April 14, 2026

Rainbow Industrial Park:

Traffic Impact Assessment (TIA):

PREPARED FOR:

Modus Holdings

APTUS ENGINEERING LTD.

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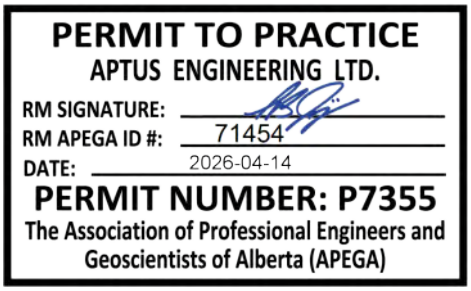
Contents

Corporate Authorization

This study entitled "Rainbow Industrial Park – Traffic Impact Assessment" was prepared by Aptus Engineering Ltd. for Modus Holdings.

The design and recommendations put forward reflect Aptus' best professional judgment based on the information available at the time of preparing this report. Any use of this information in a manner not intended or with the knowledge that situations have changed shall not be the responsibility of Aptus Engineering Ltd.



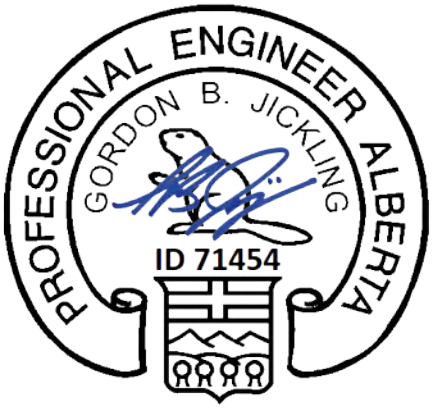
Corporate Permit

Prepared by:

2026-04-14

Brandon Wetmore, P.Eng.

Reviewed By:



2026-04-14

Gordon Jickling, P.Eng.

1.0 Executive Summary

Modus Holdings is proposing to build an Industrial subdivision at NE23-29-1-W5 (51° 30' 2.94" N, 114° 1' 52.26" W) called the Rainbow Industrial Park. The location of the industrial park is approximately 8km south of Carstairs on Highway 2A. The Industrial Park would access onto Highway 2A, via Rainbow Drive and Township Road 294/Rainbow Road.

The proposed Rainbow Industrial Park will be accessed via two existing intersections on Highway 2A, at Rainbow Drive and Township Road 294. Both of which are currently configured as Type II intersections. Traffic associated with Phase 1 of the development does not warrant any intersection improvements, and capacity analysis indicates that both intersections will continue to operate effectively under these conditions.

With the addition of Phase 2 traffic, combined with projected background growth on Highway 2A, the intersections may meet the warrants for a Type III configuration. However, capacity modelling indicates that both intersections are expected to operate within acceptable limits under the 2050 ultimate scenario without upgrades.

Given that the projected traffic volumes exceed those currently observed from existing industrial development in the area, it is recommended that Phase 1 proceed without modification. Prior to advancing Phase 2, a review of actual traffic volumes at these intersections should be completed to confirm whether upgrades to a Type III configuration are required.

Signalization and illumination are not anticipated to be necessary at either intersection. Access to the Highway 2A and Township Road 294 intersection will be supported by constructing the Rainbow Road and Township Road 294 intersection as a Type I intersection, rather than limiting it to emergency access. Traffic volumes at this location are expected to remain low, with no anticipated capacity concerns.

TIA Summary Chart

Date	April 10, 2026	**Consultant**	Aptus Engineering Ltd.
Project	Traffic Impact Assessment - Rainbow Industrial Park		

Site Information

Development Type	Industrial Park		
Highway No.	2A	**Control Section**	2A:12
Legal Land Description	NE23-29-1-W5		
Posted Speed	100	**Design Speed**	110
Design Vehicle (include turning templates in appendix)	WB-21/WB-23		
Sight Distance Available	500m	**Min. Requirement**	220m
Lane Configuration	1 Northbound, 1 Southbound		
Existing Right of Way Width	50m		

Warrants

		Improvement Required	
	Existing	**Interim**	**Ultimate**
Year	2026	2027	2030
Left Turn Lane	Type II	Type II	Type III
Right Turn Lane	Type II	Type II	Type III
Signal/Roundabout	N/A	No	No
Illumination (please specify)	None	None	None
Pedestrian	None	None	None

Intersection Treatment

	Existing	**Proposed**
Intersection Treatment Type	Typical Type II	Typical Type III
Additional Modifications	N/A	None
Design Constraints	N/A	N/A

Additional Comments

Existing Intersections of Hwy 2A/Rainbow Drive and Highway 2A/Twp Rd 294 are a Typical Type II intersection. No improvements are required for Phase 1 of the development. The traffic volumes should be analyzed prior to the construction of Phase 2 to determine if an upgrade to a Type III is required.

Disclaimer: Please note this chart does not summarize all of the guideline requirements and does not mean the categories not listed here can be excluded from the TIA

2.0 Introduction & Proposed Development Information

Rainbow Industrial Park is located at NE23-29-1-W5 (51° 30' 2.94" N, 114° 1' 52.26" W), adjacent to the Dave Striker Industrial Subdivision, and forms part of the South Carstairs Area Structure Plan. The proposed development area was previously used as a driver training facility for Schlumberger Canada and is proposed to be redeveloped as an industrial subdivision.

Key characteristics of the proposed development include:

- Total development area of approximately 32.1 ha.
- Development consisting of 26 industrial lots constructed in two phases.
- Lot sizes ranging from approximately 1.0 ha to 1.3 ha.

The site is bound by the following roadways:

- Highway 2A to the west
- Rainbow Road to the east
- Rainbow Drive to the south
- Township Road 294 to the north


Township Rd 294
Township Rd 294
Rainbow Industrial Park
51.500818, -114.031184
Rainbow Road
Rainbow Drive
Queen Elizabeth II Hwy
Range Rd 10A
Range Rd 10A
Range Rd 10A
Range Rd 11
Range Rd 10A
2A
2A
2A
2
Image © 2026 Airbus

The goal of this study is to evaluate the impact of the new development to the following intersections:

- Highway 2A & Rainbow Drive
- Township Road 294 & Rainbow Road
- Highway 2A & Township Road 294

2.1.1 Proposed Development

The proposed accesses for the development are as follows:

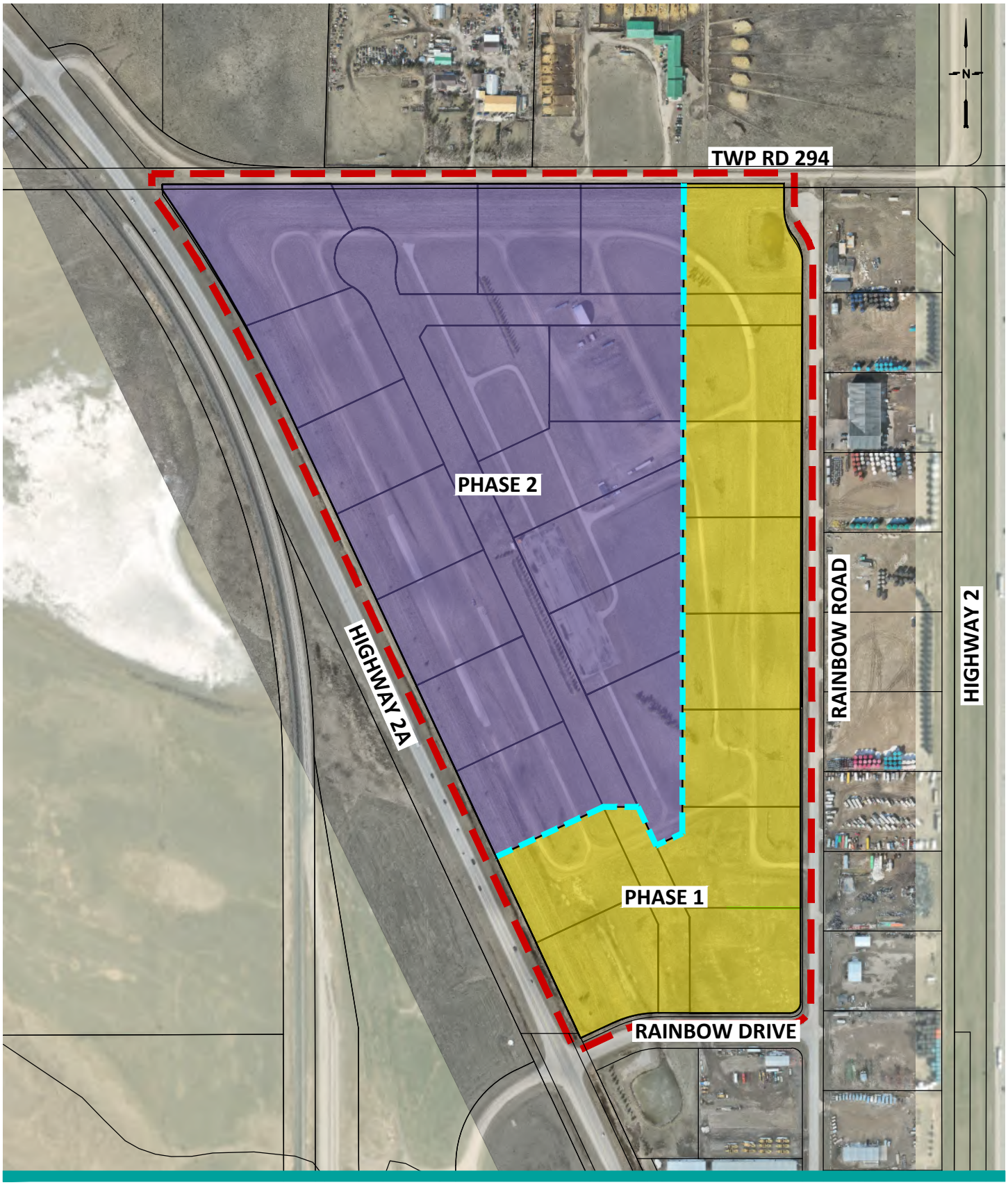
- Rainbow Drive – Approximately 110m east of the Highway 2A intersection.
- Rainbow Road – Approximately 130m south of the Twp Rd 294 intersection.

The proposed development encompasses a total area of approximately 32.1 hectares and consists of 26 industrial lots to be constructed in two phases.

Phase 1 consists of 10 Lots and consists of 11.90 ha of total area. This phase is expected to be completed in 2027. Construction is expected to begin in 2027 with lots being available in late 2027.

Phase 2 consists of 16 lots and 20.22ha of total area. This phase is expected to be completed in 2030.

The individual lot sizes are anticipated to range from approximately 1.0 to 1.3 hectares, See Figure 1.



RAINBOW INDUSTRIAL PARK

TRAFFIC IMPACT ASSESSMENT

NE23-29-1-W5

PROPOSED DEVELOPMENT

F01

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2.1.2 Study Area

This study will focus on the intersections of Highway 2A/ Rainbow Drive, Township Road 294/Rainbow Road, and Highway 2A/Twp Rd 294.

3.0 Existing Infrastructure Conditions

3.1 Existing Highway and Road Network Conditions

3.1.1 Highway 2A

Highway 2A is a two lane Rural Arterial undivided Highway that runs north-south, south of Carstairs. The current speed limit is 100km/h. The pavement width is 10.4m wide, with two 3.7m lanes. The highway has white shoulder lines and a dashed yellow centerline.

3.1.2 Township Road 294

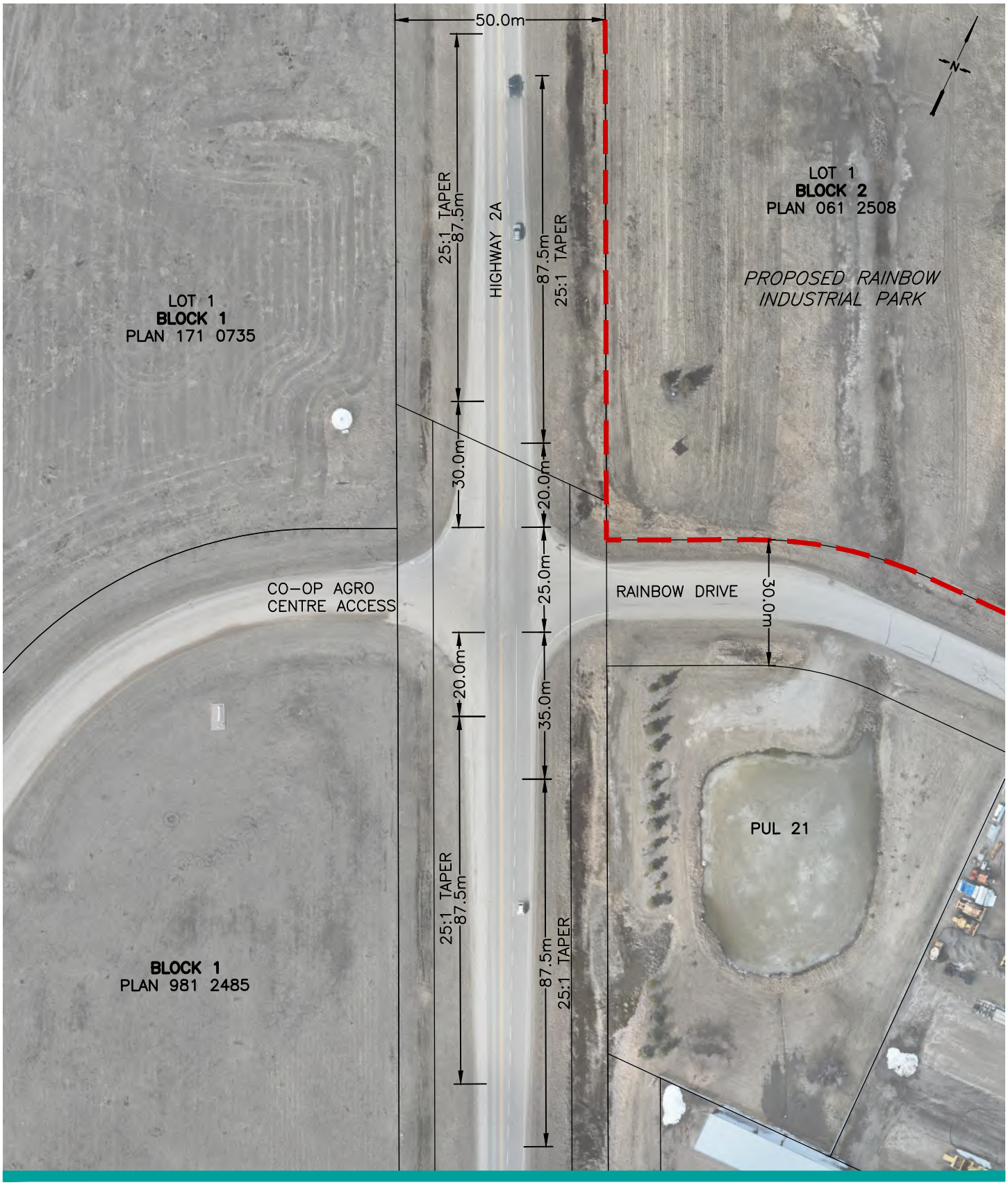
Township Road 294 is a two lane Rural local gravel road that runs east-west, south of Carstairs. There is no posted speed limit, so it is assumed to be 80km/h, typical for gravel roads. The road width is 6.0m wide, with two 3.0m lanes. The roadway is gravel so has no paint markings.

3.2 Existing Intersection Conditions

3.2.1 Highway 2A – Rainbow Drive

The existing intersection of Hwy 2A and Rainbow Drive is a Type II intersection with a northbound left turn lane and a southbound right turn lane. The intersection is stop controlled with stop signs on Rainbow Drive and the Co-op Agro Centre Access.

Details of the existing intersection can be seen on Figure 2:



RAINBOW INDUSTRIAL PARK

TRAFFIC IMPACT ASSESSMENT

NE23-29-1-W5

EXISTING HIGHWAY 2A - RAINBOW DRIVE INTERSECTION

F02

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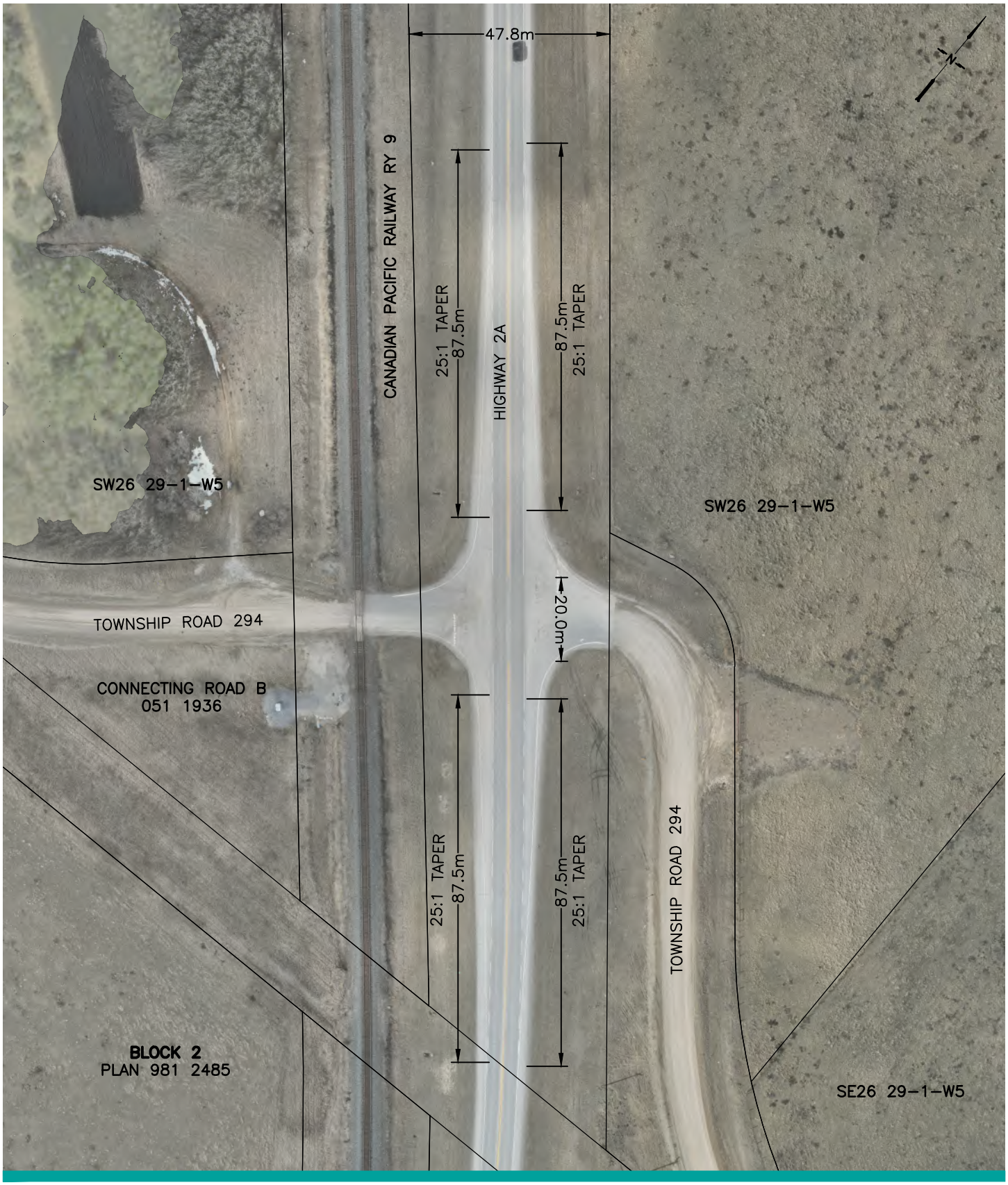
3.2.2 Highway 2A – Township Road 294

The existing intersection of Hwy 2A and Township Road 294 is a Type II intersection with a northbound right turn lane and a southbound right turn lane. The intersection is stop controlled with stop signs on Township Road 294.

Details of the existing intersection can be seen on Figure 3:



RAINBOW INDUSTRIAL PARK

TRAFFIC IMPACT ASSESSMENT

NE23-29-1-W5

EXISTING HIGHWAY 2A-TOWNSHIP ROAD 294 INTERSECTION

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3.2.1 Township Road 294 – Rainbow Road

Currently there a limited access connection between Township Road 294 and Rainbow Road. The intersection is currently used as a second emergency exit at the end of the cul-de-sac. The intersection will be constructed as part of the Rainbow Industrial Park development.

3.3 Proposed Access Configuration

The development would have two proposed accesses. The access onto Rainbow Drive would be approximately 110m east of the Highway 2A intersection. The access onto Rainbow Road would be approximately 130m south of the Twp Rd 294 intersection. Both intersections will be internal development roads and will not have any additional turning lanes. There will be a stop control on the development side of intersection.

4.0 Background Traffic & Projections

4.1 Existing Traffic Conditions

4.1.1 Traffic Counts

Traffic counts were taken at the following intersections on Tuesday March 10, 2026:

- Highway 2A & Rainbow Drive
- Highway 2A & Township Road 294
- Township Road 294 & Rainbow Road

This traffic data will be the basis for the 2026 Traffic Count scenario. Traffic Count volumes are shown on the table in Appendix A.

4.1.2 ATR Adjustment

The 2025 traffic data taken from ATR 60201258 on Highway 2A, located 5.2 km south of Highway 2A and Highway 580 in Carstairs adjacent to the development, was used to adjust the traffic count data. The Two-way 100th Highest Hour traffic volume for 2025 was 663. As traffic count data is not yet available for 2026, the two-way traffic for the AM and PM Peak for the second Tuesday in March (March 11, 2025) was compared to the AADT for 2025 to create an ATR Adjustment factor.

$$Factor = \frac{AADT\ in\ last\ year}{ATR\ 24\ hr\ daily\ volume\ on\ count\ date\ in\ last\ year}$$

Table 1 - ATR Adjustment Factor

2025 Data	Two-Way Traffic Volume
AADT	5866
ATR 24 Hour Count – March 11, 2025	5954
ATR Adjustment Factor	0.99

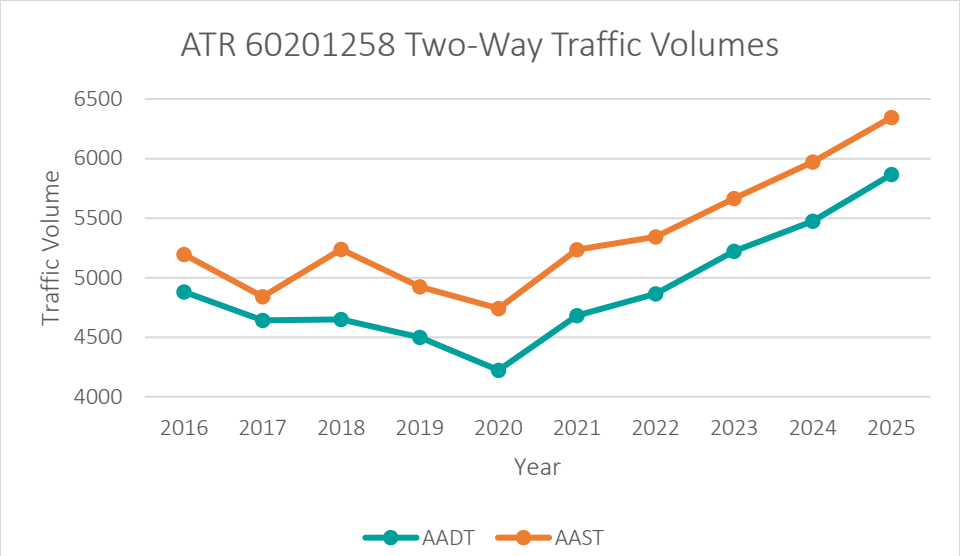
4.1.3 Background Growth

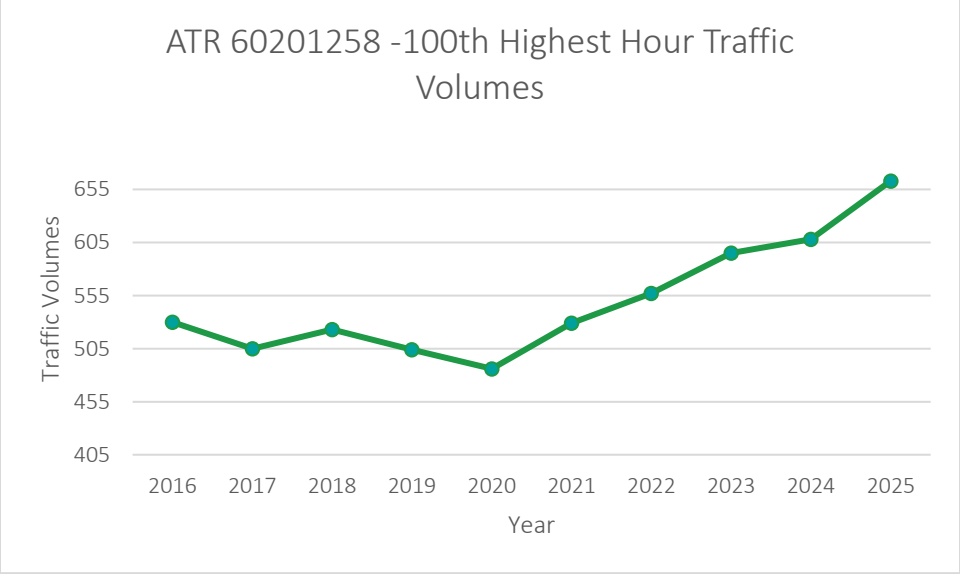
The past 10 years of data from ATR 60201258 on Highway 2A, located 5.2 km south of Highway 2A and Highway 580 in Carstairs, were analyzed to determine the background growth rate for

Highway 2A. The Average Annual Daily Traffic (AADT), Average Summer Daily Traffic (ASDT) and 100th Highest Hour for each year were analyzed.

