

St. Mary's County Sports Complex

St. Mary's County, Maryland
April 1, 2026

Preliminary Traffic Impact Analysis

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APPENDICES

APPENDIX A – Intersection Turning Movement Counts and Aerial Photographs

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Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 29931, Expiration Date: 01/08/2028.



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EXECUTIVE SUMMARY

- The proposed St. Mary's County Sports Complex is situated on the east side of MD 4 (St. Andrews Church Road) opposite St. Andrews Lane in St. Mary's County, Maryland. It includes up to 10 soccer fields and an indoor building consisting of 117,668 sq ft.
- Access is proposed via one point along MD 4 opposite St. Andrews Lane.
- This preliminary analysis reviewed existing and projected future traffic operations at the proposed site access point and nearest major intersections to the north and south.
- If the project moves forward, a full Traffic Impact Study (TIS) may be required to satisfy St. Mary's County's Adequate Public Facilities Ordinance (APFO) requirements.
- The findings of this TIS will show that improvements may be required at the following intersections:
 - MD 4 at St. Andrews Lane
 - MD 4 at Indian Bridge Road
- Analysis was undertaken through traffic signalization or roundabout implementation at either location, and each potential improvement is shown to result in adequate levels of service.

INTRODUCTION AND SUMMARY OF FINDINGS

Study Purpose

The Traffic Group, Inc. has prepared this Preliminary TIS to assess the impact the proposed development of St. Mary's County Sports Complex will have on the surrounding road network in St. Mary's County. At this time, the site is proposed to be developed with up to 10 soccer fields and a recreation community center consisting of approximately 117,668 sq ft.

Access to the facility is proposed via one point along MD 4 (St. Andrews Church Road) improvements will likely be necessary at this location to accommodate projected future traffic volumes, which could include the implementation of traffic signalization or a roundabout.

Study Criteria/Methodology

The Scope of Work for this TIS includes analysis at the proposed site access point and nearest adjacent major intersections. If the project moves forward into a development phase, coordination will be required with St. Mary's County's Department of Land Use and Growth Management (LUGM) and the Maryland Department of Transportation State Highway Administration (MDOT SHA) in scoping, a TIS to satisfy APFO and site access requirements.

This study is based on turning movement counts collected in January 2025, during the AM, PM and Saturday peak periods at each of the study intersections. Future traffic is based on a regional growth factor and site trips from the Institute of Transportation Engineer's (ITE) Trip Generation (11th Edition).

Intersection capacity analysis was undertaken for all study intersections using both Critical Lane Volume (CLV) and Highway Capacity Manual (HCM) methodology, St. Mary's County would typically require Level of Service "D" for adequacy at study intersections. Queuing is also reported using HCM results.

EXISTING TRAFFIC CONDITIONS

Site Information

The proposed St. Mary's County Sports Complex is situated on the east side of MD 4 (St. Andrews Church Road) opposite St. Andrews Lane in St. Mary's County. The property is currently undeveloped.

For the purpose of this preliminary TIS, major roadways to the north and south of the site access point were selected for study. To the north the intersection of MD 4 at Wildewood Parkway is situated approximately 1.3 miles to the north to the south. The nearest major intersection to the south is Indian Bridge Road, which sits approximately 0.5 miles south of the site. Figure 1 includes a location map showing the site location and study intersections.

MDOT SHA owns and maintains MD 4. The roadway is classified as an Urban Minor Arterial on the State Secondary System. It runs for a distance of approximately 9.36 miles from the Calvert County line to MD 5 (Point Lookout Road). In the vicinity of the subject site, the roadway features one travel lane in each direction. The posted speed limit for this segment of MD 4 is 50 miles per hour.

The intersection of MD 4 at Indian Bridge Road features stop control for the minor approach. Effectively, this is a T-intersection with a driveway situated on the opposite side of Indian Bridge Road. MD 4 has a bypass lane in the southbound direction to accommodate left turn traffic. The northbound approach features a separate right turn lane. While Indian Bridge Road is typically one lane in each direction, it widens prior to its intersection with MD 4 to provide a 300-foot-long right turn lane.

The St. Andrews Lane intersection at MD 4 is stop controlled. There are existing left turn lanes in both directions and a northbound right turn lane into the future site access point, which is currently undeveloped. The St. Andrews Lane approach features one shared left/right turn lane.

The intersection of MD 4 at Wildewood Parkway is signalized. There are separate auxiliary lanes in both the northbound and southbound directions. Figure 2 provides a summary of the existing lane use, traffic control devices, and speed limits at all intersections.

Given the relatively rural nature of this area, there are no pedestrian facilities at any of the study intersections.

Figure 1 - Location Map for Site and Study Intersections

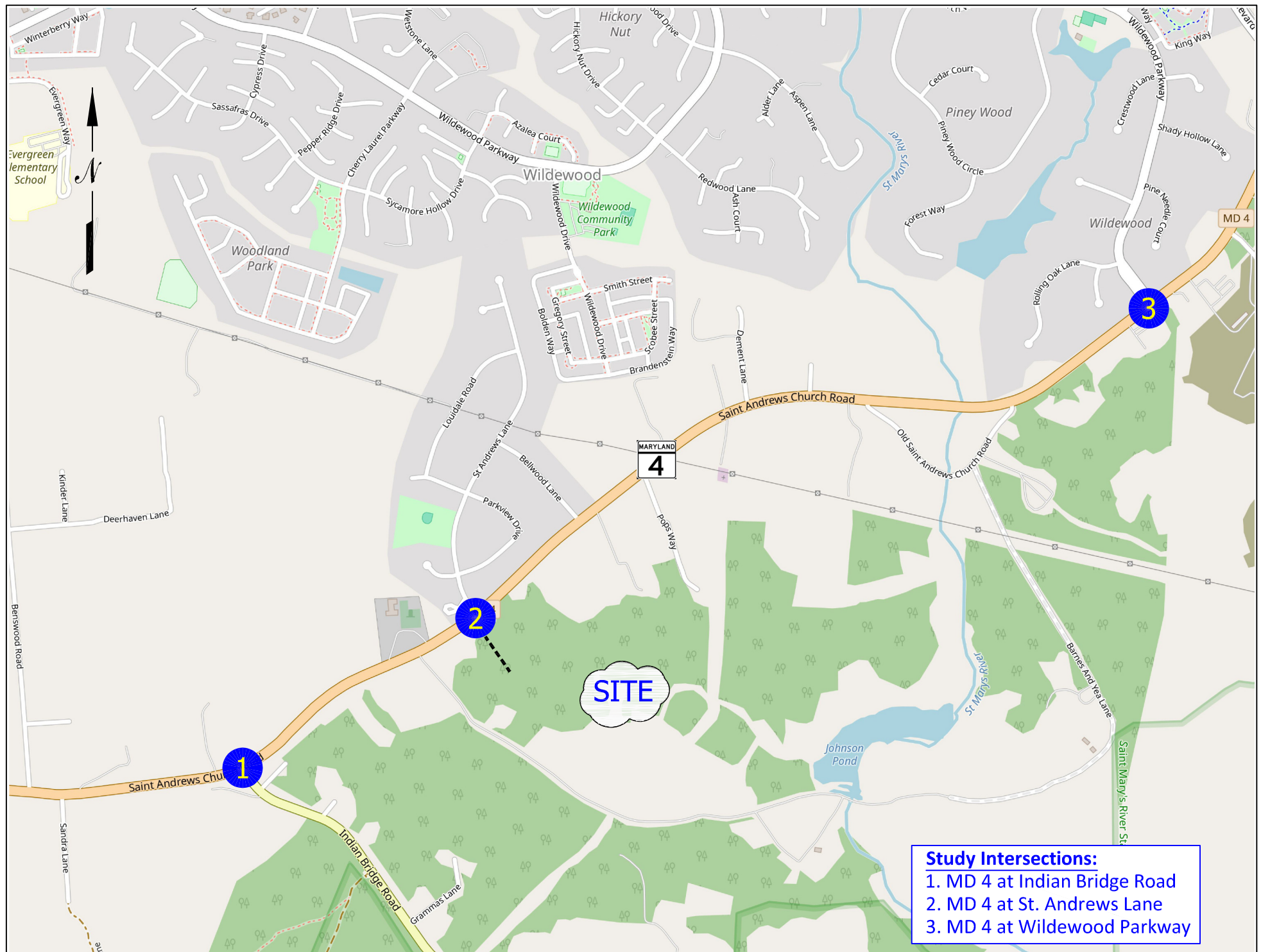
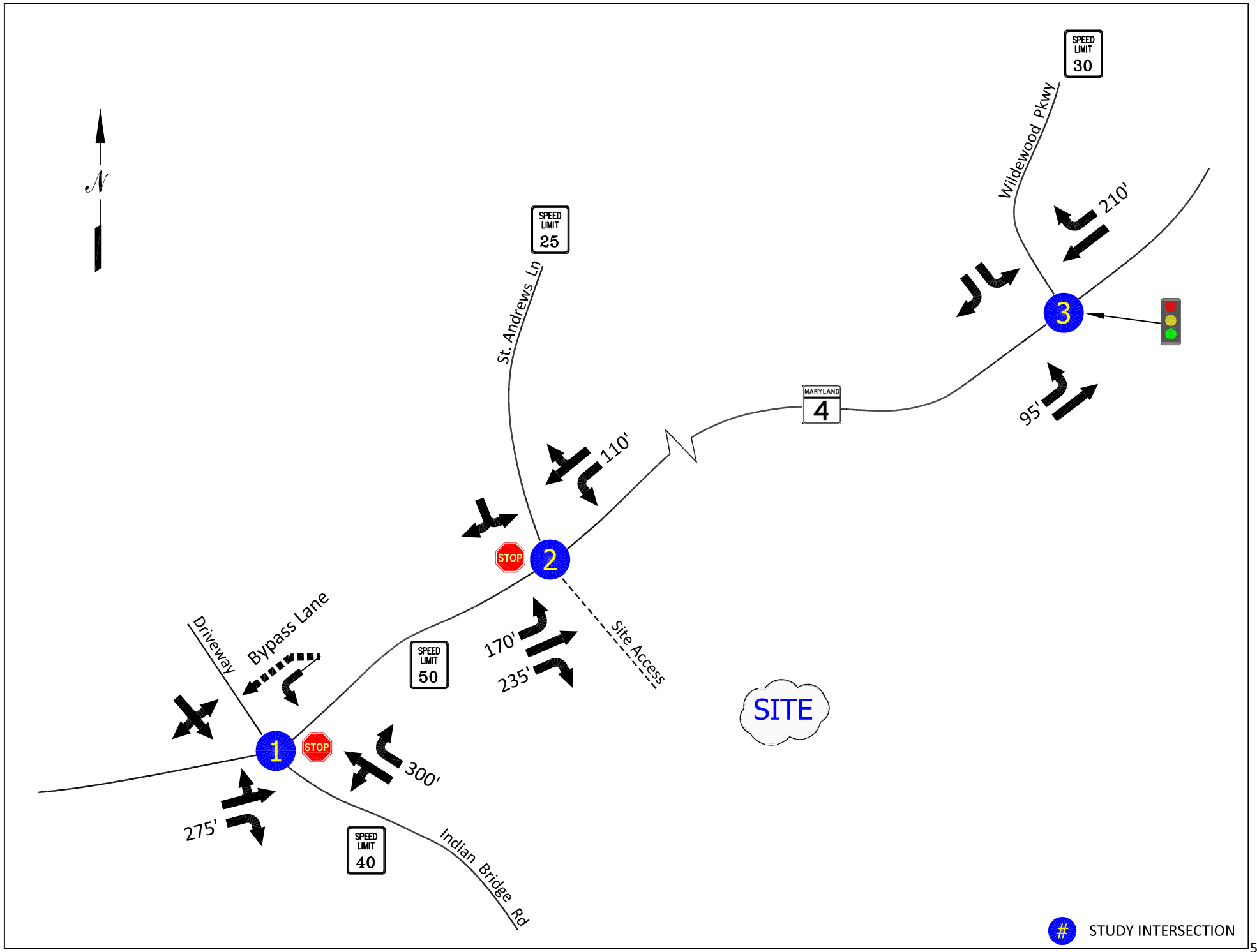


Figure 2 - Existing Lane Use and Traffic Control



St. Mary's Capital Improvement Program

St. Mary's County has a Capital Improvement Program project listed at the intersection of MD 4 at Wildwood Parkway. It involves creating a fourth leg at the intersection to provide consolidated access to properties on the east side of the roadway. The project number (HW-2105) has previously been approved for \$50,000 of engineering and survey work. It is listed as part of the 5-year capital plan, with all remaining funding occurring in Fiscal Year 2030. Details on the Capital Improvement Program project can be found in Appendix A.

MDOT SHA does not have any Consolidated Transportation Program (CTP) projects in the study area.

Traffic Volumes

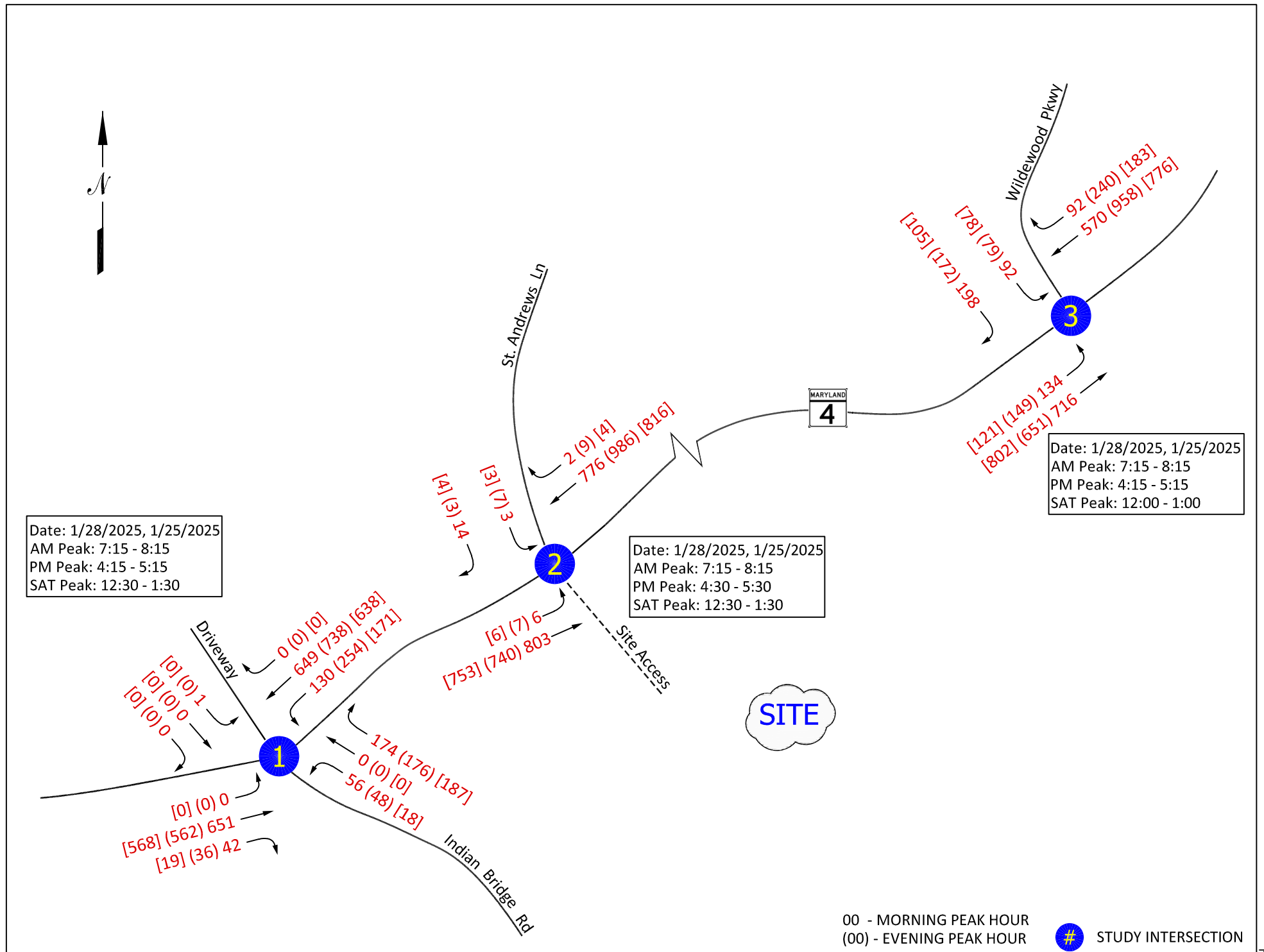
Intersection turning movement counts were collected at each of the study intersections in January 2025 for the AM, PM, and Saturday peak periods. The existing peak hour volumes are summarized in Figure 3. Complete details on the turning movement counts can be found in Appendix A.

A review of Figure 3 shows relatively even traffic volumes in the northbound and southbound direction during the AM peak. During the PM peak, it is found that traffic volumes are slightly heavier in the southbound direction of MD 4. On Saturday, volumes are also relatively evenly split.

At the proposed site access point with St. Andrews Lane, minimal traffic was found to use the intersection under existing conditions.

Indian Bridge Road, however, features significantly higher traffic volumes both turning left and turning right onto MD 4.

Figure 3 - Existing Peak Hour Traffic Volumes



BACKGROUND TRAFFIC CONDITIONS

Historical traffic volumes within the MD 4 corridor were reviewed to determine a Regional Growth Rate. Figure 4 summarizes the MDOT SHA Permanent Count Station located along MD 4, approximately 0.4 miles south of MD 235. As shown, over the last 10-year period traffic has slightly decreased from its high in 2016.

It is expected that St. Mary's Sports Complex will be developed within 3 years. To account for a 3-year growth period, a conservative 1% annual growth rate was supplied to all traffic volumes for a 3-year period. The regional growth is shown in Figure 5. Adding the regional growth to the existing peak hour traffic volumes results in the 2028 background peak hour traffic volumes as shown in Figure 6.

Figure 4 - Regional Traffic Growth Rate Projection



County:

ST. MARY'S

Municipality:

NONE

Prefix:

MD

Route NO:

4

Suffix: Mile Point:

5.7

Location:

MD4-.40 MI S OF MD235

Begin Sect:

3.55

End Sect:

6.1

Station Desc:

INDIAN BRIDGE RD TO MD 235

Func Class:

16-URBAN MINOR ARTERIAL

Location ID:

B3671

Year	AADT	AAWDT	Single Unit	Combination Unit	K Factor	D Factor	North East Split	South West Split	Dir In Peak Hour
2023	19,342	20,502	5	1	8.76	54.97	48.22	51.78	SOUTH
2022	19,051	20,581	5	1	8.76	54.97	48.22	51.78	SOUTH
2021	18,940	20,270	5	1	8.76	54.97	48.22	51.78	SOUTH
2020	16,433	17,753	5	1	8.6	60.37	49.57	50.43	SOUTH
2019	19,682	20,862	5	1	8.6	60.37	49.57	50.43	SOUTH
2018	19,681	21,061	5	1	8.6	60.37	49.57	50.43	SOUTH
2017	19,860	21,250	5	1	8.6	60.37	49.57	50.43	SOUTH
2016	20,452	21,882	5	1	8.62	59.77	49.5	50.5	SOUTH
2015	20,071	21,481	5	1	8.62	59.77	49.5	50.5	SOUTH
2014	19,560	20,930	5	1	8.62	59.77	49.5	50.5	SOUTH

Annual Growth Rate Projection: -0.12%

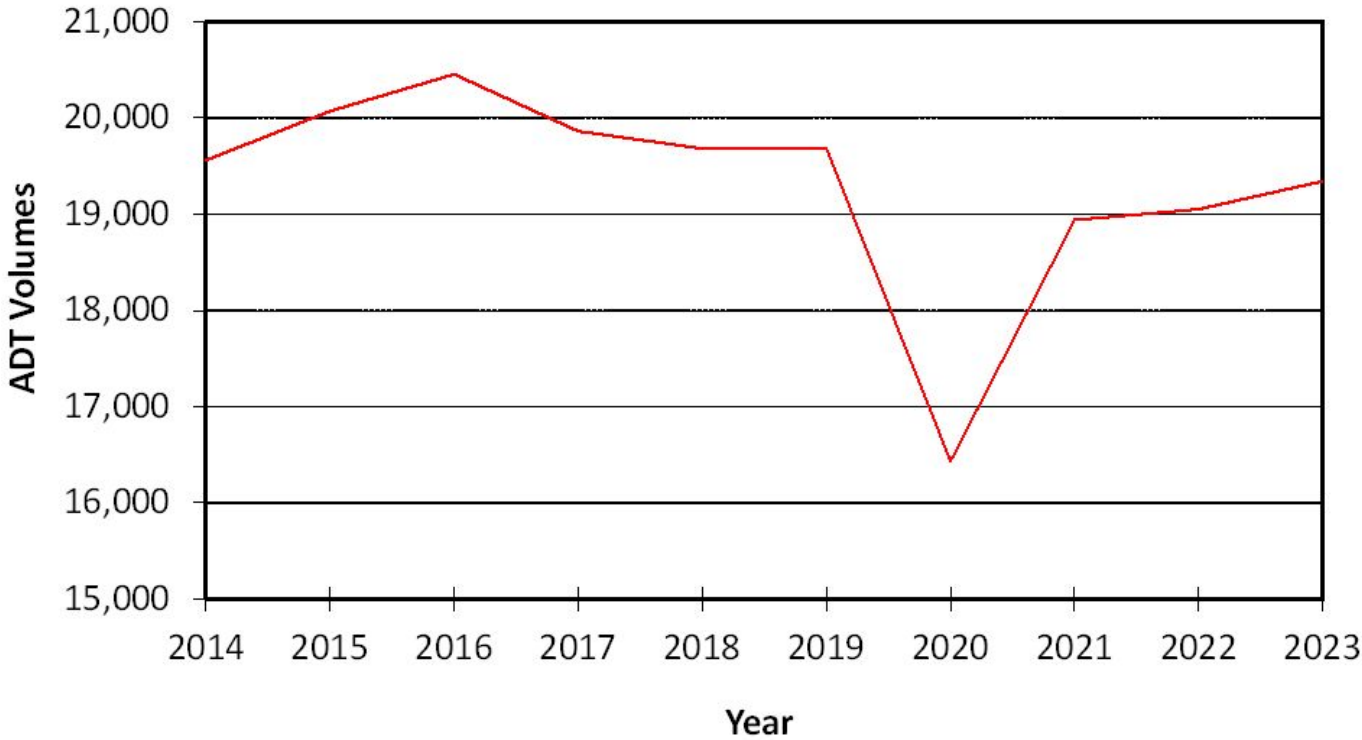


Figure 5 - Regional Traffic Growth

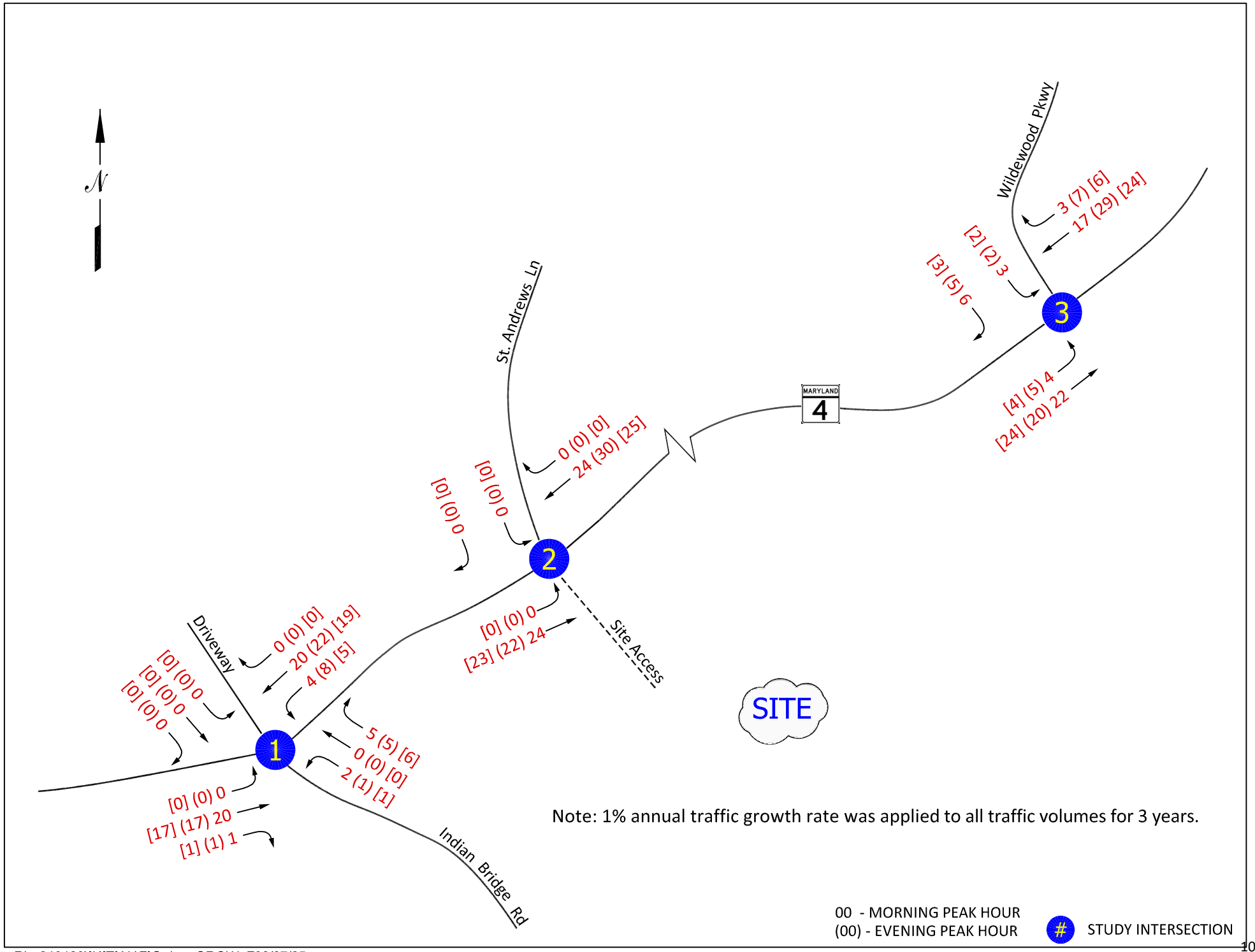
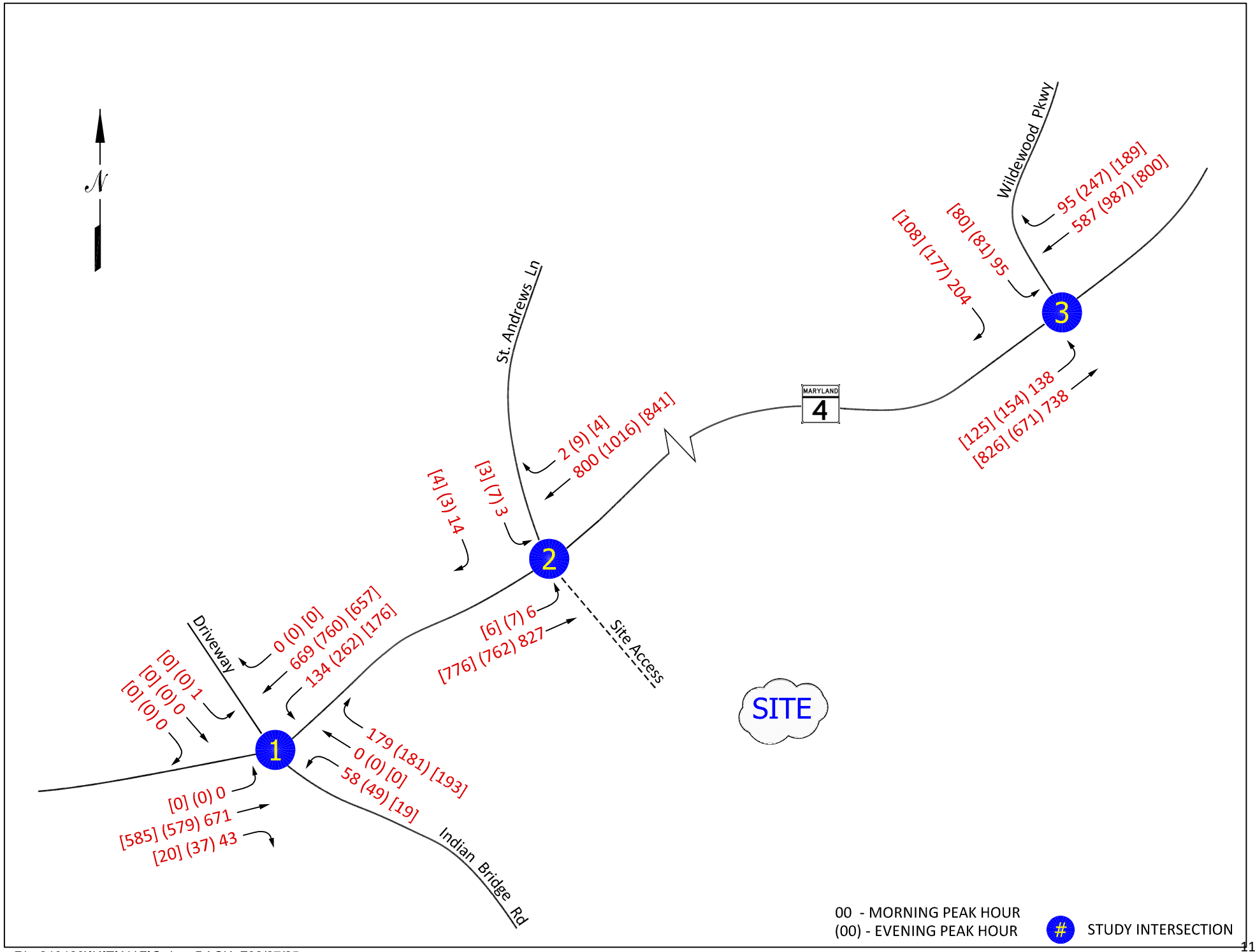


Figure 6 - 2028 Background Peak Hour Traffic Volumes



TOTAL TRAFFIC CONDITIONS

Site Information

The St. Mary's Sports Complex is proposed to be developed with 10 soccer fields and an indoor facility consisting of approximately 117,668 sq ft based on the most recent available plans. One point of access is proposed to the facility, which will be opposite St. Andrews Church Lane.

Trip Generation/Distribution

To quantify projected future trips for the site the ITE's Trip Generation (11th Edition) was utilized. This document provides future trip projections for different land uses based on data collected at similar facilities throughout the country. Specifically, Land Use Code 488 (Soccer Complex) and Land Use Code 495 (Recreational Community Center) were used in this case. The variable for Soccer Complex is number of fields, while the variable for Recreational Community Center is building square footage. Utilizing the proposed size for this facility, a total of 230 AM peak hour trips, 450 PM peak hour trips, and 501 midday Saturday peak hour trips are projected. Table 1 summarizes the trip rates, equations, and totals for the site.

Based on existing several patterns and projected future demand, the site trips were distributed to the road network. Figure 7 summarizes the trip assignment for the site.

Adding the site trips to the background peak hour traffic volumes results in the 2028 total peak hour traffic volumes as summarized in Figure 8.

