



TRAFFIC IMPACT STUDY

MURPHY USA – CIRCLE DR & JANITELL RD

Colorado Springs, CO

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June 27, 2025



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Executive Summary

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 1.2 acres in size and is identified as El Paso County Parcel Number 6428300014. It is located on the northeast quadrant of the Circle Dr/Janitell Rd intersection in Colorado Springs, CO. It is zoned Mixed Use Medium Scale (MX-M) and is currently vacant.

The study area is generally bounded by Circle Dr to the south, Janitell Rd to the west, a Private Rd to the east, and the property lines to the north. The study area for the project includes intersections that could be affected by the proposed development:

- Circle Dr/Janitell Rd
- Circle Dr/S Access
- Circle Dr/Private Rd
- Proposed Site Accesses

Description of Proposed Development

The Applicant, Murphy Oil USA, seeks to develop the property with a gas station with convenience store use. Site access is proposed via one existing right-in/right-out (RIRO) access on Circle Dr and two full movement accesses on the Private Rd on the east side of the site.

Conclusions and Recommendations

Conclusions

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

- Under existing traffic conditions, the signalized intersection within the study area, Circle Dr/Janitell Rd, currently operates at overall level of service (LOS) “C” during the weekday AM and PM peak hours, and the unsignalized intersection movements within the study area currently operate at LOS “C” or better during the weekday AM and PM peak hours. All queues remain within their effective storage lengths.
- Under background future traffic conditions, without the development of the subject site, the signalized intersection and unsignalized intersection movements within the study area are forecasted to operate consistent with existing conditions. All queues are expected to remain within their effective storage lengths.
- The proposed site development would generate, upon completion and full occupancy, 46 net new weekday AM and 55 net new weekday PM peak hour vehicle trips as well as 687 net new weekday daily trips.
- Under total future traffic conditions, with the development of the subject site, the signalized and unsignalized intersections within the study area are forecasted to operate consistent with existing and background conditions. All queues are expected to remain within their effective storage lengths.

Recommendations

- It is recommended that the Applicant provides access consistent with the site plan contained herein.

I. Introduction

Overview

This report presents the results of a Traffic Impact Study (TIS) conducted in support of a site plan to develop a gas station with convenience store use in Colorado Springs, CO. Currently the site is vacant.

Per the requirements of the City of Colorado Springs, a Transportation Impact Study is required to support the proposed development.

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 1.2 acres in size and is identified as El Paso County Parcel Number 6428300014. It is located on the northeast quadrant of the Circle Dr/Janitell Rd intersection in Colorado Springs, CO, as shown on Figure 1-1. It is zoned Mixed Use Medium Scale (MX-M) and is currently vacant. Site access is proposed via one existing right-in/right-out (RIRO) access on Circle Dr and two full movement accesses on the Private Rd to the east of the site.

The Applicant, Murphy Oil USA, seeks to develop the property with a gas station with convenience store use. A reduction of the Applicant's proposed conceptual site plan is provided on Figure 1-2. A full-size copy of the plan is provided in Appendix A.

The study area is generally bounded by Circle Dr to the south, Janitell Rd to the west, a Private Rd to the east, and property lines to the north.

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 and PM peak hour turning movement counts at the key intersections.
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 as reported by Synchro version 12.
5. Forecasted background future traffic volumes based on baseline traffic counts and regional traffic growth for build-out (2027) conditions.
6. Calculated background levels of service at each of the key study intersections for the projected build-out years based on background future traffic forecasts, and the existing/background lane use and traffic controls.
7. 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 11th Edition rates/equations and methodologies.

8. Prepared AM and PM peak hour total future traffic forecasts based on background traffic forecasts plus site traffic assignments for the build-out (2027) conditions.
9. Calculated total future levels of service for each of the key study intersections based on projected total future traffic forecasts, total future traffic controls, and intersection geometries.
10. Identified roadway improvements required to accommodate future traffic volumes as necessary.

Sources of data for this analysis included the Institute of Transportation Engineers (ITE), Trip Generation, 11th edition, the Highway Capacity Guidelines (HCM) 7th, Synchro 12, Murphy Oil USA, Colorado Springs, 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”.

Hazardous Conditions

Based on the field reconnaissance in the vicinity of the subject site, no hazardous features or constraints were identified.

Proposed Site Access

Access to the site is proposed via one existing RIRO access on Circle Dr and two full movement accesses on the Private Rd to the east of the site.

Existing Zoning

The subject site is zoned Mixed Use Medium Scale (MX-M) and is currently vacant. Figure 1-3 depicts the existing zoning associated with the subject property, as well as neighboring properties as shown on the Colorado Springs zoning map.

Nearby Uses

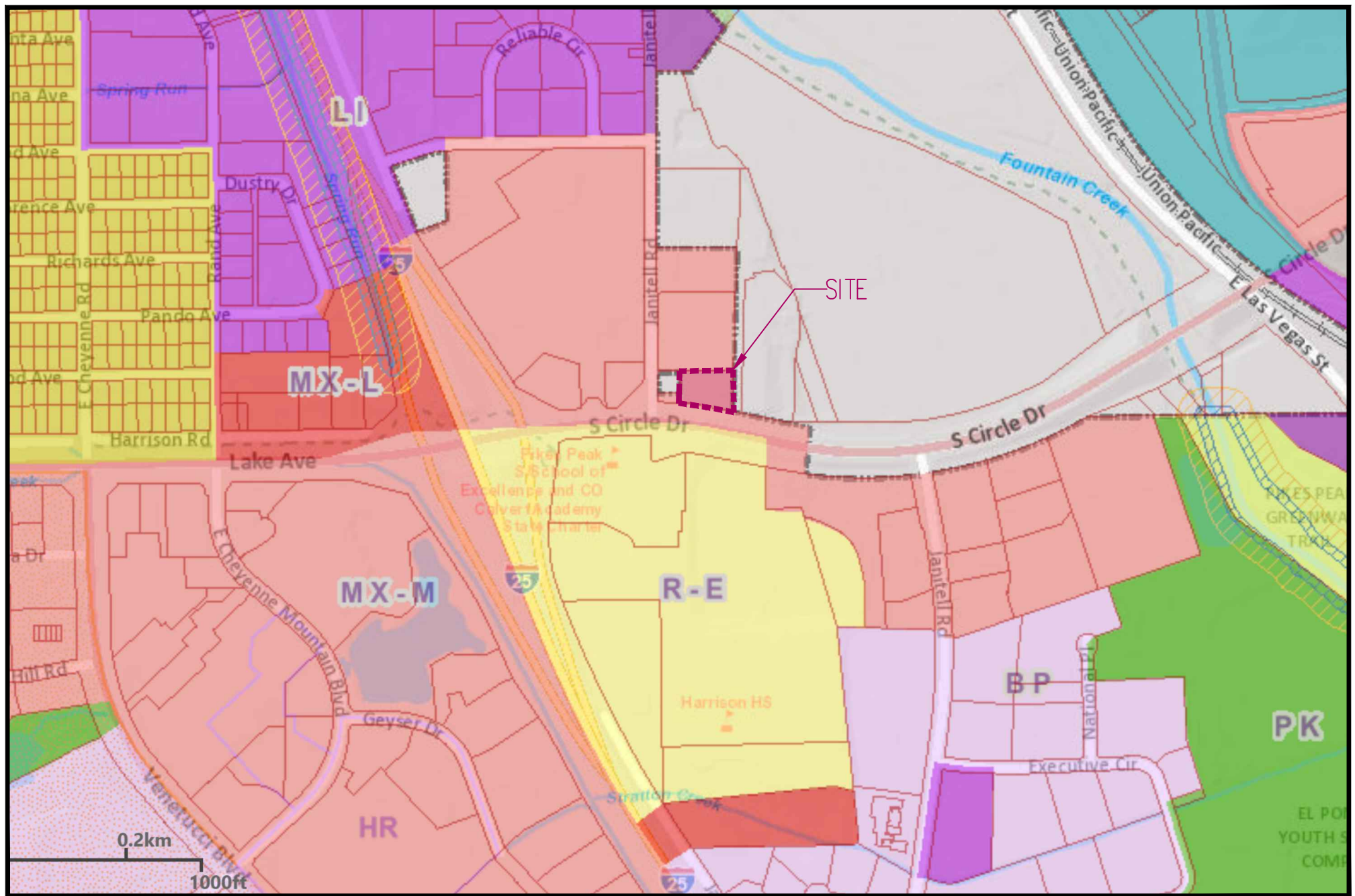
The properties surrounding the subject site are generally developed with commercial uses to the west, residential uses to the east, office uses to the north, and institutional use to the south.



FIGURE 1-1
SITE LOCATION

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, CO





**FIGURE 1-3
EXISTING ZONING**

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, 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. As such, the traffic study focuses primarily on the following intersections:

Study Intersections

- Circle Dr/Janitell Rd
- Circle Dr/S Access
- Circle Dr/Private Rd
- Proposed Site Accesses

Study Assumptions

For purposes of this analysis only, the proposed use was assumed to be built and occupied in one distinct phase. It was assumed that the use would be built and operational in study year 2027.

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 were taken from the Highway Capacity Manual (HCM) 7th reports as generated by Synchro. LOS descriptions are included in Appendix B.

A percent heavy vehicle (%HV) factor of 10% was used for all movements in the AM and a %HV factor of 3% was used for all movements in the PM, consistent with collected data.

Existing Roadway Network

Regional and local access to the subject site is provided by Circle Dr. 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.

Circle Dr

Circle Dr is constructed as a median divided east/west six-lane section with turn lanes at major intersections and a posted speed limit of 45 mph in the vicinity of the subject site. The City classifies the roadway as a Principal Arterial. The intersection with Janitell Rd operates under signalized control.

Janitell Rd

Janitell Rd is constructed as a north/south two-lane section with turn lanes at major intersections and a posted speed limit of 30 mph in the vicinity of the subject site. The City classifies the roadway as a Local Road. The intersection with Circle Dr operates under signalized control.

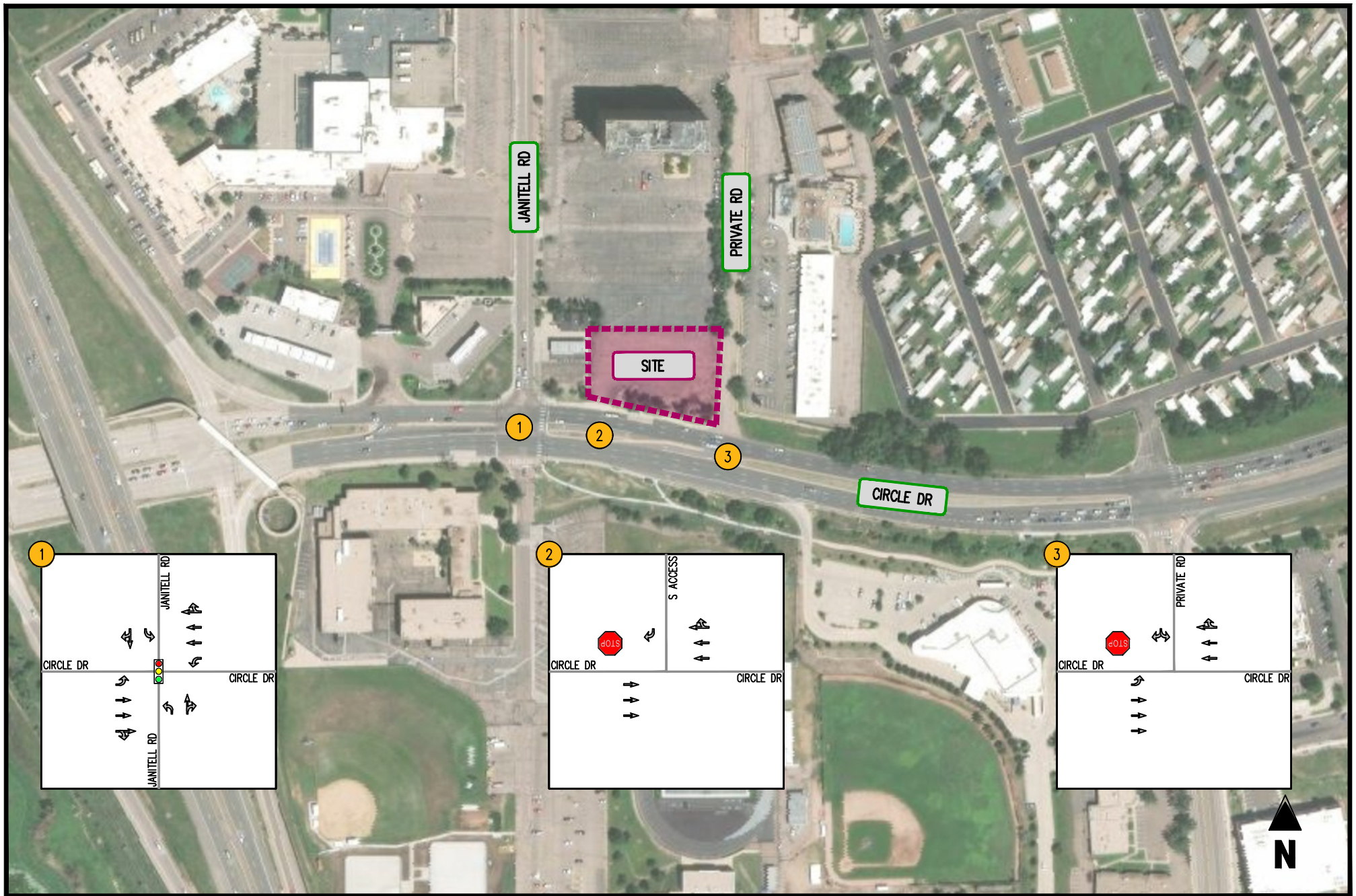


FIGURE 2-1
EXISTING LANE USE AND TRAFFIC CONTROL

MURPHY USA - CIRCLE DR & JANITELL RD
 COLORADO SPRINGS, CO

- ← MOVEMENT
- SIGNALIZED INTERSECTION
- STOP SIGN
- YIELD SIGN



III. Analysis of Existing Conditions

Traffic Volumes

Weekday AM and PM peak hour traffic volume counts were conducted on Thursday May 29, 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.

For purposes of this study, the peak hour of the network was selected based on a review of intersection volumes. These volumes were balanced to the greatest volumes observed to provide a conservative analysis.

The existing volumes are summarized in Figure 3-1. Copies of traffic counts are included in Appendix C. 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/LOS analyses were conducted at the study intersections based on the existing lane use and traffic controls shown on Figure 2-1 and existing baseline vehicular traffic volumes shown on Figure 3-1. The capacity analysis results are presented in Appendix D and summarized in Table 3-1 and on Figure 3-2.

As shown in Table 3-1, the signalized intersection within the study area, Circle Dr/Janitell Rd currently operates at overall LOS “C” during the weekday AM and PM peak hours. The movements for the unsignalized intersections within the study area currently operate at LOS “C” or better 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, all queues are contained within their effective storage.

