	72	106	121	139	252	342
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	150	520	310	694	1587	1821
			SBR	350	-	-	-	-	-	-	0	0	0	0	0	0
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP		WBL	-	25	15	28	15	285	148	-	-	-	-	-	-
		N Pinery Pkwy	WBR	215	20	10	20	13	305	220	-	-	-	-	-	-
			NBT	-	0	0	0	0	0	0	-	-	-	-	-	-
		Crowfoot Valley Rd	NBR	440	0	0	0	0	0	0	-	-	-	-	-	-
			SBL	500	3	8	3	8	10	95	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	-	0	0	0	0	0	0	-	-	-	-	-	-
Phase 1 Improvements:	SIGNAL		EBL	675	-	-	-	-	-	-	233	579	247	655	428	513
- Signalization		Access Road 1	EBTR	-	-	-	-	-	-	-	0	0	0	0	30	0
- West Leg Addition			WBL	-	-	-	-	-	-	-	84	88	87	99	129	106
- Northbound left turn lane addition		N Pinery Pkwy	WBTR	215	-	-	-	-	-	-	3	0	33	0	95	57
- Southbound right turn lane addition			NBL	300	-	-	-	-	-	-	9	28	15	74	21	104
- Two northbound & southbound through lanes		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	77	163	186	244	2110	1672
Phase 3 Improvements:			NBR	440	-	-	-	-	-	-	0	0	6	19	0	4
- Dual eastbound left turn lanes			SBL	500	-	-	-	-	-	-	7	18	5	19	5	34
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	46	123	55	163	1661	1612
			SBR	300	-	-	-	-	-	-	0	0	0	0	7	0
4 Crowfoot Valley Rd/Pradera Pkwy	STOP		WBL	-	108	70	118	78	608	478	-	-	-	-	-	-
		Pradera Pkwy	WBR	250	5	5	5	5	55	123	-	-	-	-	-	-
			NBT	-	0	0	0	0	0	0	-	-	-	-	-	-
		Crowfoot Valley Rd	NBR	880	0	0	0	0	0	0	-	-	-	-	-	-
			SBL	450	3	3	3	3	8	20	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	-	0	0	0	0	0	0	-	-	-	-	-	-
Phase 1 Improvements:	SIGNAL		EBL	400	-	-	-	-	-	-	137	126	146	142	350	217
- Signalization		Access Road 5	EBTR	-	-	-	-	-	-	-	0	0	0	0	257	93
- West Leg Addition			WBL	-	-	-	-	-	-	-	146	151	155	171	225	179
- Northbound left turn lane addition		Pradera Pkwy	WBTR	250	-	-	-	-	-	-	0	0	0	0	84	226
- Southbound right turn lane addition			NBL	300	-	-	-	-	-	-	17	34	17	38	38	99
- Two northbound & southbound through lanes		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	146	181	163	279	1275	1353
Phase 3 Improvements:			NBR	880	-	-	-	-	-	-	0	25	2	30	10	1
- Dual eastbound left turn lanes			SBL	450	-	-	-	-	-	-	5	11	26	14	37	70
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	25	45	95	133	1802	1363
			SBR	300	-	-	-	-	-	-	0	0	0	0	30	65
5 Crowfoot Valley Rd/Macanta Blvd	STOP		WBL	265	138	90	150	100	-	-	135	150	170	193	-	-
		Macanta Blvd	WBR	-	0	0	0	0	-	-	0	0	0	0	-	-
			NBT	-	0	0	0	0	-	-	0	0	0	0	-	-
		Crowfoot Valley Rd	NBR	575	0	0	0	0	-	-	0	0	0	0	-	-
			SBL	575	3	3	3	3	-	-	3	3	3	3	-	-
		Crowfoot Valley Rd	SBT	-	0	0	0	0	-	-	0	0	0	0	-	-
Canyons TIS Improvements:	SIGNAL		EBL	200	-	-	-	-	427	635	-	-	-	-	552	726
- Signalization		Canyonside Blvd	EBT	-	-	-	-	-	112	145	-	-	-	-	134	169
- West Leg Addition			EBR	200	-	-	-	-	514	334	-	-	-	-	562	529
- Dual northbound left turn lane addition		Macanta Blvd	WBL	300	-	-	-	-	198	117	-	-	-	-	225	208
- Southbound right turn lane addition			WBTR	-	-	-	-	-	100	58	-	-	-	-	117	72
- Westbound through lane addition			NBL	300	-	-	-	-	374	262	-	-	-	-	453	299
		Crowfoot Valley Rd	NBT	-	-	-	-	-	426	1158	-	-	-	-	1004	1874
			NBR	575	-	-	-	-	0	11	-	-	-	-	1	17
			SBL	575	-	-	-	-	26	40	-	-	-	-	3	11
		Crowfoot Valley Rd	SBT	-	-	-	-	-	1168	848	-	-	-	-	1167	1098
			SBR	300	-	-	-	-	486	179	-	-	-	-	197	10
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP		EBL	265	33	28	35	30	-	-	58	58	75	70	-	-
		Sapphire Pointe Blvd	EBR	-	0	0	0	0	-	-	0	0	0	0	-	-
			NBL	600	8	30	10	30	-	-	10	43	13	48	-	-
		Crowfoot Valley Rd	NBT	-	0	0	0	0	-	-	0	0	0	0	-	-
			SBT	-	0	0	0	0	-	-	0	0	0	0	-	-
		Crowfoot Valley Rd	SBR	250	0	0	0	0	-	-	0	0	0	0	-	-
Canyons TIS Improvements:	SIGNAL		EBL	265	-	-	-	-	82	47	-	-	-	-	100	56
- Signalization		Sapphire Pointe Blvd	EBR	-	-	-	-	-	431	73	-	-	-	-	423	81
- Two southbound through lanes			NBL	700	-	-	-	-	236	530	-	-	-	-	196	681
		Crowfoot Valley Rd	NBT	-	-	-	-	-	578	808	-	-	-	-	684	2022
			SBT	-	-	-	-	-	1052	1025	-	-	-	-	236	1493
		Crowfoot Valley Rd	SBR	250	-	-	-	-	0	1	-	-	-	-	0	1
7 Crowfoot Valley Rd/Access Road 2	STOP	Access Road 2	EBR	-	-	-	-	-	-	-	3	3	-	-	-	-
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	0	0	-	-	-	-
			NBT	-	-	-	-	-	-	-	0	0	-	-	-	-
		Crowfoot Valley Rd	SBR	300	-	-	-	-	-	-	0	0	-	-	-	-
Phase 2 Improvements:	STOP	Access Road 2	EBR	-	-	-	-	-	-	-	-	-	5	3	15	13
- East leg addition		Access Road 2	WBR	-	-	-	-	-	-	-	-	-	10	8	33	60
- Northbound right turn lane addition		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			NBR	300	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			SBR	300	-	-	-	-	-	-	-	-	0	0	0	0
8 Crowfoot Valley Rd/Site Access	SIGNAL	Access Road 3	EBL	-	-	-	-	-	-	-	231	401	-	-	-	-
			EBR	-	-	-	-	-	-	-	20	57	-	-	-	-
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	29	142	-	-	-	-
			NBT	-	-	-	-	-	-	-	72	229	-	-	-	-
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	50	182	-	-	-	-
			SBR	300	-	-	-	-	-	-	1	79	-	-	-	-
Phase 2 Improvements:	SIGNAL		EBL	-	-	-	-	-	-	-	-	-	150	264	332	463
Phase 2 Improvements:		Access Road 3	EBLT	-	-	-	-	-	-	-	-	-	150	264	332	463
- East Leg Addition			EBR	-	-	-	-	-	-	-	-	-	0	65	0	307
Phase 2 Improvements:		Access Road 3	WBLT	-	-	-	-	-	-	-	-	-	118	101	266	200
- Northbound right turn lane addition			WBR	-	-	-	-	-	-	-	-	-	28	21	73	36
- Southbound left turn lane addition			NBL	300	-	-	-	-	-	-	-	-	40	218	56	185
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	-	125	381	87	1328
			NBR	300	-	-	-	-	-	-	-	-	0	5	0	0
			SBL	300	-	-	-	-	-	-	-	-	21	139	34	180
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	-	-	68	185	54	33
			SBR	300	-	-	-	-	-	-	-	-	1	35	0	1
9 Crowfoot Valley Rd/Access Road 4	STOP	Access Road 4	EBR	-	-	-	-	-	-	-	10	13	-	-	-	-
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	0	0	-	-	-	-
			SBT	-	-	-	-	-	-	-	0	0	-	-	-	-
		Crowfoot Valley Rd	SBR	300	-	-	-	-	-	-	0	0	-	-	-	-
Phase 2 Improvements:	STOP	Access Road 4	EBR	-	-	-	-	-	-	-	-	-	10	13	40	38
- East Leg Addition		Access Road 4	WBR	-	-	-	-	-	-	-	-	-	8	5	18	28
- Northbound right turn lane addition		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			NBR	300	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			SBR	300	-	-	-	-	-	-	-	-	0	0	0	0

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

Table 6-3
Crowsnest - Castle Pines, CO
Recommended Improvements Summary

Improvement Description and Location	Phase		
	Phase 1	Phase 2	Phase 3
1. Crowfoot Valley Rd/Stroh Rd			
Dual westbound left turn lanes	●		
Channelization of eastbound right turn lane		●	
Two northbound through lanes			●
Two southbound through lanes			●
2. Crowfoot Valley Rd/S Chambers Rd			
Two northbound through lanes	●		
Two southbound through lanes	●		
Two eastbound through lanes	●		
Two westbound through lanes	●		
Designated eastbound channelized right turn lane	●		
Designated westbound channelized right turn lane	●		
Dual northbound left turn lanes	●		
Triple northbound left turn lanes			●
3. Crowfoot Valley Rd/N Pinery Pkwy			
Signalization	●		
West leg addition (left turn lane & through/right turn lane)	●		
Northbound left turn lane	●		
Southbound right turn lane	●		
Two northbound through lanes	●		
Two southbound through lanes	●		
Dual eastbound left turn lanes			●
4. Crowfoot Valley Rd/Pradera Pkwy			
Signalization	●		
West leg addition (left turn lane & through/right turn lane)	●		
Northbound left turn lane	●		
Southbound right turn lane	●		
Two northbound through lanes	●		
Two southbound through lanes	●		
Dual eastbound left turn lanes			●
5. Crowfoot Valley Rd/Macanta Blvd			
Two southbound through lanes	●		
Signalization			●
West leg addition (dual left turns, one through lane, and one right turn lane)			●
Dual northbound left turn lane			●
Southbound right turn lane			●
Westbound through lane addition			●
6. Crowfoot Valley Rd/Sapphire Pointe Blvd			
Signalization			●
Two southbound through lanes			●
7. Crowfoot Valley Rd/Access Road 2			
West leg addition (right-out only)	●		
Two northbound through lanes	●		
Two southbound through lanes	●		
Southbound right turn lane	●		
East leg addition (right-out only)		●	
Northbound right turn lane		●	
8. Crowfoot Valley Rd/Access Road 3			
Signalization	●		
West leg addition (left turn lane & right turn lane)	●		
Two northbound through lanes	●		
Two southbound through lanes	●		
Northbound left turn lane	●		
Southbound right turn lane	●		
East leg addition (left/through lane & right turn lane)		●	
Northbound right turn lane		●	
Southbound left turn lane		●	
9. Crowfoot Valley Rd/Access Road 4			
West leg addition (right-out only)	●		
Two northbound through lanes	●		
Two southbound through lanes	●		
Southbound right turn lane	●		
East leg addition (right-out only)		●	
Northbound right turn lane		●	

● Improvements that will be provided by Applicant
● Improvements that will be provided by others

VII. Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours. Existing queues remain within their respective storage lengths with the exception of the westbound left turn movement at the Crowfoot Valley Rd/Stroh Rd intersection which exceeds its queue during the PM peak hour.

- Under background future conditions, without the development of the subject site, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS "D" or better during the 2028 and 2030 weekday AM and PM peak hours. During 2045 conditions, the signalized intersections are expected to operate at LOS "F" during weekday AM and PM peak hours with the exception of the Crowfoot Valley Rd/Sapphire Pointe Blvd intersection which is expected to operate at LOS "A" during the 2045 peak hours. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain within their respective storage lengths with the exception of the following:
    - Westbound left movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2028 PM, 2030 PM, and 2045 AM and PM peak hours,
    - Northbound right movement at Crowfoot Valley Rd/Stroh Rd intersection during the 2045 AM and PM peak hours,
    - Westbound right movement at Crowfoot Valley Rd/Pinery Pkwy intersection during the 2045 AM and PM peak hours,
    - Eastbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
    - Eastbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM and PM peak hours,
    - Northbound left movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour, and
    - Southbound right movement at Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 AM peak hour

- The proposed site development would generate, upon completion and full occupancy:

  Phase 1 (2028):
    - 1,439 net new weekday AM peak hour vehicle trips,
    - 2,617 net new weekday PM peak hour vehicle trips, and
    - 28,401 net new weekday daily trips

  Phase 1+2 (2030):
    - 1,890 net new weekday AM peak hour vehicle trips,
    - 3,217 net new weekday PM peak hour vehicle trips, and
    - 34,258 net new weekday daily trips

Phase 1+2+3 (2045):

- 2,674 net new weekday AM peak hour vehicle trips,
- 4,258 net new weekday PM peak hour vehicle trips, and
- 44,435 net new weekday daily trips

- Under total future conditions, with the implemented improvements studied herein, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the weekday AM and PM peak hours with the exception of the following:
  - Crowfoot Valley Rd/Stroh Rd intersection which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the 2045 PM peak hour,
  - Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/N Pinery Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/Pradera Pkwy intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours,
  - Crowfoot Valley Rd/Macanta Blvd intersection which is expected to operate at LOS “F” during the 2045 AM and PM peak hours, and
  - Crowfoot Valley Rd/Access Road 3 which is expected to operate at LOS “E” during the 2045 AM peak hour and LOS “F” during the PM peak hour.

  The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain within their respective storage lengths with the exception of the eastbound left, eastbound right, and northbound left movements at the Crowfoot Valley Rd/Macanta Blvd intersection during the 2045 peak hours, consistent with background conditions.

- Per discussions with the reviewer, the effort to estimate the background traffic related exclusively to the regional traffic pattern shift (expected with the Canyonside Boulevard connection to Crowfoot Valley Road in 2040) likely results in double counting for some of the regional growth from developments and some of the Crowsnest site generated trips. This double counting likely yields higher peak hour volumes which results in a more conservative analysis of the traffic operations. Considering the highly conservative nature of this analysis this TIS still provides an estimate of the incremental impact of site-generated trips traveling within the study area roadway network. The recommendations in this TIS remain relevant for the Principal Arterial classification and related cross section, intersection spacing, and type of intersection control. Refinement of the future background traffic estimates are encouraged for subsequent TIS' that will be prepared as the site development effort progresses. The maximum amount of development permitted may be determined with regard to the ability of the study area intersections to meet the City's standards for peak hour traffic operations at time of site plan and refined analysis.

Recommendations

A Recommended Improvements Summary can be found in Table 6-3. These improvements are listed below and should be evaluated at site plan for further refinement. Intersection spacing and road design should adhere to the applicable design standards. Specifically, the full movement signalized roadway intersections should be spaced at ½ mile spacing minimum. Additional partial movement access should be evaluated at time of site plan when specific internal roadway layouts and uses are known.

Study intersections in the long range (2040/2045) study years are expected to reach or exceed capacity if the redistribution of traffic occurs consistent with the background FHU study (Canyons Improvements). As these improvements, growth, and development occur, study updates should be undertaken to ensure appropriate capacity improvements are identified and implemented.

Phase 1 Improvements (2028)

Crowfoot Valley Road/Stroh Rd

- Dual westbound left turn lanes

Crowfoot Valley Road/S Chambers Rd

- Two northbound through lanes
- Two southbound through lanes
- Two eastbound through lanes
- Two westbound through lanes
- Designated eastbound channelized right turn lane
- Designated westbound channelized right turn lane
- Dual northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Pradera Pkwy

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Macanta Blvd

- Two southbound through lanes

The addition of the proposed intersections including:

- Crowfoot Valley Rd/Access Road 2
- Crowfoot Valley Rd/Access Road 3
- Crowfoot Valley Rd/Access Road 4

The buildout of the full four-lane cross section along the length of the annexation

Phase 2 Improvements (2030)

Crowfoot Valley Road/Stroh Rd
- Channelization of eastbound right turn lane

Crowfoot Valley Road/Access Road 2
- East leg addition (right-out only)
- Northbound right turn lane

Crowfoot Valley Road/Access Road 3
- East leg addition (left turn lane & right turn lane)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 4
- East leg addition (right-out only)
- Northbound right turn lane

Phase 3 Improvements (2045)

Crowfoot Valley Road/Stroh Rd
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/S Chambers Rd
- Triple northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway
- Dual eastbound left turn lanes

Crowfoot Valley Road/Pradera Parkway
- Dual eastbound left turn lanes

Canyons Improvements (2040)

The following improvements were shown in the Canyons TIS and would be constructed by 2040:

Crowfoot Valley Road/Macanta Blvd
- Signalization
- West leg addition (dual left turn lanes, one through lane, and one right turn lane)
- Dual northbound left turn lane
- Southbound right turn lane
- Westbound through lane addition

Crowfoot Valley Road/Sapphire Pointe Blvd
- Signalization
- Two southbound through lanes

APPENDIX A – Conceptual Site Plan

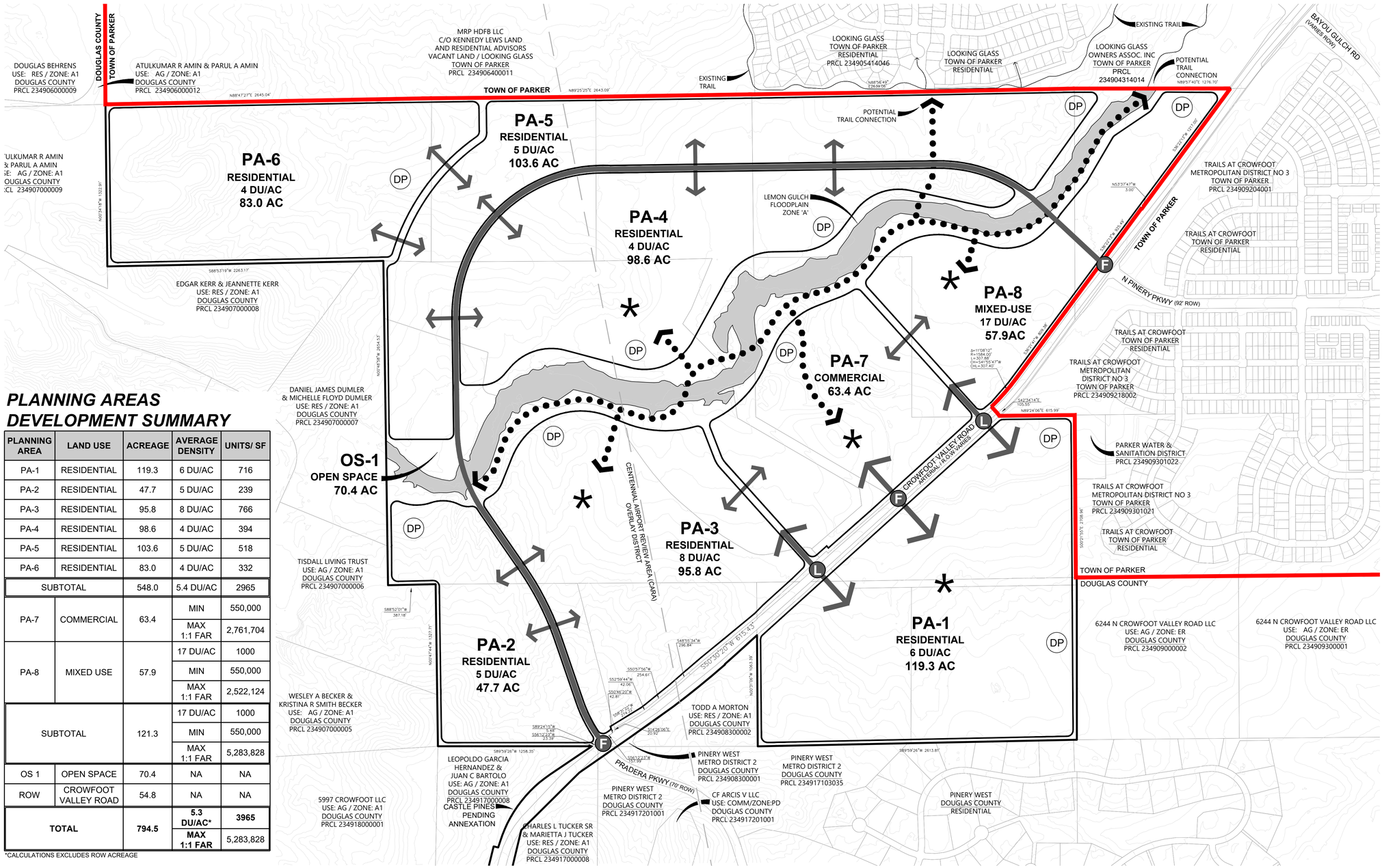
RPD-2025-001

CROWSNEST PLANNED DEVELOPMENT

CASTLE PINES, COLORADO

LOCATED IN SECTION 7, 8, 9, 17, 18 & 19, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
CITY OF CASTLE PINES, COUNTY OF DOUGLAS, STATE OF COLORADO
794.506 ACRES ~ 3,965 DWELLING UNITS / MIN. 550,000 SF COMMERCIAL

PLANNED DEVELOPMENT (PD) PLAN

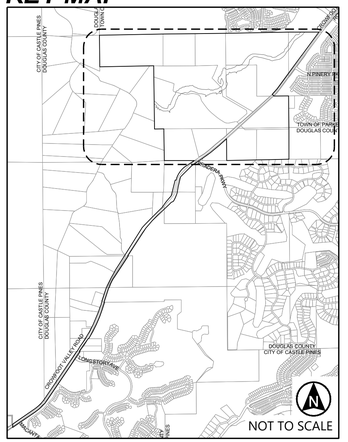


PLANNING AREAS DEVELOPMENT SUMMARY

PLANNING AREA	LAND USE	ACREAGE	AVERAGE DENSITY	UNITS/ SF
PA-1	RESIDENTIAL	119.3	6 DU/AC	716
PA-2	RESIDENTIAL	47.7	5 DU/AC	239
PA-3	RESIDENTIAL	95.8	8 DU/AC	766
PA-4	RESIDENTIAL	98.6	4 DU/AC	394
PA-5	RESIDENTIAL	103.6	5 DU/AC	518
PA-6	RESIDENTIAL	83.0	4 DU/AC	332
SUBTOTAL		548.0	5.4 DU/AC	2965
PA-7	COMMERCIAL	63.4	MIN	550,000
			MAX 1:1 FAR	2,761,704
PA-8	MIXED USE	57.9	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	2,522,124
SUBTOTAL		121.3	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	5,283,828
OS 1	OPEN SPACE	70.4	NA	NA
ROW	CROWFOOT VALLEY ROAD	54.8	NA	NA
TOTAL		**794.5**	**5.3 DU/AC***	**3965**
			MAX 1:1 FAR	5,283,828

*CALCULATIONS EXCLUDES ROW ACREAGE

KEY MAP



LEGEND

- PROPERTY LINE
- PLANNING AREA BOUNDARY
- CENTENNIAL AIRPORT REVIEW AREA (CARA) OVERLAY DISTRICT
- MUNICIPAL BOUNDARY
- CONCEPTUAL ROADWAY
- CONCEPTUAL ACCESS POINTS
- F — CONCEPTUAL FULL ACCESS
- L — CONCEPTUAL LIMITED ACCESS RIGHT -IN/RIGHT-OUT
- CONCEPTUAL TRAIL
- * — PARK / PUBLIC OUTDOOR SPACE
- DP — STORMWATER DETENTION
- FLOODPLAIN ZONE 'A'
- PA — PLANNING AREA
- OS — OPEN SPACE

NOTE: ADJACENT PARCEL BOUNDARIES OUTSIDE OF THE PD ARE FOR REFERENCE ONLY

1" = 400'-0"

LJA

Planning & Landscape Architecture

Land & Master Planning
Land Use/Feasibility Studies
Sustainable Design
Urban Design
Landscape Architecture

1765 West 121st Ave. Suite 300
Westminster, CO 80234
P 303.421.4224

No.	Rev. Date:
1	10/31/2025
2	01/14/2026
3	02/09/2026
4	02/17/2026
5	
6	

Crowsnest PD
Castle Pine, Colorado

PD PLAN/
PLANNING AREA
TABLE

Sheet: 7 of 8

PROJECT # 4080-001

APPENDIX B – Base Assumptions Form

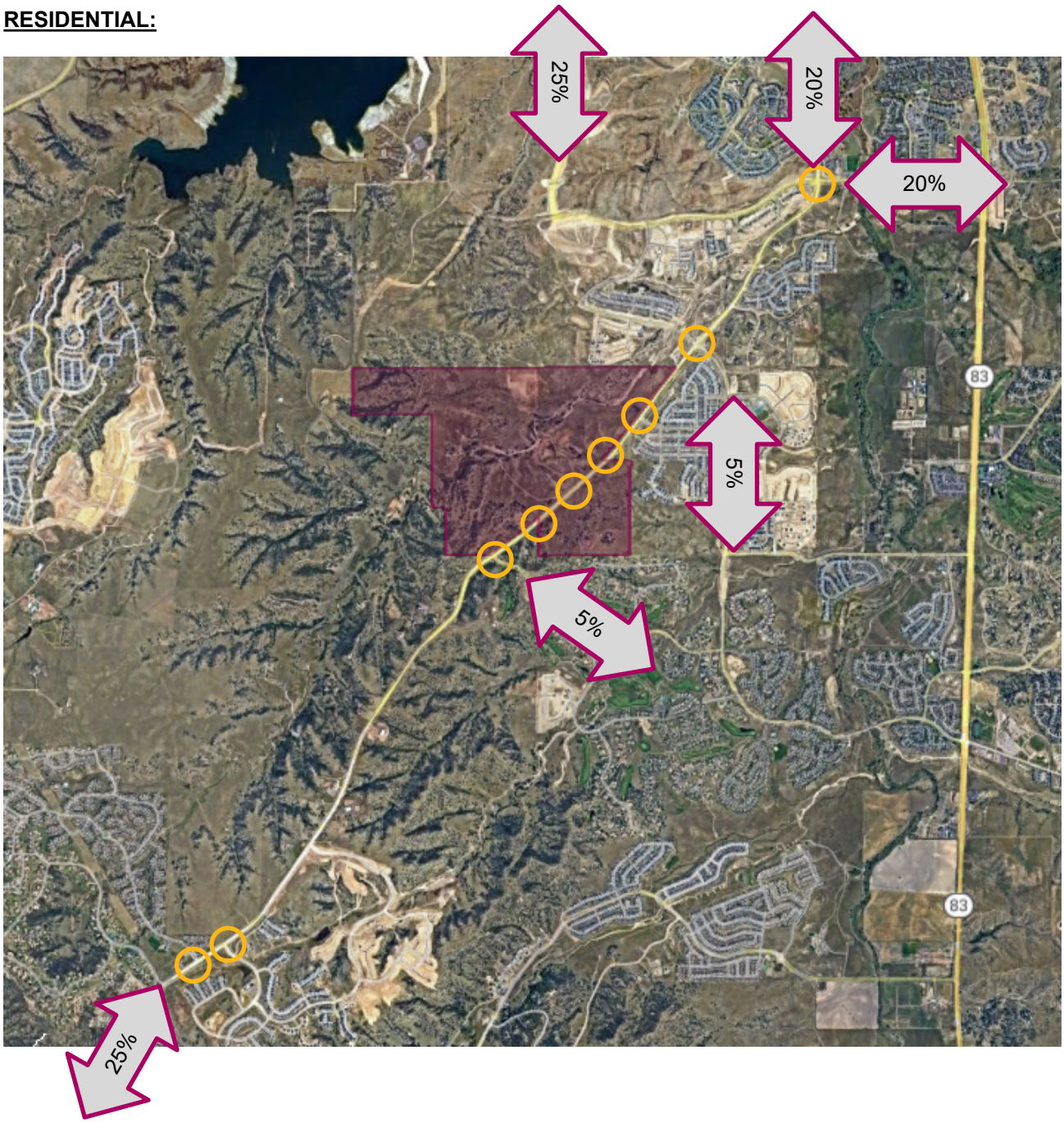
Galloway
5500 Greenwood Plaza Blvd., Suite 200
Greenwood Village, CO 80111
303.770.8884 • GallowayUS.com

TRAFFIC IMPACT STUDY BASE ASSUMPTIONS WORKSHEET

Project Name	Crowsnest			
Project Location	Castle Pines, CO			
Project Size	665 Acres			
Study Area Boundaries	North: Property Lines		South: Property Lines	
	East: Property Lines		West: Property Lines	
Study Years	Phase 1: 2028, Phase 2: 2030, Phase 3: 2045			
Future Traffic Growth Rate	Assumed 2.0%			
Study Intersections (see attached)	1. Crowfoot Valley Rd/Chambers Rd		2. Crowfoot Valley Rd/Pinery Pkwy	
	3. Crowfoot Valley Rd/Pradera Pkwy		4. Crowfoot Valley Rd/Stroh Rd	
	5. Crowfoot Valley Rd/Macanta Blvd		6. Crowfoot Valley Rd/Sapphire Pointe	
	7. Site Accesses		8.	
Time Period for Study	AM: ☒	PM: ☒	Sat. Noon: ☐	
Trip Generation Rates (Latest ITE *Trip Generation Manual* rates/equations will be utilized unless otherwise recommended or approved.) (see attached)				
Trip Adjustment Factors (Subject to approval.)	Pass by: AM 0%/PM 19% for commercial		Captive Market: 10%	
Overall Trip Distribution (see attached)	North: Res: 40% Comm: 40%	South: Res: 25% Comm: 20%	East: Res: 10% Comm: 15%	West: Res: 25% Comm: 25%
Mode Split Assumptions	N/A			
Committed Roadway Improvements	N/A			
Other Traffic Studies	The Canyons			
Areas Requiring Special Study (i.e. Signal progression, passenger car equivalents, accident analyses, etc.)	N/A			
DATE: 11/15/2025 TRANSPORTATION ENGINEER: Brian Horan (Galloway)				

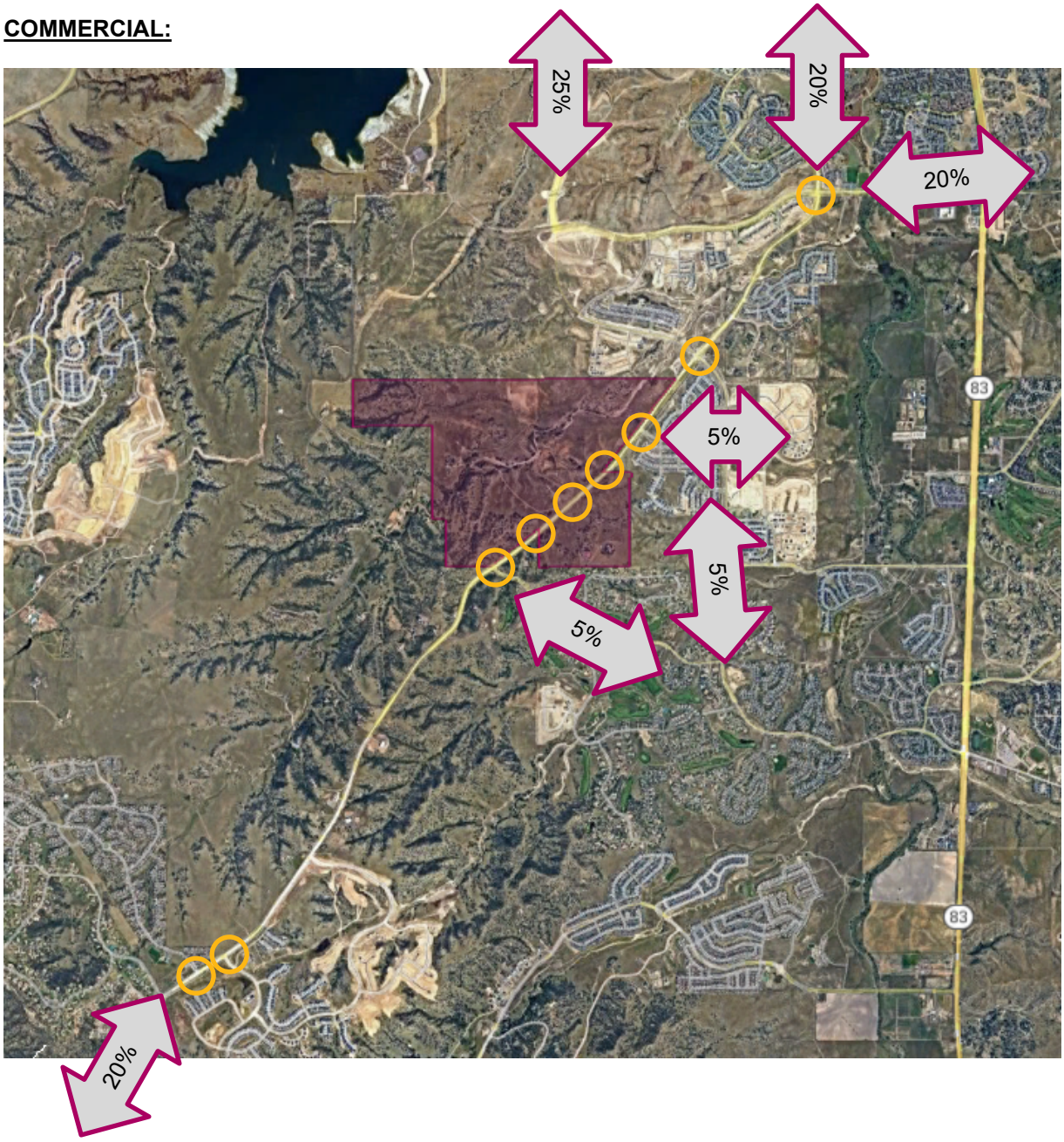
Ventana Capital
Crowsnest – Castle Pines, CO

RESIDENTIAL:



Ventana Capital
Crowsnest – Castle Pines, CO

COMMERCIAL:



APPENDIX C – LOS Descriptions

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	$\leq$10.0
B	> 10.0 and $\leq$20.0
C	> 20.0 and $\leq$ 35.0
D	> 35.0 and $\leq$ 55.0
E	> 55.0 and $\leq$ 80.0
F	>80.0

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

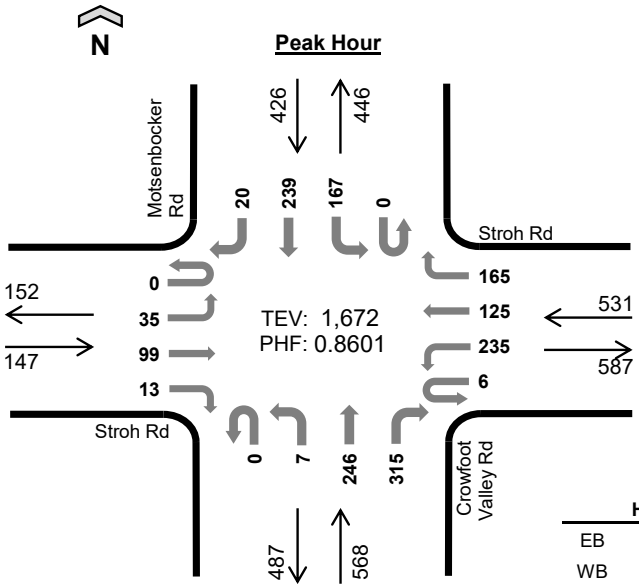
LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

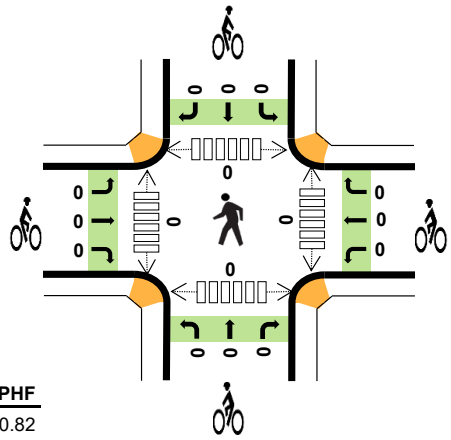
Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX D – Traffic Counts

Motsenbocker Rd
Stroh Rd

Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV%	PHF
EB	3%	0.82
WB	1%	0.74
NB	1%	0.76
SB	2%	0.89
TOTAL	1%	0.86

Peak Hour Count Summaries

Peak Hour Interval Start		Stroh Rd Eastbound				Stroh Rd Westbound				Crowfoot Valley Rd Northbound				Motsenbocker Rd Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	9	24	4	0	39	26	31	0	0	67	80	0	44	52	3	379	0
7:30 AM		0	13	26	1	0	74	42	50	0	3	84	101	0	48	43	1	486	0
7:45 AM		0	5	34	6	2	73	37	67	0	3	50	74	0	46	66	8	471	0
8:00 AM		0	8	15	2	4	49	20	17	0	1	45	60	0	29	78	8	336	1,672
Pk Hr	All	0	35	99	13	6	235	125	165	0	7	246	315	0	167	239	20	1,672	
	HV	0	2	2	0	0	2	4	0	0	0	1	5	0	3	6	0	25	
	HV%	-	6%	2%	0%	0%	1%	3%	0%	-	0%	0%	2%	-	2%	3%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	2	0	6	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	2	2	1	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	3	2	3	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	4	6	6	9	*25*	0	0	0	0	*0*	0	0	0	0	*0*

TJ Wethington
(720) 646-1008
tj.wethington@idaxdata.com

Count Summaries - All Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	6	12	1	0	39	17	16	0	3	39	80	1	43	41	0	298	0
7:15 AM	**0**	**9**	**24**	**4**	**0**	**39**	**26**	**31**	**0**	**0**	**67**	**80**	**0**	**44**	**52**	**3**	**379**	**0**
7:30 AM	**0**	**13**	**26**	**1**	**0**	**74**	**42**	**50**	**0**	**3**	**84**	**101**	**0**	**48**	**43**	**1**	**486**	**0**
7:45 AM	**0**	**5**	**34**	**6**	**2**	**73**	**37**	**67**	**0**	**3**	**50**	**74**	**0**	**46**	**66**	**8**	**471**	**1,634**
8:00 AM	**0**	**8**	**15**	**2**	**4**	**49**	**20**	**17**	**0**	**1**	**45**	**60**	**0**	**29**	**78**	**8**	**336**	**1,672**
8:15 AM	0	3	16	4	0	54	14	18	0	3	53	56	0	7	45	8	281	1,574
8:30 AM	0	11	12	3	0	55	13	24	0	3	64	83	0	25	58	3	354	1,442
8:45 AM	0	15	18	1	0	49	20	42	0	5	71	78	0	40	61	10	410	1,381
Count Total	0	70	157	22	6	432	189	265	0	21	473	612	1	282	444	41	3,015	
Pk Hr All	**0**	**35**	**99**	**13**	**6**	**235**	**125**	**165**	**0**	**7**	**246**	**315**	**0**	**167**	**239**	**20**	**1,672**	
Pk Hr HV	**0**	**2**	**2**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**1**	**5**	**0**	**3**	**6**	**0**	**25**	
Pk Hr HV%	**-**	**6%**	**2%**	**0%**	**0%**	**1%**	**3%**	**0%**	**-**	**0%**	**0%**	**2%**	**-**	**2%**	**3%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	3	5	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**0**	**2**	**0**	**6**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**1**	**2**	**2**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**3**	**2**	**3**	**2**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	1	5	3	1	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	3	3	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	2	6	7	0	*15*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	8	20	22	17	*67*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	**4**	**6**	**6**	**9**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	3	2	0	8	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**4**	**0**	**8**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**
7:45 AM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**6**	**23**
8:00 AM	**0**	**2**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**1**	**0**	**10**	**25**
8:15 AM	0	0	1	0	0	5	0	0	0	0	0	3	0	0	1	0	10	27
8:30 AM	0	0	1	0	0	3	0	0	0	0	0	3	0	1	1	0	9	35
8:45 AM	0	0	2	0	0	5	0	1	0	0	2	5	0	0	0	0	15	44
Count Total	0	2	6	0	0	15	4	1	0	0	4	18	0	7	10	0	67	
Pk Hr Heavy	**0**	**2**	**2**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**1**	**5**	**0**	**3**	**6**	**0**	**25**	