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AADT	4881	4641	4651	4500	4223	4683	4865	5222	5475	5866
AAST	5194	4841	5237	4925	4742	5236	5342	5666	5972	6346
100th Highest Hour	530	505	523	504	486	529	557	595	608	663

Both the Daily and Peak Hour volumes on this roadway have shown an increase over the 10-year period. The AADT increased by 20% (2.0% per year on average), the ASDT by 22% (2.2% per year on average) and the 100th highest hour by 25% (2.5% per year on average).





The Alberta Transportation Traffic Impact Assessment Guidelines state that a compounded

growth rate of 2% should be used as a lower limit for Provincial Highway background growth. As such a background growth rate of 2.5% was chosen for background traffic for all the intersections that were analyzed as part of this report to be conservative.

4.2 Projected Background Traffic

4.2.1 2027 & 2030 Opening Day Scenario

A growth rate of 2.5% per year linear (not compounded), was used to increase the background traffic from 2026 to 2027 for Phase 1 and 2030 for Phase 2. Future Background Traffic is shown in Appendix A.

4.2.2 2040 & 2050 Ultimate Scenario

Similarly, a growth rate of 2.5% per year linear (not compounded), was used to increase the background traffic further for the 10 Year Horizon (2040) and 20 Year Horizon (2050). Future Background Traffic is shown in Appendix A.

4.3 Traffic Generated by Other Developments

At this time, there were no identified projects in the immediate vicinity of the analyzed intersections that would impact the traffic volumes. Any other development further away is assumed to be captured in the background traffic growth.

5.0 Development Traffic

5.1 Trip Generation Rates

Trip Generation data was taken from the ITE Trip Generation 11th Edition. As trip generation rates are based on square feet of a building, lot areas were used assuming a 10% FAR (Floor Area Ratio) which is typical for industrial development and is similar to the existing nearby industrial lots. Trip generation rates and total trips generated are shown in the table below:

Table 2 – ITE Trip Generation Rates

Phase	Code	Description	Units	Generation Rates		Expected Units	Total Generated Trips	
				AM Peak	PM Peak		AM Peak	PM Peak
1	130	Industrial Park	1000 Sq. Ft. GFA	0.34	0.34	113.4	39	39
2	130	Industrial Park	1000 Sq. Ft. GFA	0.34	0.34	192.6	65	65
Total						306	104	104

These traffic volumes are much higher than the traffic volumes from the existing industrial lots in the area so these volumes should be considered very conservative.

Trip distribution was also taken from the ITE Trip Generation manual and is shown in the table

below:

Table 3 - ITE Trip Distribution Rates

Phase	Total Generated Trips		AM Peak		PM Peak		AM Peak		PM Peak	
	AM Peak	PM Peak	In	Out	In	Out	In	Out	In	Out
1	39	39	81%	19%	22%	78%	32	7	9	30
2	65	65	81%	19%	22%	78%	53	12	14	51
Total	104	104					85	19	23	81

Due to the proposed land use, all trips were assumed to be site generated with no Pass-by or Linked Trips.

5.2 Trip Distribution

As access to Highway 2A via Township Road 294 is provided by a gravel road, and the majority of trips are expected to originate from or be destined to the south leg of Highway 2A, it has been assumed that 90% of traffic will use the Highway 2A and Rainbow Drive intersection to access the site, with the remaining 10% using Rainbow Road and Township Road 294.

The distribution at the intersection of Highway 2A and Rainbow Drive is anticipated to be 88% southbound and 12% northbound (80% of total trips head southbound, 10% of total trips head northbound). The distribution at the intersection of Highway 2A and Township Road 294 is anticipated to be 50% southbound and 50% northbound (5% of total trips head southbound, 5% of total trips head northbound).

Trip distribution figures are provided in Appendix A.

6.0 Post Development Traffic

Post Development Traffic was considered for four scenarios: the 2027 Phase 1 - Opening Day, 2030 Phase 2 Commencement Day, the 2040 – 10 Year Horizon and 2050 – 20 Year Horizon Scenarios.

The background traffic for 2027 was combined with the traffic from generated from the Phase 1 only for the Opening Day Scenario.

The background traffic for 2030, 2040 and 2050 were combined with the traffic from generated from the entire development for the other scenarios.

7.0 Intersection Treatment Warrants

7.1 Turn Lane Warrant Analysis

Turn lane warrant analysis was performed for both Highway 2A intersections in all scenarios. The warrant Analysis was performed using the "AT_IntersectionAnalysis" Spreadsheet, provided by Alberta Transportation and Economic Corridors.

7.1.1 Highway 2A-Rainbow Drive

Turn Lane Warrant Analysis was performed for all scenarios for the Intersection of Highway 2A and Rainbow Drive. The intersection is currently a Type II intersection. A Type II intersection was warranted from the background traffic in all scenarios. The Total traffic in the 2030 Ultimate Scenario warranted an upgrade to a Type III intersection treatment based on the increase in traffic on Rainbow Drive. The results of the turn lane warrant analysis are shown below. Details of the Turn Lane Warrant Analysis is included in Appendix C.

Table 4 - Highway 2A-Rainbow Drive - Turn Lane Warrant Analysis

Scenario	Treatment Warranted
2027 Background Traffic	Type II
2027 Total Traffic	Type II
2030 Background Traffic	Type II
2030 Total Traffic	Type III
2040 Background Traffic	Type II
2040 Total Traffic	Type III
2050 Background Traffic	Type II
2050 Total Traffic	Type IIII

7.1.2 Highway 2A-Township Road 294

Turn Lane Warrant Analysis was performed for all scenarios for the Intersection of Highway 2A and Township Road 294. The intersection is currently a Type II intersection. A type II intersection was warranted from the background traffic in all scenarios. The Total traffic in the 2030 Ultimate Scenario warranted an upgrade to a Type III intersection treatment based on the increase in traffic on Township Road 294. The results of the turn lane warrant analysis are shown below. Details of the Turn Lane Warrant Analysis is included in Appendix C.

Table 5 - Highway 2A-Township Road 294 - Turn Lane Warrant Analysis

Scenario	Treatment Warranted
2027 Background Traffic	Type II
2027 Total Traffic	Type II
2030 Background Traffic	Type II
2030 Total Traffic	Type III
2040 Background Traffic	Type II
2040 Total Traffic	Type III
2050 Background Traffic	Type II
2050 Total Traffic	Type IIII

7.2 Signal Warrant Analysis

Signal Warrant Analysis was performed for both Highway 2A intersections in the 2050 Total Traffic Scenario. Signals were not warranted for either intersection. Signal Warrant Analysis is included in Appendix C.

8.0 Analyses

8.1 Capacity Analysis

The intersection analysis performed follows the guidelines in the Highway Capacity Manual 6, for both unsignalized and signalized intersections. The analysis and resulting Level of Service (LOS) is based on the movements through the intersections. Results of the analysis has been included in Appendix C.

The resulting LOS for each minor movement, as well as the overall intersection, is defined based on the average delay for that movement, in seconds per vehicle. The LOS Criteria for Two Way Stop Controlled (TWSC) Intersections, roundabouts and Signalized Intersections are as follows:

Table 6: Level of Service Criteria

Level of Service	Average Control Delay (s/veh)		
	Signalized	Unsignalized	Sidra Roundabout Method
A	d ≤ 10	d ≤ 10	d ≤ 10
B	10 < d ≤ 20	10 < d ≤ 15	10 < d ≤ 20
C	20 < d ≤ 35	15 < d ≤ 25	20 < d ≤ 35
D	35 < d ≤ 55	25 < d ≤ 35	35 < d ≤ 50
E	55 < d ≤ 80	35 < d ≤ 50	50 < d ≤ 70
F	80 < d	50 < d	70 < d

8.2 Highway 2A-Rainbow Drive

Capacity analysis for the Highway 2A and Rainbow Drive intersection was completed using Synchro by Trafficware. Background and Total Traffic scenarios were analyzed using both the existing intersection configuration. A summary of the modelling results is below:

Table 7 - Highway 2A-Rainbow Drive Modelling Results

Year	Intersection Conditions	Scenario	Peak	Max v/c Ratio	Intersection Delay (s)	Intersection LOS
2026	Existing	Background	AM	0.01	0.5	A
			PM	0.03	0.5	A
2027	Existing	Background	AM	0.01	0.5	A
			PM	0.03	0.5	A
		Total	AM	0.01	0.7	A
			PM	0.09	1.1	A
2030	Existing	Background	AM	0.02	0.5	A
			PM	0.04	0.5	A
		Total	AM	0.06	1.0	A
			PM	0.25	2.3	A
2040	Existing	Background	AM	0.02	0.6	A
			PM	0.05	0.6	A
		Total	AM	0.08	1.0	A
			PM	0.32	2.6	A
2050	Existing	Background	AM	0.03	0.6	A
			PM	0.07	0.7	A
		Total	AM	0.10	1.0	A
			PM	0.42	3.1	A

Based on the modelling results, the intersection would still have a LOS of A in the 2050 Total Traffic scenario with the existing Type II configuration.

8.3 Highway 2A – Township Road 294

Capacity analysis for the Highway 2A and Township Road 294 intersection was completed using Synchro by Trafficware. All background and Total Traffic scenarios were analyzed using the existing Type II intersection. A summary of the modelling results is below:

Table 8 - Highway 2A-Township Road 294 Modelling Results

Year	Intersection Conditions	Scenario	Peak	Max v/c Ratio	Intersection Delay (s)	Intersection LOS
2026	Existing	Background	AM	0.01	0.2	A
			PM	0.01	0.1	A
2027	Existing	Background	AM	0.01	0.2	A
			PM	0.01	0.1	A
		Total	AM	0.01	0.2	A
			PM	0.02	0.2	A
2030	Existing	Background	AM	0.01	0.2	A
			PM	0.01	0.1	A
		Total	AM	0.01	0.3	A
			PM	0.04	0.3	A
2040	Existing	Background	AM	0.01	0.2	A
			PM	0.02	0.1	A
		Total	AM	0.01	0.3	A
			PM	0.05	0.3	A
2050	Existing	Background	AM	0.01	0.2	A
			PM	0.03	0.2	A
		Total	AM	0.01	0.3	A
			PM	0.07	0.4	A

Based on the modelling results, the intersection would have a LOS of A in the 2050 Total Traffic scenario with the existing Type II configuration. The model showed no issues with capacity or delay with the existing configuration.

8.4 Township Road 294 – Rainbow Road

Capacity analysis for the Township Road 294 and Rainbow Road intersection was completed using Synchro by Trafficware. All background and Total Traffic scenarios were analyzed using a Type I intersection. A summary of the modelling results is below:

Table 9 - Township Road 294 – Rainbow Road Modelling Results

Year	Intersection Conditions	Scenario	Peak	Max v/c Ratio	Intersection Delay (s)	Intersection LOS
2026	Existing	Background	AM	0.01	4.8	A
			PM	0.00	2.8	A
2027	Existing	Background	AM	0.01	4.8	A
			PM	0.00	2.8	A
		Total	AM	0.01	3.6	A
			PM	0.01	5.7	A
2030	Existing	Background	AM	0.01	4.8	A
			PM	0.00	2.8	A
		Total	AM	0.01	2.7	A
			PM	0.01	6.5	A
2040	Existing	Background	AM	0.01	5.4	A
			PM	0.00	2.8	A
		Total	AM	0.01	3.1	A
			PM	0.01	6.5	A
2050	Existing	Background	AM	0.01	4.4	A
			PM	0.00	4.2	A
		Total	AM	0.01	3.0	A
			PM	0.01	6.6	A

Based on the modelling results, the intersection would have a LOS of A in the 2050 Total Traffic scenario with the Type I configuration. The model showed no issues with capacity or delay with the Type I configuration.

8.5 Traffic Safety

The area surrounding Highway 2A is flat and open with no hills or valleys close to the intersection. Sightlines are not anticipated to be a problem. The minimum stopping sight distance (SSD) for speed limit of 100 km/h (design speed=110km/h) is 220m as per the Alberta Transportation Geometric Road Design Guide, Chapter B. Sight distance at both Highway 2A intersections would be over 500m in either direction.

Exhibit 1 – Highway 2A-Rainbow Drive Facing South

Exhibit 2 - Highway 2A-Rainbow Drive Facing North

Exhibit 3 – Highway 2A-Township Road 294 Facing South

Exhibit 4 - Highway 2A-Township Road 294 Facing North

8.6 Design Vehicle Accommodation

The design vehicles for the proposed development were the WB-21 and WB-23.

8.6.1 Highway 2A-Rainbow Drive

This intersection is currently a Type II intersection which would be able to accommodate the design vehicles without crossing the centerline, as per Chapter D of the Alberta Highway Geometric Design Guide.

8.6.2 Highway 2A-Township Road 294

This intersection is currently a Type II intersection which would be able to accommodate the design vehicles without crossing the centerline, as per Chapter D of the Alberta Highway Geometric Design Guide.

8.6.3 Township Road 294 – Rainbow Road

This intersection is proposed as a Type I intersection onto a gravel road. As such larger vehicles will have to cross the centerline to make the turning movement. As this is a secondary access, it is anticipated that larger vehicles would use the Rainbow Drive access.

8.7 Illumination Warrant Analysis

Illumination warrant analysis was performed for both of the Highway 2A intersections for the 2050 Ultimate Scenario. Neither intersection warranted illumination. Illumination Analysis can be found in Appendix D.

9.0 Conclusions and Recommendations

The proposed Rainbow Industrial Park will have two access points onto Highway 2A at the existing Rainbow Drive and Township Road 294 intersections. Both intersections are currently built to a type II standard.

Phase 1 of the development did not warrant any intersection improvements and capacity analysis showed no issue at with either intersection.

Phase 2 of the development increased the traffic on Rainbow Drive and Township Road 294, along with increased background traffic on Highway 2A, causes these intersections to warrant a Type III intersection treatment. However, capacity modelling showed no issues with the existing configuration up to the 2050 Ultimate scenario.

As the capacity modelling showed no issues with the current configuration and the projected traffic volumes are much higher than the traffic generated from the existing industrial development in the area, it is recommended that Phase 1 be permitted to proceed. Prior to Phase 2 being permitted, the traffic volumes at these intersections should be evaluated to determine if an upgrade to a Type III intersection is warranted.

Neither signalization nor illumination are required for either intersection.

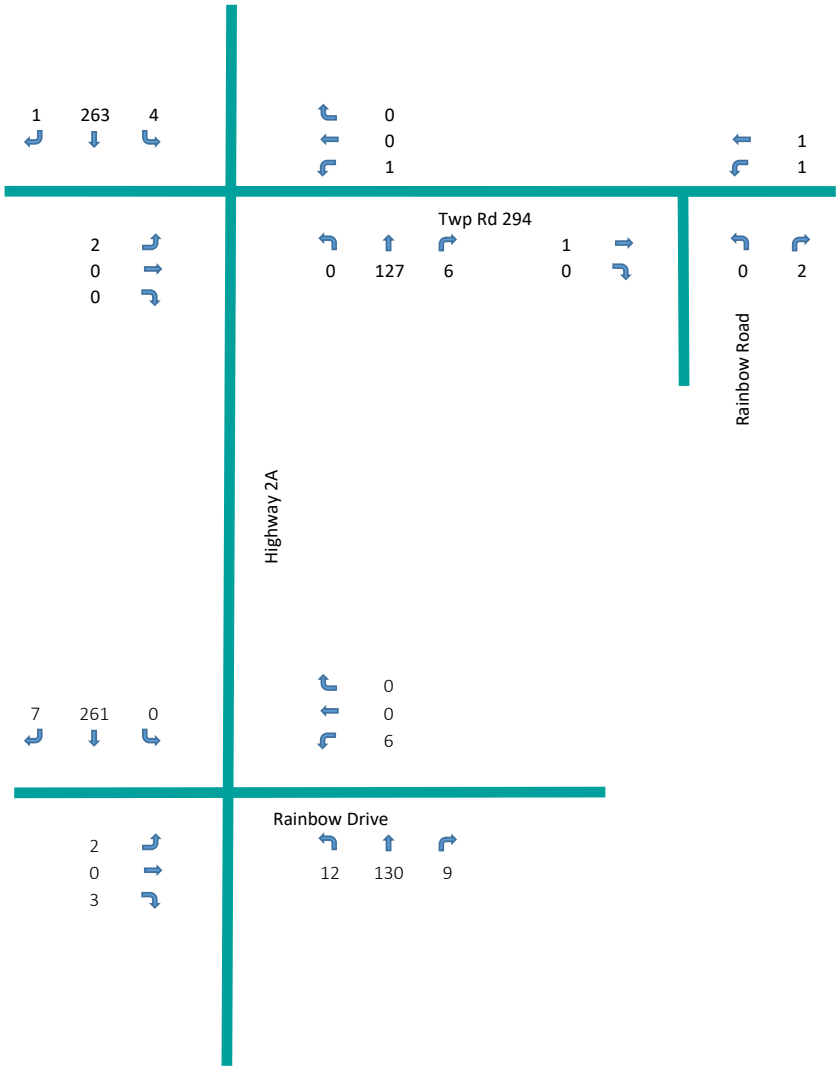
To access the Highway 2A and Township Road 294 intersection, the intersection of Rainbow Road and Township Road 294 shall be constructed as a type I intersection onto the gravel road, rather than an emergency access only. Volumes at this intersection are not anticipated to be very high and modelling showed there were no issues with capacity.