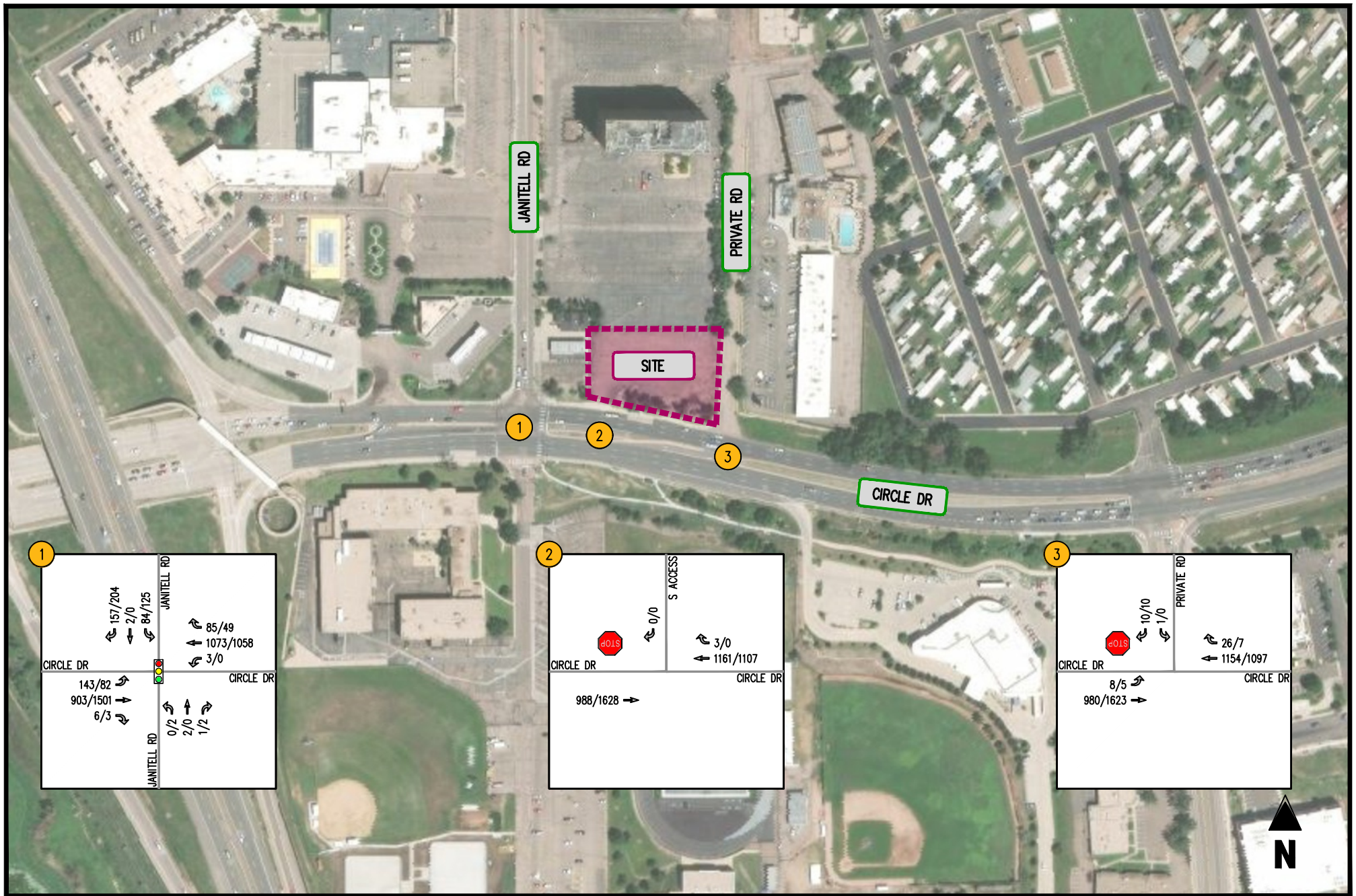


FIGURE 3-1
EXISTING VOLUMES

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN





Table 3-1

Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO

Existing Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025	
				AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	E (74.0)	E (73.9)
			EBTR	A (9.8)	B (11.9)
		Circle Dr	WBL	E (63.6)	A (0.0)
			WBTR	B (15.3)	B (17.6)
		Janitell Rd	NBL	A (0.0)	D (52.2)
			NBTR	E (65.3)	E (55.2)
		Janitell Rd	SBL	E (59.0)	D (48.1)
			SBTR	F (80.5)	F (86.4)
		Overall		C (22.1)	C (22.2)
2 Circle Dr/S Access	STOP	Circle Dr	EBT	A [0.0]	A [0.0]
		Circle Dr	WBTR	A [0.0]	A [0.0]
		S Access	SBR	A [0.0]	A [0.0]
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	C [20.9]	C [17.0]
			EBT	A [0.0]	A [0.0]
		Circle Dr	WBTR	A [0.0]	A [0.0]
		Private Rd	SBLR	C [17.8]	B [14.9]

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 3-2
Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO
Background Future Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2025	
					AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	200	74.7	73.6
			EBTR	-	5.5	5
		Circle Dr	WBL	200	47	0
			WBTR	-	28.8	28.3
		Janitell Rd	NBL	90	0	53.5
			NBTR	-	57	0
		Janitell Rd	SBL	160	68.5	77.8
			SBTR	-	15.9	3.5
2 Circle Dr/S Access	STOP	Circle Dr	EBT	-	0	0
		Circle Dr	WBTR	-	0	0
		S Access	SBLR	-	0	0
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	120	2.5	2.5
			EBT	-	0	0
		Circle Dr	WBTR	-	0	0
		Private Rd	SBR	-	2.5	2.5

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 build-out (2027) conditions based on a composite of existing baseline traffic volumes and regional traffic growth. An assumed growth factor of 2% per year was applied to existing through traffic on Circle Dr.

Regional Growth

Increases in traffic associated with regional growth were estimated at 2.0 percent per year compounded for through movements along Circle Dr up to study year 2027. 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.

Background Traffic Forecasts

The existing traffic volumes depicted on Figure 3-1 and the regional growth shown on Figure 4-1 were added together to yield the background future traffic forecasts shown on Figure 4-2 for build-out (2027) conditions.

Background Future Levels of Service

Capacity analyses of build-out (2027) future traffic conditions without the proposed development are provided in Appendix E and summarized in Table 4-1. The forecasted levels of service are also depicted graphically in Figure 4-3.

As shown on Table 4-1, the signalized intersection within the study area, Circle Dr/Janitell Rd, as well as the unsignalized intersection movements are forecasted to operate consistent with existing conditions 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 are expected to remain within their effective storage lengths, consistent with existing conditions.

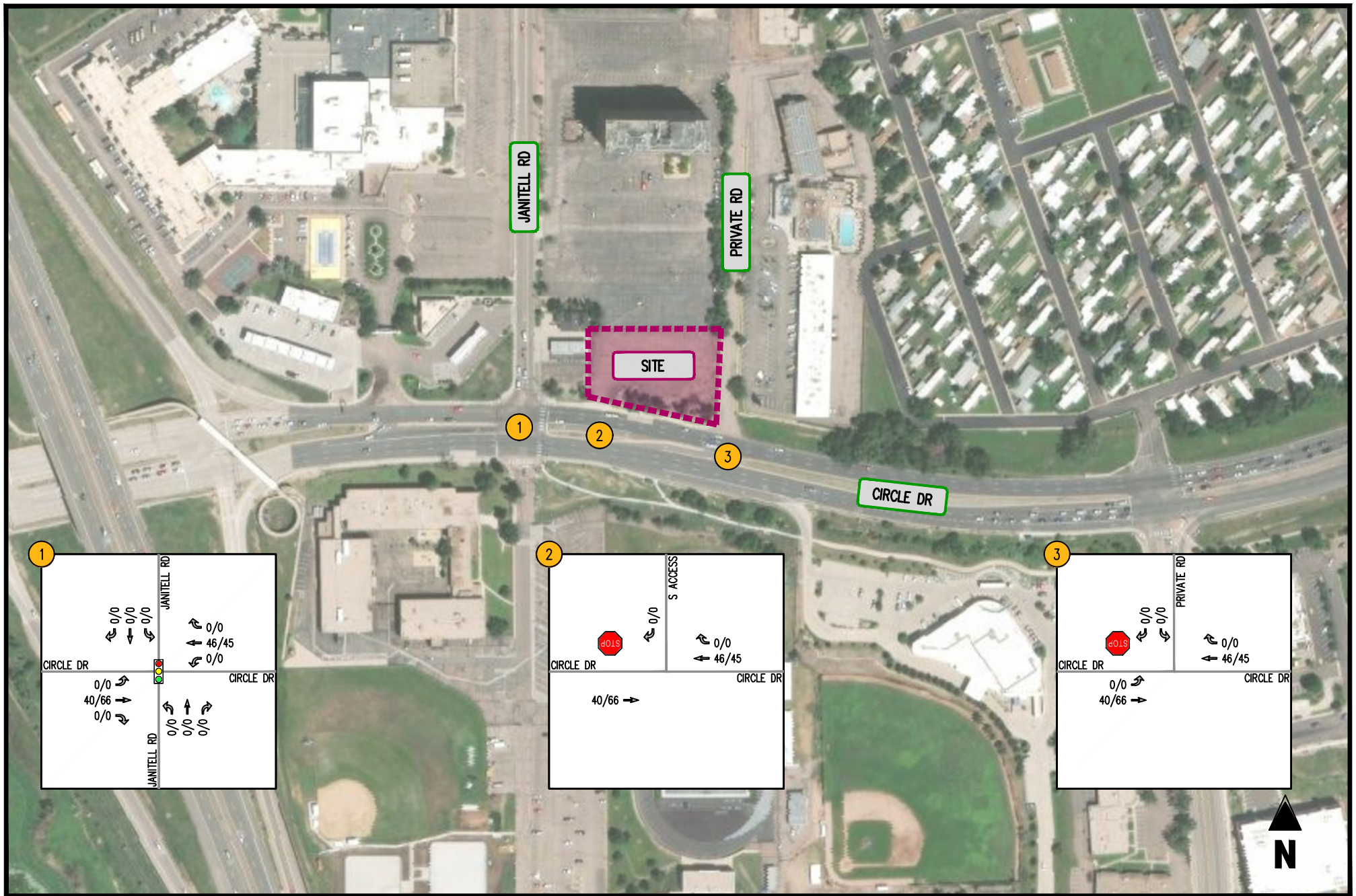


FIGURE 4-1
BACKGROUND FUTURE GROWTH 2027

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



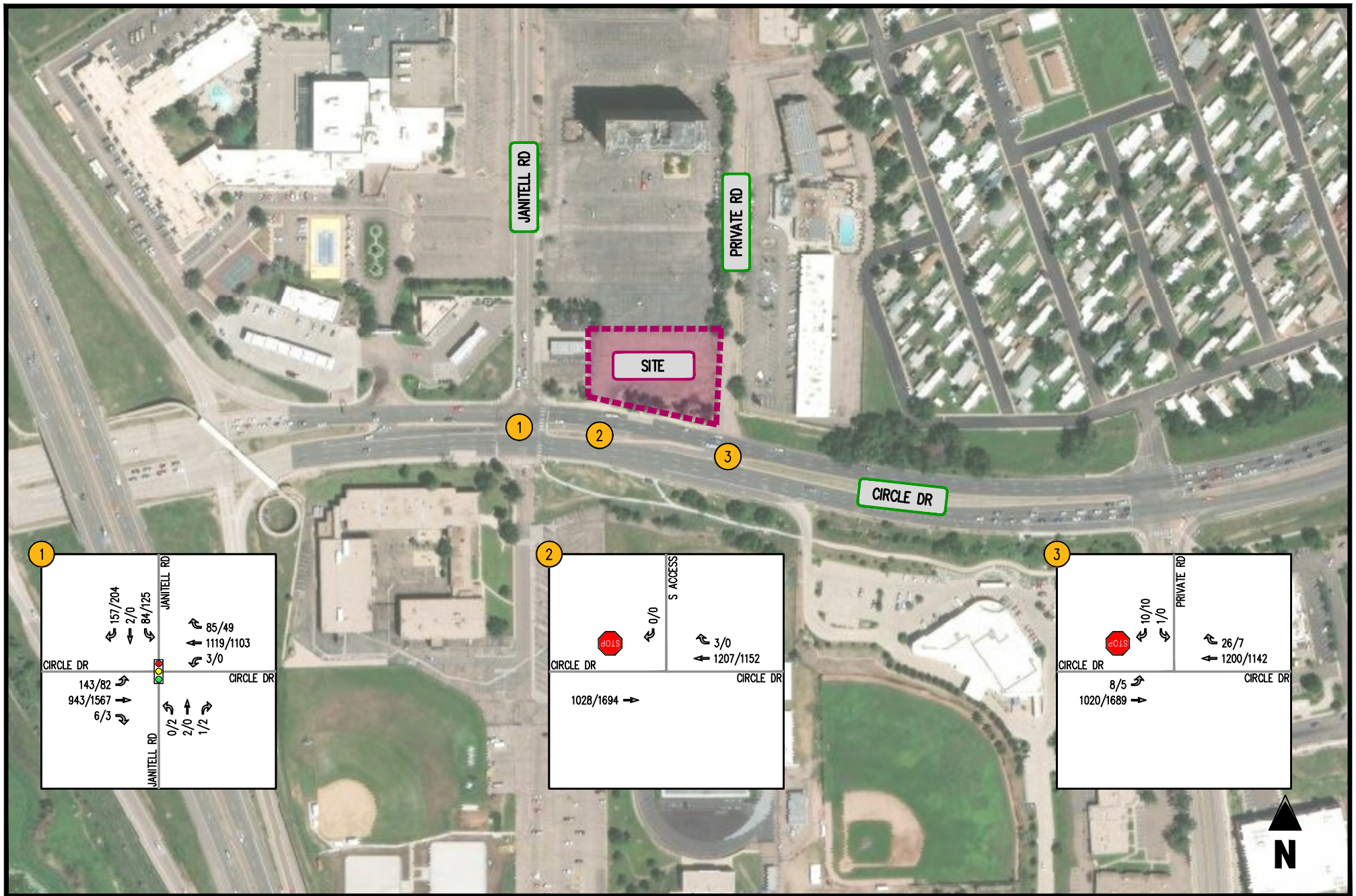


FIGURE 4-2
BACKGROUND FUTURE FORECASTS 2027

MURPHY USA - CIRCLE DR & JANITELL RD
 COLORADO SPRINGS, CO



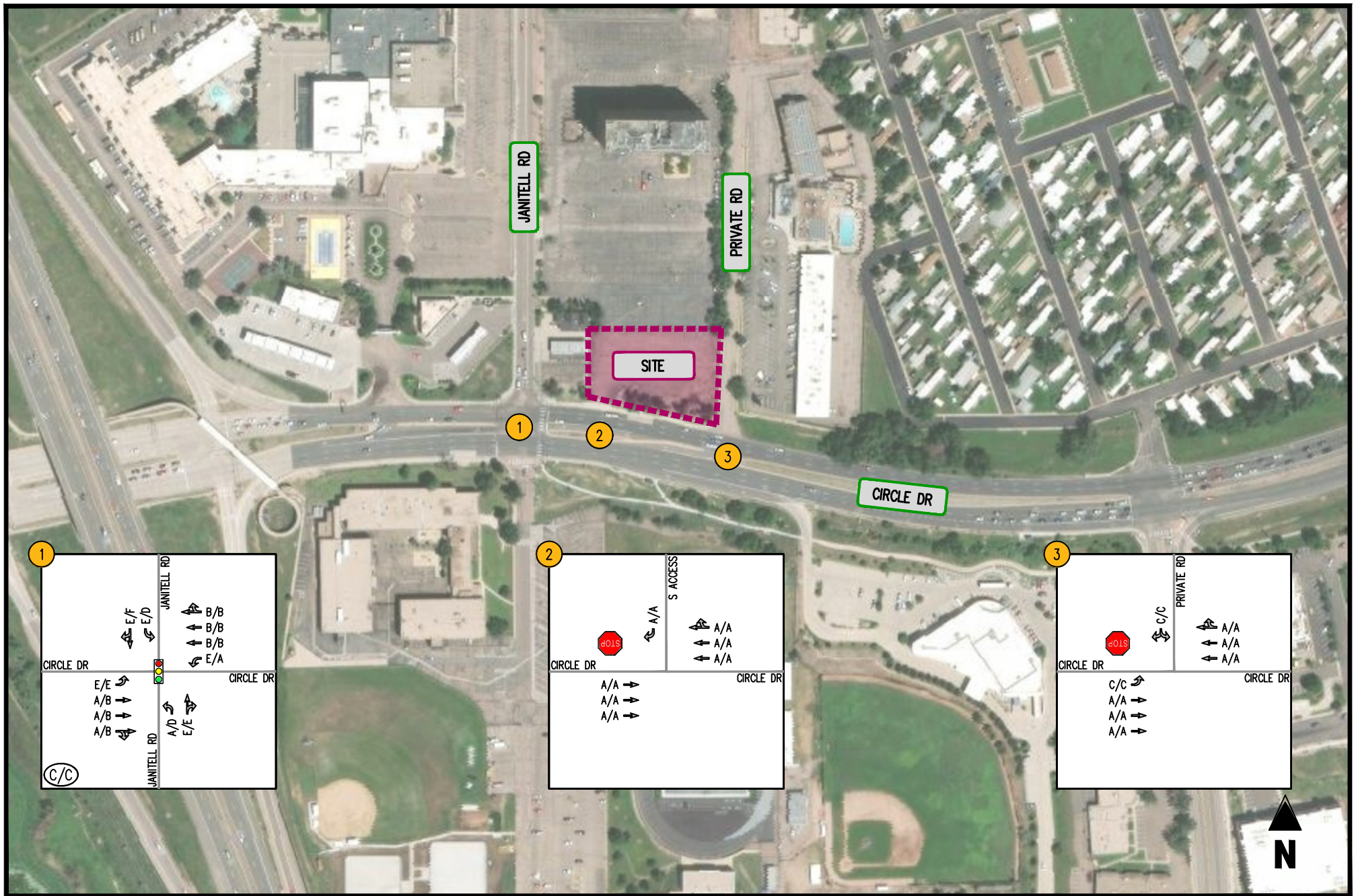


FIGURE 4-3
BACKGROUND FUTURE LEVEL OF SERVICE 2027

MURPHY USA - CIRCLE DR & JANITELL RD
 COLORADO SPRINGS, CO

(A/A) INTERSECTION LOS
 0000/0000 (AM PEAK HOUR/PM PEAK HOUR)