Count Summaries - Bikes

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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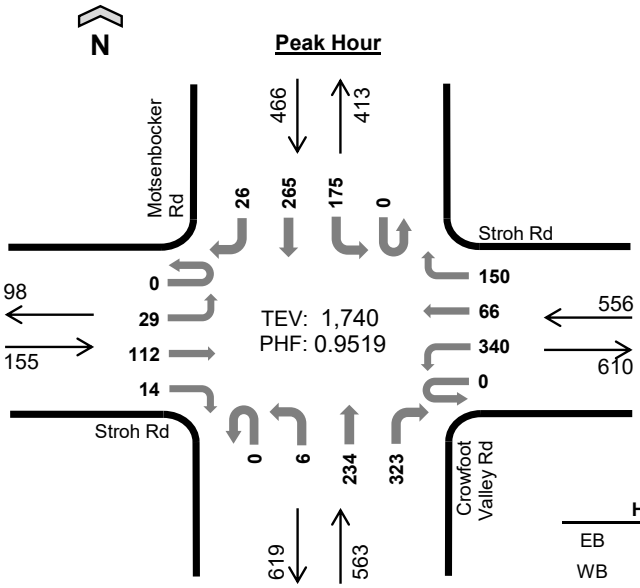
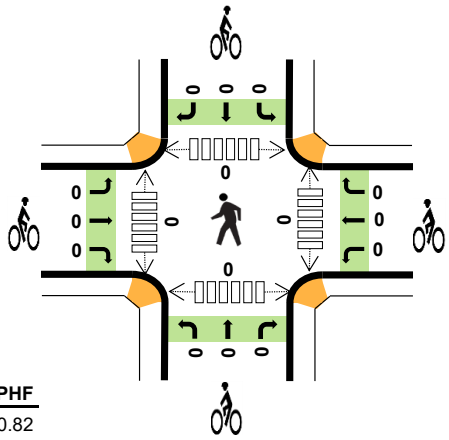
Motsenbocker Rd
Stroh Rd

Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV%	PHF
EB	3%	0.82
WB	1%	0.97
NB	1%	0.86
SB	0%	0.95
TOTAL	1%	0.95

Peak Hour Count Summaries

Peak Hour Interval Start		Stroh Rd Eastbound				Stroh Rd Westbound				Crowfoot Valley Rd Northbound				Motsenbocker Rd Southbound				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	7	35	3	0	83	24	36	0	0	55	68	0	56	54	6	427	0
4:45 PM		0	9	32	6	0	85	13	38	0	2	52	75	0	34	69	7	422	0
5:00 PM		0	9	25	1	0	80	12	41	0	1	60	87	0	43	71	4	434	0
5:15 PM		0	4	20	4	0	92	17	35	0	3	67	93	0	42	71	9	457	1,740
Pk Hr	All	0	29	112	14	0	340	66	150	0	6	234	323	0	175	265	26	1,740	
	HV	0	1	2	1	0	5	2	0	0	0	4	0	0	2	0	0	17	
	HV%	-	3%	2%	7%	-	1%	3%	0%	-	0%	2%	0%	-	1%	0%	0%	1%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	2	1	3	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	2	4	1	1	*8*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	4	7	4	2	*17*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	4	22	1	0	66	7	39	0	4	59	67	0	43	86	16	414	0
4:15 PM	0	4	31	2	0	58	16	33	0	1	48	92	0	47	73	8	413	0
4:30 PM	**0**	**7**	**35**	**3**	**0**	**83**	**24**	**36**	**0**	**0**	**55**	**68**	**0**	**56**	**54**	**6**	**427**	**0**
4:45 PM	**0**	**9**	**32**	**6**	**0**	**85**	**13**	**38**	**0**	**2**	**52**	**75**	**0**	**34**	**69**	**7**	**422**	**1,676**
5:00 PM	**0**	**9**	**25**	**1**	**0**	**80**	**12**	**41**	**0**	**1**	**60**	**87**	**0**	**43**	**71**	**4**	**434**	**1,696**
5:15 PM	**0**	**4**	**20**	**4**	**0**	**92**	**17**	**35**	**0**	**3**	**67**	**93**	**0**	**42**	**71**	**9**	**457**	**1,740**
5:30 PM	0	3	24	1	0	68	17	26	0	3	58	76	0	26	98	3	403	1,716
5:45 PM	0	4	27	3	0	76	13	31	0	2	70	60	0	19	71	10	386	1,680
Count Total	0	44	216	21	0	608	119	279	0	16	469	618	0	310	593	63	3,356	
Pk Hr All	**0**	**29**	**112**	**14**	**0**	**340**	**66**	**150**	**0**	**6**	**234**	**323**	**0**	**175**	**265**	**26**	**1,740**	
Pk Hr HV	**0**	**1**	**2**	**1**	**0**	**5**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**17**	
Pk Hr HV%	**-**	**3%**	**2%**	**7%**	**-**	**1%**	**3%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**1%**	**0%**	**0%**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	2	2	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	3	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**2**	**1**	**3**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**2**	**4**	**1**	**1**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	5	11	9	6	*31*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**4**	**7**	**4**	**2**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	6	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	1	0	5	0
4:30 PM	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**7**	**0**
4:45 PM	**0**	**0**	**2**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**8**	**26**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**22**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	11
5:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	5
Count Total	0	1	3	1	0	6	2	3	0	0	7	2	0	4	2	0	31	
Pk Hr Heavy	**0**	**1**	**2**	**1**	**0**	**5**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**17**	

Count Summaries - Bikes

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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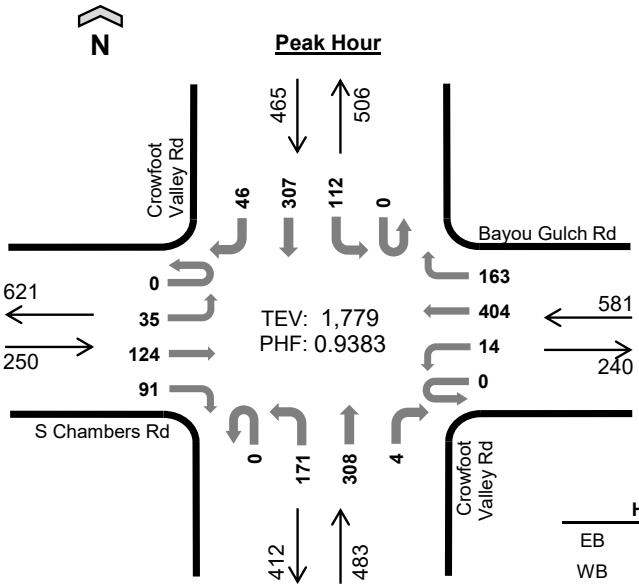
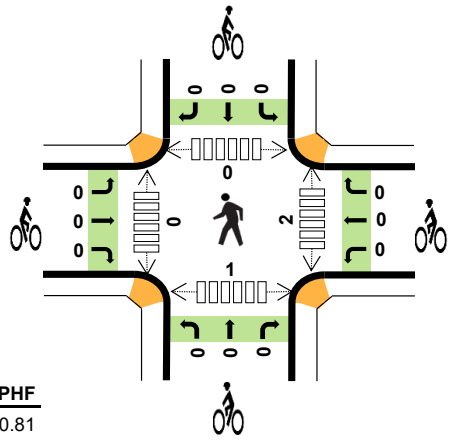
Crowfoot Valley Rd
Bayou Gulch Rd

Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV%	PHF
EB	6%	0.81
WB	2%	0.76
NB	3%	0.83
SB	3%	0.83
TOTAL	3%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		S Chambers Rd (Eastbound)				Bayou Gulch Rd (Westbound)				Crowfoot Valley Rd (Northbound)				Crowfoot Valley Rd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	6	30	20	0	4	104	39	0	51	93	2	0	19	70	12	450	0
7:30 AM		0	13	26	14	0	4	130	57	0	53	75	1	0	26	66	9	474	0
7:45 AM		0	8	36	20	0	5	81	37	0	37	73	1	0	43	81	16	438	0
8:00 AM		0	8	32	37	0	1	89	30	0	30	67	0	0	24	90	9	417	1,779
Pk Hr	All	0	35	124	91	0	14	404	163	0	171	308	4	0	112	307	46	1,779	
	HV	0	3	3	9	0	1	9	2	0	8	6	0	0	4	9	2	56	
	HV%	-	9%	2%	10%	-	7%	2%	1%	-	5%	2%	0%	-	4%	3%	4%	3%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	3	4	1	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	2	1	1	4	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	2	6	8	3	*19*	0	0	0	0	*0*	1	0	0	0	*1*
8:00 AM	8	1	4	6	*19*	0	0	0	0	*0*	1	0	0	1	*2*
Peak Hour	15	12	14	15	*56*	0	0	0	0	*0*	2	0	0	1	*3*

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Count Summaries - All Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	5	22	11	0	2	106	22	0	37	69	2	0	11	54	3	344	0
7:15 AM	**0**	**6**	**30**	**20**	**0**	**4**	**104**	**39**	**0**	**51**	**93**	**2**	**0**	**19**	**70**	**12**	**450**	**0**
7:30 AM	**0**	**13**	**26**	**14**	**0**	**4**	**130**	**57**	**0**	**53**	**75**	**1**	**0**	**26**	**66**	**9**	**474**	**0**
7:45 AM	**0**	**8**	**36**	**20**	**0**	**5**	**81**	**37**	**0**	**37**	**73**	**1**	**0**	**43**	**81**	**16**	**438**	**1,706**
8:00 AM	**0**	**8**	**32**	**37**	**0**	**1**	**89**	**30**	**0**	**30**	**67**	**0**	**0**	**24**	**90**	**9**	**417**	**1,779**
8:15 AM	0	6	35	23	0	1	50	43	0	39	88	2	0	11	76	13	387	1,716
8:30 AM	0	8	29	39	0	2	51	33	0	20	99	0	0	16	85	9	391	1,633
8:45 AM	0	11	30	31	0	1	37	28	0	27	55	1	0	28	103	10	362	1,557
Count Total	0	65	240	195	0	20	648	289	0	294	619	9	0	178	625	81	3,263	
Pk Hr All	**0**	**35**	**124**	**91**	**0**	**14**	**404**	**163**	**0**	**171**	**308**	**4**	**0**	**112**	**307**	**46**	**1,779**	
Pk Hr HV	**0**	**3**	**3**	**9**	**0**	**1**	**9**	**2**	**0**	**8**	**6**	**0**	**0**	**4**	**9**	**2**	**56**	
Pk Hr HV%	**-**	**9%**	**2%**	**10%**	**-**	**7%**	**2%**	**1%**	**-**	**5%**	**2%**	**0%**	**-**	**4%**	**3%**	**4%**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	0	2	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**3**	**4**	**1**	**2**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**2**	**1**	**1**	**4**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**2**	**6**	**8**	**3**	**19**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:00 AM	**8**	**1**	**4**	**6**	**19**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**2**
8:15 AM	9	2	11	2	*24*	0	0	0	0	*0*	1	0	0	0	*1*
8:30 AM	8	0	5	1	*14*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	10	2	11	3	*26*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	43	16	43	22	*124*	0	0	0	0	*0*	3	0	0	3	*6*
Peak Hour	**15**	**12**	**14**	**15**	***56***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**1**	**3**

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Count Summaries - Heavy Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0	4	0
7:15 AM	**0**	**0**	**1**	**2**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**10**	**0**
7:30 AM	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**8**	**0**
7:45 AM	**0**	**0**	**1**	**1**	**0**	**0**	**6**	**0**	**0**	**4**	**4**	**0**	**0**	**1**	**1**	**1**	**19**	**41**
8:00 AM	**0**	**2**	**1**	**5**	**0**	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**2**	**3**	**1**	**19**	**56**
8:15 AM	0	0	3	6	0	0	1	1	0	8	2	1	0	1	1	0	24	70
8:30 AM	0	0	2	6	0	0	0	0	0	0	5	0	0	0	1	0	14	76
8:45 AM	0	0	2	8	0	0	1	1	0	8	3	0	0	1	2	0	26	83
Count Total	0	3	10	30	0	1	11	4	0	25	17	1	0	6	14	2	124	
Pk Hr Heavy	**0**	**3**	**3**	**9**	**0**	**1**	**9**	**2**	**0**	**8**	**6**	**0**	**0**	**4**	**9**	**2**	**56**	

Count Summaries - Bikes

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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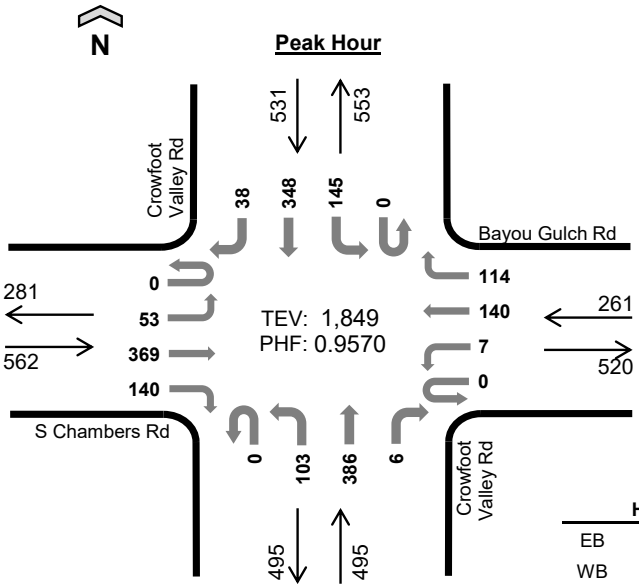
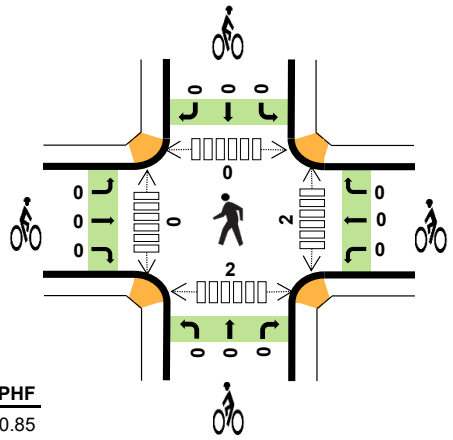
Crowfoot Valley Rd
Bayou Gulch Rd

Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV%	PHF
EB	2%	0.85
WB	1%	0.81
NB	2%	0.93
SB	1%	0.90
TOTAL	2%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		S Chambers Rd (Eastbound)				Bayou Gulch Rd (Westbound)				Crowfoot Valley Rd (Northbound)				Crowfoot Valley Rd (Southbound)				15-min Total	Rolling Hour Total
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	15	92	32	0	2	28	24	0	26	93	3	0	43	93	11	462	0
4:30 PM		0	14	92	38	0	2	49	30	0	34	88	0	0	36	88	12	483	0
4:45 PM		0	15	105	46	0	0	32	31	0	21	95	2	0	26	77	10	460	0
5:00 PM		0	9	80	24	0	3	31	29	0	22	110	1	0	40	90	5	444	1,849
Pk Hr	All	0	53	369	140	0	7	140	114	0	103	386	6	0	145	348	38	1,849	
	HV	0	3	6	2	0	1	2	0	0	2	10	0	0	1	1	1	29	
	HV%	-	6%	2%	1%	-	14%	1%	0%	-	2%	3%	0%	-	1%	0%	3%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	2	0	4	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	6	0	3	0	*9*	0	0	0	0	*0*	1	0	0	0	*1*
4:45 PM	3	1	2	2	*8*	0	0	0	0	*0*	1	0	0	1	*2*
5:00 PM	0	2	3	0	*5*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hour	11	3	12	3	*29*	0	0	0	0	*0*	2	0	0	2	*4*

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Count Summaries - All Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	10	74	29	0	2	35	27	0	17	83	0	0	43	81	13	414	0
4:15 PM	**0**	**15**	**92**	**32**	**0**	**2**	**28**	**24**	**0**	**26**	**93**	**3**	**0**	**43**	**93**	**11**	**462**	**0**
4:30 PM	**0**	**14**	**92**	**38**	**0**	**2**	**49**	**30**	**0**	**34**	**88**	**0**	**0**	**36**	**88**	**12**	**483**	**0**
4:45 PM	**0**	**15**	**105**	**46**	**0**	**0**	**32**	**31**	**0**	**21**	**95**	**2**	**0**	**26**	**77**	**10**	**460**	**1,819**
5:00 PM	**0**	**9**	**80**	**24**	**0**	**3**	**31**	**29**	**0**	**22**	**110**	**1**	**0**	**40**	**90**	**5**	**444**	**1,849**
5:15 PM	0	17	88	41	0	3	28	24	1	22	98	2	0	56	74	7	461	1,848
5:30 PM	0	19	80	29	0	2	37	31	0	18	93	0	0	38	65	10	422	1,787
5:45 PM	0	11	66	34	0	0	28	30	0	16	75	0	0	31	89	8	388	1,715
Count Total	0	110	677	273	0	14	268	226	1	176	735	8	0	313	657	76	3,534	
Pk Hr All	**0**	**53**	**369**	**140**	**0**	**7**	**140**	**114**	**0**	**103**	**386**	**6**	**0**	**145**	**348**	**38**	**1,849**	
Pk Hr HV	**0**	**3**	**6**	**2**	**0**	**1**	**2**	**0**	**0**	**2**	**10**	**0**	**0**	**1**	**1**	**1**	**29**	
Pk Hr HV%	**-**	**6%**	**2%**	**1%**	**-**	**14%**	**1%**	**0%**	**-**	**2%**	**3%**	**0%**	**-**	**1%**	**0%**	**3%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	3	5	0	1	*9*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	**2**	**0**	**4**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**6**	**0**	**3**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
4:45 PM	**3**	**1**	**2**	**2**	**8**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**2**
5:00 PM	**0**	**2**	**3**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
5:15 PM	0	0	2	0	*2*	0	0	0	0	*0*	1	0	0	0	*1*
5:30 PM	2	0	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	1	2	2	*5*	0	0	0	0	*0*	2	0	0	3	*5*
Count Total	16	9	17	6	*48*	0	0	0	0	*0*	6	0	0	5	*11*
Peak Hour	**11**	**3**	**12**	**3**	***29***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**2**	**4**

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Count Summaries - Heavy Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	1	0	0	3	2	0	0	0	0	0	1	0	0	9	0
4:15 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**1**	**7**	**0**
4:30 PM	**0**	**2**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**9**	**0**
4:45 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**8**	**33**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**29**
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	24
5:30 PM	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	18
5:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	1	5	15
Count Total	0	4	9	3	0	1	6	2	0	3	14	0	0	2	2	2	48	
Pk Hr Heavy	**0**	**3**	**6**	**2**	**0**	**1**	**2**	**0**	**0**	**2**	**10**	**0**	**0**	**1**	**1**	**1**	**29**	

Count Summaries - Bikes

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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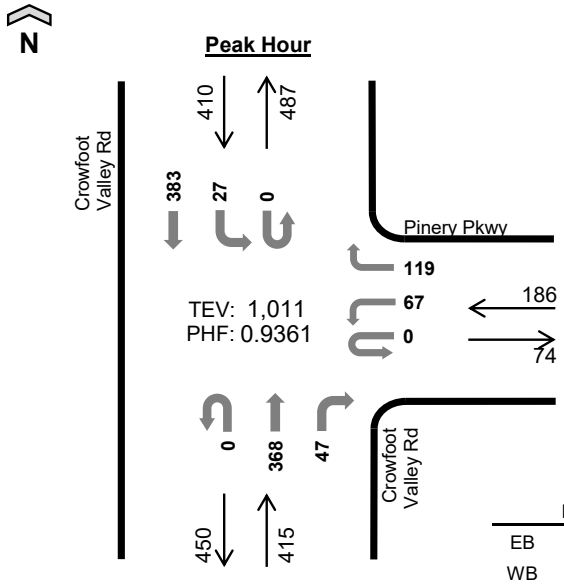
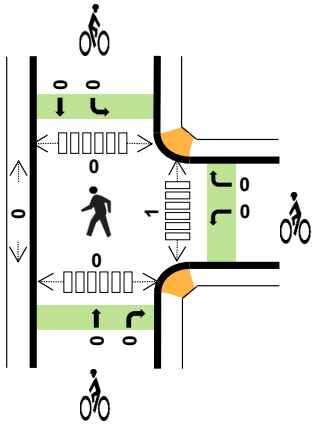
Crowfoot Valley Rd
Pinery Pkwy

Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV%	PHF
EB	--	--
WB	0%	0.78
NB	5%	0.80
SB	4%	0.84
TOTAL	4%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		**0**	**0**	**0**	**0**	**0**	**11**	**0**	**29**	**0**	**0**	**119**	**11**	**0**	**4**	**96**	**0**	**270**	**0**
7:30 AM		**0**	**0**	**0**	**0**	**0**	**24**	**0**	**36**	**0**	**0**	**90**	**16**	**0**	**2**	**79**	**0**	**247**	**0**
7:45 AM		**0**	**0**	**0**	**0**	**0**	**16**	**0**	**27**	**0**	**0**	**87**	**10**	**0**	**7**	**100**	**0**	**247**	**0**
8:00 AM		**0**	**0**	**0**	**0**	**0**	**16**	**0**	**27**	**0**	**0**	**72**	**10**	**0**	**14**	**108**	**0**	**247**	**1,011**
Pk Hr	All	**0**	**0**	**0**	**0**	**0**	**67**	**0**	**119**	**0**	**0**	**368**	**47**	**0**	**27**	**383**	**0**	**1,011**	
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**3**	**0**	**1**	**17**	**0**	**37**	
	HV%	-	-	-	-	-	**0%**	-	**0%**	-	-	**4%**	**6%**	-	**4%**	**4%**	-	**4%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	**0**	**0**	**2**	**5**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:30 AM	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**0**	**0**	**9**	**2**	***11***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
8:00 AM	**0**	**0**	**7**	**6**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**0**	**0**	**19**	**18**	***37***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***

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Count Summaries - All Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	6	0	19	0	0	96	6	0	3	61	0	191	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**29**	**0**	**0**	**119**	**11**	**0**	**4**	**96**	**0**	**270**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**36**	**0**	**0**	**90**	**16**	**0**	**2**	**79**	**0**	**247**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**27**	**0**	**0**	**87**	**10**	**0**	**7**	**100**	**0**	**247**	**955**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**27**	**0**	**0**	**72**	**10**	**0**	**14**	**108**	**0**	**247**	**1,011**
8:15 AM	0	0	0	0	0	7	0	20	0	0	104	6	0	11	97	0	245	986
8:30 AM	0	0	0	0	0	10	0	20	0	0	91	6	0	13	115	0	255	994
8:45 AM	0	0	0	0	0	8	0	11	0	0	75	5	0	12	122	0	233	980
Count Total	0	0	0	0	0	98	0	189	0	0	734	70	0	66	778	0	1,935	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**67**	**0**	**119**	**0**	**0**	**368**	**47**	**0**	**27**	**383**	**0**	**1,011**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**3**	**0**	**1**	**17**	**0**	**37**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**4%**	**6%**	**-**	**4%**	**4%**	**-**	**4%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	2	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**0**	**0**	**2**	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**1**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**9**	**2**	**11**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
8:00 AM	**0**	**0**	**7**	**6**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	1	8	6	*15*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	2	4	9	*15*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	1	11	10	*22*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	4	44	45	*93*	0	0	0	0	*0*	1	0	0	0	*1*
Peak Hour	**0**	**0**	**19**	**18**	***37***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	**1**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**4**	**0**	**7**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	**0**	**6**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**2**	**0**	**11**	**28**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**6**	**0**	**13**	**37**
8:15 AM	0	0	0	0	0	0	0	1	0	0	8	0	0	0	6	0	15	45
8:30 AM	0	0	0	0	0	1	0	1	0	0	4	0	0	0	9	0	15	54
8:45 AM	0	0	0	0	0	1	0	0	0	0	11	0	0	0	10	0	22	65
Count Total	0	0	0	0	0	2	0	2	0	0	41	3	0	1	44	0	93	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	**3**	**0**	**1**	**17**	**0**	**37**	

Count Summaries - Bikes

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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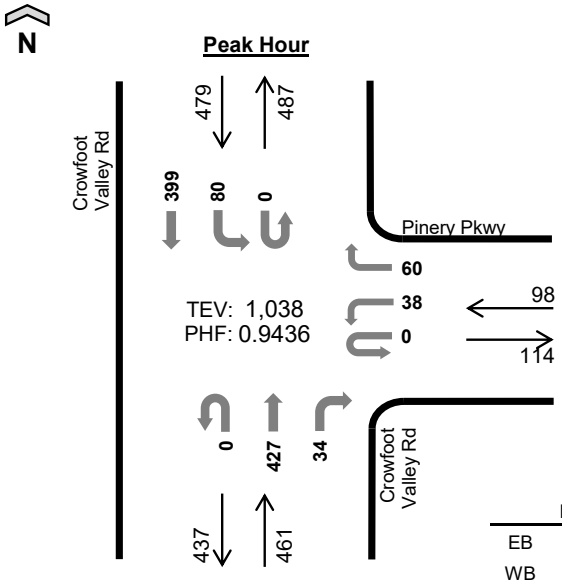
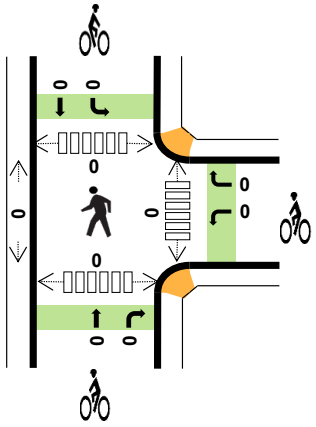
Crowfoot Valley Rd
Pinery Pkwy

Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV%	PHF
EB	--	--
WB	2%	0.94
NB	3%	0.96
SB	1%	0.93
TOTAL	2%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	0	0	0	16	0	9	0	0	113	3	0	14	110	0	265	0
4:30 PM		0	0	0	0	0	7	0	19	0	0	107	13	0	16	113	0	275	0
4:45 PM		0	0	0	0	0	7	0	15	0	0	99	7	0	33	89	0	250	0
5:00 PM		0	0	0	0	0	8	0	17	0	0	108	11	0	17	87	0	248	1,038
Pk Hr	All	0	0	0	0	0	38	0	60	0	0	427	34	0	80	399	0	1,038	
	HV	0	0	0	0	0	1	0	1	0	0	11	1	0	1	4	0	19	
	HV%	-	-	-	-	-	3%	-	2%	-	-	3%	3%	-	1%	1%	-	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	1	3	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	4	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	1	2	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	0	3	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	2	12	5	*19*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	8	0	17	0	0	90	9	0	18	103	0	245	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**9**	**0**	**0**	**113**	**3**	**0**	**14**	**110**	**0**	**265**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**19**	**0**	**0**	**107**	**13**	**0**	**16**	**113**	**0**	**275**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**15**	**0**	**0**	**99**	**7**	**0**	**33**	**89**	**0**	**250**	**1,035**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**17**	**0**	**0**	**108**	**11**	**0**	**17**	**87**	**0**	**248**	**1,038**
5:15 PM	0	0	0	0	0	7	0	17	0	0	108	14	0	24	94	0	264	1,037
5:30 PM	0	0	0	0	0	6	0	12	0	0	102	15	0	16	81	0	232	994
5:45 PM	0	0	0	0	0	9	0	12	0	0	79	11	0	19	111	0	241	985
Count Total	0	0	0	0	0	68	0	118	0	0	806	83	0	157	788	0	2,020	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**38**	**0**	**60**	**0**	**0**	**427**	**34**	**0**	**80**	**399**	**0**	**1,038**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**11**	**1**	**0**	**1**	**4**	**0**	**19**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**2%**	**-**	**-**	**3%**	**3%**	**-**	**1%**	**1%**	**-**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	*0*	0	0	1	1	*2*	0	0	0	0	*0*
4:15 PM	**0**	**1**	**3**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**4**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**1**	**2**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**3**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	5	14	6	*25*	0	0	1	1	*2*	0	0	0	0	*0*
Peak Hour	**0**	**2**	**12**	**5**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**6**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**1**	**0**	**5**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	**15**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**4**	**19**
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	15
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	12
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10
Count Total	0	0	0	0	0	1	0	4	0	0	13	1	0	1	5	0	25	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**11**	**1**	**0**	**1**	**4**	**0**	**19**	

Count Summaries - Bikes

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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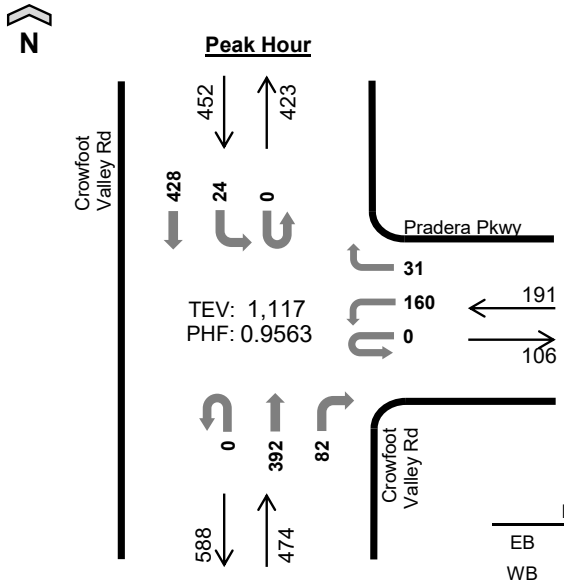
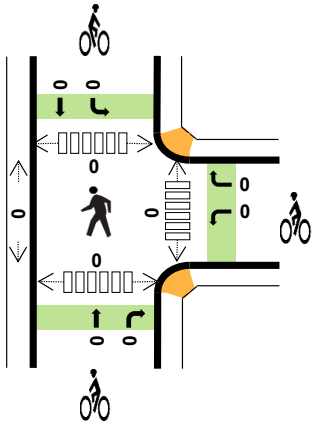
Crowfoot Valley Rd
Pradera Pkwy

Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	--	--
WB	2%	0.78
NB	4%	0.86
SB	3%	0.91
TOTAL	3%	0.96



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		**0**	**0**	**0**	**0**	**0**	**44**	**0**	**8**	**0**	**0**	**120**	**17**	**0**	**5**	**98**	**0**	**292**	**0**
7:30 AM		**0**	**0**	**0**	**0**	**0**	**51**	**0**	**10**	**0**	**0**	**99**	**19**	**0**	**0**	**106**	**0**	**285**	**0**
7:45 AM		**0**	**0**	**0**	**0**	**0**	**38**	**0**	**3**	**0**	**0**	**95**	**24**	**0**	**10**	**109**	**0**	**279**	**0**
8:00 AM		**0**	**0**	**0**	**0**	**0**	**27**	**0**	**10**	**0**	**0**	**78**	**22**	**0**	**9**	**115**	**0**	**261**	**1,117**
Pk Hr	All	**0**	**0**	**0**	**0**	**0**	**160**	**0**	**31**	**0**	**0**	**392**	**82**	**0**	**24**	**428**	**0**	**1,117**	
	HV	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**18**	**1**	**0**	**1**	**11**	**0**	**35**	
	HV%	-	-	-	-	-	**2%**	-	**3%**	-	-	**5%**	**1%**	-	**4%**	**3%**	-	**3%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	**0**	**0**	**2**	**3**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:30 AM	**0**	**3**	**3**	**4**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**0**	**1**	**7**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	**0**	**0**	**7**	**4**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**0**	**4**	**19**	**12**	***35***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

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Count Summaries - All Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	35	0	8	0	0	89	12	0	4	65	0	213	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**8**	**0**	**0**	**120**	**17**	**0**	**5**	**98**	**0**	**292**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**10**	**0**	**0**	**99**	**19**	**0**	**0**	**106**	**0**	**285**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**38**	**0**	**3**	**0**	**0**	**95**	**24**	**0**	**10**	**109**	**0**	**279**	**1,069**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**10**	**0**	**0**	**78**	**22**	**0**	**9**	**115**	**0**	**261**	**1,117**
8:15 AM	0	0	0	0	0	28	0	7	0	0	95	16	0	6	101	0	253	1,078
8:30 AM	0	0	0	0	0	29	0	13	0	0	95	21	0	11	109	0	278	1,071
8:45 AM	0	0	0	0	0	20	0	9	0	0	67	20	0	10	120	0	246	1,038
Count Total	0	0	0	0	0	272	0	68	0	0	738	151	0	55	823	0	2,107	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**160**	**0**	**31**	**0**	**0**	**392**	**82**	**0**	**24**	**428**	**0**	**1,117**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**18**	**1**	**0**	**1**	**11**	**0**	**35**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**3%**	**-**	**-**	**5%**	**1%**	**-**	**4%**	**3%**	**-**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	3	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**0**	**0**	**2**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**3**	**3**	**4**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**1**	**7**	**1**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**7**	**4**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	8	8	*16*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	5	9	*14*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	2	10	15	*27*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	6	45	46	*97*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**4**	**19**	**12**	***35***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**5**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**10**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**1**	**0**	**0**	**1**	**0**	**9**	**29**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**11**	**35**
8:15 AM	0	0	0	0	0	0	0	0	0	0	7	1	0	1	7	0	16	46
8:30 AM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	9	0	14	50
8:45 AM	0	0	0	0	0	1	0	1	0	0	10	0	0	2	13	0	27	68
Count Total	0	0	0	0	0	4	0	2	0	0	42	3	0	4	42	0	97	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**18**	**1**	**0**	**1**	**11**	**0**	**35**	

Count Summaries - Bikes

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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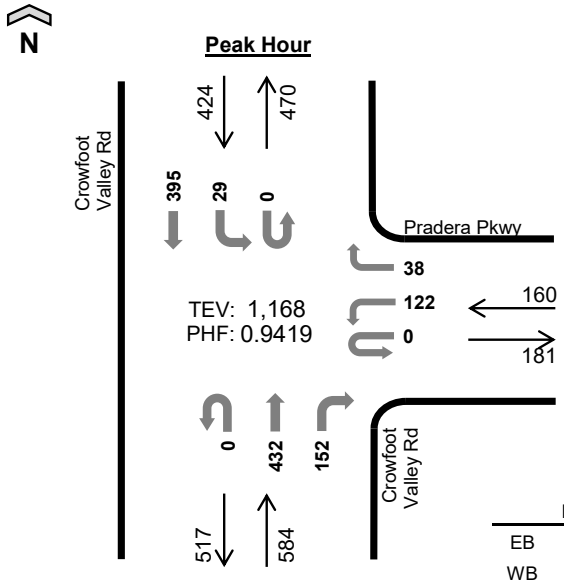
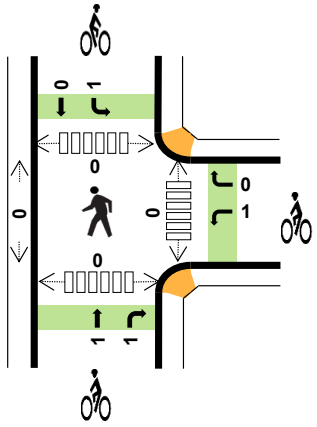
Crowfoot Valley Rd
Pradera Pkwy

Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	--	--
WB	0%	0.82
NB	1%	0.92
SB	1%	0.86
TOTAL	1%	0.94



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		**0**	**0**	**0**	**0**	**0**	**30**	**0**	**9**	**0**	**0**	**115**	**33**	**0**	**7**	**116**	**0**	**310**	**0**
4:45 PM		**0**	**0**	**0**	**0**	**0**	**23**	**0**	**4**	**0**	**0**	**95**	**31**	**0**	**6**	**97**	**0**	**256**	**0**
5:00 PM		**0**	**0**	**0**	**0**	**0**	**34**	**0**	**11**	**0**	**0**	**116**	**42**	**0**	**6**	**89**	**0**	**298**	**0**
5:15 PM		**0**	**0**	**0**	**0**	**0**	**35**	**0**	**14**	**0**	**0**	**106**	**46**	**0**	**10**	**93**	**0**	**304**	**1,168**
Pk Hr	All	**0**	**0**	**0**	**0**	**0**	**122**	**0**	**38**	**0**	**0**	**432**	**152**	**0**	**29**	**395**	**0**	**1,168**	
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**10**	
	HV%	-	-	-	-	-	**0%**	-	**0%**	-	-	**2%**	**0%**	-	**0%**	**1%**	-	**1%**	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**0**	**0**	**3**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
5:15 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***
Peak Hour	**0**	**0**	**7**	**3**	***10***	**0**	**1**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	***0***

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Count Summaries - All Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	31	0	18	0	0	92	26	0	9	105	0	281	0
4:15 PM	0	0	0	0	0	22	0	10	0	0	102	29	0	7	113	0	283	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**9**	**0**	**0**	**115**	**33**	**0**	**7**	**116**	**0**	**310**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**4**	**0**	**0**	**95**	**31**	**0**	**6**	**97**	**0**	**256**	**1,130**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**11**	**0**	**0**	**116**	**42**	**0**	**6**	**89**	**0**	**298**	**1,147**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**14**	**0**	**0**	**106**	**46**	**0**	**10**	**93**	**0**	**304**	**1,168**
5:30 PM	0	0	0	0	0	31	0	3	0	0	108	44	0	5	88	0	279	1,137
5:45 PM	0	0	0	0	0	23	0	11	0	0	78	25	0	8	100	0	245	1,126
Count Total	0	0	0	0	0	229	0	80	0	0	812	276	0	58	801	0	2,256	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**122**	**0**	**38**	**0**	**0**	**432**	**152**	**0**	**29**	**395**	**0**	**1,168**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**10**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**2%**	**0%**	**-**	**0%**	**1%**	**-**	**1%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	3	2	1	*6*	0	0	0	1	*1*	0	0	0	0	*0*
4:15 PM	0	1	3	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**3**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
5:15 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	4	15	6	*25*	0	1	2	2	*5*	0	0	0	0	*0*
Peak Hour	**0**	**0**	**7**	**3**	***10***	**0**	**1**	**2**	**1**	***4***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	0	2	0	0	0	1	0	6	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	1	0	5	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**4**	**18**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	**14**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**10**
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	9
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	7
Count Total	0	0	0	0	0	4	0	0	0	0	14	1	0	0	6	0	25	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**10**	