Appendix A

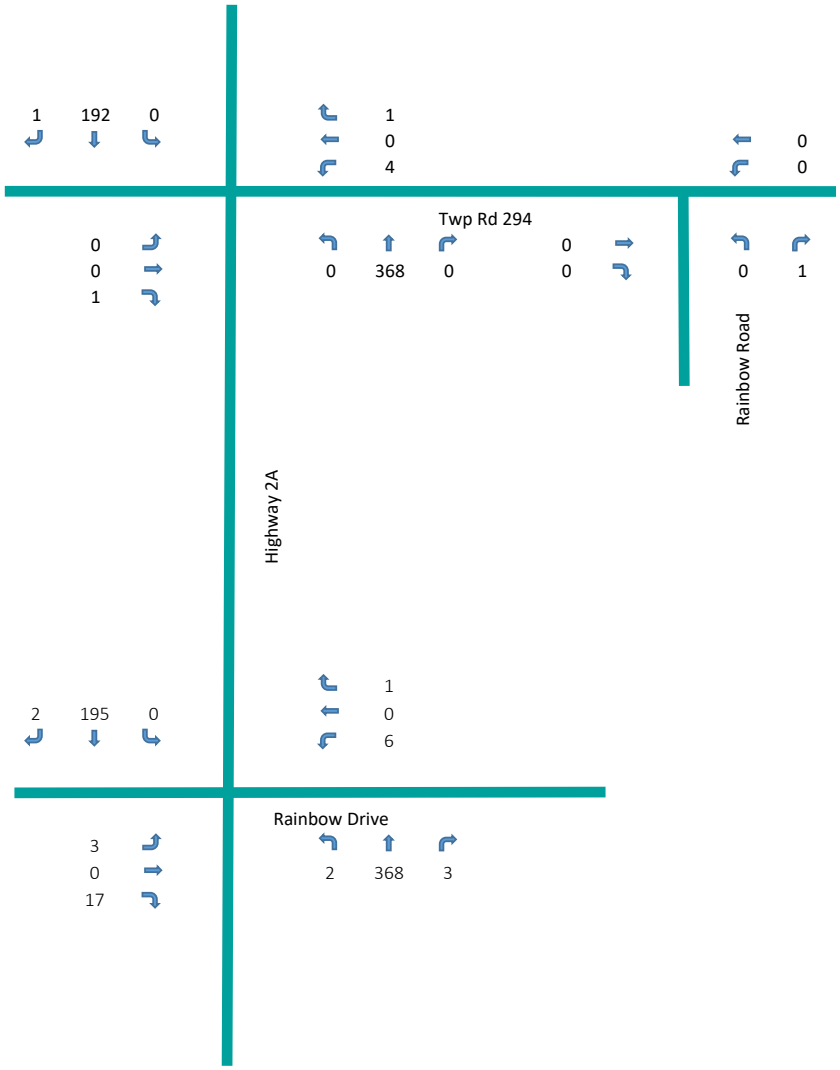
Traffic Volume Information

2026 Traffic Count

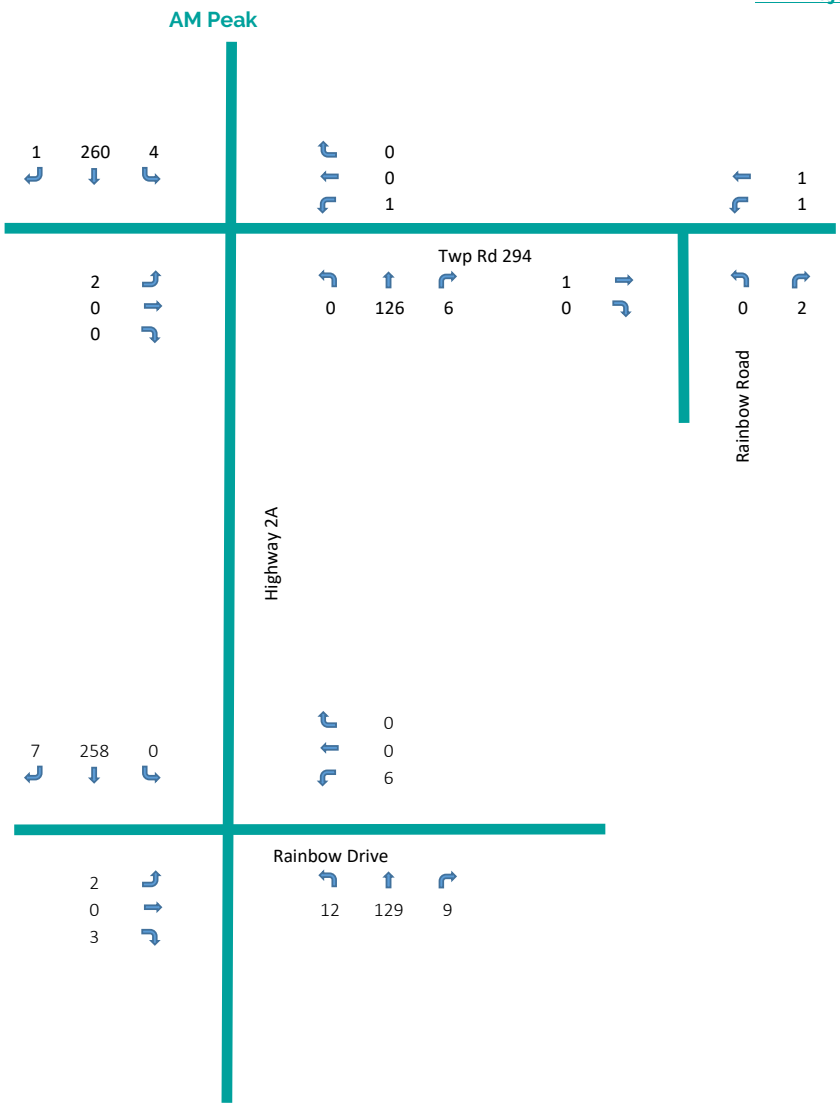
AM Peak

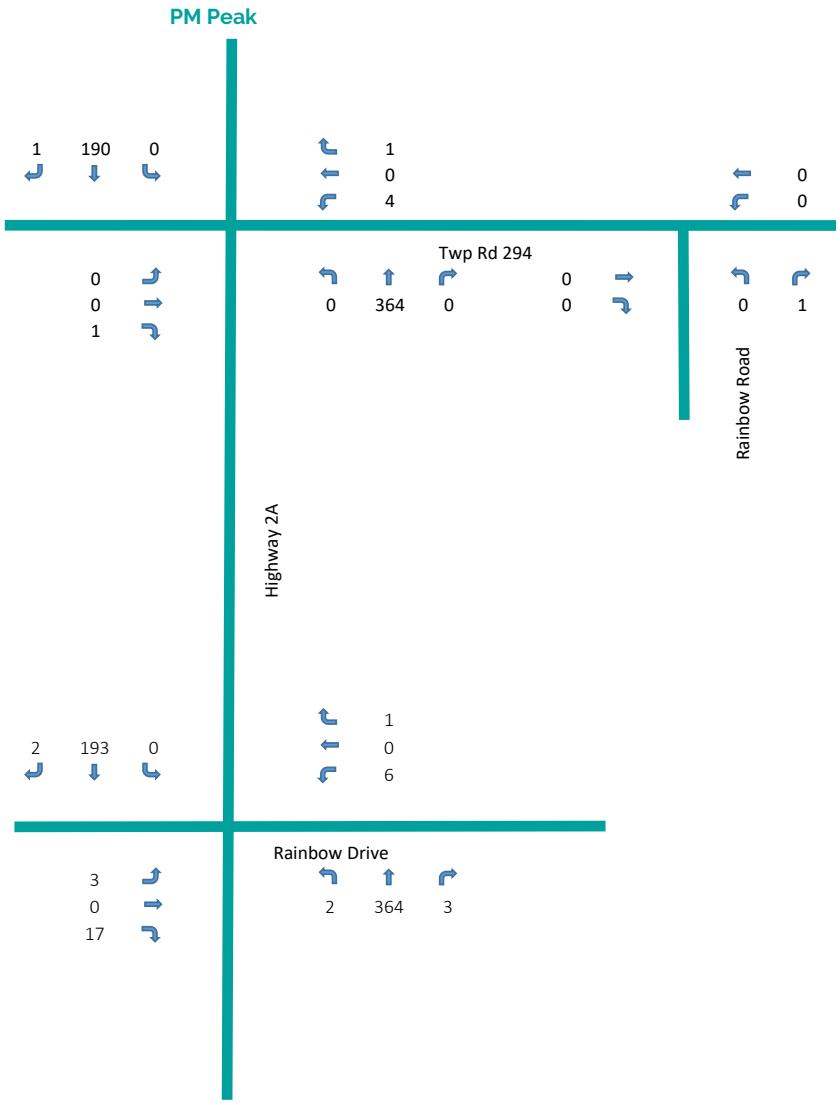


PM Peak



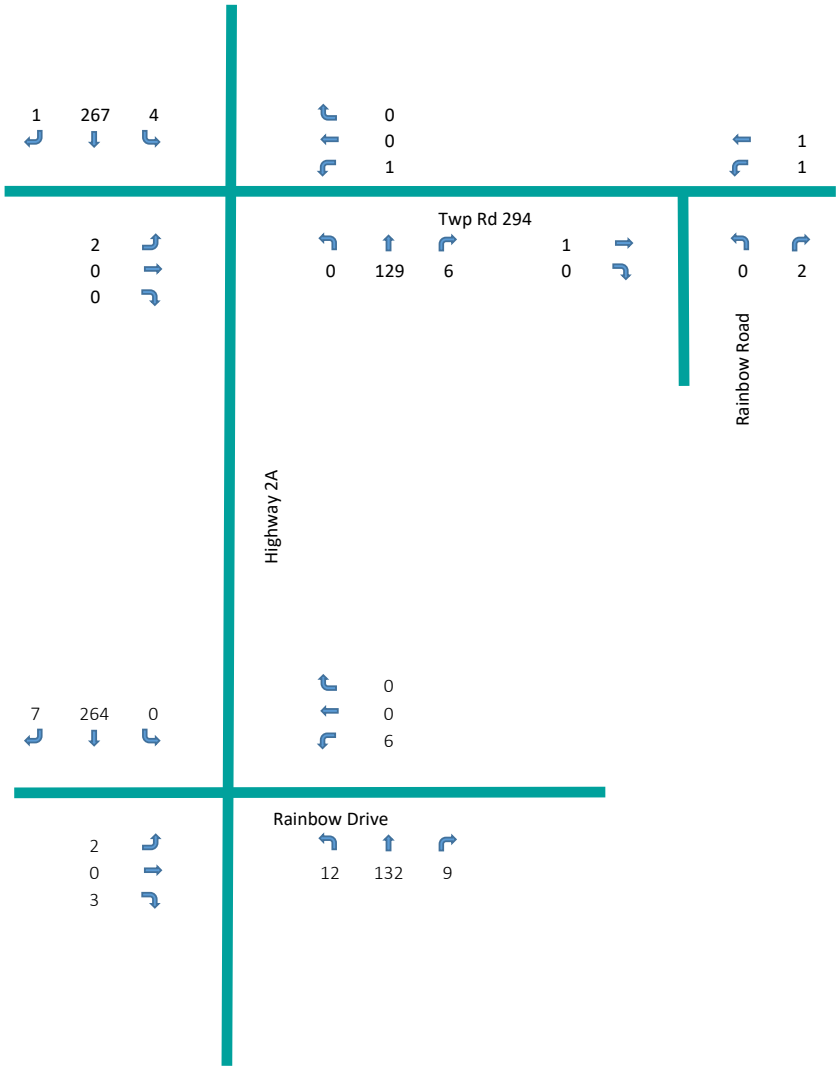
ATR Adjusted Traffic



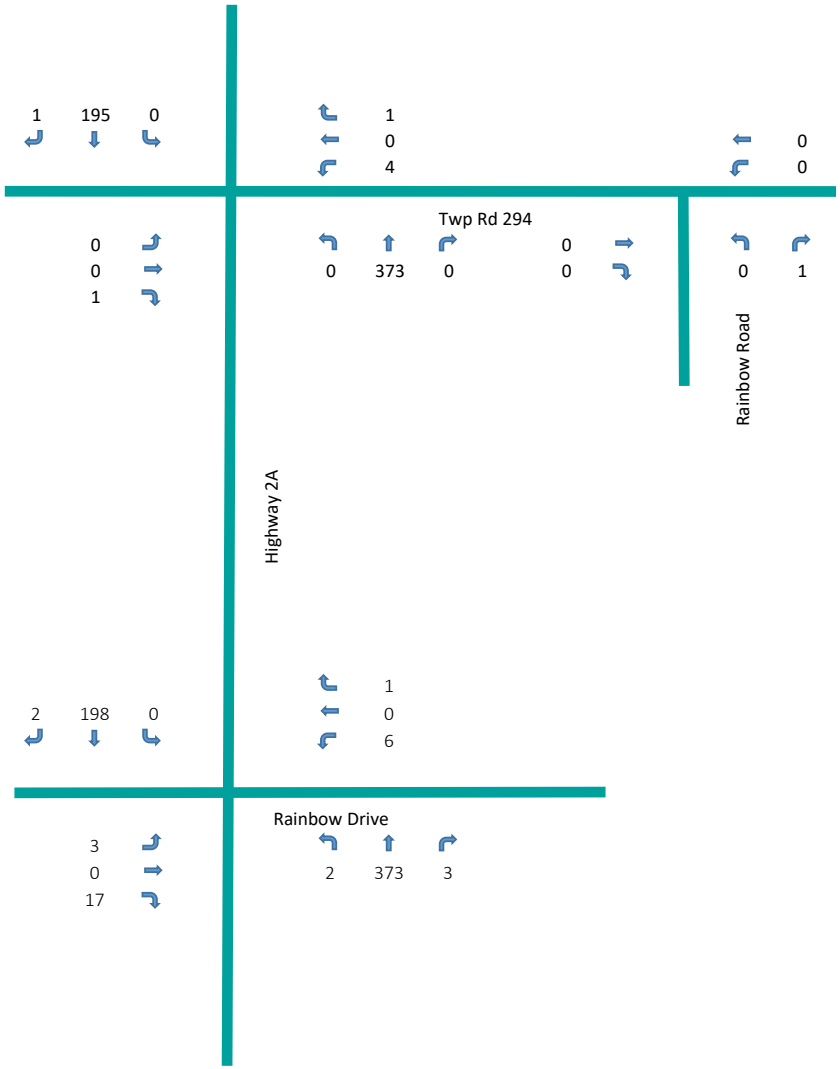


2027 Background Traffic

AM Peak

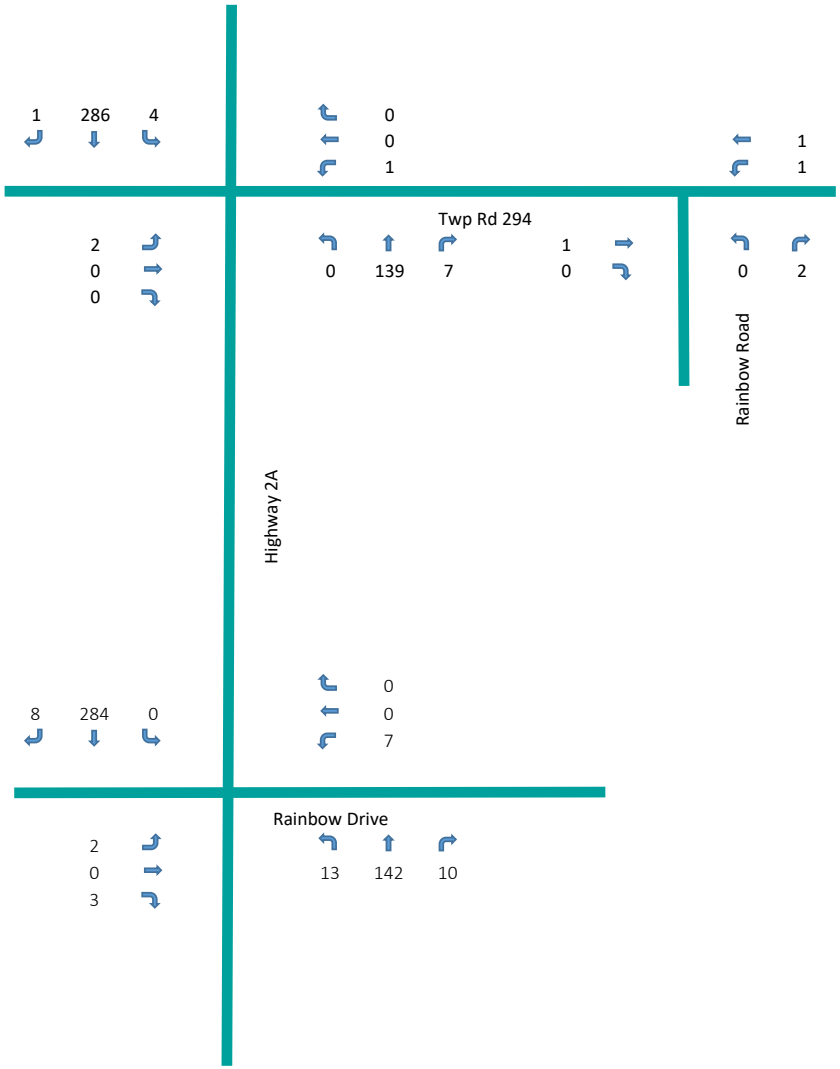


PM Peak

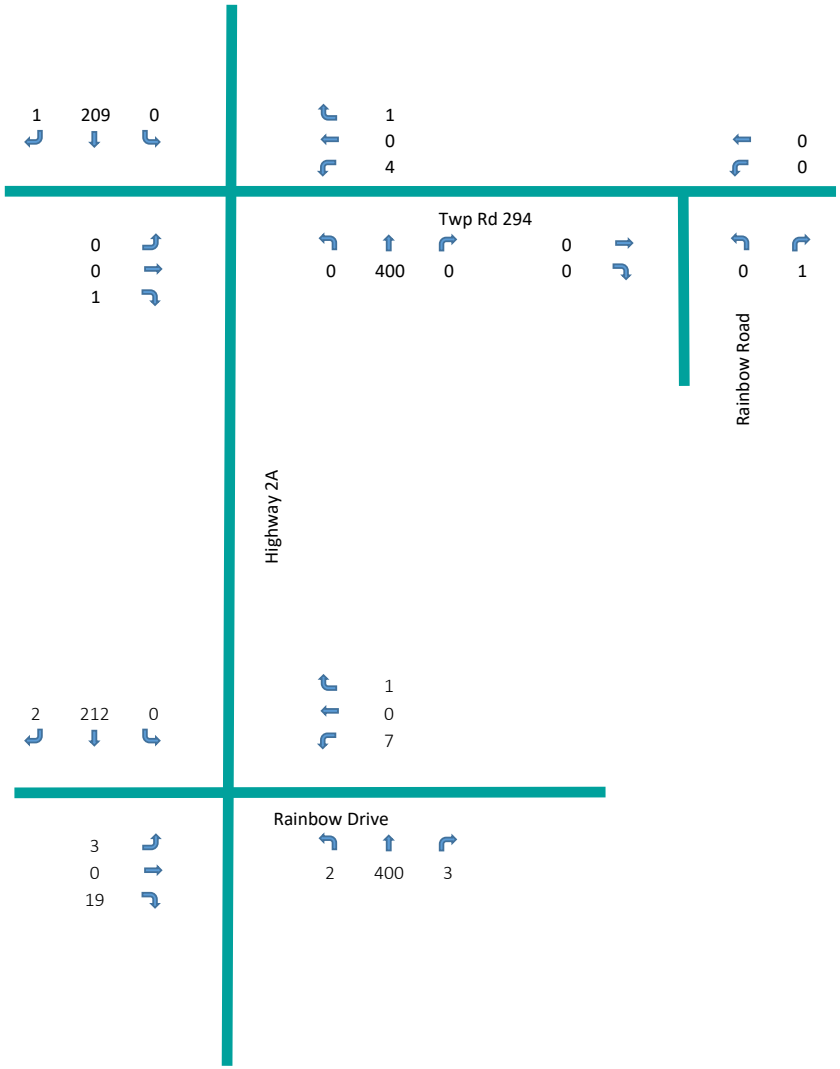


2030 Background Traffic

AM Peak

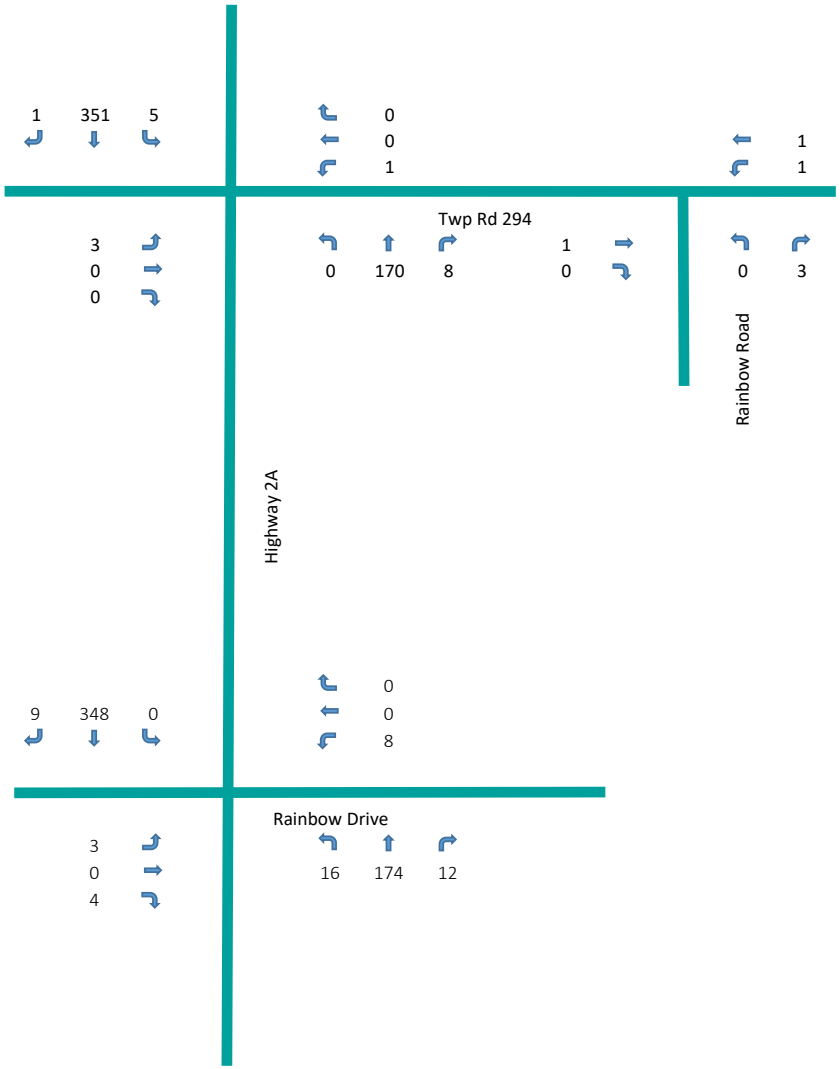


PM Peak

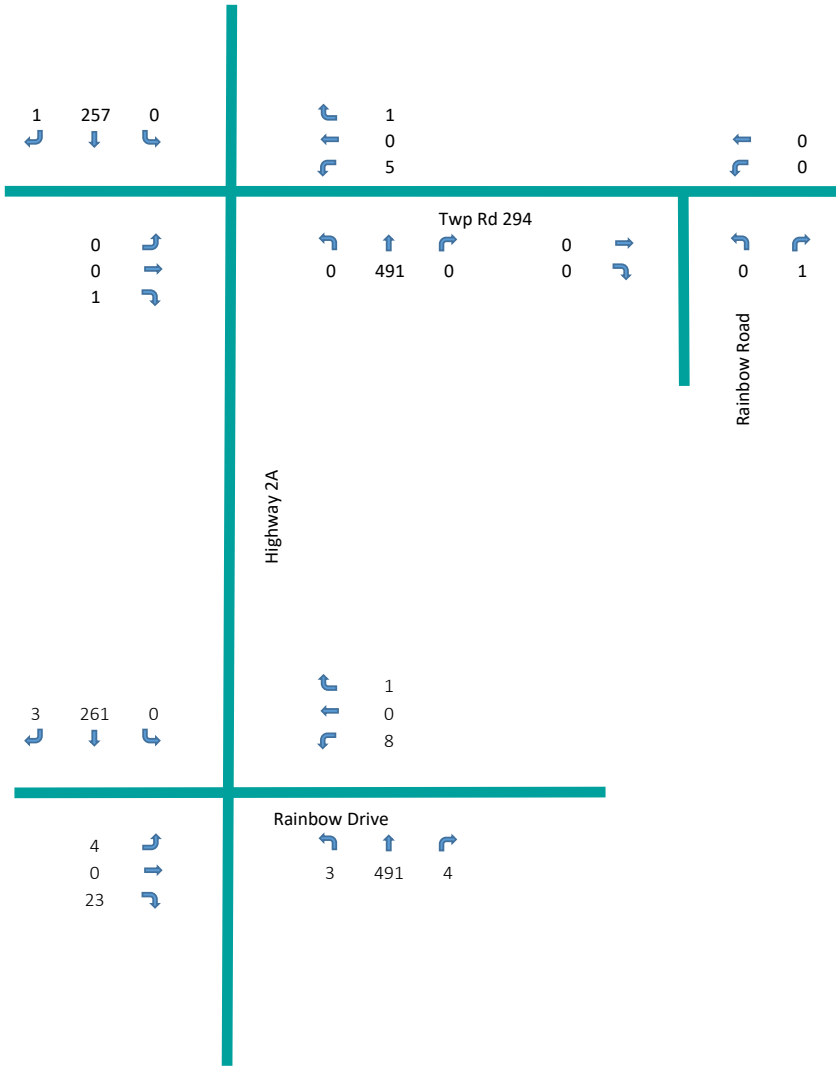


2040 Background Traffic

AM Peak

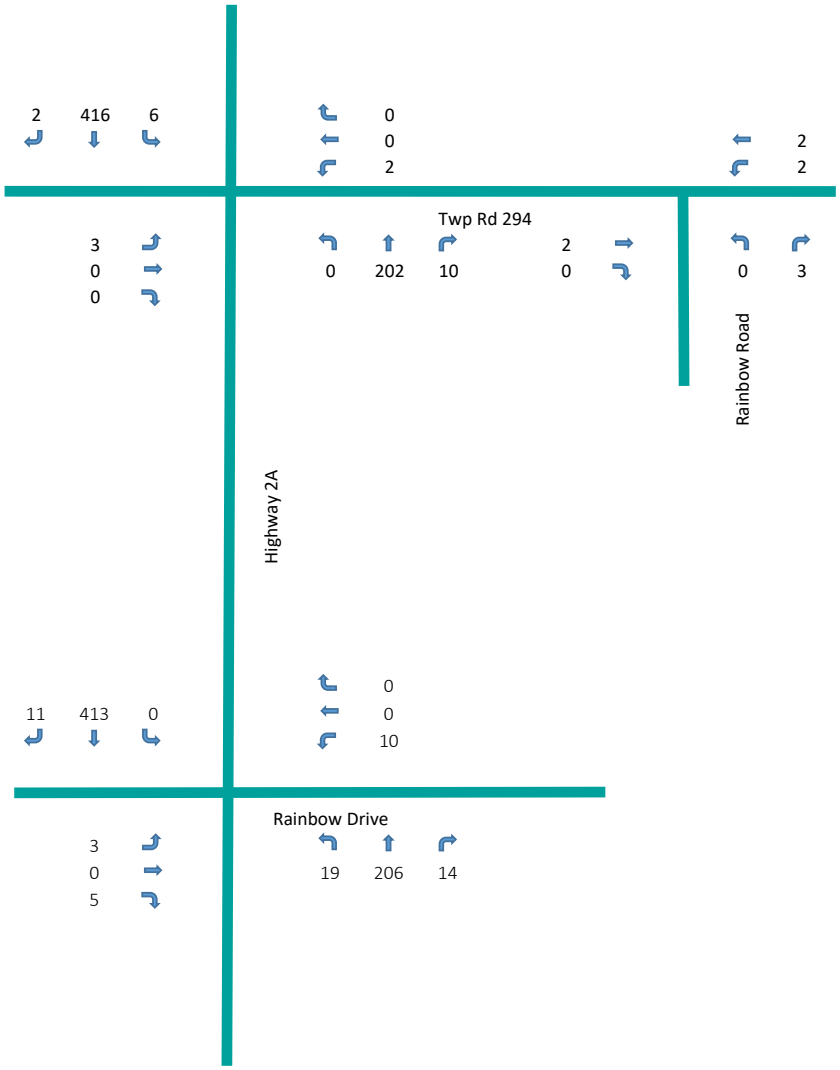


PM Peak

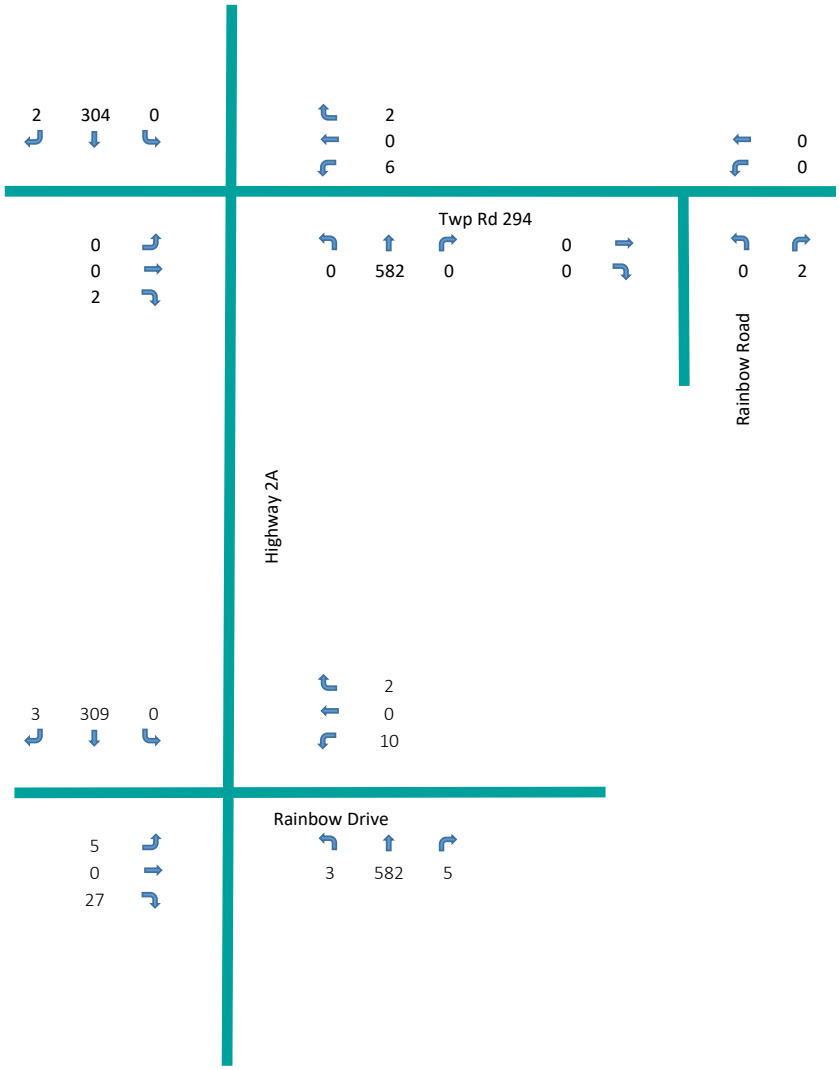


2050 Background Traffic

AM Peak



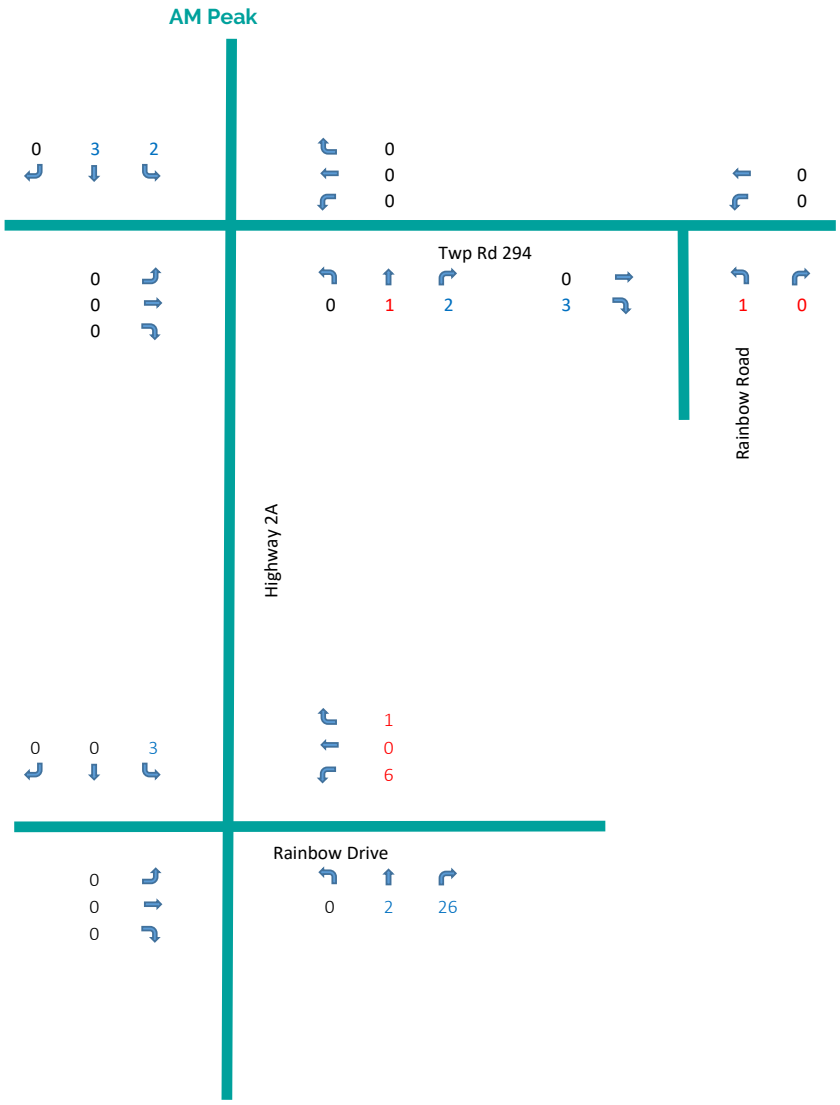
PM Peak

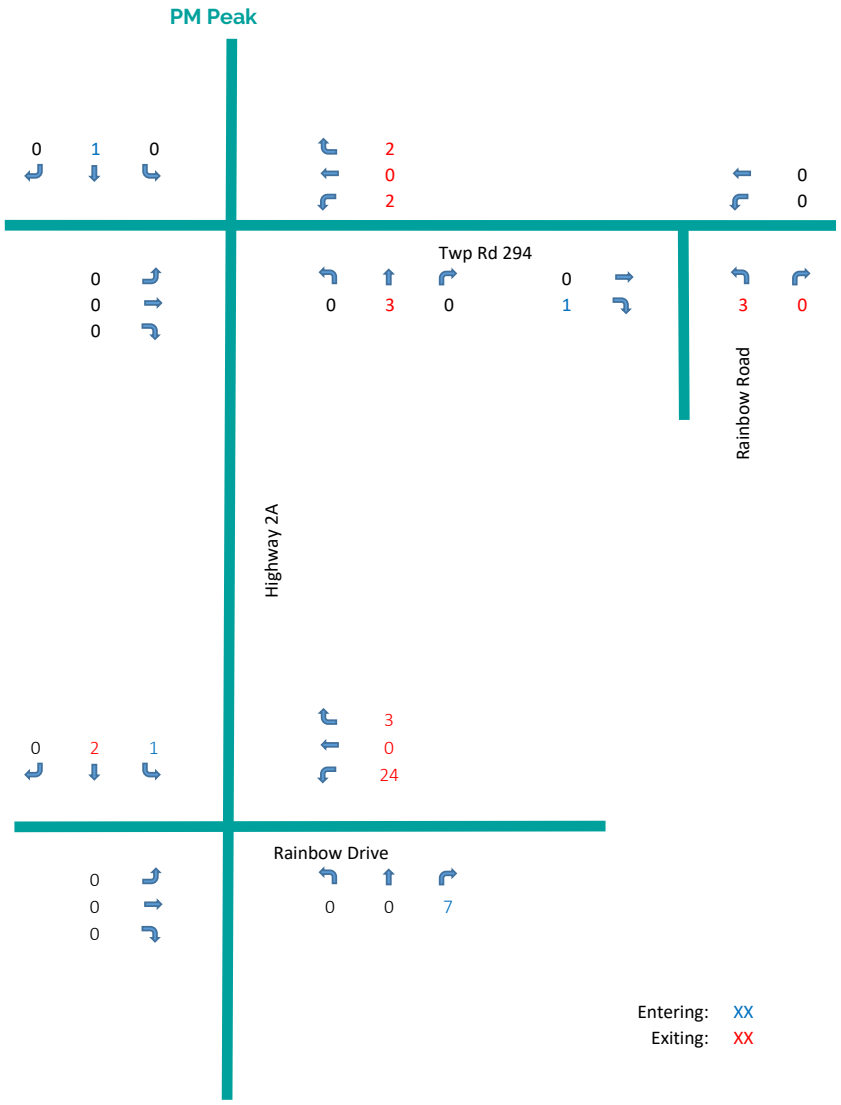


Generated Traffic Trip Distribution

Entering: XX%
Exiting: XX%

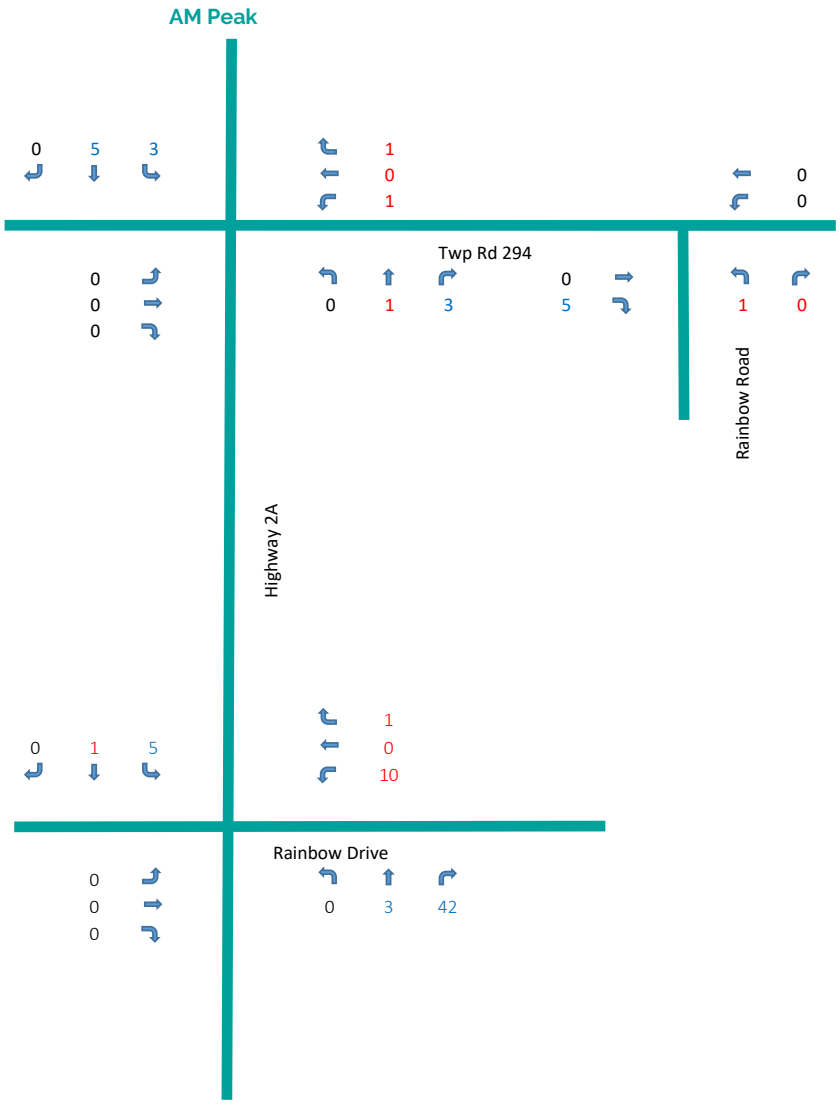
Phase 1 Generated Traffic

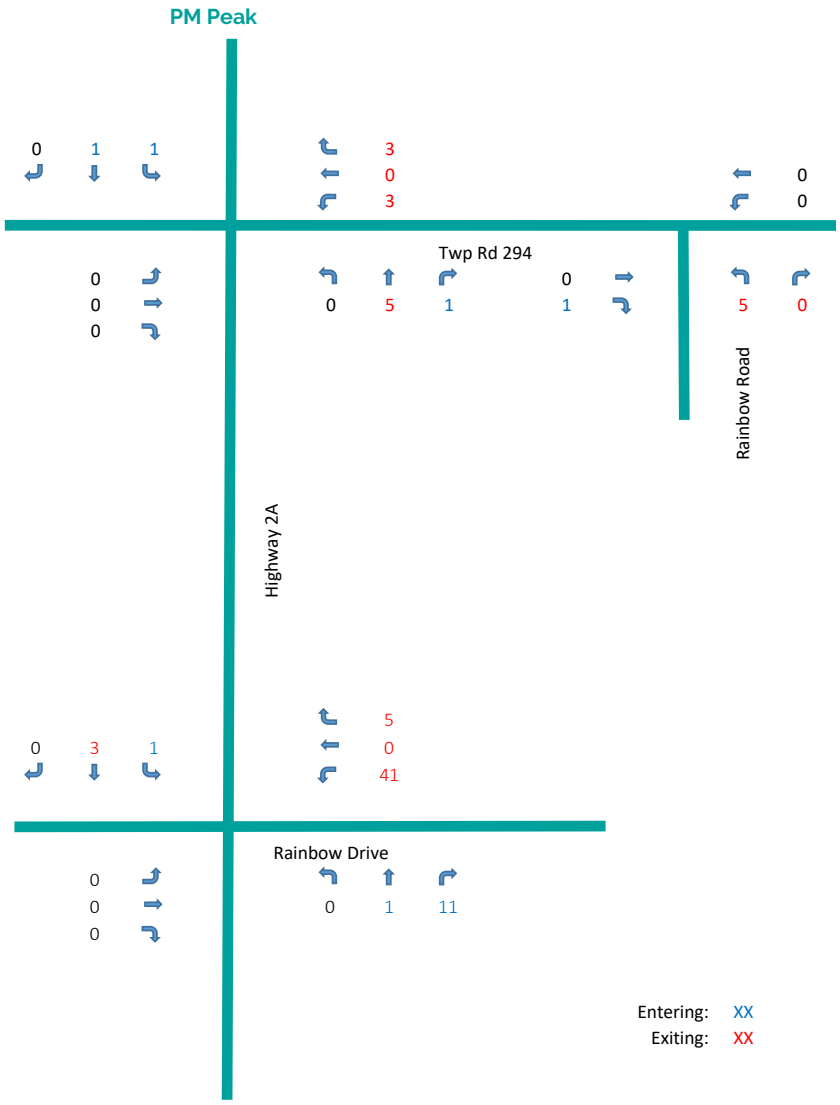




Entering: XX
Exiting: XX

Phase 2 Generated Traffic

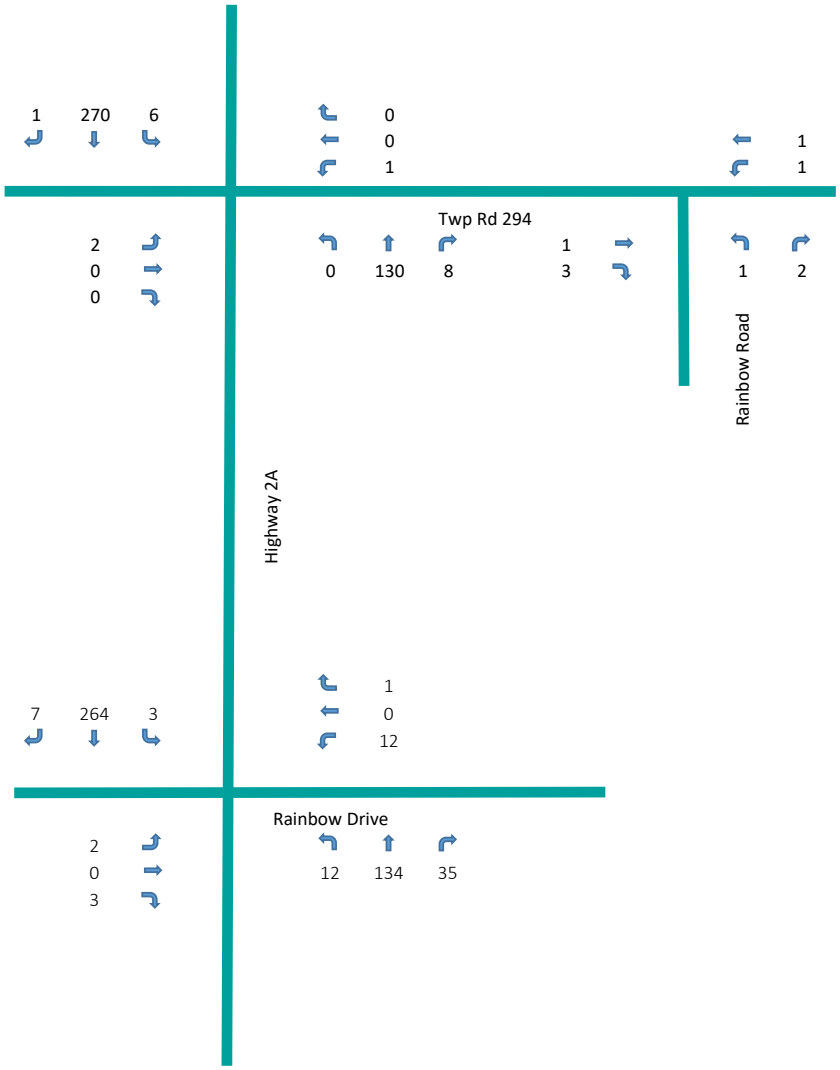




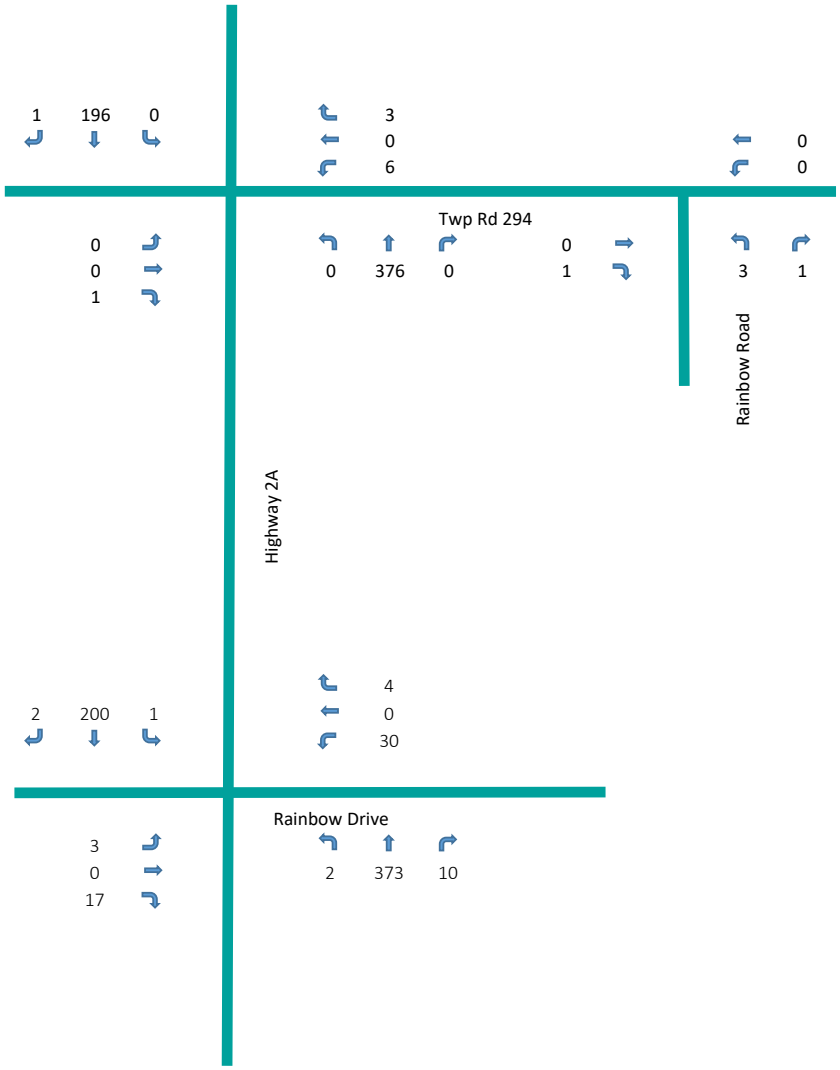
Entering: XX
Exiting: XX

2027 Total Traffic

AM Peak

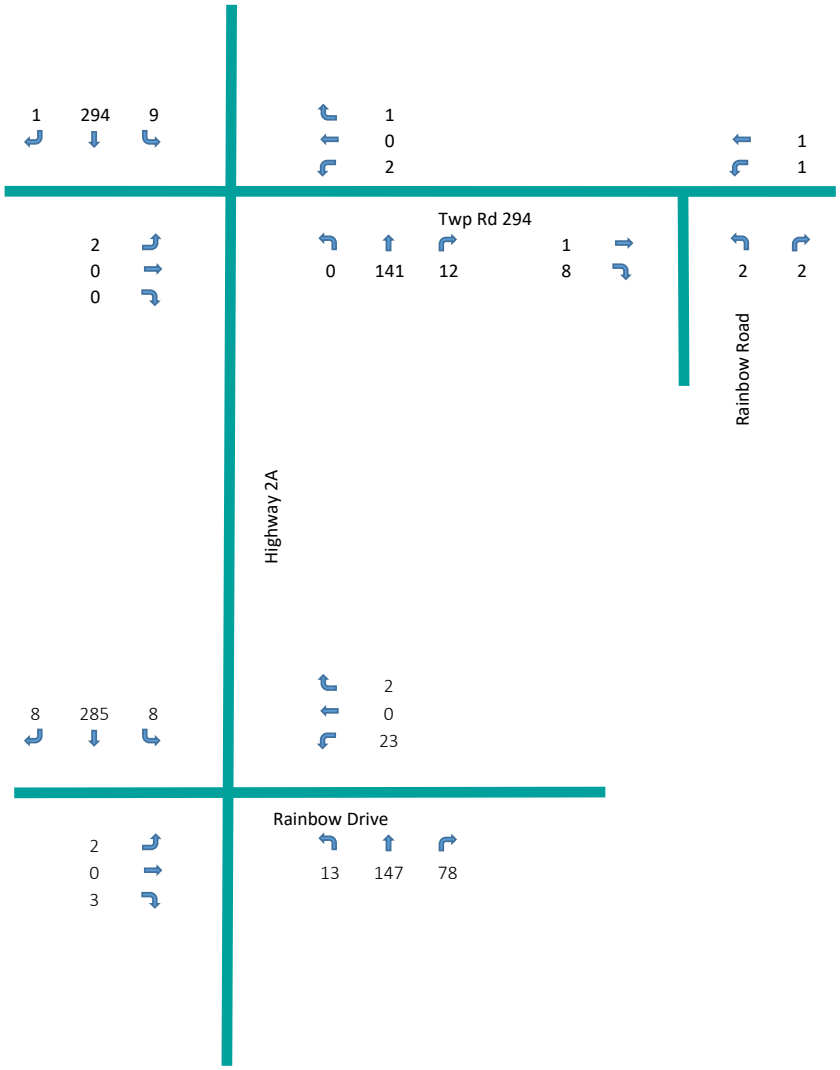


PM Peak

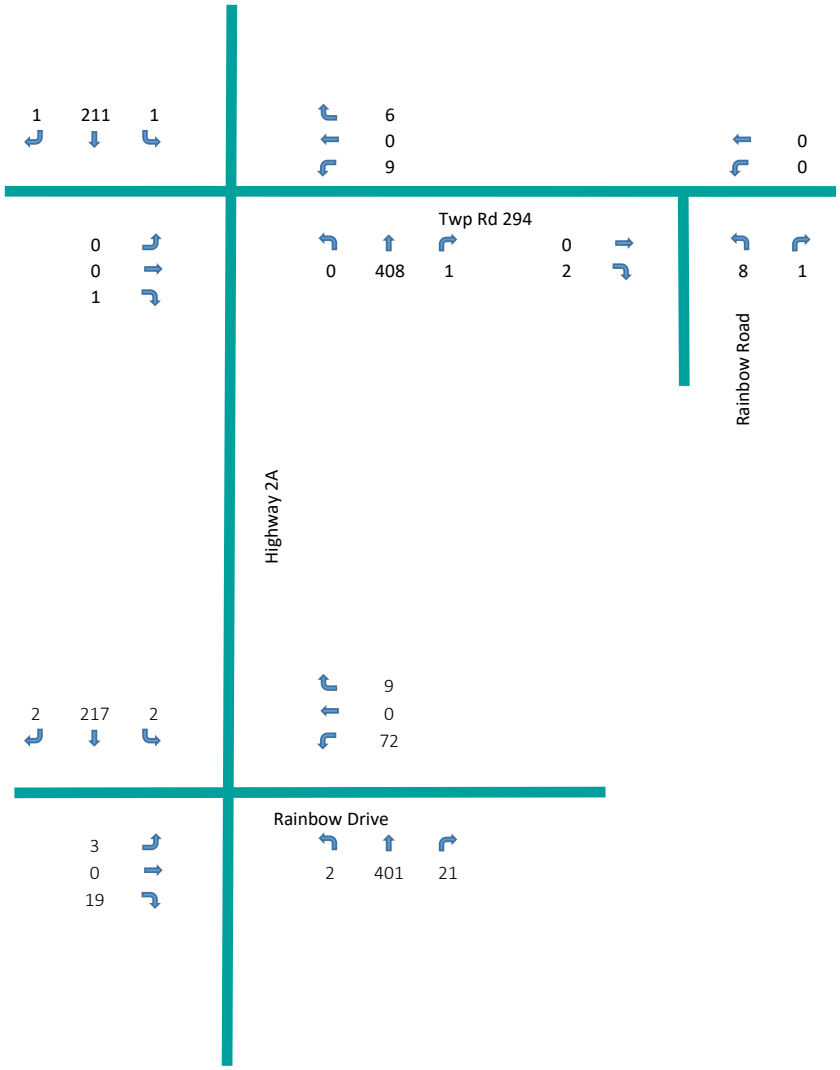


2030 Total Traffic

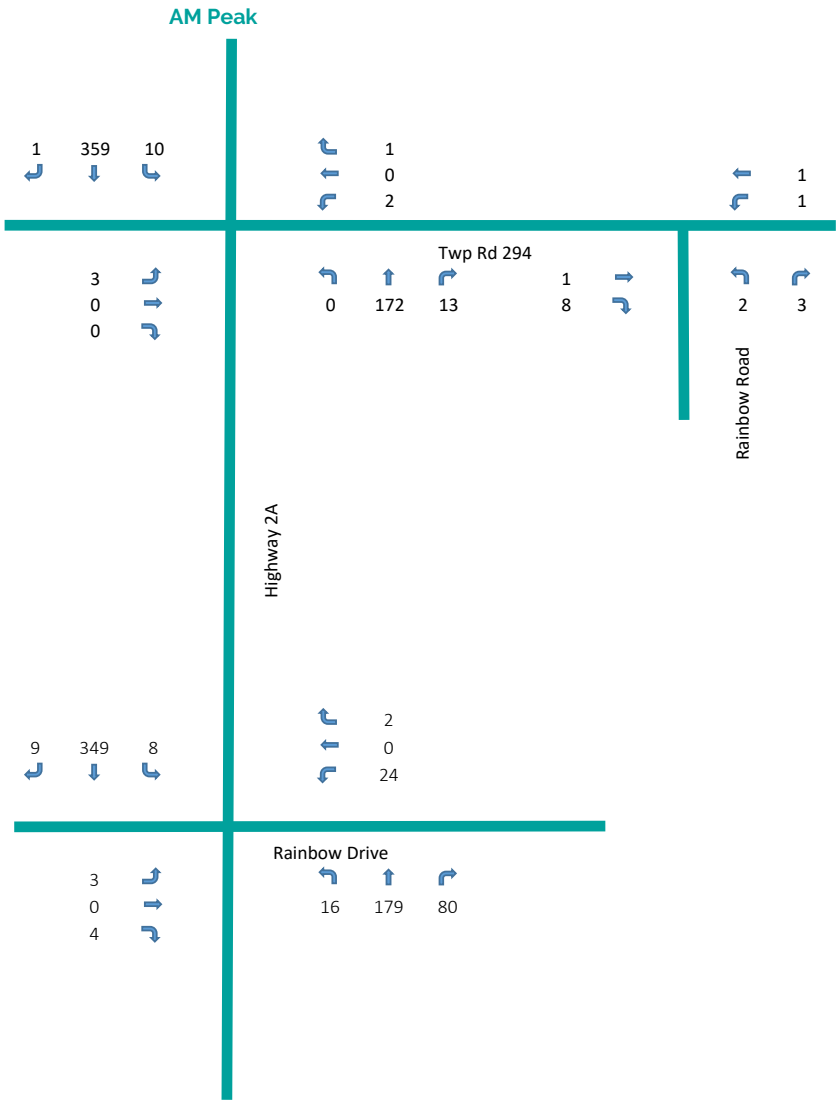
AM Peak

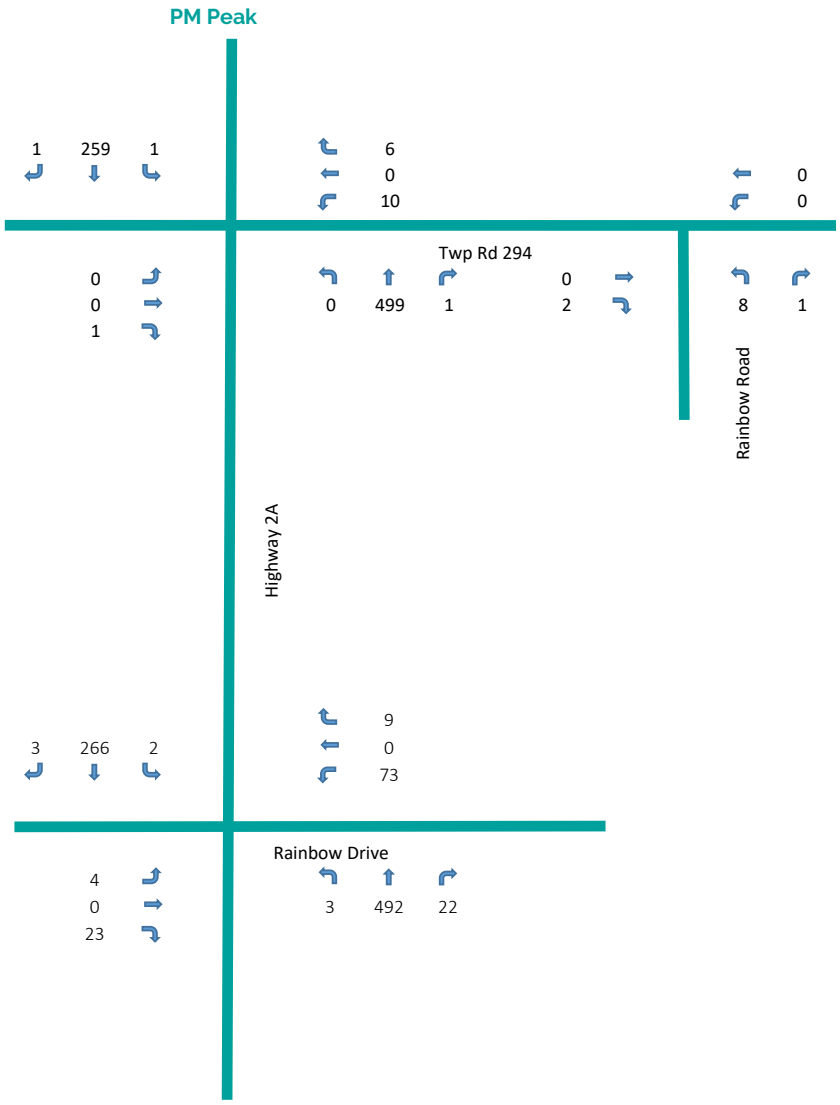


PM Peak



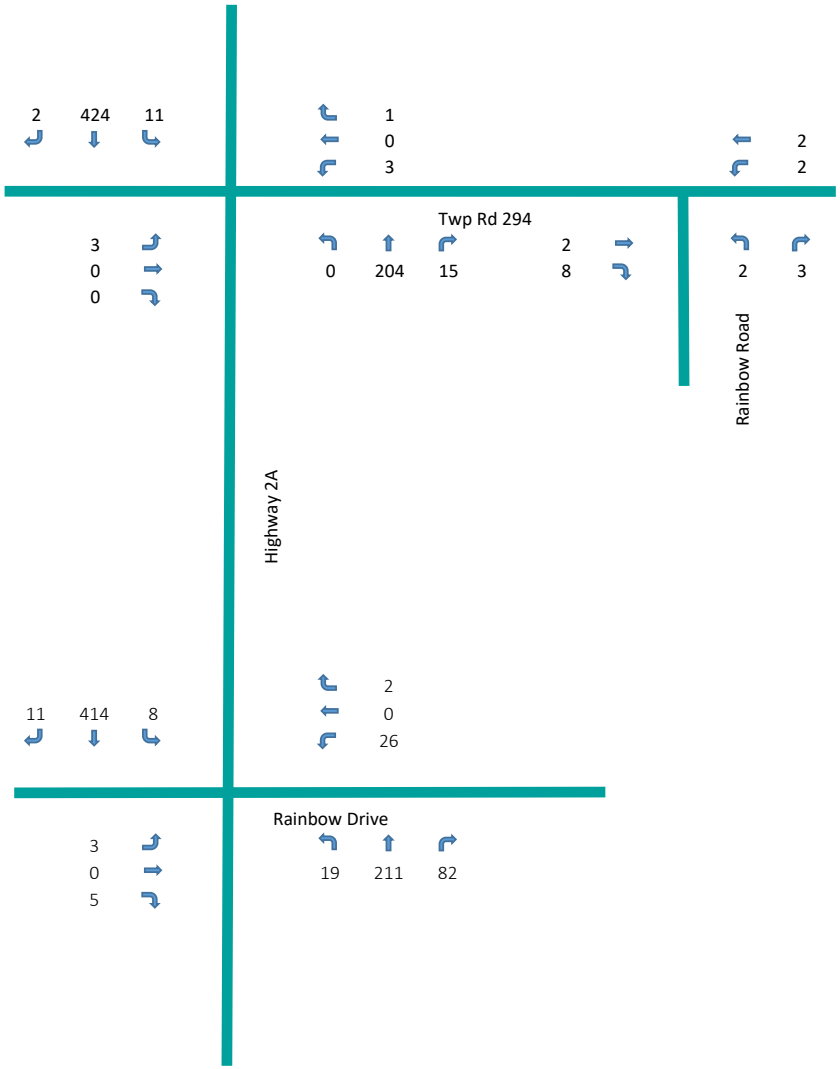
2040 Total Traffic



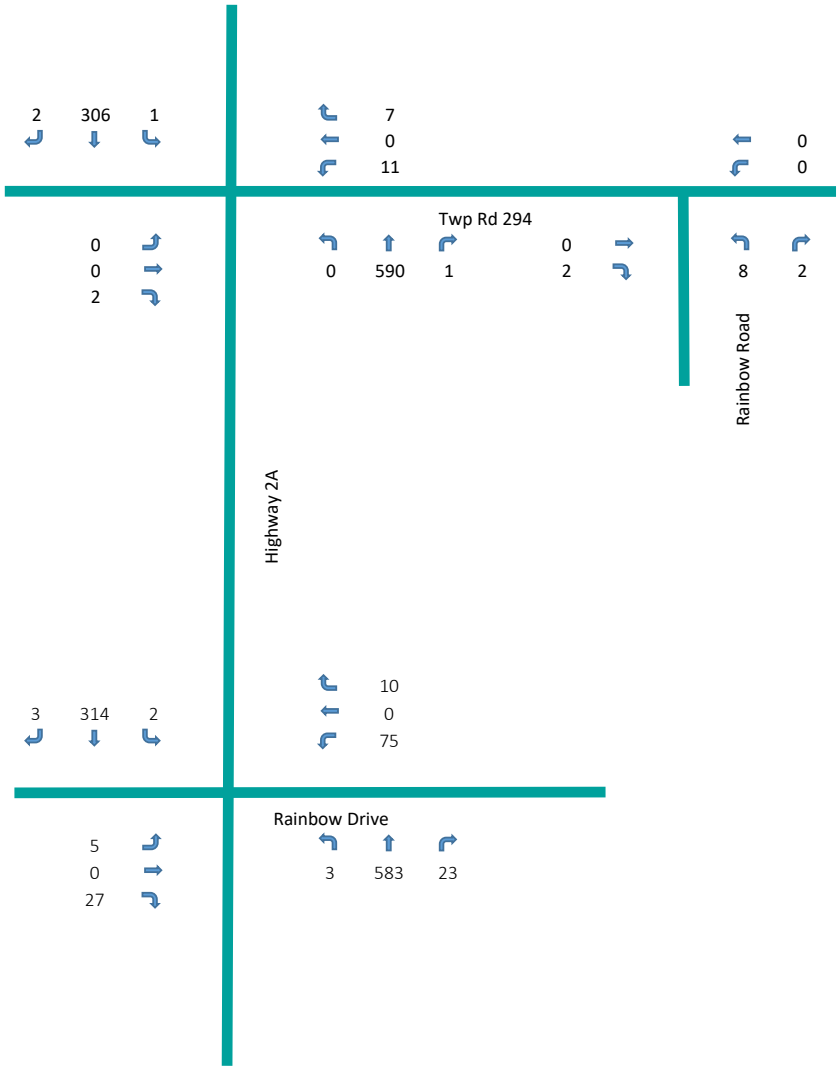


2050 Total Traffic

AM Peak



PM Peak



Appendix B

Capacity Analysis

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	6	0	0	12	130	9	0	261	7
Future Vol, veh/h	2	0	3	6	0	0	12	130	9	0	261	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	3	7	0	0	13	141	10	0	284	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	456	461	284	462	464	146	292	0	0	151	0	0
Stage 1	284	284	-	172	172	-	-	-	-	-	-	-
Stage 2	172	177	-	290	292	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	510	493	748	505	491	893	1253	-	-	1412	-	-
Stage 1	717	671	-	823	751	-	-	-	-	-	-	-
Stage 2	823	747	-	711	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	506	488	748	499	486	893	1253	-	-	1412	-	-
Mov Cap-2 Maneuver	506	488	-	499	486	-	-	-	-	-	-	-
Stage 1	710	671	-	815	743	-	-	-	-	-	-	-
Stage 2	814	740	-	708	666	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	12.3	0.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1253	-	-	628	499	1412	-	-
HCM Lane V/C Ratio	0.01	-	-	0.009	0.013	-	-	-
HCM Control Delay (s)	7.9	-	-	10.8	12.3	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	263	1	0	127	6	2	0	0	1	0	0
Future Vol, veh/h	4	263	1	0	127	6	2	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	4	286	1	0	138	7	2	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	145	0	0	287	0	0	436	439	286	433	433	138
Stage 1	-	-	-	-	-	-	294	294	-	138	138	-
Stage 2	-	-	-	-	-	-	142	145	-	295	295	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1419	-	-	1258	-	-	525	507	746	528	511	902
Stage 1	-	-	-	-	-	-	708	664	-	858	777	-
Stage 2	-	-	-	-	-	-	854	771	-	707	664	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1419	-	-	1258	-	-	524	505	746	527	509	902
Mov Cap-2 Maneuver	-	-	-	-	-	-	524	505	-	527	509	-
Stage 1	-	-	-	-	-	-	706	662	-	855	777	-
Stage 2	-	-	-	-	-	-	854	771	-	705	662	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	11.9	11.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	524	1258	-	-	1419	-	-	527
HCM Lane V/C Ratio	0.004	-	-	-	0.003	-	-	0.002
HCM Control Delay (s)	11.9	0	-	-	7.5	0	-	11.8
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	1	0	2
Future Vol, veh/h	1	0	1	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	0	1	1	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	4	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1010	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1009	1075
Mov Cap-2 Maneuver	-	-	-	-	1009	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	17	6	0	1	2	368	3	0	195	2
Future Vol, veh/h	2	0	17	6	0	1	2	368	3	0	195	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	18	7	0	1	2	400	3	0	212	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	618	619	212	628	620	402	214	0	0	403	0	0
Stage 1	212	212	-	406	406	-	-	-	-	-	-	-
Stage 2	406	407	-	222	214	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	397	400	821	391	400	642	1338	-	-	1140	-	-
Stage 1	783	721	-	616	593	-	-	-	-	-	-	-
Stage 2	616	592	-	774	720	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	396	400	821	382	400	642	1338	-	-	1140	-	-
Mov Cap-2 Maneuver	396	400	-	382	400	-	-	-	-	-	-	-
Stage 1	782	721	-	615	592	-	-	-	-	-	-	-
Stage 2	614	591	-	757	720	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	14.1	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1338	-	-	738	405	1140	-	-
HCM Lane V/C Ratio	0.002	-	-	0.028	0.019	-	-	-
HCM Control Delay (s)	7.7	-	-	10	14.1	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	192	1	0	368	0	0	0	1	4	0	1
Future Vol, veh/h	0	192	1	0	368	0	0	0	1	4	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	209	1	0	400	0	0	0	1	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	400	0	0	210	0	0	610	609	209	610	610	400
Stage 1	-	-	-	-	-	-	209	209	-	400	400	-
Stage 2	-	-	-	-	-	-	401	400	-	210	210	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1143	-	-	1343	-	-	402	406	824	402	405	643
Stage 1	-	-	-	-	-	-	786	724	-	620	596	-
Stage 2	-	-	-	-	-	-	620	596	-	785	723	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1143	-	-	1343	-	-	401	406	824	402	405	643
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	406	-	402	405	-
Stage 1	-	-	-	-	-	-	786	724	-	620	596	-
Stage 2	-	-	-	-	-	-	619	596	-	784	723	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.4	13.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	824	1343	-	-	1143	-	-	435
HCM Lane V/C Ratio	0.001	-	-	-	-	-	-	0.012
HCM Control Delay (s)	9.4	0	-	-	0	-	-	13.4
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	1
Future Vol, veh/h	0	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	0	0	0	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	6	0	0	12	132	9	0	264	7
Future Vol, veh/h	2	0	3	6	0	0	12	132	9	0	264	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	3	7	0	0	13	143	10	0	287	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	461	466	287	467	469	148	295	0	0	153	0	0
Stage 1	287	287	-	174	174	-	-	-	-	-	-	-
Stage 2	174	179	-	293	295	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	506	490	745	501	488	891	1249	-	-	1409	-	-
Stage 1	714	669	-	821	749	-	-	-	-	-	-	-
Stage 2	821	746	-	709	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	502	485	745	495	483	891	1249	-	-	1409	-	-
Mov Cap-2 Maneuver	502	485	-	495	483	-	-	-	-	-	-	-
Stage 1	707	669	-	813	742	-	-	-	-	-	-	-
Stage 2	812	739	-	706	664	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	12.4	0.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1249	-	-	624	495	1409	-	-
HCM Lane V/C Ratio	0.01	-	-	0.009	0.013	-	-	-
HCM Control Delay (s)	7.9	-	-	10.8	12.4	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	267	1	0	129	6	2	0	0	1	0	0
Future Vol, veh/h	4	267	1	0	129	6	2	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	4	290	1	0	140	7	2	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	147	0	0	291	0	0	442	445	290	439	439	140
Stage 1	-	-	-	-	-	-	298	298	-	140	140	-
Stage 2	-	-	-	-	-	-	144	147	-	299	299	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1417	-	-	1254	-	-	521	503	742	523	507	900
Stage 1	-	-	-	-	-	-	704	662	-	856	775	-
Stage 2	-	-	-	-	-	-	852	770	-	703	661	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1417	-	-	1254	-	-	520	501	742	522	505	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	520	501	-	522	505	-
Stage 1	-	-	-	-	-	-	702	660	-	853	775	-
Stage 2	-	-	-	-	-	-	852	770	-	701	659	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	12	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	520	1254	-	-	1417	-	-	522
HCM Lane V/C Ratio	0.004	-	-	-	0.003	-	-	0.002
HCM Control Delay (s)	12	0	-	-	7.5	0	-	11.9
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	1	0	2
Future Vol, veh/h	1	0	1	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	0	1	1	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	4	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1010	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1009	1075
Mov Cap-2 Maneuver	-	-	-	-	1009	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	17	6	0	1	2	373	3	0	198	2
Future Vol, veh/h	3	0	17	6	0	1	2	373	3	0	198	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	18	7	0	1	2	405	3	0	215	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	626	627	215	636	628	407	217	0	0	408	0	0
Stage 1	215	215	-	411	411	-	-	-	-	-	-	-
Stage 2	411	412	-	225	217	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	392	396	817	386	396	638	1335	-	-	1135	-	-
Stage 1	780	719	-	612	590	-	-	-	-	-	-	-
Stage 2	612	589	-	771	718	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	391	396	817	377	396	638	1335	-	-	1135	-	-
Mov Cap-2 Maneuver	391	396	-	377	396	-	-	-	-	-	-	-
Stage 1	779	719	-	611	589	-	-	-	-	-	-	-
Stage 2	610	588	-	754	718	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	14.2	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1335	-	-	702	400	1135	-	-
HCM Lane V/C Ratio	0.002	-	-	0.031	0.019	-	-	-
HCM Control Delay (s)	7.7	-	-	10.3	14.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	195	1	0	373	0	0	0	1	4	0	1
Future Vol, veh/h	0	195	1	0	373	0	0	0	1	4	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	212	1	0	405	0	0	0	1	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	213	0	0	618	617	212	618	618	405
Stage 1	-	-	-	-	-	-	212	212	-	405	405	-
Stage 2	-	-	-	-	-	-	406	405	-	213	213	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1138	-	-	1340	-	-	397	402	821	397	401	639
Stage 1	-	-	-	-	-	-	783	721	-	617	593	-
Stage 2	-	-	-	-	-	-	616	593	-	782	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1138	-	-	1340	-	-	396	402	821	397	401	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	402	-	397	401	-
Stage 1	-	-	-	-	-	-	783	721	-	617	593	-
Stage 2	-	-	-	-	-	-	615	593	-	781	721	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.4	13.5
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	821	1340	-	-	1138	-	-	430
HCM Lane V/C Ratio	0.001	-	-	-	-	-	-	0.013
HCM Control Delay (s)	9.4	0	-	-	0	-	-	13.5
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	1
Future Vol, veh/h	0	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	0	0	0	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	12	0	1	12	134	35	3	264	7
Future Vol, veh/h	2	0	3	12	0	1	12	134	35	3	264	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	3	13	0	1	13	146	38	3	287	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	485	503	287	490	492	165	295	0	0	184	0	0
Stage 1	293	293	-	191	191	-	-	-	-	-	-	-
Stage 2	192	210	-	299	301	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	487	467	745	484	473	872	1249	-	-	1373	-	-
Stage 1	709	665	-	804	737	-	-	-	-	-	-	-
Stage 2	803	723	-	703	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	482	461	745	477	467	872	1249	-	-	1373	-	-