- ← MOVEMENT
-  SIGNALIZED INTERSECTION
-  STOP SIGN
-  YIELD SIGN



Table 4-1

Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO
Existing Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025		Background 2027	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	E (74.0)	E (73.9)	E (71.6)	E (73.9)
			EBTR	A (9.8)	B (11.9)	A (9.2)	B (11.7)
		Circle Dr	WBL	E (63.6)	A (0.0)	E (63.4)	A (0.0)
			WBTR	B (15.3)	B (17.6)	B (13.3)	B (17.3)
		Janitell Rd	NBL	A (0.0)	D (52.2)	A (0.0)	D (52.6)
			NBTR	E (65.3)	E (55.2)	E (65.6)	E (55.6)
		Janitell Rd	SBL	E (59.0)	D (48.1)	E (59.6)	D (48.7)
			SBTR	F (80.5)	F (86.4)	E (74.0)	F (84.5)
			Overall	C (22.1)	C (22.2)	C (20.2)	C (21.3)
2 Circle Dr/S Access	STOP	Circle Dr	EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Circle Dr	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		S Access	SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	C [20.9]	C [17.0]	C [18.8]	C [17.5]
			EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Circle Dr	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Private Rd	SBLR	C [17.8]	B [14.9]	C [17.8]	C [15.2]

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
Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO
Background Future Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2025		Background 2027	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	200	74.7	73.6	74.7	73.6
			EBTR	-	5.5	5	5.5	5.1
		Circle Dr	WBL	200	47	0	47.3	0
			WBTR	-	28.8	28.3	28.5	26.1
		Janitell Rd	NBL	90	0	53.5	0	53.5
			NBTR	-	57	0	57	0
		Janitell Rd	SBL	160	68.5	77.8	68.1	75.4
			SBTR	-	15.9	3.5	16	3.2
2 Circle Dr/S Access	STOP	Circle Dr	EBT	-	0	0	0	0
		Circle Dr	WBTR	-	0	0	0	0
		S Access	SBLR	-	0	0	0	0
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	120	2.5	2.5	2.5	2.5
			EBT	-	0	0	0	0
		Circle Dr	WBTR	-	0	0	0	0
		Private Rd	SBR	-	2.5	2.5	2.5	2.5

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

V. Site Analysis

Overview

The Applicant is proposing develop the approximately 1.2-acre site with a gas station with convenience store use. For purposes of this study, the site is assumed to be complete and occupied by 2027. The following use and development program was analyzed:

Build-Out 2027:

12	FP	Convenience Store/Gas Station
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Proposed Site Access

As shown on the Applicant's conceptual plan (Figure 1-2), access to the site is proposed via one existing RIRO access on Circle Dr and two full movement accesses on the Private Rd to the east of the site. Proposed future lane use and traffic control is shown on Figure 5-1.

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 11th edition. The trip generation analysis is presented in Table 5-1.

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 gas stations 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 gas station on his/her way to 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:

- Convenience Store/Gas Station: 76% AM/ 75% PM

As shown in Table 5-1, the site in total is anticipated to generate 147 weekday AM and 166 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.

Pass-by Trip Distributions

The distribution of the anticipated pass-by 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 that 100% of pass-by trips coming westbound would be appropriate in the forecasting of future pass-by site traffic.

Net Site Trips

The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-1. As shown in Table 5-1, the site would generate, upon completion and full occupancy, 46 net new weekday AM and 55 net new weekday PM peak hour vehicle trips, as well as 687 net new weekday daily trips.

Net 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:

- To/from the west on Circle Dr: 50%
- To/from the east on Circle Dr: 50%

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distribution.

Total Site Trips

The total site trips for the project were created by combining pass-by trips with net site trips, which are shown on Figure 5-2.

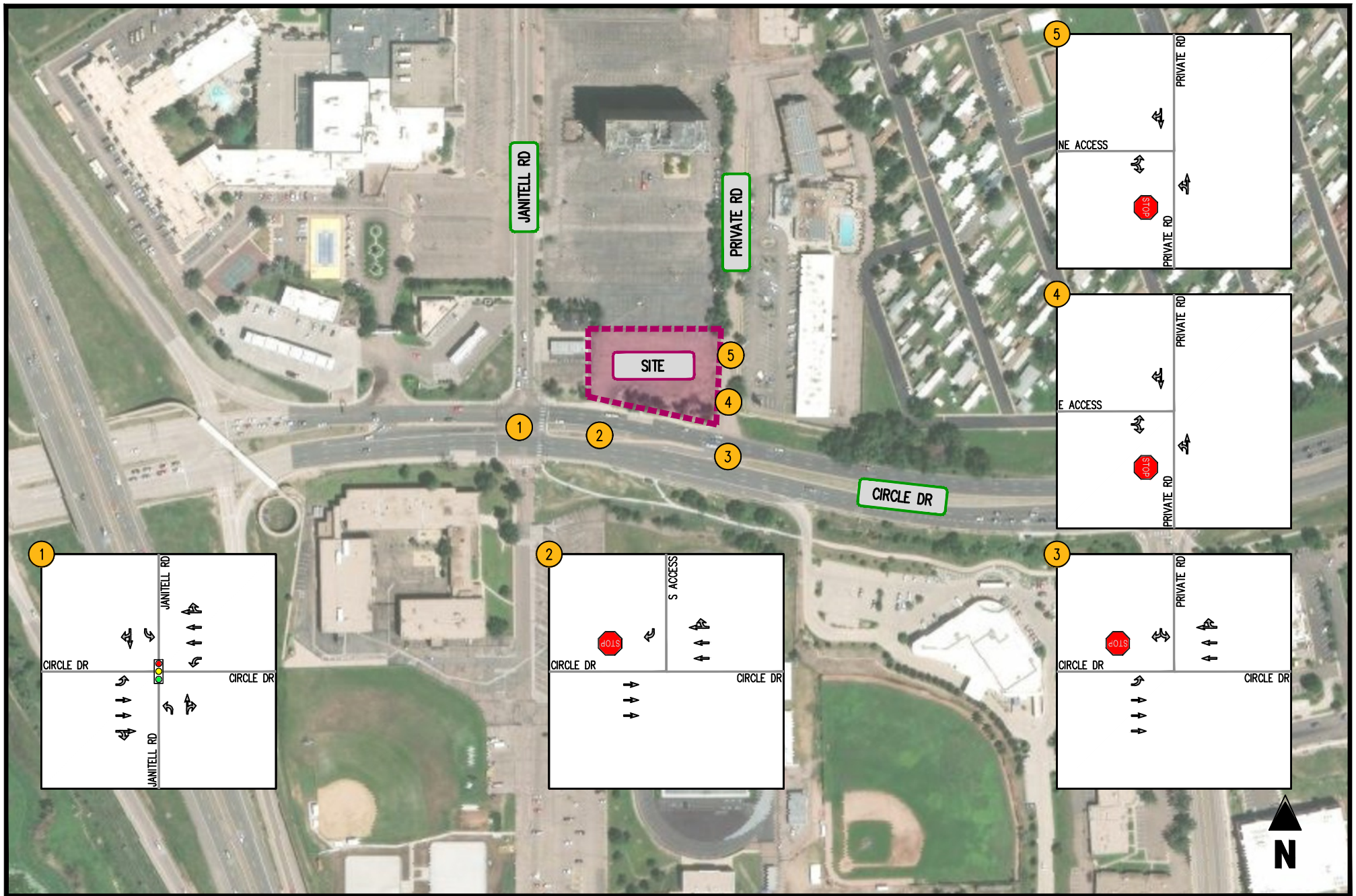




FIGURE 5-1
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL

MURPHY USA - CIRCLE DR & JANITELL RD
 COLORADO SPRINGS, CO

- ← MOVEMENT
-  SIGNALIZED INTERSECTION
-  STOP SIGN
-  YIELD SIGN



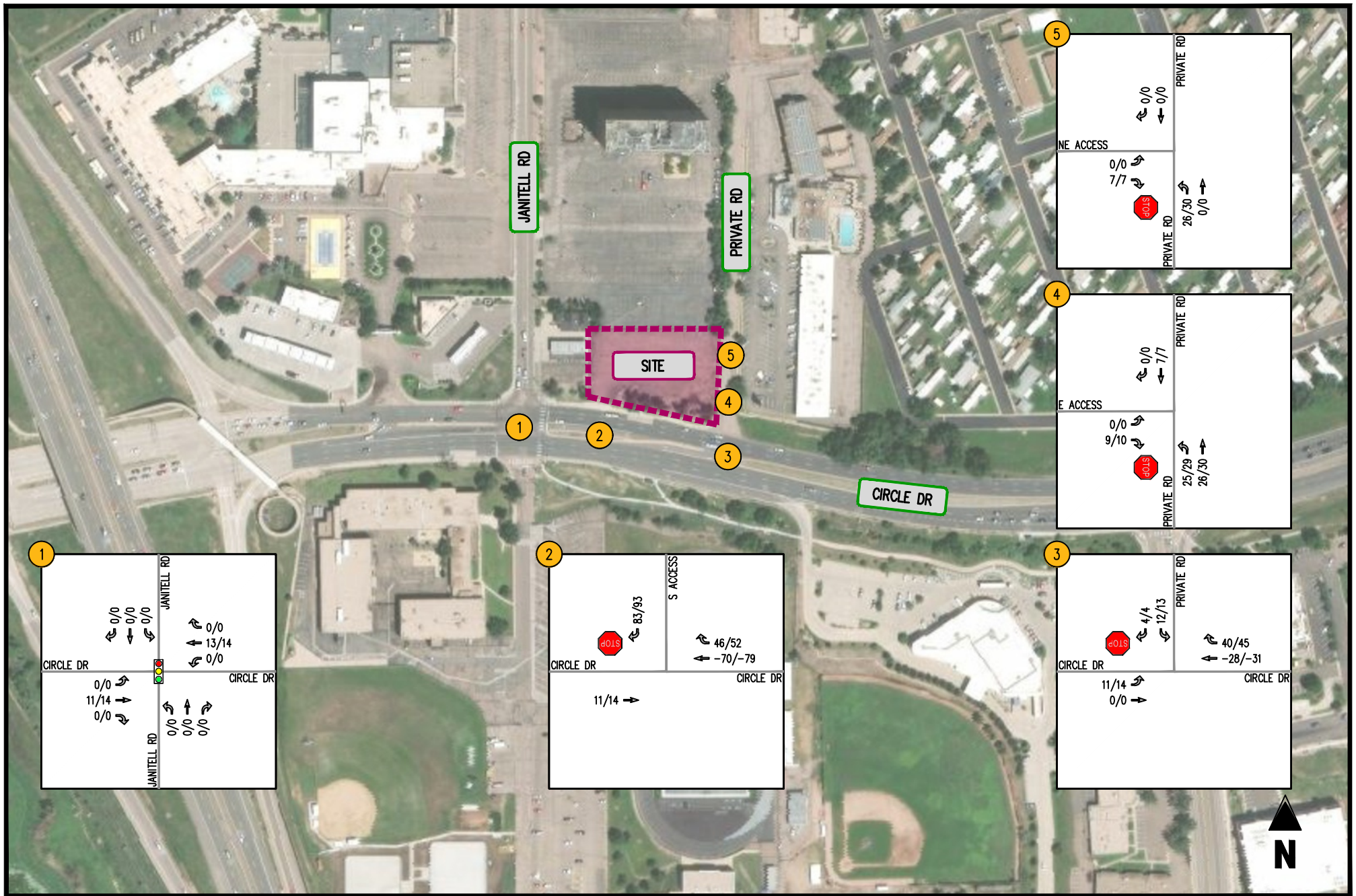


FIGURE 5-2
TOTAL SITE TRIPS

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
SIGNALIZED INTERSECTION
STOP SIGN
YIELD SIGN

Table 5-1

Murphy Oil - Circle & Janitell Colorado Springs, CO

Site Trip Generation

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
<i>Proposed</i> ⁽¹⁾										
Convenience Store/Gas Station: GFA (2-4k)	945	12	FP	97	96	193	111	110	221	2,750
<i>Pass-by (76%AM /75%PM)</i>				<i>(74)</i>	<i>(73)</i>	<i>(147)</i>	<i>(83)</i>	<i>(83)</i>	<i>(166)</i>	<i>(2,063)</i>
Net New Trips				23	23	46	28	27	55	687

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

VI. Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

The total future traffic forecasts associated with the proposed development were developed by combining the background future forecasts shown on Figure 4-2 and the total site trips shown on Figure 5-2. The resulting total future traffic forecasts are provided on Figure 6-1 for total future build-out (2027) 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 on Figures 6-1, the total future lane use on Figure 5-1, and the HCM 7th methodologies for signalized and unsignalized intersections. The results of these analyses are provided in Appendix F and presented in Table 6-1. Total future levels of service are also presented graphically in Figure 6-2.

As shown in Table 6-1, the signalized and unsignalized intersections within the study area, are forecasted to operate consistent with existing and background conditions during the weekday AM and PM peak hours.

Total Future Queuing

Total future queues were forecasted using Synchro software. The results of the queuing analysis are summarized in Table 6-2. The forecasted queues are expected to remain contained in their respective storage lengths, consistent with existing and background conditions.