Count Summaries - Bikes

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**3**	**4**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	0	0	0	1	0	0	0	0	1	1	0	1	1	0	5	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**4**	

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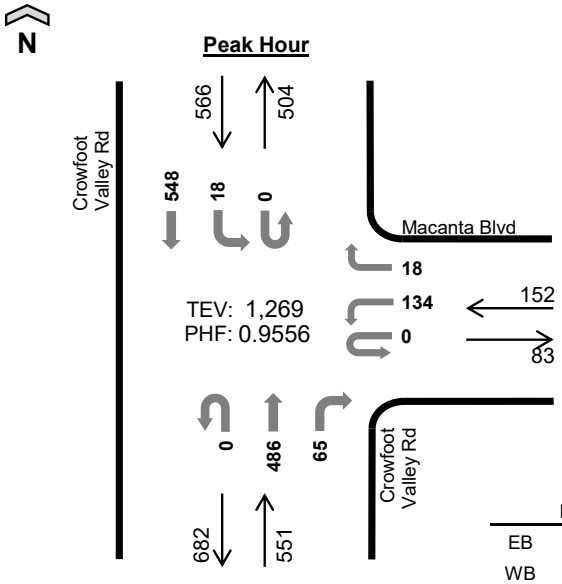
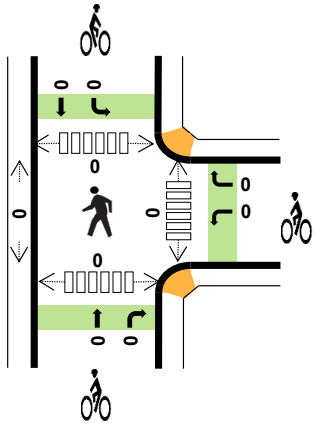
Crowfoot Valley Rd
Macanta Blvd

Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	--	--
WB	3%	0.90
NB	5%	0.91
SB	2%	0.88
TOTAL	3%	0.96



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	34	0	5	0	0	142	10	0	3	129	0	323	0
7:30 AM		0	0	0	0	0	38	0	4	0	0	126	18	0	5	141	0	332	0
7:45 AM		0	0	0	0	0	34	0	4	0	0	110	12	0	4	157	0	321	0
8:00 AM		0	0	0	0	0	28	0	5	0	0	108	25	0	6	121	0	293	1,269
Pk Hr	All	0	0	0	0	0	134	0	18	0	0	486	65	0	18	548	0	1,269	
	HV	0	0	0	0	0	2	0	2	0	0	19	6	0	3	7	0	39	
	HV%	-	-	-	-	-	1%	-	11%	-	-	4%	9%	-	17%	1%	-	3%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	4	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	7	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	2	7	2	*11*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	2	7	3	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	4	25	10	*39*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	31	0	8	0	0	105	12	0	0	118	0	274	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**5**	**0**	**0**	**142**	**10**	**0**	**3**	**129**	**0**	**323**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**38**	**0**	**4**	**0**	**0**	**126**	**18**	**0**	**5**	**141**	**0**	**332**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**4**	**0**	**0**	**110**	**12**	**0**	**4**	**157**	**0**	**321**	**1,250**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**5**	**0**	**0**	**108**	**25**	**0**	**6**	**121**	**0**	**293**	**1,269**
8:15 AM	0	0	0	0	0	30	0	4	0	0	117	28	0	0	127	0	306	1,252
8:30 AM	0	0	0	0	0	41	0	14	0	0	106	26	0	5	108	0	300	1,220
8:45 AM	0	0	0	0	0	28	0	9	0	0	101	21	0	7	131	0	297	1,196
Count Total	0	0	0	0	0	264	0	53	0	0	915	152	0	30	1,032	0	2,446	
Pk Hr All	**0**	**0**	**0**	**0**	**0**	**134**	**0**	**18**	**0**	**0**	**486**	**65**	**0**	**18**	**548**	**0**	**1,269**	
Pk Hr HV	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**19**	**6**	**0**	**3**	**7**	**0**	**39**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**11%**	**-**	**-**	**4%**	**9%**	**-**	**17%**	**1%**	**-**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	1	8	2	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**0**	**0**	**4**	**2**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**7**	**3**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**2**	**7**	**2**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**2**	**7**	**3**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	4	10	3	*17*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	2	5	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	8	5	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	11	56	23	*90*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**4**	**25**	**10**	***39***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	0	0	0	6	2	0	0	2	0	11	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**1**	**1**	**0**	**6**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**0**	**1**	**2**	**0**	**10**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	**1**	**0**	**0**	**2**	**0**	**11**	**38**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**1**	**2**	**0**	**12**	**39**
8:15 AM	0	0	0	0	0	4	0	0	0	0	7	3	0	0	3	0	17	50
8:30 AM	0	0	0	0	0	2	0	0	0	0	4	1	0	0	3	0	10	50
8:45 AM	0	0	0	0	0	0	0	0	0	0	7	1	0	1	4	0	13	52
Count Total	0	0	0	0	0	9	0	2	0	0	43	13	0	4	19	0	90	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**0**	**19**	**6**	**0**	**3**	**7**	**0**	**39**	

Count Summaries - Bikes

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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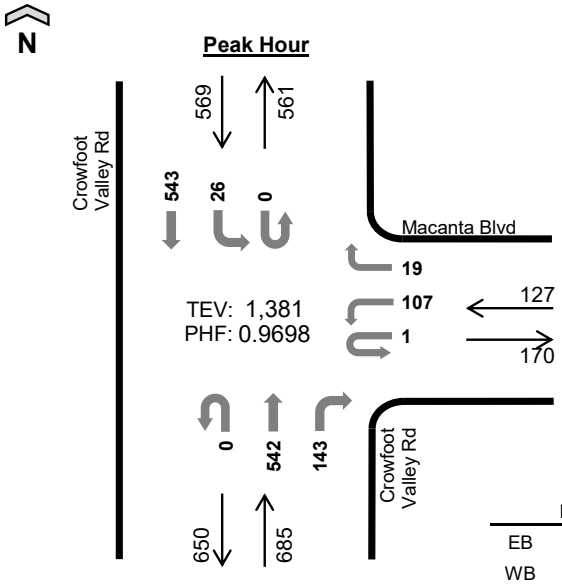
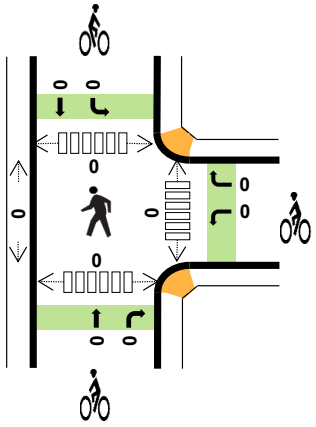
Crowfoot Valley Rd
Macanta Blvd

Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	--	--
WB	10%	0.74
NB	1%	0.94
SB	4%	0.92
TOTAL	3%	0.97



Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	28	0	6	0	0	139	32	0	9	124	0	338	0
4:15 PM		0	0	0	0	0	16	0	2	0	0	142	41	0	6	149	0	356	0
4:30 PM		0	0	0	0	0	35	0	8	0	0	118	33	0	4	139	0	337	0
4:45 PM		0	0	0	0	1	28	0	3	0	0	143	37	0	7	131	0	350	1,381
Pk Hr	All	0	0	0	0	1	107	0	19	0	0	542	143	0	26	543	0	1,381	
	HV	0	0	0	0	1	9	0	3	0	0	4	3	0	3	17	0	40	
	HV%	-	-	-	-	100%	8%	-	16%	-	-	1%	2%	-	12%	3%	-	3%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	1	2	6	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	2	3	4	*9*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	4	2	7	*13*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	6	0	3	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	13	7	20	*40*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**6**	**0**	**0**	**139**	**32**	**0**	**9**	**124**	**0**	**338**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**16**	**0**	**2**	**0**	**0**	**142**	**41**	**0**	**6**	**149**	**0**	**356**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**8**	**0**	**0**	**118**	**33**	**0**	**4**	**139**	**0**	**337**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**1**	**28**	**0**	**3**	**0**	**0**	**143**	**37**	**0**	**7**	**131**	**0**	**350**	**1,381**
5:00 PM	0	0	0	0	0	20	0	4	0	0	127	33	0	1	118	0	303	1,346
5:15 PM	0	0	0	0	0	17	0	1	0	0	136	35	0	6	150	0	345	1,335
5:30 PM	0	0	0	0	0	18	0	2	0	0	129	34	0	5	123	0	311	1,309
5:45 PM	0	0	0	0	0	15	0	6	0	0	94	32	0	7	110	0	264	1,223
Count Total	0	0	0	0	1	177	0	32	0	0	1,028	277	0	45	1,044	0	2,604	
Pk Hr All	**0**	**0**	**0**	**0**	**1**	**107**	**0**	**19**	**0**	**0**	**542**	**143**	**0**	**26**	**543**	**0**	**1,381**	
Pk Hr HV	**0**	**0**	**0**	**0**	**1**	**9**	**0**	**3**	**0**	**0**	**4**	**3**	**0**	**3**	**17**	**0**	**40**	
Pk Hr HV%	**-**	**-**	**-**	**-**	**100%**	**8%**	**-**	**16%**	**-**	**-**	**1%**	**2%**	**-**	**12%**	**3%**	**-**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**0**	**1**	**2**	**6**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**0**	**2**	**3**	**4**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**4**	**2**	**7**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**6**	**0**	**3**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	1	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	14	10	27	*51*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**0**	**13**	**7**	**20**	***40***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**4**	**0**	**9**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**4**	**0**	**9**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**7**	**0**	**13**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**9**	**40**
5:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	3	34
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	28
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	17
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	11
Count Total	0	0	0	0	1	10	0	3	0	0	7	3	0	3	24	0	51	
Pk Hr Heavy	**0**	**0**	**0**	**0**	**1**	**9**	**0**	**3**	**0**	**0**	**4**	**3**	**0**	**3**	**17**	**0**	**40**	

Count Summaries - Bikes

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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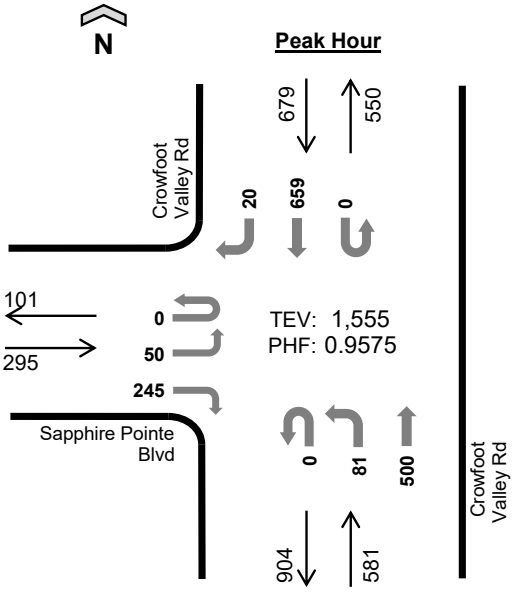
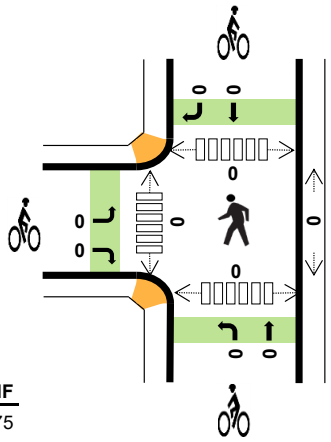
Crowfoot Valley Rd
Sapphire Pointe Blvd

Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV%	PHF
EB	2%	0.75
WB	--	--
NB	5%	0.96
SB	1%	0.91
TOTAL	3%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	17	0	81	0	0	0	0	0	8	136	0	0	0	152	2	396	0
7:30 AM		0	14	0	54	0	0	0	0	0	22	129	0	0	0	181	6	406	0
7:45 AM		0	11	0	61	0	0	0	0	0	22	112	0	0	0	179	6	391	0
8:00 AM		0	8	0	49	0	0	0	0	0	29	123	0	0	0	147	6	362	1,555
Pk Hr	All	0	50	0	245	0	0	0	0	0	81	500	0	0	0	659	20	1,555	
	HV	0	0	0	6	0	0	0	0	0	4	25	0	0	0	9	0	44	
	HV%	-	0%	-	2%	-	-	-	-	-	5%	5%	-	-	-	1%	0%	3%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	1	0	5	1	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	2	0	9	1	*12*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	0	8	2	*11*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	2	0	7	5	*14*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	6	0	29	9	*44*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	12	0	57	0	0	0	0	0	4	105	0	0	0	138	3	319	0
7:15 AM	**0**	**17**	**0**	**81**	**0**	**0**	**0**	**0**	**0**	**8**	**136**	**0**	**0**	**0**	**152**	**2**	**396**	**0**
7:30 AM	**0**	**14**	**0**	**54**	**0**	**0**	**0**	**0**	**0**	**22**	**129**	**0**	**0**	**0**	**181**	**6**	**406**	**0**
7:45 AM	**0**	**11**	**0**	**61**	**0**	**0**	**0**	**0**	**0**	**22**	**112**	**0**	**0**	**0**	**179**	**6**	**391**	**1,512**
8:00 AM	**0**	**8**	**0**	**49**	**0**	**0**	**0**	**0**	**0**	**29**	**123**	**0**	**0**	**0**	**147**	**6**	**362**	**1,555**
8:15 AM	0	8	0	38	0	0	0	0	0	26	138	0	0	0	155	7	372	1,531
8:30 AM	0	13	0	48	0	0	0	0	0	29	121	0	0	0	138	2	351	1,476
8:45 AM	0	6	0	54	0	0	0	0	0	27	114	0	0	0	167	7	375	1,460
Count Total	0	89	0	442	0	0	0	0	0	167	978	0	0	0	1,257	39	2,972	
Pk Hr All	**0**	**50**	**0**	**245**	**0**	**0**	**0**	**0**	**0**	**81**	**500**	**0**	**0**	**0**	**659**	**20**	**1,555**	
Pk Hr HV	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**25**	**0**	**0**	**0**	**9**	**0**	**44**	
Pk Hr HV%	**-**	**0%**	**-**	**2%**	**-**	**-**	**-**	**-**	**-**	**5%**	**5%**	**-**	**-**	**-**	**1%**	**0%**	**3%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	9	3	*12*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**1**	**0**	**5**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**2**	**0**	**9**	**1**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**1**	**0**	**8**	**2**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**2**	**0**	**7**	**5**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	11	7	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	6	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	1	0	7	5	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	7	0	62	28	*97*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**6**	**0**	**29**	**9**	***44***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	1	12	0
7:15 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**0**	**7**	**0**
7:30 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**0**	**0**	**1**	**0**	**12**	**0**
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**2**	**0**	**11**	**42**
8:00 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**5**	**0**	**14**	**44**
8:15 AM	0	0	0	0	0	0	0	0	0	1	10	0	0	0	7	0	18	55
8:30 AM	0	0	0	0	0	0	0	0	0	1	5	0	0	0	4	0	10	53
8:45 AM	0	0	0	1	0	0	0	0	0	0	7	0	0	0	4	1	13	55
Count Total	0	0	0	7	0	0	0	0	0	6	56	0	0	0	26	2	97	
Pk Hr Heavy	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**25**	**0**	**0**	**0**	**9**	**0**	**44**	

Count Summaries - Bikes

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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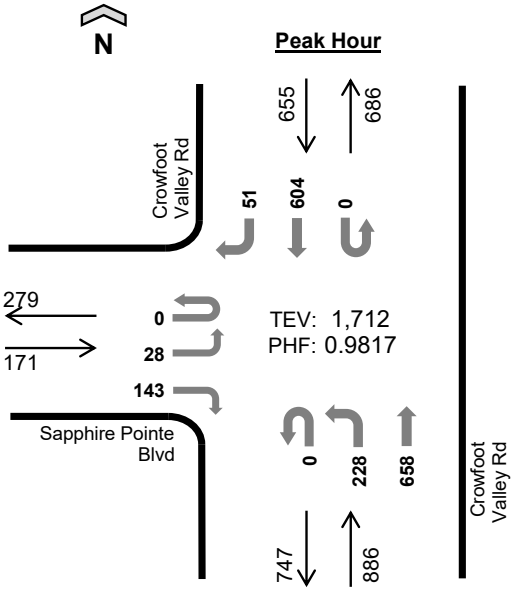
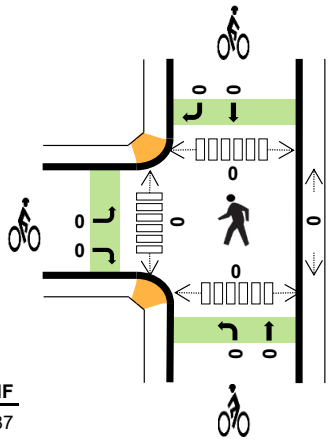
Crowfoot Valley Rd
Sapphire Pointe Blvd

Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV%	PHF
EB	1%	0.87
WB	--	--
NB	1%	0.94
SB	4%	0.94
TOTAL	2%	0.98

Peak Hour Count Summaries

Peak Hour Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	8	0	41	0	0	0	0	0	61	163	0	0	0	153	8	434	0
4:15 PM		0	8	0	34	0	0	0	0	0	52	175	0	0	0	137	21	427	0
4:30 PM		0	7	0	34	0	0	0	0	0	54	145	0	0	0	166	9	415	0
4:45 PM		0	5	0	34	0	0	0	0	0	61	175	0	0	0	148	13	436	1,712
Pk Hr	All	0	28	0	143	0	0	0	0	0	228	658	0	0	0	604	51	1,712	
	HV	0	0	0	2	0	0	0	0	0	4	8	0	0	0	24	1	39	
	HV%	-	0%	-	1%	-	-	-	-	-	2%	1%	-	-	-	4%	2%	2%	

Note: For complete count summary (all intervals), see following pages.
*** Heavy Vehicle Classifications include FHWA Classes 4-13.*
*** Count Summaries include heavy vehicles, but exclude bicycles in overall count.*

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	1	0	5	4	*10*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	0	4	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	2	13	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	1	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	2	0	12	25	*39*	0	0	0	0	*0*	0	0	0	0	*0*

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Count Summaries - All Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**8**	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**61**	**163**	**0**	**0**	**0**	**153**	**8**	**434**	0
4:15 PM	**0**	**8**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**52**	**175**	**0**	**0**	**0**	**137**	**21**	**427**	**0**
4:30 PM	**0**	**7**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**54**	**145**	**0**	**0**	**0**	**166**	**9**	**415**	**0**
4:45 PM	**0**	**5**	**0**	**34**	**0**	**0**	**0**	**0**	**0**	**61**	**175**	**0**	**0**	**0**	**148**	**13**	**436**	**1,712**
5:00 PM	0	6	0	30	0	0	0	0	0	52	153	0	0	0	136	7	384	1,662
5:15 PM	0	4	0	29	0	0	0	0	0	65	168	0	0	0	149	11	426	1,661
5:30 PM	0	8	0	41	0	0	0	0	0	58	154	0	0	0	131	15	407	1,653
5:45 PM	0	4	0	40	0	0	0	0	0	48	122	0	0	0	109	8	331	1,548
Count Total	0	50	0	283	0	0	0	0	0	451	1,255	0	0	0	1,129	92	3,260	
Pk Hr All	**0**	**28**	**0**	**143**	**0**	**0**	**0**	**0**	**0**	**228**	**658**	**0**	**0**	**0**	**604**	**51**	**1,712**	
Pk Hr HV	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**24**	**1**	**39**	
Pk Hr HV%	**-**	**0%**	**-**	**1%**	**-**	**-**	**-**	**-**	**-**	**2%**	**1%**	**-**	**-**	**-**	**4%**	**2%**	**2%**	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	**1**	**0**	**5**	**4**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	**1**	**0**	**4**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**2**	**13**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**1**	**5**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	1	0	1	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	0	0	5	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	3	0	14	34	*51*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	**2**	**0**	**12**	**25**	***39***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	**0**

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Count Summaries - Heavy Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**4**	**0**	**10**	0
4:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**3**	**0**	**8**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**12**	**1**	**15**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	**39**
5:00 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	3	32
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	29
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	12
Count Total	0	0	0	3	0	0	0	0	0	4	10	0	0	0	33	1	51	
Pk Hr Heavy	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**0**	**0**	**24**	**1**	**39**	

Count Summaries - Bikes

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

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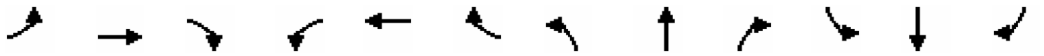
APPENDIX E – Existing Synchro Outputs

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	108	14	255	136	179	8	267	342	182	260	22
v/c Ratio	0.18	0.48	0.05	0.65	0.33	0.36	0.02	0.53	0.51	0.38	0.32	0.03
Control Delay (s/veh)	43.1	49.0	0.3	42.2	34.0	7.5	17.3	35.3	6.4	18.8	21.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.1	49.0	0.3	42.2	34.0	7.5	17.3	35.3	6.4	18.8	21.0	0.1
Queue Length 50th (ft)	19	55	0	125	61	0	2	126	0	58	89	0
Queue Length 95th (ft)	62	140	0	267	146	56	13	269	72	134	226	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	275		440	400		1000	330		600	525		
Base Capacity (vph)	607	639	613	1012	1066	982	661	1173	1123	761	1483	1276
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.17	0.02	0.25	0.13	0.18	0.01	0.23	0.30	0.24	0.18	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	99	13	235	125	165	7	246	315	167	239	20
Future Volume (veh/h)	35	99	13	235	125	165	7	246	315	167	239	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	108	14	255	136	179	8	267	342	182	260	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	162	137	334	351	297	428	549	466	417	707	599
Arrive On Green	0.09	0.09	0.09	0.19	0.19	0.19	0.01	0.29	0.29	0.09	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	38	108	14	255	136	179	8	267	342	182	260	22
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.4	3.8	0.6	9.2	4.3	7.0	0.2	8.0	13.2	4.5	6.8	0.6
Cycle Q Clear(g_c), s	1.4	3.8	0.6	9.2	4.3	7.0	0.2	8.0	13.2	4.5	6.8	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	162	137	334	351	297	428	549	466	417	707	599
V/C Ratio(X)	0.25	0.67	0.10	0.76	0.39	0.60	0.02	0.49	0.73	0.44	0.37	0.04
Avail Cap(c_a), veh/h	785	824	698	1308	1374	1164	933	1511	1280	1164	1923	1630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	30.2	28.7	26.2	24.2	25.3	16.6	19.8	21.7	13.8	15.3	13.4
Incr Delay (d2), s/veh	0.3	1.8	0.1	2.7	0.5	1.5	0.0	0.9	3.2	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.7	0.2	3.8	1.8	2.5	0.1	3.1	4.6	1.5	2.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	31.9	28.8	28.9	24.7	26.8	16.6	20.8	24.9	14.1	15.8	13.4
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		160			570			617			464	
Approach Delay, s/veh		31.0			27.3			23.0			15.0	
Approach LOS		C			C			C			B	

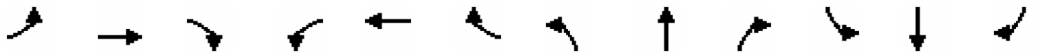
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	26.0		11.9	5.7	31.7		18.8				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	6.5	15.2		5.8	2.2	8.8		11.2				
Green Ext Time (p_c), s	0.1	4.3		0.4	0.0	2.3		1.5				

Intersection Summary												
HCM 7th Control Delay, s/veh			23.0									
HCM 7th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	253	16	667	201	376	5	132	361	54
v/c Ratio	0.23	0.32	0.03	0.89	0.64	0.70	0.01	0.46	0.79	0.12
Control Delay (s/veh)	24.3	26.9	21.9	54.8	35.5	50.9	0.0	30.3	61.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	26.9	21.9	54.8	35.5	50.9	0.0	30.3	61.5	3.3
Queue Length 50th (ft)	18	121	7	555	117	300	0	73	303	0
Queue Length 95th (ft)	46	248	24	#925	166	402	0	112	418	10
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		470	540		400
Base Capacity (vph)	319	782	633	746	407	981	889	457	971	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.32	0.03	0.89	0.49	0.38	0.01	0.29	0.37	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	124	91	14	404	163	171	320	4	112	307	46
Future Volume (veh/h)	35	124	91	14	404	163	171	320	4	112	307	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	41	146	0	16	475	192	201	376	5	132	361	54
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	157	795		541	520	210	299	511	440	279	450	378
Arrive On Green	0.03	0.43	0.00	0.02	0.41	0.41	0.10	0.27	0.27	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1266	512	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	41	146	0	16	0	667	201	376	5	132	361	54
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.6	5.6	0.0	0.6	0.0	41.0	9.9	21.2	0.3	6.5	21.2	3.2
Cycle Q Clear(g_c), s	1.6	5.6	0.0	0.6	0.0	41.0	9.9	21.2	0.3	6.5	21.2	3.2
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	795		541	0	730	299	511	440	279	450	378
V/C Ratio(X)	0.26	0.18		0.03	0.00	0.91	0.67	0.74	0.01	0.47	0.80	0.14
Avail Cap(c_a), veh/h	394	806		880	0	843	493	1129	972	529	1120	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	20.8	0.0	19.2	0.0	32.2	30.4	38.3	30.7	30.9	41.3	34.5
Incr Delay (d2), s/veh	0.9	0.2	0.0	0.0	0.0	13.6	1.0	4.4	0.0	0.5	7.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.4	0.0	0.2	0.0	19.5	4.0	9.9	0.1	2.6	10.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.0	21.0	0.0	19.2	0.0	45.9	31.4	42.7	30.7	31.4	48.3	34.9
LnGrp LOS	C	C		B		D	C	D	C	C	D	C
Approach Vol, veh/h		187			683			582			547	
Approach Delay, s/veh		22.3			45.2			38.7			42.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	54.1	14.0	38.7	7.5	55.8	17.6	35.1
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	3.6	43.0	8.5	23.2	2.6	7.6	11.9	23.2
Green Ext Time (p_c), s	0.1	4.6	0.1	4.7	0.0	1.1	0.2	4.9

Intersection Summary	
HCM 7th Control Delay, s/veh	40.6
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	376	47	27	385
Future Vol, veh/h	67	119	376	47	27	385
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	79	140	442	55	32	453

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	959	442	0	0	498	0
Stage 1	442	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	288	619	-	-	1056	-
Stage 1	652	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	279	619	-	-	1056	-
Mov Cap-2 Maneuver	279	-	-	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	585	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.25	0	0.56
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	279	619	1056	-
HCM Lane V/C Ratio	-	-	0.283	0.226	0.03	-
HCM Ctrl Dly (s/v)	-	-	22.9	12.5	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.9	0.1	-

Intersection	
Int Delay, s/veh	7.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	392	82	24	428
Future Vol, veh/h	160	31	392	82	24	428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	370	-	880	370	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	86	86	91	91
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	188	36	456	95	26	470

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	979	456	0	-	456	0
Stage 1	456	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	277	602	-	0	1094	-
Stage 1	638	-	-	0	-	-
Stage 2	595	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	271	602	-	-	1094	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	580	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	38.59	0	0.44
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	271	602	1094	-
HCM Lane V/C Ratio	-	0.695	0.061	0.024	-
HCM Ctrl Dly (s/v)	-	43.9	11.4	8.4	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	4.7	0.2	0.1	-

Intersection	
Int Delay, s/veh	6.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	486	65	18	548
Future Vol, veh/h	134	18	486	65	18	548
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	146	20	528	71	20	596

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1163	-	0	0	599	0
Stage 1	528	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	201	0	-	-	976	-
Stage 1	557	0	-	-	-	-
Stage 2	527	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	197	-	-	-	976	-
Mov Cap-2 Maneuver	197	-	-	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	62.15	0	0.28
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	197	-	976	-
HCM Lane V/C Ratio	-	-	0.739	-	0.02	-
HCM Ctrl Dly (s/v)	-	-	62.2	0	8.8	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.8	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	501	659	23
Future Vol, veh/h	50	245	81	501	659	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	300	-	-	300
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	54	266	88	545	716	25

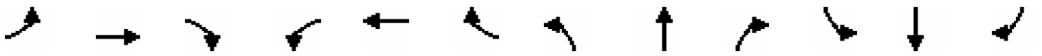
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1165	-	741	0	-	0
Stage 1	716	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	201	0	863	-	-	-
Stage 1	483	0	-	-	-	-
Stage 2	611	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	180	-	863	-	-	-
Mov Cap-2 Maneuver	180	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	611	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	33.39	1.34	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	863	-	180	-	-	-
HCM Lane V/C Ratio	0.102	-	0.302	-	-	-
HCM Ctrl Dly (s/v)	9.6	-	33.4	0	-	-
HCM Lane LOS	A	-	D	A	-	-
HCM 95th %tile Q(veh)	0.3	-	1.2	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	32	122	15	370	72	163	7	254	351	190	288	28
v/c Ratio	0.15	0.55	0.05	0.74	0.14	0.29	0.02	0.56	0.54	0.43	0.38	0.04
Control Delay (s/veh)	50.2	58.3	0.4	45.7	31.4	6.4	23.0	43.8	7.5	24.8	27.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.2	58.3	0.4	45.7	31.4	6.4	23.0	43.8	7.5	24.8	27.3	0.1
Queue Length 50th (ft)	19	76	0	216	35	0	3	148	0	79	128	0
Queue Length 95th (ft)	61	178	0	415	87	52	14	307	84	175	301	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	275		440	400		1000	330		600	525		
Base Capacity (vph)	528	555	547	880	926	869	592	1019	1025	678	1297	1126
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.22	0.03	0.42	0.08	0.19	0.01	0.25	0.34	0.28	0.22	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	112	14	340	66	150	6	234	323	175	265	26
Future Volume (veh/h)	29	112	14	340	66	150	6	234	323	175	265	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	122	15	370	72	163	7	254	351	190	288	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	171	145	432	453	384	377	527	447	400	691	585
Arrive On Green	0.09	0.09	0.09	0.24	0.24	0.24	0.01	0.28	0.28	0.10	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	32	122	15	370	72	163	7	254	351	190	288	28
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.3	5.1	0.7	15.9	2.4	6.9	0.2	9.0	16.3	5.7	9.2	0.9
Cycle Q Clear(g_c), s	1.3	5.1	0.7	15.9	2.4	6.9	0.2	9.0	16.3	5.7	9.2	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	171	145	432	453	384	377	527	447	400	691	585
V/C Ratio(X)	0.20	0.71	0.10	0.86	0.16	0.42	0.02	0.48	0.79	0.48	0.42	0.05
Avail Cap(c_a), veh/h	669	703	596	1115	1171	993	807	1288	1092	1009	1640	1390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	35.3	33.3	28.9	23.8	25.5	20.2	23.8	26.4	16.9	18.8	16.2
Incr Delay (d2), s/veh	0.2	2.1	0.1	3.8	0.1	0.6	0.0	1.0	4.4	0.3	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.3	0.3	6.7	1.0	2.5	0.1	3.7	6.0	2.0	3.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.8	37.3	33.4	32.7	24.0	26.1	20.2	24.8	30.8	17.2	19.3	16.2
LnGrp LOS	C	D	C	C	C	C	C	C	C	B	B	B
Approach Vol, veh/h		169			605			612			506	
Approach Delay, s/veh		36.3			29.9			28.2			18.4	
Approach LOS		D			C			C			B	

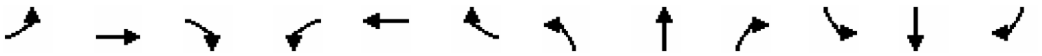
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	28.5		13.3	5.7	35.5		25.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.7	18.3		7.1	2.2	11.2		17.9				
Green Ext Time (p_c), s	0.1	4.2		0.4	0.0	2.6		1.5				

Intersection Summary												
HCM 7th Control Delay, s/veh			26.8									
HCM 7th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	65	604	9	299	118	460	6	186	387	40
v/c Ratio	0.17	0.83	0.05	0.50	0.35	0.79	0.01	0.65	0.64	0.07
Control Delay (s/veh)	25.0	45.2	25.8	38.1	21.4	49.4	0.0	30.0	40.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.0	45.2	25.8	38.1	21.4	49.4	0.0	30.0	40.5	0.2
Queue Length 50th (ft)	28	382	4	174	49	318	0	81	248	0
Queue Length 95th (ft)	70	#822	17	323	91	484	0	138	384	0
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		470	540		400
Base Capacity (vph)	464	729	426	808	510	1081	972	448	1071	935
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.83	0.02	0.37	0.23	0.43	0.01	0.42	0.36	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	365	149	8	140	114	100	391	5	158	329	34
Future Volume (veh/h)	55	365	149	8	140	114	100	391	5	158	329	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	65	429	0	9	165	134	118	460	6	186	387	40
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	256	528		169	236	191	365	596	513	340	645	542
Arrive On Green	0.05	0.28	0.00	0.01	0.25	0.25	0.07	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1682	1870	0	1711	955	776	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	65	429	0	9	0	299	118	460	6	186	387	40
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.4	17.9	0.0	0.3	0.0	13.1	3.7	18.6	0.2	5.8	14.4	1.4
Cycle Q Clear(g_c), s	2.4	17.9	0.0	0.3	0.0	13.1	3.7	18.6	0.2	5.8	14.4	1.4
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	528		169	0	427	365	596	513	340	645	542
V/C Ratio(X)	0.25	0.81		0.05	0.00	0.70	0.32	0.77	0.01	0.55	0.60	0.07
Avail Cap(c_a), veh/h	580	1119		661	0	1139	771	1567	1349	699	1554	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	27.9	0.0	24.5	0.0	28.7	18.0	25.7	19.5	18.7	22.5	18.2
Incr Delay (d2), s/veh	0.5	4.3	0.0	0.1	0.0	3.0	0.2	4.5	0.0	0.5	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.9	0.0	0.1	0.0	5.5	1.3	8.1	0.1	2.1	5.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.3	32.3	0.0	24.6	0.0	31.6	18.2	30.2	19.5	19.2	24.4	18.4
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h		494			308			584			613	
Approach Delay, s/veh		31.1			31.4			27.7			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	27.1	13.4	33.6	6.4	30.1	11.0	36.1
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	4.4	15.1	7.8	20.6	2.3	19.9	5.7	16.4
Green Ext Time (p_c), s	0.1	2.8	0.2	6.1	0.0	3.7	0.1	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	428	45	90	396
Future Vol, veh/h	29	68	428	45	90	396
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	34	80	504	53	106	466

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1181	504	0	0	556	0
Stage 1	504	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	212	572	-	-	1004	-
Stage 1	611	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	190	572	-	-	1004	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.04	0	1.67
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	190	572	1004	-
HCM Lane V/C Ratio	-	-	0.18	0.14	0.105	-
HCM Ctrl Dly (s/v)	-	-	28.1	12.3	9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.4	-

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	435	152	29	396
Future Vol, veh/h	122	38	435	152	29	396
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	370	-	880	370	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	86	86	91	91
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	144	45	506	177	32	435

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1005	506	0	-	506	0
Stage 1	506	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	268	564	-	0	1049	-
Stage 1	606	-	-	0	-	-
Stage 2	610	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	260	564	-	-	1049	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	29.33	0	0.58
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	260	564	1049	-
HCM Lane V/C Ratio	-	0.553	0.079	0.03	-
HCM Ctrl Dly (s/v)	-	34.8	11.9	8.5	-
HCM Lane LOS	-	D	B	A	-
HCM 95th %tile Q(veh)	-	3.1	0.3	0.1	-

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	524	139	18	538
Future Vol, veh/h	101	16	524	139	18	538
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	110	17	570	151	20	585

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1193	-	0	0	721	0
Stage 1	570	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	192	0	-	-	879	-
Stage 1	530	0	-	-	-	-
Stage 2	533	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	-	-	-	879	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	47.92	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	188	-	879	-
HCM Lane V/C Ratio	-	-	0.583	-	0.022	-
HCM Ctrl Dly (s/v)	-	-	47.9	0	9.2	-
HCM Lane LOS	-	-	E	A	A	-
HCM 95th %tile Q(veh)	-	-	3.2	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	641	599	40
Future Vol, veh/h	22	127	232	641	599	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	300	-	-	300
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	138	252	697	651	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1504	-	695	0	-	0
Stage 1	651	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	122	0	899	-	-	-
Stage 1	518	0	-	-	-	-
Stage 2	379	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	-	899	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	60.45	2.81	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	899	-	88	-	-	-
HCM Lane V/C Ratio	0.281	-	0.271	-	-	-
HCM Ctrl Dly (s/v)	10.6	-	60.5	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1	-	-	-

APPENDIX F – Pipeline Development Excerpt

No further comments. TIS approved on March 18, 2025.