Trip Generation Rates

Formula/Rate	Directional Distribution					
	AM Peak		PM Peak		SAT Peak	
	IN	OUT	IN	OUT	IN	OUT
Soccer Complex (fields, ITE-488)						
AM Peak Hour Trips = 0.99 x fields	61%	39%	66%	34%	48%	52%
PM Peak Hour Trips = 16.43 x fields						
Sat. Midday Peak Hour Trips = 37.48 x fields						
Recreational Community Center (ksf, ITE-495)						
AM Peak Hour Trips = 1.91 x ksf	66%	34%	47%	53%	54%	46%
PM Peak Hour Trips = 2.50 x ksf						
PM Peak Hour Trips = 2.50 x ksf						

** Trip rates obtained from ITE Trip Generation Manual 11th Edition, 2021.

Trip Generation

Land Use	Size		AM Peak Hour			PM Peak Hour			Mid. SAT Peak Hour			
			In	Out	Total	In	Out	Total	In	Out	Total	
St Mary's County Sports Complex												
Soccer Complex	10	fields	6	4	10	108	56	164	180	195	375	
Recreation Community Center	117,668	sq.ft.	148	77	225	138	156	294	68	58	126	
Total Trips			154	81	235	246	212	458	248	253	501	

TABLE 1
TRIP GENERATION FOR
ST. MARY'S COUNTY SPORTS COMPLEX



Figure 7 - Trip Assignment for Site

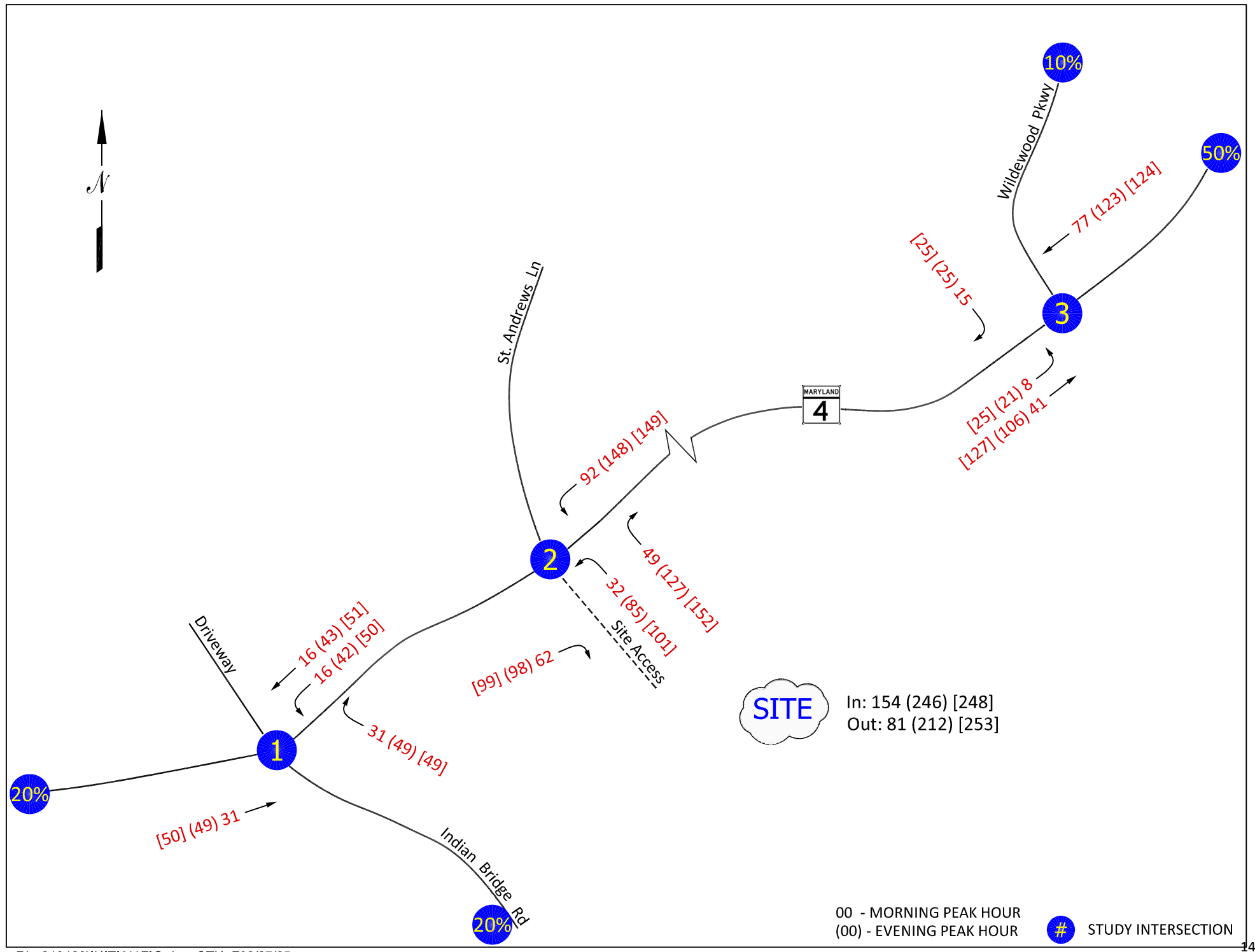
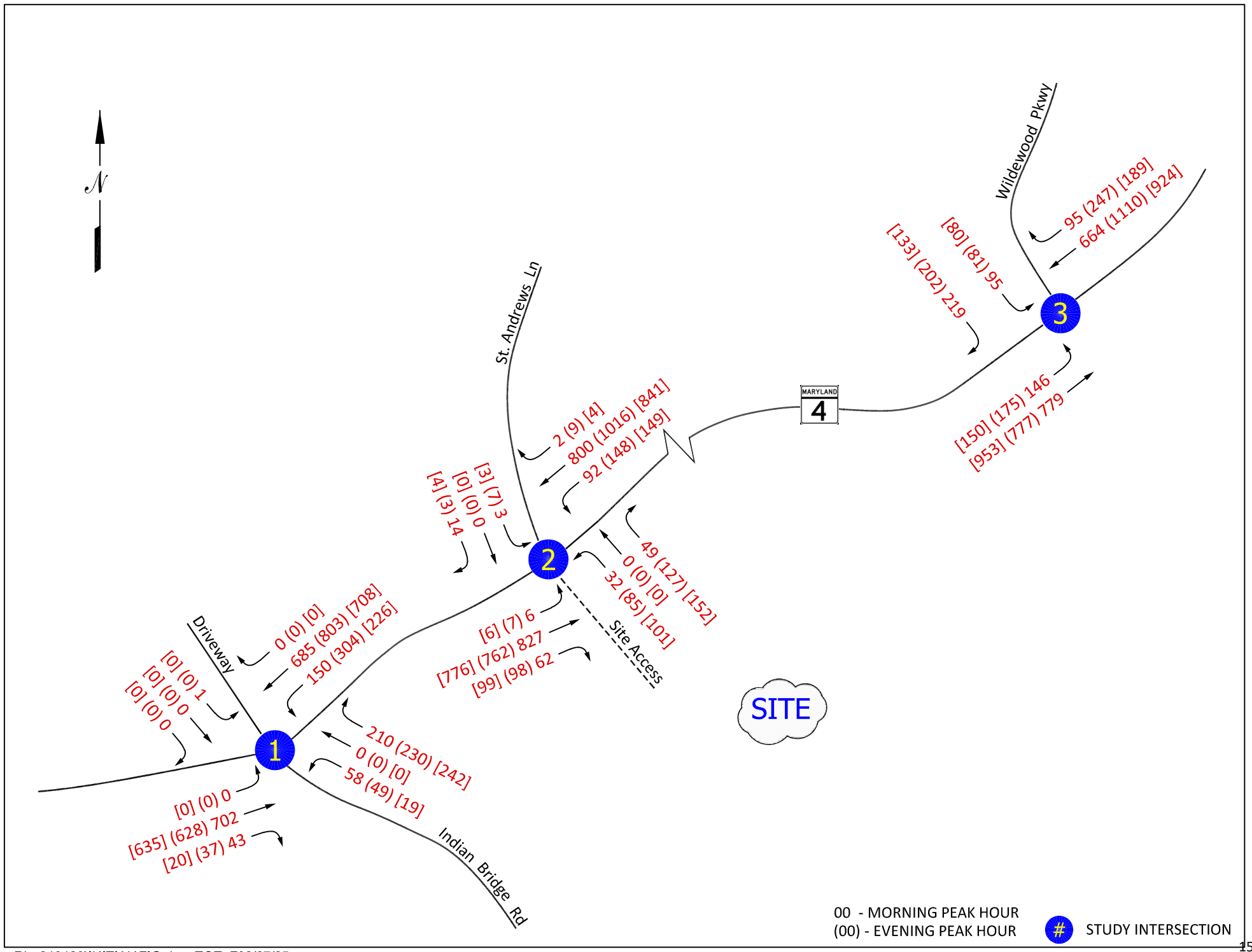


Figure 8 - 2028 Total Peak Hour Traffic Volumes



INTERSECTION CAPACITY ANALYSIS

Intersection capacity analysis was undertaken at each study intersection using CLV and HCM methodologies. The CLV analysis is a high-level planning tool utilized by MDOT SHA and St. Mary's County to determine critical volume based on conflicting volumes and lane use to determine if adequate capacity is available. The specific traffic control is not considered within this methodology. Table 2 summarizes the CLV analysis for all intersections. Complete capacity worksheets can be found in Appendix B.

A review of Table 2 shows that all intersections currently operate at Level of Service "C" or better conditions. In the future, when considering regional growth, Level of Service "C" or better conditions will remain at all locations. Level of Service "D" could occur at the intersection of MD 4 at Wildwood Parkway, with the buildout of the site. The CLV was found to be 1,366 whereas the threshold for Level of Service "D" operations is up to 1,450, meaning adequate capacity would still remain with the full buildout of the site.

HCM analysis provides additional information on average delay for the overall intersection at signalized locations and for individual approach movements at both signalized intersections and unsignalized intersections. A level of service is assigned based on the average delay per vehicle. Level of Service "A" represents optimal conditions whereas Level of Service "F" results occur when entering volume exceeds capacity. Tables 3A and 3B summarize the control delay associated with different levels of service.

Morning Peak Hour	LOS/CLV		
	Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd	A/837	A/863	A/912
2. MD 4 at St. Andrews Ln/ Site Access	A/820	A/844	A/968
3. MD 4 at Wildewood Pkwy	A/808	A/833	A/905
Evening Peak Hour			
1. MD 4 at Indian Bridge Rd	A/864	A/890	A/981
2. MD 4 at St. Andrews Ln/ Site Access	B/1012	B/1042	B/1133
3. MD 4 at Wildewood Pkwy	C/1186	C/1222	D/1366
Midday Saturday Peak Hour			
1. MD 4 at Indian Bridge Rd	A/757	A/780	A/880
2. MD 4 at St. Andrews Ln/ Site Access	A/833	A/858	B/1039
3. MD 4 at Wildewood Pkwy	A/975	B/1005	C/1154



TABLE 2
SUMMARY OF INTERSECTION
CAPACITY ANALYSIS (CLV)

Table 3A. HCM LOS Standard for Signalized Intersection

LOS	Control Delay (Seconds/Vehicle)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Table 3B. HCM LOS Standard for Unsignalized Intersection

LOS	Control Delay (Seconds/Vehicle)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

HCM analysis was undertaken for each intersection, based on its current traffic control measures. Table 4 summarizes the results. Complete capacity worksheets can be found in Appendix B.

A review of Table 4 shows that high levels of delay are currently experienced on the Indian Bridge Road approach to MD 4. This is a result of the stop control at this location. Those delays will continue to increase in the future under background and total conditions for the AM and PM peak periods.

The intersection of MD 4 at Wildewood Parkway is projected to operate adequately under existing, background, and total conditions. Improvements would not be necessary at this location to satisfy any APFO criteria.

Morning Peak Hour Traffic	Traffic Control	HCM - LOS/Delay		
		Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd WB/Left NB/L, R	Two Way Stop	B/10.5 F/61.8	B/10.7 F/75.2	B/11.1 F/94.4
w/Signal w/Roundabout	Signal Roundabout			B/15.1 C/16.0
2. MD 4 at St. Andrews Ln/ Site Access EB/Left NB/LT, R SB/LTR	Two Way Stop	B/10.1 C/17.4	B/10.3 C/18.1	B/10.3 F/174.3 E/47.6
w/Signal w/Roundabout	Signal Roundabout			C/31.9 C/16.0
3. MD 4 at Wildewood Pkwy EB WB SB	Signal	B/14.3 A/8.2 B/16.3 C/28.4	B/14.6 A/8.5 B/16.6 C/28.7	B/15.9 A/9.3 B/18.9 C/29.3
Evening Peak Hour Traffic				
1. MD 4 at Indian Bridge Rd WB/Left NB/L, R	Two Way Stop	B/10.2 F/55.2	B/10.3 F/65.6	B/11.1 F/97.6
w/Signal w/Roundabout	Signal Roundabout			B/13.9 C/16.4
2. MD 4 at St. Andrews Ln/ Site Access EB/Left NB/LT, R SB/LTR	Two Way Stop	B/10.3 E/35.5	B/10.4 E/38.1	B/10.4 F/512.6 F/263.7
w/Signal w/Roundabout	Signal Roundabout			C/28.2 C/22.4
3. MD 4 at Wildewood Pkwy EB WB SB	Signal	C/20.3 A/8.6 C/24.1 D/40.8	C/21.4 A/8.9 C/25.8 D/42.2	C/32.7 B/14.0 D/42.7 D/48.5

Midday Saturday Peak Hour Traffic	Traffic Control	HCM - LOS/Delay		
		Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd WB/Left NB/L, R	Two Way Stop	A/9.5 C/18.9	A/9.6 C/20.0	B/10.2 D/25.3
w/Signal w/Roundabout	Signal Roundabout			B/13.0 B/10.3
2. MD 4 at St. Andrews Ln/ Site Access EB/Left NB/LT, R SB/LTR	Two Way Stop	A/9.5 C/20.0	A/9.6 C/21.0	A/9.6 F/434.3 F/113.4
w/Signal w/Roundabout	Signal Roundabout			C/24.8 C/16.3
3. MD 4 at Wildewood Pkwy EB WB SB	Signal	B/14.6 A/8.4 B/18.1 C/27.9	B/15.0 A/8.5 B/18.5 C/29.1	B/17.7 A/9.9 C/22.2 D/35.7

Since high levels of delay were found at the intersection of MD 4 at Indian Bridge Road and are projected at the intersection of MD 4 at St. Andrews Lane with the buildout of this site, improvements were reviewed to enhance traffic operations, specifically the introduction of traffic signalization and a roundabout were reviewed. As shown within Table 4, adequate levels of service could be achieved with either traffic control measure.

MDOT SHA maintains MD 4 and would have final approval authority over the selected mitigation. There are benefits to either improvement.

Traffic signalization is often less expensive to install compared to a roundabout. It also requires less right-of-way as roadways typically do not need to be expanded significantly to provide signalization.

Traffic signals do have ongoing maintenance costs associated with them for electricity and for potential damage resulting from collisions.

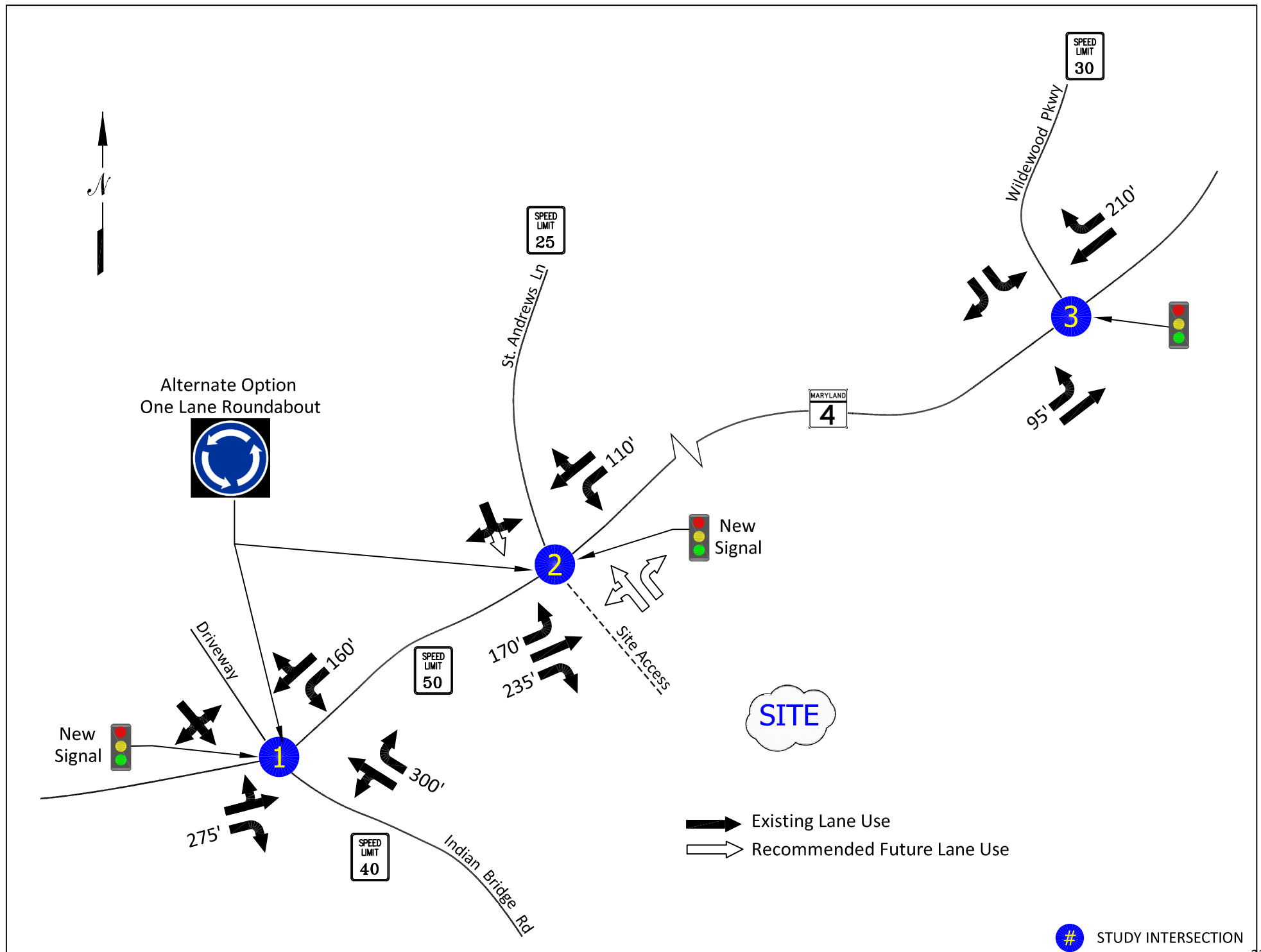
Roundabouts have a significantly higher construction cost and do require additional pavement widening to accommodate design widths.

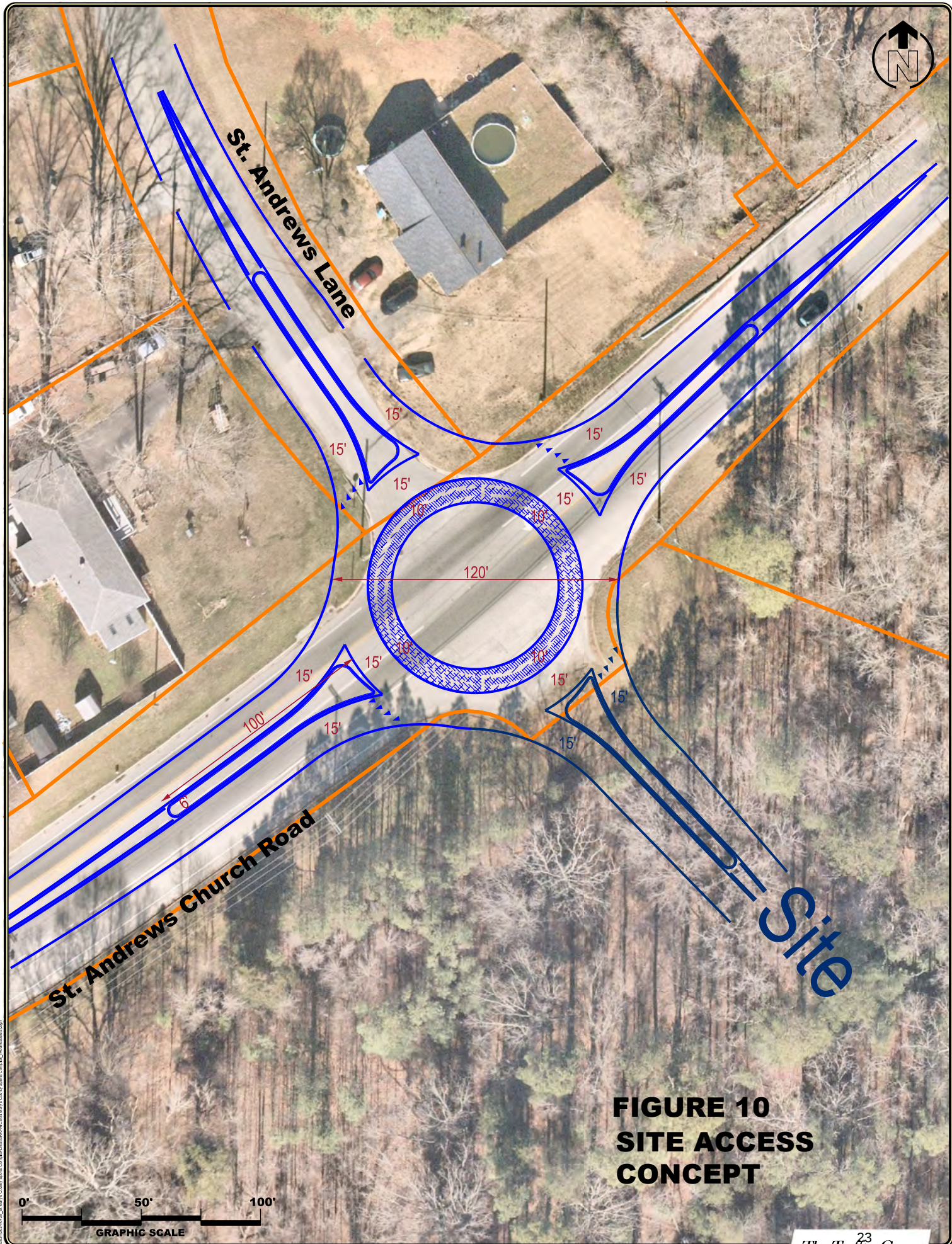
Roundabouts often are safer than traffic signals because if collisions do occur, they are often at slower speeds and less severe. Ongoing costs associated with a roundabout are often lower, as there is less infrastructure that can be damaged. Figure 9 summarizes the future recommended lane use. Concept plans for the roundabouts at each location can be found in Figures 10 and 11.

Queue analysis was also summarized using HCM methodology. The 95th percentile queue from HCM can be found in Table 5. As shown, queue lengths are projected to be able to be accommodated within the available turn bay lengths at all locations.

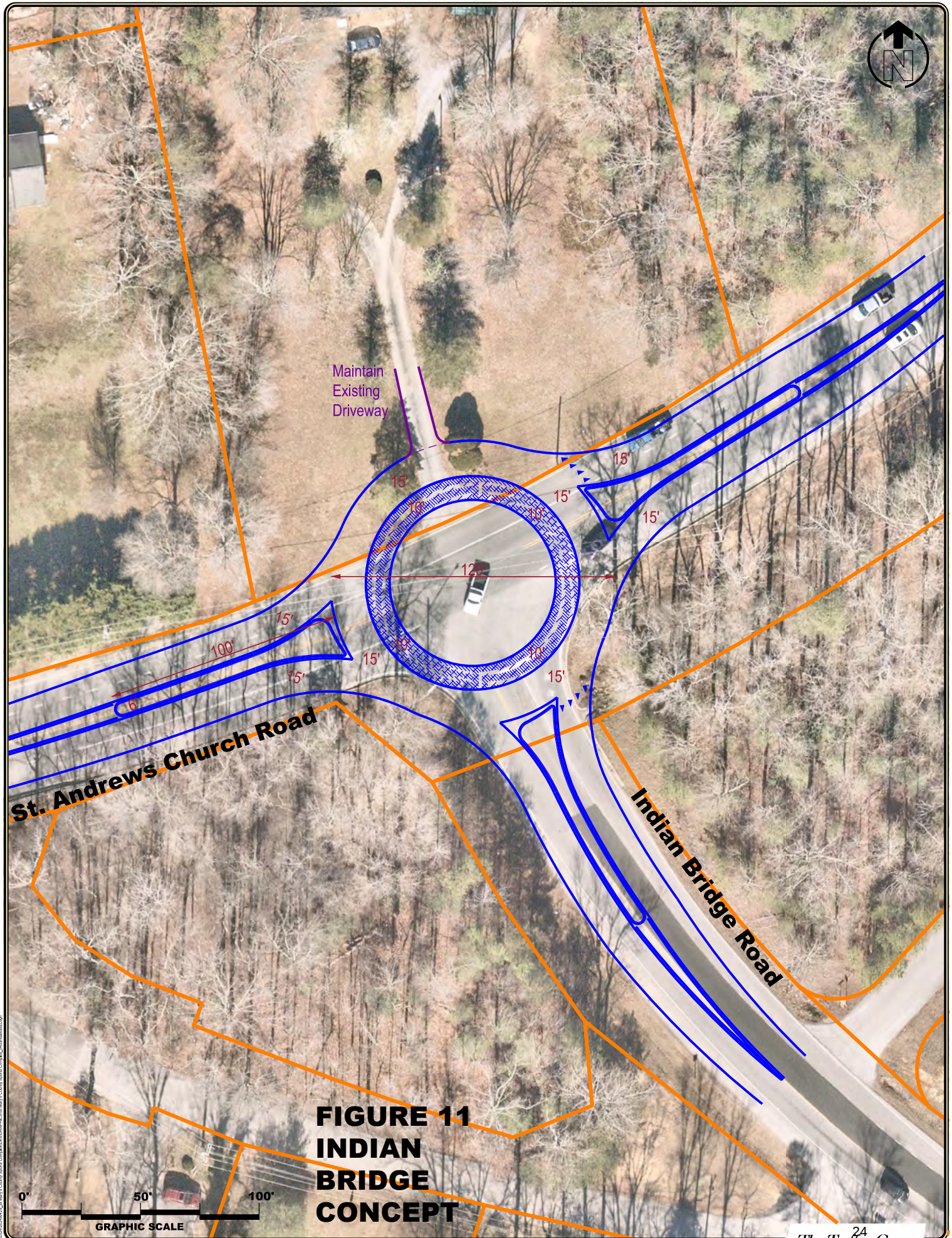
Given the proposed use for this site, it is possible that if large-scale events occur, localized congestion could result. Specifically, if large-scale tournaments or other events result in heavier peaks of traffic arriving and exiting the facility over a short amount of time, localized delaying could occur. This TIS is based on average operating conditions which would occur during the AM, PM, and Saturday peak periods on typical days.

Figure 9 - Recommended Future Lane Use and Traffic Control





**FIGURE 10
SITE ACCESS
CONCEPT**



**FIGURE 11
INDIAN
BRIDGE
CONCEPT**



Morning Peak Hour Traffic	Available Storage (ft)	HCM - 95th Queue (ft)		
		Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd				
WB/L	150	<25	<25	<25
NB/L	---	115	130	148
NB/R	300	69	77	113
<i>w/Signal</i>				
WB/L	150			60
NB/L	---			40
NB/R	300			183
<i>w/Roundabout</i>				
EB	---			458
WB	---			305
NB	---			84
2. MD 4 at St. Andrews Ln/Site Access				
EB/L	170	<25	<25	<25
WB/L	110	---		<25
NB/LT	---	---		102
NB/R	---	---		<25
SB/LR (LTR for Total)	---	<25	<25	<25
<i>w/Signal</i>				
EB/L	170			<25
WB/L	110			60
NB/LT	---			33
NB/R	---			50
SB/LTR	---			<25
<i>w/Roundabout</i>				
EB	---			421
WB	---			347
NB	---			<25
SB	---			<25
3. MD 4 at Wildwood Pkwy				
EB/L	95	38	40	53
EB/T	---	245	255	275
WB/T	---	320	333	400
WB/R	210	40	43	43
SB/L	---	70	73	73
SB/R	300	303	313	330

Evening Peak Hour Traffic	Available Storage (ft)	HCM - 95th Queue (ft)		
		Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd				
WB/L	150	28	31	41
NB/L	---	102	113	139
NB/R	300	41	44	72
<i>w/Signal</i>				
WB/L	150			75
NB/L	---			25
NB/R	300			150
<i>w/Roundabout</i>				
EB	---			253
WB	---			578
NB	---			60
2. MD 4 at St. Andrews Ln/Site Access				
EB/L	170	<25'	<25'	<25
WB/L	110			<25
NB/LT	---			269
NB/R	---			36
SB/LR (LTR for Total)	---	<25'	<25'	33
<i>w/Signal</i>				
EB/L	170			<25
WB/L	110			63
NB/LT	---			75
NB/R	---			115
SB/LTR	---			<25
<i>w/Roundabout</i>				
EB	---			345
WB	---			1165
NB	---			44
SB	---			<25
3. MD 4 at Wildwood Pkwy				
EB/L	95	103	115	240
EB/T	---	200	210	263
WB/T	---	720	775	1130
WB/R	210	113	118	120
SB/L	---	80	85	93
SB/R	300	343	345	413

Midday Saturday Peak Hour Traffic	Available Storage (ft)	HCM - 95th Queue (ft)		
		Existing Traffic	Background Traffic	Total Traffic
1. MD 4 at Indian Bridge Rd				
WB/L	150	<25	<25	25
NB/L	---	<25	<25	28
NB/R	300	43	45	76
w/Signal				
WB/L	150			50
NB/L	---			<25
NB/R	300			148
w/Roundabout				
EB	---			171
WB	---			247
NB	---			50
2. MD 4 at St. Andrews Ln/Site Access				
EB/L	170	<25	<25	<25
WB/L	110			<25
NB/LT	---			297
NB/R	---			49
SB/LR (LTR for Total)	---	<25	<25	<25
w/Signal				
EB/L	170			<25
WB/L	110			65
NB/LT	---			80
NB/R	---			125
SB/LTR	---			<25
w/Roundabout				
EB	---			366
WB	---			347
NB	---			58
SB	---			<25
3. MD 4 at Wildwood Pkwy				
EB/L	95	45	50	90
EB/T	---	258	268	348
WB/T	---	440	468	630
WB/R	210	80	83	85
SB/L	---	58	63	75
SB/R	300	188	198	253

RESULTS, RECOMMENDATIONS, AND CONCLUSIONS

This preliminary TIS has shown that improvements may be necessary at the site access point and the intersection of MD 4 at Indian Bridge Road to satisfy St. Mary's County AFPO criteria. The proposed use will generate significant traffic during the AM, PM, and Saturday peak periods to accommodate traffic demand. Improvements could involve traffic signalization or the construction of a roundabout would facilitate safer ingress and egress to the facility.

If the project moves forward to design, a formal TIS will need to be prepared in accordance with St. Mary's County APFO criteria. This preliminary document generally followed the requirements, however, coordination with county representatives would be necessary.