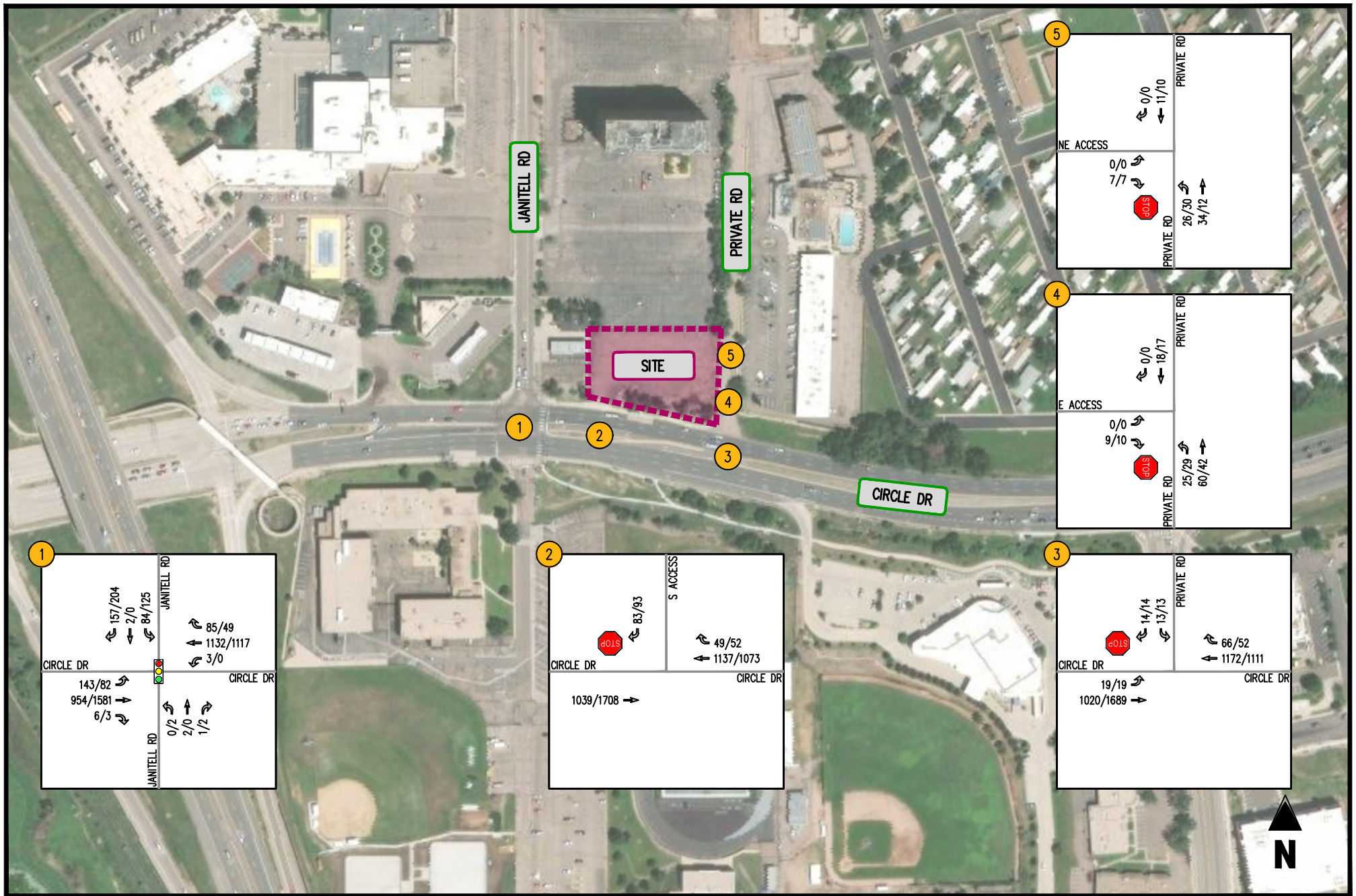


FIGURE 6-1
TOTAL FUTURE FORECASTS 2027

MURPHY USA - CIRCLE DR & JANITELL RD
COLORADO SPRINGS, CO

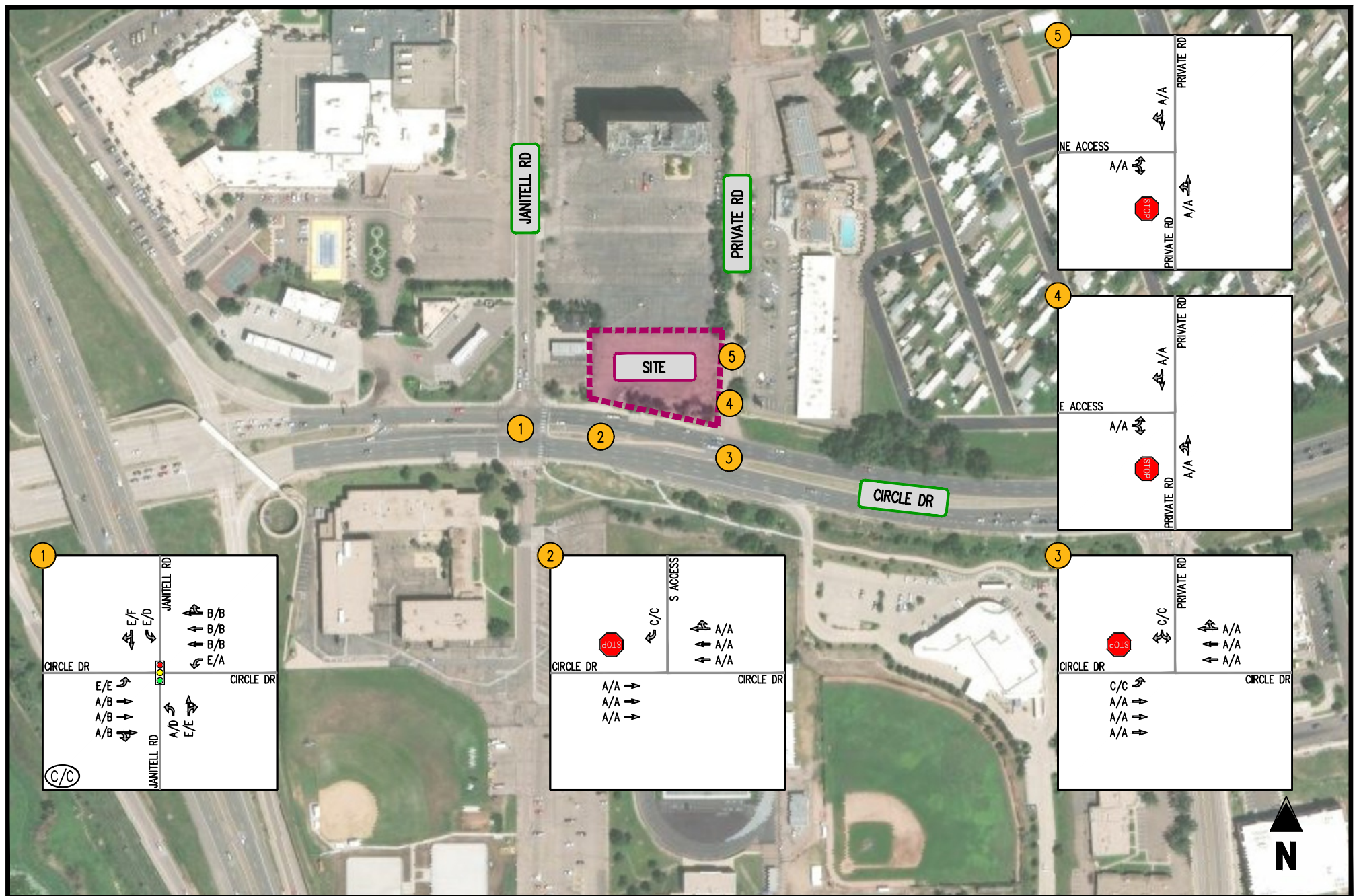


Table 6-1
Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO
Existing Intersection Level of Service Summary (1) (2)

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2027		Total Future 2027	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	E (71.6)	E (73.9)	E (72.9)	E (73.9)
			EBTR	A (9.2)	B (11.7)	A (9.7)	B (11.8)
		Circle Dr	WBL	E (63.4)	A (0.0)	E (63.5)	A (0.0)
			WBTR	B (13.3)	B (17.3)	B (14.6)	B (17.4)
		Janitell Rd	NBL	A (0.0)	D (52.6)	A (0.0)	D (52.6)
			NBTR	E (65.6)	E (55.6)	E (65.6)	E (55.6)
		Janitell Rd	SBL	E (59.6)	D (48.7)	E (59.3)	D (48.7)
			SBTR	E (74.0)	F (84.5)	E (79.7)	F (84.5)
			Overall	C (20.2)	C (21.3)	C (21.3)	C (21.3)
2 Circle Dr/S Access	STOP	Circle Dr	EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Circle Dr	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		S Access	SBR	A [0.0]	A [0.0]	C [19.3]	C [18.2]
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	C [18.8]	C [17.5]	C [20.9]	C [18.4]
			EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Circle Dr Private Rd	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			SBLR	C [17.8]	C [15.2]	C [23.2]	C [19.7]
4 E Access/Private Rd	STOP	E Access Private Rd	EBLR	-	-	A [8.5]	A [8.4]
			NBLT	-	-	A [2.2]	A [3.0]
			SBTR	-	-	A [0.0]	A [0.0]
5 NE Access/Private Rd	STOP	NE Access Private Rd	EBLR	-	-	A [8.5]	A [8.4]
			NBLT	-	-	A [3.2]	A [5.2]
			SBTR	-	-	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
Murphy Oil USA Circle Dr & Janitell Rd - Colorado Springs, CO
Background Future Intersection Queueing Summary (1)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Background 2027		Total Future 2027	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Circle Dr/Janitell Rd	SIGNAL	Circle Dr	EBL	200	74.7	73.6	74.7	73.6
			EBTR	-	5.5	5.1	5.5	5.1
		Circle Dr	WBL	200	47.3	0	47.7	0
			WBTR	-	28.5	26.1	28.2	23.9
		Janitell Rd	NBL	90	0	53.5	0	53.5
			NBTR	-	57	0	57	0
		Janitell Rd	SBL	160	68.1	75.4	68.1	75.4
			SBTR	-	16	3.2	16	3.3
2 Circle Dr/S Access	STOP	Circle Dr	EBT	-	0	0	0	0
		Circle Dr	WBTR	-	0	0	0	0
		S Access	SBLR	-	0	0	25	27.5
3 Circle Dr/Private Rd	STOP	Circle Dr	EBL	120	2.5	2.5	7.5	5
			EBT	-	0	0	0	0
		Circle Dr	WBTR	-	0	0	0	0
		Private Rd	SBR	-	2.5	2.5	10	10
4 E Access/Private Rd	STOP	E Access Private Rd	EBLR	-	-	-	0	0
			NBLT	-	-	-	2.5	2.5
			SBTR	-	-	-	0	0
5 NE Access/Private Rd	STOP	NE Access Private Rd	EBLR	-	-	-	0	0
			NBLT	-	-	-	2.5	2.5
			SBTR	-	-	-	0	0

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

VII. Conclusions and Recommendations

Conclusions

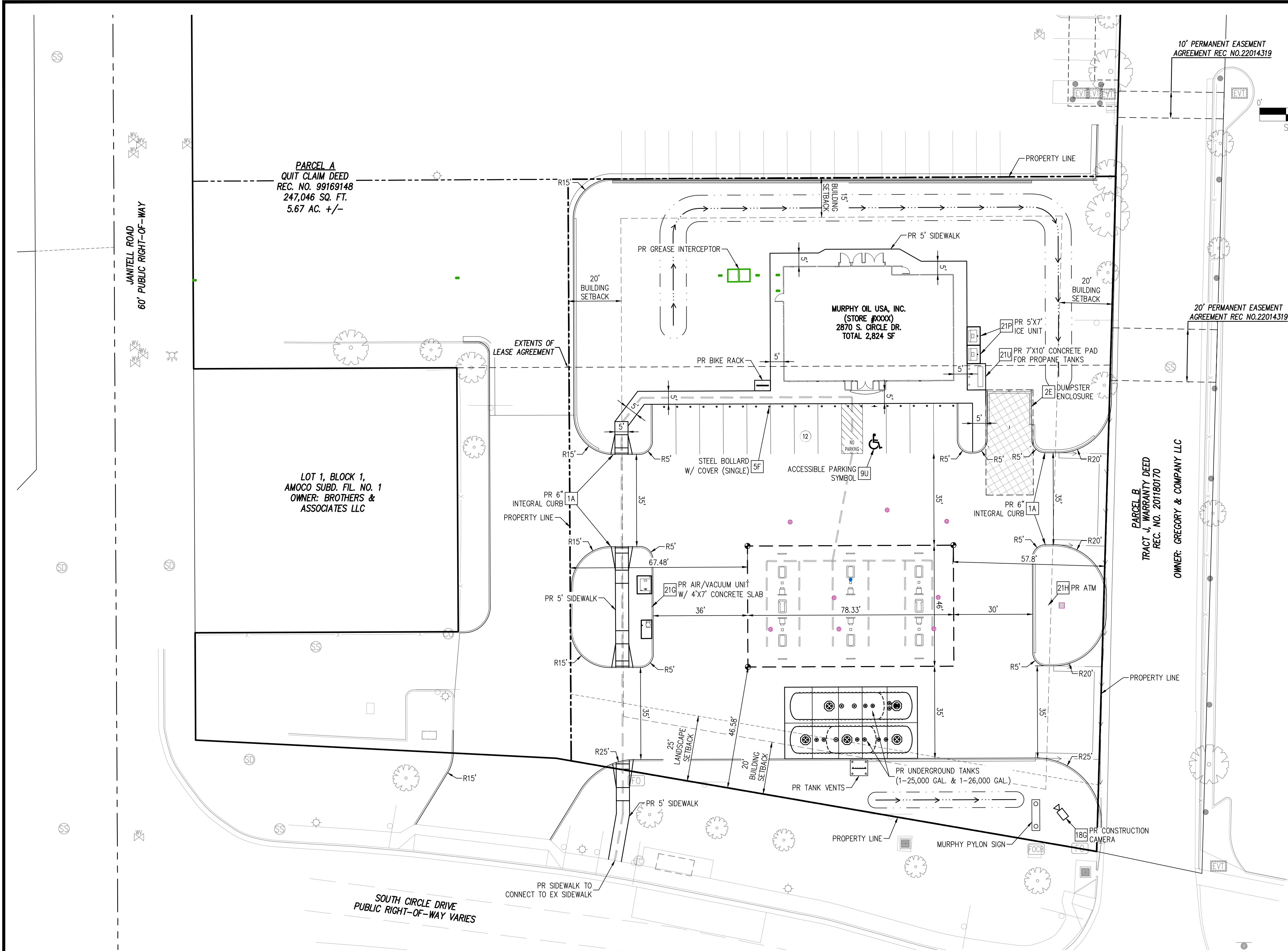
Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the signalized intersection within the study area, Circle Dr/Janitell Rd, currently operates at overall level of service (LOS) “C” during the weekday AM and PM peak hours, and the unsignalized intersection movements within the study area currently operate at LOS “C” or better during the weekday AM and PM peak hours. All queues remain within their effective storage lengths.
- Under background future traffic conditions, without the development of the subject site, the signalized intersection and unsignalized intersection movements within the study area are forecasted to operate consistent with existing conditions. All queues are expected to remain within their effective storage lengths.
- The proposed site development would generate, upon completion and full occupancy, 46 net new weekday AM and 55 net new weekday PM peak hour vehicle trips as well as 687 net new weekday daily trips.
- Under total future traffic conditions, with the development of the subject site, the signalized and unsignalized intersection within the study area, are forecasted to operate consistent with existing and background conditions. All queues are expected to remain within their effective storage lengths.

Recommendations

- It is recommended that the Applicant provides access consistent with the site plan contained herein.

APPENDIX A – Full Sized Conceptual Plan



THESE DRAWINGS DO NOT INCLUDE COMPONENTS FOR CONSTRUCTION SAFETY

CAUTION - NOTICE TO CONTRACTOR

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



PRE-CONSTRUCTION IMPERVIOUS SITE RATIO (ISR)		
AREA	SQUARE FEET	%
IMPERVIOUS (ROOF AND PAVING)	48,820	100
LANDSCAPE AREA	0	0.00
GROSS SITE	48,820	100

POST-CONSTRUCTION IMPERVIOUS SITE RATIO (ISR)		
AREA	SQUARE FEET	%
IMPERVIOUS (ROOF AND PAVING)	30,045	38.46
LANDSCAPE AREA	18,775	61.54
GROSS SITE	48,820	100

EXISTING	
	EXISTING STREET LIGHT
	EXISTING TRANSFORMER
	EXISTING ELECTRIC METER
	EXISTING ELECTRIC BOX
	EXISTING FIBER OPTIC BOX
	EXISTING GAS METER
	EXISTING SANITARY SEWER MANHOLE
	EXISTING WATER VALVE
	EXISTING STORM INLET
	EXISTING FIRE HYDRANT
	EXISTING SIGN
	EXISTING BOLLARD
	EXISTING TREE

PROPOSED	
	LANDSCAPE SETBACK
	PARKING SETBACK
	BOUNDARY LINE
	BUILDING CONTROL POINT
	CONCRETE PAVING
	REINFORCED CONCRETE PAVING
	ASPHALT PAVING
	PROPOSED ADA PATH
	SEE DETAIL SHEETS
	PLANNED INFILTRATION AREA (PIA)
	PROPOSED SIGN

BUILDING SETBACKS	
NORTH: 15'	
WEST: 20'	
SOUTH: 20'	
EAST: 20'	

ZONING: MX-M, A0 (MIXED USE - MEDIUM WITH AIRPORT OVERLAY)

CONTRACTOR SHALL BE RESPONSIBLE FOR AND HIRE A COLORADO REGISTERED LAND SURVEYOR TO ESTABLISH PROPERTY CORNERS, BUILDING CORNERS, CANOPY, ETC. AS REQUIRED FOR CONSTRUCTION LAYOUT.

CONTRACTOR TO ENSURE THE LIGHT POLES AND SIGNS ARE AT LEAST 2' FROM THE BACK OF THE CURB TO PREVENT THE VEHICLES STRIKING THE LIGHT POLE OR SIGN.

GENERAL NOTES

- ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND SIGNAGE SHALL MEET ALL APPLICABLE CITY CODE REQUIREMENTS INCLUDING:
 - PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING NE TO FIFTY (1:50)(2 PERCENT) IN ALL DIRECTIONS.
 - ACCESSIBLE PARKING SPACES SHALL BE MARKED WITH FOUR INCH (4") LINES.
 - ACCESSIBLE AISLES SHALL BE OUTLINED AND DIAGONALLY STRIPED AT FORTY FIVE DEGREE (45°) ANGLES IN A CONTRASTING COLOR SUCH AS YELLOW, WHITE, OR BLUE.
 - EACH ACCESSIBLE PARKING SPACE SHALL BE DESIGNATED AS RESERVED BY A SIGN SHOWING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. VAN ACCESSIBLE SPACES SHALL HAVE AN ADDITIONAL SIGN CONTAINING THE DESIGNATION, "VAN ACCESSIBLE", MOUNTED BELOW THE SYMBOL OF ACCESSIBILITY. EACH ACCESSIBLE PARKING SPACE SIGN SHALL BE NO SMALLER THAN EIGHTEEN INCHES (18") TALL BY TWELVE INCHES (12") WIDE. EACH VAN ACCESSIBLE SIGN SHALL BE NO SMALLER THAN SIX INCHES (6") TALL BY TWELVE INCHES (12") WIDE. SIGNS SHALL BE LOCATED AT THE HEAD OF THE SPACE.

DEPN-25-XXXX

CITY APPROVAL STAMP:

SHEET NO.
C-1
Sheet 2 of 15

ENGINEERING
STAMP

SITE PLAN
MURPHY USA (NTI) #6611
2870 S. CIRCLE DRIVE
COLORADO SPRINGS COLORADO

Galloway
1155 Kelly Johnson Blvd, Suite 305
Colorado Springs, CO 80920
719.900.7220 - GallowayUS.com

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

MURPHY USA

APPENDIX B – 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	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 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	$> 10 \text{ and } \leq 15$
C	$> 15 \text{ and } \leq 25$
D	$> 25 \text{ and } \leq 35$
E	$> 35 \text{ and } \leq 50$
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.