Mov Cap-2 Maneuver	482	461	-	477	467	-	-	-	-	-	-	-
Stage 1	702	663	-	796	730	-	-	-	-	-	-	-
Stage 2	794	716	-	698	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	12.5	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1249	-	-	612	494	1373	-	-
HCM Lane V/C Ratio	0.01	-	-	0.009	0.029	0.002	-	-
HCM Control Delay (s)	7.9	-	-	10.9	12.5	7.6	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	270	1	0	130	8	2	0	0	1	0	0
Future Vol, veh/h	6	270	1	0	130	8	2	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	7	293	1	0	141	9	2	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	294	0	0	453	457	293	449	449	141
Stage 1	-	-	-	-	-	-	307	307	-	141	141	-
Stage 2	-	-	-	-	-	-	146	150	-	308	308	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1413	-	-	1251	-	-	512	495	739	515	501	899
Stage 1	-	-	-	-	-	-	696	656	-	855	774	-
Stage 2	-	-	-	-	-	-	850	767	-	696	655	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1251	-	-	509	492	739	512	498	899
Mov Cap-2 Maneuver	-	-	-	-	-	-	509	492	-	512	498	-
Stage 1	-	-	-	-	-	-	692	652	-	850	774	-
Stage 2	-	-	-	-	-	-	850	767	-	692	651	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0	12.1	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	509	1251	-	-	1413	-	-	512
HCM Lane V/C Ratio	0.004	-	-	-	0.005	-	-	0.002
HCM Control Delay (s)	12.1	0	-	-	7.6	0	-	12
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	3	1	1	1	2
Future Vol, veh/h	1	3	1	1	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	3	1	1	1	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	6	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1598	-	1008	1072
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1598	-	1007	1072
Mov Cap-2 Maneuver	-	-	-	-	1007	-
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1049	-	-	1598	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	17	30	0	4	2	373	10	1	200	2
Future Vol, veh/h	3	0	17	30	0	4	2	373	10	1	200	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	18	33	0	4	2	405	11	1	217	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	636	639	217	644	636	411	219	0	0	416	0	0
Stage 1	219	219	-	415	415	-	-	-	-	-	-	-
Stage 2	417	420	-	229	221	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	386	390	815	382	392	634	1333	-	-	1127	-	-
Stage 1	777	716	-	609	587	-	-	-	-	-	-	-
Stage 2	607	584	-	767	715	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	383	389	815	372	391	634	1333	-	-	1127	-	-
Mov Cap-2 Maneuver	383	389	-	372	391	-	-	-	-	-	-	-
Stage 1	775	715	-	608	586	-	-	-	-	-	-	-
Stage 2	602	583	-	749	714	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	15.2	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1333	-	-	697	391	1127	-	-
HCM Lane V/C Ratio	0.002	-	-	0.031	0.095	0.001	-	-
HCM Control Delay (s)	7.7	-	-	10.3	15.2	8.2	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	196	1	0	376	0	0	0	1	6	0	3
Future Vol, veh/h	0	196	1	0	376	0	0	0	1	6	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	213	1	0	409	0	0	0	1	7	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	409	0	0	214	0	0	624	622	213	623	623	409
Stage 1	-	-	-	-	-	-	213	213	-	409	409	-
Stage 2	-	-	-	-	-	-	411	409	-	214	214	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1134	-	-	1338	-	-	394	399	820	394	398	636
Stage 1	-	-	-	-	-	-	782	721	-	613	591	-
Stage 2	-	-	-	-	-	-	612	591	-	781	720	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1134	-	-	1338	-	-	392	399	820	394	398	636
Mov Cap-2 Maneuver	-	-	-	-	-	-	392	399	-	394	398	-
Stage 1	-	-	-	-	-	-	782	721	-	613	591	-
Stage 2	-	-	-	-	-	-	609	591	-	780	720	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.4	13.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	820	1338	-	-	1134	-	-	451
HCM Lane V/C Ratio	0.001	-	-	-	-	-	-	0.022
HCM Control Delay (s)	9.4	0	-	-	0	-	-	13.2
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	5.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	1	0	0	3	1
Future Vol, veh/h	0	1	0	0	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	1	0	0	3	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1028	-	-	1602	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.5	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	7	0	0	13	142	10	0	284	8
Future Vol, veh/h	2	0	3	7	0	0	13	142	10	0	284	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	3	8	0	0	14	154	11	0	309	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	497	502	309	503	506	160	318	0	0	165	0	0
Stage 1	309	309	-	188	188	-	-	-	-	-	-	-
Stage 2	188	193	-	315	318	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	479	467	724	474	465	877	1225	-	-	1395	-	-
Stage 1	695	654	-	807	739	-	-	-	-	-	-	-
Stage 2	807	735	-	690	648	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	475	462	724	468	460	877	1225	-	-	1395	-	-
Mov Cap-2 Maneuver	475	462	-	468	460	-	-	-	-	-	-	-
Stage 1	687	654	-	798	731	-	-	-	-	-	-	-
Stage 2	798	727	-	687	648	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	12.8	0.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1225	-	-	599	468	1395	-	-
HCM Lane V/C Ratio	0.012	-	-	0.009	0.016	-	-	-
HCM Control Delay (s)	8	-	-	11.1	12.8	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	4	286	1	0	139	7	2	0	0	1	0	0
Future Vol, veh/h	4	286	1	0	139	7	2	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	4	311	1	0	151	8	2	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	159	0	0	312	0	0	474	478	311	471	471	151
Stage 1	-	-	-	-	-	-	319	319	-	151	151	-
Stage 2	-	-	-	-	-	-	155	159	-	320	320	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1402	-	-	1232	-	-	496	482	722	498	486	887
Stage 1	-	-	-	-	-	-	686	648	-	844	767	-
Stage 2	-	-	-	-	-	-	840	761	-	685	647	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1402	-	-	1232	-	-	495	481	722	497	485	887
Mov Cap-2 Maneuver	-	-	-	-	-	-	495	481	-	497	485	-
Stage 1	-	-	-	-	-	-	684	646	-	841	767	-
Stage 2	-	-	-	-	-	-	840	761	-	683	645	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	12.3	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	495	1232	-	-	1402	-	-	497
HCM Lane V/C Ratio	0.004	-	-	-	0.003	-	-	0.002
HCM Control Delay (s)	12.3	0	-	-	7.6	0	-	12.3
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	1	0	2
Future Vol, veh/h	1	0	1	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	0	1	1	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	4	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1010	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1009	1075
Mov Cap-2 Maneuver	-	-	-	-	1009	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.002	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	19	7	0	1	2	400	3	0	212	2
Future Vol, veh/h	3	0	19	7	0	1	2	400	3	0	212	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	21	8	0	1	2	435	3	0	230	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	671	672	230	683	673	437	232	0	0	438	0	0
Stage 1	230	230	-	441	441	-	-	-	-	-	-	-
Stage 2	441	442	-	242	232	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	366	373	802	359	373	613	1318	-	-	1106	-	-
Stage 1	766	708	-	589	572	-	-	-	-	-	-	-
Stage 2	589	571	-	755	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	365	372	802	349	372	613	1318	-	-	1106	-	-
Mov Cap-2 Maneuver	365	372	-	349	372	-	-	-	-	-	-	-
Stage 1	764	708	-	588	571	-	-	-	-	-	-	-
Stage 2	587	570	-	736	707	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	15	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1318	-	-	689	369	1106	-	-
HCM Lane V/C Ratio	0.002	-	-	0.035	0.024	-	-	-
HCM Control Delay (s)	7.7	-	-	10.4	15	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	209	1	0	400	0	0	0	1	4	0	1
Future Vol, veh/h	0	209	1	0	400	0	0	0	1	4	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	227	1	0	435	0	0	0	1	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	435	0	0	228	0	0	663	662	227	663	663	435
Stage 1	-	-	-	-	-	-	227	227	-	435	435	-
Stage 2	-	-	-	-	-	-	436	435	-	228	228	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1109	-	-	1323	-	-	371	378	805	371	378	615
Stage 1	-	-	-	-	-	-	769	711	-	594	575	-
Stage 2	-	-	-	-	-	-	593	575	-	768	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1109	-	-	1323	-	-	370	378	805	371	378	615
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	378	-	371	378	-
Stage 1	-	-	-	-	-	-	769	711	-	594	575	-
Stage 2	-	-	-	-	-	-	592	575	-	767	710	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.5	14.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	805	1323	-	-	1109	-	-	403
HCM Lane V/C Ratio	0.001	-	-	-	-	-	-	0.013
HCM Control Delay (s)	9.5	0	-	-	0	-	-	14.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	1
Future Vol, veh/h	0	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	0	0	0	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	23	0	2	13	147	78	8	285	8
Future Vol, veh/h	2	0	3	23	0	2	13	147	78	8	285	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	2	0	3	25	0	2	14	160	85	9	310	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	560	601	310	565	568	203	319	0	0	245	0	0
Stage 1	328	328	-	231	231	-	-	-	-	-	-	-
Stage 2	232	273	-	334	337	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	434	410	723	431	428	830	1224	-	-	1304	-	-
Stage 1	679	642	-	765	708	-	-	-	-	-	-	-
Stage 2	764	678	-	674	636	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	427	402	723	423	420	830	1224	-	-	1304	-	-
Mov Cap-2 Maneuver	427	402	-	423	420	-	-	-	-	-	-	-
Stage 1	672	637	-	757	700	-	-	-	-	-	-	-
Stage 2	753	671	-	666	631	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	13.7	0.4	0.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1224	-	-	566	440	1304	-	-
HCM Lane V/C Ratio	0.012	-	-	0.01	0.062	0.007	-	-
HCM Control Delay (s)	8	-	-	11.4	13.7	7.8	0	-
HCM Lane LOS	A	-	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	9	294	1	0	141	12	2	0	0	2	0	1
Future Vol, veh/h	9	294	1	0	141	12	2	0	0	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	10	320	1	0	153	13	2	0	0	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	166	0	0	321	0	0	500	506	320	494	494	153
Stage 1	-	-	-	-	-	-	340	340	-	153	153	-
Stage 2	-	-	-	-	-	-	160	166	-	341	341	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1394	-	-	1222	-	-	476	465	714	481	472	885
Stage 1	-	-	-	-	-	-	669	634	-	842	765	-
Stage 2	-	-	-	-	-	-	835	755	-	668	633	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1394	-	-	1222	-	-	472	461	714	478	468	885
Mov Cap-2 Maneuver	-	-	-	-	-	-	472	461	-	478	468	-
Stage 1	-	-	-	-	-	-	663	628	-	834	765	-
Stage 2	-	-	-	-	-	-	834	755	-	662	627	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0	12.7	11.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	472	1222	-	-	1394	-	-	565
HCM Lane V/C Ratio	0.005	-	-	-	0.007	-	-	0.006
HCM Control Delay (s)	12.7	0	-	-	7.6	0	-	11.4
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	8	1	1	2	2
Future Vol, veh/h	1	8	1	1	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	9	1	1	2	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	9	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1590	-	1004	1068
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1590	-	1003	1068
Mov Cap-2 Maneuver	-	-	-	-	1003	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1034	-	-	1590	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	19	72	0	9	2	401	21	2	217	2