APPENDIX A

Intersection Turning Movement Counts and Aerial Photographs



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 5



TIME	TRAFFIC FROM NORTH on: Driveway					TRAFFIC FROM SOUTH on: Indian Bridge Road					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	0	0	0	0	0	27	0	7	0	34	0	96	28	0	124	8	142	0	0	150	308
7:15 - 7:30	0	0	0	0	0	46	0	12	0	58	0	141	19	0	160	10	132	0	0	142	360
7:30 - 7:45	0	0	0	0	0	46	0	13	0	59	0	220	41	0	261	9	168	0	0	177	497
7:45 - 8:00	0	0	1	0	1	46	0	18	0	64	0	169	34	0	203	15	178	0	0	193	461
8:00 - 8:15	0	0	0	0	0	36	0	13	0	49	0	119	36	0	155	8	173	0	0	181	385
8:15 - 8:30	0	0	0	0	0	42	0	10	0	52	0	116	37	0	153	9	121	0	0	130	335
8:30 - 8:45	0	0	0	0	0	54	0	9	0	63	0	113	18	0	131	10	138	0	0	148	342
8:45 - 9:00	0	0	0	0	0	39	0	5	0	44	0	107	23	0	130	5	130	0	0	135	309
2 Hr Totals	0	0	1	0	1	336	0	87	0	423	0	1081	236	0	1317	74	1182	0	0	1256	2997
1 Hr Totals																					
7:00 - 8:00	0	0	1	0	1	165	0	50	0	215	0	626	122	0	748	42	620	0	0	662	1626
7:15 - 8:15	0	0	1	0	1	174	0	56	0	230	0	649	130	0	779	42	651	0	0	693	1703
7:30 - 8:30	0	0	1	0	1	170	0	54	0	224	0	624	148	0	772	41	640	0	0	681	1678
7:45 - 8:45	0	0	1	0	1	178	0	50	0	228	0	517	125	0	642	42	610	0	0	652	1523
8:00 - 9:00	0	0	0	0	0	171	0	37	0	208	0	455	114	0	569	32	562	0	0	594	1371
PEAK HOUR																					
7:15 - 8:15	0	0	1	0	1	174	0	56	0	230	0	649	130	0	779	42	651	0	0	693	1703
PM																					
4:00 - 4:15	0	0	0	0	0	51	0	3	0	54	0	162	61	0	223	14	155	0	0	169	446
4:15 - 4:30	0	0	0	0	0	40	0	14	0	54	0	183	64	0	247	12	145	0	0	157	458
4:30 - 4:45	0	0	0	0	0	40	0	10	0	50	0	192	50	0	242	11	136	0	0	147	439
4:45 - 5:00	0	0	0	0	0	42	0	11	0	53	0	189	64	0	253	6	155	0	0	161	467
5:00 - 5:15	0	0	0	0	0	54	0	13	0	67	0	174	76	0	250	7	126	0	0	133	450
5:15 - 5:30	0	0	0	0	0	44	0	7	0	51	0	179	69	0	248	10	145	0	0	155	454
5:30 - 5:45	0	0	0	0	0	34	0	11	0	45	0	146	52	0	198	5	112	0	0	117	360
5:45 - 6:00	0	0	0	0	0	44	0	10	0	54	0	126	30	0	156	6	139	0	0	145	355
2 Hr Totals	0	0	0	0	0	349	0	79	0	428	0	1351	466	0	1817	71	1113	0	0	1184	3429
1 Hr Totals																					
4:00 - 5:00	0	0	0	0	0	173	0	38	0	211	0	726	239	0	965	43	591	0	0	634	1810
4:15 - 5:15	0	0	0	0	0	176	0	48	0	224	0	738	254	0	992	36	562	0	0	598	1814
4:30 - 5:30	0	0	0	0	0	180	0	41	0	221	0	734	259	0	993	34	562	0	0	596	1810
4:45 - 5:45	0	0	0	0	0	174	0	42	0	216	0	688	261	0	949	28	538	0	0	566	1731
5:00 - 6:00	0	0	0	0	0	176	0	41	0	217	0	625	227	0	852	28	522	0	0	550	1619
PEAK HOUR																					
4:15 - 5:15	0	0	0	0	0	176	0	48	0	224	0	738	254	0	992	36	562	0	0	598	1814

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 5



TIME	TRAFFIC FROM NORTH on: Driveway					TRAFFIC FROM SOUTH on: Indian Bridge Road					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	0	0	0	0	0	25	0	7	0	32	0	91	26	0	117	7	138	0	0	145	294
7:15 - 7:30	0	0	0	0	0	46	0	12	0	58	0	138	18	0	156	9	129	0	0	138	352
7:30 - 7:45	0	0	0	0	0	43	0	13	0	56	0	207	39	0	246	8	165	0	0	173	475
7:45 - 8:00	0	0	0	0	0	45	0	18	0	63	0	165	33	0	198	14	175	0	0	189	450
8:00 - 8:15	0	0	0	0	0	35	0	13	0	48	0	116	33	0	149	7	163	0	0	170	367
8:15 - 8:30	0	0	0	0	0	41	0	9	0	50	0	108	36	0	144	9	117	0	0	126	320
8:30 - 8:45	0	0	0	0	0	50	0	9	0	59	0	111	18	0	129	10	132	0	0	142	330
8:45 - 9:00	0	0	0	0	0	38	0	5	0	43	0	104	23	0	127	5	126	0	0	131	301
2 Hr Totals	0	0	0	0	0	323	0	86	0	409	0	1040	226	0	1266	69	1145	0	0	1214	2889
1 Hr Totals																					
7:00 - 8:00	0	0	0	0	0	159	0	50	0	209	0	601	116	0	717	38	607	0	0	645	1571
7:15 - 8:15	0	0	0	0	0	169	0	56	0	225	0	626	123	0	749	38	632	0	0	670	1644
7:30 - 8:30	0	0	0	0	0	164	0	53	0	217	0	596	141	0	737	38	620	0	0	658	1612
7:45 - 8:45	0	0	0	0	0	171	0	49	0	220	0	500	120	0	620	40	587	0	0	627	1467
8:00 - 9:00	0	0	0	0	0	164	0	36	0	200	0	439	110	0	549	31	538	0	0	569	1318
PEAK HOUR																					
7:15 - 8:15	0	0	0	0	0	169	0	56	0	225	0	626	123	0	749	38	632	0	0	670	1644
PM																					
4:00 - 4:15	0	0	0	0	0	49	0	3	0	52	0	158	58	0	216	13	153	0	0	166	434
4:15 - 4:30	0	0	0	0	0	39	0	11	0	50	0	181	63	0	244	12	144	0	0	156	450
4:30 - 4:45	0	0	0	0	0	39	0	10	0	49	0	191	49	0	240	11	136	0	0	147	436
4:45 - 5:00	0	0	0	0	0	40	0	11	0	51	0	189	62	0	251	6	154	0	0	160	462
5:00 - 5:15	0	0	0	0	0	53	0	13	0	66	0	173	72	0	245	7	125	0	0	132	443
5:15 - 5:30	0	0	0	0	0	43	0	7	0	50	0	178	67	0	245	10	145	0	0	155	450
5:30 - 5:45	0	0	0	0	0	34	0	11	0	45	0	145	51	0	196	5	111	0	0	116	357
5:45 - 6:00	0	0	0	0	0	44	0	10	0	54	0	125	30	0	155	6	134	0	0	140	349
2 Hr Totals	0	0	0	0	0	341	0	76	0	417	0	1340	452	0	1792	70	1102	0	0	1172	3381
1 Hr Totals																					
4:00 - 5:00	0	0	0	0	0	167	0	35	0	202	0	719	232	0	951	42	587	0	0	629	1782
4:15 - 5:15	0	0	0	0	0	171	0	45	0	216	0	734	246	0	980	36	559	0	0	595	1791
4:30 - 5:30	0	0	0	0	0	175	0	41	0	216	0	731	250	0	981	34	560	0	0	594	1791
4:45 - 5:45	0	0	0	0	0	170	0	42	0	212	0	685	252	0	937	28	535	0	0	563	1712
5:00 - 6:00	0	0	0	0	0	174	0	41	0	215	0	621	220	0	841	28	515	0	0	543	1599
PEAK HOUR																					
4:15 - 5:15	0	0	0	0	0	171	0	45	0	216	0	734	246	0	980	36	559	0	0	595	1791

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 5



TIME	NORTH LEG Driveway		SOUTH LEG Indian Bridge Road	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0	0	0
7:15 - 7:30	0	0	0	0
7:30 - 7:45	0	0	0	0
7:45 - 8:00	0	0	0	0
8:00 - 8:15	0	0	0	0
8:15 - 8:30	0	0	0	0
8:30 - 8:45	0	0	0	0
8:45 - 9:00	0	0	0	0
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	0
4:15 - 4:30	0	0	0	0
4:30 - 4:45	0	0	0	0
4:45 - 5:00	0	0	0	0
5:00 - 5:15	0	0	0	0
5:15 - 5:30	0	0	0	0
5:30 - 5:45	0	0	0	0
5:45 - 6:00	0	0	0	0
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0	0	0
7:15 - 7:30	0	0	0	0
7:30 - 7:45	0	0	0	0
7:45 - 8:00	0	0	0	0
8:00 - 8:15	0	0	0	0
8:15 - 8:30	0	0	0	0
8:30 - 8:45	0	0	0	0
8:45 - 9:00	0	0	0	0
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	0
4:15 - 4:30	0	0	0	0
4:30 - 4:45	0	0	0	0
4:45 - 5:00	0	0	0	0
5:00 - 5:15	0	0	0	0
5:15 - 5:30	0	0	0	0
5:30 - 5:45	0	0	0	0
5:45 - 6:00	0	0	0	0
TOTALS	0	0	0	0

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: Driveway					TRAFFIC FROM SOUTH on: Indian Bridge Road					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	0	0	0	0	0	60	0	4	0	64	0	129	36	0	165	9	131	0	0	140	369
11:15 - 11:30	0	0	0	0	0	55	0	6	0	61	0	136	43	0	179	13	150	0	0	163	403
11:30 - 11:45	0	0	1	0	1	37	0	6	0	43	0	124	37	0	161	7	163	0	0	170	375
11:45 - 12:00	0	0	0	0	0	65	0	7	0	72	0	132	45	0	177	11	146	0	0	157	406
12:00 - 12:15	0	0	0	0	0	58	0	6	0	64	0	138	40	0	178	10	124	0	0	134	376
12:15 - 12:30	0	0	0	0	0	38	0	4	0	42	0	145	43	0	188	3	126	0	0	129	359
12:30 - 12:45	0	0	0	0	0	43	0	2	0	45	0	144	50	0	194	7	152	0	0	159	398
12:45 - 1:00	0	0	0	0	0	49	0	6	0	55	0	155	48	0	203	6	145	0	0	151	409
1:00 - 1:15	0	0	0	0	0	49	0	5	0	54	0	186	32	0	218	3	132	0	0	135	407
1:15 - 1:30	0	0	0	0	0	46	0	5	0	51	0	153	41	0	194	3	139	0	0	142	387
1:30 - 1:45	0	0	0	0	0	60	1	3	0	64	0	135	44	0	179	3	143	0	0	146	389
1:45 - 2:00	0	0	0	0	0	36	0	5	0	41	0	146	30	0	176	4	138	0	0	142	359
3 Hr Totals	0	0	1	0	1	596	1	59	0	656	0	1723	489	0	2212	79	1689	0	0	1768	4637
1 Hr Totals																					
11:00 - 12:00	0	0	1	0	1	217	0	23	0	240	0	521	161	0	682	40	590	0	0	630	1553
11:15 - 12:15	0	0	1	0	1	215	0	25	0	240	0	530	165	0	695	41	583	0	0	624	1560
11:30 - 12:30	0	0	1	0	1	198	0	23	0	221	0	539	165	0	704	31	559	0	0	590	1516
11:45 - 12:45	0	0	0	0	0	204	0	19	0	223	0	559	178	0	737	31	548	0	0	579	1539
12:00 - 1:00	0	0	0	0	0	188	0	18	0	206	0	582	181	0	763	26	547	0	0	573	1542
12:15 - 1:15	0	0	0	0	0	179	0	17	0	196	0	630	173	0	803	19	555	0	0	574	1573
12:30 - 1:30	0	0	0	0	0	187	0	18	0	205	0	638	171	0	809	19	568	0	0	587	1601
12:45 - 1:45	0	0	0	0	0	204	1	19	0	224	0	629	165	0	794	15	559	0	0	574	1592
1:00 - 2:00	0	0	0	0	0	191	1	18	0	210	0	620	147	0	767	13	552	0	0	565	1542
PEAK HOUR																					
12:30 - 1:30	0	0	0	0	0	187	0	18	0	205	0	638	171	0	809	19	568	0	0	587	1601

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: Driveway					TRAFFIC FROM SOUTH on: Indian Bridge Road					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	0	0	0	0	0	59	0	4	0	63	0	128	36	0	164	9	129	0	0	138	365
11:15 - 11:30	0	0	0	0	0	55	0	6	0	61	0	135	41	0	176	13	149	0	0	162	399
11:30 - 11:45	0	0	0	0	0	37	0	6	0	43	0	124	37	0	161	7	162	0	0	169	373
11:45 - 12:00	0	0	0	0	0	64	0	7	0	71	0	131	45	0	176	10	145	0	0	155	402
12:00 - 12:15	0	0	0	0	0	57	0	5	0	62	0	137	40	0	177	9	122	0	0	131	370
12:15 - 12:30	0	0	0	0	0	38	0	4	0	42	0	144	43	0	187	3	126	0	0	129	358
12:30 - 12:45	0	0	0	0	0	43	0	2	0	45	0	144	49	0	193	7	151	0	0	158	396
12:45 - 1:00	0	0	0	0	0	48	0	6	0	54	0	155	48	0	203	6	144	0	0	150	407
1:00 - 1:15	0	0	0	0	0	49	0	5	0	54	0	185	32	0	217	3	130	0	0	133	404
1:15 - 1:30	0	0	0	0	0	46	0	5	0	51	0	150	41	0	191	3	138	0	0	141	383
1:30 - 1:45	0	0	0	0	0	60	0	3	0	63	0	134	44	0	178	3	142	0	0	145	386
1:45 - 2:00	0	0	0	0	0	36	0	5	0	41	0	146	30	0	176	4	138	0	0	142	359
3 Hr Totals	0	0	0	0	0	592	0	58	0	650	0	1713	486	0	2199	77	1676	0	0	1753	4602
1 Hr Totals																					
11:00 - 12:00	0	0	0	0	0	215	0	23	0	238	0	518	159	0	677	39	585	0	0	624	1539
11:15 - 12:15	0	0	0	0	0	213	0	24	0	237	0	527	163	0	690	39	578	0	0	617	1544
11:30 - 12:30	0	0	0	0	0	196	0	22	0	218	0	536	165	0	701	29	555	0	0	584	1503
11:45 - 12:45	0	0	0	0	0	202	0	18	0	220	0	556	177	0	733	29	544	0	0	573	1526
12:00 - 1:00	0	0	0	0	0	186	0	17	0	203	0	580	180	0	760	25	543	0	0	568	1531
12:15 - 1:15	0	0	0	0	0	178	0	17	0	195	0	628	172	0	800	19	551	0	0	570	1565
12:30 - 1:30	0	0	0	0	0	186	0	18	0	204	0	634	170	0	804	19	563	0	0	582	1590
12:45 - 1:45	0	0	0	0	0	203	0	19	0	222	0	624	165	0	789	15	554	0	0	569	1580
1:00 - 2:00	0	0	0	0	0	191	0	18	0	209	0	615	147	0	762	13	548	0	0	561	1532
PEAK HOUR																					
12:30 - 1:30	0	0	0	0	0	186	0	18	0	204	0	634	170	0	804	19	563	0	0	582	1590

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: Indian Bridge Road
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	NORTH LEG Driveway		SOUTH LEG Indian Bridge Road	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0	0	0
11:15 - 11:30	0	0	0	0
11:30 - 11:45	0	0	0	0
11:45 - 12:00	0	0	0	0
12:00 - 12:15	0	0	0	0
12:15 - 12:30	0	0	0	0
12:30 - 12:45	0	0	0	0
12:45 - 1:00	0	0	0	0
1:00 - 1:15	0	0	0	0
1:15 - 1:30	0	0	0	0
1:30 - 1:45	0	0	0	0
1:45 - 2:00	0	0	0	0
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0	0	0
11:15 - 11:30	0	0	0	0
11:30 - 11:45	0	0	0	0
11:45 - 12:00	0	0	0	0
12:00 - 12:15	0	0	0	0
12:15 - 12:30	0	0	0	0
12:30 - 12:45	0	0	0	0
12:45 - 1:00	0	0	0	0
1:00 - 1:15	0	0	0	0
1:15 - 1:30	0	0	0	0
1:30 - 1:45	0	0	0	0
1:45 - 2:00	0	0	0	0
TOTALS	0	0	0	0



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: St Andrews Lane					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	5	0	2	0	7	0	0	0	0	0	1	120	0	0	121	0	169	0	0	169	297
7:15 - 7:30	3	0	1	0	4	0	0	0	0	0	0	173	0	0	173	0	172	3	0	175	352
7:30 - 7:45	6	0	0	0	6	0	0	0	0	0	2	244	0	0	246	0	203	0	0	203	455
7:45 - 8:00	3	0	1	0	4	0	0	0	0	0	0	211	0	0	211	0	208	0	0	208	423
8:00 - 8:15	2	0	1	0	3	0	0	0	0	0	0	148	0	0	148	0	220	3	0	223	374
8:15 - 8:30	2	0	1	0	3	0	0	0	0	0	1	150	0	1	152	0	167	0	0	167	322
8:30 - 8:45	3	0	1	0	4	0	0	0	0	0	2	126	0	0	128	0	187	3	0	190	322
8:45 - 9:00	2	0	1	0	3	0	0	0	0	0	2	131	0	0	133	0	169	1	0	170	306
2 Hr Totals	26	0	8	0	34	0	0	0	0	0	8	1303	0	1	1312	0	1495	10	0	1505	2851
1 Hr Totals																					
7:00 - 8:00	17	0	4	0	21	0	0	0	0	0	3	748	0	0	751	0	752	3	0	755	1527
7:15 - 8:15	14	0	3	0	17	0	0	0	0	0	2	776	0	0	778	0	803	6	0	809	1604
7:30 - 8:30	13	0	3	0	16	0	0	0	0	0	3	753	0	1	757	0	798	3	0	801	1574
7:45 - 8:45	10	0	4	0	14	0	0	0	0	0	3	635	0	1	639	0	782	6	0	788	1441
8:00 - 9:00	9	0	4	0	13	0	0	0	0	0	5	555	0	1	561	0	743	7	0	750	1324
PEAK HOUR																					
7:15 - 8:15	14	0	3	0	17	0	0	0	0	0	2	776	0	0	778	0	803	6	0	809	1604
PM																					
4:00 - 4:15	1	0	1	0	2	0	0	0	0	0	2	236	0	0	238	0	205	3	1	209	449
4:15 - 4:30	2	0	1	0	3	0	0	0	0	0	3	242	0	0	245	0	183	0	0	183	431
4:30 - 4:45	0	0	1	0	1	0	0	0	0	0	2	244	0	1	247	0	176	2	0	178	426
4:45 - 5:00	0	0	1	0	1	0	0	0	0	0	2	241	0	0	243	0	193	1	0	194	438
5:00 - 5:15	2	0	3	0	5	0	0	0	0	0	3	254	0	0	257	0	181	2	0	183	445
5:15 - 5:30	1	0	2	0	3	0	0	0	0	0	2	247	0	0	249	0	190	2	0	192	444
5:30 - 5:45	2	0	1	0	3	0	0	0	0	0	4	186	0	0	190	0	135	4	0	139	332
5:45 - 6:00	2	0	0	0	2	0	0	0	0	0	2	156	0	0	158	0	185	3	0	188	348
2 Hr Totals	10	0	10	0	20	0	0	0	0	0	20	1806	0	1	1827	0	1448	17	1	1466	3313
1 Hr Totals																					
4:00 - 5:00	3	0	4	0	7	0	0	0	0	0	9	963	0	1	973	0	757	6	1	764	1744
4:15 - 5:15	4	0	6	0	10	0	0	0	0	0	10	981	0	1	992	0	733	5	0	738	1740
4:30 - 5:30	3	0	7	0	10	0	0	0	0	0	9	986	0	1	996	0	740	7	0	747	1753
4:45 - 5:45	5	0	7	0	12	0	0	0	0	0	11	928	0	0	939	0	699	9	0	708	1659
5:00 - 6:00	7	0	6	0	13	0	0	0	0	0	11	843	0	0	854	0	691	11	0	702	1569
PEAK HOUR																					
4:30 - 5:30	3	0	7	0	10	0	0	0	0	0	9	986	0	1	996	0	740	7	0	747	1753

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: St Andrews Lane					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	5		2	0	7					0	1	113		0	114		165	0	0	165	286
7:15 - 7:30	3		1	0	4					0	0	166		0	166		169	2	0	171	341
7:30 - 7:45	5		0	0	5					0	2	230		0	232		199	0	0	199	436
7:45 - 8:00	2		1	0	3					0	0	206		0	206		207	0	0	207	416
8:00 - 8:15	2		1	0	3					0	0	141		0	141		207	3	0	210	354
8:15 - 8:30	2		1	0	3					0	1	143		1	145		162	0	0	162	310
8:30 - 8:45	2		1	0	3					0	2	124		0	126		178	1	0	179	308
8:45 - 9:00	2		1	0	3					0	2	128		0	130		164	0	0	164	297
2 Hr Totals	23	0	8	0	31	0	0	0	0	0	8	1251	0	1	1260	0	1451	6	0	1457	2748
1 Hr Totals																					
7:00 - 8:00	15	0	4	0	19	0	0	0	0	0	3	715	0	0	718	0	740	2	0	742	1479
7:15 - 8:15	12	0	3	0	15	0	0	0	0	0	2	743	0	0	745	0	782	5	0	787	1547
7:30 - 8:30	11	0	3	0	14	0	0	0	0	0	3	720	0	1	724	0	775	3	0	778	1516
7:45 - 8:45	8	0	4	0	12	0	0	0	0	0	3	614	0	1	618	0	754	4	0	758	1388
8:00 - 9:00	8	0	4	0	12	0	0	0	0	0	5	536	0	1	542	0	711	4	0	715	1269
PEAK HOUR																					
7:15 - 8:15	12	0	3	0	15	0	0	0	0	0	2	743	0	0	745	0	782	5	0	787	1547
PM																					
4:00 - 4:15	0		1	0	1					0	1	231		0	232		202	2	1	205	438
4:15 - 4:30	2		1	0	3					0	3	238		0	241		181	0	0	181	425
4:30 - 4:45	0		1	0	1					0	2	241		1	244		175	2	0	177	422
4:45 - 5:00	0		1	0	1					0	2	237		0	239		190	1	0	191	431
5:00 - 5:15	2		3	0	5					0	3	250		0	253		179	2	0	181	439
5:15 - 5:30	1		2	0	3					0	2	244		0	246		189	2	0	191	440
5:30 - 5:45	2		1	0	3					0	4	184		0	188		134	4	0	138	329
5:45 - 6:00	2		0	0	2					0	2	153		0	155		180	3	0	183	340
2 Hr Totals	9	0	10	0	19	0	0	0	0	0	19	1778	0	1	1798	0	1430	16	1	1447	3264
1 Hr Totals																					
4:00 - 5:00	2	0	4	0	6	0	0	0	0	0	8	947	0	1	956	0	748	5	1	754	1716
4:15 - 5:15	4	0	6	0	10	0	0	0	0	0	10	966	0	1	977	0	725	5	0	730	1717
4:30 - 5:30	3	0	7	0	10	0	0	0	0	0	9	972	0	1	982	0	733	7	0	740	1732
4:45 - 5:45	5	0	7	0	12	0	0	0	0	0	11	915	0	0	926	0	692	9	0	701	1639
5:00 - 6:00	7	0	6	0	13	0	0	0	0	0	11	831	0	0	842	0	682	11	0	693	1548
PEAK HOUR																					
4:30 - 5:30	3	0	7	0	10	0	0	0	0	0	9	972	0	1	982	0	733	7	0	740	1732

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	NORTH LEG St Andrews Lane		SOUTH LEG	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0		
7:15 - 7:30	0	0		
7:30 - 7:45	0	0		
7:45 - 8:00	0	0		
8:00 - 8:15	0	0		
8:15 - 8:30	0	0		
8:30 - 8:45	0	0		
8:45 - 9:00	0	0		
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0		
4:15 - 4:30	0	0		
4:30 - 4:45	0	0		
4:45 - 5:00	0	0		
5:00 - 5:15	0	0		
5:15 - 5:30	0	0		
5:30 - 5:45	0	0		
5:45 - 6:00	0	0		
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0	0	0
7:15 - 7:30	0	0	0	0
7:30 - 7:45	0	0	0	0
7:45 - 8:00	0	0	0	0
8:00 - 8:15	0	0	0	0
8:15 - 8:30	0	0	0	0
8:30 - 8:45	0	0	0	0
8:45 - 9:00	0	0	0	0
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	0
4:15 - 4:30	0	0	0	0
4:30 - 4:45	0	0	0	0
4:45 - 5:00	0	0	0	0
5:00 - 5:15	0	0	0	0
5:15 - 5:30	0	0	0	0
5:30 - 5:45	0	0	0	0
5:45 - 6:00	0	0	0	0
TOTALS	0	0	0	0

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: St Andrews Lane					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	0	0	1	0	1	0	0	0	0	0	2	163	0	0	165	0	188	1	0	189	355
11:15 - 11:30	4	0	2	0	6	0	0	0	0	0	1	173	0	0	174	0	207	3	0	210	390
11:30 - 11:45	2	0	1	0	3	0	0	0	0	0	1	170	0	0	171	0	195	1	0	196	370
11:45 - 12:00	1	0	1	0	2	0	0	0	0	0	2	170	0	1	173	0	215	1	0	216	391
12:00 - 12:15	2	0	0	0	2	0	0	0	0	0	1	166	0	0	167	0	192	1	0	193	362
12:15 - 12:30	1	0	0	0	1	0	0	0	0	0	2	194	0	0	196	0	166	3	0	169	366
12:30 - 12:45	1	0	1	0	2	0	0	0	0	0	1	197	0	0	198	0	197	3	0	200	400
12:45 - 1:00	0	0	1	0	1	0	0	0	0	0	1	208	0	0	209	0	195	1	0	196	406
1:00 - 1:15	1	0	1	0	2	0	0	0	0	0	2	207	0	0	209	0	179	1	0	180	391
1:15 - 1:30	2	0	0	0	2	0	0	0	0	0	0	204	0	0	204	0	182	1	0	183	389
1:30 - 1:45	1	0	1	0	2	0	0	0	0	0	1	183	0	0	184	0	198	1	0	199	385
1:45 - 2:00	3	0	1	0	4	0	0	0	0	0	1	169	0	0	170	0	177	1	0	178	352
3 Hr Totals	18	0	10	0	28	0	0	0	0	0	15	2204	0	1	2220	0	2291	18	0	2309	4557
1 Hr Totals																					
11:00 - 12:00	7	0	5	0	12	0	0	0	0	0	6	676	0	1	683	0	805	6	0	811	1506
11:15 - 12:15	9	0	4	0	13	0	0	0	0	0	5	679	0	1	685	0	809	6	0	815	1513
11:30 - 12:30	6	0	2	0	8	0	0	0	0	0	6	700	0	1	707	0	768	6	0	774	1489
11:45 - 12:45	5	0	2	0	7	0	0	0	0	0	6	727	0	1	734	0	770	8	0	778	1519
12:00 - 1:00	4	0	2	0	6	0	0	0	0	0	5	765	0	0	770	0	750	8	0	758	1534
12:15 - 1:15	3	0	3	0	6	0	0	0	0	0	6	806	0	0	812	0	737	8	0	745	1563
12:30 - 1:30	4	0	3	0	7	0	0	0	0	0	4	816	0	0	820	0	753	6	0	759	1586
12:45 - 1:45	4	0	3	0	7	0	0	0	0	0	4	802	0	0	806	0	754	4	0	758	1571
1:00 - 2:00	7	0	3	0	10	0	0	0	0	0	4	763	0	0	767	0	736	4	0	740	1517
PEAK HOUR																					
12:30 - 1:30	4	0	3	0	7	0	0	0	0	0	4	816	0	0	820	0	753	6	0	759	1586

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: St Andrews Lane					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	0		1	0	1					0	2	163		0	165		185	1	0	186	352
11:15 - 11:30	3		2	0	5					0	1	170		0	171		206	3	0	209	385
11:30 - 11:45	2		1	0	3					0	1	170		0	171		192	1	0	193	367
11:45 - 12:00	1		1	0	2					0	2	169		1	172		213	1	0	214	388
12:00 - 12:15	2		0	0	2					0	1	165		0	166		189	1	0	190	358
12:15 - 12:30	1		0	0	1					0	2	193		0	195		166	3	0	169	365
12:30 - 12:45	1		1	0	2					0	1	196		0	197		195	3	0	198	397
12:45 - 1:00	0		1	0	1					0	1	208		0	209		194	1	0	195	405
1:00 - 1:15	1		1	0	2					0	2	206		0	208		178	1	0	179	389
1:15 - 1:30	2		0	0	2					0	0	201		0	201		180	1	0	181	384
1:30 - 1:45	1		1	0	2					0	1	182		0	183		197	1	0	198	383
1:45 - 2:00	3		1	0	4					0	1	168		0	169		177	1	0	178	351
3 Hr Totals	17	0	10	0	27	0	0	0	0	0	15	2191	0	1	2207	0	2272	18	0	2290	4524
1 Hr Totals																					
11:00 - 12:00	6	0	5	0	11	0	0	0	0	0	6	672	0	1	679	0	796	6	0	802	1492
11:15 - 12:15	8	0	4	0	12	0	0	0	0	0	5	674	0	1	680	0	800	6	0	806	1498
11:30 - 12:30	6	0	2	0	8	0	0	0	0	0	6	697	0	1	704	0	760	6	0	766	1478
11:45 - 12:45	5	0	2	0	7	0	0	0	0	0	6	723	0	1	730	0	763	8	0	771	1508
12:00 - 1:00	4	0	2	0	6	0	0	0	0	0	5	762	0	0	767	0	744	8	0	752	1525
12:15 - 1:15	3	0	3	0	6	0	0	0	0	0	6	803	0	0	809	0	733	8	0	741	1556
12:30 - 1:30	4	0	3	0	7	0	0	0	0	0	4	811	0	0	815	0	747	6	0	753	1575
12:45 - 1:45	4	0	3	0	7	0	0	0	0	0	4	797	0	0	801	0	749	4	0	753	1561
1:00 - 2:00	7	0	3	0	10	0	0	0	0	0	4	757	0	0	761	0	732	4	0	736	1507
PEAK HOUR																					
12:30 - 1:30	4	0	3	0	7	0	0	0	0	0	4	811	0	0	815	0	747	6	0	753	1575

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: St Andrews Lane
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	NORTH LEG St Andrews Lane		SOUTH LEG	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0		
11:15 - 11:30	0	0		
11:30 - 11:45	0	0		
11:45 - 12:00	0	0		
12:00 - 12:15	0	0		
12:15 - 12:30	0	0		
12:30 - 12:45	0	0		
12:45 - 1:00	0	0		
1:00 - 1:15	0	0		
1:15 - 1:30	0	0		
1:30 - 1:45	0	0		
1:45 - 2:00	0	0		
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0	0	0
11:15 - 11:30	0	0	0	0
11:30 - 11:45	0	0	0	0
11:45 - 12:00	0	0	0	0
12:00 - 12:15	0	0	0	0
12:15 - 12:30	0	0	0	0
12:30 - 12:45	0	0	0	0
12:45 - 1:00	0	0	0	0
1:00 - 1:15	0	0	0	0
1:15 - 1:30	0	0	0	0
1:30 - 1:45	0	0	0	0
1:45 - 2:00	0	0	0	0
TOTALS	0	0	0	0



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Wildewood Parkway
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: Wildewood Parkway					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	38	0	16	0	54	0	0	0	0	0	11	84	0	0	95	0	144	26	0	170	319
7:15 - 7:30	43	0	19	0	62	0	0	0	0	0	25	131	0	0	156	0	156	33	0	189	407
7:30 - 7:45	88	0	30	0	118	0	0	0	0	0	17	157	0	0	174	0	184	27	0	211	503
7:45 - 8:00	35	0	15	1	51	0	0	0	0	0	22	165	0	0	187	0	189	37	0	226	464
8:00 - 8:15	32	0	27	0	59	0	0	0	0	0	28	117	0	0	145	0	187	37	0	224	428
8:15 - 8:30	34	0	15	0	49	0	0	0	0	0	24	120	0	0	144	0	160	35	0	195	388
8:30 - 8:45	24	0	20	0	44	0	0	0	0	0	22	113	0	0	135	0	142	40	0	182	361
8:45 - 9:00	26	0	30	0	56	0	0	0	0	0	15	94	0	0	109	0	150	24	0	174	339
2 Hr Totals	320	0	172	1	493	0	0	0	0	0	164	981	0	0	1145	0	1312	259	0	1571	3209
1 Hr Totals																					
7:00 - 8:00	204	0	80	1	285	0	0	0	0	0	75	537	0	0	612	0	673	123	0	796	1693
7:15 - 8:15	198	0	91	1	290	0	0	0	0	0	92	570	0	0	662	0	716	134	0	850	1802
7:30 - 8:30	189	0	87	1	277	0	0	0	0	0	91	559	0	0	650	0	720	136	0	856	1783
7:45 - 8:45	125	0	77	1	203	0	0	0	0	0	96	515	0	0	611	0	678	149	0	827	1641
8:00 - 9:00	116	0	92	0	208	0	0	0	0	0	89	444	0	0	533	0	639	136	0	775	1516
PEAK HOUR																					
7:15 - 8:15	198	0	91	1	290	0	0	0	0	0	92	570	0	0	662	0	716	134	0	850	1802
PM																					
4:00 - 4:15	47	0	23	0	70	0	0	0	0	0	46	218	0	0	264	0	165	28	0	193	527
4:15 - 4:30	40	0	18	0	58	0	0	0	0	0	58	242	0	0	300	0	167	43	0	210	568
4:30 - 4:45	35	0	14	0	49	0	0	0	0	0	50	253	0	0	303	0	160	28	0	188	540
4:45 - 5:00	55	0	31	0	86	0	0	0	0	0	68	236	0	0	304	0	168	39	0	207	597
5:00 - 5:15	42	0	16	0	58	0	0	0	0	0	64	227	0	0	291	0	156	39	0	195	544
5:15 - 5:30	44	0	15	0	59	0	0	0	0	0	65	231	0	0	296	0	155	42	0	197	552
5:30 - 5:45	31	0	21	0	52	0	0	0	0	0	65	178	0	0	243	0	130	26	0	156	451
5:45 - 6:00	23	0	24	0	47	0	0	0	0	0	48	149	0	0	197	0	136	33	0	169	413
2 Hr Totals	317	0	162	0	479	0	0	0	0	0	464	1734	0	0	2198	0	1237	278	0	1515	4192
1 Hr Totals																					
4:00 - 5:00	177	0	86	0	263	0	0	0	0	0	222	949	0	0	1171	0	660	138	0	798	2232
4:15 - 5:15	172	0	79	0	251	0	0	0	0	0	240	958	0	0	1198	0	651	149	0	800	2249
4:30 - 5:30	176	0	76	0	252	0	0	0	0	0	247	947	0	0	1194	0	639	148	0	787	2233
4:45 - 5:45	172	0	83	0	255	0	0	0	0	0	262	872	0	0	1134	0	609	146	0	755	2144
5:00 - 6:00	140	0	76	0	216	0	0	0	0	0	242	785	0	0	1027	0	577	140	0	717	1960
PEAK HOUR																					
4:15 - 5:15	172	0	79	0	251	0	0	0	0	0	240	958	0	0	1198	0	651	149	0	800	2249