CANYONS PRELIMINARY PLAN #3

TRAFFIC IMPACT STUDY

Castle Pines, Colorado

Prepared for:

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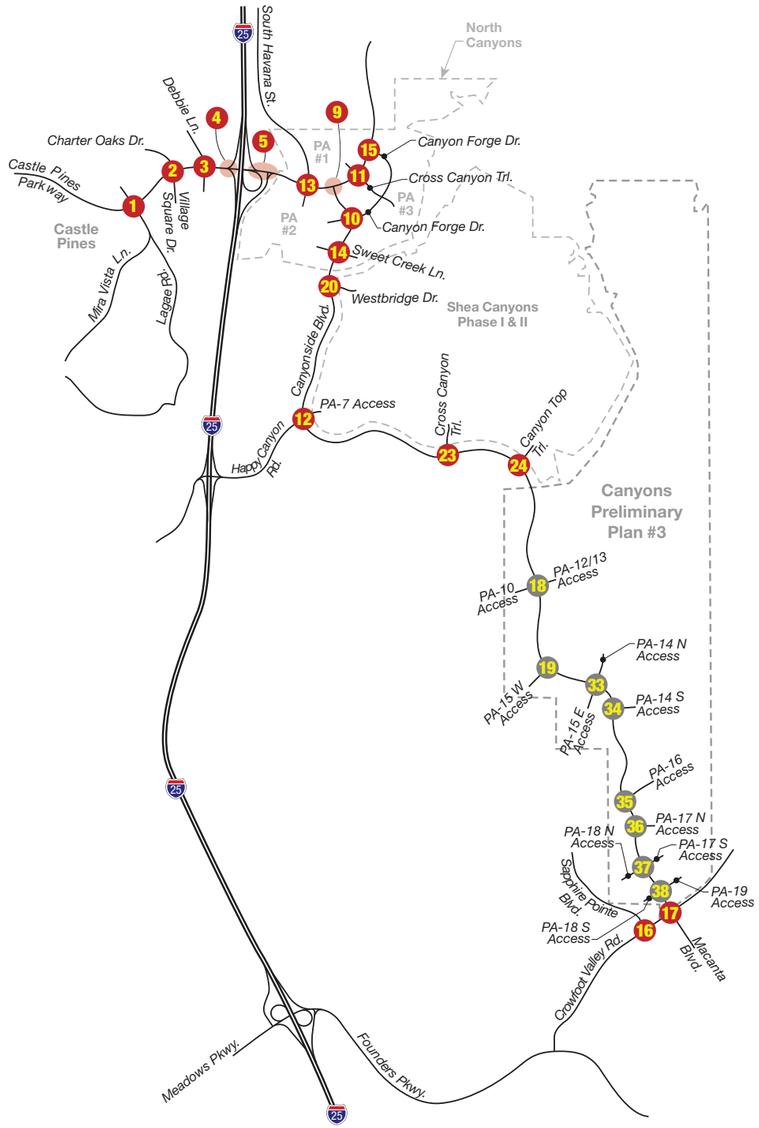
FELSBURG HOLT & ULLEVIG
connecting & enhancing communities

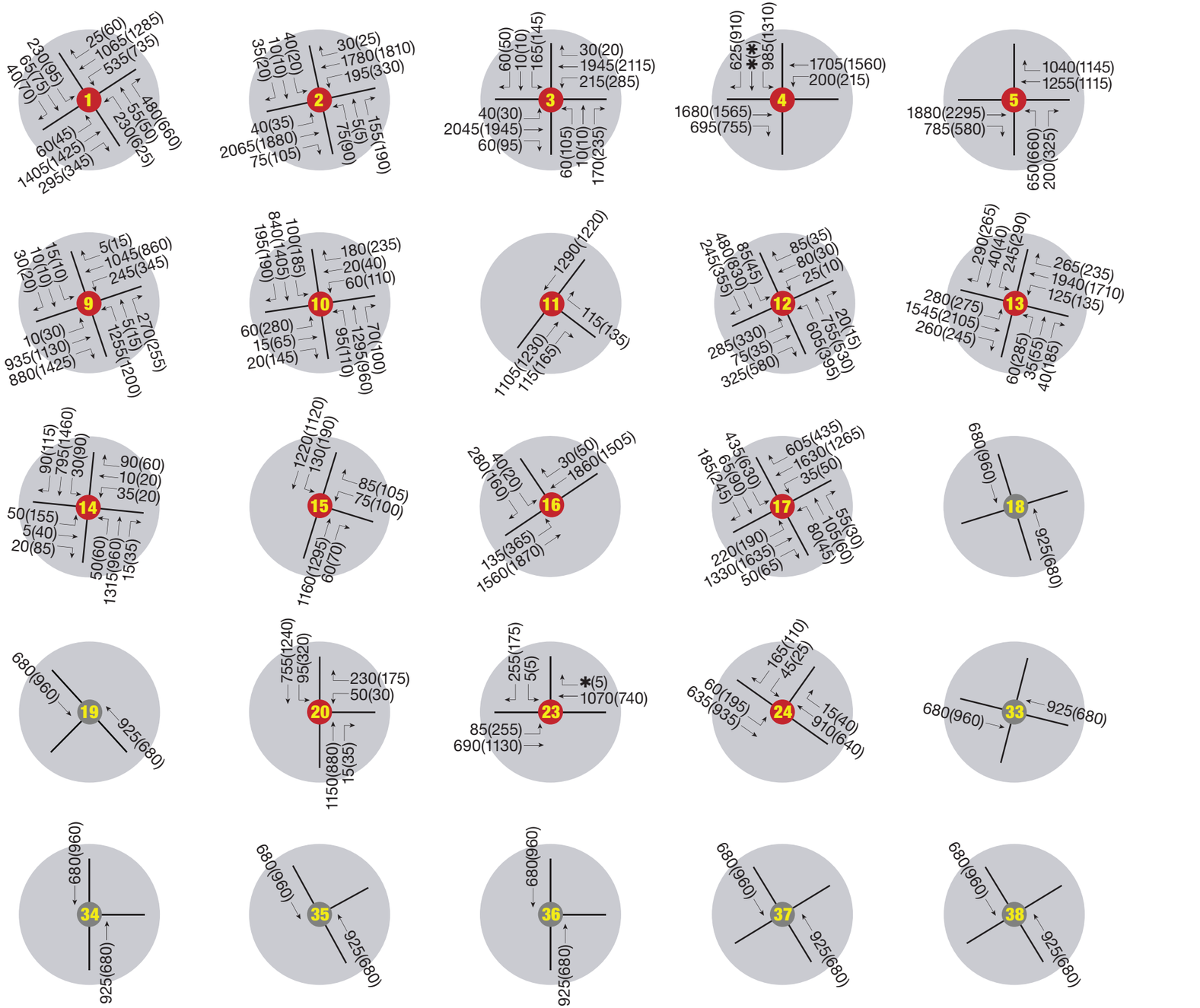
FHU Reference No. 122644-01

April 2023

Revised March 2025

KEY MAP





LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
*	=	Less Than 5 Vehicles per Hour (vph)
X	=	Background Study Intersection
X	=	Proposed Study Intersections

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

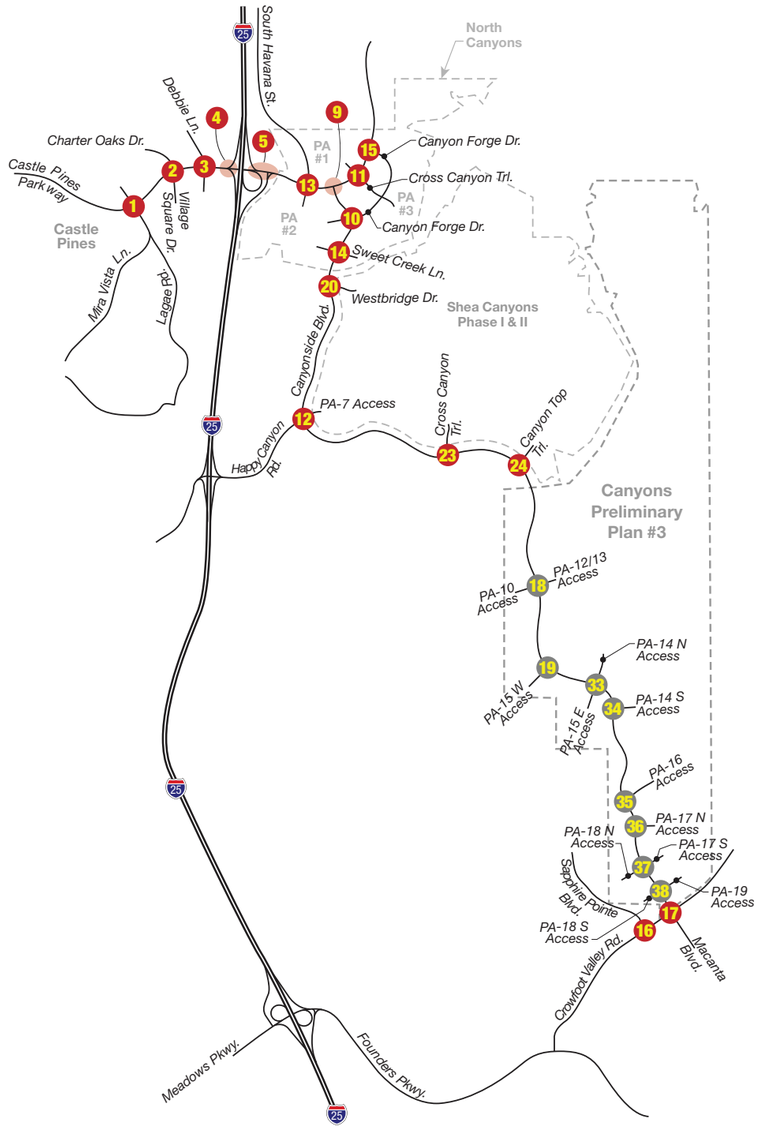
NORTH

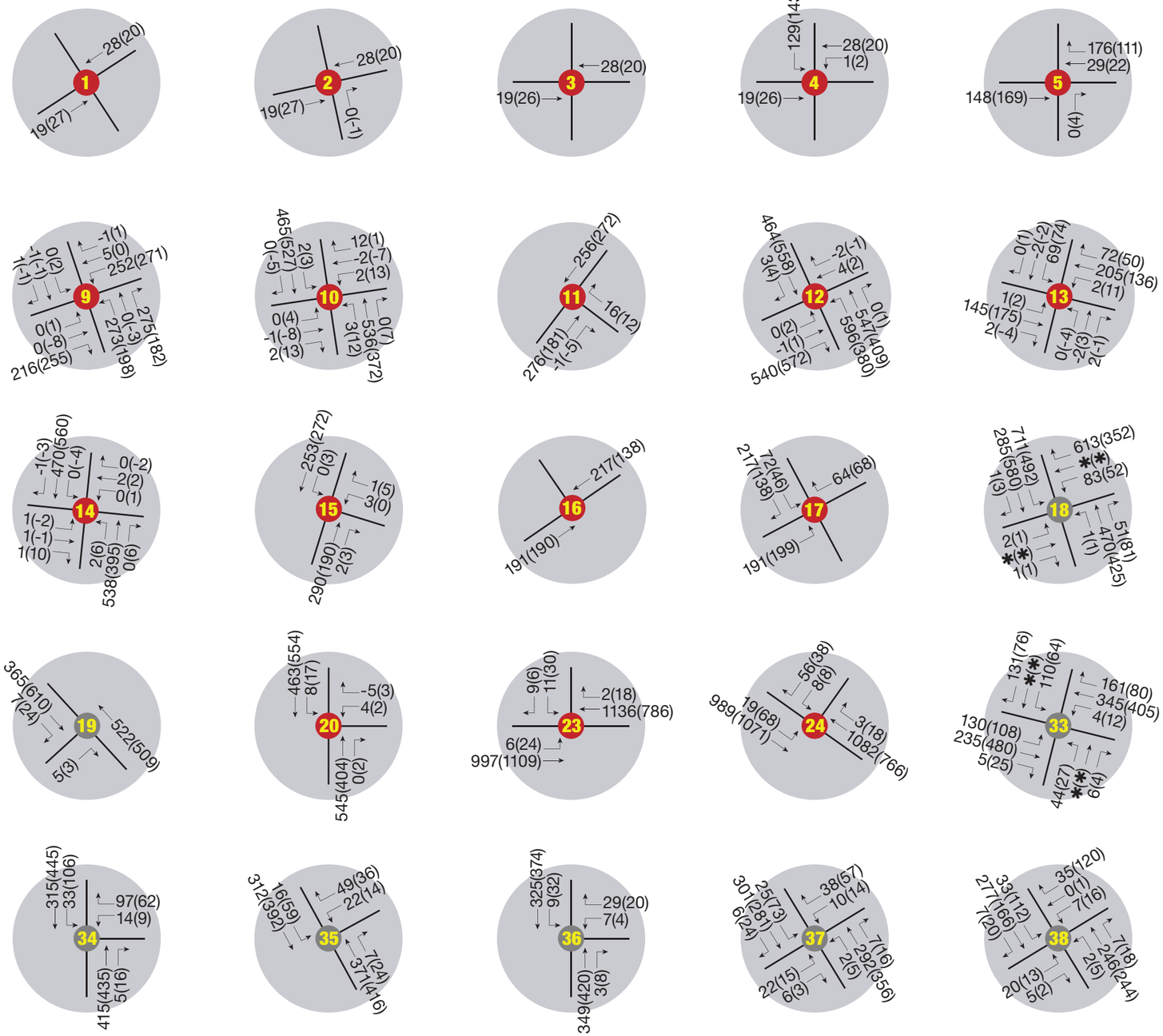
FIGURE 9

2040 Background Traffic Volumes

South Canyons TIS - MODIFIED LAYOUT 122644-01 3/18/25

KEY MAP





LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
*	=	Less Than 5 Vehicles per Hour (vph)
X	=	Background Study Intersection
X	=	Proposed Study Intersections

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

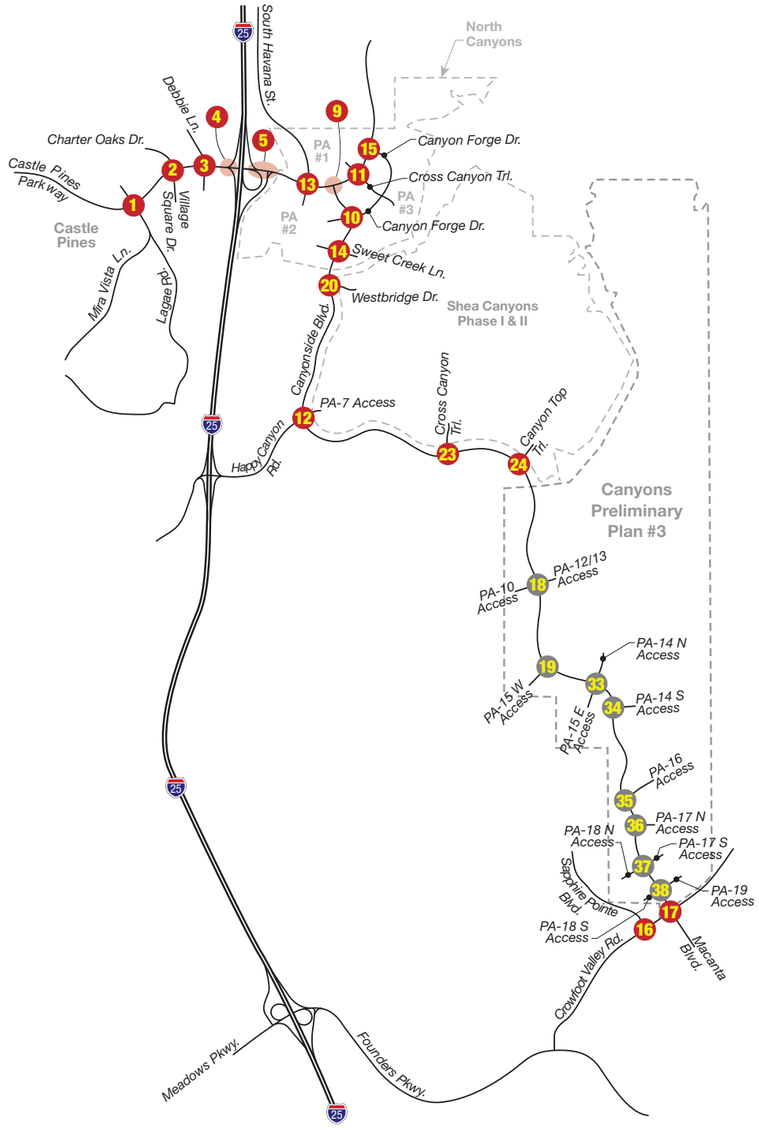
NORTH

FIGURE 11

2040 Site Generated Traffic Volumes

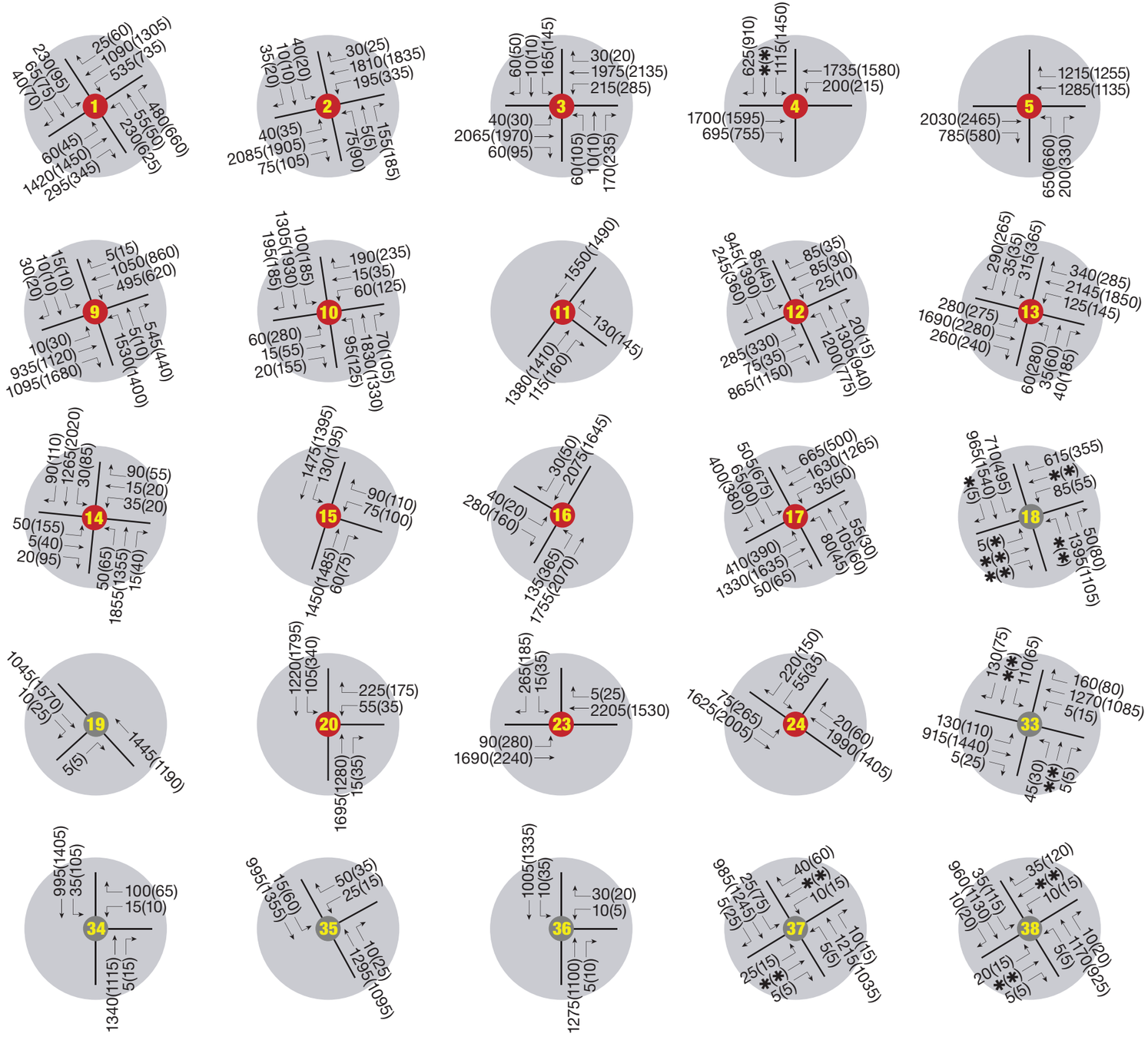
South Canyons TIS - MODIFIED LAYOUT 122644-01 3/18/25

KEY MAP



LEGEND

XXX(XXX)	=	AM(PM) Peak Hour Traffic Volumes
*	=	Less Than 5 Vehicles per Hour (vph)
X	=	Background Study Intersection
X	=	Proposed Study Intersections



FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

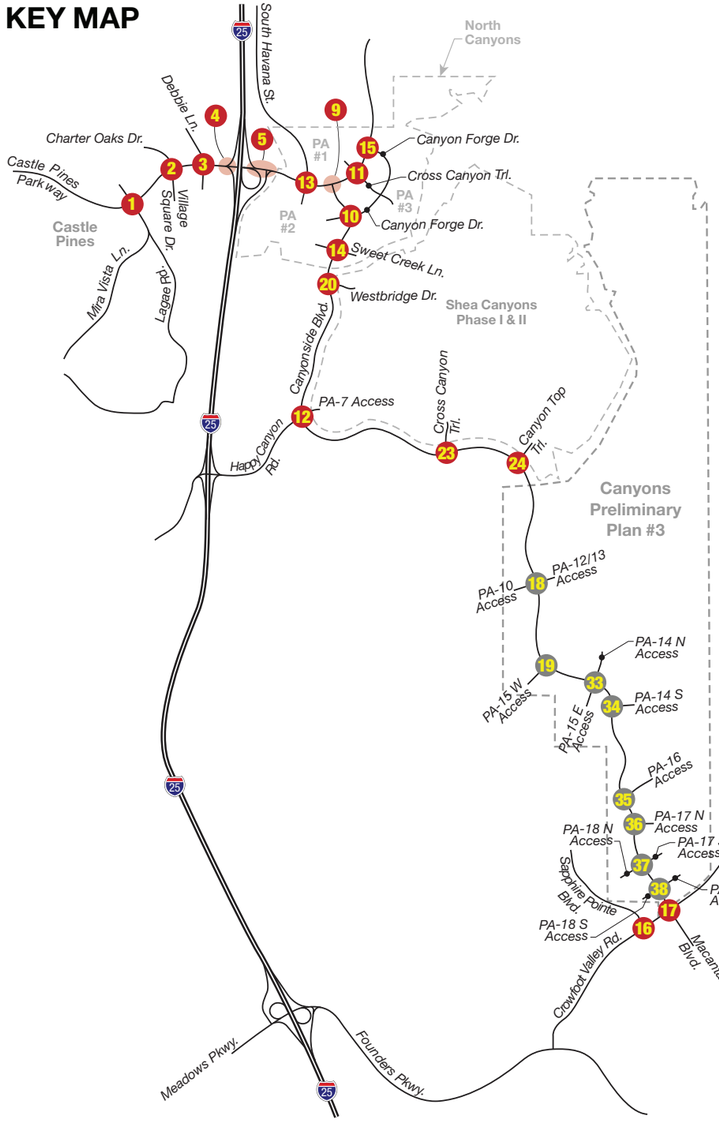
NORTH

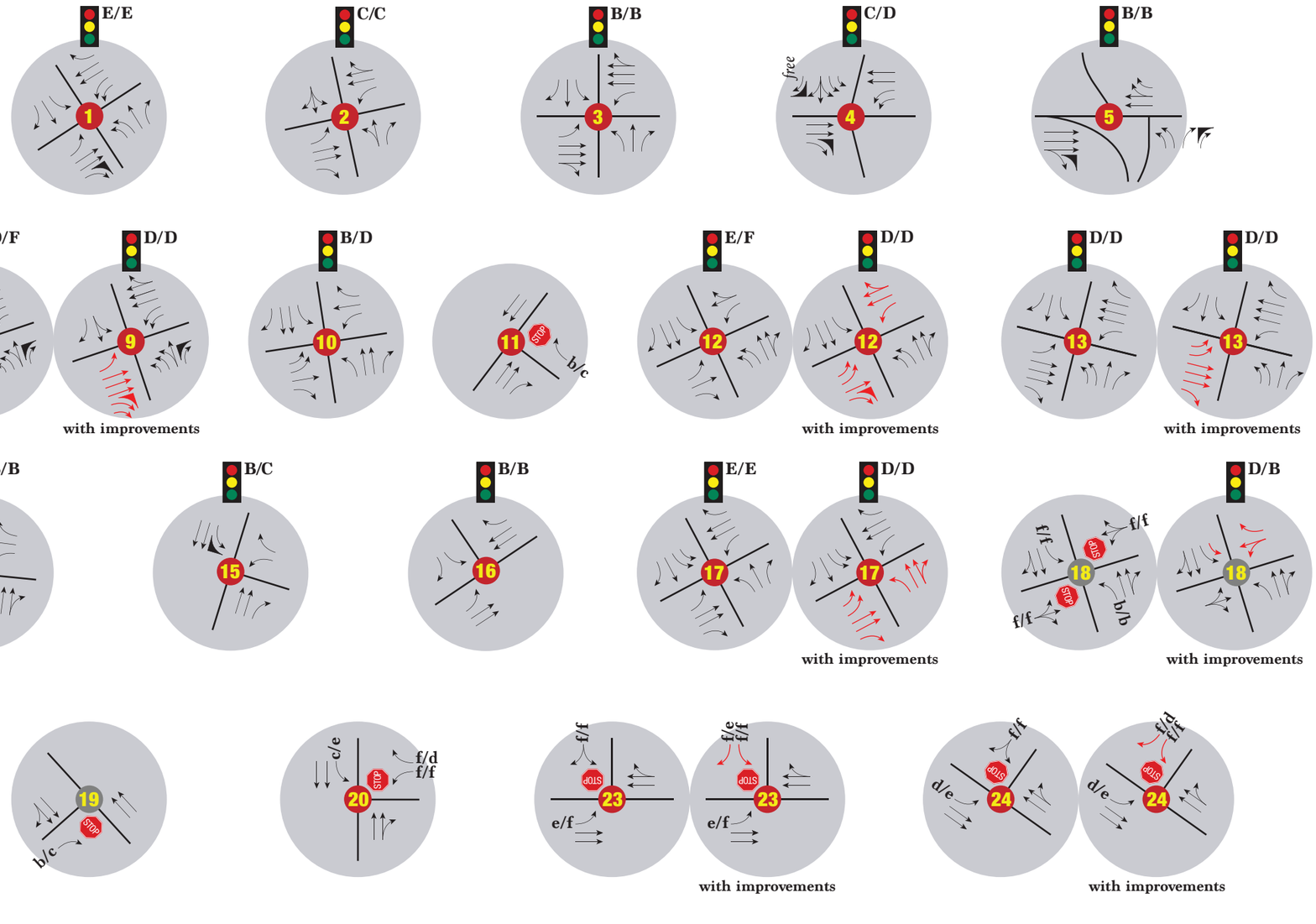
FIGURE 12

2040 Total Traffic Volumes

South Canyons TIS - MODIFIED LAYOUT 122644-01 3/18/25

KEY MAP





LEGEND

x/x =	AM/PM Peak Hour Signalized Intersection Level of Service	=	Stop Sign
x/x =	AM/PM Peak Hour Unsignalized Intersection Level of Service	=	Traffic Signal
		=	Background Study Intersection
		=	Proposed Study Intersections

FELSBURG HOLT & ULLEVIG

NOTE: Drawing Not to Scale

NORTH

FIGURE 13

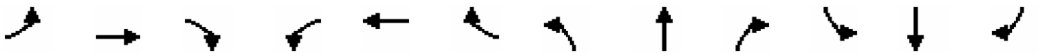
2040 Total Traffic Conditions

South Canyons TIS - MODIFIED LAYOUT 122644-01 3/18/25

APPENDIX G – Background Future (without site development) Synchro Outputs

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	114	15	271	145	190	8	284	363	192	276	23
v/c Ratio	0.19	0.51	0.05	0.66	0.34	0.37	0.02	0.56	0.52	0.41	0.34	0.03
Control Delay (s/veh)	46.2	52.4	0.4	43.8	35.3	7.3	18.4	37.8	6.6	20.2	22.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	52.4	0.4	43.8	35.3	7.3	18.4	37.8	6.6	20.2	22.2	0.1
Queue Length 50th (ft)	22	64	0	143	71	0	3	145	0	67	103	0
Queue Length 95th (ft)	69	157	0	299	162	58	13	304	77	151	252	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	578	609	589	964	1015	949	647	1116	1094	736	1420	1225
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.19	0.03	0.28	0.14	0.20	0.01	0.25	0.33	0.26	0.19	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	105	14	249	133	175	7	261	334	177	254	21
Future Volume (veh/h)	38	105	14	249	133	175	7	261	334	177	254	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	114	15	271	145	190	8	284	363	192	276	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	167	141	347	365	309	421	560	475	409	723	612
Arrive On Green	0.09	0.09	0.09	0.20	0.20	0.20	0.01	0.30	0.30	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	41	114	15	271	145	190	8	284	363	192	276	23
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	4.3	0.6	10.4	4.9	7.9	0.2	9.0	15.0	5.0	7.7	0.7
Cycle Q Clear(g_c), s	1.5	4.3	0.6	10.4	4.9	7.9	0.2	9.0	15.0	5.0	7.7	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	167	141	347	365	309	421	560	475	409	723	612
V/C Ratio(X)	0.26	0.68	0.11	0.78	0.40	0.61	0.02	0.51	0.76	0.47	0.38	0.04
Avail Cap(c_a), veh/h	741	779	660	1236	1298	1100	897	1427	1210	1101	1817	1539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	31.8	30.2	27.5	25.3	26.5	17.3	20.8	22.9	14.5	15.9	13.8
Incr Delay (d2), s/veh	0.3	1.8	0.1	2.9	0.5	1.5	0.0	1.0	3.7	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.2	4.4	2.1	2.9	0.1	3.6	5.3	1.7	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	33.7	30.3	30.4	25.8	28.0	17.3	21.9	26.6	14.8	16.4	13.8
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		170			606			655			491	
Approach Delay, s/veh		32.7			28.6			24.4			15.7	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	27.6		12.4	5.7	33.8		20.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.0	17.0		6.3	2.2	9.7		12.4				
Green Ext Time (p_c), s	0.1	4.6		0.4	0.0	2.4		1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	248	16	654	197	370	4	129	354	53
v/c Ratio	0.21	0.32	0.03	0.87	0.63	0.70	0.01	0.45	0.78	0.12
Control Delay (s/veh)	23.4	26.2	21.4	51.6	35.1	51.0	0.0	30.2	61.1	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	26.2	21.4	51.6	35.1	51.0	0.0	30.2	61.1	3.1
Queue Length 50th (ft)	18	116	7	531	114	293	0	71	295	0
Queue Length 95th (ft)	48	258	24	#976	174	426	0	117	439	13
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		400	550		350
Base Capacity (vph)	331	786	642	751	410	989	895	459	979	862
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.32	0.02	0.87	0.48	0.37	0.00	0.28	0.36	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	132	97	15	429	173	181	340	4	119	326	49
Future Volume (veh/h)	37	132	97	15	429	173	181	340	4	119	326	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	40	143	0	16	466	188	197	370	4	129	354	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	164	788		541	516	208	301	506	436	281	444	374
Arrive On Green	0.03	0.42	0.00	0.02	0.41	0.41	0.10	0.27	0.27	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1267	511	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	40	143	0	16	0	654	197	370	4	129	354	53
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.5	5.4	0.0	0.6	0.0	38.7	9.4	20.2	0.2	6.1	20.1	3.0
Cycle Q Clear(g_c), s	1.5	5.4	0.0	0.6	0.0	38.7	9.4	20.2	0.2	6.1	20.1	3.0
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	788		541	0	724	301	506	436	281	444	374
V/C Ratio(X)	0.24	0.18		0.03	0.00	0.90	0.65	0.73	0.01	0.46	0.80	0.14
Avail Cap(c_a), veh/h	410	833		892	0	871	509	1166	1003	544	1156	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	20.3	0.0	18.8	0.0	31.2	29.6	37.3	30.0	30.1	40.1	33.6
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.0	0.0	11.9	0.9	4.3	0.0	0.4	6.8	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.3	0.0	0.2	0.0	18.1	3.8	9.4	0.1	2.5	9.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	20.5	0.0	18.8	0.0	43.1	30.5	41.6	30.0	30.6	47.0	34.0
LnGrp LOS	C	C		B		D	C	D	C	C	D	C
Approach Vol, veh/h		183			670			571			536	
Approach Delay, s/veh		21.7			42.5			37.7			41.7	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	52.3	13.6	37.4	7.5	53.9	17.1	33.9
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	3.5	40.7	8.1	22.2	2.6	7.4	11.4	22.1
Green Ext Time (p_c), s	0.1	5.0	0.1	4.6	0.0	1.1	0.2	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	39.0
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	406	47	27	411
Future Vol, veh/h	67	119	406	47	27	411
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	441	51	29	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	947	441	0	0	492	0
Stage 1	441	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	292	620	-	-	1061	-
Stage 1	653	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	284	620	-	-	1061	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	593	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.8	0	0.52
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	284	620	1061	-
HCM Lane V/C Ratio	-	-	0.256	0.209	0.028	-
HCM Ctrl Dly (s/v)	-	-	22	12.3	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.8	0.1	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	422	82	24	454
Future Vol, veh/h	160	31	422	82	24	454
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	459	89	26	493

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1004	459	0	-	459	0
Stage 1	459	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	268	600	-	0	1092	-
Stage 1	636	-	-	0	-	-
Stage 2	581	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	262	600	-	-	1092	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	567	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	37.36	0	0.42
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	262	600	1092	-
HCM Lane V/C Ratio	-	0.665	0.056	0.024	-
HCM Ctrl Dly (s/v)	-	42.4	11.4	8.4	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	4.3	0.2	0.1	-

Intersection	
Int Delay, s/veh	8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	516	65	18	574
Future Vol, veh/h	134	18	516	65	18	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	146	20	561	71	20	624

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1224	-	0	0	632	0
Stage 1	561	-	-	-	-	-
Stage 2	663	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	184	0	-	-	949	-
Stage 1	536	0	-	-	-	-
Stage 2	511	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	180	-	-	-	949	-
Mov Cap-2 Maneuver	180	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	501	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	77.22	0	0.27
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	180	-	949	-
HCM Lane V/C Ratio	-	-	0.808	-	0.021	-
HCM Ctrl Dly (s/v)	-	-	77.2	0	8.9	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	5.5	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	531	685	23
Future Vol, veh/h	50	245	81	531	685	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	54	266	88	577	745	25

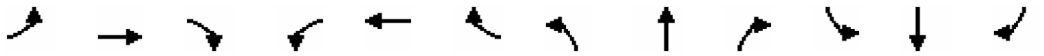
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1209	-	770	0	-	0
Stage 1	745	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	188	0	843	-	-	-
Stage 1	468	0	-	-	-	-
Stage 2	600	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	168	-	843	-	-	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	600	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	36.23	1.29	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	843	-	168	-	-	-
HCM Lane V/C Ratio	0.104	-	0.323	-	-	-
HCM Ctrl Dly (s/v)	9.8	-	36.2	0	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	129	16	392	76	173	7	270	373	202	305	30
v/c Ratio	0.16	0.58	0.06	0.75	0.14	0.29	0.02	0.60	0.56	0.47	0.41	0.04
Control Delay (s/veh)	53.2	62.5	0.4	47.6	32.6	6.3	24.3	47.0	7.7	26.9	29.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.2	62.5	0.4	47.6	32.6	6.3	24.3	47.0	7.7	26.9	29.0	0.1
Queue Length 50th (ft)	22	88	0	251	40	0	3	172	0	92	149	0
Queue Length 95th (ft)	66	195	0	465	95	55	14	338	87	192	330	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	497	523	521	828	872	832	575	959	996	649	1221	1064
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.25	0.03	0.47	0.09	0.21	0.01	0.28	0.37	0.31	0.25	0.03

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	119	15	361	70	159	6	248	343	186	281	28
Future Volume (veh/h)	31	119	15	361	70	159	6	248	343	186	281	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	129	16	392	76	173	7	270	373	202	305	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	175	149	449	471	400	372	546	463	394	714	605
Arrive On Green	0.09	0.09	0.09	0.25	0.25	0.25	0.01	0.29	0.29	0.10	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	34	129	16	392	76	173	7	270	373	202	305	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	5.9	0.8	18.4	2.8	8.0	0.2	10.4	19.0	6.5	10.5	1.0
Cycle Q Clear(g_c), s	1.5	5.9	0.8	18.4	2.8	8.0	0.2	10.4	19.0	6.5	10.5	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	175	149	449	471	400	372	546	463	394	714	605
V/C Ratio(X)	0.20	0.74	0.11	0.87	0.16	0.43	0.02	0.49	0.81	0.51	0.43	0.05
Avail Cap(c_a), veh/h	612	643	545	1020	1071	908	764	1178	998	932	1499	1271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	38.5	36.2	31.3	25.5	27.4	21.5	25.6	28.6	18.1	19.9	17.0
Incr Delay (d2), s/veh	0.2	2.3	0.1	4.1	0.1	0.6	0.0	1.0	4.7	0.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.7	0.3	8.0	1.2	2.9	0.1	4.4	7.1	2.4	4.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	40.8	36.3	35.4	25.6	28.0	21.5	26.6	33.3	18.5	20.5	17.1
LnGrp LOS	D	D	D	D	C	C	C	C	C	B	C	B
Approach Vol, veh/h		179			641			650			537	
Approach Delay, s/veh		39.6			32.2			30.4			19.6	
Approach LOS		D			C			C			B	

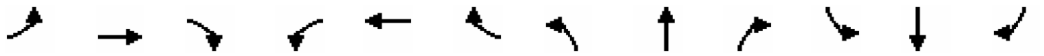
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.6	31.5		14.2	5.8	39.3		28.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	8.5	21.0		7.9	2.2	12.5		20.4				
Green Ext Time (p_c), s	0.1	4.5		0.4	0.0	2.7		1.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			28.9									
HCM 7th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	593	9	294	115	451	5	183	379	39
v/c Ratio	0.16	0.81	0.05	0.49	0.34	0.79	0.01	0.64	0.64	0.07
Control Delay (s/veh)	24.3	43.0	25.0	36.9	21.4	49.6	0.0	29.6	40.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	43.0	25.0	36.9	21.4	49.6	0.0	29.6	40.5	0.3
Queue Length 50th (ft)	27	367	4	168	48	309	0	80	242	0
Queue Length 95th (ft)	71	#867	18	336	96	512	0	146	404	0
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		400	550		350
Base Capacity (vph)	473	734	437	815	514	1092	980	451	1081	944
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.81	0.02	0.36	0.22	0.41	0.01	0.41	0.35	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	387	158	8	149	121	106	415	5	168	349	36
Future Volume (veh/h)	58	387	158	8	149	121	106	415	5	168	349	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	63	421	0	9	162	132	115	451	5	183	379	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	258	522		172	232	189	367	589	507	343	639	537
Arrive On Green	0.05	0.28	0.00	0.01	0.24	0.24	0.06	0.31	0.31	0.09	0.34	0.34
Sat Flow, veh/h	1682	1870	0	1711	954	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	63	421	0	9	0	294	115	451	5	183	379	39
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.2	17.1	0.0	0.3	0.0	12.6	3.6	17.7	0.2	5.6	13.7	1.4
Cycle Q Clear(g_c), s	2.2	17.1	0.0	0.3	0.0	12.6	3.6	17.7	0.2	5.6	13.7	1.4
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	522		172	0	422	367	589	507	343	639	537
V/C Ratio(X)	0.24	0.81		0.05	0.00	0.70	0.31	0.77	0.01	0.53	0.59	0.07
Avail Cap(c_a), veh/h	592	1148		678	0	1168	788	1607	1383	716	1594	1340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	27.3	0.0	24.0	0.0	28.1	17.7	25.2	19.2	18.3	22.0	18.0
Incr Delay (d2), s/veh	0.5	4.2	0.0	0.1	0.0	3.0	0.2	4.4	0.0	0.5	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.5	0.0	0.1	0.0	5.2	1.3	7.7	0.1	2.0	5.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	31.6	0.0	24.1	0.0	31.0	17.9	29.6	19.2	18.8	23.9	18.1
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h		484			303			571			601	
Approach Delay, s/veh		30.4			30.8			27.2			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	26.3	13.2	32.7	6.4	29.2	10.8	35.1
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	4.2	14.6	7.6	19.7	2.3	19.1	5.6	15.7
Green Ext Time (p_c), s	0.1	2.7	0.2	5.9	0.0	3.7	0.1	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	26.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	0	68	0	458	45	90	425	0	0	0
Future Vol, veh/h	0	68	0	458	45	90	425	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	215	-	-	440	500	-	-	-	-
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
Heavy Vehicles, %	2	0	2	4	6	4	4	2	2	2
Mvmt Flow	0	74	0	498	49	98	462	0	0	0