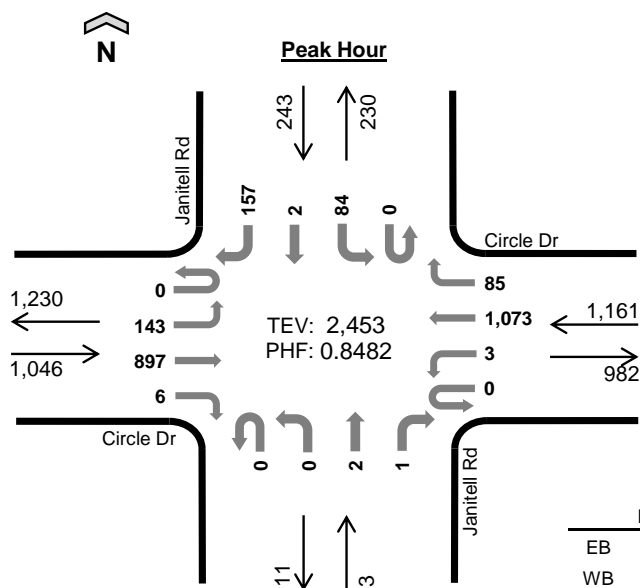
The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The 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.

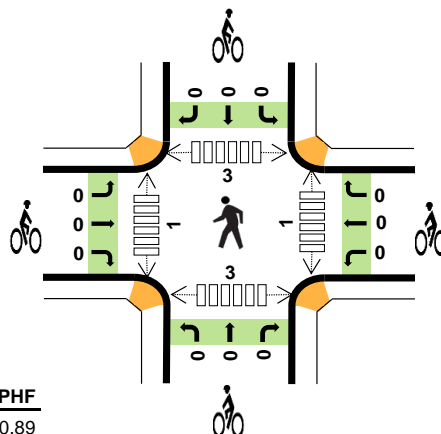
Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX C – Traffic Counts

Janitell Rd Circle Dr



Date: 5/29/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	8%	0.89
WB	7%	0.78
NB	0%	0.75
SB	38%	0.89
TOTAL	10%	0.85

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				Janitell Rd				Janitell 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		
7:45 AM		0	39	252	2	0	1	341	30	0	0	1	0	0	20	1	36	723	0
8:00 AM		0	40	208	1	0	1	241	21	0	0	0	1	0	17	0	37	567	0
8:15 AM		0	33	193	2	0	1	230	14	0	0	1	0	0	29	1	38	542	0
8:30 AM		0	31	244	1	0	0	261	20	0	0	0	0	0	18	0	46	621	2,453
Pk Hr	All	0	143	897	6	0	3	1,073	85	0	0	2	1	0	84	2	157	2,453	
	HV	0	46	38	0	0	0	50	27	0	0	0	0	0	33	0	60	254	
	HV%	-	32%	4%	0%	-	0%	5%	32%	-	-	0%	0%	-	39%	0%	38%	10%	

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
7:45 AM	15	22	0	18	55	0	0	0	0	0	0	0	0	0	0
8:00 AM	21	24	0	20	65	0	0	0	0	0	0	0	2	0	2
8:15 AM	25	12	0	31	68	0	0	0	0	0	1	0	0	0	1
8:30 AM	23	19	0	24	66	0	0	0	0	0	0	1	1	3	5
Peak Hour	84	77	0	93	254	0	0	0	0	0	1	1	3	3	8

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				Janitell Rd				Janitell 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	37	195	0	1	0	213	21	0	0	0	1	0	5	2	19	494	0
7:15 AM		0	41	191	0	0	0	241	16	0	0	0	0	0	23	0	26	538	0
7:30 AM		0	30	254	1	1	0	257	16	0	0	0	0	0	18	0	31	608	0
7:45 AM		0	39	252	2	0	1	341	30	0	0	1	0	0	20	1	36	723	2,363
8:00 AM		0	40	208	1	0	1	241	21	0	0	0	1	0	17	0	37	567	2,436
8:15 AM		0	33	193	2	0	1	230	14	0	0	1	0	0	29	1	38	542	2,440
8:30 AM		0	31	244	1	0	0	261	20	0	0	0	0	0	18	0	46	621	2,453
8:45 AM		0	36	185	4	0	1	252	17	0	0	0	0	0	26	0	30	551	2,281
Count Total		0	287	1,722	11	2	4	2,036	155	0	0	2	2	0	156	4	263	4,644	
Pk Hr	All	0	143	897	6	0	3	1,073	85	0	0	2	1	0	84	2	157	2,453	
	HV	0	46	38	0	0	0	50	27	0	0	0	0	0	33	0	60	254	
	HV%	-	32%	4%	0%	-	0%	5%	32%	-	-	0%	0%	-	39%	0%	38%	10%	

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	15	18	0	10	43	0	0	0	0	0	0	0	0	0	0
7:15 AM	9	21	0	17	47	0	0	0	0	0	0	0	1	1	2
7:30 AM	17	19	0	25	61	0	0	0	0	0	0	0	1	0	1
7:45 AM	15	22	0	18	55	0	0	0	0	0	0	0	0	0	0
8:00 AM	21	24	0	20	65	0	0	0	0	0	0	0	2	0	2
8:15 AM	25	12	0	31	68	0	0	0	0	0	1	0	0	0	1
8:30 AM	23	19	0	24	66	0	0	0	0	0	0	1	1	3	5
8:45 AM	27	14	0	19	60	0	0	0	0	0	0	2	0	1	3
Count Total	152	149	0	164	465	0	0	0	0	0	1	3	5	5	14
Peak Hour	84	77	0	93	254	0	0	0	0	0	1	1	3	3	8

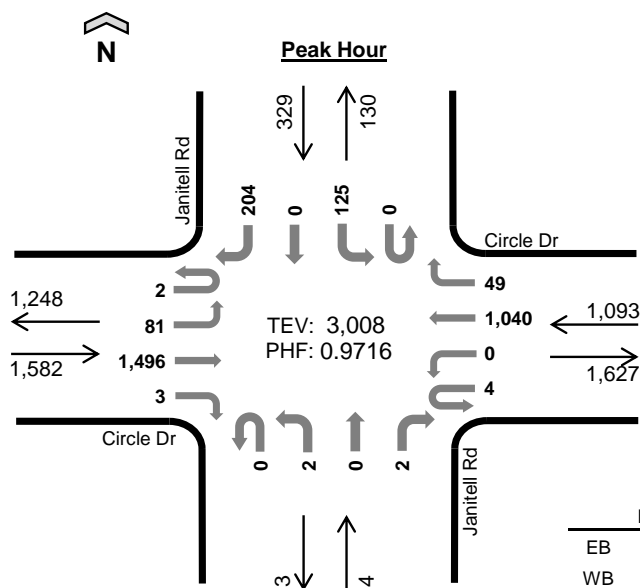
Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				Janitell Rd				Janitell 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	11	4	0	0	0	11	7	0	0	0	0	0	2	0	8	43	0
7:15 AM	0	4	5	0	0	0	17	4	0	0	0	0	0	7	0	10	47	0
7:30 AM	0	10	7	0	0	0	13	6	0	0	0	0	0	7	0	18	61	0
7:45 AM	0	9	6	0	0	0	17	5	0	0	0	0	0	4	0	14	55	206
8:00 AM	0	13	8	0	0	0	13	11	0	0	0	0	0	7	0	13	65	228
8:15 AM	0	12	13	0	0	0	7	5	0	0	0	0	0	13	0	18	68	249
8:30 AM	0	12	11	0	0	0	13	6	0	0	0	0	0	9	0	15	66	254
8:45 AM	0	11	16	0	0	0	9	5	0	0	0	0	0	3	0	16	60	259
Count Total	0	82	70	0	0	0	100	49	0	0	0	0	0	52	0	112	465	
Pk Hr Heavy	0	46	38	0	0	0	50	27	0	0	0	0	0	33	0	60	254	

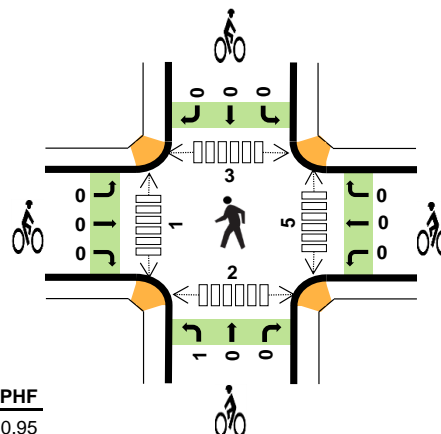
Count Summaries - Bikes

Interval Start	Circle Dr				Circle Dr				Janitell Rd				Janitell 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	

Janitell Rd Circle Dr



Date: 5/29/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	3%	0.95
WB	1%	0.95
NB	0%	0.50
SB	6%	0.87
TOTAL	3%	0.97

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				Janitell Rd				Janitell 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		1	25	375	1	0	0	258	18	0	1	0	0	0	45	0	37	761	0
4:45 PM		0	23	392	0	3	0	254	10	0	0	0	0	0	22	0	43	747	0
5:00 PM		1	19	369	1	0	0	279	9	0	0	0	1	0	30	0	65	774	0
5:15 PM		0	14	360	1	1	0	249	12	0	1	0	1	0	28	0	59	726	3,008
Pk Hr	All	2	81	1,496	3	4	0	1,040	49	0	2	0	2	0	125	0	204	3,008	
	HV	0	27	28	0	0	0	7	6	0	0	0	0	0	5	0	15	88	
	HV%	0%	33%	2%	0%	0%	-	1%	12%	-	0%	-	0%	-	4%	-	7%	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
4:30 PM	17	3	0	4	24	0	0	1	0	1	2	0	2	1	5
4:45 PM	15	4	0	7	26	0	0	0	0	0	2	0	1	0	3
5:00 PM	13	3	0	4	20	0	0	0	0	0	0	0	0	1	1
5:15 PM	10	3	0	5	18	0	0	0	0	0	1	1	0	0	2
Peak Hour	55	13	0	20	88	0	0	1	0	1	5	1	3	2	11

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				Janitell Rd				Janitell 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		1	13	345	0	0	0	197	11	0	0	0	0	0	35	0	61	663	0
4:15 PM		0	18	433	0	0	0	125	7	0	1	0	1	0	24	0	42	651	0
4:30 PM		1	25	375	1	0	0	258	18	0	1	0	0	0	45	0	37	761	0
4:45 PM		0	23	392	0	3	0	254	10	0	0	0	0	0	22	0	43	747	2,822
5:00 PM		1	19	369	1	0	0	279	9	0	0	0	1	0	30	0	65	774	2,933
5:15 PM		0	14	360	1	1	0	249	12	0	1	0	1	0	28	0	59	726	3,008
5:30 PM		0	17	350	2	0	0	267	12	0	0	0	1	0	20	0	50	719	2,966
5:45 PM		1	13	287	1	0	0	226	18	0	0	0	0	0	18	0	35	599	2,818
Count Total		4	142	2,911	6	4	0	1,855	97	0	3	0	4	0	222	0	392	5,640	
Pk Hr	All	2	81	1,496	3	4	0	1,040	49	0	2	0	2	0	125	0	204	3,008	
	HV	0	27	28	0	0	0	7	6	0	0	0	0	0	5	0	15	88	
	HV%	0%	33%	2%	0%	0%	-	1%	12%	-	0%	-	0%	-	4%	-	7%	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	11	6	0	3	20	1	0	0	0	1	2	0	0	2	4
4:15 PM	9	4	0	7	20	0	0	0	0	0	0	0	0	0	0
4:30 PM	17	3	0	4	24	0	0	1	0	1	2	0	2	1	5
4:45 PM	15	4	0	7	26	0	0	0	0	0	2	0	1	0	3
5:00 PM	13	3	0	4	20	0	0	0	0	0	0	0	0	1	1
5:15 PM	10	3	0	5	18	0	0	0	0	0	1	1	0	0	2
5:30 PM	11	6	0	5	22	0	0	0	0	0	0	0	0	0	0
5:45 PM	7	1	0	2	10	0	0	0	1	1	1	0	0	0	1
Count Total	93	30	0	37	160	1	0	1	1	3	8	1	3	4	16
Peak Hour	55	13	0	20	88	0	0	1	0	1	5	1	3	2	11

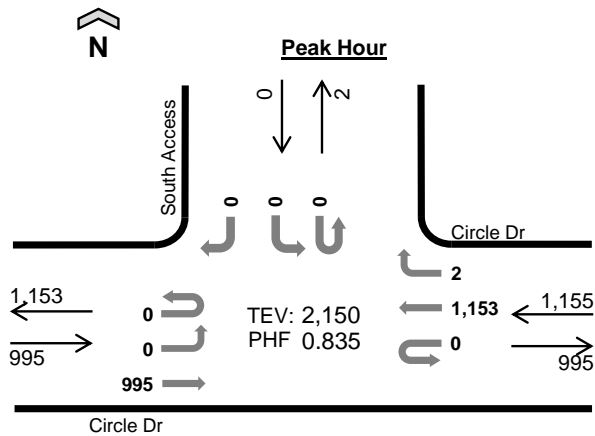
Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				Janitell Rd				Janitell 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	3	8	0	0	0	3	3	0	0	0	0	0	2	0	1	20	0
4:15 PM	0	3	6	0	0	0	1	3	0	0	0	0	0	1	0	6	20	0
4:30 PM	0	12	5	0	0	0	1	2	0	0	0	0	0	1	0	3	24	0
4:45 PM	0	5	10	0	0	0	2	2	0	0	0	0	0	1	0	6	26	90
5:00 PM	0	7	6	0	0	0	2	1	0	0	0	0	0	2	0	2	20	90
5:15 PM	0	3	7	0	0	0	2	1	0	0	0	0	0	1	0	4	18	88
5:30 PM	0	6	5	0	0	0	5	1	0	0	0	0	0	1	0	4	22	86
5:45 PM	0	1	6	0	0	0	1	0	0	0	0	0	0	0	0	2	10	70
Count Total	0	40	53	0	0	0	17	13	0	0	0	0	0	9	0	28	160	
Pk Hr Heavy	0	27	28	0	0	0	7	6	0	0	0	0	0	5	0	15	88	

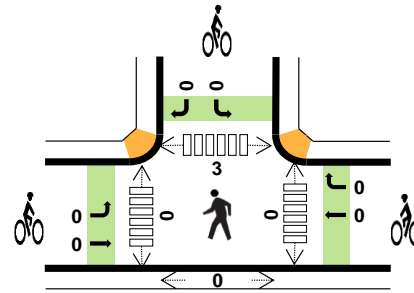
Count Summaries - Bikes

Interval Start	Circle Dr				Circle Dr				Janitell Rd				Janitell 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	1	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	0	0	0	1	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	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	1	1	1
Count Total	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	3	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	

South Access Circle Dr



Date: 5/29/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV%	PHF
EB	7%	0.90
WB	7%	0.78
NB	--	--
SB	--	--
TOTAL	7%	0.84

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				n/a				South Access				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		
7:30 AM		0	0	276	0	0	0	274	0	0	0	0	0	0	0	0	0	550	0
7:45 AM		0	0	274	0	0	0	369	0	0	0	0	0	0	0	0	0	643	0
8:00 AM		0	0	225	0	0	0	263	1	0	0	0	0	0	0	0	0	489	0
8:15 AM		0	0	220	0	0	0	247	1	0	0	0	0	0	0	0	0	468	2,150
Pk Hr	All	0	0	995	0	0	0	1,153	2	0	0	0	0	0	0	0	0	2,150	
	HV	0	0	65	0	0	0	76	1	0	0	0	0	0	0	0	0	142	
	HV%	-	-	7%	-	-	-	7%	50%	-	-	-	-	-	-	-	-	7%	

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
7:30 AM	14	19	0	0	33	0	0	0	0	0	0	0	1	0	1
7:45 AM	10	21	0	0	31	0	0	0	0	0	0	0	0	0	0
8:00 AM	15	24	0	0	39	0	0	0	0	0	0	0	2	0	2
8:15 AM	26	13	0	0	39	0	0	0	0	0	0	0	0	0	0
Peak Hour	65	77	0	0	142	0	0	0	0	0	0	0	3	0	3

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				n/a				South Access				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	200	0	0	0	234	0	0	0	0	0	0	0	0	0	434	0
7:15 AM		0	0	211	0	0	0	254	0	0	0	0	0	0	0	0	0	465	0
7:30 AM		0	0	276	0	0	0	274	0	0	0	0	0	0	0	0	0	550	0
7:45 AM		0	0	274	0	0	0	369	0	0	0	0	0	0	0	0	0	643	2,092
8:00 AM		0	0	225	0	0	0	263	1	0	0	0	0	0	0	0	0	489	2,147
8:15 AM		0	0	220	0	0	0	247	1	0	0	0	0	0	0	0	0	468	2,150
8:30 AM		0	0	264	0	0	0	282	1	0	0	0	0	0	0	0	0	547	2,147
8:45 AM		0	0	211	0	0	0	273	3	0	0	0	0	0	0	0	0	487	1,991
Count Total		0	0	1,881	0	0	0	2,196	6	0	0	0	0	0	0	0	0	4,083	
Pk Hr	All	0	0	995	0	0	0	1,153	2	0	0	0	0	0	0	0	0	2,150	
	HV	0	0	65	0	0	0	76	1	0	0	0	0	0	0	0	0	142	
	HV%	-	-	7%	-	-	-	7%	50%	-	-	-	-	-	-	-	-	7%	