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 4
and: Wildewood Parkway
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	TRAFFIC FROM NORTH on: Wildewood Parkway					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	37		16	0	53					0	10	78		0	88	139	23	0		162	303
7:15 - 7:30	41		19	0	60					0	22	125		0	147	154	30	0		184	391
7:30 - 7:45	82		30	0	112					0	16	149		0	165	183	27	0		210	487
7:45 - 8:00	34		15	1	50					0	21	161		0	182	184	36	0		220	452
8:00 - 8:15	32		27	0	59					0	26	110		0	136	178	33	0		211	406
8:15 - 8:30	33		15	0	48					0	23	114		0	137	155	34	0		189	374
8:30 - 8:45	24		19	0	43					0	21	111		0	132	136	35	0		171	346
8:45 - 9:00	25		30	0	55					0	14	91		0	105	145	24	0		169	329
2 Hr Totals	308	0	171	1	480	0	0	0	0	0	153	939	0	0	1092	0	1274	242	0	1516	3088
1 Hr Totals																					
7:00 - 8:00	194	0	80	1	275	0	0	0	0	0	69	513	0	0	582	0	660	116	0	776	1633
7:15 - 8:15	189	0	91	1	281	0	0	0	0	0	85	545	0	0	630	0	699	126	0	825	1736
7:30 - 8:30	181	0	87	1	269	0	0	0	0	0	86	534	0	0	620	0	700	130	0	830	1719
7:45 - 8:45	123	0	76	1	200	0	0	0	0	0	91	496	0	0	587	0	653	138	0	791	1578
8:00 - 9:00	114	0	91	0	205	0	0	0	0	0	84	426	0	0	510	0	614	126	0	740	1455
PEAK HOUR																					
7:15 - 8:15	189	0	91	1	281	0	0	0	0	0	85	545	0	0	630	0	699	126	0	825	1736
PM																					
4:00 - 4:15	44		23	0	67					0	46	217		0	263	161	28	0		189	519
4:15 - 4:30	40		17	0	57					0	56	236		0	292	166	42	0		208	557
4:30 - 4:45	35		14	0	49					0	50	250		0	300	160	28	0		188	537
4:45 - 5:00	53		31	0	84					0	68	235		0	303	164	39	0		203	590
5:00 - 5:15	40		16	0	56					0	64	225		0	289	155	39	0		194	539
5:15 - 5:30	43		15	0	58					0	65	230		0	295	154	42	0		196	549
5:30 - 5:45	30		21	0	51					0	65	174		0	239	129	26	0		155	445
5:45 - 6:00	23		24	0	47					0	48	146		0	194	131	33	0		164	405
2 Hr Totals	308	0	161	0	469	0	0	0	0	0	462	1713	0	0	2175	0	1220	277	0	1497	4141
1 Hr Totals																					
4:00 - 5:00	172	0	85	0	257	0	0	0	0	0	220	938	0	0	1158	0	651	137	0	788	2203
4:15 - 5:15	168	0	78	0	246	0	0	0	0	0	238	946	0	0	1184	0	645	148	0	793	2223
4:30 - 5:30	171	0	76	0	247	0	0	0	0	0	247	940	0	0	1187	0	633	148	0	781	2215
4:45 - 5:45	166	0	83	0	249	0	0	0	0	0	262	864	0	0	1126	0	602	146	0	748	2123
5:00 - 6:00	136	0	76	0	212	0	0	0	0	0	242	775	0	0	1017	0	569	140	0	709	1938
PEAK HOUR																					
4:15 - 5:15	168	0	78	0	246	0	0	0	0	0	238	946	0	0	1184	0	645	148	0	793	2223

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: Wildewood Parkway
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 28, 2025
Weather: Cool/Cloudy
Entered by: CP

Tuesday
Star Rating: 4



TIME	NORTH LEG Wildewood Parkway		SOUTH LEG	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0		
7:15 - 7:30	0	0		
7:30 - 7:45	0	0		
7:45 - 8:00	0	0		
8:00 - 8:15	0	0		
8:15 - 8:30	0	0		
8:30 - 8:45	0	0		
8:45 - 9:00	0	0		
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0		
4:15 - 4:30	0	0		
4:30 - 4:45	0	0		
4:45 - 5:00	0	0		
5:00 - 5:15	0	0		
5:15 - 5:30	0	0		
5:30 - 5:45	0	0		
5:45 - 6:00	0	0		
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
7:00 - 7:15	0	0	0	0
7:15 - 7:30	0	0	0	0
7:30 - 7:45	0	0	0	0
7:45 - 8:00	0	0	0	0
8:00 - 8:15	0	0	0	0
8:15 - 8:30	0	0	0	0
8:30 - 8:45	0	0	0	0
8:45 - 9:00	0	0	0	0
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	0
4:15 - 4:30	0	0	0	0
4:30 - 4:45	0	0	0	0
4:45 - 5:00	0	0	0	0
5:00 - 5:15	0	0	0	0
5:15 - 5:30	0	0	0	0
5:30 - 5:45	0	0	0	0
5:45 - 6:00	0	0	0	0
TOTALS	0	0	0	0

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Date: January 25, 2025

Weather: Cold/Cloudy

Entered by: CP

Saturday

Star Rating: 4



Intersection of: MD 4

and: Wildewood Parkway

Location: St Mary's County, Maryland

TIME	TRAFFIC FROM NORTH on: Wildewood Parkway					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	31	0	24	0	55	0	0	0	0	0	40	170	0	0	210	0	207	32	0	239	504
11:15 - 11:30	27	0	26	0	53	0	0	0	0	0	27	164	0	0	191	0	203	28	0	231	475
11:30 - 11:45	28	0	27	0	55	0	0	0	0	0	42	154	0	0	196	0	193	24	0	217	468
11:45 - 12:00	32	0	16	0	48	0	0	0	0	0	41	171	0	0	212	0	204	25	0	229	489
12:00 - 12:15	28	0	23	0	51	0	0	0	0	0	44	174	0	0	218	0	214	33	0	247	516
12:15 - 12:30	25	0	17	0	42	0	0	0	0	0	41	185	0	0	226	0	176	37	0	213	481
12:30 - 12:45	27	0	20	0	47	0	0	0	0	0	56	209	0	0	265	0	207	18	0	225	537
12:45 - 1:00	25	0	18	0	43	0	0	0	0	0	42	208	0	0	250	0	205	33	0	238	531
1:00 - 1:15	23	0	22	0	45	0	0	0	0	0	44	197	0	0	241	0	190	19	0	209	495
1:15 - 1:30	23	0	20	0	43	0	0	0	0	0	47	189	0	0	236	0	160	31	0	191	470
1:30 - 1:45	26	0	12	0	38	0	0	0	0	0	32	181	0	0	213	0	180	27	0	207	458
1:45 - 2:00	26	0	17	0	43	0	0	0	0	0	45	161	0	0	206	0	187	28	0	215	464
3 Hr Totals	321	0	242	0	563	0	0	0	0	0	501	2163	0	0	2664	0	2326	335	0	2661	5888
1 Hr Totals																					
11:00 - 12:00	118	0	93	0	211	0	0	0	0	0	150	659	0	0	809	0	807	109	0	916	1936
11:15 - 12:15	115	0	92	0	207	0	0	0	0	0	154	663	0	0	817	0	814	110	0	924	1948
11:30 - 12:30	113	0	83	0	196	0	0	0	0	0	168	684	0	0	852	0	787	119	0	906	1954
11:45 - 12:45	112	0	76	0	188	0	0	0	0	0	182	739	0	0	921	0	801	113	0	914	2023
12:00 - 1:00	105	0	78	0	183	0	0	0	0	0	183	776	0	0	959	0	802	121	0	923	2065
12:15 - 1:15	100	0	77	0	177	0	0	0	0	0	183	799	0	0	982	0	778	107	0	885	2044
12:30 - 1:30	98	0	80	0	178	0	0	0	0	0	189	803	0	0	992	0	762	101	0	863	2033
12:45 - 1:45	97	0	72	0	169	0	0	0	0	0	165	775	0	0	940	0	735	110	0	845	1954
1:00 - 2:00	98	0	71	0	169	0	0	0	0	0	168	728	0	0	896	0	717	105	0	822	1887
PEAK HOUR																					
12:00 - 1:00	105	0	78	0	183	0	0	0	0	0	183	776	0	0	959	0	802	121	0	923	2065

CARS TURNING MOVEMENT COUNT - SUMMARY

Counted by: VCU

Date: January 25, 2025

Weather: Cold/Cloudy

Entered by: CP

Saturday

Star Rating: 4



Intersection of: MD 4

and: Wildewood Parkway

Location: St Mary's County, Maryland

TIME	TRAFFIC FROM NORTH on: Wildewood Parkway					TRAFFIC FROM SOUTH on:					TRAFFIC FROM EAST on: MD 4					TRAFFIC FROM WEST on: MD 4					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
11:00 - 11:15	31		24	0	55					0	40	170		0	210		202	32	0	234	499
11:15 - 11:30	26		26	0	52					0	27	161		0	188		202	28	0	230	470
11:30 - 11:45	28		27	0	55					0	42	154		0	196		192	24	0	216	467
11:45 - 12:00	32		16	0	48					0	41	169		0	210		203	25	0	228	486
12:00 - 12:15	28		23	0	51					0	44	173		0	217		210	33	0	243	511
12:15 - 12:30	25		17	0	42					0	41	184		0	225		175	37	0	212	479
12:30 - 12:45	27		20	0	47					0	56	207		0	263		206	18	0	224	534
12:45 - 1:00	25		18	0	43					0	41	207		0	248		203	33	0	236	527
1:00 - 1:15	23		21	0	44					0	44	196		0	240		188	19	0	207	491
1:15 - 1:30	23		20	0	43					0	47	186		0	233		159	31	0	190	466
1:30 - 1:45	26		12	0	38					0	32	180		0	212		178	27	0	205	455
1:45 - 2:00	26		17	0	43					0	45	158		0	203		185	28	0	213	459
3 Hr Totals	320	0	241	0	561	0	0	0	0	0	500	2145	0	0	2645	0	2303	335	0	2638	5844
1 Hr Totals																					
11:00 - 12:00	117	0	93	0	210	0	0	0	0	0	150	654	0	0	804	0	799	109	0	908	1922
11:15 - 12:15	114	0	92	0	206	0	0	0	0	0	154	657	0	0	811	0	807	110	0	917	1934
11:30 - 12:30	113	0	83	0	196	0	0	0	0	0	168	680	0	0	848	0	780	119	0	899	1943
11:45 - 12:45	112	0	76	0	188	0	0	0	0	0	182	733	0	0	915	0	794	113	0	907	2010
12:00 - 1:00	105	0	78	0	183	0	0	0	0	0	182	771	0	0	953	0	794	121	0	915	2051
12:15 - 1:15	100	0	76	0	176	0	0	0	0	0	182	794	0	0	976	0	772	107	0	879	2031
12:30 - 1:30	98	0	79	0	177	0	0	0	0	0	188	796	0	0	984	0	756	101	0	857	2018
12:45 - 1:45	97	0	71	0	168	0	0	0	0	0	164	769	0	0	933	0	728	110	0	838	1939
1:00 - 2:00	98	0	70	0	168	0	0	0	0	0	168	720	0	0	888	0	710	105	0	815	1871
PEAK HOUR																					
12:00 - 1:00	105	0	78	0	183	0	0	0	0	0	182	771	0	0	953	0	794	121	0	915	2051

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY

Intersection of: MD 4
and: Wildewood Parkway
Location: St Mary's County, Maryland

Counted by: VCU
Date: January 25, 2025
Weather: Cold/Cloudy
Entered by: CP

Saturday
Star Rating: 4



TIME	NORTH LEG Wildewood Parkway		SOUTH LEG	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0		
11:15 - 11:30	0	0		
11:30 - 11:45	0	0		
11:45 - 12:00	0	0		
12:00 - 12:15	0	0		
12:15 - 12:30	0	0		
12:30 - 12:45	0	0		
12:45 - 1:00	0	0		
1:00 - 1:15	0	0		
1:15 - 1:30	0	0		
1:30 - 1:45	0	0		
1:45 - 2:00	0	0		
TOTALS	0	0	0	0

	EAST LEG MD 4		WEST LEG MD 4	
	Pedestrians	Bicycles	Pedestrians	Bicycles
AM				
11:00 - 11:15	0	0	0	0
11:15 - 11:30	0	0	0	0
11:30 - 11:45	0	0	0	0
11:45 - 12:00	0	0	0	0
12:00 - 12:15	0	0	0	0
12:15 - 12:30	0	0	0	0
12:30 - 12:45	0	0	0	0
12:45 - 1:00	0	0	0	0
1:00 - 1:15	0	0	0	0
1:15 - 1:30	0	0	0	0
1:30 - 1:45	0	0	0	0
1:45 - 2:00	0	0	0	0
TOTALS	0	0	0	0



Project Title 4-Way Intersection MD4/Wildewood Parkway	Project Number HW-2105	Classification Highways
Project Description This project is created to facilitate a safer left turn situation into existing properties. The intersection improvement would enhance the MDOT project which creates a turn lane on MD4 from Wildewood Parkway to Old St. Andrews Church Road. The Left Turn Lane Project has been on hold at MDOT but is expected to restart design soon; however, MDOT has not announced an official re-start date. MDOT is proposing that a MOU be established to identify the County and State's responsibility/obligation on the project. MDOT offered to draft the MOU and incorporate the proposed 4-way intersection into the MD4 Left Turn Lane Design. The MOU is expected to list the County's monetary contribution. The adjacent landowners support that project. Exact cost sharing and responsibilities have not been determined nor has the MOU draft circulated. The County will have an agreement with the MDOT for coordinating the State MD4 Left Turn Lane Project and the 4-Way Intersection and a separate agreement with the Patriot Pointe, LLC for property right-of-way over the proposed county road alignment to the Landfill Parcel. Negotiations will be needed with the developer once MDOT and the County have the MOU in place. Requesting funds in 2030 but it is not clear whether the developer is donating land, trading lands, and/or offering a road design. The County should be prepared to coordinate the Left Turn and 4-way Intersection Projects.		 Compliance With Comprehensive Plan Section 11.3.2.A Provide safe, efficient, economical roads which support community revitalization, economic development, and environmental stewardship. P. 11-1
Discussion of Operating Budget Impact		

Appropriation Phase	Total Project	Prior Approval	Budget	5-Year Capital Plan					Balance to Complete
			FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	
Engineering/Survey	110,000	50,000						60,000	
Land Acquisition	75,000							75,000	
Construction	1,000,000							1,000,000	
MGMT/Inspect	30,000							30,000	
Material Testing	5,000							5,000	
Utility Relocations	20,000							20,000	
Contingencies	80,000							80,000	
As-Built	10,000							10,000	
TOTAL COSTS	1,330,000	50,000						1,280,000	

Funding Schedule

BONDS	910,000							910,000	
TRANSFER TAXES	420,000	50,000						370,000	
PAY-GO									
EXCISE TAX									
STATE FUNDS									
FEDERAL FUNDS									
OTHER SOURCES									
TOTAL FUNDS	1,330,000	50,000						1,280,000	

Operating Impacts	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
STAFFING -FTEs						
SWM and Road Maintenance						2,000
TOTAL COSTS						2,000

APPENDIX B

Intersection Capacity Analysis Worksheets



CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

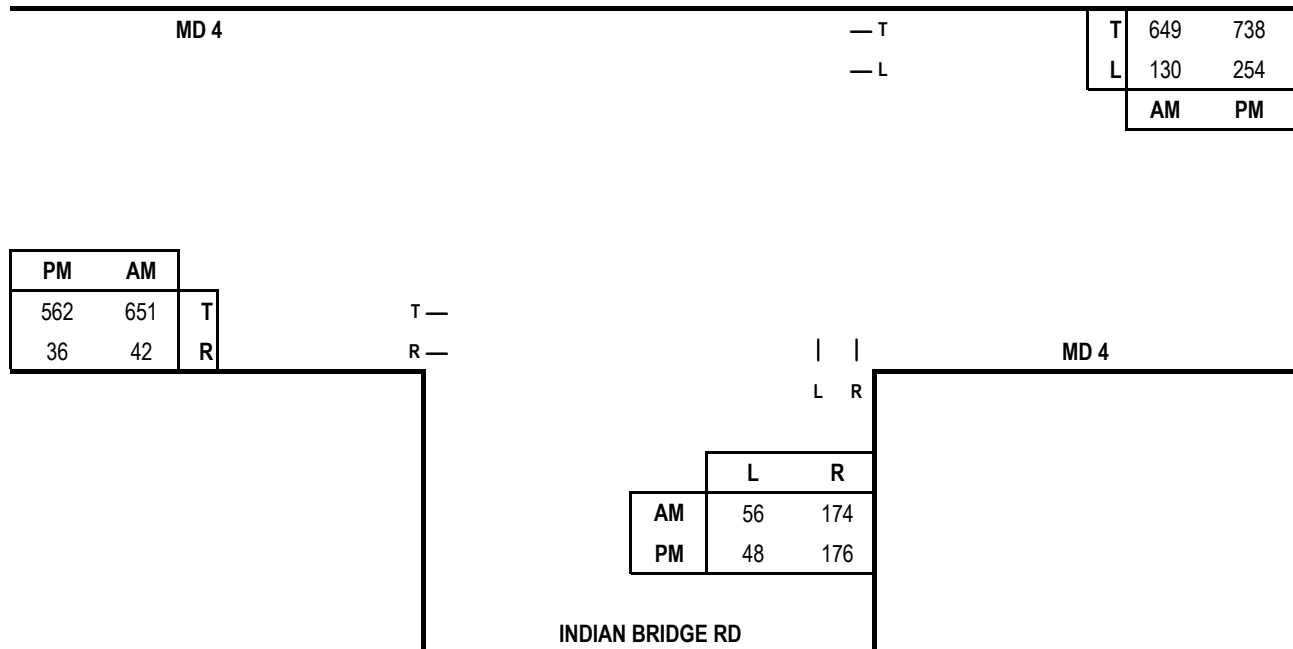
E/W Road: MD 4
N/S Road: Indian Bridge Rd
Conditions: Existing Traffic

Date of Count: 1/28/2025
Day of Count: Tuesday
Analyst: Richard Huang



Peak: 7:15 -8:15

Peak: 4:15 -5:15



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	56	1.00	56			
EB	651	1.00	651	130	1.00	130
WB	649	1.00	649			
CLV TOTAL=						837
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	48	1.00	48			
EB	562	1.00	562	254	1.00	254
WB	738	1.00	738			
CLV TOTAL=						864
Level of Service (LOS)=						A

Scenario ID - EXIST1

CLV V/C =0.52

CLV V/C =0.54

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

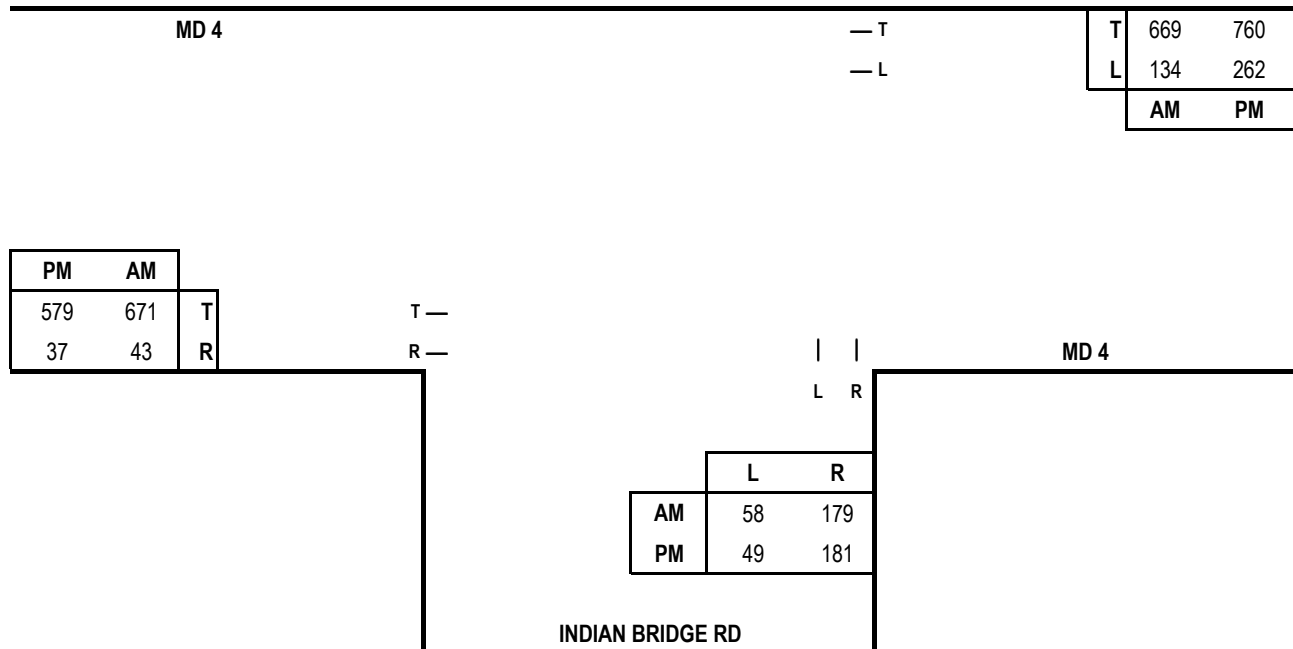
E/W Road: MD 4
N/S Road: Indian Bridge Rd
Conditions: Background Traffic

Date of Count: 1/28/2025
Day of Count: Tuesday
Analyst: Richard Huang



Peak: 7:15 -8:15

Peak: 4:15 -5:15



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	58	1.00	58			
EB	671	1.00	671	134	1.00	134
WB	669	1.00	669			
CLV TOTAL=						863
Level of Service (LOS)=						A

CLV V/C =0.54

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	49	1.00	49			
EB	579	1.00	579	262	1.00	262
WB	760	1.00	760			
CLV TOTAL=						890
Level of Service (LOS)=						A

CLV V/C =0.56

Scenario ID - BACK1

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

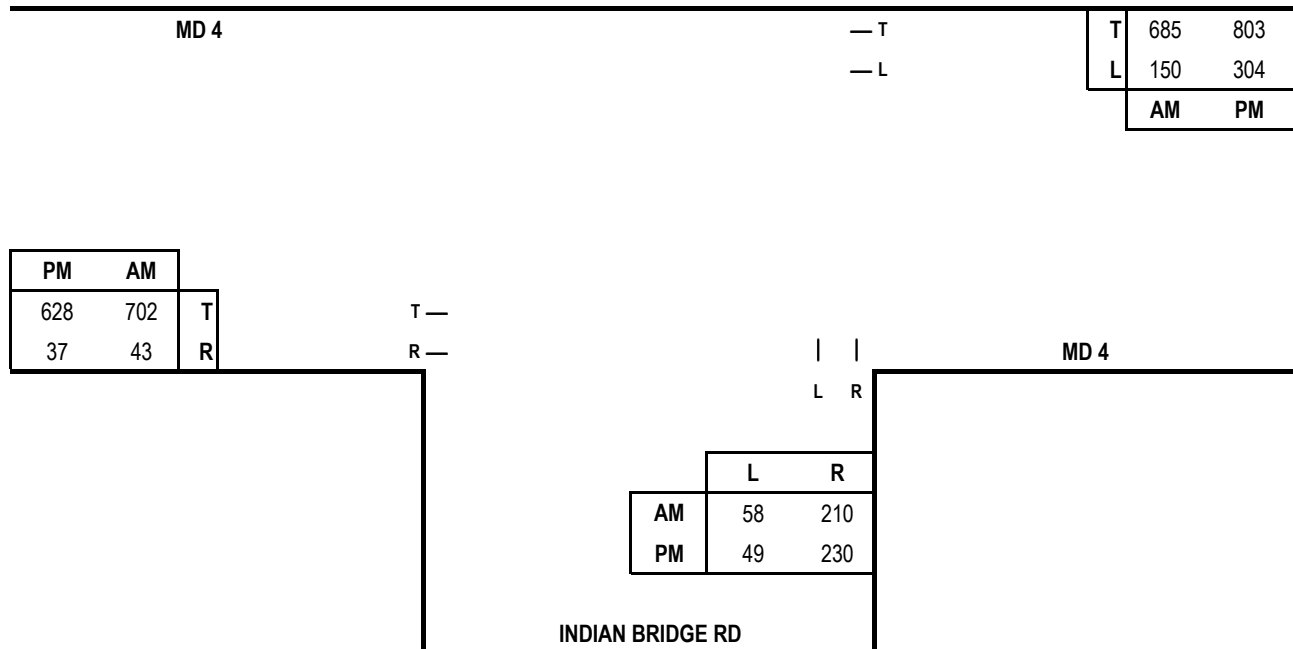
E/W Road: MD 4
N/S Road: Indian Bridge Rd
Conditions: Total Traffic

Date of Count: 1/28/2025
Day of Count: Tuesday
Analyst: Richard Huang



Peak: 7:15 -8:15

Peak: 4:15 -5:15



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	60	1.00	60			
EB	702	1.00	702	150	1.00	150
WB	685	1.00	685			
CLV TOTAL=						912
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	49	1.00	49			
EB	628	1.00	628	304	1.00	304
WB	803	1.00	803			
CLV TOTAL=						981
Level of Service (LOS)=						A

Scenario ID - TOT1

CLV V/C =0.57

CLV V/C =0.61

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

N/S Road: Indian Bridge Rd

Conditions: Existing Traffic

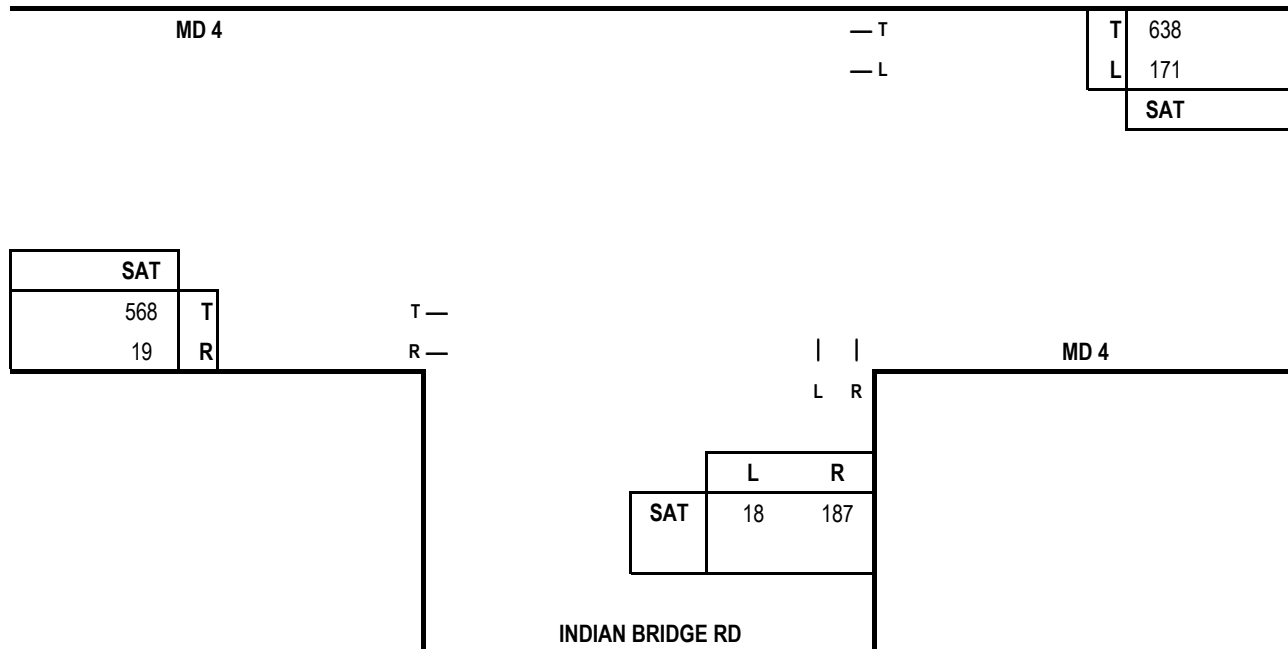
Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Peak: 12:30 -1:30



Capacity Analysis

Sat. Midday Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	18	1.00	18			
EB	568	1.00	568	171	1.00	171
WB	638	1.00	638			
CLV TOTAL=						757
Level of Service (LOS)=						A

Scenario ID - EXIST1

CLV V/C = 0.47

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

N/S Road: Indian Bridge Rd

Conditions: Background Traffic

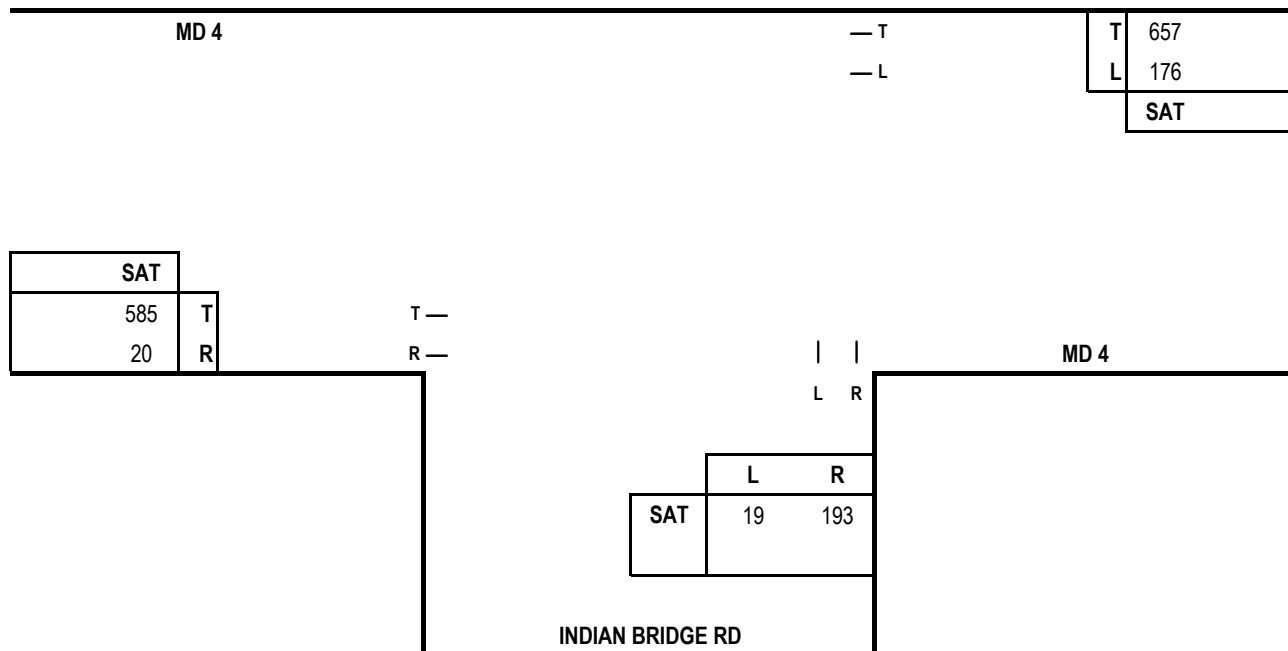
Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Peak: 12:30 -1:30



Capacity Analysis

Sat. Midday Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			SAT
	VOL	x LUF	= Total	VOL	x LUF	= Total	CLV
NB	19	1.00	19				19
EB	585	1.00	585	176	1.00	176	761
WB	657	1.00	657				
CLV TOTAL=							780
Level of Service (LOS)=							A

Scenario ID - BACK1

CLV V/C =0.49

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

N/S Road: Indian Bridge Rd

Conditions: Total Traffic

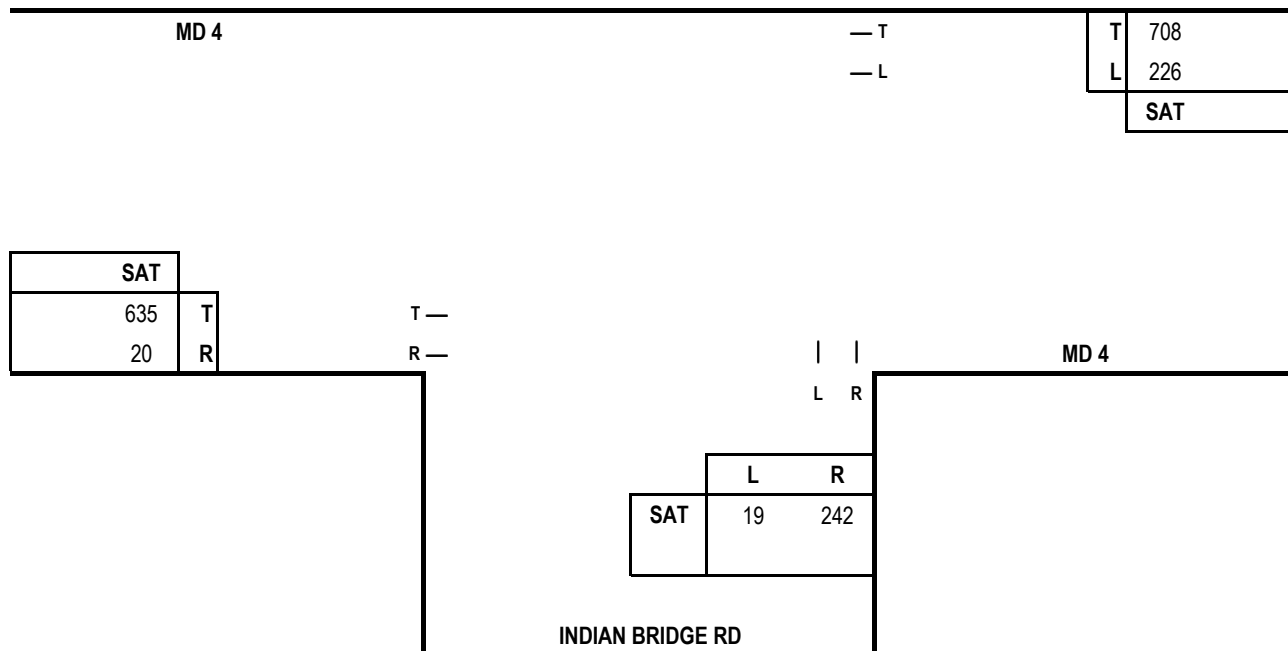
Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Peak: 12:30 -1:30