Major/Minor	Minor1		Major1			Major2		
Conflicting Flow All	1155	498	-	0	0	547	0	0
Stage 1	498	-	-	-	-	-	-	-
Stage 2	658	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	4.14	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	2.236	-	-
Pot Cap-1 Maneuver	220	576	0	-	-	1013	-	0
Stage 1	615	-	0	-	-	-	-	0
Stage 2	519	-	0	-	-	-	-	0
Platoon blocked, %				-	-		-	
Mov Cap-1 Maneuver	198	576	-	-	-	1013	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-	-	-
Stage 1	615	-	-	-	-	-	-	-
Stage 2	469	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.46	0	1.56
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	198	576	1013	-
HCM Lane V/C Ratio	-	-	0.159	0.128	0.097	-
HCM Ctrl Dly (s/v)	-	-	26.6	12.2	8.9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.4	0.3	-

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	122	38	465	0	29	425	0	0
Future Vol, veh/h	122	38	465	0	29	425	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	-	None	-	None
Storage Length	0	370	-	880	370	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0	0	-
Grade, %	0	-	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	2	4	3	2	2
Mvmt Flow	133	41	505	0	32	462	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1030	505	0	-	505	0
Stage 1	505	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	258	565	-	0	1049	-
Stage 1	606	-	-	0	-	-
Stage 2	593	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	251	565	-	-	1049	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	576	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	29.06	0	0.55
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	251	565	1049	-
HCM Lane V/C Ratio	-	0.529	0.073	0.03	-
HCM Ctrl Dly (s/v)	-	34.4	11.9	8.5	-
HCM Lane LOS	-	D	B	A	-
HCM 95th %tile Q(veh)	-	2.8	0.2	0.1	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	554	139	18	567
Future Vol, veh/h	101	16	554	139	18	567
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	110	17	602	151	20	616

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1258	-	0	0	753	0
Stage 1	602	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	175	0	-	-	855	-
Stage 1	510	0	-	-	-	-
Stage 2	516	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	171	-	-	-	855	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	504	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	57.38	0	0.29
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	171	-	855	-
HCM Lane V/C Ratio	-	-	0.641	-	0.023	-
HCM Ctrl Dly (s/v)	-	-	57.4	0	9.3	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	3.6	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	671	628	40
Future Vol, veh/h	22	127	232	671	628	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	138	252	729	683	43

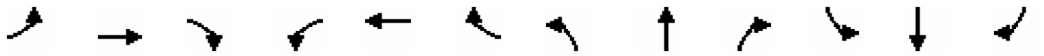
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1552	-	726	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	114	0	875	-	-	-
Stage 1	501	0	-	-	-	-
Stage 2	372	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	81	-	875	-	-	-
Mov Cap-2 Maneuver	81	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	372	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	66.85	2.77	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	875	-	81	-	-	-
HCM Lane V/C Ratio	0.288	-	0.294	-	-	-
HCM Ctrl Dly (s/v)	10.8	-	66.8	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1.1	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	118	15	282	150	198	9	296	378	200	287	24
v/c Ratio	0.20	0.52	0.05	0.67	0.34	0.38	0.02	0.58	0.54	0.44	0.35	0.03
Control Delay (s/veh)	48.2	54.8	0.4	45.5	36.5	7.3	19.1	39.4	6.6	21.2	23.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.2	54.8	0.4	45.5	36.5	7.3	19.1	39.4	6.6	21.2	23.0	0.1
Queue Length 50th (ft)	23	69	0	156	76	0	3	158	0	73	112	0
Queue Length 95th (ft)	73	168	0	326	175	61	15	330	79	163	271	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	560	589	574	933	982	928	639	1081	1077	721	1376	1189
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.20	0.03	0.30	0.15	0.21	0.01	0.27	0.35	0.28	0.21	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	109	14	259	138	182	8	272	348	184	264	22
Future Volume (veh/h)	39	109	14	259	138	182	8	272	348	184	264	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	118	15	282	150	198	9	296	378	200	287	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	170	144	356	373	316	419	574	487	406	738	625
Arrive On Green	0.09	0.09	0.09	0.20	0.20	0.20	0.01	0.31	0.31	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	118	15	282	150	198	9	296	378	200	287	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	4.6	0.7	11.4	5.3	8.6	0.3	9.9	16.4	5.4	8.3	0.7
Cycle Q Clear(g_c), s	1.7	4.6	0.7	11.4	5.3	8.6	0.3	9.9	16.4	5.4	8.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	170	144	356	373	316	419	574	487	406	738	625
V/C Ratio(X)	0.26	0.70	0.10	0.79	0.40	0.63	0.02	0.52	0.78	0.49	0.39	0.04
Avail Cap(c_a), veh/h	706	742	628	1177	1236	1047	870	1360	1152	1054	1730	1466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	33.4	31.6	28.8	26.3	27.7	17.7	21.6	23.9	15.0	16.4	14.1
Incr Delay (d2), s/veh	0.3	1.9	0.1	3.0	0.5	1.5	0.0	1.0	3.8	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.1	0.2	4.8	2.3	3.2	0.1	4.0	5.9	1.9	3.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.4	35.3	31.7	31.8	26.9	29.2	17.7	22.6	27.7	15.3	16.9	14.1
LnGrp LOS	C	D	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		175			630			683			511	
Approach Delay, s/veh		34.3			29.8			25.3			16.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	29.2		12.9	5.9	35.8		21.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.4	18.4		6.6	2.3	10.3		13.4				
Green Ext Time (p_c), s	0.1	4.8		0.4	0.0	2.5		1.7				

Intersection Summary		
HCM 7th Control Delay, s/veh		25.2
HCM 7th LOS		C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	258	16	681	205	384	4	135	368	55
v/c Ratio	0.25	0.33	0.03	0.92	0.66	0.71	0.01	0.47	0.80	0.12
Control Delay (s/veh)	25.5	27.5	22.4	58.8	35.9	51.1	0.0	30.5	61.9	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.5	27.5	22.4	58.8	35.9	51.1	0.0	30.5	61.9	3.4
Queue Length 50th (ft)	19	126	7	583	120	309	0	75	312	0
Queue Length 95th (ft)	51	278	25	#1067	181	445	0	122	462	16
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		400	550		350
Base Capacity (vph)	307	777	625	740	403	973	882	455	964	850
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.33	0.03	0.92	0.51	0.39	0.00	0.30	0.38	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	137	100	15	446	180	189	353	4	124	339	51
Future Volume (veh/h)	39	137	100	15	446	180	189	353	4	124	339	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	42	149	0	16	485	196	205	384	4	135	368	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	149	801		540	524	212	297	516	445	277	455	382
Arrive On Green	0.03	0.43	0.00	0.02	0.41	0.41	0.10	0.28	0.28	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1266	512	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	42	149	0	16	0	681	205	384	4	135	368	55
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.7	5.9	0.0	0.6	0.0	43.5	10.4	22.4	0.2	6.8	22.4	3.3
Cycle Q Clear(g_c), s	1.7	5.9	0.0	0.6	0.0	43.5	10.4	22.4	0.2	6.8	22.4	3.3
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	801		540	0	736	297	516	445	277	455	382
V/C Ratio(X)	0.28	0.19		0.03	0.00	0.92	0.69	0.74	0.01	0.49	0.81	0.14
Avail Cap(c_a), veh/h	377	801		868	0	817	478	1093	941	513	1085	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	21.3	0.0	19.6	0.0	33.3	31.2	39.5	31.5	31.8	42.6	35.4
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.0	0.0	15.8	1.1	4.5	0.0	0.5	7.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.5	0.0	0.3	0.0	21.1	4.2	10.4	0.1	2.8	10.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	21.4	0.0	19.6	0.0	49.1	32.3	44.0	31.5	32.3	49.8	35.7
LnGrp LOS	C	C		B		D	C	D	C	C	D	D
Approach Vol, veh/h		191			697			593			558	
Approach Delay, s/veh		22.9			48.4			39.9			44.1	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	56.1	14.3	40.1	7.6	57.8	18.1	36.3
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	3.7	45.5	8.8	24.4	2.6	7.9	12.4	24.4
Green Ext Time (p_c), s	0.1	4.0	0.1	4.8	0.0	1.1	0.2	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.4
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	427	47	27	427
Future Vol, veh/h	67	119	427	47	27	427
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	464	51	29	464

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	987	464	0	0	515	0
Stage 1	464	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	277	602	-	-	1040	-
Stage 1	637	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	602	-	-	1040	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.45	0	0.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	269	602	1040	-
HCM Lane V/C Ratio	-	-	0.271	0.215	0.028	-
HCM Ctrl Dly (s/v)	-	-	23.3	12.6	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	0.1	-

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	443	82	24	470
Future Vol, veh/h	160	31	443	82	24	470
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	482	89	26	511

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1045	482	0	-	482	0
Stage 1	482	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	253	583	-	0	1071	-
Stage 1	621	-	-	0	-	-
Stage 2	570	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	247	583	-	-	1071	-
Mov Cap-2 Maneuver	247	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	556	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	42.08	0	0.41
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	247	583	1071	-
HCM Lane V/C Ratio	-	0.703	0.058	0.024	-
HCM Ctrl Dly (s/v)	-	48	11.6	8.4	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	4.7	0.2	0.1	-

Intersection	
Int Delay, s/veh	9.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	537	65	18	590
Future Vol, veh/h	134	18	537	65	18	590
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	146	20	584	71	20	641

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1264	-	0	0	654	0
Stage 1	584	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	174	0	-	-	931	-
Stage 1	522	0	-	-	-	-
Stage 2	502	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	170	-	-	-	931	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	491	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	89.8	0	0.27
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	170	-	931	-
HCM Lane V/C Ratio	-	-	0.856	-	0.021	-
HCM Ctrl Dly (s/v)	-	-	89.8	0	9	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	6	-	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	552	701	23
Future Vol, veh/h	50	245	81	552	701	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	54	266	88	600	762	25

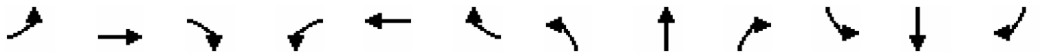
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1238	-	787	0	-	0
Stage 1	762	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	180	0	830	-	-	-
Stage 1	460	0	-	-	-	-
Stage 2	592	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	161	-	830	-	-	-
Mov Cap-2 Maneuver	161	-	-	-	-	-
Stage 1	411	-	-	-	-	-
Stage 2	592	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	38.27	1.26	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	830	-	161	-	-	-
HCM Lane V/C Ratio	0.106	-	0.337	-	-	-
HCM Ctrl Dly (s/v)	9.9	-	38.3	0	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.4	-	1.4	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	135	16	408	79	180	8	280	388	210	318	32
v/c Ratio	0.16	0.60	0.06	0.76	0.14	0.30	0.02	0.62	0.57	0.50	0.43	0.05
Control Delay (s/veh)	54.8	65.1	0.4	48.9	33.4	6.3	25.0	49.5	7.8	28.5	30.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.8	65.1	0.4	48.9	33.4	6.3	25.0	49.5	7.8	28.5	30.4	0.1
Queue Length 50th (ft)	24	98	0	274	43	0	4	190	0	102	168	0
Queue Length 95th (ft)	69	205	0	501	101	57	16	355	89	201	348	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	475	499	503	792	833	807	561	917	976	626	1167	1021
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.27	0.03	0.52	0.09	0.22	0.01	0.31	0.40	0.34	0.27	0.03

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	124	15	375	73	166	7	258	357	193	293	29
Future Volume (veh/h)	32	124	15	375	73	166	7	258	357	193	293	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	135	16	408	79	180	8	280	388	210	318	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	179	152	462	485	411	367	558	473	390	727	616
Arrive On Green	0.10	0.10	0.10	0.26	0.26	0.26	0.01	0.30	0.30	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	35	135	16	408	79	180	8	280	388	210	318	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	6.6	0.9	20.5	3.0	8.9	0.3	11.5	21.2	7.2	11.7	1.2
Cycle Q Clear(g_c), s	1.7	6.6	0.9	20.5	3.0	8.9	0.3	11.5	21.2	7.2	11.7	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	179	152	462	485	411	367	558	473	390	727	616
V/C Ratio(X)	0.21	0.75	0.11	0.88	0.16	0.44	0.02	0.50	0.82	0.54	0.44	0.05
Avail Cap(c_a), veh/h	572	601	509	954	1002	849	730	1102	934	880	1403	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	41.1	38.6	33.2	26.7	28.9	22.5	27.0	30.4	19.1	21.0	17.8
Incr Delay (d2), s/veh	0.2	2.4	0.1	4.4	0.1	0.5	0.0	1.0	5.0	0.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.0	0.3	8.9	1.3	3.3	0.1	4.9	8.1	2.7	4.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.1	43.5	38.7	37.6	26.9	29.4	22.5	28.0	35.4	19.6	21.6	17.9
LnGrp LOS	D	D	D	D	C	C	C	C	D	B	C	B
Approach Vol, veh/h		186			667			676			560	
Approach Delay, s/veh		42.3			34.1			32.2			20.6	
Approach LOS		D			C			C			C	

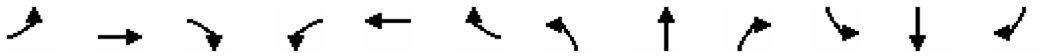
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	33.9		14.9	5.9	42.3		30.2				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	9.2	23.2		8.6	2.3	13.7		22.5				
Green Ext Time (p_c), s	0.1	4.6		0.4	0.0	2.9		1.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			30.6									
HCM 7th LOS			C									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	66	617	10	305	120	470	7	189	395	41
v/c Ratio	0.18	0.87	0.06	0.50	0.37	0.81	0.01	0.68	0.65	0.07
Control Delay (s/veh)	25.3	51.1	26.1	38.4	22.6	52.6	0.0	32.5	42.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.3	51.1	26.1	38.4	22.6	52.6	0.0	32.5	42.1	0.3
Queue Length 50th (ft)	29	402	4	180	50	328	0	83	256	0
Queue Length 95th (ft)	77	#959	20	364	98	540	0	149	424	1
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		400	550		350
Base Capacity (vph)	460	709	408	787	500	1053	948	433	1043	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.87	0.02	0.39	0.24	0.45	0.01	0.44	0.38	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	403	165	9	155	126	110	432	6	174	363	38
Future Volume (veh/h)	61	403	165	9	155	126	110	432	6	174	363	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	66	438	0	10	168	137	120	470	7	189	395	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	254	534		166	240	196	362	604	520	336	653	549
Arrive On Green	0.05	0.29	0.00	0.01	0.25	0.25	0.07	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1682	1870	0	1711	953	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	66	438	0	10	0	305	120	470	7	189	395	41
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1730	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.5	18.8	0.0	0.4	0.0	13.8	3.9	19.6	0.3	6.1	15.1	1.5
Cycle Q Clear(g_c), s	2.5	18.8	0.0	0.4	0.0	13.8	3.9	19.6	0.3	6.1	15.1	1.5
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	534		166	0	436	362	604	520	336	653	549
V/C Ratio(X)	0.26	0.82		0.06	0.00	0.70	0.33	0.78	0.01	0.56	0.61	0.07
Avail Cap(c_a), veh/h	567	1085		641	0	1104	752	1519	1308	678	1507	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	28.7	0.0	24.9	0.0	29.3	18.4	26.4	19.8	19.2	23.0	18.6
Incr Delay (d2), s/veh	0.5	4.5	0.0	0.1	0.0	2.9	0.2	4.6	0.0	0.6	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.4	0.0	0.1	0.0	5.7	1.4	8.6	0.1	2.2	6.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	33.2	0.0	25.1	0.0	32.2	18.6	31.0	19.9	19.7	24.9	18.7
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h		504			315			597			625	
Approach Delay, s/veh		32.0			31.9			28.4			23.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	28.2	13.7	34.8	6.6	31.1	11.2	37.3
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	4.5	15.8	8.1	21.6	2.4	20.8	5.9	17.1
Green Ext Time (p_c), s	0.1	2.8	0.2	6.2	0.0	3.8	0.1	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	28.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	480	45	90	447
Future Vol, veh/h	29	68	480	45	90	447
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	32	74	522	49	98	486

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1203	522	0	0	571	0
Stage 1	522	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	205	559	-	-	992	-
Stage 1	600	-	-	-	-	-
Stage 2	506	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	559	-	-	992	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	456	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.19	0	1.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	185	559	992	-
HCM Lane V/C Ratio	-	-	0.17	0.132	0.099	-
HCM Ctrl Dly (s/v)	-	-	28.4	12.4	9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.3	-

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	487	152	29	447
Future Vol, veh/h	122	38	487	152	29	447
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	133	41	529	165	32	486

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1078	529	0	-	529	0
Stage 1	529	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	242	547	-	0	1028	-
Stage 1	591	-	-	0	-	-
Stage 2	579	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	235	547	-	-	1028	-
Mov Cap-2 Maneuver	235	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	561	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	32.31	0	0.52
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	235	547	1028	-
HCM Lane V/C Ratio	-	0.565	0.075	0.031	-
HCM Ctrl Dly (s/v)	-	38.6	12.1	8.6	-
HCM Lane LOS	-	E	B	A	-
HCM 95th %tile Q(veh)	-	3.1	0.2	0.1	-

Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	576	139	18	589
Future Vol, veh/h	101	16	576	139	18	589
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	110	17	626	151	20	640

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1305	-	0	0	777	0
Stage 1	626	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	164	0	-	-	837	-
Stage 1	496	0	-	-	-	-
Stage 2	502	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	160	-	-	-	837	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	491	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	66.32	0	0.28
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	160	-	837	-
HCM Lane V/C Ratio	-	-	0.687	-	0.023	-
HCM Ctrl Dly (s/v)	-	-	66.3	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4	-	0.1	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	693	650	40
Future Vol, veh/h	22	127	232	693	650	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	138	252	753	707	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1588	-	750	0	-	0
Stage 1	707	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	108	0	857	-	-	-
Stage 1	488	0	-	-	-	-
Stage 2	366	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	-	857	-	-	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	366	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	72.28	2.74	0
HCM LOS	F		

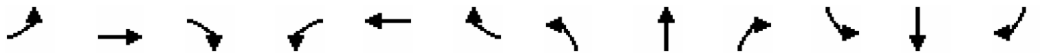
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	857	-	76	-	-	-
HCM Lane V/C Ratio	0.294	-	0.313	-	-	-
HCM Ctrl Dly (s/v)	10.9	-	72.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1.2	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	160	25	383	202	266	15	1249	512	270	1526	33
v/c Ratio	0.28	0.75	0.09	0.87	0.44	0.45	0.14	1.95	0.74	0.88	1.68	0.04
Control Delay (s/veh)	73.3	93.5	0.7	80.4	56.2	7.8	28.4	462.4	35.7	78.1	340.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.3	93.5	0.7	80.4	56.2	7.8	28.4	462.4	35.7	78.1	340.1	0.1
Queue Length 50th (ft)	58	171	0	396	184	0	8	~2118	296	239	~2486	0
Queue Length 95th (ft)	116	279	0	#621	301	81	25	#2812	543	389	#3158	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	331	349	383	553	582	677	265	640	691	423	908	812
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.46	0.07	0.69	0.35	0.39	0.06	1.95	0.74	0.64	1.68	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	147	23	352	186	245	14	1149	471	248	1404	30
Future Volume (veh/h)	52	147	23	352	186	245	14	1149	471	248	1404	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	160	25	383	202	266	15	1249	512	270	1526	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	189	160	423	444	376	76	692	586	292	919	779
Arrive On Green	0.10	0.10	0.10	0.24	0.24	0.24	0.02	0.37	0.37	0.14	0.49	0.49
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	160	25	383	202	266	15	1249	512	270	1526	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.4	12.5	2.1	31.0	13.7	22.9	0.8	55.0	44.7	18.2	73.0	1.6
Cycle Q Clear(g_c), s	4.4	12.5	2.1	31.0	13.7	22.9	0.8	55.0	44.7	18.2	73.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	189	160	423	444	376	76	692	586	292	919	779
V/C Ratio(X)	0.32	0.85	0.16	0.91	0.45	0.71	0.20	1.80	0.87	0.92	1.66	0.04
Avail Cap(c_a), veh/h	359	377	320	599	629	533	288	692	586	468	919	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	65.7	61.0	55.1	48.5	51.9	38.5	46.8	43.6	48.8	37.8	19.6
Incr Delay (d2), s/veh	0.4	4.0	0.2	12.4	0.5	1.8	0.5	367.9	14.0	12.3	302.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.1	0.9	15.2	6.4	9.2	0.3	95.1	19.1	6.4	108.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.4	69.7	61.2	67.5	49.0	53.8	38.9	414.8	57.6	61.1	340.0	19.7
LnGrp LOS	E	E	E	E	D	D	D	F	E	E	F	B
Approach Vol, veh/h		242			851			1776			1829	
Approach Delay, s/veh		67.1			58.8			308.6			293.1	
Approach LOS		E			E			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.3	61.0		21.0	7.3	79.0		41.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	20.2	57.0		14.5	2.8	75.0		33.0				
Green Ext Time (p_c), s	0.2	0.0		0.5	0.0	0.0		2.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			244.9									
HCM 7th LOS			F									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	1026	158	915	771	1376	105	180	1643	74
v/c Ratio	0.47	2.11	0.79	1.62	2.89	1.82	0.15	0.85	2.39	0.12
Control Delay (s/veh)	49.5	533.7	75.4	325.4	879.6	404.8	12.0	86.1	653.7	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	49.5	533.7	75.4	325.4	879.6	404.8	12.0	86.1	653.7	6.2
Queue Length 50th (ft)	44	~1912	143	~1613	~1586	~2550	18	168	~3311	0
Queue Length 95th (ft)	78	#2275	232	#1924	#1935	#3016	69	268	#3718	35
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		300	550		350
Base Capacity (vph)	213	486	258	565	267	757	704	271	688	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	2.11	0.61	1.62	2.89	1.82	0.15	0.66	2.39	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	184	760	145	600	242	709	1266	97	166	1512	68
Future Volume (veh/h)	52	184	760	145	600	242	709	1266	97	166	1512	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	57	200	0	158	652	263	771	1376	105	180	1643	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	97	487		369	386	156	280	814	701	199	719	604
Arrive On Green	0.03	0.26	0.00	0.08	0.30	0.30	0.14	0.44	0.44	0.09	0.39	0.39
Sat Flow, veh/h	1682	1870	0	1711	1267	511	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	57	200	0	158	0	915	771	1376	105	180	1643	74
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	4.5	16.0	0.0	12.0	0.0	55.0	25.0	78.6	7.1	14.2	70.0	5.5
Cycle Q Clear(g_c), s	4.5	16.0	0.0	12.0	0.0	55.0	25.0	78.6	7.1	14.2	70.0	5.5
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	487		369	0	541	280	814	701	199	719	604
V/C Ratio(X)	0.59	0.41		0.43	0.00	1.69	2.75	1.69	0.15	0.91	2.29	0.12
Avail Cap(c_a), veh/h	226	518		471	0	541	280	814	701	282	719	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	55.4	0.0	43.1	0.0	62.8	64.2	51.0	30.8	58.7	55.3	35.6
Incr Delay (d2), s/veh	5.5	0.8	0.0	0.6	0.0	318.5	797.0	316.0	0.2	19.8	582.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	7.6	0.0	5.2	0.0	72.5	74.5	106.9	2.8	5.6	148.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	56.2	0.0	43.7	0.0	381.3	861.1	367.0	31.0	78.5	638.2	35.8
LnGrp LOS	E	E		D		F	F	F	C	E	F	D
Approach Vol, veh/h		257			1073			2252			1897	
Approach Delay, s/veh		56.6			331.6			520.5			561.6	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	61.5	21.9	85.6	19.7	53.5	30.5	77.0
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	6.5	57.0	16.2	80.6	14.0	18.0	27.0	72.0
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.2	1.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	476.0
HCM 7th LOS	F

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	677.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	1953	47	27	2390
Future Vol, veh/h	67	119	1953	47	27	2390
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	2123	51	29	2598

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4779	2123	0	0	2174	0
Stage 1	2123	-	-	-	-	-
Stage 2	2657	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	~ 1	~ 64	-	-	241	-
Stage 1	101	-	-	-	-	-
Stage 2	~ 53	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	~ 64	-	-	241	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	101	-	-	-	-	-
Stage 2	~ 47	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v $ 16752.31		0	0.25
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	1	64	241	-
HCM Lane V/C Ratio	-	-	84.177	2.021	0.122	-
HCM Ctrl Dly (s/v)	-	-	$ 45416.6	$ 613.6	22	-
HCM Lane LOS	-	-	F	F	C	-
HCM 95th %tile Q(veh)	-	-	11.4	12.2	0.4	-

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

Intersection	
Int Delay, s/veh	3759.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	1969	82	24	2433
Future Vol, veh/h	160	31	1969	82	24	2433
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	2140	89	26	2645

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4837	2140	0	-	2140	0
Stage 1	2140	-	-	-	-	-
Stage 2	2697	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	~ 1	61	-	0	248	-
Stage 1	~ 97	-	-	0	-	-
Stage 2	~ 50	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 1	61	-	-	248	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	~ 97	-	-	-	-	-
Stage 2	~ 45	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v $ 90868.76		0	0.21
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	1	61	248	-
HCM Lane V/C Ratio		221.962	0.551	0.105	-
HCM Ctrl Dly (s/v)		$ 108451.3	120.2	21.2	-
HCM Lane LOS	-	F	F	C	-
HCM 95th %tile Q(veh)	-	24.3	2.2	0.3	-

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

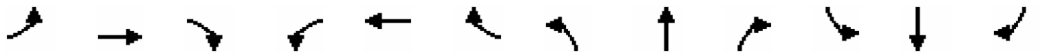
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	600	78	458	146	192	472	1596	71	42	1957	796
v/c Ratio	1.17	0.35	0.99	0.45	0.62	1.24	0.80	0.07	0.33	1.17	0.72
Control Delay (s/veh)	142.5	56.8	78.0	42.9	50.0	177.0	17.8	0.1	17.5	115.4	15.3
Queue Delay	0.0	0.0	4.2	0.0	0.0	0.0	0.2	0.0	0.0	1.0	0.0
Total Delay (s/veh)	142.5	56.8	82.2	42.9	50.0	177.0	18.0	0.1	17.5	116.4	15.3
Queue Length 50th (ft)	~309	61	315	97	58	~260	330	0	12	~1032	329
Queue Length 95th (ft)	#427	112	#514	158	100	#374	426	m0	26	#1168	486
Internal Link Dist (ft)		338			274		775			13280	
Turn Bay Length (ft)	200		200	265		300		575	575		300
Base Capacity (vph)	514	240	463	327	310	382	1989	963	128	1674	1110
Starvation Cap Reductn	0	0	0	0	0	0	54	0	0	0	0
Spillback Cap Reductn	0	0	8	0	0	0	0	0	0	416	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.33	1.01	0.45	0.62	1.24	0.82	0.07	0.33	1.56	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	72	421	134	116	61	434	1468	65	39	1800	732
Future Volume (veh/h)	552	72	421	134	116	61	434	1468	65	39	1800	732
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	600	78	458	146	126	0	472	1596	71	42	1957	796
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	518	256	394	283	273		385	1941	866	176	1681	988
Arrive On Green	0.15	0.14	0.14	0.09	0.08	0.00	0.11	0.55	0.55	0.04	0.47	0.47
Sat Flow, veh/h	3456	1870	1585	1781	3647	0	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	600	78	458	146	126	0	472	1596	71	42	1957	796
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1777	0	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	19.5	4.9	17.8	9.7	4.4	0.0	14.5	48.1	2.8	1.5	61.5	49.4
Cycle Q Clear(g_c), s	19.5	4.9	17.8	9.7	4.4	0.0	14.5	48.1	2.8	1.5	61.5	49.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	518	256	394	283	273		385	1941	866	176	1681	988
V/C Ratio(X)	1.16	0.30	1.16	0.52	0.46		1.22	0.82	0.08	0.24	1.16	0.81
Avail Cap(c_a), veh/h	518	256	394	299	273		385	1941	866	176	1681	988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	50.5	48.9	49.1	57.4	0.0	57.7	24.3	14.0	22.6	34.2	18.6
Incr Delay (d2), s/veh	90.8	0.7	97.9	1.5	1.2	0.0	113.5	2.3	0.1	0.7	80.8	7.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	2.4	22.9	4.4	2.0	0.0	12.2	18.9	1.0	0.6	43.2	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	146.0	51.2	146.8	50.6	58.6	0.0	171.3	26.6	14.1	23.2	115.0	25.6
LnGrp LOS	F	D	F	D	E		F	C	B	C	F	C
Approach Vol, veh/h		1136			272			2139			2795	
Approach Delay, s/veh		139.8			54.3			58.1			88.2	
Approach LOS		F			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	16.5	10.5	78.0	17.2	24.3	20.0	68.5
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	19.5	10.0	5.0	71.0	12.9	16.6	14.5	61.5
Max Q Clear Time (g_c+I1), s	21.5	6.4	3.5	50.1	11.7	19.8	16.5	63.5
Green Ext Time (p_c), s	0.0	0.2	0.0	11.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	85.8
HCM 7th LOS	F

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	54	336	162	2090	2518	36
v/c Ratio	0.20	1.05	1.00	0.78	1.09	0.03
Control Delay (s/veh)	50.8	102.7	103.2	12.4	54.8	0.7
Queue Delay	0.0	0.0	0.0	0.0	4.1	0.0
Total Delay (s/veh)	50.8	102.7	103.2	12.4	59.0	0.7
Queue Length 50th (ft)	40	~236	86	485	~1271	0
Queue Length 95th (ft)	82	#431	#236	578	m1052	m0
Internal Link Dist (ft)	475			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	265	319	162	2667	2308	1040
Starvation Cap Reductn	0	0	0	0	254	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.20	1.05	1.00	0.78	1.23	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	309	149	1923	2317	33
Future Volume (veh/h)	50	309	149	1923	2317	33
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	0	162	2090	2518	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70		221	3072	2785	1242
Arrive On Green	0.04	0.00	0.04	0.86	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	54	0	162	2090	2518	36
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	3.9	0.0	2.1	25.2	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	2.1	25.2	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	70		221	3072	2785	1242
V/C Ratio(X)	0.77		0.73	0.68	0.90	0.03
Avail Cap(c_a), veh/h	267		258	3072	2785	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	61.8	0.0	12.7	2.9	0.0	0.0
Incr Delay (d2), s/veh	16.0	0.0	8.6	1.2	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.9	3.4	0.2	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	77.8	0.0	21.4	4.1	0.5	0.0
LnGrp LOS	E		C	A	A	A
Approach Vol, veh/h	54			2252	2554	
Approach Delay, s/veh	77.8			5.4	0.5	
Approach LOS	E			A	A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	119.4	10.6	10.5	108.9
Change Period (Y+Rc), s	7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s	98.0	19.5	7.7	84.8
Max Q Clear Time (g_c+I1), s	27.2	5.9	4.1	2.0
Green Ext Time (p_c), s	31.8	0.1	0.1	51.5

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Notes

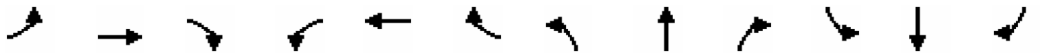
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	47	180	27	552	107	242	12	1511	524	283	1199	42
v/c Ratio	0.22	0.80	0.09	1.10	0.20	0.39	0.13	2.60	0.84	0.91	1.37	0.05
Control Delay (s/veh)	73.7	101.6	0.6	126.7	52.2	7.4	29.8	748.9	49.6	88.0	210.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.7	101.6	0.6	126.7	52.2	7.4	29.8	748.9	49.6	88.0	210.2	0.1
Queue Length 50th (ft)	50	208	0	~732	96	0	7	~2953	393	277	~1779	0
Queue Length 95th (ft)	99	312	0	#1097	169	78	21	#3525	#671	#434	#2354	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	301	317	358	502	528	622	241	581	624	386	876	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.57	0.08	1.10	0.20	0.39	0.05	2.60	0.84	0.73	1.37	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	166	25	508	98	223	11	1390	482	260	1103	39
Future Volume (veh/h)	43	166	25	508	98	223	11	1390	482	260	1103	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	180	27	552	107	242	12	1511	524	283	1199	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	205	173	518	544	461	64	598	507	302	848	718
Arrive On Green	0.11	0.11	0.11	0.29	0.29	0.29	0.01	0.32	0.32	0.15	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	47	180	27	552	107	242	12	1511	524	283	1199	42
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.1	16.3	2.7	50.0	7.4	22.0	0.8	55.0	55.0	22.9	77.9	2.6
Cycle Q Clear(g_c), s	4.1	16.3	2.7	50.0	7.4	22.0	0.8	55.0	55.0	22.9	77.9	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	205	173	518	544	461	64	598	507	302	848	718
V/C Ratio(X)	0.24	0.88	0.16	1.07	0.20	0.52	0.19	2.52	1.03	0.94	1.41	0.06
Avail Cap(c_a), veh/h	311	326	277	518	544	461	249	598	507	405	848	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.0	75.4	69.4	61.0	45.8	51.0	47.3	58.5	58.5	57.5	47.0	26.4
Incr Delay (d2), s/veh	0.2	9.5	0.2	58.1	0.1	0.9	0.5	691.2	48.8	22.3	193.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.3	1.1	30.7	3.5	8.8	0.3	140.1	28.3	9.6	80.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.3	85.0	69.5	119.0	46.0	51.9	47.8	749.6	107.2	79.8	240.5	26.4
LnGrp LOS	E	F	E	F	D	D	D	F	F	E	F	C
Approach Vol, veh/h		254			901			2047			1524	
Approach Delay, s/veh		80.6			92.3			581.1			204.7	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.1	61.0		24.8	7.2	83.9		56.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	24.9	57.0		18.3	2.8	79.9		52.0				
Green Ext Time (p_c), s	0.2	0.0		0.5	0.0	0.0		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		339.6
HCM 7th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	89	1275	102	410	845	1768	143	255	1310	55
v/c Ratio	0.43	2.67	0.65	0.80	3.08	2.48	0.21	0.93	1.86	0.09
Control Delay (s/veh)	43.3	779.6	58.7	71.3	966.9	695.2	17.9	94.7	424.8	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.3	779.6	58.7	71.3	966.9	695.2	17.9	94.7	424.8	2.4
Queue Length 50th (ft)	70	~2564	81	442	~1712	~3486	47	253	~2362	0
Queue Length 95th (ft)	114	#2949	141	602	#2082	#3938	110	#465	#2780	13
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		300	550		350
Base Capacity (vph)	276	478	263	538	274	712	667	277	703	642
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	2.67	0.39	0.76	3.08	2.48	0.21	0.92	1.86	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
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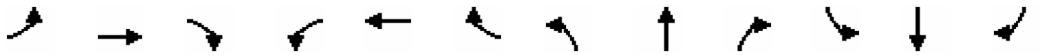
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	542	631	94	208	169	777	1627	132	235	1205	51
Future Volume (veh/h)	82	542	631	94	208	169	777	1627	132	235	1205	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	89	589	0	102	226	184	845	1768	143	255	1310	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	179	522		132	271	221	283	744	641	272	725	610
Arrive On Green	0.05	0.28	0.00	0.05	0.28	0.28	0.14	0.40	0.40	0.13	0.39	0.39
Sat Flow, veh/h	1682	1870	0	1711	954	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	89	589	0	102	0	410	845	1768	143	255	1310	55
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	6.7	50.0	0.0	7.6	0.0	39.8	25.0	71.3	10.5	21.7	70.0	4.0
Cycle Q Clear(g_c), s	6.7	50.0	0.0	7.6	0.0	39.8	25.0	71.3	10.5	21.7	70.0	4.0
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	522		132	0	492	283	744	641	272	725	610
V/C Ratio(X)	0.50	1.13		0.77	0.00	0.83	2.99	2.38	0.22	0.94	1.81	0.09
Avail Cap(c_a), veh/h	285	522		279	0	531	283	744	641	285	725	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	64.6	0.0	49.4	0.0	60.2	63.3	53.9	35.6	61.7	54.6	34.5
Incr Delay (d2), s/veh	2.1	79.7	0.0	6.9	0.0	11.0	903.8	623.1	0.4	35.3	368.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	34.9	0.0	3.5	0.0	18.8	83.4	161.2	4.2	13.7	105.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	144.3	0.0	56.2	0.0	71.1	967.2	677.0	36.0	97.0	423.2	34.6
LnGrp LOS	D	F		E		E	F	F	D	F	F	C
Approach Vol, veh/h		678			512			2756			1620	
Approach Delay, s/veh		131.9			68.1			732.7			358.6	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	57.4	29.2	78.3	15.2	56.5	30.5	77.0
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0
Max Q Clear Time (g_c+I1), s	8.7	41.8	23.7	73.3	9.6	52.0	27.0	72.0
Green Ext Time (p_c), s	0.1	2.8	0.1	0.0	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	489.5
HCM 7th LOS	F

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	500.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	2468	45	90	1840
Future Vol, veh/h	29	68	2468	45	90	1840
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	32	74	2683	49	98	2000

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4878	2683	0	0	2732	0
Stage 1	2683	-	-	-	-	-
Stage 2	2196	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	~ 1	~ 29	-	-	145	-
Stage 1	52	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 0	~ 29	-	-	145	-
Mov Cap-2 Maneuver	~ 0	-	-	-	-	-
Stage 1	52	-	-	-	-	-
Stage 2	~ 30	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v $ 23360.56		0	3.29
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	29	145	-
HCM Lane V/C Ratio	-	-	115.668	2.557	0.677	-
HCM Ctrl Dly (s/v)	-	-	$ 75801.9	$ 995.9	70.6	-
HCM Lane LOS	-	-	F	F	F	-
HCM 95th %tile Q(veh)	-	-	5.9	8.8	3.8	-

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

Intersection	
Int Delay, s/veh	2280.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	2475	152	29	1840
Future Vol, veh/h	122	38	2475	152	29	1840
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	133	41	2690	165	32	2000

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4753	2690	0	-	2690	0
Stage 1	2690	-	-	-	-	-
Stage 2	2063	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	~ 1	~ 28	-	0	150	-
Stage 1	~ 51	-	-	0	-	-
Stage 2	~ 107	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 1	~ 28	-	-	150	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	~ 51	-	-	-	-	-
Stage 2	~ 84	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v $ 64	183.57	0	0.55
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	1	28	150	-
HCM Lane V/C Ratio	-	167.898	1.48	0.21	-
HCM Ctrl Dly (s/v)	-	$ 84002.4	$ 554.6	35.2	-
HCM Lane LOS	-	F	F	E	-
HCM 95th %tile Q(veh)	-	19.1	4.9	0.8	-