Future Vol, veh/h	3	0	19	72	0	9	2	401	21	2	217	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	21	78	0	10	2	436	23	2	236	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	697	703	236	704	694	448	238	0	0	459	0	0
Stage 1	240	240	-	452	452	-	-	-	-	-	-	-
Stage 2	457	463	-	252	242	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	352	358	796	348	363	604	1311	-	-	1086	-	-
Stage 1	757	701	-	581	565	-	-	-	-	-	-	-
Stage 2	578	559	-	746	700	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	345	357	796	338	362	604	1311	-	-	1086	-	-
Mov Cap-2 Maneuver	345	357	-	338	362	-	-	-	-	-	-	-
Stage 1	755	700	-	580	564	-	-	-	-	-	-	-
Stage 2	568	558	-	725	699	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.5	18.5	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1311	-	-	676	355	1086	-	-
HCM Lane V/C Ratio	0.002	-	-	0.035	0.248	0.002	-	-
HCM Control Delay (s)	7.8	-	-	10.5	18.5	8.3	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	1	211	1	0	408	1	0	0	1	9	0	6
Future Vol, veh/h	1	211	1	0	408	1	0	0	1	9	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	229	1	0	443	1	0	0	1	10	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	444	0	0	230	0	0	678	675	229	675	675	443
Stage 1	-	-	-	-	-	-	231	231	-	443	443	-
Stage 2	-	-	-	-	-	-	447	444	-	232	232	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1100	-	-	1320	-	-	362	372	803	364	372	608
Stage 1	-	-	-	-	-	-	765	708	-	588	571	-
Stage 2	-	-	-	-	-	-	585	570	-	764	707	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1100	-	-	1320	-	-	358	372	803	363	372	608
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	372	-	363	372	-
Stage 1	-	-	-	-	-	-	764	707	-	587	571	-
Stage 2	-	-	-	-	-	-	579	570	-	762	706	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.5	13.6
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	803	1320	-	-	1100	-	-	433
HCM Lane V/C Ratio	0.001	-	-	-	0.001	-	-	0.038
HCM Control Delay (s)	9.5	0	-	-	8.3	0	-	13.6
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	0	8	1
Future Vol, veh/h	0	2	0	0	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	2	0	0	9	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1601	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1020	-	-	1601	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	8	0	0	16	174	12	0	348	9
Future Vol, veh/h	3	0	4	8	0	0	16	174	12	0	348	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	4	9	0	0	17	189	13	0	378	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	608	614	378	615	618	196	388	0	0	202	0	0
Stage 1	378	378	-	230	230	-	-	-	-	-	-	-
Stage 2	230	236	-	385	388	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	403	403	662	399	401	838	1154	-	-	1352	-	-
Stage 1	638	610	-	766	708	-	-	-	-	-	-	-
Stage 2	766	704	-	632	604	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	399	397	662	392	395	838	1154	-	-	1352	-	-
Mov Cap-2 Maneuver	399	397	-	392	395	-	-	-	-	-	-	-
Stage 1	628	610	-	755	697	-	-	-	-	-	-	-
Stage 2	755	693	-	628	604	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	14.4	0.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1154	-	-	516	392	1352	-	-
HCM Lane V/C Ratio	0.015	-	-	0.015	0.022	-	-	-
HCM Control Delay (s)	8.2	-	-	12.1	14.4	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	5	351	1	0	170	8	3	0	0	1	0	0
Future Vol, veh/h	5	351	1	0	170	8	3	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	382	1	0	185	9	3	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	194	0	0	383	0	0	582	586	382	578	578	185
Stage 1	-	-	-	-	-	-	392	392	-	185	185	-
Stage 2	-	-	-	-	-	-	190	194	-	393	393	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1361	-	-	1159	-	-	420	418	659	423	423	850
Stage 1	-	-	-	-	-	-	627	601	-	810	741	-
Stage 2	-	-	-	-	-	-	805	734	-	626	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1361	-	-	1159	-	-	418	416	659	421	421	850
Mov Cap-2 Maneuver	-	-	-	-	-	-	418	416	-	421	421	-
Stage 1	-	-	-	-	-	-	624	598	-	806	741	-
Stage 2	-	-	-	-	-	-	805	734	-	623	598	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	13.7	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	418	1159	-	-	1361	-	-	421
HCM Lane V/C Ratio	0.008	-	-	-	0.004	-	-	0.003
HCM Control Delay (s)	13.7	0	-	-	7.7	0	-	13.6
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	1	0	3
Future Vol, veh/h	1	0	1	1	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	0	1	1	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	4	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1010	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1009	1075
Mov Cap-2 Maneuver	-	-	-	-	1009	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	19	7	0	1	2	400	3	0	212	2
Future Vol, veh/h	3	0	19	7	0	1	2	400	3	0	212	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	21	8	0	1	2	435	3	0	230	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	671	672	230	683	673	437	232	0	0	438	0	0
Stage 1	230	230	-	441	441	-	-	-	-	-	-	-
Stage 2	441	442	-	242	232	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	366	373	802	359	373	613	1318	-	-	1106	-	-
Stage 1	766	708	-	589	572	-	-	-	-	-	-	-
Stage 2	589	571	-	755	707	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	365	372	802	349	372	613	1318	-	-	1106	-	-
Mov Cap-2 Maneuver	365	372	-	349	372	-	-	-	-	-	-	-
Stage 1	764	708	-	588	571	-	-	-	-	-	-	-
Stage 2	587	570	-	736	707	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	15	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1318	-	-	689	369	1106	-	-
HCM Lane V/C Ratio	0.002	-	-	0.035	0.024	-	-	-
HCM Control Delay (s)	7.7	-	-	10.4	15	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	209	1	0	400	0	0	0	1	4	0	1
Future Vol, veh/h	0	209	1	0	400	0	0	0	1	4	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	227	1	0	435	0	0	0	1	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	435	0	0	228	0	0	663	662	227	663	663	435
Stage 1	-	-	-	-	-	-	227	227	-	435	435	-
Stage 2	-	-	-	-	-	-	436	435	-	228	228	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1109	-	-	1323	-	-	371	378	805	371	378	615
Stage 1	-	-	-	-	-	-	769	711	-	594	575	-
Stage 2	-	-	-	-	-	-	593	575	-	768	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1109	-	-	1323	-	-	370	378	805	371	378	615
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	378	-	371	378	-
Stage 1	-	-	-	-	-	-	769	711	-	594	575	-
Stage 2	-	-	-	-	-	-	592	575	-	767	710	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.5	14.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	805	1323	-	-	1109	-	-	403
HCM Lane V/C Ratio	0.001	-	-	-	-	-	-	0.013
HCM Control Delay (s)	9.5	0	-	-	0	-	-	14.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	1
Future Vol, veh/h	0	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	0	0	0	0	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	24	0	2	16	179	80	8	349	9
Future Vol, veh/h	3	0	4	24	0	2	16	179	80	8	349	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	4	26	0	2	17	195	87	9	379	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	671	713	379	677	680	239	389	0	0	282	0	0
Stage 1	397	397	-	273	273	-	-	-	-	-	-	-
Stage 2	274	316	-	404	407	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	366	354	661	363	369	793	1153	-	-	1263	-	-
Stage 1	623	598	-	726	678	-	-	-	-	-	-	-
Stage 2	726	650	-	617	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	358	346	661	354	360	793	1153	-	-	1263	-	-
Mov Cap-2 Maneuver	358	346	-	354	360	-	-	-	-	-	-	-
Stage 1	614	593	-	715	668	-	-	-	-	-	-	-
Stage 2	713	640	-	607	587	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	15.5	0.5	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1153	-	-	485	370	1263	-	-
HCM Lane V/C Ratio	0.015	-	-	0.016	0.076	0.007	-	-
HCM Control Delay (s)	8.2	-	-	12.5	15.5	7.9	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	10	359	1	0	172	13	3	0	0	2	0	1
Future Vol, veh/h	10	359	1	0	172	13	3	0	0	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	11	390	1	0	187	14	3	0	0	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	201	0	0	391	0	0	607	613	390	600	600	187
Stage 1	-	-	-	-	-	-	412	412	-	187	187	-
Stage 2	-	-	-	-	-	-	195	201	-	413	413	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1353	-	-	1151	-	-	404	404	652	408	411	847
Stage 1	-	-	-	-	-	-	611	589	-	808	740	-
Stage 2	-	-	-	-	-	-	800	729	-	610	588	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1353	-	-	1151	-	-	400	400	652	405	407	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	400	400	-	405	407	-
Stage 1	-	-	-	-	-	-	605	583	-	800	740	-
Stage 2	-	-	-	-	-	-	799	729	-	604	582	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0	14.1	12.4
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	400	1151	-	-	1353	-	-	490
HCM Lane V/C Ratio	0.008	-	-	-	0.008	-	-	0.007
HCM Control Delay (s)	14.1	0	-	-	7.7	0	-	12.4
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	8	1	1	2	3
Future Vol, veh/h	1	8	1	1	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	1	9	1	1	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	9	6
Stage 1	-	-	-	-	6	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1590	-	1004	1068
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1012	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1590	-	1003	1068
Mov Cap-2 Maneuver	-	-	-	-	1003	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1041	-	-	1590	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	23	73	0	9	3	492	22	2	266	3
Future Vol, veh/h	4	0	23	73	0	9	3	492	22	2	266	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	4	0	25	79	0	10	3	535	24	2	289	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	851	858	289	860	849	547	292	0	0	559	0	0
Stage 1	293	293	-	553	553	-	-	-	-	-	-	-
Stage 2	558	565	-	307	296	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	277	291	743	273	295	531	1253	-	-	997	-	-
Stage 1	709	665	-	512	509	-	-	-	-	-	-	-
Stage 2	509	503	-	696	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	271	290	743	263	294	531	1253	-	-	997	-	-
Mov Cap-2 Maneuver	271	290	-	263	294	-	-	-	-	-	-	-
Stage 1	708	664	-	511	508	-	-	-	-	-	-	-
Stage 2	498	502	-	671	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	23.9	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1253	-	-	591	278	997	-	-
HCM Lane V/C Ratio	0.003	-	-	0.05	0.321	0.002	-	-
HCM Control Delay (s)	7.9	-	-	11.4	23.9	8.6	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.3	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	1	259	1	0	499	1	0	0	1	10	0	6
Future Vol, veh/h	1	259	1	0	499	1	0	0	1	10	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	282	1	0	542	1	0	0	1	11	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	543	0	0	283	0	0	830	827	282	827	827	542
Stage 1	-	-	-	-	-	-	284	284	-	542	542	-
Stage 2	-	-	-	-	-	-	546	543	-	285	285	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1011	-	-	1262	-	-	286	304	750	287	304	535
Stage 1	-	-	-	-	-	-	717	671	-	519	515	-
Stage 2	-	-	-	-	-	-	517	515	-	716	670	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1011	-	-	1262	-	-	282	304	750	286	304	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	304	-	286	304	-
Stage 1	-	-	-	-	-	-	716	670	-	518	515	-