Capacity Analysis

Sat. Midday Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
NB	19	1.00	19			
EB	635	1.00	635	226	1.00	226
WB	708	1.00	708			
CLV TOTAL=						880
Level of Service (LOS)=						A

Scenario ID - TOT1

CLV V/C =0.55

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

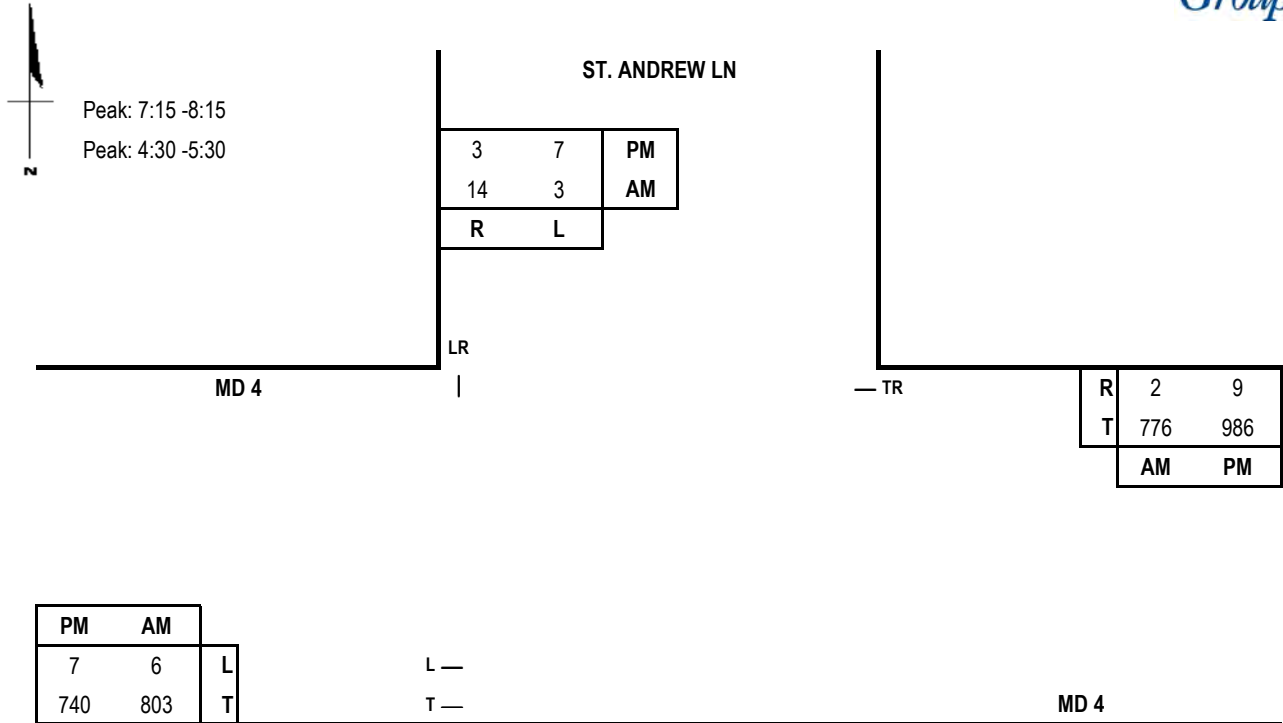
N/S Road: St. Andrew Ln

Conditions: Existing Traffic

Date of Count: 1/28/2025

Day of Count: Tuesday

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	17	1.00	17			
EB	803	1.00	803			
WB	778	1.00	778	6	1.00	6
CLV TOTAL=						820
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	10	1.00	10			
EB	740	1.00	740			
WB	995	1.00	995	7	1.00	7
CLV TOTAL=						1,012
Level of Service (LOS)=						B

Scenario ID - EXIST2

CLV V/C =0.51

CLV V/C =0.63

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

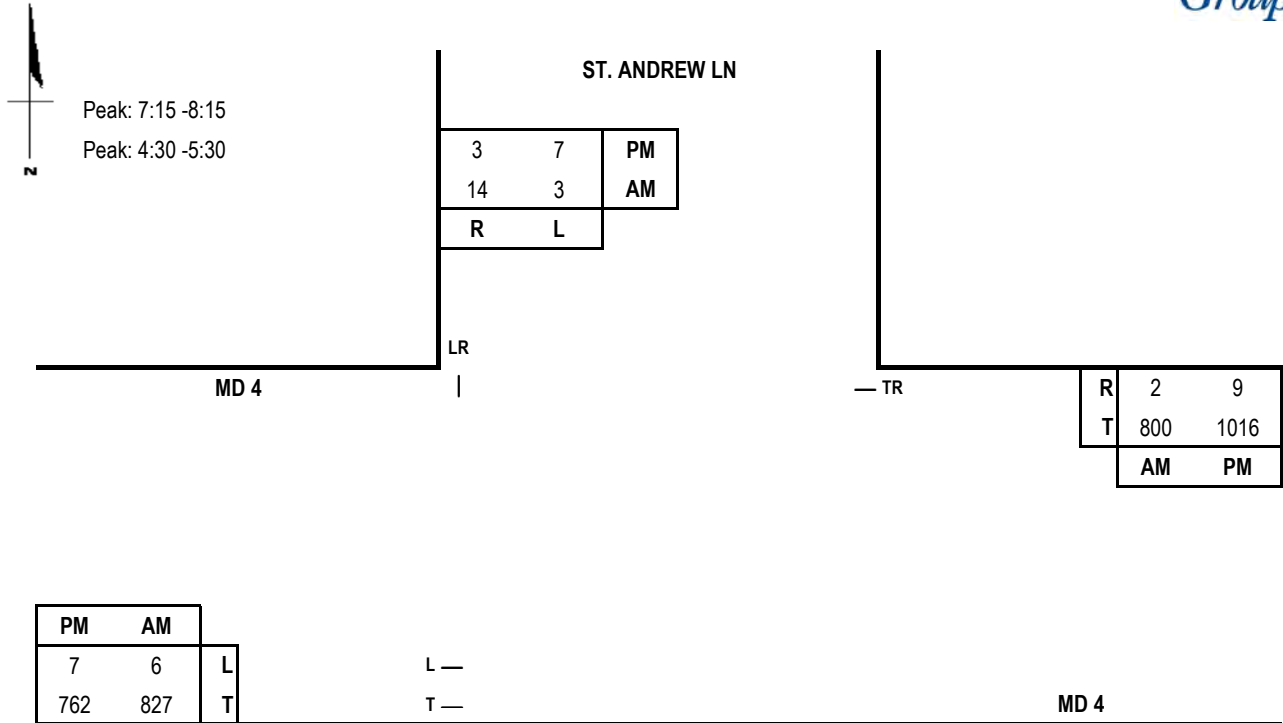
N/S Road: St. Andrew Ln

Conditions: Background Traffic

Date of Count: 1/28/2025

Day of Count: Tuesday

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	17	1.00	17			
EB	827	1.00	827			
WB	802	1.00	802	6	1.00	6
CLV TOTAL=						844
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	10	1.00	10			
EB	762	1.00	762			
WB	1025	1.00	1025	7	1.00	7
CLV TOTAL=						1,042
Level of Service (LOS)=						B

Scenario ID - BACK2

CLV V/C =0.53

CLV V/C =0.65

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

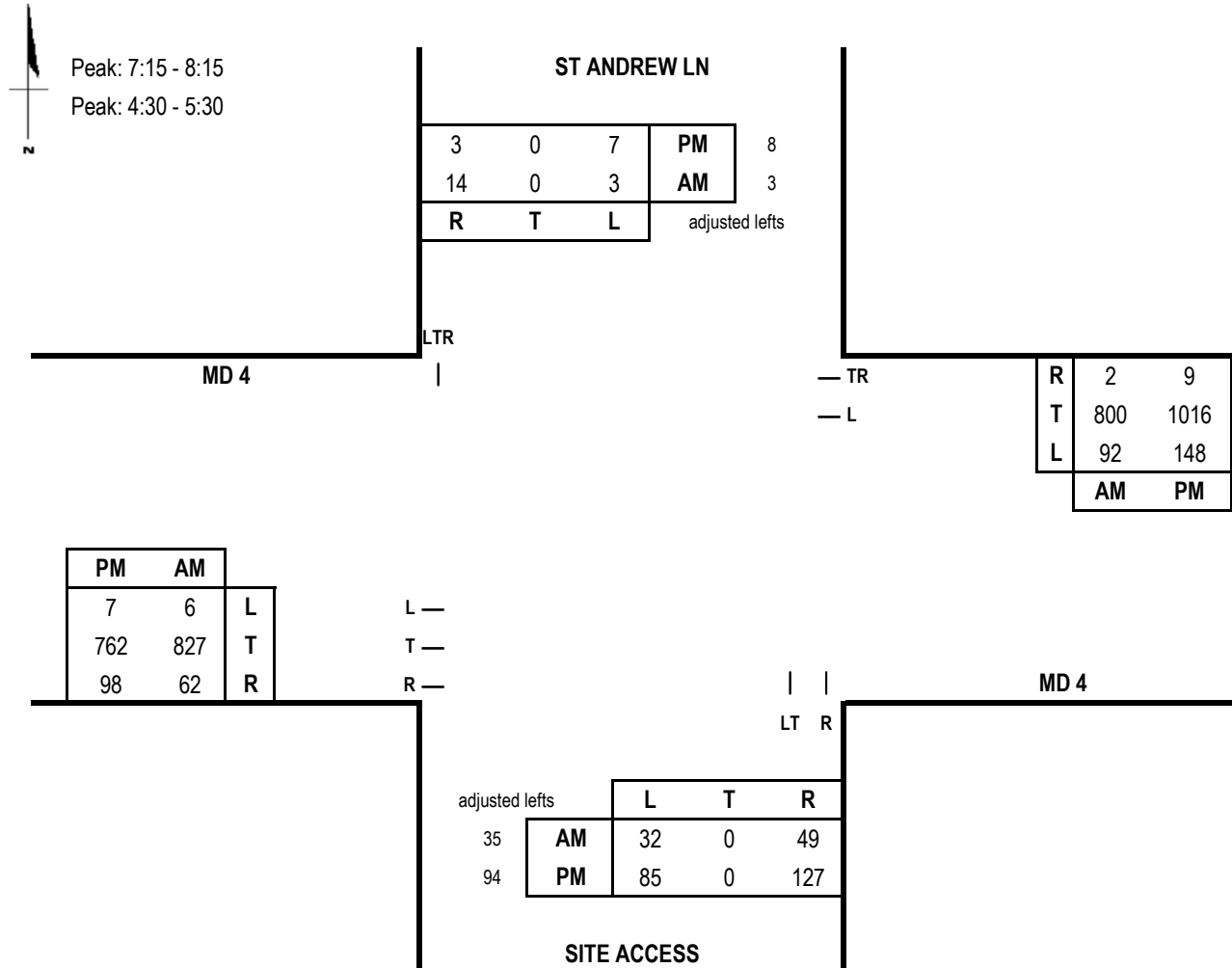
Date of Count: 1/28/2025

N/S Road: St. Andrew Ln/Site Access

Day of Count: Tuesday

Conditions: Total Traffic

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			AM
	VOL	x LUF	= Total	VOL	x LUF	= Total	CLV
NB	35	1.00	35	3	1.00	3	49
SB	17	1.00	17	32	1.00	32	
EB	827	1.00	827	92	1.00	92	919
WB	802	1.00	802	6	1.00	6	
CLV TOTAL=							968
Level of Service (LOS)=							A

AM V/C = 0.61

Evening Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			PM
	VOL	x LUF	= Total	VOL	x LUF	= Total	CLV
NB	94	1.00	94	7	1.00	7	101
SB	11	1.00	11	85	1.00	85	
EB	762	1.00	762	148	1.00	148	1032
WB	1025	1.00	1025	7	1.00	7	
CLV TOTAL=							1,133
Level of Service (LOS)=							B

PM V/C = 0.71

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

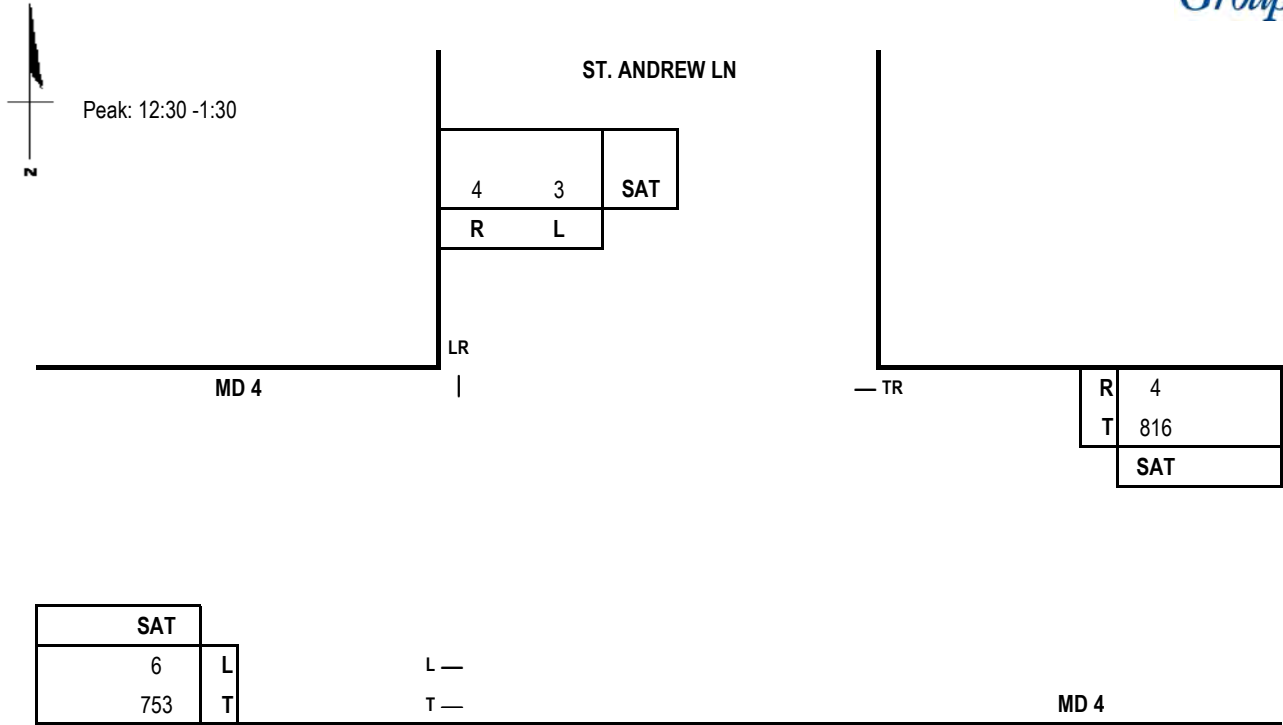
N/S Road: St. Andrew Ln

Conditions: Existing Traffic

Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	7	1.00	7			
EB	753	1.00	753			
WB	820	1.00	820	6	1.00	6
CLV TOTAL=						833
Level of Service (LOS)=						A

Scenario ID - EXIST2

CLV V/C =0.52

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

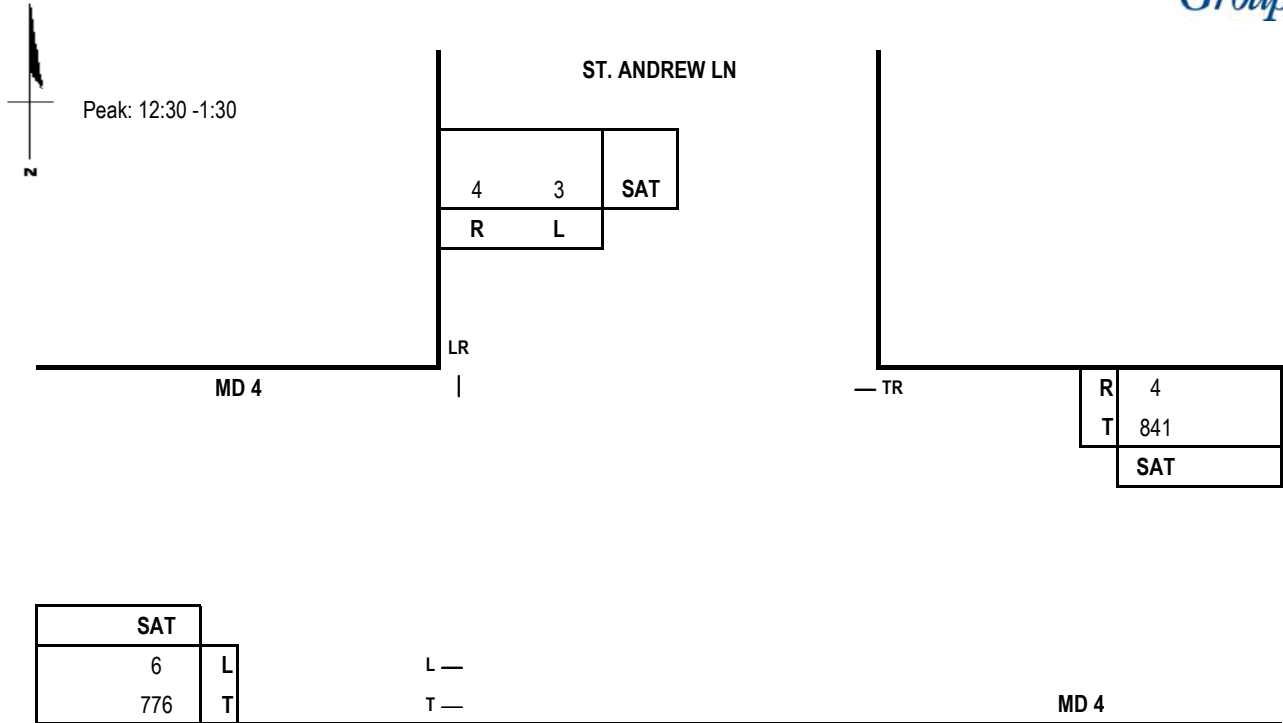
N/S Road: St. Andrew Ln

Conditions: Background Traffic

Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			SAT
	VOL	x LUF	= Total	VOL	x LUF	= Total	CLV
SB	7	1.00	7				7
EB	776	1.00	776				851
WB	845	1.00	845	6	1.00	6	
CLV TOTAL=							858
Level of Service (LOS)=							A

Scenario ID - BACK2

CLV V/C =0.54

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

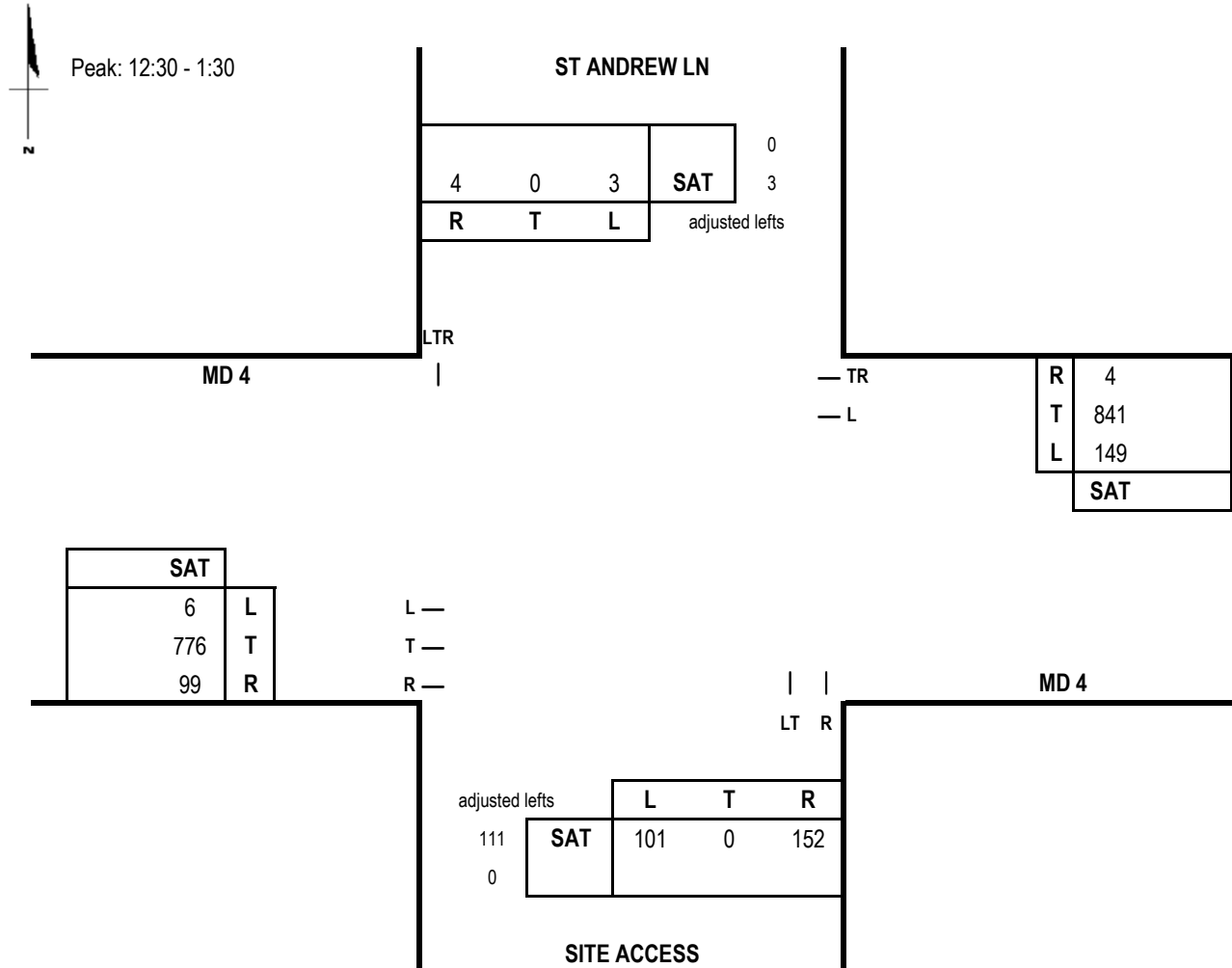
Date of Count: 1/25/2025

N/S Road: St. Andrew Ln/Site Access

Day of Count: Saturday

Conditions: Total Traffic

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			SAT CLV
	VOL	x LUF	= Total	VOL	x LUF	= Total	
NB	111	1.00	111	3	1.00	3	114
SB	7	1.00	7	101	1.00	101	
EB	776	1.00	776	149	1.00	149	925
WB	845	1.00	845	6	1.00	6	
CLV TOTAL=							1,039
Level of Service (LOS)=							B

SAT V/C = 0.65

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

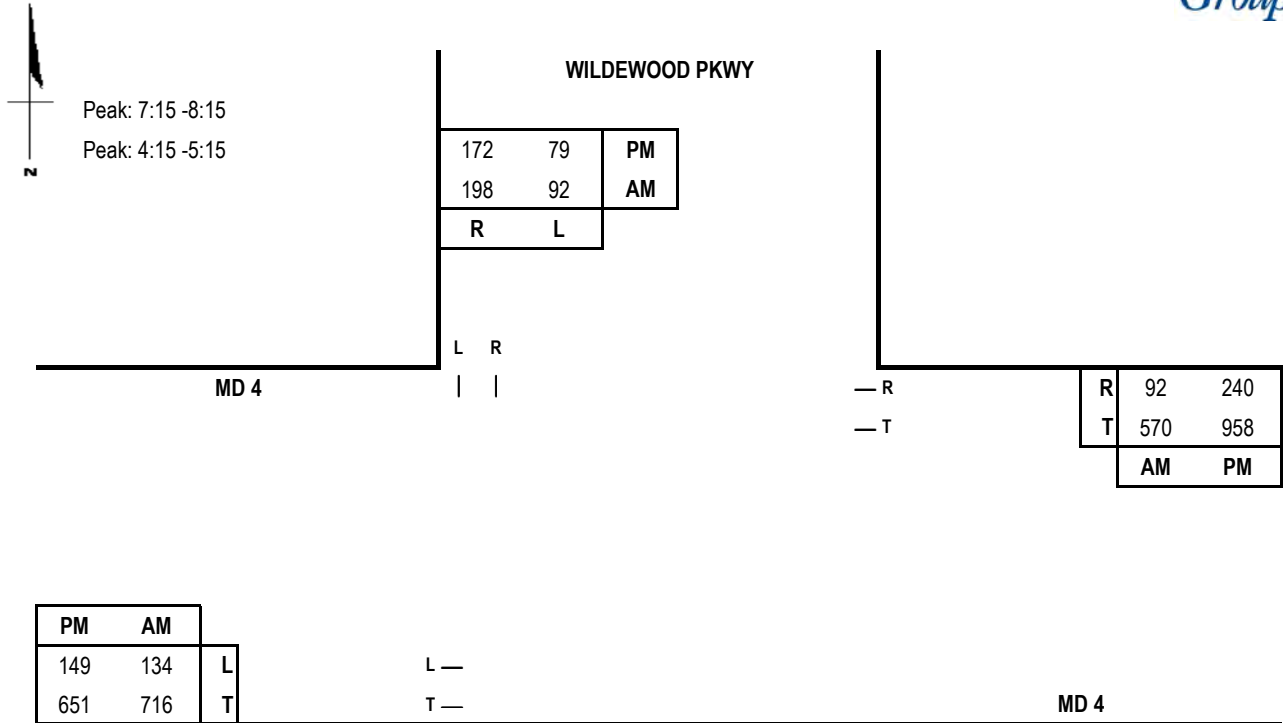
N/S Road: Wildewood Pkwy

Conditions: Existing Traffic

Date of Count: 1/28/2025

Day of Count: Tuesday

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	92	1.00	92			
EB	716	1.00	716			
WB	570	1.00	570	134	1.00	134
CLV TOTAL=						808
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	79	1.00	79			
EB	651	1.00	651			
WB	958	1.00	958	149	1.00	149
CLV TOTAL=						1,186
Level of Service (LOS)=						C

Scenario ID - EXIST3

CLV V/C =0.51

CLV V/C =0.74

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

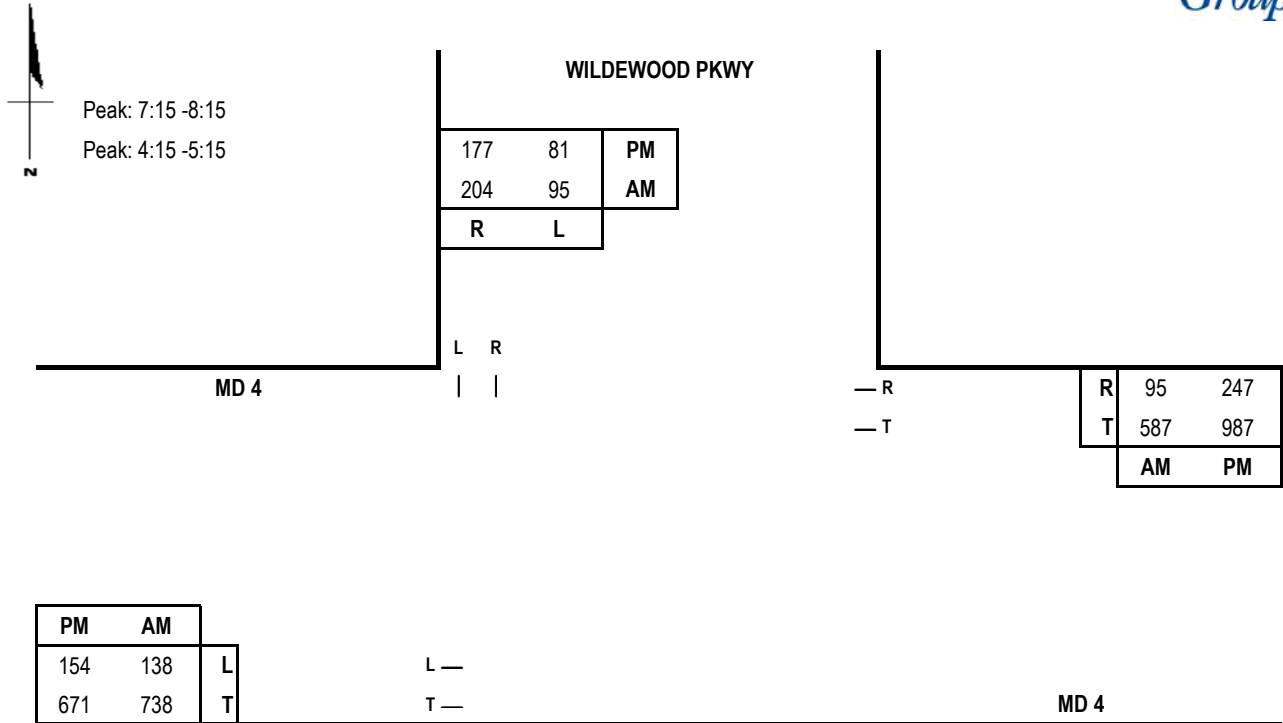
N/S Road: Wildewood Pkwy

Conditions: Background Traffic

Date of Count: 1/28/2025

Day of Count: Tuesday

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	95	1.00	95			
EB	738	1.00	738			
WB	587	1.00	587	138	1.00	138
CLV TOTAL=						833
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	81	1.00	81			
EB	671	1.00	671			
WB	987	1.00	987	154	1.00	154
CLV TOTAL=						1,222
Level of Service (LOS)=						C

Scenario ID - BACK3

CLV V/C =0.52

CLV V/C =0.76

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

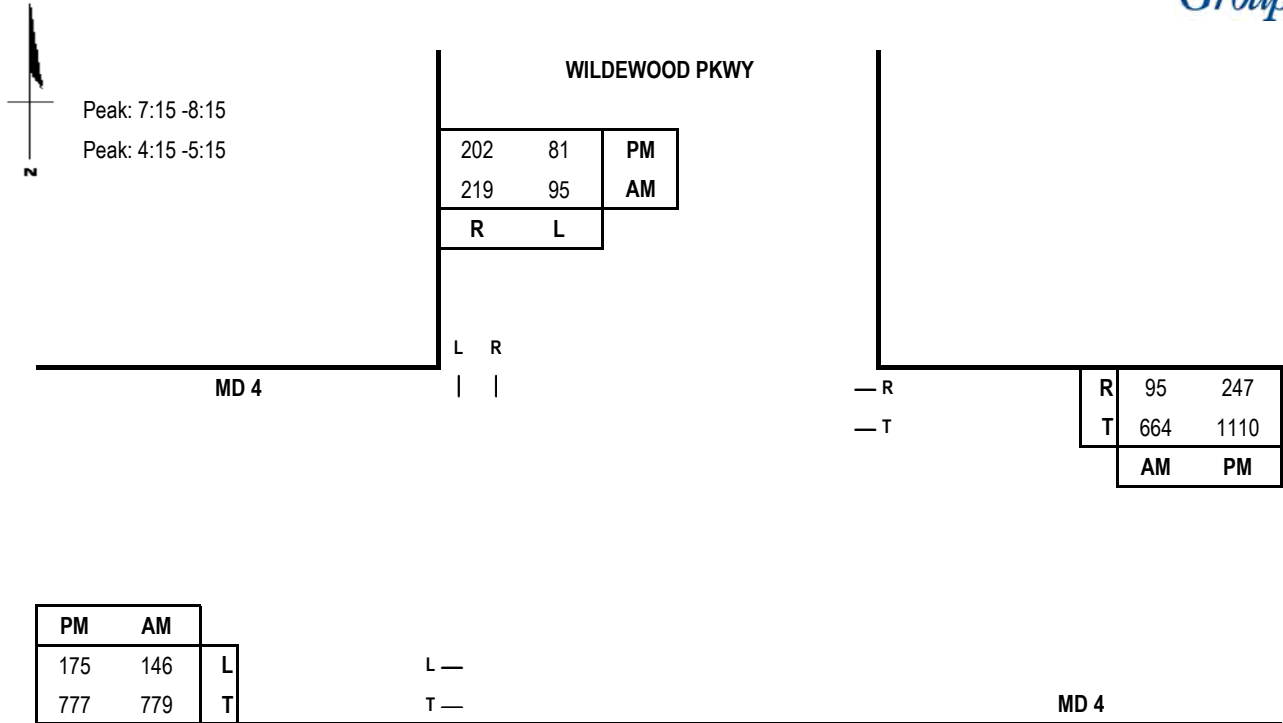
N/S Road: Wildewood Pkwy

Conditions: Total Traffic

Date of Count: 1/28/2025

Day of Count: Tuesday

Analyst: Richard Huang



Capacity Analysis

Morning Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	95	1.00	95			
EB	779	1.00	779			
WB	664	1.00	664	146	1.00	146
CLV TOTAL=						905
Level of Service (LOS)=						A

Evening Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	81	1.00	81			
EB	777	1.00	777			
WB	1110	1.00	1110	175	1.00	175
CLV TOTAL=						1,366
Level of Service (LOS)=						D