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

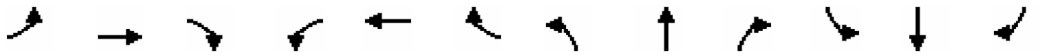
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	807	108	443	110	108	435	1962	151	60	1518	596
v/c Ratio	1.65	0.43	0.67	0.39	0.34	0.79	1.02	0.16	0.38	1.01	0.53
Control Delay (s/veh)	337.9	57.8	27.0	40.8	39.7	65.7	44.4	1.5	19.7	64.1	6.8
Queue Delay	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	33.2	0.0
Total Delay (s/veh)	337.9	57.8	27.3	40.8	39.7	65.7	44.4	1.5	19.7	97.3	6.8
Queue Length 50th (ft)	~507	85	191	73	30	171	~931	1	17	~686	92
Queue Length 95th (ft)	#635	145	334	117	58	m#262	#1158	m11	40	#848	179
Internal Link Dist (ft)		338			97		775			13280	
Turn Bay Length (ft)	200		200	265		300		575	575		300
Base Capacity (vph)	488	277	666	377	534	552	1931	940	317	1497	1116
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	20	0	0	0	0	0	0	328	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.65	0.39	0.69	0.29	0.20	0.79	1.02	0.16	0.19	1.30	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	742	99	408	101	66	33	400	1805	139	55	1397	548
Future Volume (veh/h)	742	99	408	101	66	33	400	1805	139	55	1397	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	807	108	443	110	72	0	435	1962	151	60	1518	596
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	492	274	385	251	273		332	1968	878	125	1763	1012
Arrive On Green	0.14	0.15	0.15	0.07	0.08	0.00	0.10	0.55	0.55	0.04	0.50	0.50
Sat Flow, veh/h	3456	1870	1585	1781	3647	0	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	807	108	443	110	72	0	435	1962	151	60	1518	596
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1777	0	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	18.5	6.8	19.1	7.3	2.5	0.0	12.5	71.5	6.1	2.1	48.8	28.3
Cycle Q Clear(g_c), s	18.5	6.8	19.1	7.3	2.5	0.0	12.5	71.5	6.1	2.1	48.8	28.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	492	274	385	251	273		332	1968	878	125	1763	1012
V/C Ratio(X)	1.64	0.39	1.15	0.44	0.26		1.31	1.00	0.17	0.48	0.86	0.59
Avail Cap(c_a), veh/h	492	274	385	382	533		332	1968	878	316	1763	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	0.42	0.42	0.42	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	50.2	49.2	50.1	56.5	0.0	58.8	28.9	14.3	30.6	28.8	13.6
Incr Delay (d2), s/veh	297.5	0.9	93.9	1.2	0.5	0.0	148.2	12.4	0.2	2.9	5.8	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.4	3.3	22.0	3.3	1.1	0.0	12.1	30.4	2.1	0.9	20.5	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	353.3	51.2	143.1	51.3	57.0	0.0	206.9	41.3	14.5	33.4	34.6	16.1
LnGrp LOS	F	D	F	D	E		F	D	B	C	C	B
Approach Vol, veh/h		1358			182			2548			2174	
Approach Delay, s/veh		260.7			53.6			68.0			29.5	
Approach LOS		F			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	16.5	10.5	79.0	14.9	25.6	18.0	71.5
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	18.5	19.5	19.0	48.5	19.0	19.0	12.5	55.0
Max Q Clear Time (g_c+I1), s	20.5	4.5	4.1	73.5	9.3	21.1	14.5	50.8
Green Ext Time (p_c), s	0.0	0.3	0.1	0.0	0.2	0.0	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	96.0
HCM 7th LOS	F

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	24	192	438	2524	2012	60
v/c Ratio	0.21	0.68	0.83	0.85	1.07	0.07
Control Delay (s/veh)	60.3	20.4	50.2	10.3	53.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	13.4	0.0
Total Delay (s/veh)	60.3	20.4	50.2	10.3	67.0	1.3
Queue Length 50th (ft)	20	0	287	442	~1002	1
Queue Length 95th (ft)	47	73	#530	808	m#1025	m1
Internal Link Dist (ft)	94			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	245	384	528	2970	1883	859
Starvation Cap Reductn	0	0	0	0	141	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.50	0.83	0.85	1.15	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	177	403	2322	1851	55
Future Volume (veh/h)	22	177	403	2322	1851	55
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	0	438	2524	2012	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	40		466	3133	2438	1087
Arrive On Green	0.02	0.00	0.15	0.88	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	24	0	438	2524	2012	60
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	1.7	0.0	17.2	37.7	0.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	17.2	37.7	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	40		466	3133	2438	1087
V/C Ratio(X)	0.60		0.94	0.81	0.83	0.06
Avail Cap(c_a), veh/h	247		533	3133	2438	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.30	0.30
Uniform Delay (d), s/veh	63.0	0.0	27.8	3.1	0.0	0.0
Incr Delay (d2), s/veh	13.9	0.0	23.4	2.3	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	15.1	3.2	0.3	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	76.9	0.0	51.2	5.5	1.0	0.0
LnGrp LOS	E		D	A	A	A
Approach Vol, veh/h	24			2962	2072	
Approach Delay, s/veh	76.9			12.2	1.0	
Approach LOS	E			B	A	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	121.6	8.4	25.4	96.2
Change Period (Y+Rc), s	7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s	99.5	18.0	24.8	69.2
Max Q Clear Time (g_c+I1), s	39.7	3.7	19.2	2.0
Green Ext Time (p_c), s	41.6	0.0	0.7	29.3

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A

Notes

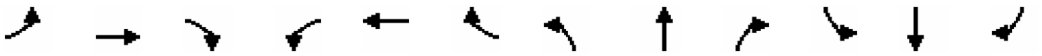
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX H – Total Future (with site development) Synchro Outputs

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	114	45	357	145	190	57	482	512	192	391	23
v/c Ratio	0.27	0.72	0.16	0.64	0.48	0.46	0.11	0.61	0.53	0.45	0.44	0.03
Control Delay (s/veh)	47.2	70.2	1.3	44.0	42.4	8.8	4.3	13.9	3.4	14.5	21.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.2	70.2	1.3	44.0	42.4	8.8	4.3	13.9	3.4	14.5	21.3	0.0
Queue Length 50th (ft)	24	72	0	110	85	0	5	58	17	54	165	0
Queue Length 95th (ft)	57	#151	0	146	136	55	12	#432	0	104	285	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	159	167	281	961	521	580	497	790	965	429	896	841
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.68	0.16	0.37	0.28	0.33	0.11	0.61	0.53	0.45	0.44	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	105	41	328	133	175	52	443	471	177	360	21
Future Volume (veh/h)	37	105	41	328	133	175	52	443	471	177	360	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	114	45	357	145	190	57	482	512	192	391	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	149	127	530	287	243	497	863	732	361	929	788
Arrive On Green	0.08	0.08	0.08	0.15	0.15	0.15	0.04	0.46	0.46	0.08	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	40	114	45	357	145	190	57	482	512	192	391	23
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.1	6.0	2.7	9.8	7.1	11.5	1.6	18.7	25.7	5.5	13.3	0.7
Cycle Q Clear(g_c), s	2.1	6.0	2.7	9.8	7.1	11.5	1.6	18.7	25.7	5.5	13.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	149	127	530	287	243	497	863	732	361	929	788
V/C Ratio(X)	0.28	0.76	0.36	0.67	0.51	0.78	0.11	0.56	0.70	0.53	0.42	0.03
Avail Cap(c_a), veh/h	160	168	143	968	524	444	515	863	732	370	929	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	43.6	40.0	38.8	40.7	13.4	19.5	21.4	14.6	16.0	12.8
Incr Delay (d2), s/veh	0.4	13.9	0.6	1.1	1.0	4.1	0.0	2.4	5.1	0.6	1.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.3	1.1	4.1	3.3	4.6	0.6	7.8	9.5	2.0	5.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.7	59.0	44.2	41.1	39.9	44.8	13.4	21.9	26.6	15.2	17.4	12.9
LnGrp LOS	D	E	D	D	D	D	B	C	C	B	B	B
Approach Vol, veh/h		199			692			1051			606	
Approach Delay, s/veh		52.6			41.8			23.7			16.5	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	52.2		14.0	9.0	55.7		21.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	32.0		9.0	5.0	35.0		28.0				
Max Q Clear Time (g_c+I1), s	7.5	27.7		8.0	3.6	15.3		13.5				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	3.0		1.8				

Intersection Summary			
HCM 7th Control Delay, s/veh		29.2	
HCM 7th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	143	249	46	466	188	445	765	53	129	585	53
v/c Ratio	0.20	0.20	0.17	0.15	0.65	0.12	0.46	0.47	0.06	0.33	0.38	0.07
Control Delay (s/veh)	25.4	32.7	0.2	24.4	40.8	0.2	8.8	16.6	0.6	10.9	18.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.4	32.7	0.2	24.4	40.8	0.2	8.8	16.6	0.6	10.9	18.0	0.7
Queue Length 50th (ft)	18	40	0	20	144	0	40	170	0	38	113	0
Queue Length 95th (ft)	38	62	0	43	184	0	m54	214	m3	72	150	6
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	200	1309	1468	310	1305	1599	994	1641	833	397	1521	763
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.11	0.17	0.15	0.36	0.12	0.45	0.47	0.06	0.32	0.38	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	132	229	42	429	173	409	704	49	119	538	49
Future Volume (veh/h)	37	132	229	42	429	173	409	704	49	119	538	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	40	143	0	46	466	0	445	765	53	129	585	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	181	643		309	652		953	1707	773	361	1581	699
Arrive On Green	0.03	0.18	0.00	0.04	0.18	0.00	0.03	0.16	0.16	0.06	0.45	0.45
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	40	143	0	46	466	0	445	765	53	129	585	53
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	1.9	3.4	0.0	2.2	12.3	0.0	6.8	19.5	2.8	3.9	11.0	1.9
Cycle Q Clear(g_c), s	1.9	3.4	0.0	2.2	12.3	0.0	6.8	19.5	2.8	3.9	11.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	643		309	652		953	1707	773	361	1581	699
V/C Ratio(X)	0.22	0.22		0.15	0.71		0.47	0.45	0.07	0.36	0.37	0.08
Avail Cap(c_a), veh/h	211	1315		333	1311		998	1707	773	374	1581	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.85	0.85	0.85	0.85	0.85	0.85
Uniform Delay (d), s/veh	32.4	34.9	0.0	31.6	38.4	0.0	14.0	30.1	23.0	14.8	18.2	15.8
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.2	2.1	0.0	0.1	0.7	0.1	0.2	0.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	0.0	0.9	5.4	0.0	2.5	9.3	1.0	1.4	4.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.0	35.2	0.0	31.7	40.5	0.0	14.1	30.8	23.2	15.0	18.8	15.9
LnGrp LOS	C	D		C	D		B	C	C	B	B	B
Approach Vol, veh/h		183			512			1263			767	
Approach Delay, s/veh		34.7			39.7			24.6			18.0	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	24.8	11.3	55.0	9.1	24.6	14.5	51.8
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	5.1	36.9	6.5	27.0	5.0	37.0	10.3	23.2
Max Q Clear Time (g_c+I1), s	3.9	14.3	5.9	21.5	4.2	5.4	8.8	13.0
Green Ext Time (p_c), s	0.0	4.0	0.0	3.3	0.0	1.1	0.2	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

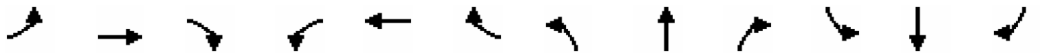
Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	265	40	88	129	28	868	60	29	779	71
v/c Ratio	0.80	0.08	0.30	0.45	0.06	0.43	0.06	0.09	0.38	0.07
Control Delay (s/veh)	52.6	0.3	32.0	5.2	6.2	6.4	0.1	4.5	7.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.6	0.3	32.0	5.2	6.2	6.4	0.1	4.5	7.0	0.4
Queue Length 50th (ft)	146	0	43	0	4	62	0	2	144	0
Queue Length 95th (ft)	#233	0	84	3	m9	77	0	7	46	0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	339	615	422	499	447	2025	937	330	2051	983
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.07	0.21	0.26	0.06	0.43	0.06	0.09	0.38	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



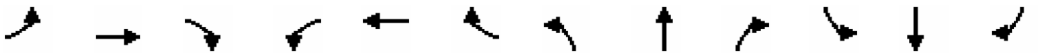
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	0	37	81	0	119	26	799	55	27	717	65
Future Volume (veh/h)	244	0	37	81	0	119	26	799	55	27	717	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	265	0	40	88	0	129	28	868	60	29	779	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	367	0	299	332	0	164	568	1889	829	199	1381	626
Arrive On Green	0.15	0.00	0.19	0.06	0.00	0.10	0.12	0.36	0.36	0.06	0.79	0.79
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	265	0	40	88	0	129	28	868	60	29	779	71
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	12.7	0.0	2.1	4.3	0.0	7.9	0.0	19.0	2.6	1.0	8.4	0.6
Cycle Q Clear(g_c), s	12.7	0.0	2.1	4.3	0.0	7.9	0.0	19.0	2.6	1.0	8.4	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	367	0	299	332	0	164	568	1889	829	199	1381	626
V/C Ratio(X)	0.72	0.00	0.13	0.27	0.00	0.78	0.05	0.46	0.07	0.15	0.56	0.11
Avail Cap(c_a), veh/h	397	0	299	551	0	325	568	1889	829	247	1381	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	31.7	0.0	33.8	36.4	0.0	43.7	16.1	20.7	15.5	21.8	7.2	2.4
Incr Delay (d2), s/veh	5.8	0.0	0.2	0.4	0.0	8.0	0.0	0.8	0.2	0.3	1.6	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	0.8	1.9	0.0	3.4	0.4	8.1	0.9	0.4	2.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	0.0	34.0	36.8	0.0	51.7	16.2	21.5	15.7	22.2	8.8	2.7
LnGrp LOS	D		C	D		D	B	C	B	C	A	A
Approach Vol, veh/h		305			217			956			879	
Approach Delay, s/veh		37.1			45.7			21.0			8.8	
Approach LOS		D			D			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	58.5	10.9	23.3	21.8	44.0	19.4	14.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	39.5	18.5	18.5	5.5	39.5	16.5	20.5
Max Q Clear Time (g_c+I1), s	3.0	21.0	6.3	4.1	2.0	10.4	14.7	9.9
Green Ext Time (p_c), s	0.0	5.4	0.1	0.1	0.0	5.4	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	20.8
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	80	174	63	28	560	89	75	652	55
v/c Ratio	0.56	0.19	0.54	0.14	0.06	0.27	0.09	0.13	0.30	0.05
Control Delay (s/veh)	39.8	1.0	38.5	0.7	7.3	12.1	0.2	1.4	2.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.8	1.0	38.5	0.7	7.3	12.1	0.2	1.4	2.1	0.1
Queue Length 50th (ft)	87	0	94	0	5	95	0	2	15	0
Queue Length 95th (ft)	137	0	146	0	17	146	0	5	25	0
Internal Link Dist (ft)		355		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	303	592	406	681	524	2047	1018	613	2199	1054
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.14	0.43	0.09	0.05	0.27	0.09	0.12	0.30	0.05

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	0	74	160	0	58	26	515	82	69	600	51
Future Volume (veh/h)	149	0	74	160	0	58	26	515	82	69	600	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	162	0	80	174	0	63	28	560	89	75	652	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	312	0	114	300	0	128	714	1162	535	760	1252	563
Arrive On Green	0.10	0.00	0.07	0.11	0.00	0.08	0.28	0.34	0.34	0.30	0.35	0.35
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	162	0	80	174	0	63	28	560	89	75	652	55
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	8.3	0.0	4.9	8.8	0.0	3.8	0.0	12.8	2.7	0.0	14.6	1.6
Cycle Q Clear(g_c), s	8.3	0.0	4.9	8.8	0.0	3.8	0.0	12.8	2.7	0.0	14.6	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	114	300	0	128	714	1162	535	760	1252	563
V/C Ratio(X)	0.52	0.00	0.70	0.58	0.00	0.49	0.04	0.48	0.17	0.10	0.52	0.10
Avail Cap(c_a), veh/h	352	0	309	467	0	436	714	1162	535	760	1252	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	45.4	37.1	0.0	44.0	14.6	26.4	11.4	13.4	25.5	10.6
Incr Delay (d2), s/veh	1.3	0.0	7.6	1.8	0.0	2.9	0.0	1.4	0.7	0.1	1.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	2.2	3.9	0.0	1.6	0.3	5.1	1.5	0.8	5.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.9	0.0	52.9	38.9	0.0	46.9	14.6	27.8	12.1	13.4	27.1	11.0
LnGrp LOS	D		D	D		D	B	C	B	B	C	B
Approach Vol, veh/h		242			237			677			782	
Approach Delay, s/veh		43.5			41.0			25.2			24.6	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.7	38.0	15.6	11.7	32.7	40.0	14.7	12.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	33.5	20.5	19.5	6.5	35.5	12.5	27.5
Max Q Clear Time (g_c+I1), s	2.0	14.8	10.8	6.9	2.0	16.6	10.3	5.8
Green Ext Time (p_c), s	0.1	3.4	0.3	0.3	0.0	3.9	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	29.2
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	635	65	18	794
Future Vol, veh/h	134	18	635	65	18	794
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	146	20	690	71	20	863

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1161	-	0	0	761	0
Stage 1	690	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	188	0	-	-	847	-
Stage 1	459	0	-	-	-	-
Stage 2	595	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	184	-	-	-	847	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	73.3	0	0.21
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	184	-	847	-
HCM Lane V/C Ratio	-	-	0.791	-	0.023	-
HCM Ctrl Dly (s/v)	-	-	73.3	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	5.4	-	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	650	905	23
Future Vol, veh/h	50	245	81	650	905	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	54	266	88	707	984	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1513	-	1009	0	-	0
Stage 1	984	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	121	0	685	-	-	-
Stage 1	361	0	-	-	-	-
Stage 2	556	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	105	-	685	-	-	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	556	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	71.06	1.22	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	685	-	105	-	-	-
HCM Lane V/C Ratio	0.129	-	0.516	-	-	-
HCM Ctrl Dly (s/v)	11	-	71.1	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	2.3	-	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	37	0	880	795	40
Future Vol, veh/h	0	37	0	880	795	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	300
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	0	40	0	957	864	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	432	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*870	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		0		-	-	-
Mov Cap-1 Maneuver	-	*870	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.34	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	870	-	-
HCM Lane V/C Ratio	-	0.046	-	-
HCM Ctrl Dly (s/v)	-	9.3	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	274	27	102	683	699	205
v/c Ratio	0.74	0.08	0.20	0.28	0.33	0.20
Control Delay (s/veh)	48.7	10.8	5.2	5.0	3.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.7	10.8	5.2	5.0	3.8	0.6
Queue Length 50th (ft)	164	0	15	55	34	0
Queue Length 95th (ft)	231	20	29	72	50	1
Internal Link Dist (ft)	567			1025	836	
Turn Bay Length (ft)			300			300
Base Capacity (vph)	628	579	544	2479	2127	1033
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.05	0.19	0.28	0.33	0.20

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	252	25	94	628	643	189
Future Volume (veh/h)	252	25	94	628	643	189
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	274	27	102	683	699	205
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	317	282	551	2602	2275	1015
Arrive On Green	0.18	0.18	0.05	0.73	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	274	27	102	683	699	205
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	14.9	1.4	1.8	6.4	0.0	0.0
Cycle Q Clear(g_c), s	14.9	1.4	1.8	6.4	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	317	282	551	2602	2275	1015
V/C Ratio(X)	0.87	0.10	0.19	0.26	0.31	0.20
Avail Cap(c_a), veh/h	632	563	654	2602	2275	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	34.4	4.6	4.4	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.1	0.2	0.2	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	1.4	0.5	1.6	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	47.0	34.5	4.7	4.7	0.4	0.4
LnGrp LOS	D	C	A	A	A	A
Approach Vol, veh/h	301			785	904	
Approach Delay, s/veh	45.9			4.7	0.4	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.7		22.3	9.2	68.5
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		55.5		35.5	10.5	40.5
Max Q Clear Time (g_c+I1), s		8.4		16.9	3.8	2.0
Green Ext Time (p_c), s		4.6		0.8	0.1	5.5

Intersection Summary	
HCM 7th Control Delay, s/veh	9.0
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	91	0	722	629	39
Future Vol, veh/h	0	91	0	722	629	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	300
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	0	99	0	785	684	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	342	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*912	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		0		-	-	-
Mov Cap-1 Maneuver	-	*912	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.43	0	0
HCM LOS	A		

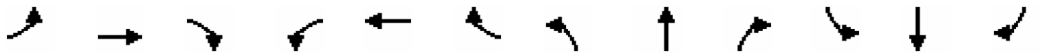
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	912	-	-
HCM Lane V/C Ratio	-	0.108	-	-
HCM Ctrl Dly (s/v)	-	9.4	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.4	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	129	96	628	76	173	68	523	563	202	621	30
v/c Ratio	0.21	0.76	0.31	0.85	0.19	0.36	0.22	0.68	0.57	0.70	0.71	0.04
Control Delay (s/veh)	54.6	82.1	2.7	58.0	39.7	7.3	10.1	14.8	4.5	34.5	33.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.6	82.1	2.7	58.0	39.7	7.3	10.1	14.8	4.5	34.5	33.3	0.1
Queue Length 50th (ft)	25	99	0	240	48	0	10	85	34	105	436	0
Queue Length 95th (ft)	59	#202	0	311	92	54	m11	86	68	148	544	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	168	176	312	790	429	502	311	776	988	305	899	834
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.73	0.31	0.79	0.18	0.34	0.22	0.67	0.57	0.66	0.69	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	119	88	578	70	159	63	481	518	186	571	28
Future Volume (veh/h)	31	119	88	578	70	159	63	481	518	186	571	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	129	96	628	76	173	68	523	563	202	621	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	158	134	703	381	323	351	791	670	239	688	583
Arrive On Green	0.08	0.08	0.08	0.20	0.20	0.20	0.15	0.42	0.42	0.10	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	34	129	96	628	76	173	68	523	563	202	621	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.2	8.3	7.2	21.6	4.1	11.9	0.0	27.3	38.8	10.2	38.3	1.5
Cycle Q Clear(g_c), s	2.2	8.3	7.2	21.6	4.1	11.9	0.0	27.3	38.8	10.2	38.3	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	158	134	703	381	323	351	791	670	239	688	583
V/C Ratio(X)	0.23	0.82	0.72	0.89	0.20	0.54	0.19	0.66	0.84	0.84	0.90	0.05
Avail Cap(c_a), veh/h	161	169	143	793	429	364	351	791	670	250	843	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	54.9	54.4	47.3	40.3	43.4	43.4	28.2	31.5	33.3	36.5	24.8
Incr Delay (d2), s/veh	0.3	22.4	12.2	11.3	0.2	1.0	0.1	3.0	8.7	20.4	17.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.8	3.3	10.2	1.9	4.7	1.7	12.1	15.4	5.6	19.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.4	77.3	66.6	58.6	40.5	44.5	43.4	31.2	40.2	53.7	53.8	25.0
LnGrp LOS	D	E	E	E	D	D	D	C	D	D	D	C
Approach Vol, veh/h		259			877			1154			853	
Approach Delay, s/veh		70.1			54.2			36.3			52.8	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	57.6		16.3	24.0	50.9		30.8				
Change Period (Y+Rc), s	5.0	6.0		6.0	6.0	* 6		6.0				
Max Green Setting (Gmax), s	13.0	47.0		11.0	5.0	* 55		28.0				
Max Q Clear Time (g_c+I1), s	12.2	40.8		10.3	2.0	40.3		23.6				
Green Ext Time (p_c), s	0.0	3.6		0.1	0.0	4.6		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	48.6
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	421	566	89	162	132	433	957	68	183	1010	39
v/c Ratio	0.14	0.37	0.39	0.27	0.14	0.08	0.85	0.78	0.11	0.76	0.90	0.07
Control Delay (s/veh)	23.3	33.4	0.8	25.5	29.7	0.1	42.3	31.1	2.7	36.2	40.7	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.3	33.4	0.8	25.5	29.7	0.1	42.3	31.1	2.7	36.2	40.7	0.7
Queue Length 50th (ft)	30	135	0	43	48	0	105	308	2	32	360	0
Queue Length 95th (ft)	60	182	0	79	75	0	m156	m328	m8	m106	#520	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	441	1131	1468	327	1197	1599	530	1233	647	255	1125	586
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.37	0.39	0.27	0.14	0.08	0.82	0.78	0.11	0.72	0.90	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	387	521	82	149	121	398	880	63	168	929	36
Future Volume (veh/h)	58	387	521	82	149	121	398	880	63	168	929	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	63	421	0	89	162	0	433	957	68	183	1010	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	485	1213		365	1233		503	1171	531	246	1104	488
Arrive On Green	0.04	0.34	0.00	0.04	0.35	0.00	0.03	0.11	0.11	0.09	0.31	0.31
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	63	421	0	89	162	0	433	957	68	183	1010	39
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	3.0	10.8	0.0	4.1	3.8	0.0	10.3	32.1	4.7	8.5	33.6	2.1
Cycle Q Clear(g_c), s	3.0	10.8	0.0	4.1	3.8	0.0	10.3	32.1	4.7	8.5	33.6	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	485	1213		365	1233		503	1171	531	246	1104	488
V/C Ratio(X)	0.13	0.35		0.24	0.13		0.86	0.82	0.13	0.74	0.92	0.08
Avail Cap(c_a), veh/h	494	1213		365	1233		574	1229	557	266	1127	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.64	0.64	0.64	0.58	0.58	0.58
Uniform Delay (d), s/veh	24.6	30.0	0.0	25.0	27.3	0.0	31.9	50.8	38.5	29.7	40.3	29.5
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.3	0.2	0.0	7.0	3.2	0.1	5.0	7.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.6	0.0	1.7	1.6	0.0	4.8	15.7	1.8	3.7	15.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.7	30.8	0.0	25.3	27.5	0.0	38.8	54.0	38.7	34.7	47.9	29.6
LnGrp LOS	C	C		C	C		D	D	D	C	D	C
Approach Vol, veh/h		484			251			1458			1232	
Approach Delay, s/veh		30.0			26.7			48.8			45.4	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	48.8	16.1	47.2	10.6	48.1	18.1	45.2
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	5.1	38.3	11.9	42.2	5.1	38.3	15.1	39.0
Max Q Clear Time (g_c+I1), s	5.0	5.8	10.5	34.1	6.1	12.8	12.3	35.6
Green Ext Time (p_c), s	0.0	1.4	0.0	5.5	0.0	3.6	0.3	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	43.3
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

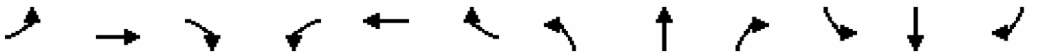
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	389	27	66	74	88	995	86	98	1347	221
v/c Ratio	1.25	0.09	0.19	0.30	0.37	0.50	0.09	0.33	0.65	0.21
Control Delay (s/veh)	178.4	0.6	43.7	3.2	14.2	8.8	0.2	7.0	6.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	178.4	0.6	43.7	3.2	14.2	8.8	0.2	7.0	6.2	0.3
Queue Length 50th (ft)	~382	0	45	0	17	126	0	12	101	0
Queue Length 95th (ft)	#579	0	88	0	m28	163	m0	m18	m123	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	311	484	348	390	241	2004	919	316	2062	1030
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.06	0.19	0.19	0.37	0.50	0.09	0.31	0.65	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	0	25	61	0	68	81	915	79	90	1239	203
Future Volume (veh/h)	358	0	25	61	0	68	81	915	79	90	1239	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	389	0	27	66	0	74	88	995	86	98	1347	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	373	0	65	419	0	101	426	1976	867	212	1663	754
Arrive On Green	0.18	0.00	0.04	0.20	0.00	0.06	0.05	0.19	0.19	0.10	0.95	0.95
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	389	0	27	66	0	74	88	995	86	98	1347	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	21.5	0.0	2.0	0.0	0.0	5.6	0.0	31.2	2.1	4.0	10.1	0.6
Cycle Q Clear(g_c), s	21.5	0.0	2.0	0.0	0.0	5.6	0.0	31.2	2.1	4.0	10.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	0	65	419	0	101	426	1976	867	212	1663	754
V/C Ratio(X)	1.04	0.00	0.42	0.16	0.00	0.73	0.21	0.50	0.10	0.46	0.81	0.29
Avail Cap(c_a), veh/h	373	0	279	419	0	234	426	1976	867	268	1663	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.66	0.66	0.66
Uniform Delay (d), s/veh	51.9	0.0	57.1	39.1	0.0	56.1	22.9	34.3	3.3	23.5	1.8	0.4
Incr Delay (d2), s/veh	58.3	0.0	4.2	0.2	0.0	9.8	0.2	0.9	0.2	1.0	2.9	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.6	0.0	0.9	1.6	0.0	2.5	1.8	14.7	2.0	1.5	1.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	110.1	0.0	61.3	39.3	0.0	65.9	23.1	35.2	3.6	24.5	4.8	1.1
LnGrp LOS	F		E	D		E	C	D	A	C	A	A
Approach Vol, veh/h		416			140			1169			1666	
Approach Delay, s/veh		107.0			53.4			32.0			5.4	
Approach LOS		F			D			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	73.4	28.8	9.5	21.2	62.5	26.0	12.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.7	54.8	18.0	21.5	6.5	58.0	21.5	18.0
Max Q Clear Time (g_c+I1), s	6.0	33.2	2.0	4.0	2.0	12.1	23.5	7.6
Green Ext Time (p_c), s	0.1	6.8	0.1	0.1	0.1	13.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	54	133	120	88	777	165	95	695	176
v/c Ratio	0.49	0.13	0.56	0.32	0.17	0.34	0.15	0.20	0.30	0.16
Control Delay (s/veh)	53.7	0.7	57.2	2.3	5.7	9.4	1.6	3.1	4.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.7	0.7	57.2	2.3	5.7	9.4	1.6	3.1	4.1	0.5
Queue Length 50th (ft)	76	0	96	0	15	123	0	6	83	0
Queue Length 95th (ft)	126	0	151	0	34	181	25	11	45	0
Internal Link Dist (ft)		666		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	252	549	346	598	586	2305	1126	532	2350	1119
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.10	0.38	0.20	0.15	0.34	0.15	0.18	0.30	0.16

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	0	50	122	0	110	81	715	152	87	639	162
Future Volume (veh/h)	99	0	50	122	0	110	81	715	152	87	639	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	108	0	54	133	0	120	88	777	165	95	695	176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	135	0	81	215	0	150	735	1550	714	697	1575	708
Arrive On Green	0.04	0.00	0.05	0.09	0.00	0.09	0.27	0.45	0.45	0.27	0.45	0.45
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	108	0	54	133	0	120	88	777	165	95	695	176
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	3.2	0.0	4.1	4.5	0.0	9.0	0.0	19.5	7.8	0.0	16.6	8.4
Cycle Q Clear(g_c), s	3.2	0.0	4.1	4.5	0.0	9.0	0.0	19.5	7.8	0.0	16.6	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	0	81	215	0	150	735	1550	714	697	1575	708
V/C Ratio(X)	0.80	0.00	0.67	0.62	0.00	0.80	0.12	0.50	0.23	0.14	0.44	0.25
Avail Cap(c_a), veh/h	242	0	253	360	0	357	735	1550	714	697	1575	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	0.0	56.9	51.9	0.0	54.1	12.5	24.1	20.8	14.4	23.3	21.0
Incr Delay (d2), s/veh	10.2	0.0	9.0	2.9	0.0	9.4	0.1	1.2	0.8	0.1	0.9	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	1.8	4.0	0.0	3.9	1.1	7.7	3.0	1.3	6.7	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.8	0.0	65.9	54.8	0.0	63.5	12.6	25.2	21.6	14.5	24.2	21.8
LnGrp LOS	E		E	D		E	B	C	C	B	C	C
Approach Vol, veh/h		162			253			1030			966	
Approach Delay, s/veh		66.5			58.9			23.6			22.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.2	59.0	15.0	10.7	37.2	59.0	9.7	16.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	54.5	20.5	19.5	9.5	54.5	12.5	27.5
Max Q Clear Time (g_c+I1), s	2.0	21.5	6.5	6.1	2.0	18.6	5.2	11.0
Green Ext Time (p_c), s	0.1	5.9	0.3	0.2	0.1	5.3	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	885	139	18	831
Future Vol, veh/h	101	16	885	139	18	831
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
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	110	17	962	151	20	903

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1453	-	0	0	1113	0
Stage 1	962	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	121	0	-	-	623	-
Stage 1	331	0	-	-	-	-
Stage 2	581	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	117	-	-	-	623	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	331	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	135.56	0	0.23
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	117	-	623	-
HCM Lane V/C Ratio	-	-	0.935	-	0.031	-
HCM Ctrl Dly (s/v)	-	-	135.6	0	11	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	6	-	0.1	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	1002	892	40
Future Vol, veh/h	22	127	232	1002	892	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	138	252	1089	970	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2018	-	1013	0	-	0
Stage 1	970	-	-	-	-	-
Stage 2	1049	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	57	0	682	-	-	-
Stage 1	367	0	-	-	-	-
Stage 2	299	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	36	-	682	-	-	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	299	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	219	2.51	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	682	-	36	-	-	-
HCM Lane V/C Ratio	0.37	-	0.666	-	-	-
HCM Ctrl Dly (s/v)	13.3	-	219	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.7	-	2.3	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	24	0	1075	1220	105
Future Vol, veh/h	0	24	0	1075	1220	105
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	-	-	-	300
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	0	26	0	1168	1326	114

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	663	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*754	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		0		-	-	-
Mov Cap-1 Maneuver	-	*754	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.95	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	754	-	-
HCM Lane V/C Ratio	-	0.035	-	-
HCM Ctrl Dly (s/v)	-	9.9	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

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

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	426	278	262	742	692	660
v/c Ratio	0.84	0.43	0.54	0.33	0.40	0.59
Control Delay (s/veh)	55.9	5.4	10.0	6.9	6.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.9	5.4	10.0	6.9	6.1	5.1
Queue Length 50th (ft)	315	0	52	146	61	30
Queue Length 95th (ft)	401	57	142	229	182	79
Internal Link Dist (ft)	566			1025	836	
Turn Bay Length (ft)			300			300
Base Capacity (vph)	631	743	540	2266	1745	1115
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.37	0.49	0.33	0.40	0.59

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	392	256	241	683	637	607
Future Volume (veh/h)	392	256	241	683	637	607
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	426	278	262	742	692	660
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	471	419	424	2351	1928	860
Arrive On Green	0.26	0.26	0.08	0.66	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	426	278	262	742	692	660
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	28.2	19.1	7.5	10.9	0.0	0.0
Cycle Q Clear(g_c), s	28.2	19.1	7.5	10.9	0.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	471	419	424	2351	1928	860
V/C Ratio(X)	0.90	0.66	0.62	0.32	0.36	0.77
Avail Cap(c_a), veh/h	635	565	554	2351	1928	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	40.0	9.3	8.8	0.0	0.0
Incr Delay (d2), s/veh	13.3	1.8	1.5	0.4	0.5	6.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	16.6	2.7	3.7	0.1	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.6	41.8	10.7	9.2	0.5	6.5
LnGrp LOS	E	D	B	A	A	A
Approach Vol, veh/h	704			1004	1352	
Approach Delay, s/veh	50.8			9.6	3.4	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		85.2		36.8	14.5	70.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		69.5		43.5	18.9	46.1
Max Q Clear Time (g_c+I1), s		12.9		30.2	9.5	2.0
Green Ext Time (p_c), s		5.2		2.1	0.5	8.3

Intersection Summary		
HCM 7th Control Delay, s/veh		16.3
HCM 7th LOS		B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	116	0	924	772	121
Future Vol, veh/h	0	116	0	924	772	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	300
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	0	126	0	1004	839	132

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	420	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*874	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		0		-	-	-
Mov Cap-1 Maneuver	-	*874	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.81	0	0
HCM LOS	A		

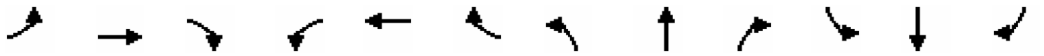
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	874	-	-
HCM Lane V/C Ratio	-	0.144	-	-
HCM Ctrl Dly (s/v)	-	9.8	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.5	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	118	51	387	150	198	75	565	582	200	428	24
v/c Ratio	0.29	0.76	0.03	0.66	0.47	0.46	0.16	0.71	0.58	0.54	0.47	0.03
Control Delay (s/veh)	50.8	77.9	0.0	46.5	43.9	8.7	3.4	13.6	5.0	16.8	22.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.8	77.9	0.0	46.5	43.9	8.7	3.4	13.6	5.0	16.8	22.5	0.0
Queue Length 50th (ft)	27	80	0	128	93	0	5	55	39	59	193	0
Queue Length 95th (ft)	63	#171	0	166	146	58	m7	m#471	m387	111	327	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	153	161	1583	906	492	563	472	794	1008	377	906	844
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.73	0.03	0.43	0.30	0.35	0.16	0.71	0.58	0.53	0.47	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	109	47	356	138	182	69	520	535	184	394	22
Future Volume (veh/h)	39	109	47	356	138	182	69	520	535	184	394	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	118	0	387	150	198	75	565	582	200	428	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	150		543	294	249	477	879	745	321	942	798
Arrive On Green	0.08	0.08	0.00	0.16	0.16	0.16	0.04	0.47	0.47	0.08	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	118	0	387	150	198	75	565	582	200	428	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.4	6.6	0.0	11.3	7.8	12.8	2.3	24.3	32.6	6.0	15.6	0.8
Cycle Q Clear(g_c), s	2.4	6.6	0.0	11.3	7.8	12.8	2.3	24.3	32.6	6.0	15.6	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	150		543	294	249	477	879	745	321	942	798
V/C Ratio(X)	0.29	0.79		0.71	0.51	0.80	0.16	0.64	0.78	0.62	0.45	0.03
Avail Cap(c_a), veh/h	151	159		913	494	419	487	879	745	337	942	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.60	0.60	0.60	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	47.9	0.0	42.4	40.9	43.0	13.9	21.3	23.5	17.0	16.9	13.3
Incr Delay (d2), s/veh	0.4	19.4	0.0	1.3	1.0	4.3	0.0	2.2	4.9	2.3	1.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	3.8	0.0	4.8	3.6	5.2	0.8	10.1	11.9	2.3	6.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.3	67.2	0.0	43.7	42.0	47.3	13.9	23.5	28.4	19.3	18.5	13.3
LnGrp LOS	D	E		D	D	D	B	C	C	B	B	B
Approach Vol, veh/h		160			735			1222			652	
Approach Delay, s/veh		61.7			44.3			25.3			18.5	
Approach LOS		E			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	55.8		14.5	9.5	59.4		22.6				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	37.0		9.0	5.0	41.0		28.0				
Max Q Clear Time (g_c+I1), s	8.0	34.6		8.6	4.3	17.6		14.8				
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	3.5		1.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	149	286	52	485	196	542	923	71	135	651	55
v/c Ratio	0.12	0.11	0.19	0.10	0.35	0.12	0.87	0.89	0.12	0.68	0.82	0.11
Control Delay (s/veh)	16.7	22.9	0.3	16.6	24.3	0.2	33.9	41.1	1.4	40.1	38.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.7	22.9	0.3	16.6	24.3	0.2	33.9	41.1	1.4	40.1	38.8	0.4
Queue Length 50th (ft)	15	35	0	19	128	0	106	336	2	52	136	0
Queue Length 95th (ft)	35	58	0	41	174	0	m#195	#436	m8	#121	#310	0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		1000	500		400	550		350
Base Capacity (vph)	364	1334	1468	521	1402	1599	637	1034	577	204	794	511
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.11	0.19	0.10	0.35	0.12	0.85	0.89	0.12	0.66	0.82	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	137	263	48	446	180	499	849	65	124	599	51
Future Volume (veh/h)	39	137	263	48	446	180	499	849	65	124	599	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	42	149	0	52	485	0	542	923	71	135	651	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	358	1308		536	1320		669	1025	464	218	804	356
Arrive On Green	0.03	0.37	0.00	0.04	0.37	0.00	0.04	0.10	0.10	0.08	0.23	0.23
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	42	149	0	52	485	0	542	923	71	135	651	55
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	1.6	2.9	0.0	2.0	10.5	0.0	12.3	27.2	4.3	6.2	18.5	3.0
Cycle Q Clear(g_c), s	1.6	2.9	0.0	2.0	10.5	0.0	12.3	27.2	4.3	6.2	18.5	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	1308		536	1320		669	1025	464	218	804	356
V/C Ratio(X)	0.12	0.11		0.10	0.37		0.81	0.90	0.15	0.62	0.81	0.15
Avail Cap(c_a), veh/h	383	1308		553	1320		691	1039	471	218	804	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.77	0.77	0.77	0.83	0.83	0.83
Uniform Delay (d), s/veh	20.0	22.1	0.0	19.4	24.2	0.0	29.7	46.5	36.1	30.4	38.7	32.7
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.1	0.8	0.0	5.0	9.0	0.2	3.3	5.9	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.2	0.0	0.8	4.4	0.0	5.7	14.1	1.7	2.6	8.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.1	22.3	0.0	19.5	25.0	0.0	34.7	55.4	36.3	33.7	44.6	33.1
LnGrp LOS	C	C		B	C		C	E	D	C	D	C
Approach Vol, veh/h		191			537			1536			841	
Approach Delay, s/veh		21.8			24.5			47.2			42.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	45.9	13.5	37.6	9.4	45.5	19.9	31.2
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	5.1	37.4	8.0	31.0	5.0	37.5	15.1	23.9
Max Q Clear Time (g_c+I1), s	3.6	12.5	8.2	29.2	4.0	4.9	14.3	20.5
Green Ext Time (p_c), s	0.0	4.4	0.0	1.3	0.0	1.2	0.1	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	40.4
HCM 7th LOS	D