Stage 2	-	-	-	-	-	-	511	515	-	714	669	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	9.8	16
HCM LOS			A	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	750	1262	-	-	1011	-	-	346
HCM Lane V/C Ratio	0.001	-	-	-	0.001	-	-	0.05
HCM Control Delay (s)	9.8	0	-	-	8.6	0	-	16
HCM Lane LOS	A	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	6.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	0	8	1
Future Vol, veh/h	0	2	0	0	8	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	2	0	0	9	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1601	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1020	-	-	1601	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	5	10	0	0	19	206	14	0	413	11
Future Vol, veh/h	3	0	5	10	0	0	19	206	14	0	413	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	5	11	0	0	21	224	15	0	449	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	723	730	449	732	735	232	461	0	0	239	0	0
Stage 1	449	449	-	274	274	-	-	-	-	-	-	-
Stage 2	274	281	-	458	461	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	338	346	604	333	343	800	1084	-	-	1310	-	-
Stage 1	584	567	-	726	678	-	-	-	-	-	-	-
Stage 2	726	673	-	577	560	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	333	339	604	325	336	800	1084	-	-	1310	-	-
Mov Cap-2 Maneuver	333	339	-	325	336	-	-	-	-	-	-	-
Stage 1	573	567	-	712	665	-	-	-	-	-	-	-
Stage 2	712	660	-	572	560	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	16.5	0.7	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1084	-	-	463	325	1310	-	-
HCM Lane V/C Ratio	0.019	-	-	0.019	0.033	-	-	-
HCM Control Delay (s)	8.4	-	-	12.9	16.5	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	6	416	2	0	202	10	3	0	0	2	0	0
Future Vol, veh/h	6	416	2	0	202	10	3	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	7	452	2	0	220	11	3	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	231	0	0	454	0	0	692	697	452	687	688	220
Stage 1	-	-	-	-	-	-	466	466	-	220	220	-
Stage 2	-	-	-	-	-	-	226	231	-	467	468	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1319	-	-	1091	-	-	354	361	601	357	365	812
Stage 1	-	-	-	-	-	-	571	557	-	776	716	-
Stage 2	-	-	-	-	-	-	770	708	-	570	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1319	-	-	1091	-	-	352	358	601	355	362	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	352	358	-	355	362	-
Stage 1	-	-	-	-	-	-	567	553	-	771	716	-
Stage 2	-	-	-	-	-	-	770	708	-	566	552	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.1	0	15.3	15.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	352	1091	-	-	1319	-	-	355
HCM Lane V/C Ratio	0.009	-	-	-	0.005	-	-	0.006
HCM Control Delay (s)	15.3	0	-	-	7.7	0	-	15.2
HCM Lane LOS	C	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	0	2	2	0	3
Future Vol, veh/h	2	0	2	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	2	0	2	2	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	8	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1601	-	1005	1073
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	1004	1073
Mov Cap-2 Maneuver	-	-	-	-	1004	-
Stage 1	-	-	-	-	1013	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1073	-	-	1601	-
HCM Lane V/C Ratio	0.003	-	-	0.001	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	27	10	0	2	3	582	5	0	309	3
Future Vol, veh/h	5	0	27	10	0	2	3	582	5	0	309	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	0	29	11	0	2	3	633	5	0	336	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	979	980	336	994	981	636	339	0	0	638	0	0
Stage 1	336	336	-	642	642	-	-	-	-	-	-	-
Stage 2	643	644	-	352	339	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	226	247	699	221	246	472	1204	-	-	932	-	-
Stage 1	672	637	-	458	464	-	-	-	-	-	-	-
Stage 2	457	463	-	659	635	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	247	699	211	246	472	1204	-	-	932	-	-
Mov Cap-2 Maneuver	225	247	-	211	246	-	-	-	-	-	-	-
Stage 1	671	637	-	457	463	-	-	-	-	-	-	-
Stage 2	454	462	-	631	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	21.4	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1204	-	-	526	232	932	-	-
HCM Lane V/C Ratio	0.003	-	-	0.066	0.056	-	-	-
HCM Control Delay (s)	8	-	-	12.3	21.4	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	304	2	0	582	0	0	0	2	6	0	2
Future Vol, veh/h	0	304	2	0	582	0	0	0	2	6	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	330	2	0	633	0	0	0	2	7	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	633	0	0	332	0	0	964	963	330	965	965	633
Stage 1	-	-	-	-	-	-	330	330	-	633	633	-
Stage 2	-	-	-	-	-	-	634	633	-	332	332	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	936	-	-	1211	-	-	232	253	705	231	252	474
Stage 1	-	-	-	-	-	-	677	640	-	463	469	-
Stage 2	-	-	-	-	-	-	462	469	-	675	639	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	936	-	-	1211	-	-	231	253	705	230	252	474
Mov Cap-2 Maneuver	-	-	-	-	-	-	231	253	-	230	252	-
Stage 1	-	-	-	-	-	-	677	640	-	463	469	-
Stage 2	-	-	-	-	-	-	460	469	-	673	639	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	10.1	19.1
HCM LOS			B	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	705	1211	-	-	936	-	-	264
HCM Lane V/C Ratio	0.003	-	-	-	-	-	-	0.033
HCM Control Delay (s)	10.1	0	-	-	0	-	-	19.1
HCM Lane LOS	B	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	2
Future Vol, veh/h	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	0	0	0	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1602	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1602	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1602	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	5	26	0	2	19	211	82	8	414	11
Future Vol, veh/h	3	0	5	26	0	2	19	211	82	8	414	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	3	0	5	28	0	2	21	229	89	9	450	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	785	828	450	793	796	274	462	0	0	318	0	0
Stage 1	468	468	-	316	316	-	-	-	-	-	-	-
Stage 2	317	360	-	477	480	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	307	303	603	303	316	758	1084	-	-	1225	-	-
Stage 1	570	556	-	689	650	-	-	-	-	-	-	-
Stage 2	688	621	-	563	549	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	299	294	603	294	307	758	1084	-	-	1225	-	-
Mov Cap-2 Maneuver	299	294	-	294	307	-	-	-	-	-	-	-
Stage 1	559	550	-	676	638	-	-	-	-	-	-	-
Stage 2	673	609	-	552	544	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.4	18	0.5	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1084	-	-	437	307	1225	-	-
HCM Lane V/C Ratio	0.019	-	-	0.02	0.099	0.007	-	-
HCM Control Delay (s)	8.4	-	-	13.4	18	8	0	-
HCM Lane LOS	A	-	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	11	424	2	0	204	15	3	0	0	3	0	1
Future Vol, veh/h	11	424	2	0	204	15	3	0	0	3	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	12	461	2	0	222	16	3	0	0	3	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	238	0	0	463	0	0	716	723	461	708	709	222
Stage 1	-	-	-	-	-	-	485	485	-	222	222	-
Stage 2	-	-	-	-	-	-	231	238	-	486	487	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	1311	-	-	1083	-	-	341	349	594	346	355	810
Stage 1	-	-	-	-	-	-	558	547	-	774	714	-
Stage 2	-	-	-	-	-	-	765	703	-	557	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1311	-	-	1083	-	-	338	345	594	343	351	810
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	345	-	343	351	-
Stage 1	-	-	-	-	-	-	551	540	-	765	714	-
Stage 2	-	-	-	-	-	-	764	703	-	550	538	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0.2	0	15.8	14.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	338	1083	-	-	1311	-	-	401
HCM Lane V/C Ratio	0.01	-	-	-	0.009	-	-	0.011
HCM Control Delay (s)	15.8	0	-	-	7.8	0	-	14.1
HCM Lane LOS	C	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	8	2	2	2	3
Future Vol, veh/h	2	8	2	2	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	2	9	2	2	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	11	0	13	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	6	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1589	-	998	1067
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1009	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1589	-	997	1067
Mov Cap-2 Maneuver	-	-	-	-	997	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1038	-	-	1589	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	27	75	0	10	3	583	23	2	314	3
Future Vol, veh/h	5	0	27	75	0	10	3	583	23	2	314	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	0
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	5	0	29	82	0	11	3	634	25	2	341	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1003	1010	341	1014	1001	647	344	0	0	659	0	0
Stage 1	345	345	-	653	653	-	-	-	-	-	-	-
Stage 2	658	665	-	361	348	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	218	237	695	214	240	466	1198	-	-	915	-	-
Stage 1	664	631	-	451	459	-	-	-	-	-	-	-
Stage 2	448	453	-	651	629	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	212	236	695	204	239	466	1198	-	-	915	-	-
Mov Cap-2 Maneuver	212	236	-	204	239	-	-	-	-	-	-	-
Stage 1	662	629	-	450	458	-	-	-	-	-	-	-
Stage 2	436	452	-	622	627	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	33.1	0	0.1
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1198	-	-	513	218	915	-	-
HCM Lane V/C Ratio	0.003	-	-	0.068	0.424	0.002	-	-
HCM Control Delay (s)	8	-	-	12.5	33.1	8.9	0	-
HCM Lane LOS	A	-	-	B	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	2	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	1	306	1	0	590	1	0	0	2	11	0	7
Future Vol, veh/h	1	306	1	0	590	1	0	0	2	11	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	1	333	1	0	641	1	0	0	2	12	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	642	0	0	334	0	0	981	977	333	978	977	641
Stage 1	-	-	-	-	-	-	335	335	-	641	641	-
Stage 2	-	-	-	-	-	-	646	642	-	337	336	-
Critical Hdwy	4.15	-	-	4.15	-	-	7.15	6.55	6.25	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-	6.15	5.55	-
Follow-up Hdwy	2.245	-	-	2.245	-	-	3.545	4.045	3.345	3.545	4.045	3.345
Pot Cap-1 Maneuver	928	-	-	1209	-	-	226	248	702	227	248	469
Stage 1	-	-	-	-	-	-	673	637	-	458	465	-
Stage 2	-	-	-	-	-	-	455	464	-	671	637	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	928	-	-	1209	-	-	222	248	702	226	248	469
Mov Cap-2 Maneuver	-	-	-	-	-	-	222	248	-	226	248	-
Stage 1	-	-	-	-	-	-	672	636	-	458	465	-
Stage 2	-	-	-	-	-	-	448	464	-	668	636	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	0	0	10.1	18.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NELn1	NWL	NWT	NWR	SEL	SET	SER	SWLn1
Capacity (veh/h)	702	1209	-	-	928	-	-	283
HCM Lane V/C Ratio	0.003	-	-	-	0.001	-	-	0.069
HCM Control Delay (s)	10.1	0	-	-	8.9	0	-	18.7
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	0	8	2
Future Vol, veh/h	0	2	0	0	8	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	0	2	0	0	9	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.15	-	6.45	6.25
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	-	-	2.245	-	3.545	3.345
Pot Cap-1 Maneuver	-	-	1601	-	1013	1075
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	1013	1075
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	1014	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1025	-	-	1601	-
HCM Lane V/C Ratio	0.011	-	-	-	-
HCM Control Delay (s)	8.6	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Appendix C