Scenario ID - TOT3

CLV V/C =0.57

CLV V/C =0.85

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

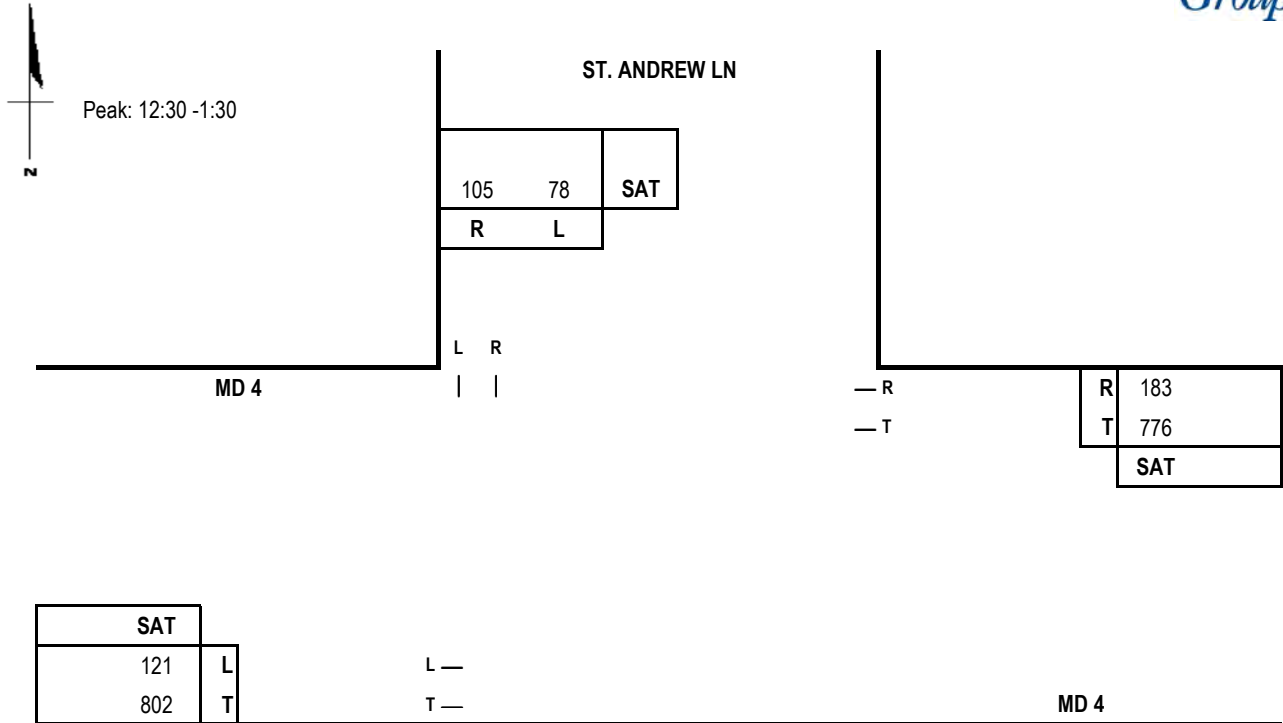
N/S Road: St. Andrew Ln

Conditions: Existing Traffic

Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	78	1.00	78			
EB	802	1.00	802			
WB	776	1.00	776	121	1.00	121
CLV TOTAL=						975
Level of Service (LOS)=						A

Scenario ID - EXIST3

CLV V/C =0.61

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

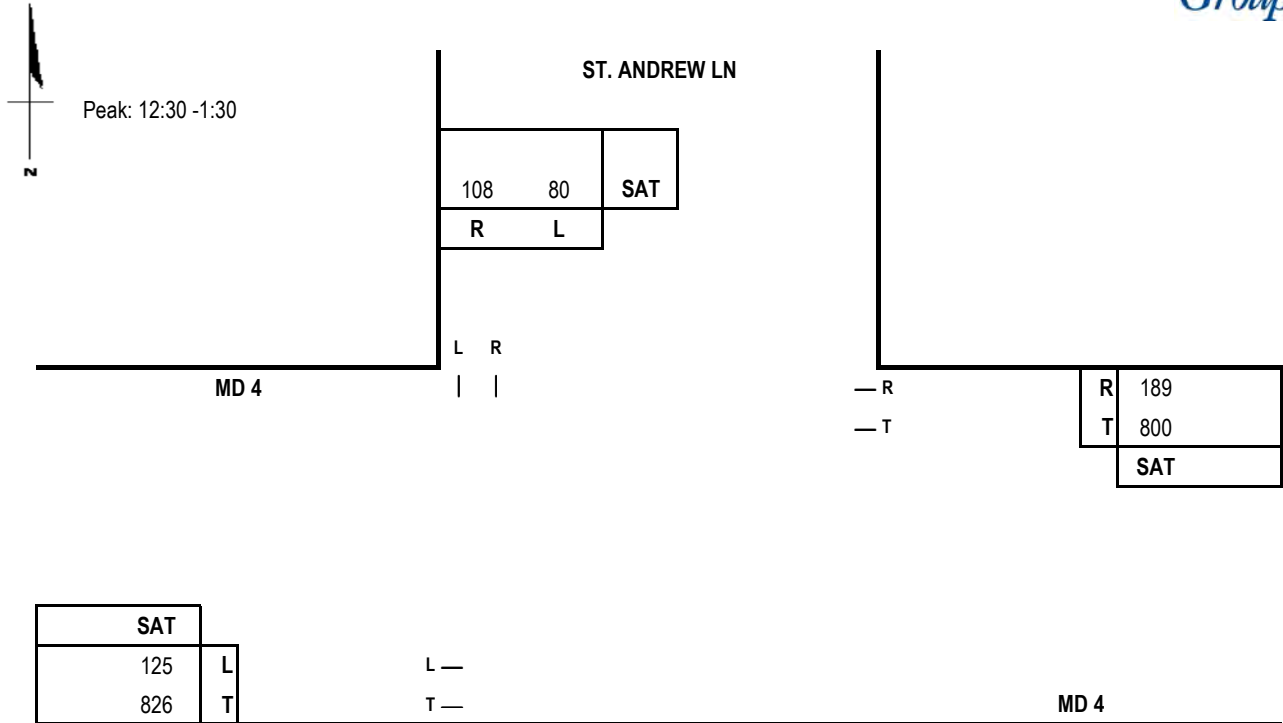
N/S Road: St. Andrew Ln

Conditions: Background Traffic

Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour							
Dir	Thru Volumes			+ Opposing Lefts			SAT
	VOL	x LUF	= Total	VOL	x LUF	= Total	CLV
SB	80	1.00	80				80
EB	826	1.00	826				925
WB	800	1.00	800	125	1.00	125	
CLV TOTAL=							1,005
Level of Service (LOS)=							B

Scenario ID - BACK3

CLV V/C =0.63

CRITICAL LANE VOLUME (CLV) METHODOLOGY for MSHA

E/W Road: MD 4

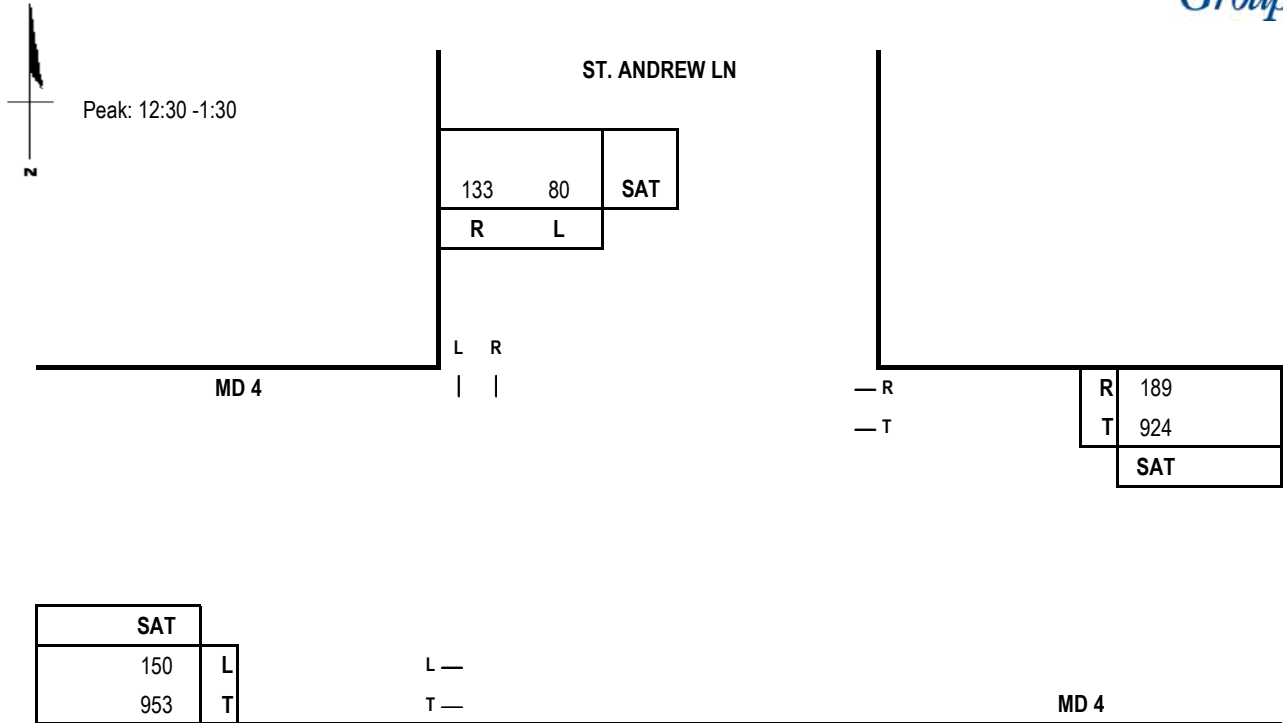
N/S Road: St. Andrew Ln

Conditions: Total Traffic

Date of Count: 1/25/2025

Day of Count: Saturday

Analyst: Richard Huang



Capacity Analysis

Sat. Midday Peak Hour						
Dir	Thru Volumes			+ Opposing Lefts		
	VOL	x LUF	= Total	VOL	x LUF	= Total
SB	80	1.00	80			
EB	953	1.00	953			
WB	924	1.00	924	150	1.00	150
CLV TOTAL=						1,154
Level of Service (LOS)=						C

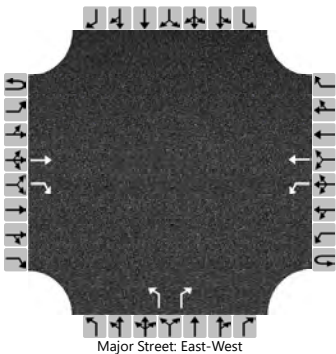
Scenario ID - TOT3

CLV V/C =0.72

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	Indian Bridge Rd
Time Analyzed	EX AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			651	42		130	649			56		174				
Percent Heavy Vehicles (%)						5				0		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.15				6.40		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.25				3.50		3.33				

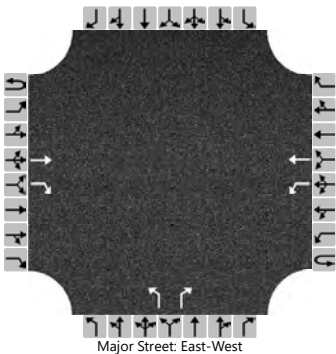
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						151				65		202				
Capacity, c (veh/h)						806				71		406				
v/c Ratio						0.19				0.92		0.50				
95% Queue Length, Q ₉₅ (veh)						0.7				4.6		2.7				
95% Queue Length, Q ₉₅ (ft)						18.2				115.0		69.1				
Control Delay (s/veh)						10.5				184.4		22.4				
Level of Service (LOS)						B				F		C				
Approach Delay (s/veh)					1.8				61.8							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	Indian Bridge Rd
Time Analyzed	Back AM	Peak Hour Factor	0.86
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			671	43		134	669			58		179				
Percent Heavy Vehicles (%)						5				0		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.15				6.40		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.25				3.50		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						156				67		208				
Capacity, c (veh/h)						789				65		394				
v/c Ratio						0.20				1.05		0.53				
95% Queue Length, Q ₉₅ (veh)						0.7				5.2		3.0				
95% Queue Length, Q ₉₅ (ft)						18.2				130.0		76.8				
Control Delay (s/veh)						10.7				233.4		24.0				
Level of Service (LOS)						B				F		C				
Approach Delay (s/veh)					1.8				75.2							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

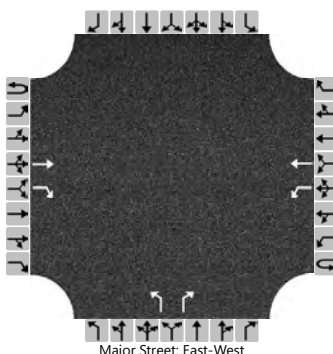
General Information

Analyst	RH
Agency/Co.	The Traffic Group, Inc.
Date Performed	2/12/2025
Analysis Year	2028
Time Analyzed	Total AM
Intersection Orientation	East-West
Project Description	St. Mary County Sport Complex

Site Information

Intersection	MD4 at Indian Bridge Rd
Jurisdiction	St. Mary County, MD
East/West Street	MD 4
North/South Street	Indian Bridge Rd
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			702	43		150	685			58		210				
Percent Heavy Vehicles (%)						5				0		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.15				6.40		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.25				3.50		3.33				

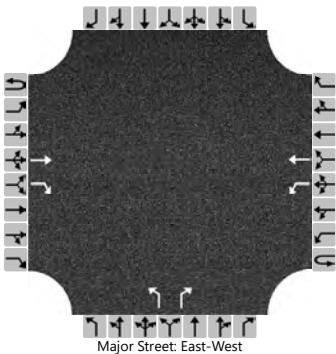
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						174				67		244				
Capacity, c (veh/h)						765				54		375				
v/c Ratio						0.23				1.24		0.65				
95% Queue Length, Q ₉₅ (veh)						0.9				5.9		4.4				
95% Queue Length, Q ₉₅ (ft)						23.4				147.5		112.6				
Control Delay (s/veh)						11.1				324.9		30.8				
Level of Service (LOS)						B				F		D				
Approach Delay (s/veh)					2.0				94.4							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	Indian Bridge Rd
Time Analyzed	EX PM	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			562	36		254	738			48		176				
Percent Heavy Vehicles (%)						3				6		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.46		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.55		3.33				

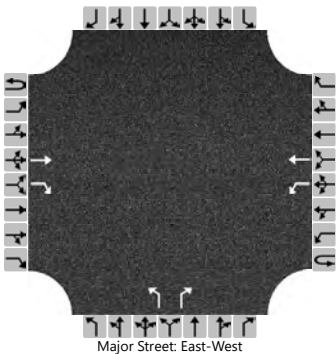
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					262				49		181					
Capacity, c (veh/h)					959				57		513					
v/c Ratio					0.27				0.87		0.35					
95% Queue Length, Q ₉₅ (veh)					1.1				3.9		1.6					
95% Queue Length, Q ₉₅ (ft)					28.2				102.2		41.0					
Control Delay (s/veh)					10.2				199.7		15.8					
Level of Service (LOS)					B				F		C					
Approach Delay (s/veh)					2.6				55.2							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	Indian Bridge Rd
Time Analyzed	Back PM	Peak Hour Factor	0.97
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			579	37		262	760			49		181				
Percent Heavy Vehicles (%)						3				6		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.46		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.55		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						270				51		187				
Capacity, c (veh/h)						943				51		501				
v/c Ratio						0.29				0.98		0.37				
95% Queue Length, Q ₉₅ (veh)						1.2				4.3		1.7				
95% Queue Length, Q ₉₅ (ft)						30.7				112.7		43.5				
Control Delay (s/veh)						10.3				247.3		16.4				
Level of Service (LOS)						B				F		C				
Approach Delay (s/veh)					2.7				65.6							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

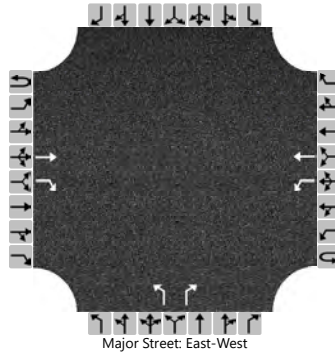
General Information

Analyst	RH
Agency/Co.	The Traffic Group, Inc.
Date Performed	2/12/2025
Analysis Year	2028
Time Analyzed	Total PM
Intersection Orientation	East-West
Project Description	St. Mary County Sport Complex

Site Information

Intersection	MD4 at Indian Bridge Rd
Jurisdiction	St. Mary County, MD
East/West Street	MD 4
North/South Street	Indian Bridge Rd
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			628	37		304	803			49		230				
Percent Heavy Vehicles (%)						3				6		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.46		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.55		3.33				

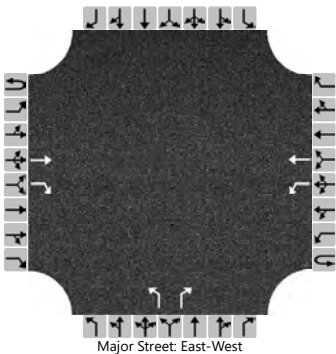
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						313				51		237				
Capacity, c (veh/h)						903				36		469				
v/c Ratio						0.35				1.40		0.51				
95% Queue Length, Q ₉₅ (veh)						1.6				5.3		2.8				
95% Queue Length, Q ₉₅ (ft)						41.0				138.9		71.7				
Control Delay (s/veh)						11.1				460.5		20.3				
Level of Service (LOS)						B				F		C				
Approach Delay (s/veh)					3.0				97.6							
Approach LOS					A				F							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	Indian Bridge Rd
Time Analyzed	EX SAT	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			568	19		171	638			18		187				
Percent Heavy Vehicles (%)						1				0		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.11				6.40		6.21				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.21				3.50		3.31				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						174				18		191				
Capacity, c (veh/h)						983				100		516				
v/c Ratio						0.18				0.18		0.37				
95% Queue Length, Q ₉₅ (veh)						0.6				0.6		1.7				
95% Queue Length, Q ₉₅ (ft)						15.1				15.0		42.8				
Control Delay (s/veh)						9.5				49.0		16.0				
Level of Service (LOS)						A				E		C				
Approach Delay (s/veh)					2.0				18.9							
Approach LOS					A				C							

HCS Two-Way Stop-Control Report

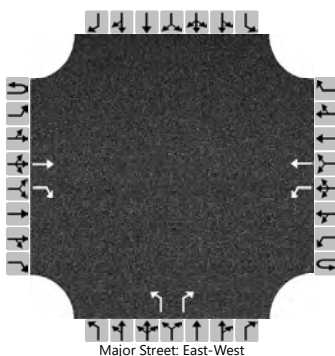
General Information

Analyst	RH
Agency/Co.	The Traffic Group, Inc.
Date Performed	2/12/2025
Analysis Year	2028
Time Analyzed	Back SAT
Intersection Orientation	East-West
Project Description	St. Mary County Sport Complex

Site Information

Intersection	MD4 at Indian Bridge Rd
Jurisdiction	St. Mary County, MD
East/West Street	MD 4
North/South Street	Indian Bridge Rd
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			585	20		176	657			19		193				
Percent Heavy Vehicles (%)						1				0		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.11				6.40		6.21				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.21				3.50		3.31				

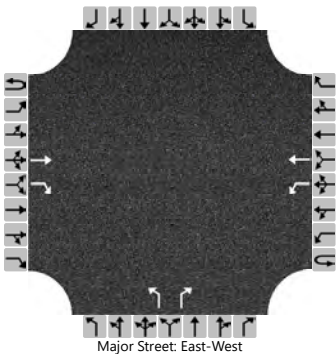
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						180				19		197				
Capacity, c (veh/h)						968				93		505				
v/c Ratio						0.19				0.21		0.39				
95% Queue Length, Q ₉₅ (veh)						0.7				0.7		1.8				
95% Queue Length, Q ₉₅ (ft)						17.6				17.5		45.4				
Control Delay (s/veh)						9.6				53.9		16.6				
Level of Service (LOS)						A				F		C				
Approach Delay (s/veh)					2.0				20.0							
Approach LOS					A				C							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD4 at Indian Bridge Rd
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St. Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	Indian Bridge Rd
Time Analyzed	Total SAT	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St. Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			635	20		226	708			19		242				
Percent Heavy Vehicles (%)						1				0		1				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.11				6.40		6.21				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.21				3.50		3.31				

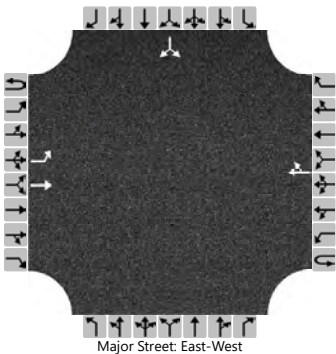
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						231				19		247				
Capacity, c (veh/h)						926				64		472				
v/c Ratio						0.25				0.30		0.52				
95% Queue Length, Q ₉₅ (veh)						1.0				1.1		3.0				
95% Queue Length, Q ₉₅ (ft)						25.2				27.5		75.6				
Control Delay (s/veh)						10.2				84.5		20.7				
Level of Service (LOS)						B				F		C				
Approach Delay (s/veh)					2.5				25.3							
Approach LOS					A				D							

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	St Andrews Lane
Time Analyzed	EX AM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		6	803				776	2						3		14
Percent Heavy Vehicles (%)		17												0		14
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.27												6.40		6.34
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.35												3.50		3.43

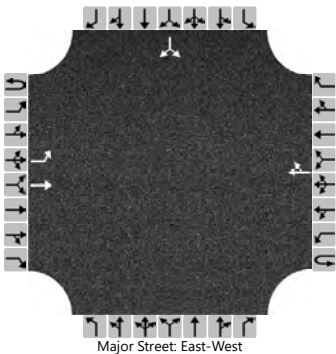
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													19	
Capacity, c (veh/h)		706													310	
v/c Ratio		0.01													0.06	
95% Queue Length, Q ₉₅ (veh)		0.0													0.2	
95% Queue Length, Q ₉₅ (ft)		0.0													5.5	
Control Delay (s/veh)		10.1													17.4	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.1												17.4			
Approach LOS	A												C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Back AM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		6	827				800	2						3		14
Percent Heavy Vehicles (%)		17												0		14
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.27												6.40		6.34
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.35												3.50		3.43

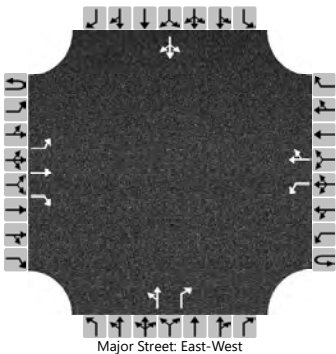
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													19	
Capacity, c (veh/h)		689													293	
v/c Ratio		0.01													0.07	
95% Queue Length, Q ₉₅ (veh)		0.0													0.2	
95% Queue Length, Q ₉₅ (ft)		0.0													5.5	
Control Delay (s/veh)		10.3													18.1	
Level of Service (LOS)		B													C	
Approach Delay (s/veh)	0.1												18.1			
Approach LOS	A												C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Total AM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	1	0	1	1	0		0	1	1		0	1	0
Configuration		L	T	R		L		TR		LT		R			LTR	
Volume (veh/h)		6	827	62		92	800	2		32	0	49		3	0	14
Percent Heavy Vehicles (%)		17				3				3	0	3		0	0	14
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.27				4.13				7.13	6.50	6.23		7.10	6.50	6.34
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.35				2.23				3.53	4.00	3.33		3.50	4.00	3.43

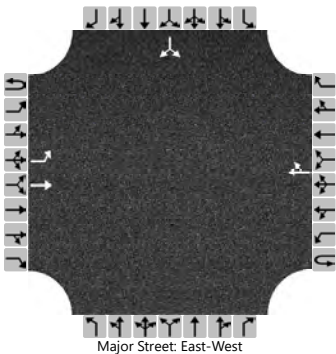
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				105				36		56			19	
Capacity, c (veh/h)		689				682				31		318			104	
v/c Ratio		0.01				0.15				1.18		0.17			0.19	
95% Queue Length, Q ₉₅ (veh)		0.0				0.5				4.0		0.6			0.6	
95% Queue Length, Q ₉₅ (ft)		0.0				12.8				102.4		15.4			16.4	
Control Delay (s/veh)		10.3				11.2				412.6		18.7			47.6	
Level of Service (LOS)		B				B				F		C			E	
Approach Delay (s/veh)	0.1				1.2				174.3				47.6			
Approach LOS	A				A				F				E			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	St Andrews Lane
Time Analyzed	EX PM	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		7	740				986	9						7		3
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

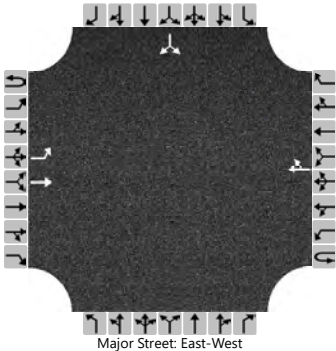
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													10	
Capacity, c (veh/h)		691													128	
v/c Ratio		0.01													0.08	
95% Queue Length, Q ₉₅ (veh)		0.0													0.3	
95% Queue Length, Q ₉₅ (ft)		0.0													7.5	
Control Delay (s/veh)		10.3													35.5	
Level of Service (LOS)		B													E	
Approach Delay (s/veh)	0.1												35.5			
Approach LOS	A												E			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Back PM	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		7	762				1016	9						7		3
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

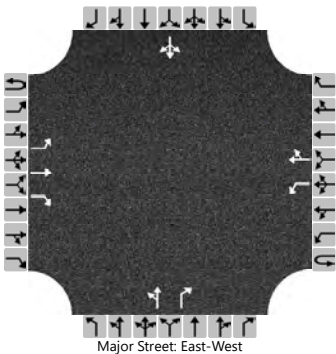
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													10	
Capacity, c (veh/h)		673													119	
v/c Ratio		0.01													0.09	
95% Queue Length, Q ₉₅ (veh)		0.0													0.3	
95% Queue Length, Q ₉₅ (ft)		0.0													7.5	
Control Delay (s/veh)		10.4													38.1	
Level of Service (LOS)		B													E	
Approach Delay (s/veh)	0.1												38.1			
Approach LOS	A												E			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Total PM	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	1	0	1	1	0		0	1	1		0	1	0
Configuration		L	T	R		L		TR		LT		R			LTR	
Volume (veh/h)		7	762	98		148	1016	9		85	0	127		7	0	3
Percent Heavy Vehicles (%)		0				3				3	0	3		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.13				7.13	6.50	6.23		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.23				3.53	4.00	3.33		3.50	4.00	3.30

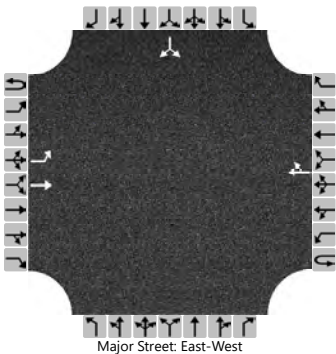
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				151				87		130			10	
Capacity, c (veh/h)		673				765				28		395			22	
v/c Ratio		0.01				0.20				3.12		0.33			0.46	
95% Queue Length, Q ₉₅ (veh)		0.0				0.7				10.5		1.4			1.3	
95% Queue Length, Q ₉₅ (ft)		0.0				17.9				268.8		35.8			32.5	
Control Delay (s/veh)		10.4				10.9				1250.8		18.5			263.7	
Level of Service (LOS)		B				B				F		C			F	
Approach Delay (s/veh)	0.1				1.4				512.6				263.7			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2025	North/South Street	St Andrews Lane
Time Analyzed	EX SAT	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		6	753				816	4						3		4
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

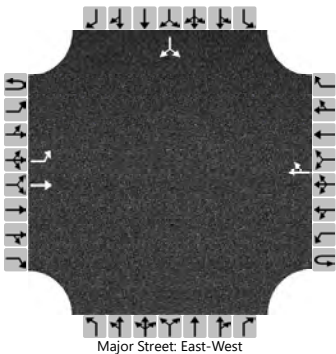
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													7	
Capacity, c (veh/h)		806													247	
v/c Ratio		0.01													0.03	
95% Queue Length, Q ₉₅ (veh)		0.0													0.1	
95% Queue Length, Q ₉₅ (ft)		0.0													2.5	
Control Delay (s/veh)		9.5													20.0	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)	0.1												20.0			
Approach LOS	A												C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Back SAT	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	T					TR							LR	
Volume (veh/h)		6	776				841	4						3		4
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

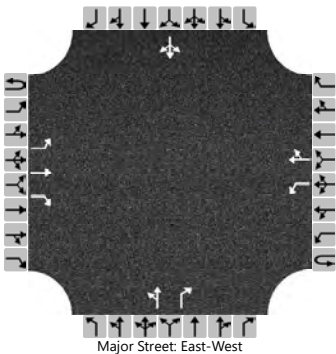
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6													7	
Capacity, c (veh/h)		789													232	
v/c Ratio		0.01													0.03	
95% Queue Length, Q ₉₅ (veh)		0.0													0.1	
95% Queue Length, Q ₉₅ (ft)		0.0													2.5	
Control Delay (s/veh)		9.6													21.0	
Level of Service (LOS)		A													C	
Approach Delay (s/veh)	0.1												21.0			
Approach LOS	A												C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	RH	Intersection	MD 4 at St. Andrews Lane
Agency/Co.	The Traffic Group, Inc.	Jurisdiction	St Mary County, MD
Date Performed	2/12/2025	East/West Street	MD 4
Analysis Year	2028	North/South Street	St Andrews Lane
Time Analyzed	Total SAT	Peak Hour Factor	0.98
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	St Mary County Sport Complex		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	1	0	1	1	0		0	1	1		0	1	0
Configuration		L	T	R		L		TR		LT		R			LTR	
Volume (veh/h)		6	776	99		149	841	4		101	0	152		3	0	4
Percent Heavy Vehicles (%)		0				3				3	0	3		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.13				7.13	6.50	6.23		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.23				3.53	4.00	3.33		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				152				103		155			7	
Capacity, c (veh/h)		789				755				36		388			40	
v/c Ratio		0.01				0.20				2.83		0.40			0.18	
95% Queue Length, Q ₉₅ (veh)		0.0				0.7				11.6		1.9			0.6	
95% Queue Length, Q ₉₅ (ft)		0.0				17.9				297.0		48.6			15.0	
Control Delay (s/veh)		9.6				11.0				1057.4		20.3			113.4	
Level of Service (LOS)		A				B				F		C			F	
Approach Delay (s/veh)	0.1				1.6				434.3				113.4			
Approach LOS	A				A				F				F			

Timings
1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total AM Peak w/Improvement

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	702	43	150	685	58	210
Future Volume (vph)	702	43	150	685	58	210
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	25.0	25.0	5.0	25.0	5.0	5.0
Minimum Split (s)	30.0	30.0	10.0	30.0	23.0	23.0
Total Split (s)	60.0	60.0	30.0	90.0	30.0	30.0
Total Split (%)	50.0%	50.0%	25.0%	75.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

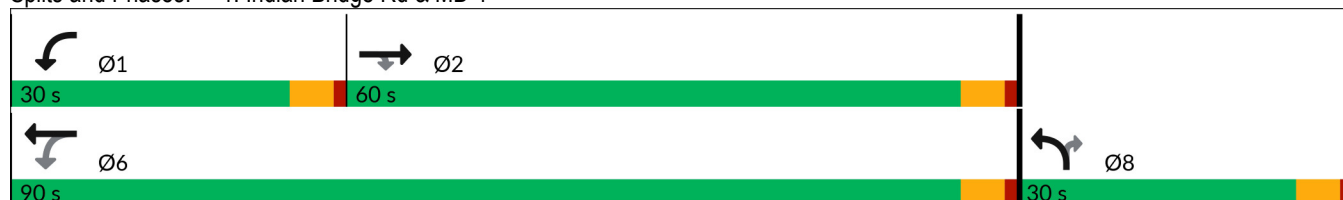
Cycle Length: 120

Actuated Cycle Length: 80.4

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Indian Bridge Rd & MD 4



03/03/2025

HCM 7th Signalized Intersection Summary
1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total AM Peak w/Improvement

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	702	43	150	685	58	210
Future Volume (veh/h)	702	43	150	685	58	210
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1752	1826	1841	1900	1856
Adj Flow Rate, veh/h	816	50	174	797	67	244
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	10	5	4	0	3
Cap, veh/h	955	764	320	1221	344	299
Arrive On Green	0.51	0.51	0.08	0.66	0.19	0.19
Sat Flow, veh/h	1856	1485	1739	1841	1810	1572
Grp Volume(v), veh/h	816	50	174	797	67	244
Grp Sat Flow(s), veh/h/ln	1856	1485	1739	1841	1810	1572
Q Serve(g_s), s	25.9	1.2	2.9	17.5	2.1	10.1
Cycle Q Clear(g_c), s	25.9	1.2	2.9	17.5	2.1	10.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	955	764	320	1221	344	299
V/C Ratio(X)	0.85	0.07	0.54	0.65	0.20	0.82
Avail Cap(c_a), veh/h	1500	1200	828	2299	665	578
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.3	8.3	13.4	6.8	23.2	26.4
Incr Delay (d2), s/veh	3.0	0.0	1.4	0.6	0.3	5.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.2	0.6	2.4	8.8	1.6	7.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.4	8.3	14.8	7.4	23.5	31.9
LnGrp LOS	B	A	B	A	C	C
Approach Vol, veh/h	866			971	311	
Approach Delay, s/veh	16.8			8.7	30.1	
Approach LOS	B			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.1	40.0			50.1	17.9
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	25.0	55.0			85.0	25.0
Max Q Clear Time (g_c+I1), s	4.9	27.9			19.5	12.1
Green Ext Time (p_c), s	0.4	7.1			7.5	0.8
Intersection Summary						
HCM 7th Control Delay, s/veh			15.1			
HCM 7th LOS			B			