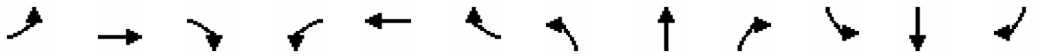
Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	265	40	88	129	28	1141	60	29	889	71
v/c Ratio	0.84	0.08	0.31	0.53	0.07	0.55	0.06	0.11	0.42	0.07
Control Delay (s/veh)	60.2	0.4	34.5	11.6	6.9	9.5	0.7	4.0	4.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.2	0.4	34.5	11.6	6.9	9.5	0.7	4.0	4.1	0.1
Queue Length 50th (ft)	159	0	47	0	7	256	1	3	44	0
Queue Length 95th (ft)	#247	0	87	33	15	186	6	m5	55	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	321	557	398	430	398	2091	961	254	2125	1011
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.07	0.22	0.30	0.07	0.55	0.06	0.11	0.42	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



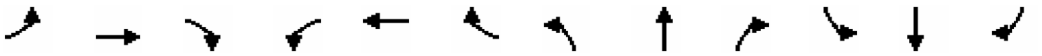
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	0	37	81	0	119	26	1050	55	27	818	65
Future Volume (veh/h)	244	0	37	81	0	119	26	1050	55	27	818	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	265	0	40	88	0	129	28	1141	60	29	889	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	359	0	296	323	0	162	469	1936	850	287	1551	703
Arrive On Green	0.15	0.00	0.19	0.06	0.00	0.10	0.27	1.00	1.00	0.04	0.59	0.59
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	265	0	40	88	0	129	28	1141	60	29	889	71
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	13.6	0.0	2.2	4.5	0.0	8.4	0.0	0.0	0.0	1.0	16.7	1.2
Cycle Q Clear(g_c), s	13.6	0.0	2.2	4.5	0.0	8.4	0.0	0.0	0.0	1.0	16.7	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	296	323	0	162	469	1936	850	287	1551	703
V/C Ratio(X)	0.74	0.00	0.14	0.27	0.00	0.80	0.06	0.59	0.07	0.10	0.57	0.10
Avail Cap(c_a), veh/h	374	0	296	517	0	292	469	1936	850	322	1551	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	34.0	0.0	36.0	38.9	0.0	46.5	16.5	0.0	0.0	18.0	15.5	4.3
Incr Delay (d2), s/veh	7.2	0.0	0.2	0.4	0.0	8.6	0.1	1.3	0.2	0.1	1.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	0.9	2.0	0.0	3.7	0.3	0.4	0.0	0.4	5.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.2	0.0	36.2	39.3	0.0	55.2	16.5	1.3	0.2	18.1	16.7	4.5
LnGrp LOS	D		D	D		E	B	A	A	B	B	A
Approach Vol, veh/h		305			217			1229			989	
Approach Delay, s/veh		40.6			48.7			1.6			15.9	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	63.2	11.2	24.3	19.1	51.5	20.1	15.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	47.0	18.0	18.0	5.0	47.0	16.5	19.5
Max Q Clear Time (g_c+I1), s	3.0	2.0	6.5	4.2	2.0	18.7	15.6	10.4
Green Ext Time (p_c), s	0.0	9.6	0.1	0.1	0.0	6.3	0.1	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	14.8
HCM 7th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	80	174	70	28	615	89	92	760	55
v/c Ratio	0.57	0.21	0.55	0.17	0.06	0.29	0.09	0.17	0.34	0.05
Control Delay (s/veh)	42.8	1.3	41.6	0.9	7.3	11.9	0.3	4.7	5.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.8	1.3	41.6	0.9	7.3	11.9	0.3	4.7	5.2	0.4
Queue Length 50th (ft)	93	0	101	0	6	108	0	13	64	0
Queue Length 95th (ft)	146	0	155	0	17	163	2	26	95	0
Internal Link Dist (ft)		897		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	302	547	391	636	476	2107	1040	585	2254	1073
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.15	0.45	0.11	0.06	0.29	0.09	0.16	0.34	0.05

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	0	74	160	0	64	26	566	82	85	699	51
Future Volume (veh/h)	149	0	74	160	0	64	26	566	82	85	699	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	162	0	80	174	0	70	28	615	89	92	760	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	298	0	112	292	0	125	665	1293	595	727	1380	621
Arrive On Green	0.10	0.00	0.07	0.11	0.00	0.08	0.26	0.37	0.37	0.28	0.39	0.39
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	162	0	80	174	0	70	28	615	89	92	760	55
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	8.8	0.0	5.2	9.4	0.0	4.5	0.0	14.3	2.7	0.0	17.7	1.6
Cycle Q Clear(g_c), s	8.8	0.0	5.2	9.4	0.0	4.5	0.0	14.3	2.7	0.0	17.7	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	0	112	292	0	125	665	1293	595	727	1380	621
V/C Ratio(X)	0.54	0.00	0.71	0.60	0.00	0.56	0.04	0.48	0.15	0.13	0.55	0.09
Avail Cap(c_a), veh/h	343	0	292	441	0	396	665	1293	595	727	1380	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	48.2	39.6	0.0	47.0	15.9	25.4	10.5	14.3	25.0	9.8
Incr Delay (d2), s/veh	1.5	0.0	8.1	1.9	0.0	3.8	0.0	1.3	0.5	0.1	1.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	2.3	4.2	0.0	1.9	0.4	5.7	1.5	1.1	7.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.5	0.0	56.4	41.5	0.0	50.9	16.0	26.6	11.0	14.4	26.6	10.1
LnGrp LOS	D		E	D		D	B	C	B	B	C	B
Approach Vol, veh/h		242			244			732			907	
Approach Delay, s/veh		46.4			44.2			24.3			24.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.8	44.0	16.2	12.0	31.8	46.0	15.3	12.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	39.5	20.5	19.5	6.5	41.5	13.5	26.5
Max Q Clear Time (g_c+I1), s	2.0	16.3	11.4	7.2	2.0	19.7	10.8	6.5
Green Ext Time (p_c), s	0.1	4.0	0.3	0.3	0.0	4.9	0.1	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	8.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	686	65	18	893
Future Vol, veh/h	134	18	686	65	18	893
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	-	575	575	-
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	146	20	746	71	20	971

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1270	-	0	0	816	0
Stage 1	746	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	160	0	-	-	807	-
Stage 1	430	0	-	-	-	-
Stage 2	558	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	156	-	-	-	807	-
Mov Cap-2 Maneuver	156	-	-	-	-	-
Stage 1	430	-	-	-	-	-
Stage 2	545	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	112.71	0	0.19
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	156	-	807	-
HCM Lane V/C Ratio	-	-	0.934	-	0.024	-
HCM Ctrl Dly (s/v)	-	-	112.7	0	9.6	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	6.8	-	0.1	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	701	1004	23
Future Vol, veh/h	50	245	81	701	1004	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	54	266	88	762	1091	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1648	-	1116	0	-	0
Stage 1	1091	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	99	0	624	-	-	-
Stage 1	321	0	-	-	-	-
Stage 2	538	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	85	-	624	-	-	-
Mov Cap-2 Maneuver	85	-	-	-	-	-
Stage 1	276	-	-	-	-	-
Stage 2	538	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	103.29	1.21	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	624	-	85	-	-	-
HCM Lane V/C Ratio	0.141	-	0.64	-	-	-
HCM Ctrl Dly (s/v)	11.7	-	103.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.5	-	3	-	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	37	0	0	82	0	1049	6	0	896	40
Future Vol, veh/h	0	0	37	0	0	82	0	1049	6	0	896	40
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	-	-	0	-	-	0	-	-	300	-	-	300
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	40	0	0	89	0	1140	7	0	974	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	487	-	-	570	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*843	0	0	*803	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			0			0		-	-		-	-
Mov Cap-1 Maneuver	-	-	*843	-	-	*803	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.49	10.04	0	0
HCM LOS	A	B		

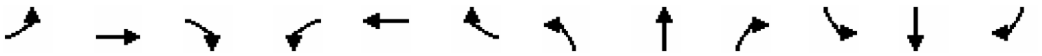
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	843	803	-	-
HCM Lane V/C Ratio	-	-	0.048	0.111	-	-
HCM Ctrl Dly (s/v)	-	-	9.5	10	-	-
HCM Lane LOS	-	-	A	B	-	-
HCM 95th %tile Q(veh)	-	-	0.2	0.4	-	-

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

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	137	137	27	108	89	102	784	13	92	716	205
v/c Ratio	0.72	0.72	0.08	0.64	0.25	0.22	0.34	0.01	0.18	0.32	0.19
Control Delay (s/veh)	62.0	62.0	0.4	57.2	6.1	7.1	6.7	0.0	5.0	4.2	0.4
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 (s/veh)	62.0	62.0	0.4	57.2	6.1	7.1	6.7	0.0	5.0	4.2	0.4
Queue Length 50th (ft)	93	93	0	69	0	12	78	0	8	34	0
Queue Length 95th (ft)	150	150	0	118	28	40	125	m0	21	68	1
Internal Link Dist (ft)		564		562			1025			836	
Turn Bay Length (ft)						300		300	300		300
Base Capacity (vph)	456	456	699	406	699	509	2302	1051	505	2230	1073
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.30	0.04	0.27	0.13	0.20	0.34	0.01	0.18	0.32	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	0	25	99	0	82	94	721	12	85	659	189
Future Volume (veh/h)	252	0	25	99	0	82	94	721	12	85	659	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	274	0	27	108	0	89	102	784	13	92	716	205
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	0	315	343	0	315	345	1391	621	708	2199	981
Arrive On Green	0.20	0.00	0.20	0.20	0.00	0.20	0.06	0.39	0.39	0.56	1.00	1.00
Sat Flow, veh/h	2616	0	1585	1383	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	274	0	27	108	0	89	102	784	13	92	716	205
Grp Sat Flow(s),veh/h/ln	1308	0	1585	1383	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	10.8	0.0	1.5	7.2	0.0	5.1	4.1	18.3	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	18.0	0.0	1.5	7.2	0.0	5.1	4.1	18.3	0.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	478	0	315	343	0	315	345	1391	621	708	2199	981
V/C Ratio(X)	0.57	0.00	0.09	0.32	0.00	0.28	0.30	0.56	0.02	0.13	0.33	0.21
Avail Cap(c_a), veh/h	1007	0	636	623	0	636	439	1391	621	708	2199	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	0.0	34.6	36.9	0.0	36.1	22.5	25.2	19.8	9.4	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.1	0.5	0.0	0.5	0.5	1.7	0.1	0.1	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.6	2.5	0.0	2.0	1.6	7.4	0.2	0.7	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.8	0.0	34.7	37.4	0.0	36.5	23.0	26.8	19.8	9.4	0.4	0.5
LnGrp LOS	D		C	D		D	C	C	B	A	A	A
Approach Vol, veh/h		301			197			899			1013	
Approach Delay, s/veh		44.8			37.0			26.3			1.2	
Approach LOS		D			D			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.4	46.0		25.6	10.4	70.1		25.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.5	41.5		42.5	11.5	38.5		42.5				
Max Q Clear Time (g_c+I1), s	2.0	20.3		20.0	6.1	2.0		9.2				
Green Ext Time (p_c), s	0.1	4.8		1.1	0.1	5.6		0.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	91	0	0	66	0	761	18	0	744	39
Future Vol, veh/h	0	0	91	0	0	66	0	761	18	0	744	39
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	-	-	0	-	-	0	-	-	300	-	-	300
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	99	0	0	72	0	827	20	0	809	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	404	-	-	414	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*882	0	0	*882	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			0			0		-	-		-	-
Mov Cap-1 Maneuver	-	-	*882	-	-	*882	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.59	9.44	0	0
HCM LOS	A	A		

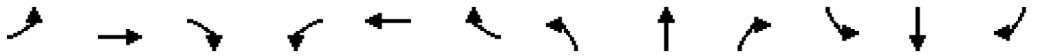
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	882	882	-	-
HCM Lane V/C Ratio	-	-	0.112	0.081	-	-
HCM Ctrl Dly (s/v)	-	-	9.6	9.4	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	-	-

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

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	135	116	703	79	180	82	584	615	210	714	32
v/c Ratio	0.22	0.80	0.07	0.89	0.18	0.36	0.32	0.77	0.61	0.85	0.89	0.04
Control Delay (s/veh)	62.7	95.2	0.1	67.5	44.7	7.9	41.7	42.0	14.7	63.8	51.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.7	95.2	0.1	67.5	44.7	7.9	41.7	42.0	14.7	63.8	51.6	0.1
Queue Length 50th (ft)	30	123	0	323	58	0	33	259	121	138	591	0
Queue Length 95th (ft)	67	#223	0	#406	106	61	m67	#724	299	223	#773	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	174	183	1583	821	446	515	256	761	1010	400	839	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.74	0.07	0.86	0.18	0.35	0.32	0.77	0.61	0.53	0.85	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	124	107	647	73	166	75	537	566	193	657	29
Future Volume (veh/h)	32	124	107	647	73	166	75	537	566	193	657	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	135	0	703	79	180	82	584	615	210	714	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	160		766	414	351	277	810	687	234	765	649
Arrive On Green	0.09	0.09	0.00	0.22	0.22	0.22	0.11	0.43	0.43	0.10	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	35	135	0	703	79	180	82	584	615	210	714	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.6	10.1	0.0	28.2	4.9	14.2	0.0	36.5	51.0	11.7	51.8	1.7
Cycle Q Clear(g_c), s	2.6	10.1	0.0	28.2	4.9	14.2	0.0	36.5	51.0	11.7	51.8	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	160		766	414	351	277	810	687	234	765	649
V/C Ratio(X)	0.23	0.84		0.92	0.19	0.51	0.30	0.72	0.90	0.90	0.93	0.05
Avail Cap(c_a), veh/h	176	184		827	448	380	277	810	687	423	843	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	64.0	0.0	54.0	44.9	48.5	55.1	33.2	37.3	36.7	40.1	25.3
Incr Delay (d2), s/veh	0.3	23.0	0.0	14.2	0.2	0.9	0.2	4.2	13.2	5.0	19.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.8	0.0	13.6	2.3	5.6	2.6	16.7	21.2	5.2	26.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	87.0	0.0	68.3	45.1	49.4	55.3	37.3	50.5	41.7	59.8	25.4
LnGrp LOS	E	F		E	D	D	E	D	D	D	E	C
Approach Vol, veh/h		170			962			1281			956	
Approach Delay, s/veh		81.6			62.8			44.8			54.7	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.9	67.5		18.2	22.3	64.1		37.5				
Change Period (Y+Rc), s	5.0	6.0		6.0	6.0	* 6		6.0				
Max Green Setting (Gmax), s	29.0	42.0		14.0	7.0	* 64		34.0				
Max Q Clear Time (g_c+I1), s	13.7	53.0		12.1	2.0	53.8		30.2				
Green Ext Time (p_c), s	0.1	0.0		0.1	0.0	4.3		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	54.6
HCM 7th LOS	D

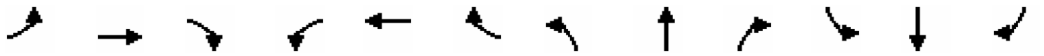
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	66	438	675	111	168	137	499	1074	82	189	1186	41
v/c Ratio	0.17	0.45	0.46	0.43	0.16	0.09	0.88	0.72	0.11	0.73	0.91	0.06
Control Delay (s/veh)	32.7	44.6	1.0	39.3	39.0	0.1	43.7	37.7	8.9	36.1	67.4	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.7	44.6	1.0	39.3	39.0	0.1	43.7	37.7	8.9	36.1	67.4	2.7
Queue Length 50th (ft)	41	178	0	71	62	0	195	420	15	118	612	0
Queue Length 95th (ft)	77	232	0	119	94	0	m213	m457	m32	m139	#694	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	379	974	1468	260	1041	1599	587	1497	747	306	1311	650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.45	0.46	0.43	0.16	0.09	0.85	0.72	0.11	0.62	0.90	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	403	621	102	155	126	459	988	75	174	1091	38
Future Volume (veh/h)	61	403	621	102	155	126	459	988	75	174	1091	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	66	438	0	111	168	0	499	1074	82	189	1186	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	420	1072		300	1077		554	1446	655	249	1290	571
Arrive On Green	0.04	0.30	0.00	0.04	0.30	0.00	0.04	0.13	0.13	0.08	0.37	0.37
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	66	438	0	111	168	0	499	1074	82	189	1186	41
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	3.8	13.9	0.0	5.3	4.9	0.0	15.0	41.3	6.4	9.5	45.7	2.4
Cycle Q Clear(g_c), s	3.8	13.9	0.0	5.3	4.9	0.0	15.0	41.3	6.4	9.5	45.7	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	420	1072		300	1077		554	1446	655	249	1290	571
V/C Ratio(X)	0.16	0.41		0.37	0.16		0.90	0.74	0.13	0.76	0.92	0.07
Avail Cap(c_a), veh/h	420	1072		300	1077		634	1446	655	310	1316	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.59	0.59	0.59	0.45	0.45	0.45
Uniform Delay (d), s/veh	32.5	39.5	0.0	36.0	36.2	0.0	44.9	54.3	39.2	31.4	43.0	29.3
Incr Delay (d2), s/veh	0.2	1.2	0.0	0.6	0.3	0.0	8.9	1.5	0.1	2.8	5.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	6.2	0.0	0.7	2.2	0.0	10.1	19.9	2.6	4.0	20.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.7	40.7	0.0	36.6	36.5	0.0	53.8	55.8	39.3	34.2	48.6	29.4
LnGrp LOS	C	D		D	D		D	E	D	C	D	C
Approach Vol, veh/h		504			279			1655			1416	
Approach Delay, s/veh		39.6			36.5			54.4			46.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	49.5	17.1	64.8	10.8	49.3	22.9	58.9
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	5.1	38.6	16.5	57.3	5.3	38.4	20.8	53.0
Max Q Clear Time (g_c+I1), s	5.8	6.9	11.5	43.3	7.3	15.9	17.0	47.7
Green Ext Time (p_c), s	0.0	1.4	0.1	9.3	0.0	3.6	0.4	4.3

Intersection Summary	
HCM 7th Control Delay, s/veh	48.1
HCM 7th LOS	D

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

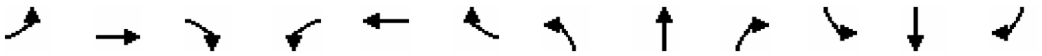
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	389	27	66	74	88	1191	86	98	1653	221
v/c Ratio	1.25	0.11	0.18	0.35	0.53	0.57	0.09	0.40	0.78	0.21
Control Delay (s/veh)	185.1	0.9	50.3	4.6	37.5	10.9	2.1	9.4	10.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	185.1	0.9	50.3	4.6	37.5	10.9	2.1	9.4	10.4	0.3
Queue Length 50th (ft)	~448	0	53	0	27	221	10	13	135	0
Queue Length 95th (ft)	#655	0	99	0	74	244	19	m19	163	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	310	439	367	339	166	2072	944	264	2119	1034
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.06	0.18	0.22	0.53	0.57	0.09	0.37	0.78	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



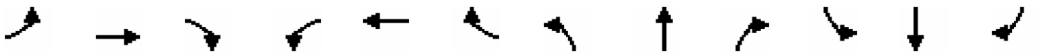
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	0	25	61	0	68	81	1096	79	90	1521	203
Future Volume (veh/h)	358	0	25	61	0	68	81	1096	79	90	1521	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	389	0	27	66	0	74	88	1191	86	98	1653	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	363	0	56	415	0	97	359	2075	911	228	1827	828
Arrive On Green	0.18	0.00	0.04	0.20	0.00	0.06	0.11	0.59	0.59	0.09	1.00	1.00
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	389	0	27	66	0	74	88	1191	86	98	1653	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	24.9	0.0	2.4	0.2	0.0	6.5	0.0	29.8	1.2	4.2	0.0	0.0
Cycle Q Clear(g_c), s	24.9	0.0	2.4	0.2	0.0	6.5	0.0	29.8	1.2	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	0	56	415	0	97	359	2075	911	228	1827	828
V/C Ratio(X)	1.07	0.00	0.48	0.16	0.00	0.76	0.24	0.57	0.09	0.43	0.90	0.27
Avail Cap(c_a), veh/h	363	0	278	415	0	201	359	2075	911	280	1827	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.61	0.61	0.61
Uniform Delay (d), s/veh	60.2	0.0	67.2	45.3	0.0	65.6	22.8	17.8	1.5	22.0	0.0	0.0
Incr Delay (d2), s/veh	67.5	0.0	6.4	0.2	0.0	11.6	0.4	1.2	0.2	0.8	5.1	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	0.0	1.1	1.9	0.0	2.9	2.0	11.4	1.2	1.6	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	127.7	0.0	73.6	45.5	0.0	77.2	23.1	19.0	1.7	22.8	5.1	0.5
LnGrp LOS	F		E	D		E	C	B	A	C	A	A
Approach Vol, veh/h		416			140			1365			1972	
Approach Delay, s/veh		124.2			62.2			18.2			5.5	
Approach LOS		F			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	88.7	33.1	9.5	20.7	78.7	29.4	13.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.4	70.7	18.0	24.9	6.9	74.2	24.9	18.0
Max Q Clear Time (g_c+I1), s	6.2	31.8	2.2	4.4	2.0	2.0	26.9	8.5
Green Ext Time (p_c), s	0.1	10.1	0.1	0.1	0.1	21.3	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	54	133	140	88	902	165	107	780	176
v/c Ratio	0.50	0.15	0.53	0.39	0.19	0.41	0.15	0.22	0.32	0.15
Control Delay (s/veh)	59.5	0.9	59.3	3.1	7.1	13.9	2.0	5.7	6.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.5	0.9	59.3	3.1	7.1	13.9	2.0	5.7	6.1	0.9
Queue Length 50th (ft)	89	0	111	0	18	204	0	21	124	3
Queue Length 95th (ft)	142	0	171	0	38	279	30	14	133	0
Internal Link Dist (ft)		743		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	241	486	292	532	499	2191	1079	529	2406	1142
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.11	0.46	0.26	0.18	0.41	0.15	0.20	0.32	0.15

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	0	50	122	0	129	81	830	152	98	718	162
Future Volume (veh/h)	99	0	50	122	0	129	81	830	152	98	718	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	108	0	54	133	0	140	88	902	165	107	780	176
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	194	0	143	276	0	166	571	1625	748	597	1825	820
Arrive On Green	0.07	0.00	0.09	0.08	0.00	0.10	0.18	0.47	0.47	0.23	0.52	0.52
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	108	0	54	133	0	140	88	902	165	107	780	176
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	7.7	0.0	4.6	9.5	0.0	12.3	0.0	26.5	6.3	0.0	19.5	6.2
Cycle Q Clear(g_c), s	7.7	0.0	4.6	9.5	0.0	12.3	0.0	26.5	6.3	0.0	19.5	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	0	143	276	0	166	571	1625	748	597	1825	820
V/C Ratio(X)	0.56	0.00	0.38	0.48	0.00	0.85	0.15	0.56	0.22	0.18	0.43	0.21
Avail Cap(c_a), veh/h	255	0	218	399	0	296	571	1625	748	597	1825	820
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	0.0	60.8	52.6	0.0	62.5	19.7	27.1	11.8	22.4	21.2	9.8
Incr Delay (d2), s/veh	2.5	0.0	1.6	1.3	0.0	11.1	0.1	1.4	0.7	0.1	0.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.9	4.3	0.0	5.4	1.6	10.8	3.3	2.2	7.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.4	0.0	62.5	53.9	0.0	73.5	19.8	28.5	12.5	22.5	22.0	10.4
LnGrp LOS	E		E	D		E	B	C	B	C	C	B
Approach Vol, veh/h		162			273			1155			1063	
Approach Delay, s/veh		58.4			64.0			25.5			20.1	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.5	71.0	16.2	17.3	30.5	78.0	14.2	19.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.5	66.5	21.5	19.5	9.5	73.5	14.5	26.5
Max Q Clear Time (g_c+I1), s	2.0	28.5	11.5	6.6	2.0	21.5	9.7	14.3
Green Ext Time (p_c), s	0.2	7.2	0.2	0.2	0.1	6.2	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	11.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	1000	139	18	910
Future Vol, veh/h	101	16	1000	139	18	910
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	-	575	575	-
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	110	17	1087	151	20	989

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1621	-	0	0	1238	0
Stage 1	1087	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22	-
Pot Cap-1 Maneuver	~ 94	0	-	-	558	-
Stage 1	285	0	-	-	-	-
Stage 2	552	0	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 90	-	-	-	558	-
Mov Cap-2 Maneuver	~ 90	-	-	-	-	-
Stage 1	285	-	-	-	-	-
Stage 2	533	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	247.81	0	0.23
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	90	-	558	-
HCM Lane V/C Ratio	-	-	1.213	-	0.035	-
HCM Ctrl Dly (s/v)	-	-	247.8	0	11.7	-
HCM Lane LOS	-	-	F	A	B	-
HCM 95th %tile Q(veh)	-	-	7.7	-	0.1	-

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

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	1117	971	40
Future Vol, veh/h	22	127	232	1117	971	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
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	138	252	1214	1055	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2167	-	1099	0	-	0
Stage 1	1055	-	-	-	-	-
Stage 2	1111	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	46	0	633	-	-	-
Stage 1	334	0	-	-	-	-
Stage 2	277	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	27	-	633	-	-	-
Mov Cap-2 Maneuver	27	-	-	-	-	-
Stage 1	201	-	-	-	-	-
Stage 2	277	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 336.74	2.48	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	633	-	27	-	-	-
HCM Lane V/C Ratio	0.398	-	0.873	-	-	-
HCM Ctrl Dly (s/v)	14.4	-	$ 336.7	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.9	-	2.8	-	-	-

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	24	0	0	57	0	1199	19	0	1502	105
Future Vol, veh/h	0	0	24	0	0	57	0	1199	19	0	1502	105
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	-	-	0	-	-	0	-	-	300	-	-	300
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	0	0	62	0	1303	21	0	1633	114

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	816	-	-	652	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*652	0	0	*741	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			0			0		-	-		-	-
Mov Cap-1 Maneuver	-	-	*652	-	-	*741	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.75	10.3	0	0
HCM LOS	B	B		

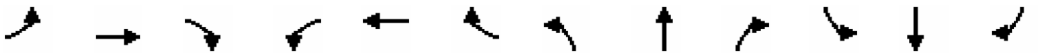
Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	652	741	-	-
HCM Lane V/C Ratio	-	-	0.04	0.084	-	-
HCM Ctrl Dly (s/v)	-	-	10.8	10.3	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.1	0.3	-	-

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

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	213	213	278	74	62	262	836	40	283	716	660
v/c Ratio	0.76	0.76	0.49	0.44	0.15	0.62	0.45	0.05	0.54	0.37	0.56
Control Delay (s/veh)	67.8	67.8	7.0	53.0	4.5	19.2	15.6	1.1	15.4	8.8	2.0
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 (s/veh)	67.8	67.8	7.0	53.0	4.5	19.2	15.6	1.1	15.4	8.8	2.0
Queue Length 50th (ft)	195	195	0	59	0	79	255	1	38	51	0
Queue Length 95th (ft)	264	264	65	101	21	218	381	5	m139	185	35
Internal Link Dist (ft)		665		711			1025			836	
Turn Bay Length (ft)						300		300	300		300
Base Capacity (vph)	513	513	815	308	699	483	1847	848	527	1952	1169
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.42	0.34	0.24	0.09	0.54	0.45	0.05	0.54	0.37	0.56

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	0	256	68	0	57	241	769	37	260	659	607
Future Volume (veh/h)	392	0	256	68	0	57	241	769	37	260	659	607
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	426	0	278	74	0	62	262	836	40	283	716	660
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	602	0	383	317	0	383	343	1189	530	710	1880	839
Arrive On Green	0.24	0.00	0.24	0.24	0.00	0.24	0.13	0.33	0.33	0.55	0.88	0.88
Sat Flow, veh/h	2681	0	1585	1101	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	426	0	278	74	0	62	262	836	40	283	716	660
Grp Sat Flow(s),veh/h/ln	1340	0	1585	1101	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	21.8	0.0	22.9	7.8	0.0	4.4	16.7	29.1	2.4	0.4	5.0	22.6
Cycle Q Clear(g_c), s	29.6	0.0	22.9	7.8	0.0	4.4	16.7	29.1	2.4	0.4	5.0	22.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	602	0	383	317	0	383	343	1189	530	710	1880	839
V/C Ratio(X)	0.71	0.00	0.73	0.23	0.00	0.16	0.76	0.70	0.08	0.40	0.38	0.79
Avail Cap(c_a), veh/h	1059	0	653	504	0	653	410	1189	530	710	1880	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	0.0	49.5	43.8	0.0	42.5	39.4	41.1	32.3	19.3	4.2	5.2
Incr Delay (d2), s/veh	1.5	0.0	2.6	0.4	0.0	0.2	6.9	3.5	0.3	0.4	0.6	7.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	9.4	2.2	0.0	1.8	7.8	12.8	1.0	4.4	1.5	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	0.0	52.2	44.2	0.0	42.7	46.3	44.6	32.5	19.7	4.8	12.6
LnGrp LOS	E		D	D		D	D	D	C	B	A	B
Approach Vol, veh/h		704			136			1138			1659	
Approach Delay, s/veh		55.3			43.5			44.6			10.4	
Approach LOS		E			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.2	52.0		38.8	23.6	79.6		38.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	22.5	47.5		58.5	24.5	45.5		58.5				
Max Q Clear Time (g_c+I1), s	2.4	31.1		31.6	18.7	24.6		9.8				
Green Ext Time (p_c), s	0.7	4.8		2.7	0.4	7.2		0.8				

Intersection Summary		
HCM 7th Control Delay, s/veh		31.0
HCM 7th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	116	0	0	45	0	1002	56	0	862	121
Future Vol, veh/h	0	0	116	0	0	45	0	1002	56	0	862	121
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	-	-	0	-	-	0	-	-	300	-	-	300
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	126	0	0	49	0	1089	61	0	937	132

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	468	-	-	545	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*845	0	0	*800	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			0			0		-	-		-	-
Mov Cap-1 Maneuver	-	-	*845	-	-	*800	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.01	9.79	0	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	845	800	-	-
HCM Lane V/C Ratio	-	-	0.149	0.061	-	-
HCM Ctrl Dly (s/v)	-	-	10	9.8	-	-
HCM Lane LOS	-	-	B	A	-	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-	-

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

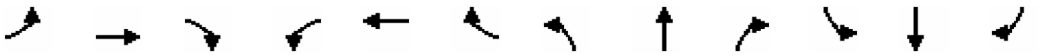
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	160	73	522	202	266	113	1642	809	270	1713	33
v/c Ratio	0.37	0.97	0.05	0.88	0.63	0.58	0.84	0.99	0.77	1.00	0.89	0.04
Control Delay (s/veh)	75.0	132.4	0.1	81.2	70.2	17.7	68.5	21.9	5.4	103.2	39.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	75.0	132.4	0.1	81.2	70.2	17.7	68.5	21.9	5.4	103.2	39.2	0.1
Queue Length 50th (ft)	56	168	0	273	195	40	72	630	50	~246	813	0
Queue Length 95th (ft)	106	#322	0	#360	287	137	m67	m406	m36	#439	932	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	156	165	1583	608	330	462	137	1657	1057	270	1925	905
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.97	0.05	0.86	0.61	0.58	0.82	0.99	0.77	1.00	0.89	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	147	67	480	186	245	104	1511	744	248	1576	30
Future Volume (veh/h)	52	147	67	480	186	245	104	1511	744	248	1576	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	160	0	522	202	266	113	1642	809	270	1713	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	166		612	331	281	159	1664	742	261	1931	861
Arrive On Green	0.09	0.09	0.00	0.18	0.18	0.18	0.05	0.47	0.47	0.12	0.54	0.54
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	57	160	0	522	202	266	113	1642	809	270	1713	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.8	13.5	0.0	23.1	15.7	26.2	5.2	72.2	74.0	19.0	67.2	1.5
Cycle Q Clear(g_c), s	4.8	13.5	0.0	23.1	15.7	26.2	5.2	72.2	74.0	19.0	67.2	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	166		612	331	281	159	1664	742	261	1931	861
V/C Ratio(X)	0.36	0.97		0.85	0.61	0.95	0.71	0.99	1.09	1.03	0.89	0.04
Avail Cap(c_a), veh/h	158	166		612	331	281	168	1664	742	261	1931	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.8	71.8	0.0	63.0	60.0	64.3	34.6	41.5	42.0	56.4	31.8	16.8
Incr Delay (d2), s/veh	0.5	59.1	0.0	11.0	2.9	39.4	1.0	4.2	42.9	64.5	6.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	9.1	0.0	11.0	7.7	13.5	2.2	30.8	36.1	14.7	28.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	68.3	130.9	0.0	74.0	62.8	103.6	35.6	45.7	84.9	120.9	38.3	16.9
LnGrp LOS	E	F		E	E	F	D	D	F	F	D	B
Approach Vol, veh/h		217			990			2564			2016	
Approach Delay, s/veh		114.5			79.7			57.6			49.0	
Approach LOS		F			E			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.0	80.0		20.0	12.2	91.8		34.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	19.0	74.0		14.0	8.0	85.0		28.0				
Max Q Clear Time (g_c+I1), s	21.0	76.0		15.5	7.2	69.2		28.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	12.5		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	60.5
HCM 7th LOS	E

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	200	1060	205	652	263	1263	2164	203	180	2017	74
v/c Ratio	0.54	0.27	0.72	0.73	0.84	0.16	1.33	1.15	0.22	1.01	1.40	0.10
Control Delay (s/veh)	60.3	52.5	3.1	66.9	69.7	0.2	196.1	100.5	4.8	101.7	210.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.3	52.5	3.1	66.9	69.7	0.2	196.1	100.5	4.8	101.7	210.4	0.5
Queue Length 50th (ft)	43	89	0	169	337	0	~646	~1404	37	~194	~1475	0
Queue Length 95th (ft)	80	127	0	247	412	0	m#473	m920	m22	m#252	#1587	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	106	828	1468	282	826	1599	947	1881	927	178	1441	720
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.24	0.72	0.73	0.79	0.16	1.33	1.15	0.22	1.01	1.40	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	184	975	189	600	242	1162	1991	187	166	1856	68
Future Volume (veh/h)	52	184	975	189	600	242	1162	1991	187	166	1856	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	57	200	0	205	652	0	1263	2164	203	180	2017	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	123	744		284	742		822	1978	896	129	1538	681
Arrive On Green	0.03	0.21	0.00	0.03	0.21	0.00	0.17	0.56	0.56	0.05	0.44	0.44
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	4904	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	57	200	0	205	652	0	1263	2164	203	180	2017	74
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1635	1777	1610	1753	1763	1560
Q Serve(g_s), s	4.2	7.5	0.0	5.0	28.1	0.0	26.5	87.9	10.1	7.5	68.9	4.4
Cycle Q Clear(g_c), s	4.2	7.5	0.0	5.0	28.1	0.0	26.5	87.9	10.1	7.5	68.9	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	744		284	742		822	1978	896	129	1538	681
V/C Ratio(X)	0.46	0.27		0.72	0.88		1.54	1.09	0.23	1.40	1.31	0.11
Avail Cap(c_a), veh/h	123	832		284	830		822	1978	896	129	1538	681
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.09	0.09	0.09	0.39	0.39	0.39
Uniform Delay (d), s/veh	49.8	52.3	0.0	58.6	60.6	0.0	65.8	35.0	17.8	45.1	44.5	26.4
Incr Delay (d2), s/veh	2.7	0.3	0.0	8.3	10.4	0.0	241.6	43.3	0.1	196.4	142.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.3	0.0	6.1	13.6	0.0	29.2	46.8	3.7	10.1	58.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	52.6	0.0	66.8	71.0	0.0	307.3	78.4	17.8	241.5	186.6	26.5
LnGrp LOS	D	D		E	E		F	F	B	F	F	C
Approach Vol, veh/h		257			857			3630			2271	
Approach Delay, s/veh		52.6			70.0			154.6			185.7	
Approach LOS		D			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	39.5	13.0	94.9	10.5	39.6	32.0	75.9
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	5.1	36.9	7.5	84.0	5.0	37.0	26.5	65.0
Max Q Clear Time (g_c+I1), s	6.2	30.1	9.5	89.9	7.0	9.5	28.5	70.9
Green Ext Time (p_c), s	0.0	2.9	0.0	0.0	0.0	1.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	150.6
HCM 7th LOS	F