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	6	17	0	0	23	0	0	0	0	0	0	0	0	0	0
7:15 AM	12	21	0	0	33	0	0	0	0	0	0	0	1	0	1
7:30 AM	14	19	0	0	33	0	0	0	0	0	0	0	1	0	1
7:45 AM	10	21	0	0	31	0	0	0	0	0	0	0	0	0	0
8:00 AM	15	24	0	0	39	0	0	0	0	0	0	0	2	0	2
8:15 AM	26	13	0	0	39	0	0	0	0	0	0	0	0	0	0
8:30 AM	20	19	0	0	39	0	0	0	0	0	0	0	0	0	0
8:45 AM	19	14	0	0	33	0	0	0	0	0	0	0	0	0	0
Count Total	122	148	0	0	270	0	0	0	0	0	0	0	4	0	4
Peak Hour	65	77	0	0	142	0	0	0	0	0	0	0	3	0	3

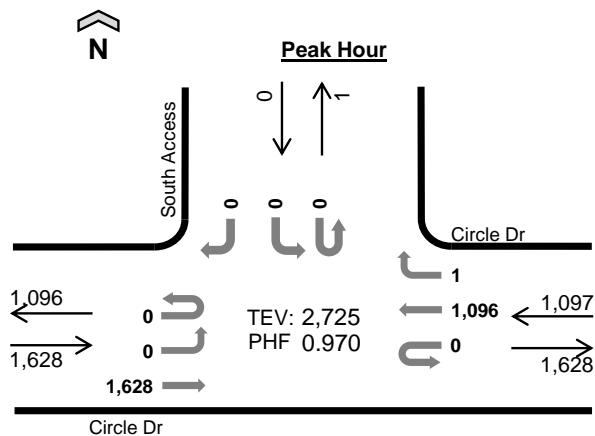
Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				n/a				South Access				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	6	0	0	0	17	0	0	0	0	0	0	0	0	0	23	0
7:15 AM	0	0	12	0	0	0	21	0	0	0	0	0	0	0	0	0	33	0
7:30 AM	0	0	14	0	0	0	19	0	0	0	0	0	0	0	0	0	33	0
7:45 AM	0	0	10	0	0	0	21	0	0	0	0	0	0	0	0	0	31	120
8:00 AM	0	0	15	0	0	0	24	0	0	0	0	0	0	0	0	0	39	136
8:15 AM	0	0	26	0	0	0	12	1	0	0	0	0	0	0	0	0	39	142
8:30 AM	0	0	20	0	0	0	19	0	0	0	0	0	0	0	0	0	39	148
8:45 AM	0	0	19	0	0	0	14	0	0	0	0	0	0	0	0	0	33	150
Count Total	0	0	122	0	0	0	147	1	0	0	0	0	0	0	0	0	270	
Pk Hr Heavy	0	0	65	0	0	0	76	1	0	0	0	0	0	0	0	0	142	

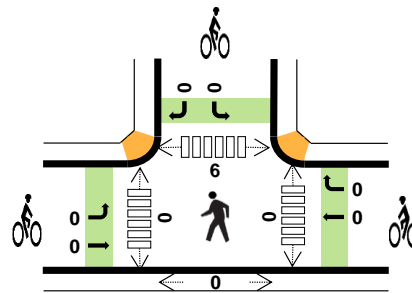
Count Summaries - Bikes

Interval Start	Circle Dr				Circle Dr				n/a				South Access				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	

South Access Circle Dr



Date: 5/29/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	2%	0.97
WB	1%	0.95
NB	--	--
SB	--	--
TOTAL	2%	0.97

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				n/a				South Access				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	420	0	0	0	281	1	0	0	0	0	0	0	0	0	702	0
4:45 PM		0	0	418	0	0	0	266	0	0	0	0	0	0	0	0	0	684	0
5:00 PM		0	0	400	0	0	0	288	0	0	0	0	0	0	0	0	0	688	0
5:15 PM		0	0	390	0	0	0	261	0	0	0	0	0	0	0	0	0	651	2,725
Pk Hr	All	0	0	1,628	0	0	0	1,096	1	0	0	0	0	0	0	0	0	2,725	
	HV	0	0	34	0	0	0	12	0	0	0	0	0	0	0	0	0	46	
	HV%	-	-	2%	-	-	-	1%	0%	-	-	-	-	-	-	-	-	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
4:30 PM	6	3	0	0	9	0	0	0	0	0	0	0	3	0	3
4:45 PM	12	3	0	0	15	0	0	0	0	0	0	0	1	0	1
5:00 PM	8	3	0	0	11	0	0	0	0	0	0	0	0	0	0
5:15 PM	8	3	0	0	11	0	0	0	0	0	0	0	2	0	2
Peak Hour	34	12	0	0	46	0	0	0	0	0	0	0	6	0	6

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				n/a				South Access				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	380	0	0	0	208	0	0	0	0	0	0	0	0	0	588	0
4:15 PM		0	0	459	0	0	0	130	0	0	0	0	0	0	0	0	0	589	0
4:30 PM		0	0	420	0	0	0	281	1	0	0	0	0	0	0	0	0	702	0
4:45 PM		0	0	418	0	0	0	266	0	0	0	0	0	0	0	0	0	684	2,563
5:00 PM		0	0	400	0	0	0	288	0	0	0	0	0	0	0	0	0	688	2,663
5:15 PM		0	0	390	0	0	0	261	0	0	0	0	0	0	0	0	0	651	2,725
5:30 PM		0	0	370	0	0	0	279	0	0	0	0	0	0	0	0	0	649	2,672
5:45 PM		0	0	306	0	0	0	244	0	0	0	0	0	0	0	0	0	550	2,538
Count Total		0	0	3,143	0	0	0	1,957	1	0	0	0	0	0	0	0	0	5,101	
Pk Hr	All	0	0	1,628	0	0	0	1,096	1	0	0	0	0	0	0	0	0	2,725	
	HV	0	0	34	0	0	0	12	0	0	0	0	0	0	0	0	0	46	
	HV%	-	-	2%	-	-	-	1%	0%	-	-	-	-	-	-	-	-	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	10	6	0	0	16	0	0	0	0	0	0	0	0	0	0
4:15 PM	7	4	0	0	11	0	0	0	0	0	0	0	4	0	4
4:30 PM	6	3	0	0	9	0	0	0	0	0	0	0	3	0	3
4:45 PM	12	3	0	0	15	0	0	0	0	0	0	0	1	0	1
5:00 PM	8	3	0	0	11	0	0	0	0	0	0	0	0	0	0
5:15 PM	8	3	0	0	11	0	0	0	0	0	0	0	2	0	2
5:30 PM	6	6	0	0	12	0	0	0	0	0	0	0	0	0	0
5:45 PM	6	1	0	0	7	0	0	0	0	0	0	0	0	0	0
Count Total	63	29	0	0	92	0	0	0	0	0	0	0	10	0	10
Peak Hour	34	12	0	0	46	0	0	0	0	0	0	0	6	0	6

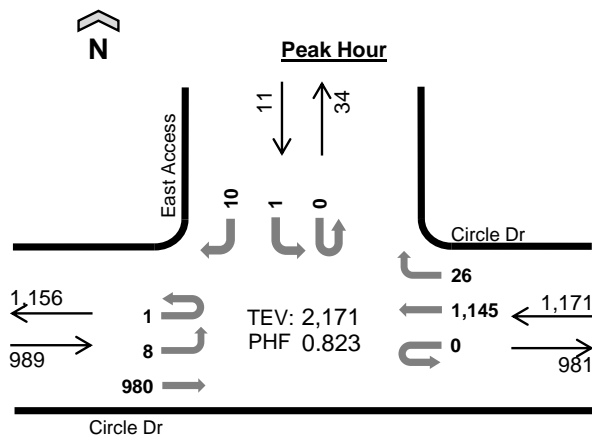
Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				n/a				South Access				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	10	0	0	0	6	0	0	0	0	0	0	0	0	0	16	0
4:15 PM	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	11	0
4:30 PM	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	9	0
4:45 PM	0	0	12	0	0	0	3	0	0	0	0	0	0	0	0	0	15	51
5:00 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11	46
5:15 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11	46
5:30 PM	0	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	12	49
5:45 PM	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7	41
Count Total	0	0	63	0	0	0	29	0	0	0	0	0	0	0	0	0	92	
Pk Hr Heavy	0	0	34	0	0	0	12	0	0	0	0	0	0	0	0	0	46	

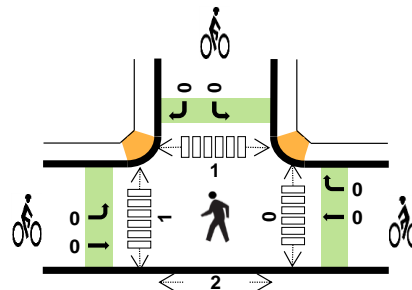
Count Summaries - Bikes

Interval Start	Circle Dr				Circle Dr				n/a				South Access				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	

East Access Circle Dr



Date: 5/29/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV%	PHF
EB	7%	0.88
WB	7%	0.78
NB	--	--
SB	0%	0.92
TOTAL	7%	0.82

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				n/a				East Access				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		
7:45 AM		0	0	280	0	0	0	366	10	0	0	0	0	0	0	0	3	659	0
8:00 AM		0	3	222	0	0	0	250	6	0	0	0	0	0	0	0	3	484	0
8:15 AM		0	4	216	0	0	0	250	4	0	0	0	0	0	0	0	2	476	0
8:30 AM		1	1	262	0	0	0	279	6	0	0	0	0	0	1	0	2	552	2,171
Pk Hr	All	1	8	980	0	0	0	1,145	26	0	0	0	0	0	1	0	10	2,171	
	HV	0	0	69	0	0	0	77	0	0	0	0	0	0	0	0	0	146	
	HV%	0%	0%	7%	-	-	-	7%	0%	-	-	-	-	-	0%	-	0%	7%	

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
7:45 AM	8	21	0	0	29	0	0	0	0	0	0	0	1	0	1
8:00 AM	15	24	0	0	39	0	0	0	0	0	0	1	0	1	2
8:15 AM	26	14	0	0	40	0	0	0	0	0	0	0	0	0	0
8:30 AM	20	18	0	0	38	0	0	0	0	0	0	0	0	1	1
Peak Hour	69	77	0	0	146	0	0	0	0	0	0	1	1	2	4

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				n/a				East Access				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	2	198	0	0	0	232	3	0	0	0	0	0	1	0	1	437	0
7:15 AM		0	3	208	0	0	0	254	4	0	0	0	0	0	0	0	3	472	0
7:30 AM		1	4	263	0	0	0	277	1	0	0	0	0	0	1	0	0	547	0
7:45 AM		0	0	280	0	0	0	366	10	0	0	0	0	0	0	0	3	659	2,115
8:00 AM		0	3	222	0	0	0	250	6	0	0	0	0	0	0	0	3	484	2,162
8:15 AM		0	4	216	0	0	0	250	4	0	0	0	0	0	0	0	2	476	2,166
8:30 AM		1	1	262	0	0	0	279	6	0	0	0	0	0	1	0	2	552	2,171
8:45 AM		0	1	213	0	0	0	277	11	0	0	0	0	0	0	0	2	504	2,016
Count Total		2	18	1,862	0	0	0	2,185	45	0	0	0	0	0	3	0	16	4,131	
Pk Hr	All	1	8	980	0	0	0	1,145	26	0	0	0	0	0	1	0	10	2,171	
	HV	0	0	69	0	0	0	77	0	0	0	0	0	0	0	0	0	146	
	HV%	0%	0%	7%	-	-	-	7%	0%	-	-	-	-	-	0%	-	0%	7%	

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	6	17	0	0	23	0	0	0	0	0	0	0	0	0	0
7:15 AM	12	20	0	1	33	0	0	0	0	0	0	0	0	0	0
7:30 AM	14	17	0	0	31	0	0	0	0	0	0	0	0	0	0
7:45 AM	8	21	0	0	29	0	0	0	0	0	0	0	1	0	1
8:00 AM	15	24	0	0	39	0	0	0	0	0	0	1	0	1	2
8:15 AM	26	14	0	0	40	0	0	0	0	0	0	0	0	0	0
8:30 AM	20	18	0	0	38	0	0	0	0	0	0	0	0	1	1
8:45 AM	19	13	0	0	32	0	0	0	0	0	0	0	0	0	0
Count Total	120	144	0	1	265	0	0	0	0	0	0	1	1	2	4
Peak Hour	69	77	0	0	146	0	0	0	0	0	0	1	1	2	4

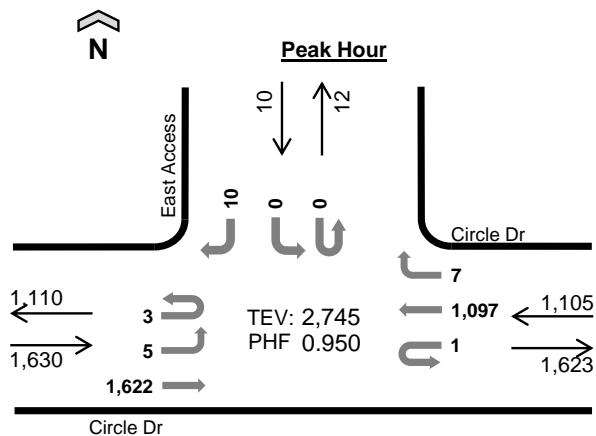
Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				n/a				East Access				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	6	0	0	0	17	0	0	0	0	0	0	0	0	0	23	0
7:15 AM	0	0	12	0	0	0	20	0	0	0	0	0	0	0	0	1	33	0
7:30 AM	0	0	14	0	0	0	17	0	0	0	0	0	0	0	0	0	31	0
7:45 AM	0	0	8	0	0	0	21	0	0	0	0	0	0	0	0	0	29	116
8:00 AM	0	0	15	0	0	0	24	0	0	0	0	0	0	0	0	0	39	132
8:15 AM	0	0	26	0	0	0	14	0	0	0	0	0	0	0	0	0	40	139
8:30 AM	0	0	20	0	0	0	18	0	0	0	0	0	0	0	0	0	38	146
8:45 AM	0	0	19	0	0	0	13	0	0	0	0	0	0	0	0	0	32	149
Count Total	0	0	120	0	0	0	144	0	0	0	0	0	0	0	0	1	265	
Pk Hr Heavy	0	0	69	0	0	0	77	0	0	0	0	0	0	0	0	0	146	

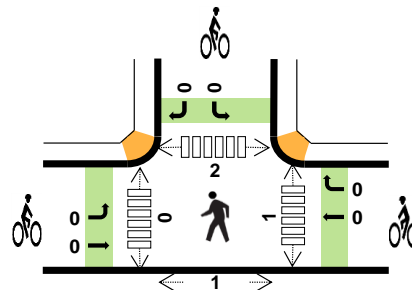
Count Summaries - Bikes

Interval Start	Circle Dr				Circle Dr				n/a				East Access				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	

East Access Circle Dr



Date: 5/29/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	2%	0.97
WB	1%	0.91
NB	--	--
SB	0%	0.63
TOTAL	2%	0.95

Peak Hour Count Summaries

Peak Hour Interval Start		Circle Dr				Circle Dr				n/a				East Access				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		1	2	415	0	1	0	299	3	0	0	0	0	0	0	0	1	722	0
4:45 PM		0	1	420	0	0	0	255	2	0	0	0	0	0	0	0	3	681	0
5:00 PM		1	1	390	0	0	0	284	1	0	0	0	0	0	0	0	4	681	0
5:15 PM		1	1	397	0	0	0	259	1	0	0	0	0	0	0	0	2	661	2,745
Pk Hr	All	3	5	1,622	0	1	0	1,097	7	0	0	0	0	0	0	0	10	2,745	
	HV	0	0	33	0	0	0	14	0	0	0	0	0	0	0	0	0	47	
	HV%	0%	0%	2%	-	0%	-	1%	0%	-	-	-	-	-	-	-	0%	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
4:30 PM	7	3	0	0	10	0	0	0	0	0	1	0	0	1	2
4:45 PM	11	4	0	0	15	0	0	0	0	0	0	0	1	0	1
5:00 PM	8	3	0	0	11	0	0	0	0	0	0	0	0	0	0
5:15 PM	7	4	0	0	11	0	0	0	0	0	0	0	1	0	1
Peak Hour	33	14	0	0	47	0	0	0	0	0	1	0	2	1	4