Turn Lane and Signal Warrant Analysis

Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

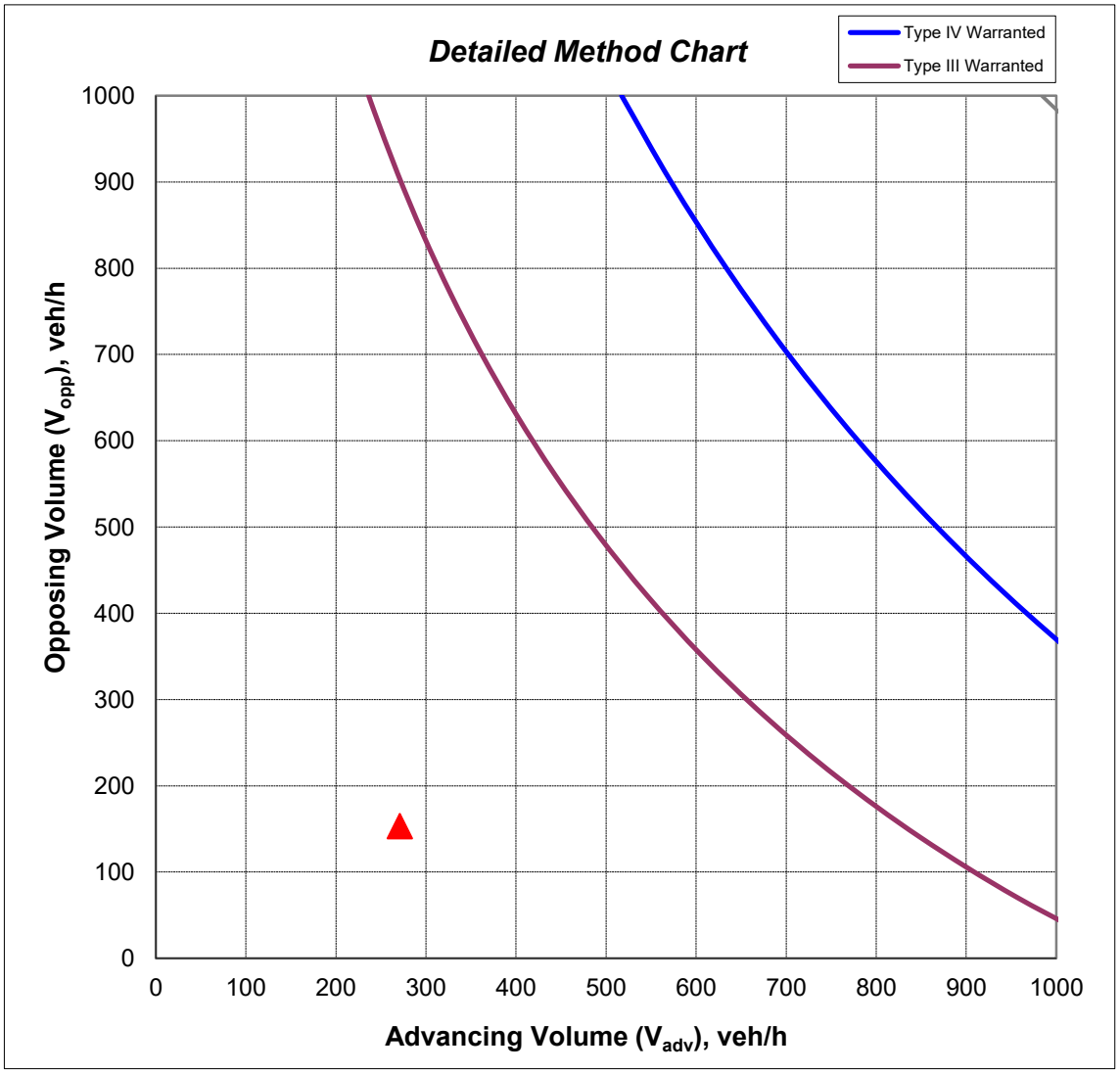
Year of Analysis: 2027 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,172
Minor (intersecting) Road A.A.D.T	91
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	271
Opposing volume (V_{opp}), veh/h:	153
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	7

OUTPUT	Value
Percent left-turns in advancing volume:	0.4%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

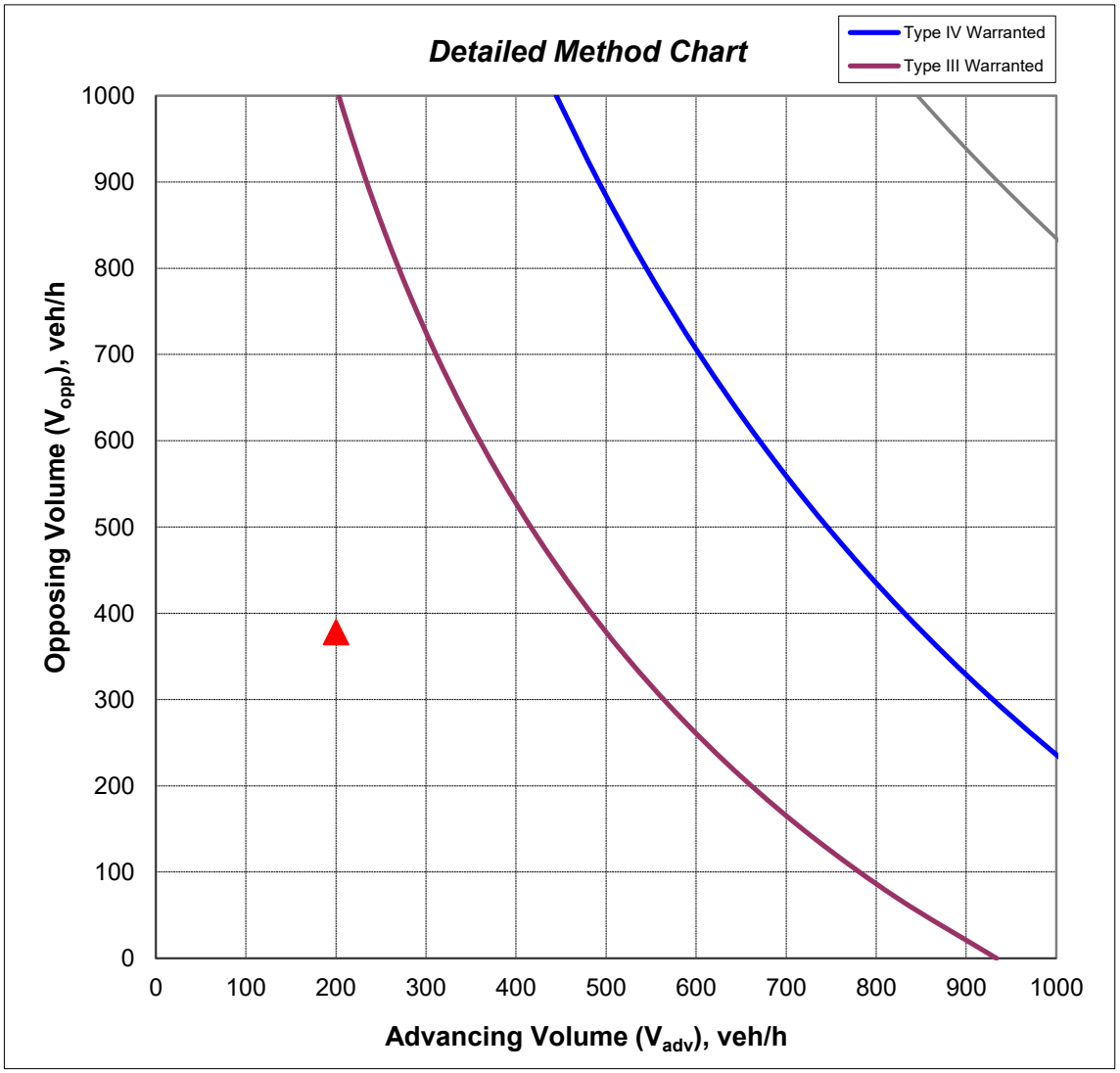
Year of Analysis: 2027 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,172
Minor (intersecting) Road A.A.D.T	91
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	200
Opposing volume (V_{opp}), veh/h:	378
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

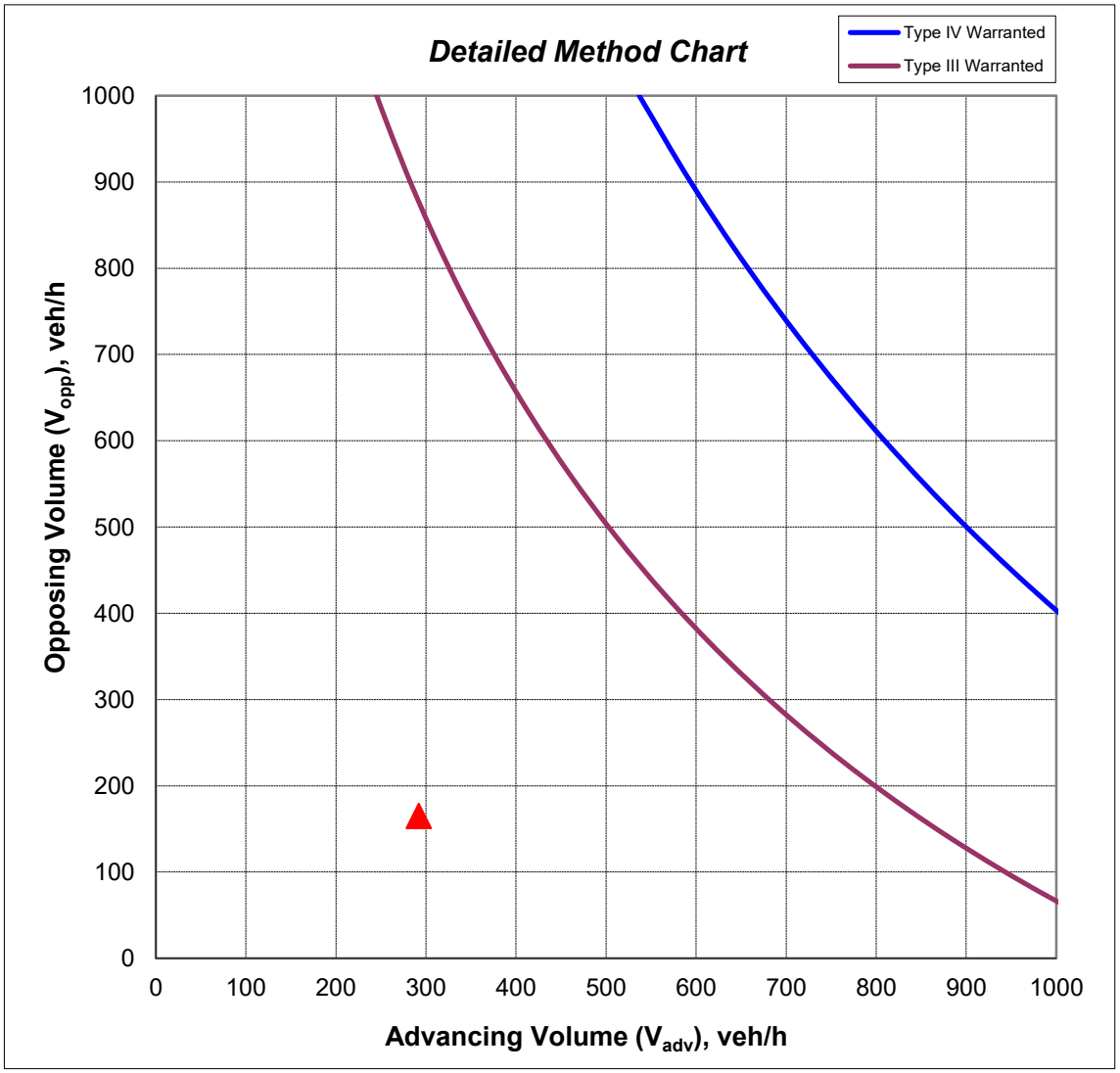
Year of Analysis: 2030 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,617
Minor (intersecting) Road A.A.D.T	100
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	292
Opposing volume (V_{opp}), veh/h:	165
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	8

OUTPUT		Value
Percent left-turns in advancing volume:		0.3%
Percent trucks in left turn volume:		100.0%
Probability of conflict threshold:		0.58%
Calculated probability of conflicting arrival:		0.0%
Calculated conflicts per hour, veh/h:		0.1
Use Detailed Method		
Type II		
Additonal Storage Not Requied	*base storage requirement*	-
	- standard storage length	-
	+ additional truck storage	-
	= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

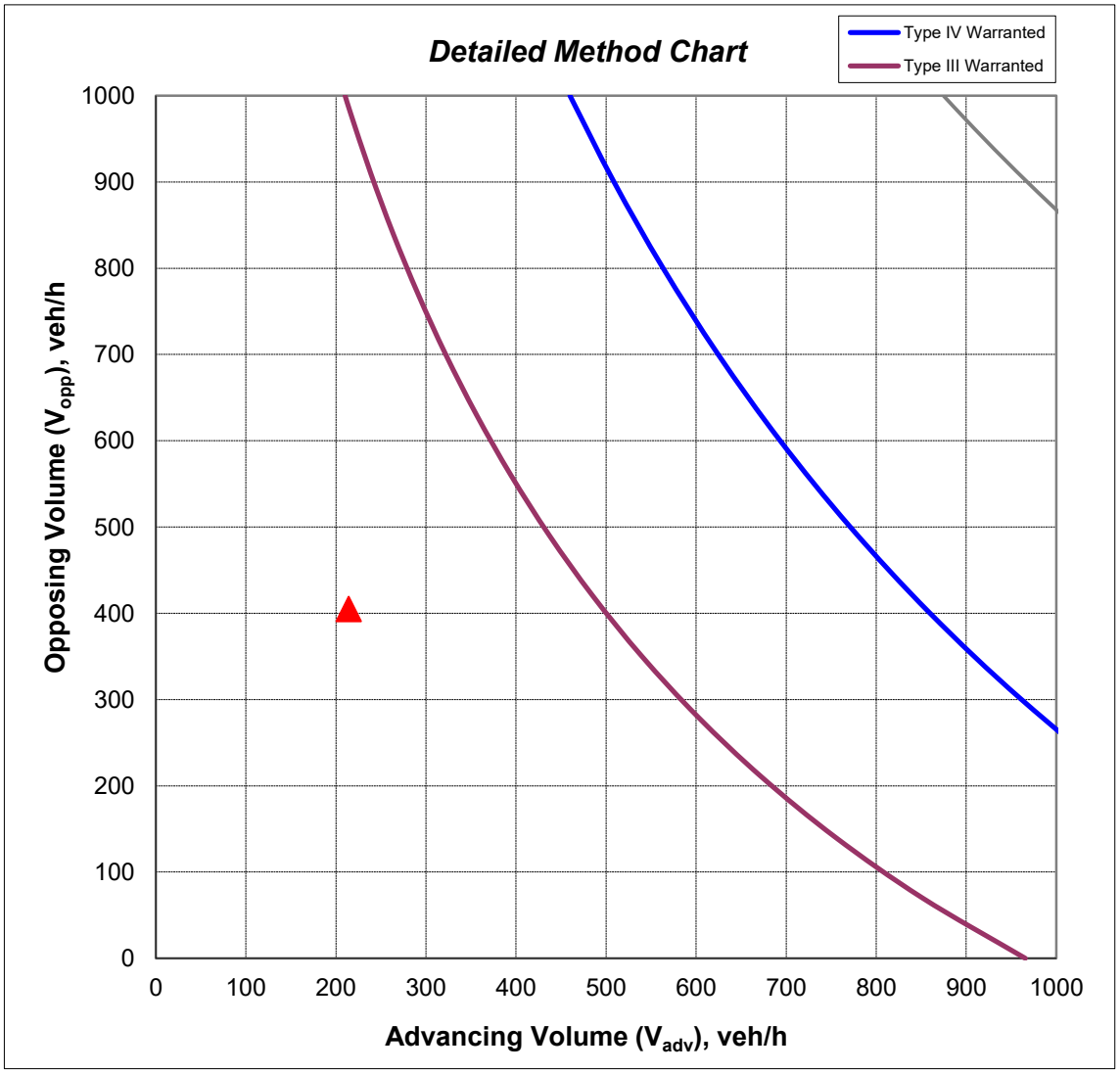
Year of Analysis: 2030 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,617
Minor (intersecting) Road A.A.D.T	100
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	214
Opposing volume (V_{opp}), veh/h:	405
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

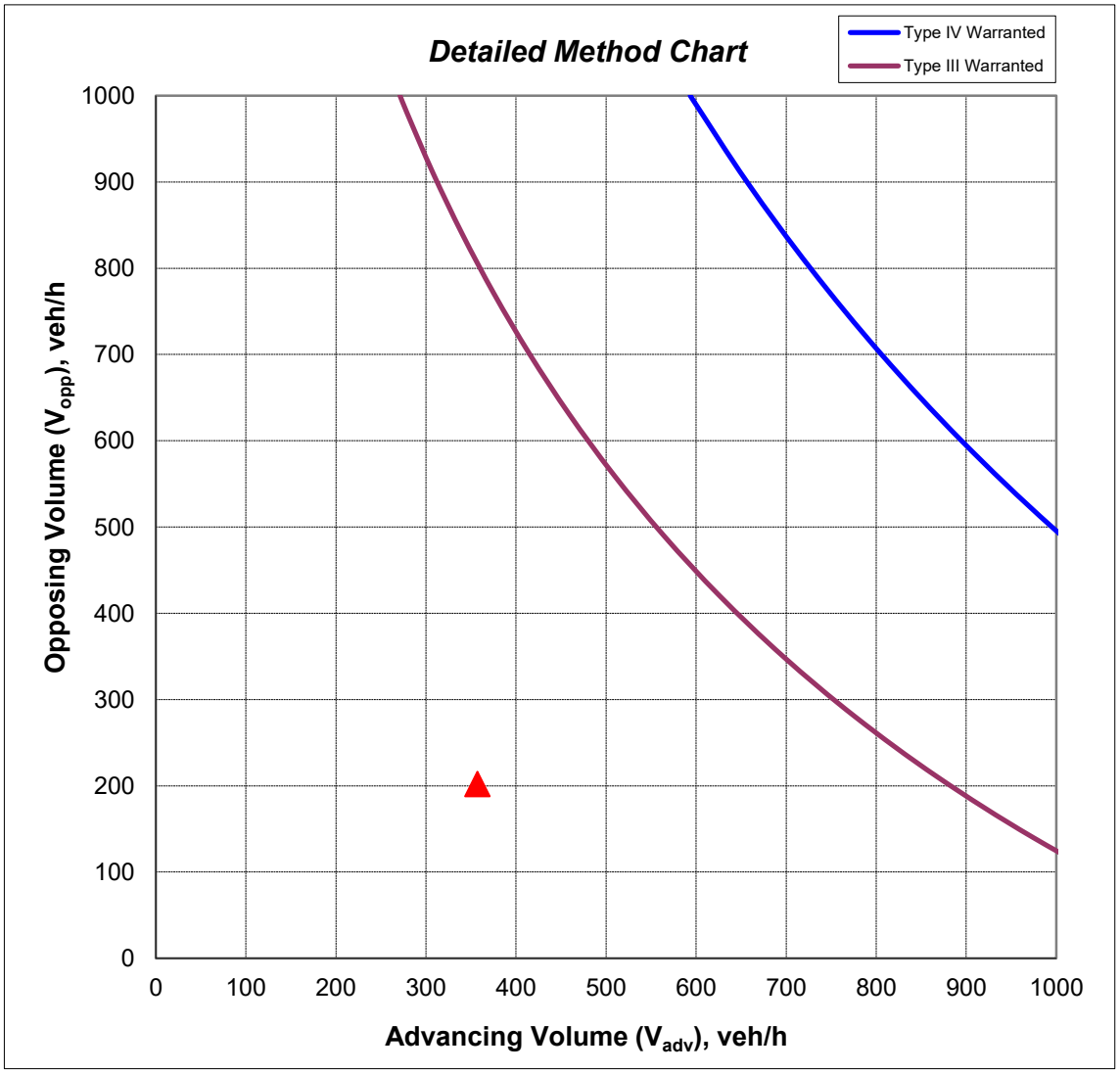
Year of Analysis: 2040 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,909
Minor (intersecting) Road A.A.D.T	118
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	357
Opposing volume (V_{opp}), veh/h:	202
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	9

OUTPUT		Value
Percent left-turns in advancing volume:		0.3%
Percent trucks in left turn volume:		100.0%
Probability of conflict threshold:		0.58%
Calculated probability of conflicting arrival:		0.0%
Calculated conflicts per hour, veh/h:		0.1
Use Detailed Method		
Type II		
Additonal Storage Not Requied	*base storage requirement*	-
	- standard storage length	-
	+ additional truck storage	-
	= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

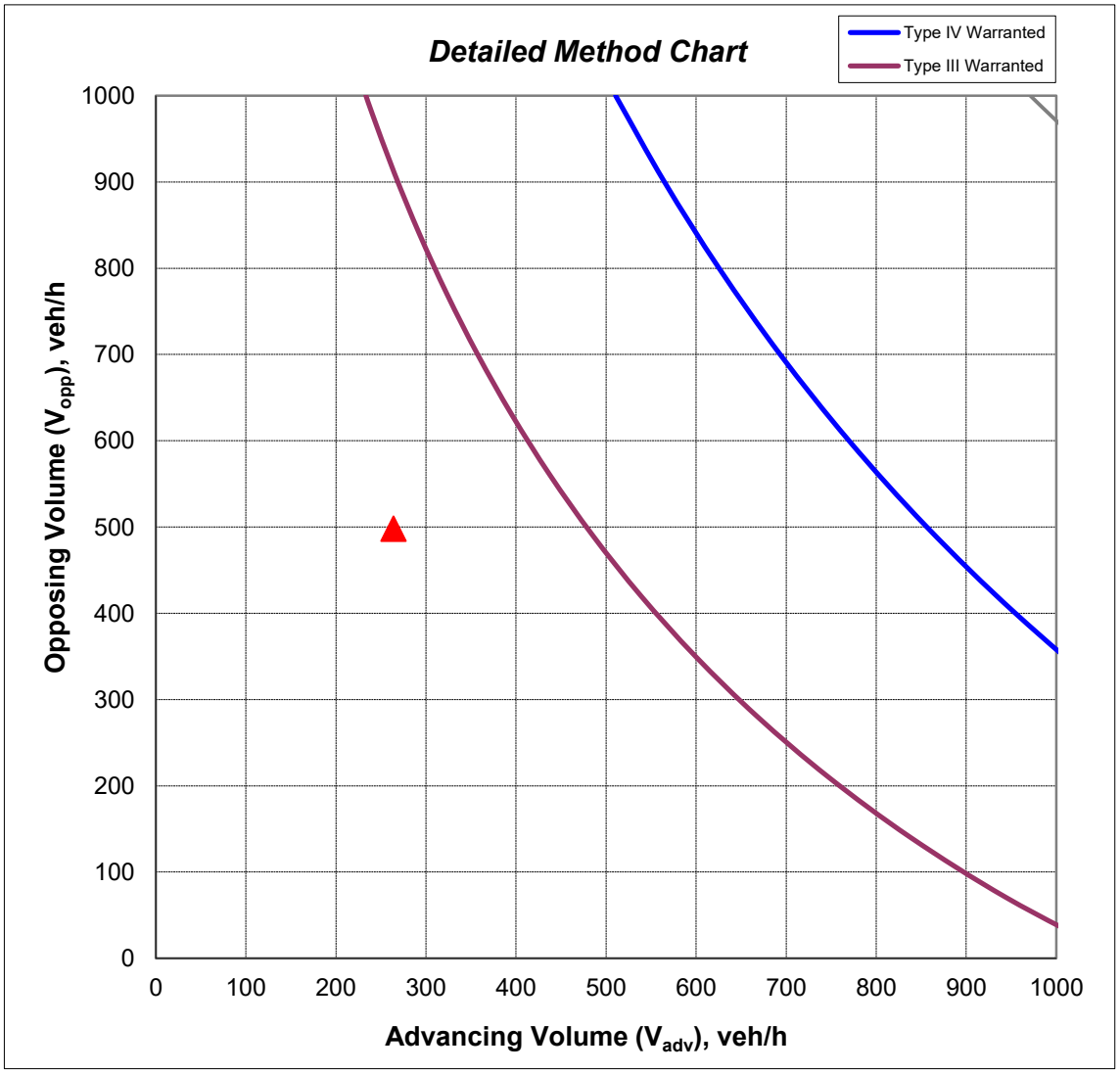
Year of Analysis: 2040 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,909
Minor (intersecting) Road A.A.D.T	118
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	264
Opposing volume (V_{opp}), veh/h:	498
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	3