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

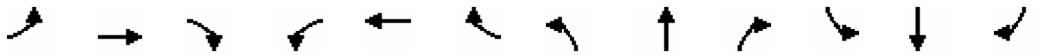
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	452	102	88	129	51	3049	60	29	3114	139
v/c Ratio	1.35	0.41	0.43	0.68	0.49	1.23	0.05	0.25	1.26	0.12
Control Delay (s/veh)	224.7	9.3	61.2	36.7	39.5	124.1	2.3	8.9	142.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	224.7	9.3	61.2	36.7	39.5	124.1	2.3	8.9	142.6	0.3
Queue Length 50th (ft)	~312	0	80	25	18	~2073	0	3	~2166	0
Queue Length 95th (ft)	#428	30	129	95	m21	m#2110	m0	m5	m#1661	m7
Internal Link Dist (ft)		390		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	336	297	273	300	104	2487	1112	116	2468	1146
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.35	0.34	0.32	0.43	0.49	1.23	0.05	0.25	1.26	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	0	94	81	0	119	47	2805	55	27	2865	128
Future Volume (veh/h)	416	0	94	81	0	119	47	2805	55	27	2865	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	452	0	102	88	0	129	51	3049	60	29	3114	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	339	0	216	249	0	150	164	2345	1029	86	2191	993
Arrive On Green	0.10	0.00	0.14	0.06	0.00	0.09	0.13	1.00	1.00	0.03	0.83	0.83
Sat Flow, veh/h	3456	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	452	0	102	88	0	129	51	3049	60	29	3114	139
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	15.5	0.0	9.4	6.9	0.0	12.7	0.0	105.9	0.0	1.0	99.0	1.5
Cycle Q Clear(g_c), s	15.5	0.0	9.4	6.9	0.0	12.7	0.0	105.9	0.0	1.0	99.0	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	0	216	249	0	150	164	2345	1029	86	2191	993
V/C Ratio(X)	1.33	0.00	0.47	0.35	0.00	0.86	0.31	1.30	0.06	0.34	1.42	0.14
Avail Cap(c_a), veh/h	339	0	216	352	0	206	164	2345	1029	101	2191	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	71.3	0.0	63.0	59.8	0.0	70.5	63.9	0.0	0.0	39.2	13.2	1.8
Incr Delay (d2), s/veh	168.8	0.0	1.6	0.9	0.0	22.6	1.1	138.3	0.1	0.2	189.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.8	0.0	3.9	3.2	0.0	6.1	1.8	45.0	0.0	0.6	72.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	240.1	0.0	64.6	60.7	0.0	93.1	64.9	138.3	0.1	39.4	202.9	1.8
LnGrp LOS	F		E	E		F	E	F	A	D	F	A
Approach Vol, veh/h		554			217			3160			3282	
Approach Delay, s/veh		207.8			79.9			134.5			192.9	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	110.4	13.5	26.0	15.0	103.5	20.0	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	99.0	18.0	18.0	5.0	99.0	15.5	20.5
Max Q Clear Time (g_c+I1), s	3.0	107.9	8.9	11.4	2.0	101.0	17.5	14.7
Green Ext Time (p_c), s	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	165.1
HCM 7th LOS	F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	411	206	174	82	63	2297	89	92	2955	147
v/c Ratio	1.05	0.86	0.75	0.42	0.61	1.05	0.08	0.77	1.30	0.14
Control Delay (s/veh)	124.6	72.4	70.7	33.4	50.1	50.9	4.1	32.5	166.6	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	124.6	72.4	70.7	33.4	50.1	50.9	4.1	32.5	166.6	6.2
Queue Length 50th (ft)	~237	127	150	28	28	~1362	5	45	~2144	36
Queue Length 95th (ft)	#350	#257	225	84	m38	m#1275	m10	m37	m#1802	m30
Internal Link Dist (ft)		613		643		13280			2297	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	391	258	248	230	103	2191	1051	119	2271	1052
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.80	0.70	0.36	0.61	1.05	0.08	0.77	1.30	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	378	29	160	160	11	64	58	2113	82	85	2719	135
Future Volume (veh/h)	378	29	160	160	11	64	58	2113	82	85	2719	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	411	32	174	174	12	70	63	2297	89	92	2955	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
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	394	29	156	224	24	138	127	2222	1023	101	2209	993
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.05	0.64	0.64	0.03	0.63	0.63
Sat Flow, veh/h	3456	252	1371	1781	237	1384	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	411	0	206	174	0	82	63	2297	89	92	2955	147
Grp Sat Flow(s),veh/h/ln	1728	0	1624	1781	0	1621	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	18.0	0.0	18.0	13.7	0.0	7.6	1.3	101.2	3.3	4.1	99.0	3.3
Cycle Q Clear(g_c), s	18.0	0.0	18.0	13.7	0.0	7.6	1.3	101.2	3.3	4.1	99.0	3.3
Prop In Lane	1.00		0.84	1.00		0.85	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	0	185	224	0	162	127	2222	1023	101	2209	993
V/C Ratio(X)	1.04	0.00	1.11	0.78	0.00	0.51	0.50	1.03	0.09	0.91	1.34	0.15
Avail Cap(c_a), veh/h	394	0	185	249	0	185	127	2222	1023	101	2209	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.12	0.12	0.12	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.0	0.0	70.0	56.9	0.0	67.4	72.1	28.4	10.8	44.6	29.5	3.6
Incr Delay (d2), s/veh	57.3	0.0	100.0	13.2	0.0	2.4	0.4	17.7	0.0	61.6	155.1	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	12.6	6.9	0.0	3.2	2.4	42.6	1.2	3.7	84.9	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	127.3	0.0	170.0	70.1	0.0	69.8	72.5	46.1	10.8	106.2	184.6	3.9
LnGrp LOS	F		F	E		E	E	F	B	F	F	A
Approach Vol, veh/h		617			256			2449			3194	
Approach Delay, s/veh		141.5			70.0			45.5			174.0	
Approach LOS		F			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	105.7	20.3	22.5	11.7	103.5	22.5	20.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	99.0	18.0	18.0	5.0	99.0	18.0	18.0
Max Q Clear Time (g_c+I1), s	6.1	103.2	15.7	20.0	3.3	101.0	20.0	9.6
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	118.6
HCM 7th LOS	F

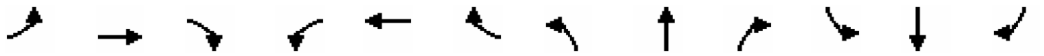
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	600	78	458	146	192	472	1815	71	42	2441	796
v/c Ratio	1.42	0.53	1.16	0.64	0.59	1.08	0.84	0.07	0.34	1.35	0.72
Control Delay (s/veh)	248.6	82.7	134.6	79.1	59.1	126.8	21.5	0.4	20.1	181.1	9.3
Queue Delay	0.0	0.0	0.2	0.0	0.0	0.0	1.2	0.0	0.0	0.7	0.0
Total Delay (s/veh)	248.6	82.7	134.7	79.1	59.1	126.8	22.7	0.4	20.1	181.7	9.3
Queue Length 50th (ft)	~428	79	~414	146	76	~262	787	0	5	~1727	367
Queue Length 95th (ft)	#552	134	#562	225	117	#453	1004	m1	m3	m#1167	m197
Internal Link Dist (ft)		408			274		775			13280	
Turn Bay Length (ft)	200		200	265		300		575	575		300
Base Capacity (vph)	423	282	394	227	424	439	2153	1002	249	1803	1109
Starvation Cap Reductn	0	0	0	0	0	0	152	0	0	0	0
Spillback Cap Reductn	0	0	6	0	0	0	0	0	0	340	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.42	0.28	1.18	0.64	0.45	1.08	0.91	0.07	0.17	1.67	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	72	421	134	116	61	434	1670	65	39	2246	732
Future Volume (veh/h)	552	72	421	134	116	61	434	1670	65	39	2246	732
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	600	78	458	146	126	66	472	1815	71	42	2441	796
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	284	396	167	238	118	339	2085	930	139	1849	1020
Arrive On Green	0.12	0.15	0.15	0.07	0.10	0.10	0.10	0.59	0.59	0.03	0.52	0.52
Sat Flow, veh/h	3456	1870	1585	1781	2302	1140	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	600	78	458	146	96	96	472	1815	71	42	2441	796
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1777	1665	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	19.5	5.8	24.0	8.7	8.1	8.7	15.5	68.2	1.9	1.7	82.2	56.8
Cycle Q Clear(g_c), s	19.5	5.8	24.0	8.7	8.1	8.7	15.5	68.2	1.9	1.7	82.2	56.8
Prop In Lane	1.00		1.00	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	426	284	396	167	183	172	339	2085	930	139	1849	1020
V/C Ratio(X)	1.41	0.27	1.16	0.87	0.52	0.56	1.39	0.87	0.08	0.30	1.32	0.78
Avail Cap(c_a), veh/h	426	284	396	198	202	190	339	2085	930	286	1849	1020
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51	0.09	0.09	0.09
Uniform Delay (d), s/veh	69.3	59.3	37.3	71.3	67.1	67.4	71.3	27.6	5.6	29.0	37.9	20.2
Incr Delay (d2), s/veh	196.7	0.5	95.0	28.8	2.3	3.0	185.7	2.8	0.1	0.1	144.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.3	2.8	24.1	7.2	3.8	3.9	15.5	27.5	1.1	0.7	70.4	19.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	265.9	59.8	132.3	100.0	69.4	70.4	256.9	30.4	5.7	29.1	182.5	20.7
LnGrp LOS	F	E	F	F	E	E	F	C	A	C	F	C
Approach Vol, veh/h		1136			338			2358			3279	
Approach Delay, s/veh		197.9			82.9			75.0			141.2	
Approach LOS		F			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	22.8	10.5	99.7	17.3	30.5	21.0	89.2
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	6.5	* 6.5	5.5	7.0
Max Green Setting (Gmax), s	19.5	18.0	18.0	78.0	13.5	* 24	15.5	80.5
Max Q Clear Time (g_c+I1), s	21.5	10.7	3.7	70.2	10.7	26.0	17.5	84.2
Green Ext Time (p_c), s	0.0	0.5	0.0	6.2	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	125.6
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	54	336	162	2310	3003	36
v/c Ratio	0.27	1.04	0.78	0.81	1.24	0.03
Control Delay (s/veh)	67.9	94.3	68.0	11.4	126.2	1.1
Queue Delay	0.0	0.0	0.0	0.5	0.1	0.0
Total Delay (s/veh)	67.9	94.3	68.0	11.9	126.3	1.1
Queue Length 50th (ft)	52	~215	113	597	~2085	0
Queue Length 95th (ft)	100	#423	196	684	m236	m0
Internal Link Dist (ft)	267			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	201	323	247	2855	2413	1084
Starvation Cap Reductn	0	0	0	0	97	0
Spillback Cap Reductn	0	0	0	184	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	1.04	0.66	0.86	1.30	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	309	149	2125	2763	33
Future Volume (veh/h)	50	309	149	2125	2763	33
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	0	162	2310	3003	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70		182	3134	2738	1221
Arrive On Green	0.04	0.00	0.08	0.88	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	54	0	162	2310	3003	36
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	4.7	0.0	10.1	34.7	121.7	0.0
Cycle Q Clear(g_c), s	4.7	0.0	10.1	34.7	121.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	70		182	3134	2738	1221
V/C Ratio(X)	0.78		0.89	0.74	1.10	0.03
Avail Cap(c_a), veh/h	203		249	3134	2738	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	75.2	0.0	64.3	3.2	0.0	0.0
Incr Delay (d2), s/veh	16.6	0.0	24.1	1.6	44.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	7.6	5.3	16.8	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	91.8	0.0	88.4	4.7	44.2	0.0
LnGrp LOS	F		F	A	F	A
Approach Vol, veh/h	54			2472	3039	
Approach Delay, s/veh	91.8			10.2	43.6	
Approach LOS	F			B	D	

Timer - Assigned Phs	4	6	7	8
Phs Duration (G+Y+Rc), s	146.3	11.7	17.7	128.6
Change Period (Y+Rc), s	7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s	127.5	18.0	18.0	104.0
Max Q Clear Time (g_c+I1), s	36.7	6.7	12.1	123.7
Green Ext Time (p_c), s	44.1	0.1	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	37	0	0	82	0	2825	6	0	3000	40
Future Vol, veh/h	0	0	37	0	0	82	0	2825	6	0	3000	40
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	-	-	0	-	-	0	-	-	300	-	-	300
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	40	0	0	89	0	3071	7	0	3261	43

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1630	-	-	1535	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*230	0	0	*283	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*230	-	-	*283	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	23.99	23.48	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	230	283	-	-
HCM Lane V/C Ratio	-	-	0.175	0.315	-	-
HCM Ctrl Dly (s/v)	-	-	24	23.5	-	-
HCM Lane LOS	-	-	C	C	-	-
HCM 95th %tile Q(veh)	-	-	0.6	1.3	-	-

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

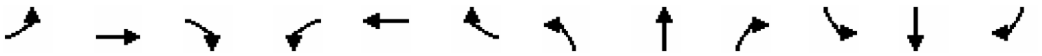
Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	137	137	27	108	89	102	2714	13	92	3003	205
v/c Ratio	1.18	1.18	0.10	1.16	0.34	0.99	1.01	0.01	0.88	1.12	0.17
Control Delay (s/veh)	196.6	196.6	0.8	200.3	22.5	69.5	15.5	0.0	40.8	63.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	196.6	196.6	0.8	200.3	22.5	69.5	15.5	0.0	40.8	63.3	0.0
Queue Length 50th (ft)	~176	~176	0	~131	16	59	~1407	0	48	~1915	0
Queue Length 95th (ft)	#332	#332	0	#266	73	m56	m87	m0	m34	m54	m0
Internal Link Dist (ft)		858		886			938			905	
Turn Bay Length (ft)						300		300	300		300
Base Capacity (vph)	116	116	258	93	258	103	2685	1211	104	2687	1240
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	1.18	0.10	1.16	0.34	0.99	1.01	0.01	0.88	1.12	0.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	0	25	99	0	82	94	2497	12	85	2763	189
Future Volume (veh/h)	252	0	25	99	0	82	94	2497	12	85	2763	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	274	0	27	108	0	89	102	2714	13	92	3003	205
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	0	196	216	0	196	106	2697	1203	103	2699	1204
Arrive On Green	0.12	0.00	0.12	0.12	0.00	0.12	0.03	0.76	0.76	0.06	1.00	1.00
Sat Flow, veh/h	2616	0	1585	1383	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	274	0	27	108	0	89	102	2714	13	92	3003	205
Grp Sat Flow(s),veh/h/ln	1308	0	1585	1383	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	7.8	0.0	2.4	11.7	0.0	8.2	4.6	119.9	0.3	4.0	120.0	0.0
Cycle Q Clear(g_c), s	19.5	0.0	2.4	11.7	0.0	8.2	4.6	119.9	0.3	4.0	120.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	196	216	0	196	106	2697	1203	103	2699	1204
V/C Ratio(X)	1.25	0.00	0.14	0.50	0.00	0.45	0.96	1.01	0.01	0.89	1.11	0.17
Avail Cap(c_a), veh/h	220	0	196	216	0	196	106	2697	1203	103	2699	1204
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.7	0.0	61.8	65.8	0.0	64.3	55.1	19.1	4.6	72.4	0.0	0.0
Incr Delay (d2), s/veh	143.1	0.0	0.3	1.8	0.0	1.6	74.4	18.9	0.0	56.0	56.5	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	1.0	4.3	0.0	3.4	6.3	45.1	0.1	5.1	21.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	219.8	0.0	62.1	67.6	0.0	66.0	129.5	37.9	4.6	128.3	56.5	0.3
LnGrp LOS	F		E	E		E	F	F	A	F	F	A
Approach Vol, veh/h		301			197			2829			3300	
Approach Delay, s/veh		205.6			66.9			41.1			55.1	
Approach LOS		F			E			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	124.4		24.0	9.5	124.5		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	119.9		19.5	5.0	120.0		19.5				
Max Q Clear Time (g_c+I1), s	6.0	121.9		21.5	6.6	122.0		13.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			56.3									
HCM 7th LOS			E									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	91	0	0	66	0	2537	18	0	2848	39
Future Vol, veh/h	0	0	91	0	0	66	0	2537	18	0	2848	39
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	-	-	0	-	-	0	-	-	300	-	-	300
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	99	0	0	72	0	2758	20	0	3096	42

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1548	-	-	1379	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*269	0	0	*363	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*269	-	-	*363	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	25.91	17.36	0	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	269	363	-	-
HCM Lane V/C Ratio	-	-	0.367	0.198	-	-
HCM Ctrl Dly (s/v)	-	-	25.9	17.4	-	-
HCM Lane LOS	-	-	D	C	-	-
HCM 95th %tile Q(veh)	-	-	1.6	0.7	-	-

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

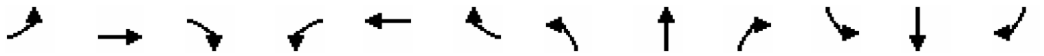
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	47	180	162	953	107	242	108	1900	815	283	1735	42
v/c Ratio	0.33	1.19	0.10	1.20	0.25	0.48	1.06	1.18	0.74	1.41	0.96	0.05
Control Delay (s/veh)	76.1	193.0	0.1	153.6	52.0	18.4	93.2	95.4	5.5	246.1	50.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.1	193.0	0.1	153.6	52.0	18.4	93.2	95.4	5.5	246.1	50.5	0.1
Queue Length 50th (ft)	47	~226	0	~621	92	55	~73	~1228	27	~345	896	0
Queue Length 95th (ft)	93	#393	0	#757	151	144	m42	m291	m10	#542	#1080	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	143	151	1583	793	430	502	102	1614	1103	201	1813	857
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	1.19	0.10	1.20	0.25	0.48	1.06	1.18	0.74	1.41	0.96	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	166	149	877	98	223	99	1748	750	260	1596	39
Future Volume (veh/h)	43	166	149	877	98	223	99	1748	750	260	1596	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	180	0	953	107	242	108	1900	815	283	1735	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	152		799	433	367	113	1621	723	201	1821	812
Arrive On Green	0.08	0.08	0.00	0.23	0.23	0.23	0.03	0.46	0.46	0.09	0.51	0.51
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	47	180	0	953	107	242	108	1900	815	283	1735	42
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.0	13.0	0.0	37.0	7.5	22.2	5.0	73.0	73.0	14.0	74.4	2.1
Cycle Q Clear(g_c), s	4.0	13.0	0.0	37.0	7.5	22.2	5.0	73.0	73.0	14.0	74.4	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	152		799	433	367	113	1621	723	201	1821	812
V/C Ratio(X)	0.32	1.18		1.19	0.25	0.66	0.95	1.17	1.13	1.41	0.95	0.05
Avail Cap(c_a), veh/h	145	152		799	433	367	113	1621	723	201	1821	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.4	73.5	0.0	61.5	50.1	55.8	40.6	43.5	43.5	55.5	37.2	19.5
Incr Delay (d2), s/veh	0.5	131.1	0.0	98.9	0.2	4.0	15.3	78.0	59.1	210.9	12.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.7	0.0	27.0	3.5	9.2	2.7	47.9	38.9	15.6	33.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.8	204.6	0.0	160.4	50.4	59.8	55.9	121.5	102.6	266.5	49.7	19.7
LnGrp LOS	E	F		F	D	E	E	F	F	F	D	B
Approach Vol, veh/h		227			1302			2823			2060	
Approach Delay, s/veh		176.7			132.6			113.5			78.8	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	79.0		19.0	10.0	88.0		43.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	14.0	73.0		13.0	5.0	82.0		37.0				
Max Q Clear Time (g_c+I1), s	16.0	75.0		15.0	7.0	76.4		39.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.9		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			108.5									
HCM 7th LOS			F									

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	89	589	1357	238	226	184	1332	2545	240	255	2382	55
v/c Ratio	0.31	0.81	0.92	1.68	0.31	0.12	1.53	1.41	0.27	1.31	1.64	0.08
Control Delay (s/veh)	45.3	70.0	12.3	366.6	53.9	0.1	277.2	222.1	14.2	188.2	314.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.3	70.0	12.3	366.6	53.9	0.1	277.2	222.1	14.2	188.2	314.9	0.3
Queue Length 50th (ft)	70	311	0	~289	105	0	~698	~1880	84	~304	~1912	0
Queue Length 95th (ft)	115	373	#26	#462	144	0	m#434	m926	m39	m#340	m#1820	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	283	818	1468	142	831	1599	869	1802	891	195	1456	724
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.72	0.92	1.68	0.27	0.12	1.53	1.41	0.27	1.31	1.64	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	542	1248	219	208	169	1225	2341	221	235	2191	51
Future Volume (veh/h)	82	542	1248	219	208	169	1225	2341	221	235	2191	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	89	589	0	238	226	0	1332	2545	240	255	2382	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	272	685		151	699		751	1947	882	149	1601	708
Arrive On Green	0.04	0.19	0.00	0.05	0.20	0.00	0.10	0.37	0.37	0.06	0.45	0.45
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	4904	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	89	589	0	238	226	0	1332	2545	240	255	2382	55
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1635	1777	1610	1753	1763	1560
Q Serve(g_s), s	6.8	25.7	0.0	7.5	8.7	0.0	24.5	87.6	16.8	9.5	72.6	3.2
Cycle Q Clear(g_c), s	6.8	25.7	0.0	7.5	8.7	0.0	24.5	87.6	16.8	9.5	72.6	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	685		151	699		751	1947	882	149	1601	708
V/C Ratio(X)	0.33	0.86		1.58	0.32		1.77	1.31	0.27	1.71	1.49	0.08
Avail Cap(c_a), veh/h	272	822		151	835		751	1947	882	149	1601	708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.09	0.09	0.09	0.11	0.11	0.11
Uniform Delay (d), s/veh	49.5	62.5	0.0	61.2	55.1	0.0	71.8	50.6	28.2	50.3	43.7	24.7
Incr Delay (d2), s/veh	0.7	8.6	0.0	288.7	0.4	0.0	348.7	138.7	0.1	322.8	220.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	12.2	0.0	14.8	3.9	0.0	34.7	76.9	6.8	19.4	78.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.2	71.1	0.0	349.9	55.5	0.0	420.5	189.3	28.3	373.2	263.7	24.7
LnGrp LOS	D	E		F	E		F	F	C	F	F	C
Approach Vol, veh/h		678			464			4117			2692	
Approach Delay, s/veh		68.3			206.5			254.7			269.2	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	38.0	15.0	94.6	13.0	37.4	30.0	79.6
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	6.9	37.6	9.5	81.5	7.5	37.0	24.5	66.5
Max Q Clear Time (g_c+I1), s	8.8	10.7	11.5	89.6	9.5	27.7	26.5	74.6
Green Ext Time (p_c), s	0.0	1.9	0.0	0.0	0.0	3.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	240.9
HCM 7th LOS	F

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

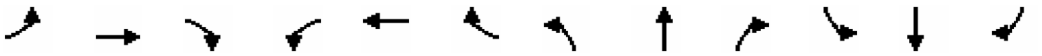
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	518	71	66	74	159	3524	86	98	3448	430
v/c Ratio	1.56	0.29	0.37	0.53	1.49	1.42	0.08	0.99	1.40	0.36
Control Delay (s/veh)	309.9	2.9	63.0	29.0	257.8	211.0	3.9	62.2	197.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	309.9	2.9	63.0	29.0	257.8	211.0	3.9	62.2	197.5	0.4
Queue Length 50th (ft)	~392	0	61	2	~177	~2590	10	54	~2548	2
Queue Length 95th (ft)	#513	0	106	57	m#104	m#1672	m4	m34	m#1612	m0
Internal Link Dist (ft)		155		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	332	301	262	269	107	2481	1109	99	2470	1180
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.56	0.24	0.25	0.28	1.49	1.42	0.08	0.99	1.40	0.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	477	0	65	61	0	68	146	3242	79	90	3172	396
Future Volume (veh/h)	477	0	65	61	0	68	146	3242	79	90	3172	396
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	518	0	71	66	0	74	159	3524	86	98	3448	430
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	335	0	174	211	0	95	228	2208	969	220	2197	996
Arrive On Green	0.10	0.00	0.11	0.05	0.00	0.06	0.14	0.84	0.84	0.13	0.84	0.84
Sat Flow, veh/h	3456	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	518	0	71	66	0	74	159	3524	86	98	3448	430
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	15.5	0.0	6.7	5.4	0.0	7.4	9.4	101.0	1.1	3.9	100.5	6.6
Cycle Q Clear(g_c), s	15.5	0.0	6.7	5.4	0.0	7.4	9.4	101.0	1.1	3.9	100.5	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	0	174	211	0	95	228	2208	969	220	2197	996
V/C Ratio(X)	1.55	0.00	0.41	0.31	0.00	0.78	0.70	1.60	0.09	0.45	1.57	0.43
Avail Cap(c_a), veh/h	335	0	178	329	0	203	228	2208	969	220	2197	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	72.3	0.0	66.4	66.3	0.0	74.2	64.7	12.8	2.5	63.3	13.2	2.0
Incr Delay (d2), s/veh	260.7	0.0	1.5	0.8	0.0	12.9	9.0	270.5	0.2	0.1	256.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.0	0.0	2.8	2.6	0.0	3.3	6.4	97.4	0.6	3.5	93.5	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	332.9	0.0	67.9	67.1	0.0	87.1	73.7	283.3	2.7	63.4	269.7	2.1
LnGrp LOS	F		E	E		F	E	F	A	E	F	A
Approach Vol, veh/h		589			140			3769			3976	
Approach Delay, s/veh		301.0			77.7			268.1			235.7	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	105.5	12.0	22.1	20.9	105.0	20.0	14.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	101.0	18.0	18.0	5.5	100.5	15.5	20.5
Max Q Clear Time (g_c+I1), s	5.9	103.0	7.4	8.7	11.4	102.5	17.5	9.4
Green Ext Time (p_c), s	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	252.0
HCM 7th LOS	F

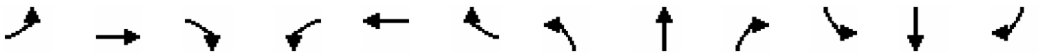
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	279	140	133	175	192	3134	165	107	2338	457
v/c Ratio	0.83	0.50	0.55	0.82	1.37	1.44	0.15	0.78	1.05	0.41
Control Delay (s/veh)	90.7	21.9	59.6	77.7	203.2	215.4	0.2	45.1	50.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	90.7	21.9	59.6	77.7	203.2	215.4	0.2	45.1	50.3	2.8
Queue Length 50th (ft)	150	21	115	129	~213	~2330	2	60	~1440	63
Queue Length 95th (ft)	#217	93	179	#226	m#99	m#1353	m1	m#70	m#1363	m65
Internal Link Dist (ft)		267		643		13280			2297	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	347	290	276	245	140	2175	1072	137	2217	1103
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.48	0.48	0.71	1.37	1.44	0.15	0.78	1.05	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	20	109	122	32	129	177	2883	152	98	2151	420
Future Volume (veh/h)	257	20	109	122	32	129	177	2883	152	98	2151	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	279	22	118	133	35	140	192	3134	165	107	2338	457
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	322	34	183	249	39	155	163	2236	1030	100	2148	966
Arrive On Green	0.09	0.13	0.13	0.08	0.12	0.12	0.07	0.64	0.64	0.03	0.61	0.61
Sat Flow, veh/h	3456	255	1369	1781	327	1308	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	279	0	140	133	0	175	192	3134	165	107	2338	457
Grp Sat Flow(s),veh/h/ln	1728	0	1624	1781	0	1635	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	12.7	0.0	13.1	10.4	0.0	16.9	10.6	103.1	6.6	5.0	97.5	15.6
Cycle Q Clear(g_c), s	12.7	0.0	13.1	10.4	0.0	16.9	10.6	103.1	6.6	5.0	97.5	15.6
Prop In Lane	1.00		0.84	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	0	217	249	0	194	163	2236	1030	100	2148	966
V/C Ratio(X)	0.87	0.00	0.65	0.53	0.00	0.90	1.18	1.40	0.16	1.07	1.09	0.47
Avail Cap(c_a), veh/h	350	0	217	310	0	202	163	2236	1030	100	2148	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.6	0.0	65.7	56.2	0.0	69.6	73.2	28.4	11.3	47.1	31.2	6.5
Incr Delay (d2), s/veh	18.9	0.0	6.5	1.8	0.0	36.8	85.2	181.0	0.0	111.0	48.2	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	5.8	4.8	0.0	9.0	10.4	94.0	2.3	5.2	51.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.5	0.0	72.2	58.0	0.0	106.4	158.4	209.4	11.3	158.0	79.5	8.2
LnGrp LOS	F		E	E		F	F	F	B	F	F	A
Approach Vol, veh/h		419			308			3491			2902	
Approach Delay, s/veh		84.4			85.5			197.2			71.2	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	107.6	17.0	25.9	15.1	102.0	19.4	23.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	101.0	18.0	18.0	8.5	97.5	16.2	19.8
Max Q Clear Time (g_c+I1), s	7.0	105.1	12.4	15.1	12.6	99.5	14.7	18.9
Green Ext Time (p_c), s	0.0	0.0	0.1	0.2	0.0	0.0	0.2	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	134.4
HCM 7th LOS	F

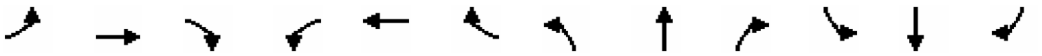
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	807	108	443	110	108	435	2598	151	60	1975	596
v/c Ratio	1.39	0.38	0.83	0.78	0.43	1.40	1.39	0.17	0.28	1.07	0.51
Control Delay (s/veh)	231.4	65.6	54.4	105.6	53.1	234.1	203.7	5.4	22.3	54.2	1.5
Queue Delay	0.0	0.0	0.6	0.0	0.0	0.0	0.1	0.0	0.0	13.3	0.0
Total Delay (s/veh)	231.4	65.6	55.0	105.6	53.1	234.1	203.8	5.4	22.3	67.4	1.5
Queue Length 50th (ft)	~572	104	343	114	38	~312	~1961	15	11	~1187	24
Queue Length 95th (ft)	#726	169	#529	#208	72	m#299	m#1874	m17	m11	m#1098	m10
Internal Link Dist (ft)		408			274		775			13280	
Turn Bay Length (ft)	200		200	265		300		575	575		300
Base Capacity (vph)	582	287	532	153	410	311	1873	894	243	1846	1179
Starvation Cap Reductn	0	0	0	0	0	0	65	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	0	0	0	0	353	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.39	0.38	0.85	0.72	0.26	1.40	1.44	0.17	0.25	1.32	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	742	99	408	101	66	33	400	2390	139	55	1817	548
Future Volume (veh/h)	742	99	408	101	66	33	400	2390	139	55	1817	548
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	807	108	443	110	72	36	435	2598	151	60	1975	596
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	615	276	377	175	147	69	313	1777	793	253	1903	1090
Arrive On Green	0.15	0.15	0.15	0.07	0.06	0.06	0.09	0.50	0.50	0.12	0.54	0.54
Sat Flow, veh/h	3456	1870	1585	1781	2349	1100	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	807	108	443	110	53	55	435	2598	151	60	1975	596
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1777	1672	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	24.3	8.4	23.6	9.8	4.6	5.1	14.5	80.0	5.9	0.7	85.7	12.1
Cycle Q Clear(g_c), s	24.3	8.4	23.6	9.8	4.6	5.1	14.5	80.0	5.9	0.7	85.7	12.1
Prop In Lane	1.00		1.00	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	615	276	377	175	111	105	313	1777	793	253	1903	1090
V/C Ratio(X)	1.31	0.39	1.17	0.63	0.48	0.52	1.39	1.46	0.19	0.24	1.04	0.55
Avail Cap(c_a), veh/h	615	276	377	200	200	188	313	1777	793	253	1903	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Uniform Delay (d), s/veh	66.1	61.7	60.9	73.1	72.5	72.7	72.8	40.0	10.8	62.5	37.2	3.4
Incr Delay (d2), s/veh	151.8	0.9	102.7	5.0	3.2	4.0	176.9	208.3	0.0	0.0	19.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.6	4.1	25.7	4.7	2.2	2.3	14.0	84.2	3.0	2.1	39.6	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	217.9	62.6	163.6	78.1	75.7	76.7	249.6	248.3	10.8	62.5	56.2	3.5
LnGrp LOS	F	E	F	E	E	E	F	F	B	E	F	A
Approach Vol, veh/h		1358			218			3184			2631	
Approach Delay, s/veh		187.8			77.2			237.2			44.4	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.8	16.5	25.7	87.0	17.2	30.1	20.0	92.7
Change Period (Y+Rc), s	6.5	* 6.5	7.0	* 7	5.5	6.5	5.5	7.0
Max Green Setting (Gmax), s	19.5	* 18	18.0	* 80	13.9	23.6	14.5	83.5
Max Q Clear Time (g_c+I1), s	26.3	7.1	2.7	82.0	11.8	25.6	16.5	87.7
Green Ext Time (p_c), s	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	154.8
HCM 7th LOS	F

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	24	192	438	3160	2468	60
v/c Ratio	0.25	0.72	0.92	1.03	1.18	0.06
Control Delay (s/veh)	76.9	24.0	74.5	36.6	97.7	1.4
Queue Delay	0.0	0.0	0.0	29.8	0.0	0.0
Total Delay (s/veh)	76.9	24.0	74.5	66.4	97.7	1.4
Queue Length 50th (ft)	25	0	391	~1840	~1612	2
Queue Length 95th (ft)	56	81	#681	#2022	m#1493	m1
Internal Link Dist (ft)	267			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	199	348	476	3068	2090	946
Starvation Cap Reductn	0	0	0	0	2	0
Spillback Cap Reductn	0	0	0	1090	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.55	0.92	1.60	1.18	0.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	177	403	2907	2271	55
Future Volume (veh/h)	22	177	403	2907	2271	55
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	0	438	3160	2468	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	37		401	3203	2426	1082
Arrive On Green	0.02	0.00	0.18	0.90	1.00	1.00
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	24	0	438	3160	2468	60
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	2.1	0.0	29.5	126.7	109.2	0.0
Cycle Q Clear(g_c), s	2.1	0.0	29.5	126.7	109.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	37		401	3203	2426	1082
V/C Ratio(X)	0.66		1.09	0.99	1.02	0.06
Avail Cap(c_a), veh/h	200		401	3203	2426	1082
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.09	0.09
Uniform Delay (d), s/veh	77.8	0.0	57.9	7.0	0.0	0.0
Incr Delay (d2), s/veh	18.3	0.0	72.1	13.0	10.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	23.9	14.5	3.6	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	96.1	0.0	130.1	20.1	10.7	0.0
LnGrp LOS	F		F	C	F	A
Approach Vol, veh/h	24			3598	2528	
Approach Delay, s/veh	96.1			33.5	10.4	
Approach LOS	F			C	B	

Timer - Assigned Phs		4		6	7	8
Phs Duration (G+Y+Rc), s		151.2		8.8	35.0	116.2
Change Period (Y+Rc), s		7.0		5.5	5.5	7.0
Max Green Setting (Gmax), s		129.5		18.0	29.5	94.5
Max Q Clear Time (g_c+I1), s		128.7		4.1	31.5	111.2
Green Ext Time (p_c), s		0.8		0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	24.2
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	24	0	0	57	0	3410	19	0	3193	105
Future Vol, veh/h	0	0	24	0	0	57	0	3410	19	0	3193	105
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	-	-	0	-	-	0	-	-	300	-	-	300
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	0	0	62	0	3707	21	0	3471	114

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1735	-	-	1853	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*188	0	0	*122	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*188	-	-	*122	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	27.27	61.8	0	0
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	188	122	-	-
HCM Lane V/C Ratio	-	-	0.139	0.509	-	-
HCM Ctrl Dly (s/v)	-	-	27.3	61.8	-	-
HCM Lane LOS	-	-	D	F	-	-
HCM 95th %tile Q(veh)	-	-	0.5	2.4	-	-

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

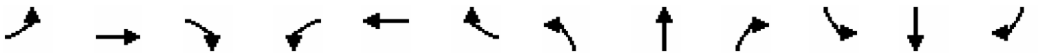
Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	213	213	278	74	62	262	3239	40	283	2554	660
v/c Ratio	1.18	1.18	0.81	1.07	0.20	1.42	1.36	0.04	1.37	1.05	0.54
Control Delay (s/veh)	178.3	178.3	54.4	190.3	10.6	235.2	182.0	0.2	204.1	33.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	178.3	178.3	54.4	190.3	10.6	235.2	182.0	0.2	204.1	33.2	0.2
Queue Length 50th (ft)	~278	~278	164	~85	0	~316	~2353	1	~338	~1521	0
Queue Length 95th (ft)	#463	#463	#307	#200	36	m#185	m#1328	m0	m#180	m33	m1
Internal Link Dist (ft)		218		709			938			905	
Turn Bay Length (ft)						300		300	300		300
Base Capacity (vph)	181	181	345	69	303	184	2377	1077	206	2422	1226
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	1.18	0.81	1.07	0.20	1.42	1.36	0.04	1.37	1.05	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	0	256	68	0	57	241	2980	37	260	2350	607
Future Volume (veh/h)	392	0	256	68	0	57	241	2980	37	260	2350	607
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	426	0	278	74	0	62	262	3239	40	283	2554	660
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	0	243	214	0	243	220	2388	1065	206	2432	1085
Arrive On Green	0.15	0.00	0.15	0.15	0.00	0.15	0.08	0.67	0.67	0.18	1.00	1.00
Sat Flow, veh/h	2681	0	1585	1101	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	426	0	278	74	0	62	262	3239	40	283	2554	660
Grp Sat Flow(s),veh/h/ln	1340	0	1585	1101	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	14.7	0.0	24.5	9.8	0.0	5.5	12.5	107.5	1.4	14.5	0.0	0.0
Cycle Q Clear(g_c), s	24.5	0.0	24.5	9.8	0.0	5.5	12.5	107.5	1.4	14.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	0	243	214	0	243	220	2388	1065	206	2432	1085
V/C Ratio(X)	1.26	0.00	1.15	0.35	0.00	0.26	1.19	1.36	0.04	1.37	1.05	0.61
Avail Cap(c_a), veh/h	337	0	243	214	0	243	220	2388	1065	206	2432	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.6	0.0	67.8	61.5	0.0	59.7	43.8	26.3	8.8	63.9	0.0	0.0
Incr Delay (d2), s/veh	140.6	0.0	102.7	1.0	0.0	0.5	121.4	163.3	0.1	194.6	33.1	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	16.9	2.8	0.0	2.3	12.0	93.4	0.5	18.5	11.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	215.2	0.0	170.4	62.5	0.0	60.3	165.2	189.5	8.9	258.5	33.1	2.5
LnGrp LOS	F		F	E		E	F	F	A	F	F	A
Approach Vol, veh/h		704			136			3541			3497	
Approach Delay, s/veh		197.5			61.5			185.7			45.6	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	112.0		29.0	17.0	114.0		29.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	14.5	107.5		24.5	12.5	109.5		24.5				
Max Q Clear Time (g_c+I1), s	16.5	109.5		26.5	14.5	2.0		11.8				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	74.1		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh		122.4
HCM 7th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	116	0	0	45	0	3213	56	0	2553	121
Future Vol, veh/h	0	0	116	0	0	45	0	3213	56	0	2553	121
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	-	-	0	-	-	0	-	-	300	-	-	300
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	126	0	0	49	0	3492	61	0	2775	132

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1388	-	-	1746	-	0	0	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	*359	0	0	*174	0	-	-	0	-	-
Stage 1	0	0	-	0	0	-	0	-	-	0	-	-
Stage 2	0	0	-	0	0	-	0	-	-	0	-	-
Platoon blocked, %			1			1		-	-		-	-
Mov Cap-1 Maneuver	-	-	*359	-	-	*174	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	20.39	33.49	0	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	359	174	-	-
HCM Lane V/C Ratio	-	-	0.352	0.28	-	-
HCM Ctrl Dly (s/v)	-	-	20.4	33.5	-	-
HCM Lane LOS	-	-	C	D	-	-
HCM 95th %tile Q(veh)	-	-	1.5	1.1	-	-

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