03/03/2025

Timings 2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report

Total AM Peak w/Improvement

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	6	827	62	92	800	32	0	49	3	0
Future Volume (vph)	6	827	62	92	800	32	0	49	3	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases	5	2		1	6		8			4
Permitted Phases	2		2	6		8		8	4	
Detector Phase	5	2	2	1	6	8	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	30.0	30.0	10.0	30.0	25.0	25.0	25.0	25.0	25.0
Minimum Split (s)	10.0	35.0	35.0	15.0	35.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	10.0	60.0	60.0	20.0	70.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	9.1%	54.5%	54.5%	18.2%	63.6%	27.3%	27.3%	27.3%	27.3%	27.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min

Intersection Summary

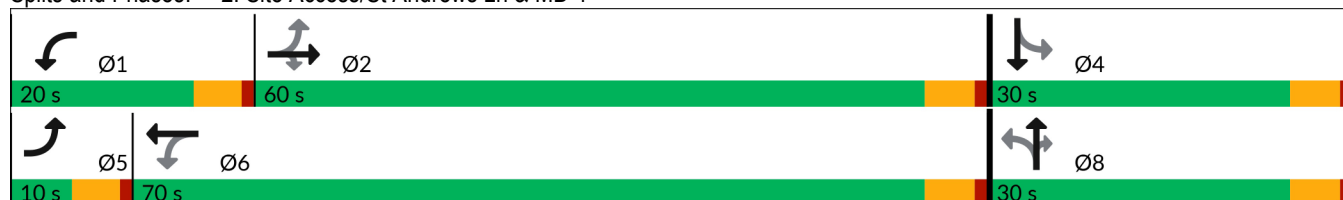
Cycle Length: 110

Actuated Cycle Length: 106

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Site Access/St Andrews Ln & MD 4



03/03/2025

HCM 7th Signalized Intersection Summary 2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report
Total AM Peak w/Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	827	62	92	800	2	32	0	49	3	0	14
Future Volume (veh/h)	6	827	62	92	800	2	32	0	49	3	0	14
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	1648	1856	1900	1900	1841	1900	1900	1900	1900	1900	1900	1693
Adj Flow Rate, veh/h	7	940	70	105	909	2	36	0	56	3	0	16
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	17	3	0	0	4	0	0	0	0	0	0	14
Cap, veh/h	201	969	841	254	1111	2	415	0	388	77	24	325
Arrive On Green	0.01	0.52	0.52	0.09	0.61	0.61	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	1570	1856	1610	1810	1836	4	1434	0	1610	154	98	1346
Grp Volume(v), veh/h	7	940	70	105	0	911	36	0	56	19	0	0
Grp Sat Flow(s),veh/h/ln	1570	1856	1610	1810	0	1840	1434	0	1610	1598	0	0
Q Serve(g_s), s	0.2	50.8	2.3	2.3	0.0	40.1	0.9	0.0	2.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	50.8	2.3	2.3	0.0	40.1	1.8	0.0	2.8	0.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.16		0.84
Lane Grp Cap(c), veh/h	201	969	841	254	0	1114	415	0	388	426	0	0
V/C Ratio(X)	0.03	0.97	0.08	0.41	0.00	0.82	0.09	0.00	0.14	0.04	0.00	0.00
Avail Cap(c_a), veh/h	263	984	854	349	0	1154	415	0	388	426	0	0
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	24.0	12.4	22.3	0.0	16.0	30.5	0.0	30.9	30.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	21.5	0.0	1.1	0.0	4.6	0.1	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	33.0	1.3	2.4	0.0	21.5	1.3	0.0	2.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.4	45.4	12.4	23.4	0.0	20.6	30.6	0.0	31.1	30.2	0.0	0.0
LnGrp LOS	B	D	B	C		C	C		C	C		
Approach Vol, veh/h	1017			1016			92			19		
Approach Delay, s/veh	43.0			20.9			30.9			30.2		
Approach LOS	D			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.5	59.2		30.0	5.9	67.8		30.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	55.0		25.0	5.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	4.3	52.8		2.9	2.2	42.1		4.8				
Green Ext Time (p_c), s	0.1	1.3		0.0	0.0	6.5		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh				31.9								
HCM 7th LOS				C								

03/03/2025

Timings
1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total PM Peak w/Improvement

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	628	37	304	803	49	230
Future Volume (vph)	628	37	304	803	49	230
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	25.0	25.0	5.0	25.0	5.0	5.0
Minimum Split (s)	30.0	30.0	10.0	30.0	23.0	23.0
Total Split (s)	60.0	60.0	30.0	90.0	30.0	30.0
Total Split (%)	50.0%	50.0%	25.0%	75.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

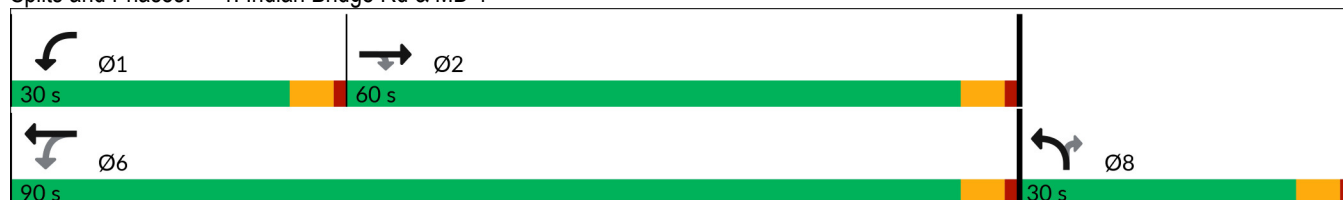
Cycle Length: 120

Actuated Cycle Length: 68.7

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Indian Bridge Rd & MD 4



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HCM 7th Signalized Intersection Summary
1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total PM Peak w/Improvement

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	628	37	304	803	49	230
Future Volume (veh/h)	628	37	304	803	49	230
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1900	1856	1885	1811	1856
Adj Flow Rate, veh/h	647	38	313	828	51	237
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	3	1	6	3
Cap, veh/h	798	681	452	1211	327	298
Arrive On Green	0.42	0.42	0.14	0.64	0.19	0.19
Sat Flow, veh/h	1885	1610	1767	1885	1725	1572
Grp Volume(v), veh/h	647	38	313	828	51	237
Grp Sat Flow(s),veh/h/ln	1885	1610	1767	1885	1725	1572
Q Serve(g_s), s	17.9	0.8	5.2	16.6	1.5	8.6
Cycle Q Clear(g_c), s	17.9	0.8	5.2	16.6	1.5	8.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	798	681	452	1211	327	298
V/C Ratio(X)	0.81	0.06	0.69	0.68	0.16	0.80
Avail Cap(c_a), veh/h	1744	1489	955	2695	725	661
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	15.1	10.1	11.2	6.8	20.1	23.0
Incr Delay (d2), s/veh	2.0	0.0	1.9	0.7	0.2	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.5	3.0	8.2	1.0	6.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.1	10.2	13.1	7.5	20.4	27.8
LnGrp LOS	B	B	B	A	C	C
Approach Vol, veh/h	685			1141	288	
Approach Delay, s/veh	16.7			9.0	26.5	
Approach LOS	B			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.0	30.2			43.2	16.3
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	25.0	55.0			85.0	25.0
Max Q Clear Time (g_c+I1), s	7.2	19.9			18.6	10.6
Green Ext Time (p_c), s	0.9	5.2			8.0	0.8
Intersection Summary						
HCM 7th Control Delay, s/veh			13.9			
HCM 7th LOS			B			

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Timings

2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report

Total PM Peak w/Improvement

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	7	762	98	148	1016	85	0	127	7	0
Future Volume (vph)	7	762	98	148	1016	85	0	127	7	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases	5	2		1	6		8			4
Permitted Phases	2		2	6		8		8	4	
Detector Phase	5	2	2	1	6	8	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	30.0	30.0	10.0	30.0	25.0	25.0	25.0	25.0	25.0
Minimum Split (s)	10.0	35.0	35.0	15.0	35.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	10.0	60.0	60.0	20.0	70.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	9.1%	54.5%	54.5%	18.2%	63.6%	27.3%	27.3%	27.3%	27.3%	27.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min

Intersection Summary

Cycle Length: 110

Actuated Cycle Length: 96.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Site Access/St Andrews Ln & MD 4

 Ø1	 Ø2	 Ø4
20 s	60 s	30 s
 Ø5	 Ø6	 Ø8
10 s	70 s	30 s

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HCM 7th Signalized Intersection Summary

2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report

Total PM Peak w/Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	762	98	148	1016	9	85	0	127	7	0	3
Future Volume (veh/h)	7	762	98	148	1016	9	85	0	127	7	0	3
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	1900	1885	1900	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	778	100	151	1037	9	87	0	130	7	0	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	1	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	131	943	806	347	1101	10	446	0	403	264	11	92
Arrive On Green	0.01	0.50	0.50	0.10	0.59	0.59	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	1810	1885	1610	1810	1866	16	1493	0	1610	811	43	366
Grp Volume(v), veh/h	7	778	100	151	0	1046	87	0	130	10	0	0
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	0	1882	1493	0	1610	1220	0	0
Q Serve(g_s), s	0.2	35.0	3.3	3.5	0.0	51.1	0.0	0.0	6.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	35.0	3.3	3.5	0.0	51.1	3.8	0.0	6.6	3.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	0.70		0.30
Lane Grp Cap(c), veh/h	131	943	806	347	0	1111	446	0	403	367	0	0
V/C Ratio(X)	0.05	0.82	0.12	0.44	0.00	0.94	0.19	0.00	0.32	0.03	0.00	0.00
Avail Cap(c_a), veh/h	205	1039	888	440	0	1226	446	0	403	367	0	0
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.1	21.2	13.3	16.9	0.0	18.9	29.4	0.0	30.5	28.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	5.1	0.1	0.9	0.0	13.3	0.2	0.0	0.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	21.0	2.0	2.5	0.0	29.6	3.0	0.0	4.6	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.3	26.3	13.3	17.7	0.0	32.2	29.6	0.0	30.9	28.2	0.0	0.0
LnGrp LOS	C	C	B	B		C	C		C	C		
Approach Vol, veh/h	885			1197			217			10		
Approach Delay, s/veh	24.8			30.4			30.4			28.2		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	54.9		30.0	5.9	63.9		30.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	55.0		25.0	5.0	65.0		25.0				
Max Q Clear Time (g_c+I1), s	5.5	37.0		5.8	2.2	53.1		8.6				
Green Ext Time (p_c), s	0.2	5.0		0.0	0.0	5.8		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.2											
HCM 7th LOS	C											

03/03/2025

Timings 1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total SAT Peak w/Improvement

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	635	20	226	708	19	242
Future Volume (vph)	635	20	226	708	19	242
Turn Type	NA	Perm	pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	8	
Permitted Phases		2	6			8
Detector Phase	2	2	1	6	8	8
Switch Phase						
Minimum Initial (s)	25.0	25.0	5.0	25.0	5.0	5.0
Minimum Split (s)	30.0	30.0	10.0	30.0	23.0	23.0
Total Split (s)	60.0	60.0	30.0	90.0	30.0	30.0
Total Split (%)	50.0%	50.0%	25.0%	75.0%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	Min	Min	None	Min	None	None

Intersection Summary

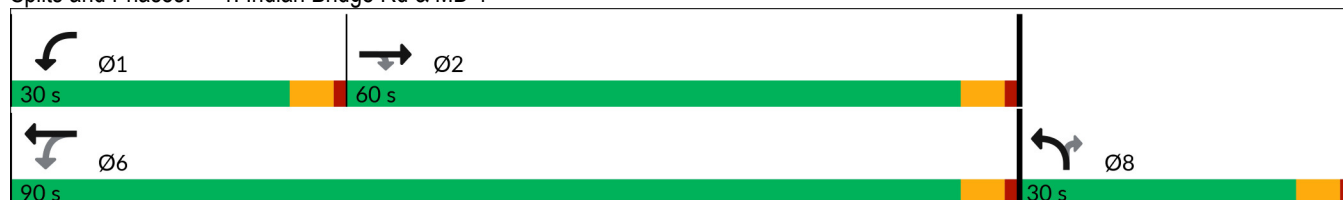
Cycle Length: 120

Actuated Cycle Length: 61.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Indian Bridge Rd & MD 4



03/03/2025

HCM 7th Signalized Intersection Summary
1: Indian Bridge Rd & MD 4

Synchro 12 Report
Total SAT Peak w/Improvement

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	635	20	226	708	19	242
Future Volume (veh/h)	635	20	226	708	19	242
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1885	1900	1885	1885	1900	1885
Adj Flow Rate, veh/h	648	20	231	722	19	247
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	0	1	1	0	1
Cap, veh/h	827	706	427	1191	349	308
Arrive On Green	0.44	0.44	0.11	0.63	0.19	0.19
Sat Flow, veh/h	1885	1610	1795	1885	1810	1598
Grp Volume(v), veh/h	648	20	231	722	19	247
Grp Sat Flow(s),veh/h/ln	1885	1610	1795	1885	1810	1598
Q Serve(g_s), s	16.8	0.4	3.5	13.0	0.5	8.4
Cycle Q Clear(g_c), s	16.8	0.4	3.5	13.0	0.5	8.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	827	706	427	1191	349	308
V/C Ratio(X)	0.78	0.03	0.54	0.61	0.05	0.80
Avail Cap(c_a), veh/h	1819	1554	1026	2812	794	701
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.7	9.1	10.2	6.3	18.8	22.0
Incr Delay (d2), s/veh	1.7	0.0	1.1	0.5	0.1	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.4	0.2	2.0	6.5	0.4	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	9.1	11.3	6.8	18.8	26.8
LnGrp LOS	B	A	B	A	B	C
Approach Vol, veh/h	668			953	266	
Approach Delay, s/veh	15.2			7.9	26.2	
Approach LOS	B			A	C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.0	30.0			41.0	16.0
Change Period (Y+Rc), s	5.0	5.0			5.0	5.0
Max Green Setting (Gmax), s	25.0	55.0			85.0	25.0
Max Q Clear Time (g_c+I1), s	5.5	18.8			15.0	10.4
Green Ext Time (p_c), s	0.6	5.2			6.3	0.7
Intersection Summary						
HCM 7th Control Delay, s/veh			13.0			
HCM 7th LOS			B			

03/03/2025

Timings

2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report

Total SAT Peak w/Improvement

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	6	776	99	149	841	101	0	152	3	0
Future Volume (vph)	6	776	99	149	841	101	0	152	3	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases	5	2		1	6		8			4
Permitted Phases	2		2	6		8		8	4	
Detector Phase	5	2	2	1	6	8	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	30.0	30.0	10.0	30.0	25.0	25.0	25.0	25.0	25.0
Minimum Split (s)	10.0	35.0	35.0	15.0	35.0	30.0	30.0	30.0	30.0	30.0
Total Split (s)	10.0	60.0	60.0	20.0	70.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	9.1%	54.5%	54.5%	18.2%	63.6%	27.3%	27.3%	27.3%	27.3%	27.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	None	None	Min	None	None	None	Min	Min

Intersection Summary

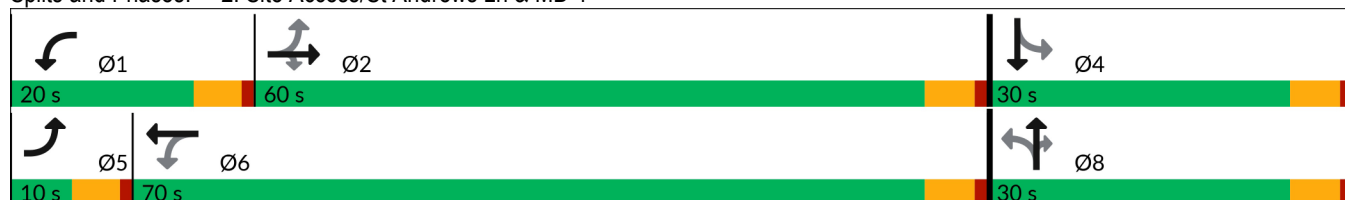
Cycle Length: 110

Actuated Cycle Length: 96.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Site Access/St Andrews Ln & MD 4



03/03/2025

HCM 7th Signalized Intersection Summary

2: Site Access/St Andrews Ln & MD 4

Synchro 12 Report

Total SAT Peak w/Improvement

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	776	99	149	841	4	101	0	152	3	0	4
Future Volume (veh/h)	6	776	99	149	841	4	101	0	152	3	0	4
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	1900	1885	1900	1900	1885	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	792	101	152	858	4	103	0	155	3	0	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	1	0	0	1	0	0	0	0	0	0	0
Cap, veh/h	216	874	747	316	1053	5	467	0	434	188	21	205
Arrive On Green	0.01	0.46	0.46	0.11	0.56	0.56	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	1810	1885	1610	1810	1875	9	1448	0	1610	491	79	760
Grp Volume(v), veh/h	6	792	101	152	0	862	103	0	155	7	0	0
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	0	1884	1448	0	1610	1330	0	0
Q Serve(g_s), s	0.2	36.1	3.3	3.5	0.0	34.4	0.0	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	36.1	3.3	3.5	0.0	34.4	5.0	0.0	7.2	5.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.43		0.57
Lane Grp Cap(c), veh/h	216	874	747	316	0	1058	467	0	434	414	0	0
V/C Ratio(X)	0.03	0.91	0.14	0.48	0.00	0.82	0.22	0.00	0.36	0.02	0.00	0.00
Avail Cap(c_a), veh/h	300	1117	954	417	0	1319	467	0	434	414	0	0
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.5	23.0	14.2	18.3	0.0	16.5	26.6	0.0	27.4	24.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	8.9	0.1	1.1	0.0	3.3	0.2	0.0	0.5	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	22.4	2.0	2.6	0.0	18.8	3.2	0.0	5.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.5	32.0	14.3	19.5	0.0	19.8	26.9	0.0	27.9	24.9	0.0	0.0
LnGrp LOS	B	C	B	B		B	C		C	C		
Approach Vol, veh/h	899			1014			258			7		
Approach Delay, s/veh	29.9			19.7			27.5			24.9		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	48.1		30.0	5.7	57.1		30.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	15.0	55.0		25.0	5.0	65.0		25.0				
Max Q Clear Time (g_c+l1), s	5.5	38.1		7.0	2.2	36.4		9.2				
Green Ext Time (p_c), s	0.2	5.0		0.0	0.0	6.3		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				24.8								
HCM 7th LOS				C								

03/03/2025

Timings 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing AM

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	134	716	570	92	92	198
Future Volume (vph)	134	716	570	92	92	198
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

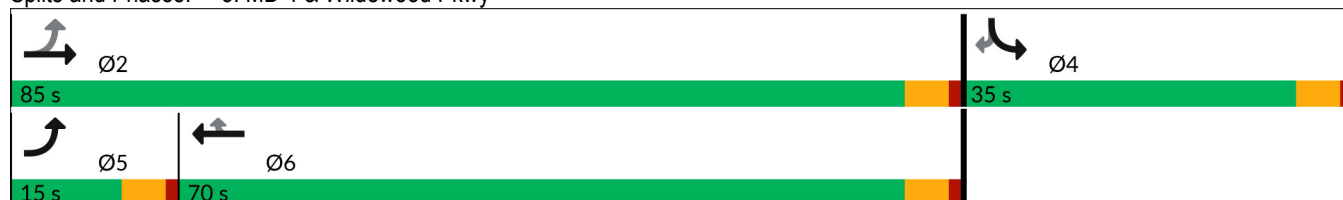
Cycle Length: 120

Actuated Cycle Length: 76.7

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	134	716	570	92	92	198
Future Volume (veh/h)	134	716	570	92	92	198
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1870	1841	1781	1900	1826
Adj Flow Rate, veh/h	149	796	633	102	102	198
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	8	0	5
Cap, veh/h	453	1247	870	714	361	309
Arrive On Green	0.13	0.67	0.47	0.47	0.20	0.20
Sat Flow, veh/h	1725	1870	1841	1510	1810	1547
Grp Volume(v), veh/h	149	796	633	102	102	198
Grp Sat Flow(s), veh/h/ln	1725	1870	1841	1510	1810	1547
Q Serve(g_s), s	2.6	18.5	20.7	2.9	3.6	8.8
Cycle Q Clear(g_c), s	2.6	18.5	20.7	2.9	3.6	8.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	453	1247	870	714	361	309
V/C Ratio(X)	0.33	0.64	0.73	0.14	0.28	0.64
Avail Cap(c_a), veh/h	464	1996	1596	1309	724	619
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.1	7.2	15.9	11.2	25.4	27.5
Incr Delay (d2), s/veh	0.4	0.5	1.2	0.1	0.4	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	9.8	12.8	1.6	2.8	12.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.5	7.8	17.1	11.3	25.9	29.7
LnGrp LOS	B	A	B	B	C	C
Approach Vol, veh/h		945	735		300	
Approach Delay, s/veh		8.2	16.3		28.4	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		55.0		20.0	14.6	40.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		20.5		10.8	4.6	22.7
Green Ext Time (p_c), s		7.4		0.9	0.2	5.5
Intersection Summary						
HCM 7th Control Delay, s/veh			14.3			
HCM 7th LOS			B			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing PM

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	149	651	958	240	79	172
Future Volume (vph)	149	651	958	240	79	172
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	149	651	958	240	79	172
Future Volume (veh/h)	149	651	958	240	79	172
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1870
Adj Flow Rate, veh/h	159	693	1019	255	84	172
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	2
Cap, veh/h	303	1400	1112	942	277	244
Arrive On Green	0.10	0.74	0.59	0.59	0.15	0.15
Sat Flow, veh/h	1795	1885	1885	1598	1795	1585
Grp Volume(v), veh/h	159	693	1019	255	84	172
Grp Sat Flow(s), veh/h/ln	1795	1885	1885	1598	1795	1585
Q Serve(g_s), s	2.7	14.5	46.9	7.6	4.0	10.0
Cycle Q Clear(g_c), s	2.7	14.5	46.9	7.6	4.0	10.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	303	1400	1112	942	277	244
V/C Ratio(X)	0.52	0.49	0.92	0.27	0.30	0.70
Avail Cap(c_a), veh/h	306	1552	1261	1069	554	489
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	21.0	5.1	17.8	9.7	36.5	39.0
Incr Delay (d2), s/veh	1.6	0.3	9.8	0.2	0.6	3.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	8.0	28.8	4.5	3.2	13.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	22.6	5.4	27.6	9.9	37.1	42.7
LnGrp LOS	C	A	C	A	D	D
Approach Vol, veh/h		852	1274		256	
Approach Delay, s/veh		8.6	24.1		40.8	
Approach LOS		A	C		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		77.2		20.0	14.9	62.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		16.5		12.0	4.7	48.9
Green Ext Time (p_c), s		5.9		0.7	0.2	8.4
Intersection Summary						
HCM 7th Control Delay, s/veh			20.3			
HCM 7th LOS			C			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing Sat



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	121	802	776	183	78	105
Future Volume (vph)	121	802	776	183	78	105
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 85

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Existing Sat

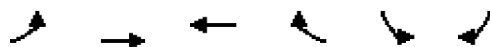


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	121	802	776	183	78	105
Future Volume (veh/h)	121	802	776	183	78	105
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1885	1900	1900
Adj Flow Rate, veh/h	126	835	808	191	81	104
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	0	0
Cap, veh/h	381	1290	945	801	340	303
Arrive On Green	0.12	0.68	0.50	0.50	0.19	0.19
Sat Flow, veh/h	1810	1885	1885	1598	1810	1610
Grp Volume(v), veh/h	126	835	808	191	81	104
Grp Sat Flow(s), veh/h/ln	1810	1885	1885	1598	1810	1610
Q Serve(g_s), s	2.1	19.7	29.3	5.3	3.0	4.4
Cycle Q Clear(g_c), s	2.1	19.7	29.3	5.3	3.0	4.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	381	1290	945	801	340	303
V/C Ratio(X)	0.33	0.65	0.86	0.24	0.24	0.34
Avail Cap(c_a), veh/h	396	1924	1564	1325	693	616
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.3	7.0	17.1	11.1	27.0	27.6
Incr Delay (d2), s/veh	0.5	0.6	2.6	0.2	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.8	10.3	17.6	3.2	2.3	7.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.8	7.6	19.7	11.2	27.4	28.3
LnGrp LOS	B	A	B	B	C	C
Approach Vol, veh/h		961	999		185	
Approach Delay, s/veh		8.4	18.1		27.9	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		58.6		19.7	14.4	44.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		21.7		6.4	4.1	31.3
Green Ext Time (p_c), s		8.1		0.5	0.1	8.0
Intersection Summary						
HCM 7th Control Delay, s/veh			14.6			
HCM 7th LOS			B			

03/03/2025

Timings 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd AM



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	138	738	587	95	95	204
Future Volume (vph)	138	738	587	95	95	204
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

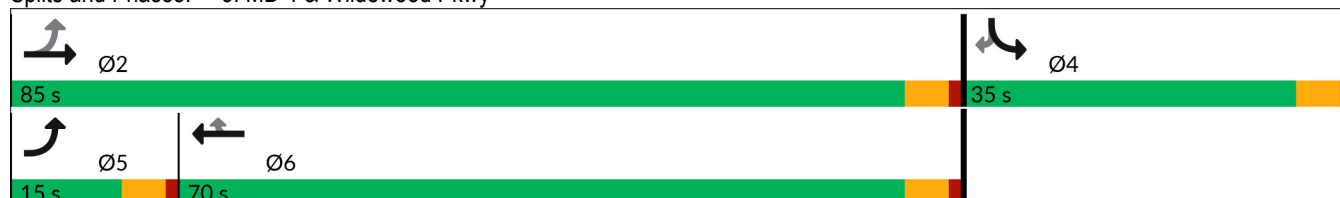
Cycle Length: 120

Actuated Cycle Length: 77.6

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

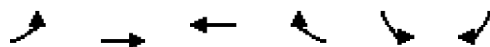
Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	138	738	587	95	95	204
Future Volume (veh/h)	138	738	587	95	95	204
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1870	1841	1781	1900	1826
Adj Flow Rate, veh/h	153	820	652	106	106	205
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	8	0	5
Cap, veh/h	442	1247	869	713	361	309
Arrive On Green	0.13	0.67	0.47	0.47	0.20	0.20
Sat Flow, veh/h	1725	1870	1841	1510	1810	1547
Grp Volume(v), veh/h	153	820	652	106	106	205
Grp Sat Flow(s), veh/h/ln	1725	1870	1841	1510	1810	1547
Q Serve(g_s), s	2.7	19.5	21.7	3.0	3.7	9.2
Cycle Q Clear(g_c), s	2.7	19.5	21.7	3.0	3.7	9.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	442	1247	869	713	361	309
V/C Ratio(X)	0.35	0.66	0.75	0.15	0.29	0.66
Avail Cap(c_a), veh/h	451	1996	1596	1309	724	619
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	10.6	7.4	16.2	11.2	25.5	27.7
Incr Delay (d2), s/veh	0.5	0.6	1.3	0.1	0.4	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	10.2	13.3	1.7	2.9	12.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.0	8.0	17.5	11.3	25.9	30.1
LnGrp LOS	B	A	B	B	C	C
Approach Vol, veh/h		973	758		311	
Approach Delay, s/veh		8.5	16.6		28.7	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		55.0		20.0	14.6	40.4
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		21.5		11.2	4.7	23.7
Green Ext Time (p_c), s		7.8		0.9	0.2	5.7
Intersection Summary						
HCM 7th Control Delay, s/veh			14.6			
HCM 7th LOS			B			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd PM

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	154	671	987	247	81	177
Future Volume (vph)	154	671	987	247	81	177
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

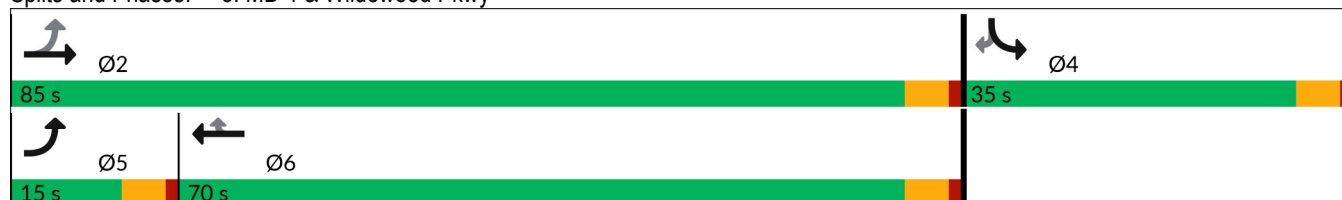
Cycle Length: 120

Actuated Cycle Length: 105

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy

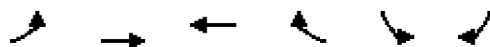


03/03/2025

HCM 7th Signalized Intersection Summary

3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	154	671	987	247	81	177
Future Volume (veh/h)	154	671	987	247	81	177
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1870
Adj Flow Rate, veh/h	164	714	1050	263	86	169
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	2
Cap, veh/h	291	1412	1130	958	270	239
Arrive On Green	0.10	0.75	0.60	0.60	0.15	0.15
Sat Flow, veh/h	1795	1885	1885	1598	1795	1585
Grp Volume(v), veh/h	164	714	1050	263	86	169
Grp Sat Flow(s), veh/h/ln	1795	1885	1885	1598	1795	1585
Q Serve(g_s), s	2.8	15.2	50.1	7.9	4.3	10.1
Cycle Q Clear(g_c), s	2.8	15.2	50.1	7.9	4.3	10.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	291	1412	1130	958	270	239
V/C Ratio(X)	0.56	0.51	0.93	0.27	0.32	0.71
Avail Cap(c_a), veh/h	293	1515	1231	1043	541	478
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	22.3	5.0	18.0	9.6	37.7	40.2
Incr Delay (d2), s/veh	2.4	0.3	11.7	0.2	0.7	3.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	8.4	31.0	4.7	3.4	13.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.7	5.3	29.8	9.7	38.4	44.1
LnGrp LOS	C	A	C	A	D	D
Approach Vol, veh/h		878	1313		255	
Approach Delay, s/veh		8.9	25.8		42.2	
Approach LOS		A	C		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		79.6		20.0	14.9	64.7
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		17.2		12.1	4.8	52.1
Green Ext Time (p_c), s		6.2		0.7	0.2	7.6
Intersection Summary						
HCM 7th Control Delay, s/veh			21.4			
HCM 7th LOS			C			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd Sat

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	125	826	800	189	80	108
Future Volume (vph)	125	826	800	189	80	108
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

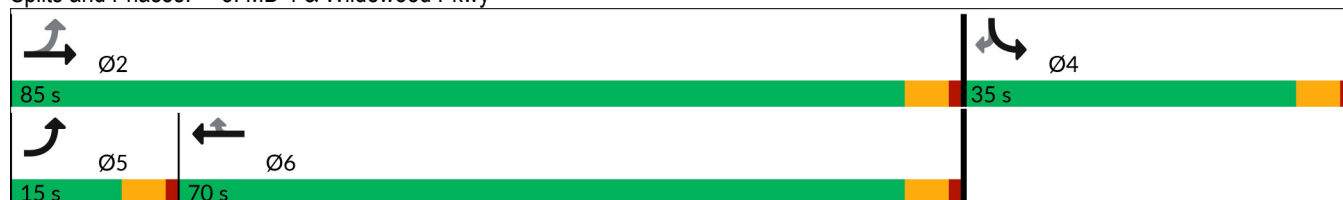
Cycle Length: 120

Actuated Cycle Length: 87

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

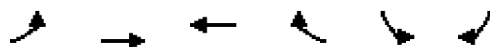
Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Back'd Sat

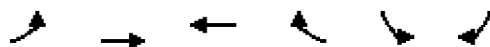


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	125	826	800	189	80	108
Future Volume (veh/h)	125	826	800	189	80	108
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1885	1900	1900
Adj Flow Rate, veh/h	130	860	833	197	83	107
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	0	0
Cap, veh/h	373	1305	967	820	332	295
Arrive On Green	0.12	0.69	0.51	0.51	0.18	0.18
Sat Flow, veh/h	1810	1885	1885	1598	1810	1610
Grp Volume(v), veh/h	130	860	833	197	83	107
Grp Sat Flow(s), veh/h/ln	1810	1885	1885	1598	1810	1610
Q Serve(g_s), s	2.2	20.8	31.1	5.5	3.2	4.7
Cycle Q Clear(g_c), s	2.2	20.8	31.1	5.5	3.2	4.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	373	1305	967	820	332	295
V/C Ratio(X)	0.35	0.66	0.86	0.24	0.25	0.36
Avail Cap(c_a), veh/h	385	1872	1521	1289	674	599
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	14.0	7.0	17.1	10.9	28.1	28.8
Incr Delay (d2), s/veh	0.6	0.6	3.2	0.2	0.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	10.7	18.7	3.3	2.5	7.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.6	7.6	20.3	11.0	28.5	29.5
LnGrp LOS	B	A	C	B	C	C
Approach Vol, veh/h		990	1030		190	
Approach Delay, s/veh		8.5	18.5		29.1	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		60.8		19.8	14.5	46.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+l1), s		22.8		6.7	4.2	33.1
Green Ext Time (p_c), s		8.5		0.5	0.1	8.3
Intersection Summary						
HCM 7th Control Delay, s/veh			15.0			
HCM 7th LOS			B			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total AM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	146	779	664	95	95	219
Future Volume (vph)	146	779	664	95	95	219
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 81.5