Count Summaries - All Vehicles

Interval Start		Circle Dr				Circle Dr				n/a				East Access				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	2	372	0	0	0	203	3	0	0	0	0	0	1	0	1	582	0
4:15 PM		0	3	456	0	0	0	123	2	0	0	0	0	0	0	0	0	584	0
4:30 PM		1	2	415	0	1	0	299	3	0	0	0	0	0	0	0	1	722	0
4:45 PM		0	1	420	0	0	0	255	2	0	0	0	0	0	0	0	3	681	2,569
5:00 PM		1	1	390	0	0	0	284	1	0	0	0	0	0	0	0	4	681	2,668
5:15 PM		1	1	397	0	0	0	259	1	0	0	0	0	0	0	0	2	661	2,745
5:30 PM		0	2	362	0	0	0	278	0	0	0	0	0	0	0	0	1	643	2,666
5:45 PM		0	1	313	0	0	0	240	2	0	0	0	0	0	2	0	1	559	2,544
Count Total		3	13	3,125	0	1	0	1,941	14	0	0	0	0	0	3	0	13	5,113	
Pk Hr	All	3	5	1,622	0	1	0	1,097	7	0	0	0	0	0	0	0	10	2,745	
	HV	0	0	33	0	0	0	14	0	0	0	0	0	0	0	0	0	47	
	HV%	0%	0%	2%	-	0%	-	1%	0%	-	-	-	-	-	-	-	0%	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	9	8	0	0	17	1	0	0	1	2	1	0	0	1	2
4:15 PM	7	3	0	0	10	0	0	0	0	0	0	0	0	0	0
4:30 PM	7	3	0	0	10	0	0	0	0	0	1	0	0	1	2
4:45 PM	11	4	0	0	15	0	0	0	0	0	0	0	1	0	1
5:00 PM	8	3	0	0	11	0	0	0	0	0	0	0	0	0	0
5:15 PM	7	4	0	0	11	0	0	0	0	0	0	0	1	0	1
5:30 PM	7	6	0	0	13	0	0	0	0	0	0	0	0	0	0
5:45 PM	6	1	0	0	7	0	0	0	0	0	0	0	0	0	0
Count Total	62	32	0	0	94	1	0	0	1	2	2	0	2	2	6
Peak Hour	33	14	0	0	47	0	0	0	0	0	1	0	2	1	4

Count Summaries - Heavy Vehicles

Interval Start	Circle Dr				Circle Dr				n/a				East Access				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	9	0	0	0	7	1	0	0	0	0	0	0	0	0	17	0
4:15 PM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10	0
4:30 PM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10	0
4:45 PM	0	0	11	0	0	0	4	0	0	0	0	0	0	0	0	0	15	52
5:00 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11	46
5:15 PM	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	11	47
5:30 PM	0	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	13	50
5:45 PM	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7	42
Count Total	0	0	62	0	0	0	31	1	0	0	0	0	0	0	0	0	94	
Pk Hr Heavy	0	0	33	0	0	0	14	0	0	0	0	0	0	0	0	0	47	

Count Summaries - Bikes

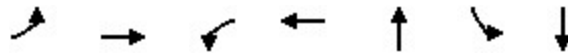
Interval Start	Circle Dr				Circle Dr				n/a				East Access				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	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	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

APPENDIX D – Existing Synchro Outputs

Queues

1: Janitell Rd & Circle Dr

06/26/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	161	1022	4	1362	3	94	178
v/c Ratio	0.72	0.28	0.05	0.46	0.04	0.56	0.60
Control Delay (s/veh)	74.7	5.5	47.0	28.8	57.0	68.5	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.7	5.5	47.0	28.8	57.0	68.5	15.9
Queue Length 50th (ft)	140	62	3	318	2	82	2
Queue Length 95th (ft)	207	182	m7	447	12	124	64
Internal Link Dist (ft)		457		123	487		18
Turn Bay Length (ft)	200		200			160	
Base Capacity (vph)	298	3709	160	2963	226	199	413
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.28	0.03	0.46	0.01	0.47	0.43





















Intersection Summary

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






HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr

06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	903	6	3	1073	85	0	2	1	84	2	157
Future Volume (veh/h)	143	903	6	3	1073	85	0	2	1	84	2	157
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	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	161	1015	7	4	1262	100	0	2	1	94	2	176
Peak Hour Factor	0.89	0.89	0.89	0.85	0.85	0.85	0.85	0.85	0.85	0.89	0.89	0.89
Percent Heavy Veh, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	186	3312	23	73	2796	222	74	35	17	205	2	200
Arrive On Green	0.11	0.68	0.68	0.04	0.62	0.62	0.00	0.03	0.03	0.07	0.14	0.14
Sat Flow, veh/h	1668	4900	34	1668	4518	358	1668	1102	551	1668	17	1470
Grp Volume(v), veh/h	161	660	362	4	891	471	0	0	3	94	0	178
Grp Sat Flow(s),veh/h/ln	1668	1594	1746	1668	1594	1687	1668	0	1653	1668	0	1487
Q Serve(g_s), s	13.1	11.7	11.7	0.3	20.4	20.4	0.0	0.0	0.2	7.3	0.0	16.2
Cycle Q Clear(g_c), s	13.1	11.7	11.7	0.3	20.4	20.4	0.0	0.0	0.2	7.3	0.0	16.2
Prop In Lane	1.00		0.02	1.00		0.21	1.00		0.33	1.00		0.99
Lane Grp Cap(c), veh/h	186	2155	1180	73	1973	1044	74	0	52	205	0	202
V/C Ratio(X)	0.87	0.31	0.31	0.06	0.45	0.45	0.00	0.00	0.06	0.46	0.00	0.88
Avail Cap(c_a), veh/h	302	2155	1180	163	1973	1044	182	0	228	273	0	269
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	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.3	9.1	9.1	63.3	13.9	13.9	0.0	0.0	64.8	57.4	0.0	58.5
Incr Delay (d2), s/veh	13.7	0.4	0.7	0.3	0.7	1.4	0.0	0.0	0.5	1.6	0.0	22.0
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	6.1	3.8	4.3	0.1	7.0	7.6	0.0	0.0	0.1	3.2	0.0	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.0	9.5	9.8	63.6	14.7	15.3	0.0	0.0	65.3	59.0	0.0	80.5
LnGrp LOS	E	A	A	E	B	B			E	E		F
Approach Vol, veh/h	1183				1366		3				272	
Approach Delay, s/veh	18.4				15.0		65.3				73.1	
Approach LOS	B				B		E				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	99.8	0.0	25.7	20.4	91.9	14.4	11.3				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	2.3	13.7	0.0	18.2	15.1	22.4	9.3	2.2				
Green Ext Time (p_c), s	0.0	7.5	0.0	0.5	0.3	10.7	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			22.1									
HCM 7th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↓			↗
Traffic Vol, veh/h	0	988	1161	3	0	0
Future Vol, veh/h	0	988	1161	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	90	85	85	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	1098	1366	4	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	685
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.3
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	4
Pot Cap-1 Maneuver	0	-	-	-	0	321
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	321
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		0		
HCM LOS					A	
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Ctrl Dly (s/v)	-	-	-	0		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	-		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	980	1154	26	1	10
Future Vol, veh/h	8	980	1154	26	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	85	85	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	9	1114	1358	31	1	11

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1388	0	-	0	1837
Stage 1	-	-	-	-	1373
Stage 2	-	-	-	-	464
Critical Hdwy	5.5	-	-	-	5.9
Critical Hdwy Stg 1	-	-	-	-	6.8
Critical Hdwy Stg 2	-	-	-	-	6.2
Follow-up Hdwy	3.2	-	-	-	3.9
Pot Cap-1 Maneuver	235	-	-	-	*175
Stage 1	-	-	-	-	*133
Stage 2	-	-	-	-	*761
Platoon blocked, %		-	-	-	0
Mov Cap-1 Maneuver	235	-	-	-	*168
Mov Cap-2 Maneuver	-	-	-	-	*168
Stage 1	-	-	-	-	*127
Stage 2	-	-	-	-	*761

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.17	0	17.83
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	235	-	-	-	293
HCM Lane V/C Ratio	0.039	-	-	-	0.041
HCM Ctrl Dly (s/v)	20.9	-	-	-	17.8
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

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

Queues

1: Janitell Rd & Circle Dr

06/26/2025























Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	1635	1203	2	2	144	234
v/c Ratio	0.57	0.41	0.36	0.02	0.01	0.72	0.49
Control Delay (s/veh)	73.6	5.0	28.3	53.5	0.0	77.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.6	5.0	28.3	53.5	0.0	77.8	3.5
Queue Length 50th (ft)	78	126	366	2	0	128	0
Queue Length 95th (ft)	132	230	453	9	0	176	0
Internal Link Dist (ft)		457	123		487		18
Turn Bay Length (ft)	200			90		160	
Base Capacity (vph)	317	4016	3362	134	424	212	591
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.41	0.36	0.01	0.00	0.68	0.40
Intersection Summary							

HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr

06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	1501	3	0	1058	49	2	0	2	125	0	204
Future Volume (veh/h)	82	1501	3	0	1058	49	2	0	2	125	0	204
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	1632	3	0	1150	53	2	0	2	144	0	234
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.85	0.85	0.85	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	115	3518	6	1	2840	131	123	0	168	352	0	257
Arrive On Green	0.07	0.67	0.67	0.00	0.57	0.57	0.03	0.00	0.11	0.09	0.00	0.16
Sat Flow, veh/h	1767	5221	10	1767	4963	229	1767	0	1572	1767	0	1572
Grp Volume(v), veh/h	89	1056	579	0	782	421	2	0	2	144	0	234
Grp Sat Flow(s),veh/h/ln	1767	1689	1854	1767	1689	1814	1767	0	1572	1767	0	1572
Q Serve(g_s), s	6.8	20.5	20.5	0.0	17.8	17.8	0.1	0.0	0.2	9.7	0.0	20.2
Cycle Q Clear(g_c), s	6.8	20.5	20.5	0.0	17.8	17.8	0.1	0.0	0.2	9.7	0.0	20.2
Prop In Lane	1.00		0.01	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	2275	1249	1	1933	1038	123	0	168	352	0	257
V/C Ratio(X)	0.77	0.46	0.46	0.00	0.40	0.41	0.02	0.00	0.01	0.41	0.00	0.91
Avail Cap(c_a), veh/h	320	2275	1249	173	1933	1038	187	0	217	392	0	285
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.5	10.7	10.7	0.0	16.4	16.4	52.2	0.0	55.1	47.3	0.0	56.7
Incr Delay (d2), s/veh	10.4	0.7	1.2	0.0	0.6	1.2	0.1	0.0	0.0	0.8	0.0	29.7
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	3.4	7.1	8.0	0.0	6.7	7.4	0.1	0.0	0.1	4.4	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.9	11.4	11.9	0.0	17.1	17.6	52.2	0.0	55.2	48.1	0.0	86.4
LnGrp LOS	E	B	B		B	B	D		E	D		F
Approach Vol, veh/h	1724			1203			4			378		
Approach Delay, s/veh	14.8			17.3			53.7			71.8		
Approach LOS	B			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	99.5	9.0	29.5	14.0	85.5	16.8	21.7				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	0.0	22.5	2.1	22.2	8.8	19.8	11.7	2.2				
Green Ext Time (p_c), s	0.0	14.8	0.0	0.4	0.2	9.0	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	22.2											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection







Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↑
Traffic Vol, veh/h	0	1628	1107	0	0	0
Future Vol, veh/h	0	1628	1107	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1770	1203	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 602
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 7.16
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.93
Pot Cap-1 Maneuver	0	-	- - 0 378
Stage 1	0	-	- - 0 -
Stage 2	0	-	- - 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - 378
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1623	1097	7	0	10
Future Vol, veh/h	5	1623	1097	7	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	91	91	85	85
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	1764	1205	8	0	12

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1213	0	0 1926 607
Stage 1	-	-	- 1209 -
Stage 2	-	-	- 717 -
Critical Hdwy	5.36	-	- 5.76 7.16
Critical Hdwy Stg 1	-	-	- 6.66 -
Critical Hdwy Stg 2	-	-	- 6.06 -
Follow-up Hdwy	3.13	-	- 3.83 3.93
Pot Cap-1 Maneuver	306	-	- *252 375
Stage 1	-	-	- *178 -
Stage 2	-	-	- *668 -
Platoon blocked, %	-	-	- 0
Mov Cap-1 Maneuver	306	-	- *248 375
Mov Cap-2 Maneuver	-	-	- *248 -
Stage 1	-	-	- *175 -
Stage 2	-	-	- *668 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.05	0	14.92
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	306	-	-	-	375
HCM Lane V/C Ratio	0.018	-	-	-	0.031
HCM Ctrl Dly (s/v)	17	-	-	-	14.9
HCM Lane LOS	C	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

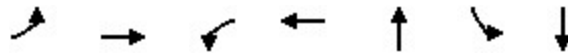
Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

APPENDIX E – Background (without site development) Synchro Outputs

Queues

1: Janitell Rd & Circle Dr

06/26/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	155	1032	3	1308	3	91	173
v/c Ratio	0.71	0.28	0.04	0.44	0.04	0.54	0.59
Control Delay (s/veh)	74.7	5.5	47.3	28.5	57.0	68.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.7	5.5	47.3	28.5	57.0	68.1	16.0
Queue Length 50th (ft)	135	62	3	300	2	80	2
Queue Length 95th (ft)	203	186	m4	457	13	122	67
Internal Link Dist (ft)		457		123	487		18
Turn Bay Length (ft)	200		200			160	
Base Capacity (vph)	297	3716	160	2984	226	199	409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.28	0.02	0.44	0.01	0.46	0.42





















Intersection Summary

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

HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr

06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	943	6	3	1119	85	0	2	1	84	2	157
Future Volume (veh/h)	143	943	6	3	1119	85	0	2	1	84	2	157
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	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	155	1025	7	3	1216	92	0	2	1	91	2	171
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	180	3328	23	73	2838	215	74	33	16	200	2	195
Arrive On Green	0.11	0.68	0.68	0.04	0.63	0.63	0.00	0.03	0.03	0.07	0.13	0.13
Sat Flow, veh/h	1668	4901	33	1668	4535	343	1668	1102	551	1668	17	1470
Grp Volume(v), veh/h	155	667	365	3	855	453	0	0	3	91	0	173
Grp Sat Flow(s),veh/h/ln	1668	1594	1746	1668	1594	1690	1668	0	1653	1668	0	1487
Q Serve(g_s), s	12.6	11.7	11.7	0.2	18.9	18.9	0.0	0.0	0.2	7.1	0.0	15.8
Cycle Q Clear(g_c), s	12.6	11.7	11.7	0.2	18.9	18.9	0.0	0.0	0.2	7.1	0.0	15.8
Prop In Lane	1.00		0.02	1.00		0.20	1.00		0.33	1.00		0.99
Lane Grp Cap(c), veh/h	180	2165	1186	73	1995	1057	74	0	49	200	0	197
V/C Ratio(X)	0.86	0.31	0.31	0.04	0.43	0.43	0.00	0.00	0.06	0.45	0.00	0.88
Avail Cap(c_a), veh/h	302	2165	1186	163	1995	1057	182	0	228	271	0	269
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	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.6	9.0	9.0	63.2	13.2	13.2	0.0	0.0	65.1	57.7	0.0	58.8
Incr Delay (d2), s/veh	12.3	0.4	0.7	0.2	0.7	1.3	0.0	0.0	0.5	1.6	0.0	20.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	3.8	4.3	0.1	6.5	7.0	0.0	0.0	0.1	3.1	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.9	9.4	9.7	63.5	13.9	14.5	0.0	0.0	65.6	59.3	0.0	79.7
LnGrp LOS	E	A	A	E	B	B			E	E		E
Approach Vol, veh/h	1187				1311		3				264	
Approach Delay, s/veh	17.7				14.2		65.6				72.7	
Approach LOS	B				B		E				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	100.2	0.0	25.3	19.9	92.8	14.2	11.1				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	2.2	13.7	0.0	17.8	14.6	20.9	9.1	2.2				
Green Ext Time (p_c), s	0.0	7.6	0.0	0.5	0.3	10.2	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	21.4											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection







Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↑
Traffic Vol, veh/h	0	1028	1207	3	0	0
Future Vol, veh/h	0	1028	1207	3	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	1117	1312	3	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	7.3
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	4
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	334
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Ctrl Dly (s/v)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	1020	1200	26	1	10
Future Vol, veh/h	8	1020	1200	26	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	9	1109	1304	28	1	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1333	0	0 1779 666
Stage 1	-	-	- 1318 -
Stage 2	-	-	- 461 -
Critical Hdwy	5.5	-	- 5.9 7.3
Critical Hdwy Stg 1	-	-	- 6.8 -
Critical Hdwy Stg 2	-	-	- 6.2 -
Follow-up Hdwy	3.2	-	- 3.9 4
Pot Cap-1 Maneuver	251	-	- *190 330
Stage 1	-	-	- *144 -
Stage 2	-	-	- *761 -
Platoon blocked, %	-	-	- 0
Mov Cap-1 Maneuver	251	-	- *183 330
Mov Cap-2 Maneuver	-	-	- *183 -
Stage 1	-	-	- *139 -
Stage 2	-	-	- *761 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.15	0	17.18
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	251	-	-	-	308
HCM Lane V/C Ratio	0.035	-	-	-	0.039
HCM Ctrl Dly (s/v)	19.9	-	-	-	17.2
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

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

Queues

1: Janitell Rd & Circle Dr

06/26/2025



























Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	1706	1252	2	2	136	222
v/c Ratio	0.57	0.42	0.37	0.02	0.01	0.69	0.47
Control Delay (s/veh)	73.6	5.1	26.1	53.5	0.0	75.4	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.6	5.1	26.1	53.5	0.0	75.4	3.2
Queue Length 50th (ft)	78	134	247	2	0	120	0
Queue Length 95th (ft)	132	245	456	10	0	174	0
Internal Link Dist (ft)		457	123		487		18
Turn Bay Length (ft)	200			90		160	
Base Capacity (vph)	317	4022	3371	134	425	212	589
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.42	0.37	0.01	0.00	0.64	0.38
Intersection Summary							






HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr

06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	82	1567	3	0	1103	49	2	0	2	125	0	204
Future Volume (veh/h)	82	1567	3	0	1103	49	2	0	2	125	0	204
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	1703	3	0	1199	53	2	0	2	136	0	222
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	115	3555	6	1	2881	127	123	0	162	340	0	246
Arrive On Green	0.07	0.68	0.68	0.00	0.58	0.58	0.03	0.00	0.10	0.08	0.00	0.16
Sat Flow, veh/h	1767	5222	9	1767	4973	220	1767	0	1572	1767	0	1572
Grp Volume(v), veh/h	89	1101	605	0	814	438	2	0	2	136	0	222
Grp Sat Flow(s),veh/h/ln	1767	1689	1854	1767	1689	1816	1767	0	1572	1767	0	1572
Q Serve(g_s), s	6.8	21.3	21.3	0.0	18.4	18.5	0.1	0.0	0.2	9.2	0.0	19.1
Cycle Q Clear(g_c), s	6.8	21.3	21.3	0.0	18.4	18.5	0.1	0.0	0.2	9.2	0.0	19.1
Prop In Lane	1.00		0.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	2299	1262	1	1956	1052	123	0	162	340	0	246
V/C Ratio(X)	0.77	0.48	0.48	0.00	0.42	0.42	0.02	0.00	0.01	0.40	0.00	0.90
Avail Cap(c_a), veh/h	320	2299	1262	173	1956	1052	188	0	217	388	0	285
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.5	10.4	10.4	0.0	16.1	16.1	52.5	0.0	55.6	47.9	0.0	57.2
Incr Delay (d2), s/veh	10.4	0.7	1.3	0.0	0.7	1.2	0.1	0.0	0.0	0.8	0.0	27.4
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	3.4	7.3	8.2	0.0	6.9	7.6	0.1	0.0	0.1	4.2	0.0	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.9	11.2	11.7	0.0	16.7	17.3	52.6	0.0	55.6	48.7	0.0	84.5
LnGrp LOS	E	B	B		B	B	D		E	D		F
Approach Vol, veh/h	1795			1252			4			358		
Approach Delay, s/veh	14.5			16.9			54.1			70.9		
Approach LOS	B			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	100.4	9.0	28.6	14.0	86.4	16.3	21.2				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	0.0	23.3	2.1	21.1	8.8	20.5	11.2	2.2				
Green Ext Time (p_c), s	0.0	15.8	0.0	0.4	0.2	9.5	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	21.3											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↓			↗
Traffic Vol, veh/h	0	1694	1152	0	0	0
Future Vol, veh/h	0	1694	1152	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1841	1252	0	0	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	626
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	364
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	364
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Ctrl Dly (s/v)	-	-	-	0		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	-		

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1689	1142	7	0	10
Future Vol, veh/h	5	1689	1142	7	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	5	1836	1241	8	0	11

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1249	0	0 1990 624
Stage 1	-	-	- 1245 -
Stage 2	-	-	- 745 -
Critical Hdwy	5.36	-	- 5.76 7.16
Critical Hdwy Stg 1	-	-	- 6.66 -
Critical Hdwy Stg 2	-	-	- 6.06 -
Follow-up Hdwy	3.13	-	- 3.83 3.93
Pot Cap-1 Maneuver	294	-	- *242 365
Stage 1	-	-	- *169 -
Stage 2	-	-	- *655 -
Platoon blocked, %		-	- 0
Mov Cap-1 Maneuver	294	-	- *238 365
Mov Cap-2 Maneuver	-	-	- *238 -
Stage 1	-	-	- *166 -
Stage 2	-	-	- *655 -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.05	0	15.17
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	294	-	-	-	365
HCM Lane V/C Ratio	0.019	-	-	-	0.03
HCM Ctrl Dly (s/v)	17.5	-	-	-	15.2
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

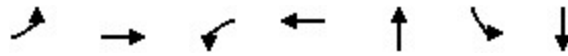
Notes	
~: Volume exceeds capacity	\$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

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

Queues

1: Janitell Rd & Circle Dr

06/26/2025



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	155	1044	3	1322	3	91	173
v/c Ratio	0.71	0.28	0.04	0.44	0.04	0.54	0.59
Control Delay (s/veh)	74.7	5.5	47.7	28.2	57.0	68.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.7	5.5	47.7	28.2	57.0	68.1	16.0
Queue Length 50th (ft)	135	63	2	300	2	80	2
Queue Length 95th (ft)	203	189	m4	467	13	122	67
Internal Link Dist (ft)		457		123	487		168
Turn Bay Length (ft)	200		200			160	
Base Capacity (vph)	297	3716	160	2986	226	199	409
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.28	0.02	0.44	0.01	0.46	0.42





















Intersection Summary

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

HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr

06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	954	6	3	1132	85	0	2	1	84	2	157
Future Volume (veh/h)	143	954	6	3	1132	85	0	2	1	84	2	157
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	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	155	1037	7	3	1230	92	0	2	1	91	2	171
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	180	3328	22	73	2840	212	74	33	16	200	2	195
Arrive On Green	0.11	0.68	0.68	0.04	0.63	0.63	0.00	0.03	0.03	0.07	0.13	0.13
Sat Flow, veh/h	1668	4901	33	1668	4540	339	1668	1102	551	1668	17	1470
Grp Volume(v), veh/h	155	675	369	3	864	458	0	0	3	91	0	173
Grp Sat Flow(s),veh/h/ln	1668	1594	1746	1668	1594	1691	1668	0	1653	1668	0	1487
Q Serve(g_s), s	12.6	11.9	11.9	0.2	19.2	19.2	0.0	0.0	0.2	7.1	0.0	15.8
Cycle Q Clear(g_c), s	12.6	11.9	11.9	0.2	19.2	19.2	0.0	0.0	0.2	7.1	0.0	15.8
Prop In Lane	1.00		0.02	1.00		0.20	1.00		0.33	1.00		0.99
Lane Grp Cap(c), veh/h	180	2165	1186	73	1995	1058	74	0	49	200	0	197
V/C Ratio(X)	0.86	0.31	0.31	0.04	0.43	0.43	0.00	0.00	0.06	0.45	0.00	0.88
Avail Cap(c_a), veh/h	302	2165	1186	163	1995	1058	182	0	228	271	0	269
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	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.6	9.0	9.0	63.2	13.3	13.3	0.0	0.0	65.1	57.7	0.0	58.8
Incr Delay (d2), s/veh	12.3	0.4	0.7	0.2	0.7	1.3	0.0	0.0	0.5	1.6	0.0	20.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	3.9	4.3	0.1	6.6	7.2	0.0	0.0	0.1	3.1	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.9	9.4	9.7	63.5	13.9	14.6	0.0	0.0	65.6	59.3	0.0	79.7
LnGrp LOS	E	A	A	E	B	B			E	E		E
Approach Vol, veh/h	1199			1325			3			264		
Approach Delay, s/veh	17.7			14.3			65.6			72.7		
Approach LOS	B			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	100.2	0.0	25.3	19.9	92.8	14.2	11.1				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	2.2	13.9	0.0	17.8	14.6	21.2	9.1	2.2				
Green Ext Time (p_c), s	0.0	7.7	0.0	0.5	0.3	10.3	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	21.3											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection







Int Delay, s/veh 0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↑
Traffic Vol, veh/h	0	1039	1137	49	0	83
Future Vol, veh/h	0	1039	1137	49	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	1129	1236	53	0	90

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 645
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 7.3
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 4
Pot Cap-1 Maneuver	0	-	- 0 341
Stage 1	0	-	- 0 -
Stage 2	0	-	- 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - 341
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	19.31
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	341
HCM Lane V/C Ratio	-	-	-	0.264
HCM Ctrl Dly (s/v)	-	-	-	19.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q(veh)	-	-	-	1

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	1020	1172	66	13	14
Future Vol, veh/h	19	1020	1172	66	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	21	1109	1274	72	14	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1346	0	0 1795 673
Stage 1	-	-	- 1310 -
Stage 2	-	-	- 485 -
Critical Hdwy	5.5	-	- 5.9 7.3
Critical Hdwy Stg 1	-	-	- 6.8 -
Critical Hdwy Stg 2	-	-	- 6.2 -
Follow-up Hdwy	3.2	-	- 3.9 4
Pot Cap-1 Maneuver	247	-	- *186 327
Stage 1	-	-	- *146 -
Stage 2	-	-	- *761 -
Platoon blocked, %	-	-	- 0
Mov Cap-1 Maneuver	247	-	- *170 327
Mov Cap-2 Maneuver	-	-	- *170 -
Stage 1	-	-	- *133 -
Stage 2	-	-	- *761 -




Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.38	0	23.24
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	247	-	-	-	227
HCM Lane V/C Ratio	0.084	-	-	-	0.13
HCM Ctrl Dly (s/v)	20.9	-	-	-	23.2
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.4

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

Intersection




Int Delay, s/veh 2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	25	60	18	0
Future Vol, veh/h	0	9	25	60	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	10	27	65	20	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	139	20	20
Stage 1	20	-	-
Stage 2	120	-	-
Critical Hdwy	6.5	6.3	4.2
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.5	-	-
Follow-up Hdwy	3.59	3.39	2.29
Pot Cap-1 Maneuver	835	1036	1546
Stage 1	983	-	-
Stage 2	886	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	820	1036	1546
Mov Cap-2 Maneuver	820	-	-
Stage 1	965	-	-
Stage 2	886	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.51	2.17	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	529	-	1036	-	-
HCM Lane V/C Ratio	0.018	-	0.009	-	-
HCM Ctrl Dly (s/v)	7.4	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	26	34	11	0
Future Vol, veh/h	0	7	26	34	11	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	8	28	37	12	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	105	12	12	0	-	0
Stage 1	12	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	873	1046	1556	-	-	-
Stage 1	991	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	857	1046	1556	-	-	-
Mov Cap-2 Maneuver	857	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	8.47	3.19		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	780	-	1046	-	-	
HCM Lane V/C Ratio	0.018	-	0.007	-	-	
HCM Ctrl Dly (s/v)	7.4	0	8.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	

Queues

1: Janitell Rd & Circle Dr

06/26/2025



























Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	89	1721	1267	2	2	136	222
v/c Ratio	0.57	0.43	0.38	0.02	0.01	0.69	0.47
Control Delay (s/veh)	73.6	5.1	23.9	53.5	0.0	75.4	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.6	5.1	23.9	53.5	0.0	75.4	3.3
Queue Length 50th (ft)	78	136	232	2	0	120	0
Queue Length 95th (ft)	132	247	444	10	0	174	0
Internal Link Dist (ft)		457	123		487		18
Turn Bay Length (ft)	200			90		160	
Base Capacity (vph)	317	4022	3371	134	425	212	588
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.43	0.38	0.01	0.00	0.64	0.38
Intersection Summary							

HCM 7th Signalized Intersection Summary

1: Janitell Rd & Circle Dr






06/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	82	1581	3	0	1117	49	2	0	2	125	0	204
Future Volume (veh/h)	82	1581	3	0	1117	49	2	0	2	125	0	204
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	1718	3	0	1214	53	2	0	2	136	0	222
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	115	3555	6	1	2883	126	123	0	162	340	0	246
Arrive On Green	0.07	0.68	0.68	0.00	0.58	0.58	0.03	0.00	0.10	0.08	0.00	0.16
Sat Flow, veh/h	1767	5222	9	1767	4976	217	1767	0	1572	1767	0	1572
Grp Volume(v), veh/h	89	1111	610	0	824	443	2	0	2	136	0	222
Grp Sat Flow(s),veh/h/ln	1767	1689	1854	1767	1689	1816	1767	0	1572	1767	0	1572
Q Serve(g_s), s	6.8	21.6	21.6	0.0	18.7	18.7	0.1	0.0	0.2	9.2	0.0	19.1
Cycle Q Clear(g_c), s	6.8	21.6	21.6	0.0	18.7	18.7	0.1	0.0	0.2	9.2	0.0	19.1
Prop In Lane	1.00		0.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	2299	1262	1	1956	1052	123	0	162	340	0	246
V/C Ratio(X)	0.77	0.48	0.48	0.00	0.42	0.42	0.02	0.00	0.01	0.40	0.00	0.90
Avail Cap(c_a), veh/h	320	2299	1262	173	1956	1052	188	0	217	388	0	285
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.5	10.5	10.5	0.0	16.2	16.2	52.5	0.0	55.6	47.9	0.0	57.2
Incr Delay (d2), s/veh	10.4	0.7	1.3	0.0	0.7	1.2	0.1	0.0	0.0	0.8	0.0	27.4
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	3.4	7.4	8.4	0.0	7.0	7.7	0.1	0.0	0.1	4.2	0.0	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.9	11.2	11.8	0.0	16.8	17.4	52.6	0.0	55.6	48.7	0.0	84.5
LnGrp LOS	E	B	B		B	B	D		E	D		F
Approach Vol, veh/h	1810			1267			4			358		
Approach Delay, s/veh	14.5			17.0			54.1			70.9		
Approach LOS	B			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	100.4	9.0	28.6	14.0	86.4	16.3	21.2				
Change Period (Y+Rc), s	6.5	6.5	5.0	7.0	5.0	6.5	5.0	7.0				
Max Green Setting (Gmax), s	13.5	65.5	9.0	25.0	25.0	55.5	15.0	19.0				
Max Q Clear Time (g_c+I1), s	0.0	23.6	2.1	21.1	8.8	20.7	11.2	2.2				
Green Ext Time (p_c), s	0.0	16.0	0.0	0.4	0.2	9.6	0.1	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	21.3											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑↑	↑↑↑↓			↗
Traffic Vol, veh/h	0	1708	1073	52	0	93
Future Vol, veh/h	0	1708	1073	52	0	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	1857	1166	57	0	101
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	611
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	0	-	-	-	0	372
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	372
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Ctrl Dly, s/v	0	0		18.24		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	372		
HCM Lane V/C Ratio	-	-	-	0.272		
HCM Ctrl Dly (s/v)	-	-	-	18.2		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	1.1		

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	1689	1111	52	13	14
Future Vol, veh/h	19	1689	1111	52	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	120	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	21	1836	1208	57	14	15




Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1264	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	5.36	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	3.13	-	-
Pot Cap-1 Maneuver	289	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	289	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-




Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.21	0	19.74
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	289	-	-	-	274
HCM Lane V/C Ratio	0.072	-	-	-	0.107
HCM Ctrl Dly (s/v)	18.4	-	-	-	19.7
HCM Lane LOS	C	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.4

Notes

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

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	29	42	17	0
Future Vol, veh/h	0	10	29	42	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	11	32	46	18	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	127	18	18	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	865	1057	1592	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	847	1057	1592	-	-	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	8.44	2.98		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	735	-	1057	-	-	
HCM Lane V/C Ratio	0.02	-	0.01	-	-	
HCM Ctrl Dly (s/v)	7.3	0	8.4	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	30	12	10	0
Future Vol, veh/h	0	7	30	12	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	8	33	13	11	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	89	11	11	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	909	1067	1602	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	890	1067	1602	-	-	-
Mov Cap-2 Maneuver	890	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	8.4	5.21		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1286	-	1067	-	-	
HCM Lane V/C Ratio	0.02	-	0.007	-	-	
HCM Ctrl Dly (s/v)	7.3	0	8.4	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	0	-	-	