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

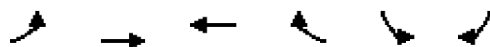
Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	146	779	664	95	95	219
Future Volume (veh/h)	146	779	664	95	95	219
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1811	1870	1841	1781	1900	1826
Adj Flow Rate, veh/h	162	866	738	106	106	219
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	6	2	4	8	0	5
Cap, veh/h	392	1247	868	712	362	309
Arrive On Green	0.13	0.67	0.47	0.47	0.20	0.20
Sat Flow, veh/h	1725	1870	1841	1510	1810	1547
Grp Volume(v), veh/h	162	866	738	106	106	219
Grp Sat Flow(s), veh/h/ln	1725	1870	1841	1510	1810	1547
Q Serve(g_s), s	2.9	21.5	26.5	3.0	3.7	9.9
Cycle Q Clear(g_c), s	2.9	21.5	26.5	3.0	3.7	9.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	392	1247	868	712	362	309
V/C Ratio(X)	0.41	0.69	0.85	0.15	0.29	0.71
Avail Cap(c_a), veh/h	400	1996	1596	1309	724	619
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	13.0	7.8	17.5	11.3	25.5	28.0
Incr Delay (d2), s/veh	0.7	0.7	2.5	0.1	0.4	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	11.0	16.0	1.7	2.9	13.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.7	8.5	20.0	11.4	25.9	30.9
LnGrp LOS	B	A	B	B	C	C
Approach Vol, veh/h		1028	844		325	
Approach Delay, s/veh		9.3	18.9		29.3	
Approach LOS		A	B		C	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		55.0		20.0	14.7	40.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		23.5		11.9	4.9	28.5
Green Ext Time (p_c), s		8.7		1.0	0.2	6.7
Intersection Summary						
HCM 7th Control Delay, s/veh			15.9			
HCM 7th LOS			B			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total PM Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	175	777	1110	247	81	202
Future Volume (vph)	175	777	1110	247	81	202
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

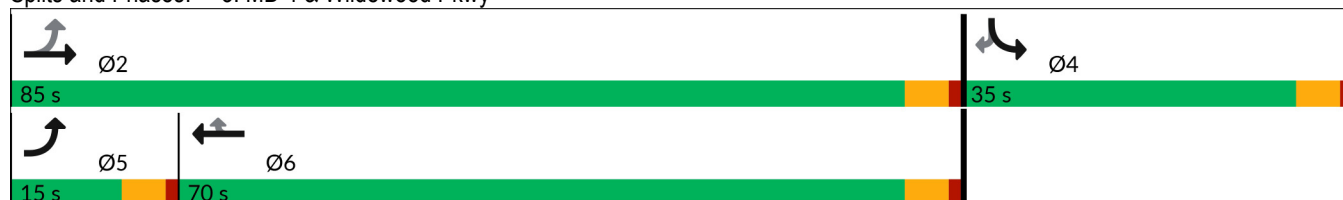
Cycle Length: 120

Actuated Cycle Length: 105

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total PM Peak

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	777	1110	247	81	202
Future Volume (veh/h)	175	777	1110	247	81	202
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1870
Adj Flow Rate, veh/h	186	827	1181	263	86	194
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	2
Cap, veh/h	238	1432	1164	986	261	231
Arrive On Green	0.09	0.76	0.62	0.62	0.15	0.15
Sat Flow, veh/h	1795	1885	1885	1598	1795	1585
Grp Volume(v), veh/h	186	827	1181	263	86	194
Grp Sat Flow(s),veh/h/ln	1795	1885	1885	1598	1795	1585
Q Serve(g_s), s	6.5	19.8	65.0	7.9	4.5	12.5
Cycle Q Clear(g_c), s	6.5	19.8	65.0	7.9	4.5	12.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	238	1432	1164	986	261	231
V/C Ratio(X)	0.78	0.58	1.01	0.27	0.33	0.84
Avail Cap(c_a), veh/h	239	1433	1164	986	512	452
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	34.5	5.4	20.1	9.2	40.4	43.8
Incr Delay (d2), s/veh	15.2	0.6	30.0	0.1	0.7	8.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.6	10.5	45.2	4.8	3.7	16.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.7	6.0	50.2	9.4	41.1	51.8
LnGrp LOS	D	A	F	A	D	D
Approach Vol, veh/h		1013	1444		280	
Approach Delay, s/veh		14.0	42.7		48.5	
Approach LOS		B	D		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		85.0		20.3	15.0	70.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		21.8		14.5	8.5	67.0
Green Ext Time (p_c), s		7.9		0.8	0.1	0.0
Intersection Summary						
HCM 7th Control Delay, s/veh			32.7			
HCM 7th LOS			C			

03/03/2025

Timings
3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total SAT Peak

						
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	150	953	924	189	80	133
Future Volume (vph)	150	953	924	189	80	133
Turn Type	pm+pt	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases	2			6		4
Detector Phase	5	2	6	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	50.0	30.0	30.0	15.0	15.0
Minimum Split (s)	15.0	55.0	35.0	35.0	23.0	23.0
Total Split (s)	15.0	85.0	70.0	70.0	35.0	35.0
Total Split (%)	12.5%	70.8%	58.3%	58.3%	29.2%	29.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	Min	Min	Min	None	None

Intersection Summary

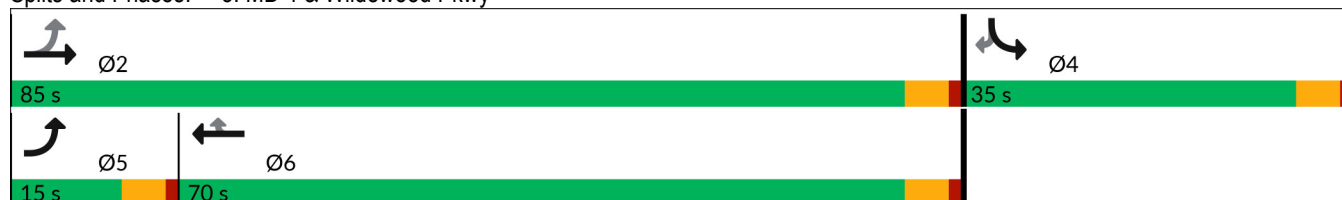
Cycle Length: 120

Actuated Cycle Length: 98.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Splits and Phases: 3: MD 4 & Wildewood Pkwy



03/03/2025

HCM 7th Signalized Intersection Summary 3: MD 4 & Wildewood Pkwy

Synchro 12 Report
Total SAT Peak

						
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	150	953	924	189	80	133
Future Volume (veh/h)	150	953	924	189	80	133
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1885	1900	1900
Adj Flow Rate, veh/h	156	993	962	197	83	127
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	0	0
Cap, veh/h	329	1375	1071	908	293	261
Arrive On Green	0.11	0.73	0.57	0.57	0.16	0.16
Sat Flow, veh/h	1810	1885	1885	1598	1810	1610
Grp Volume(v), veh/h	156	993	962	197	83	127
Grp Sat Flow(s),veh/h/ln	1810	1885	1885	1598	1810	1610
Q Serve(g_s), s	2.6	27.7	41.4	5.6	3.7	6.6
Cycle Q Clear(g_c), s	2.6	27.7	41.4	5.6	3.7	6.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	329	1375	1071	908	293	261
V/C Ratio(X)	0.47	0.72	0.90	0.22	0.28	0.49
Avail Cap(c_a), veh/h	333	1638	1331	1128	590	525
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	18.6	7.1	17.5	9.8	33.9	35.1
Incr Delay (d2), s/veh	1.1	1.3	7.2	0.1	0.5	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	13.9	25.2	3.4	3.0	10.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.7	8.4	24.7	9.9	34.4	36.5
LnGrp LOS	B	A	C	A	C	D
Approach Vol, veh/h		1149	1159		210	
Approach Delay, s/veh		9.9	22.2		35.7	
Approach LOS		A	C		D	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		72.2		19.9	14.8	57.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		80.0		30.0	10.0	65.0
Max Q Clear Time (g_c+I1), s		29.7		8.6	4.6	43.4
Green Ext Time (p_c), s		11.2		0.6	0.2	8.9
Intersection Summary						
HCM 7th Control Delay, s/veh			17.7			
HCM 7th LOS			B			

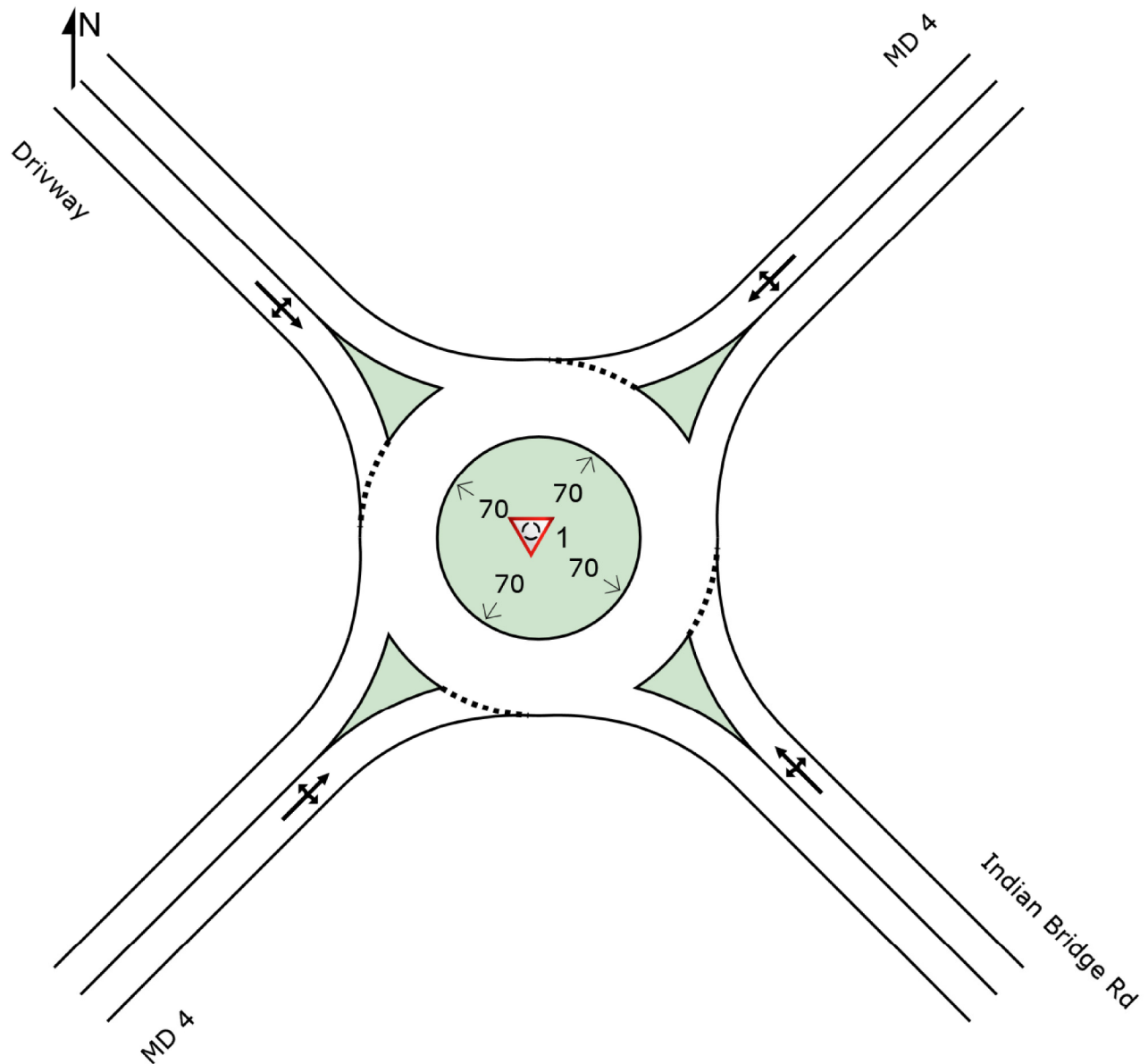
03/03/2025

SITE LAYOUT

Site: 1 [TA (Site Folder: General)]

MD 4 at Indian Bridge Rd
Total AM w/Roundabout
Site Category: NA
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: F:\2024\2024-0429_St Mary's County Sports Complex\ENG\INITIAL\HCM\Int 1.sip9

MOVEMENT SUMMARY

 Site: 1 [TA (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at Indian Bridge Rd

Total AM w/Roundabout

Site Category: NA

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] ft				mph
SouthEast: Indian Bridge Rd															
3x	L2	All MCs	67	0.0	67	0.0	0.560	16.3	LOS C	3.3	83.6	0.80	0.87	1.16	27.6
8x	T1	All MCs	1	0.0	1	0.0	0.560	16.3	LOS C	3.3	83.6	0.80	0.87	1.16	28.0
18x	R2	All MCs	244	3.0	244	3.0	0.560	17.2	LOS C	3.3	83.6	0.80	0.87	1.16	27.8
Approach			313	2.3	313	2.3	0.560	17.0	LOS C	3.3	83.6	0.80	0.87	1.16	27.8
NorthEast: MD 4															
1x	L2	All MCs	174	5.0	174	5.0	0.787	14.6	LOS B	11.8	304.5	0.67	0.26	0.67	28.5
6x	T1	All MCs	797	4.0	797	4.0	0.787	14.5	LOS B	11.8	304.5	0.67	0.26	0.67	29.0
16x	R2	All MCs	1	0.0	1	0.0	0.787	14.2	LOS B	11.8	304.5	0.67	0.26	0.67	28.9
Approach			972	4.2	972	4.2	0.787	14.6	LOS B	11.8	304.5	0.67	0.26	0.67	28.9
NorthWest: Driveway															
7x	L2	All MCs	1	0.0	1	0.0	0.008	7.9	LOS A	0.0	0.7	0.67	0.56	0.67	30.9
4x	T1	All MCs	1	0.0	1	0.0	0.008	7.9	LOS A	0.0	0.7	0.67	0.56	0.67	31.4
14x	R2	All MCs	1	0.0	1	0.0	0.008	7.9	LOS A	0.0	0.7	0.67	0.56	0.67	31.2
Approach			3	0.0	3	0.0	0.008	7.9	LOS A	0.0	0.7	0.67	0.56	0.67	31.2
SouthWest: MD 4															
5x	L2	All MCs	1	0.0	1	0.0	0.788	16.8	LOS C	17.8	457.9	0.89	0.74	1.34	27.9
2x	T1	All MCs	816	3.0	816	3.0	0.788	17.2	LOS C	17.8	457.9	0.89	0.74	1.34	28.3
12x	R2	All MCs	50	10.0	50	10.0	0.788	18.0	LOS C	17.8	457.9	0.89	0.74	1.34	28.0
Approach			867	3.4	867	3.4	0.788	17.2	LOS C	17.8	457.9	0.89	0.74	1.34	28.3
All Vehicles			2156	3.6	2156	3.6	0.788	16.0	LOS C	17.8	457.9	0.78	0.54	1.01	28.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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Project: F:\2024\2024-0429_St Mary's County Sports Complex\ENG\INITIAL\HCM\Int 1.sip9

MOVEMENT SUMMARY

 Site: 1 [TP (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at Indian Bridge Rd

Total PM w/Roundabout

Site Category: NA

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh ft		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
SouthEast: Indian Bridge Rd															
3x	L2	All MCs	51	6.0	51	6.0	0.432	12.0	LOS B	2.3	59.9	0.72	0.69	0.90	29.5
8x	T1	All MCs	1	0.0	1	0.0	0.432	10.8	LOS B	2.3	59.9	0.72	0.69	0.90	30.2
18x	R2	All MCs	237	3.0	237	3.0	0.432	11.4	LOS B	2.3	59.9	0.72	0.69	0.90	29.9
Approach			289	3.5	289	3.5	0.432	11.5	LOS B	2.3	59.9	0.72	0.69	0.90	29.9
NorthEast: MD 4															
1x	L2	All MCs	313	3.0	313	3.0	0.889	18.6	LOS C	22.8	577.6	0.98	0.35	0.98	27.0
6x	T1	All MCs	828	1.0	828	1.0	0.889	18.4	LOS C	22.8	577.6	0.98	0.35	0.98	27.5
16x	R2	All MCs	1	0.0	1	0.0	0.889	18.3	LOS C	22.8	577.6	0.98	0.35	0.98	27.4
Approach			1142	1.5	1142	1.5	0.889	18.5	LOS C	22.8	577.6	0.98	0.35	0.98	27.4
NorthWest: Driveway															
7x	L2	All MCs	1	0.0	1	0.0	0.008	9.1	LOS A	0.0	0.7	0.71	0.62	0.71	30.4
4x	T1	All MCs	1	0.0	1	0.0	0.008	9.1	LOS A	0.0	0.7	0.71	0.62	0.71	30.9
14x	R2	All MCs	1	0.0	1	0.0	0.008	9.1	LOS A	0.0	0.7	0.71	0.62	0.71	30.7
Approach			3	0.0	3	0.0	0.008	9.1	LOS A	0.0	0.7	0.71	0.62	0.71	30.7
SouthWest: MD 4															
5x	L2	All MCs	1	0.0	1	0.0	0.701	14.8	LOS B	10.0	253.1	0.83	0.78	1.32	28.7
2x	T1	All MCs	647	1.0	647	1.0	0.701	15.0	LOS B	10.0	253.1	0.83	0.78	1.32	29.1
12x	R2	All MCs	38	0.0	38	0.0	0.701	14.8	LOS B	10.0	253.1	0.83	0.78	1.32	29.0
Approach			687	0.9	687	0.9	0.701	15.0	LOS B	10.0	253.1	0.83	0.78	1.32	29.1
All Vehicles			2121	1.6	2121	1.6	0.889	16.4	LOS C	22.8	577.6	0.89	0.53	1.08	28.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stoeline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

 Site: 1 [TS (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at Indian Bridge Rd

Total SAT w/Roundabout

Site Category: NA

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh ft		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
SouthEast: Indian Bridge Rd															
3x	L2	All MCs	19	0.0	19	0.0	0.384	10.0	LOS B	2.0	49.5	0.69	0.65	0.81	30.4
8x	T1	All MCs	1	0.0	1	0.0	0.384	10.0	LOS B	2.0	49.5	0.69	0.65	0.81	30.9
18x	R2	All MCs	247	1.0	247	1.0	0.384	10.2	LOS B	2.0	49.5	0.69	0.65	0.81	30.7
Approach			267	0.9	267	0.9	0.384	10.2	LOS B	2.0	49.5	0.69	0.65	0.81	30.7
NorthEast: MD 4															
1x	L2	All MCs	231	1.0	231	1.0	0.713	9.4	LOS A	9.8	246.6	0.30	0.07	0.30	30.4
6x	T1	All MCs	722	1.0	722	1.0	0.713	9.4	LOS A	9.8	246.6	0.30	0.07	0.30	30.9
16x	R2	All MCs	1	0.0	1	0.0	0.713	9.4	LOS A	9.8	246.6	0.30	0.07	0.30	30.7
Approach			954	1.0	954	1.0	0.713	9.4	LOS A	9.8	246.6	0.30	0.07	0.30	30.8
NorthWest: Driveway															
7x	L2	All MCs	1	0.0	1	0.0	0.006	7.2	LOS A	0.0	0.5	0.64	0.51	0.64	31.2
4x	T1	All MCs	1	0.0	1	0.0	0.006	7.2	LOS A	0.0	0.5	0.64	0.51	0.64	31.7
14x	R2	All MCs	1	0.0	1	0.0	0.006	7.2	LOS A	0.0	0.5	0.64	0.51	0.64	31.5
Approach			3	0.0	3	0.0	0.006	7.2	LOS A	0.0	0.5	0.64	0.51	0.64	31.5
SouthWest: MD 4															
5x	L2	All MCs	1	0.0	1	0.0	0.623	11.5	LOS B	6.8	170.9	0.68	0.50	0.85	30.0
2x	T1	All MCs	648	1.0	648	1.0	0.623	11.6	LOS B	6.8	170.9	0.68	0.50	0.85	30.5
12x	R2	All MCs	20	0.0	20	0.0	0.623	11.5	LOS B	6.8	170.9	0.68	0.50	0.85	30.3
Approach			669	1.0	669	1.0	0.623	11.6	LOS B	6.8	170.9	0.68	0.50	0.85	30.5
All Vehicles			1894	1.0	1894	1.0	0.713	10.3	LOS B	9.8	246.6	0.49	0.30	0.56	30.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stoeline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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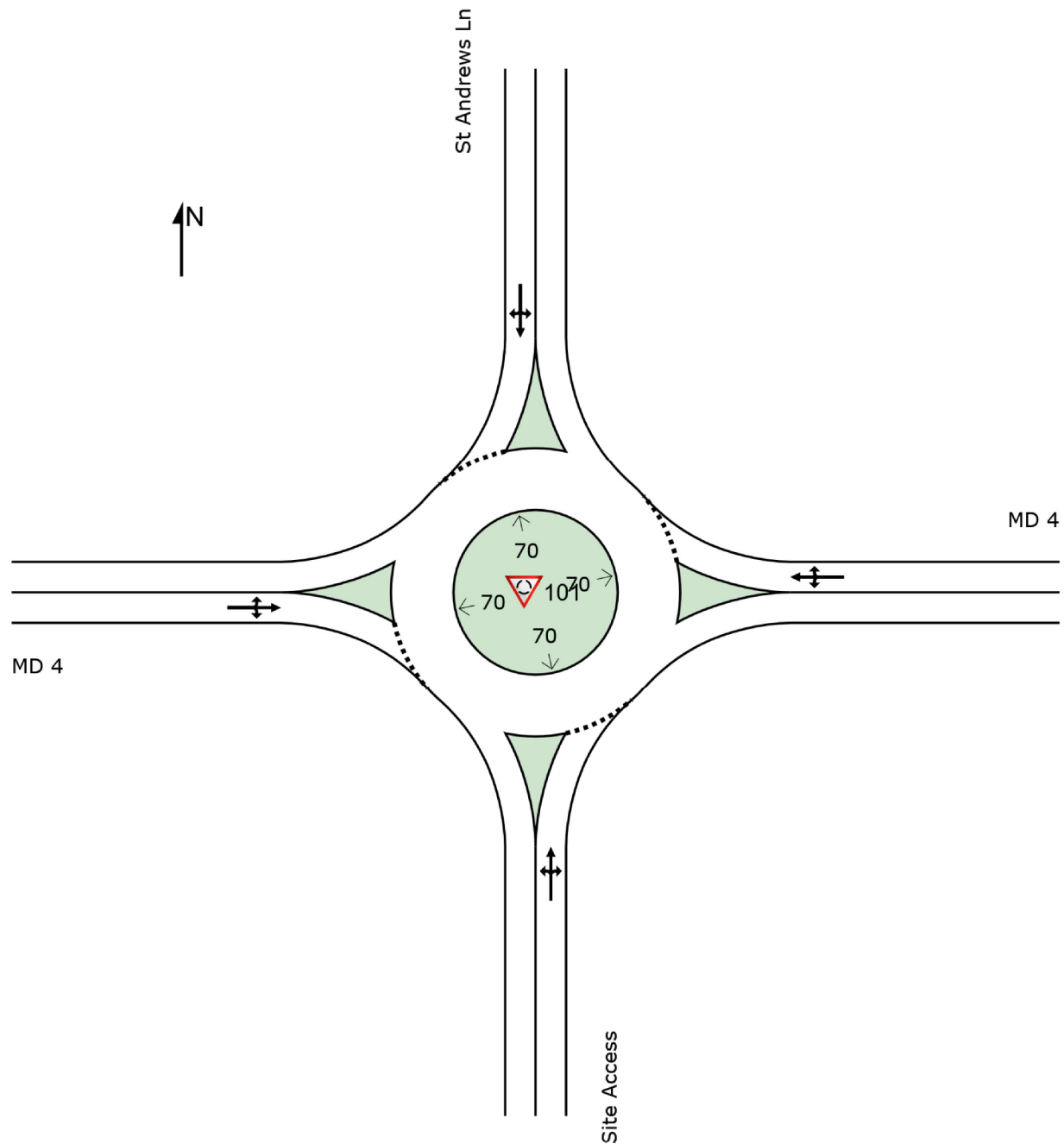
Project: F:\2024\2024-0429_St Mary's County Sports Complex\ENG\INITIAL\HCM\Int 1.sip9

SITE LAYOUT

 **Site: 101 [TA (Site Folder: General)]**

MD 4 at St Andrews Ln/Site Access
Total AM Peak w/Imp
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



MOVEMENT SUMMARY

 Site: 101 [TA (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at St Andrews Ln/Site Access

Total AM Peak w/Imp

Site Category: (None)

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh ft		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Site Access															
3	L2	All MCs	36	2.0	36	2.0	0.191	10.1	LOS B	0.7	18.0	0.69	0.68	0.69	29.9
8	T1	All MCs	1	2.0	1	2.0	0.191	10.1	LOS B	0.7	18.0	0.69	0.68	0.69	30.4
18	R2	All MCs	56	2.0	56	2.0	0.191	10.1	LOS B	0.7	18.0	0.69	0.68	0.69	30.2
Approach			93	2.0	93	2.0	0.191	10.1	LOS B	0.7	18.0	0.69	0.68	0.69	30.0
East: MD 4															
1	L2	All MCs	105	0.0	105	0.0	0.798	13.4	LOS B	13.5	346.9	0.59	0.19	0.59	29.0
6	T1	All MCs	909	4.0	909	4.0	0.798	13.7	LOS B	13.5	346.9	0.59	0.19	0.59	29.4
16	R2	All MCs	2	0.0	2	0.0	0.798	13.4	LOS B	13.5	346.9	0.59	0.19	0.59	29.3
Approach			1016	3.6	1016	3.6	0.798	13.7	LOS B	13.5	346.9	0.59	0.19	0.59	29.4
North: St Andrews Ln															
7	L2	All MCs	3	0.0	3	0.0	0.056	7.1	LOS A	0.2	4.4	0.68	0.68	0.68	30.0
4	T1	All MCs	1	0.0	1	0.0	0.056	7.1	LOS A	0.2	4.4	0.68	0.68	0.68	30.5
14	R2	All MCs	16	14.0	16	14.0	0.056	12.0	LOS B	0.2	4.4	0.68	0.68	0.68	30.0
Approach			20	10.9	20	10.9	0.056	10.8	LOS B	0.2	4.4	0.68	0.68	0.68	30.0
West: MD 4															
5	L2	All MCs	7	17.0	7	17.0	0.848	20.4	LOS C	16.4	420.5	0.95	0.47	1.01	26.9
2	T1	All MCs	940	3.0	940	3.0	0.848	18.9	LOS C	16.4	420.5	0.95	0.47	1.01	27.7
12	R2	All MCs	70	0.0	70	0.0	0.848	18.6	LOS C	16.4	420.5	0.95	0.47	1.01	27.6
Approach			1017	2.9	1017	2.9	0.848	18.9	LOS C	16.4	420.5	0.95	0.47	1.01	27.7
All Vehicles			2147	3.3	2147	3.3	0.848	16.0	LOS C	16.4	420.5	0.77	0.35	0.80	28.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stoeline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

 Site: 101 [TP (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at St Andrews Ln/Site Access

Total PM Peak w/Imp

Site Category: (None)

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total HV] veh/h %		Arrival Flows [Total HV] veh/h %		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh Dist] veh ft		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed mph
South: Site Access															
3	L2	All MCs	87	2.0	87	2.0	0.369	11.4	LOS B	1.7	43.7	0.72	0.71	0.84	29.3
8	T1	All MCs	1	2.0	1	2.0	0.369	11.4	LOS B	1.7	43.7	0.72	0.71	0.84	29.8
18	R2	All MCs	130	2.0	130	2.0	0.369	11.4	LOS B	1.7	43.7	0.72	0.71	0.84	29.6
Approach			217	2.0	217	2.0	0.369	11.4	LOS B	1.7	43.7	0.72	0.71	0.84	29.5
East: MD 4															
1	L2	All MCs	151	0.0	151	0.0	0.966	29.7	LOS D	46.3	1164.8	1.00	0.94	1.33	24.0
6	T1	All MCs	1037	1.0	1037	1.0	0.966	29.8	LOS D	46.3	1164.8	1.00	0.94	1.33	24.3
16	R2	All MCs	9	0.0	9	0.0	0.966	29.7	LOS D	46.3	1164.8	1.00	0.94	1.33	24.2
Approach			1197	0.9	1197	0.9	0.966	29.8	LOS D	46.3	1164.8	1.00	0.94	1.33	24.3
North: St Andrews Ln															
7	L2	All MCs	7	0.0	7	0.0	0.030	10.1	LOS B	0.1	2.6	0.74	0.74	0.74	29.5
4	T1	All MCs	1	0.0	1	0.0	0.030	10.1	LOS B	0.1	2.6	0.74	0.74	0.74	29.9
14	R2	All MCs	3	0.0	3	0.0	0.030	10.1	LOS B	0.1	2.6	0.74	0.74	0.74	29.7
Approach			11	0.0	11	0.0	0.030	10.1	LOS B	0.1	2.6	0.74	0.74	0.74	29.6
West: MD 4															
5	L2	All MCs	7	0.0	7	0.0	0.761	15.1	LOS C	13.7	345.2	0.80	0.55	1.01	28.6
2	T1	All MCs	778	1.0	778	1.0	0.761	15.2	LOS C	13.7	345.2	0.80	0.55	1.01	29.1
12	R2	All MCs	100	0.0	100	0.0	0.761	15.1	LOS C	13.7	345.2	0.80	0.55	1.01	28.9
Approach			885	0.9	885	0.9	0.761	15.2	LOS C	13.7	345.2	0.80	0.55	1.01	29.0
All Vehicles			2310	1.0	2310	1.0	0.966	22.4	LOS C	46.3	1164.8	0.90	0.77	1.16	26.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stoeline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

 Site: 101 [TS (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

MD 4 at St Andrews Ln/Site Access

Total SAT Peak w/Imp

Site Category: (None)

Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV]	%	[Total HV]	%	v/c	sec		[Veh. veh	Dist] ft				mph
South: Site Access															
3	L2	All MCs	103	2.0	103	2.0	0.445	13.2	LOS B	2.3	58.3	0.75	0.77	0.97	28.7
8	T1	All MCs	1	2.0	1	2.0	0.445	13.2	LOS B	2.3	58.3	0.75	0.77	0.97	29.1
18	R2	All MCs	155	2.0	155	2.0	0.445	13.2	LOS B	2.3	58.3	0.75	0.77	0.97	28.9
Approach			259	2.0	259	2.0	0.445	13.2	LOS B	2.3	58.3	0.75	0.77	0.97	28.8
East: MD 4															
1	L2	All MCs	152	0.0	152	0.0	0.831	17.6	LOS C	13.8	346.5	0.90	0.43	0.92	27.5
6	T1	All MCs	858	1.0	858	1.0	0.831	17.7	LOS C	13.8	346.5	0.90	0.43	0.92	27.9
16	R2	All MCs	4	0.0	4	0.0	0.831	17.6	LOS C	13.8	346.5	0.90	0.43	0.92	27.8
Approach			1014	0.8	1014	0.8	0.831	17.7	LOS C	13.8	346.5	0.90	0.43	0.92	27.9
North: St Andrews Ln															
7	L2	All MCs	3	0.0	3	0.0	0.019	8.5	LOS A	0.1	1.6	0.69	0.64	0.69	30.6
4	T1	All MCs	1	0.0	1	0.0	0.019	8.5	LOS A	0.1	1.6	0.69	0.64	0.69	31.1
14	R2	All MCs	4	0.0	4	0.0	0.019	8.5	LOS A	0.1	1.6	0.69	0.64	0.69	30.9
Approach			8	0.0	8	0.0	0.019	8.5	LOS A	0.1	1.6	0.69	0.64	0.69	30.8
West: MD 4															
5	L2	All MCs	6	0.0	6	0.0	0.771	15.5	LOS C	14.6	366.3	0.82	0.56	1.04	28.5
2	T1	All MCs	792	1.0	792	1.0	0.771	15.6	LOS C	14.6	366.3	0.82	0.56	1.04	28.9
12	R2	All MCs	101	0.0	101	0.0	0.771	15.5	LOS C	14.6	366.3	0.82	0.56	1.04	28.8
Approach			899	0.9	899	0.9	0.771	15.6	LOS C	14.6	366.3	0.82	0.56	1.04	28.9
All Vehicles			2181	1.0	2181	1.0	0.831	16.3	LOS C	14.6	366.3	0.85	0.52	0.98	28.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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