OUTPUT	Value
Percent left-turns in advancing volume:	0.4%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

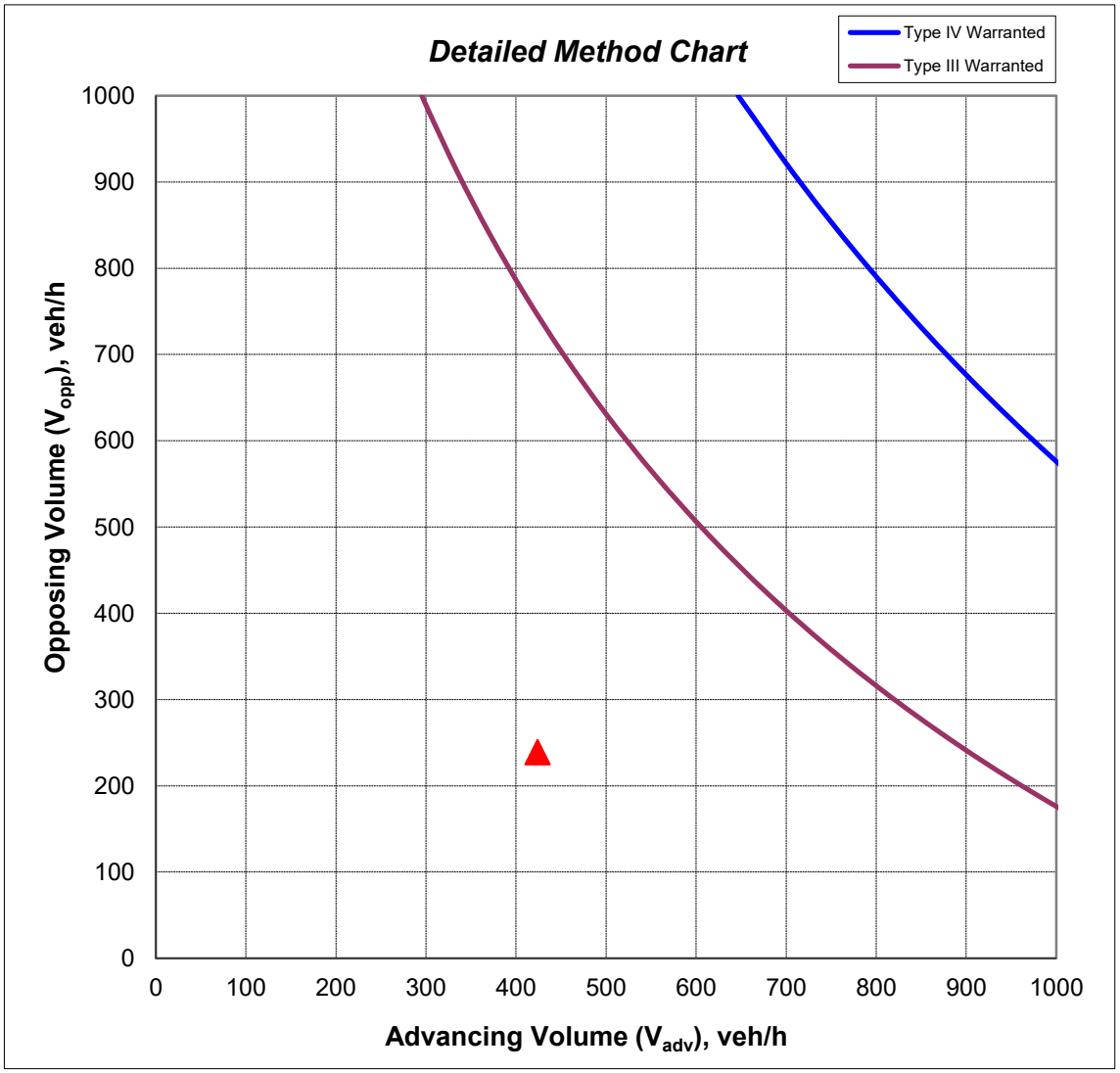
Year of Analysis: 2050 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,190
Minor (intersecting) Road A.A.D.T	154
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	424
Opposing volume (V_{opp}), veh/h:	239
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	11

OUTPUT	Value
Percent left-turns in advancing volume:	0.2%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.2
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

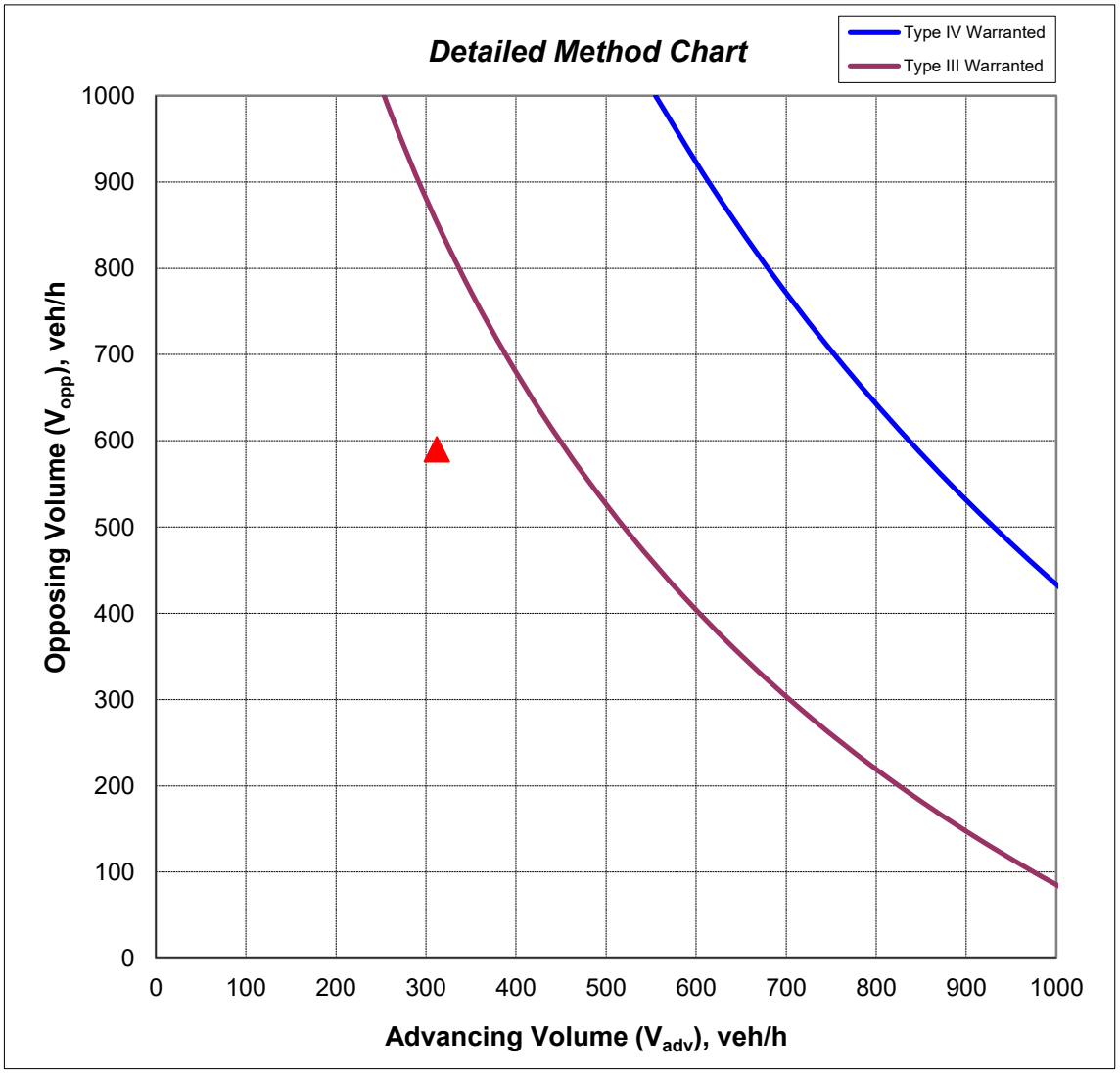
Year of Analysis: 2050 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,190
Minor (intersecting) Road A.A.D.T	154
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	312
Opposing volume (V_{opp}), veh/h:	590
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	3

OUTPUT	Value
Percent left-turns in advancing volume:	0.3%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.2
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

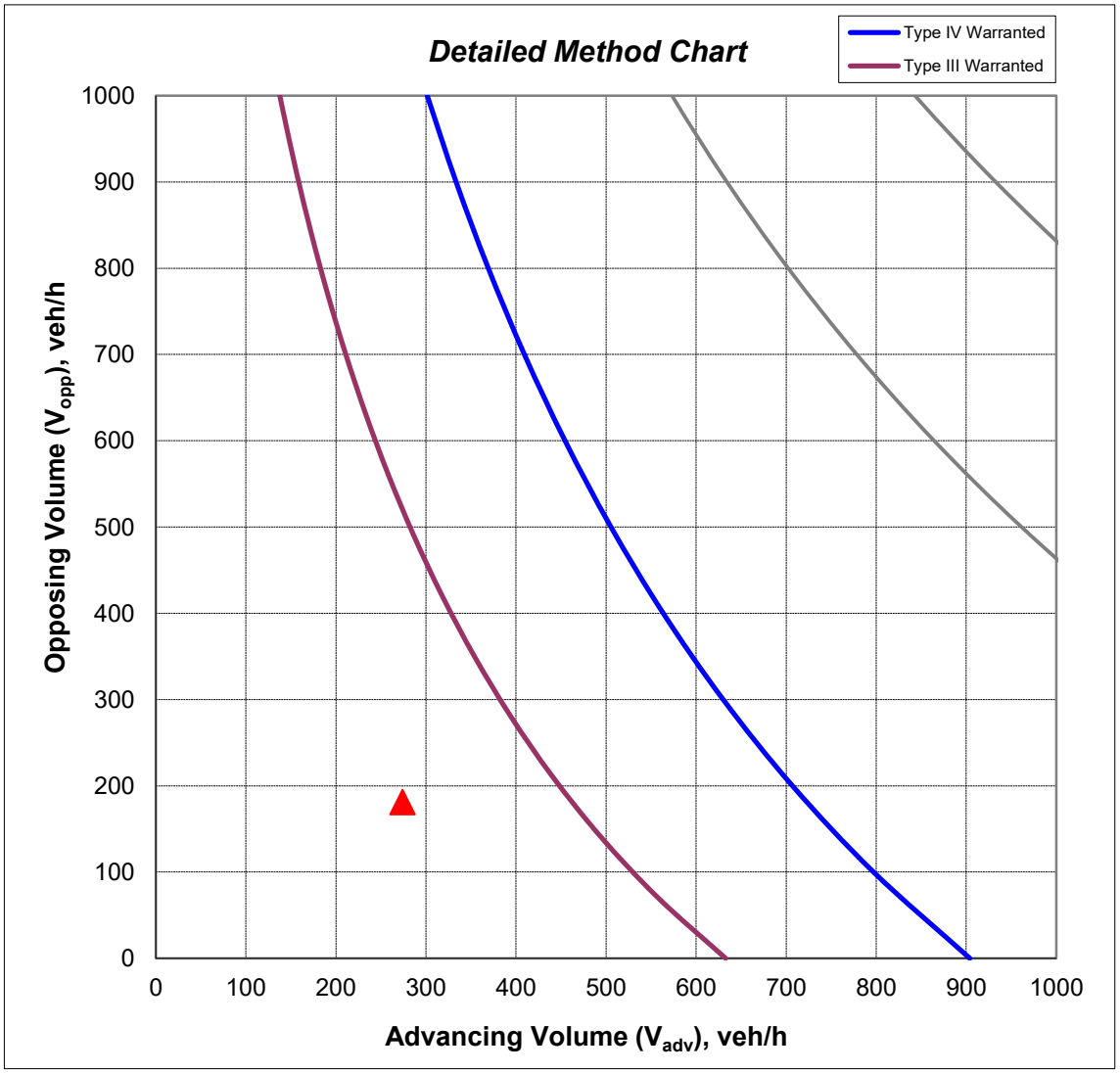
Year of Analysis: 2027 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,299
Minor (intersecting) Road A.A.D.T	409
Left turn volume (V_{LT}), veh/h:	3
Advancing volume (V_{adv}), veh/h:	274
Opposing volume (V_{opp}), veh/h:	181
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	7

OUTPUT		Value
Percent left-turns in advancing volume:		1.1%
Percent trucks in left turn volume:		33.3%
Probability of conflict threshold:		0.58%
Calculated probability of conflicting arrival:		0.1%
Calculated conflicts per hour, veh/h:		0.2
Use Detailed Method		
Type II		
Additonal Storage Not Requied	*base storage requirement*	-
	- standard storage length	-
	+ additional truck storage	-
	= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

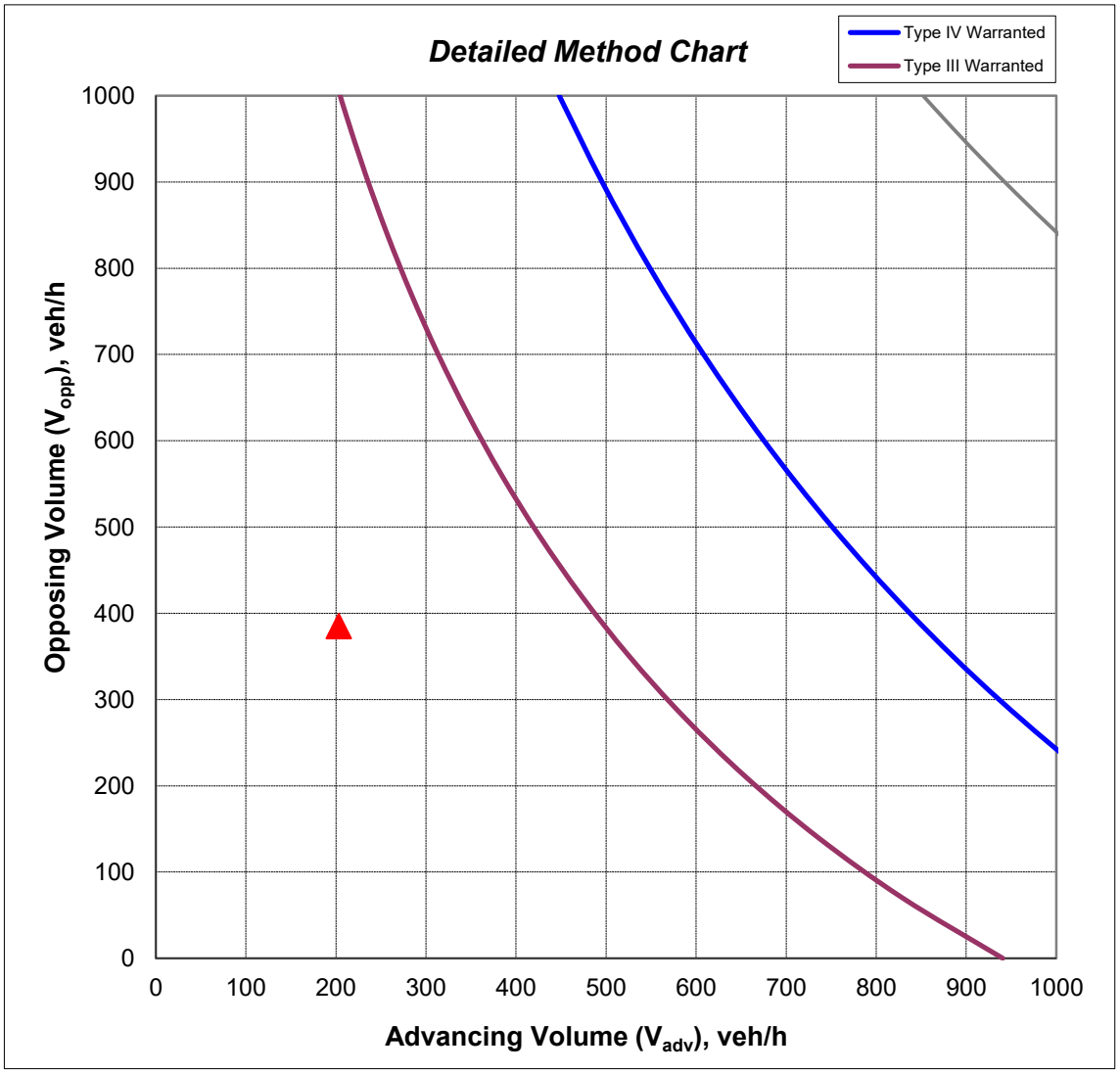
Year of Analysis: 2027 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,299
Minor (intersecting) Road A.A.D.T	409
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	203
Opposing volume (V_{opp}), veh/h:	385
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

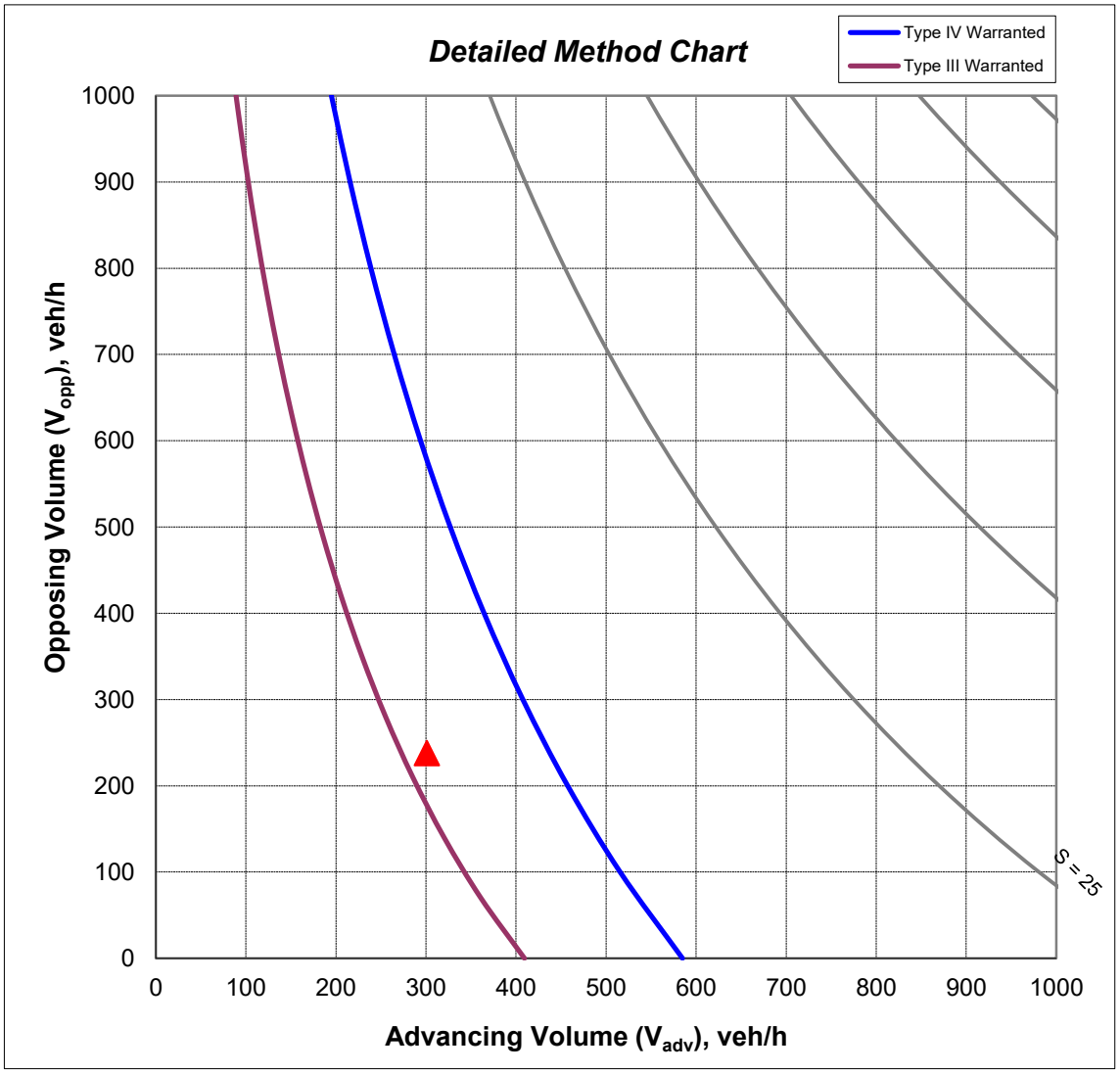
Year of Analysis: 2030 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,763
Minor (intersecting) Road A.A.D.T	946
Left turn volume (V_{LT}), veh/h:	8
Advancing volume (V_{adv}), veh/h:	301
Opposing volume (V_{opp}), veh/h:	238
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	8

OUTPUT	Value
Percent left-turns in advancing volume:	2.7%
Percent trucks in left turn volume:	12.5%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.3%
Calculated conflicts per hour, veh/h:	0.8
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

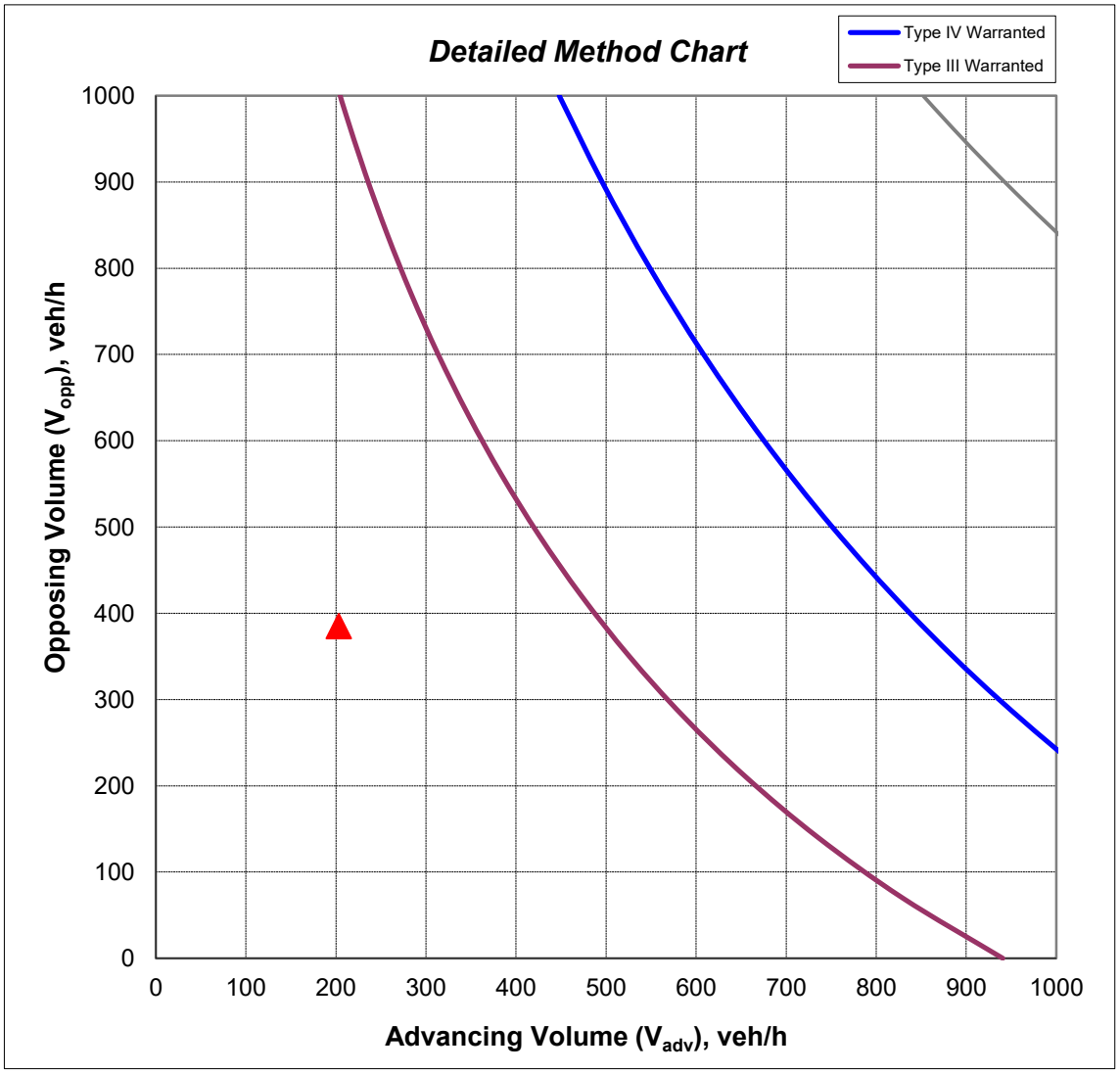
Year of Analysis: 2027 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,299
Minor (intersecting) Road A.A.D.T	409
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	203
Opposing volume (V_{opp}), veh/h:	385
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

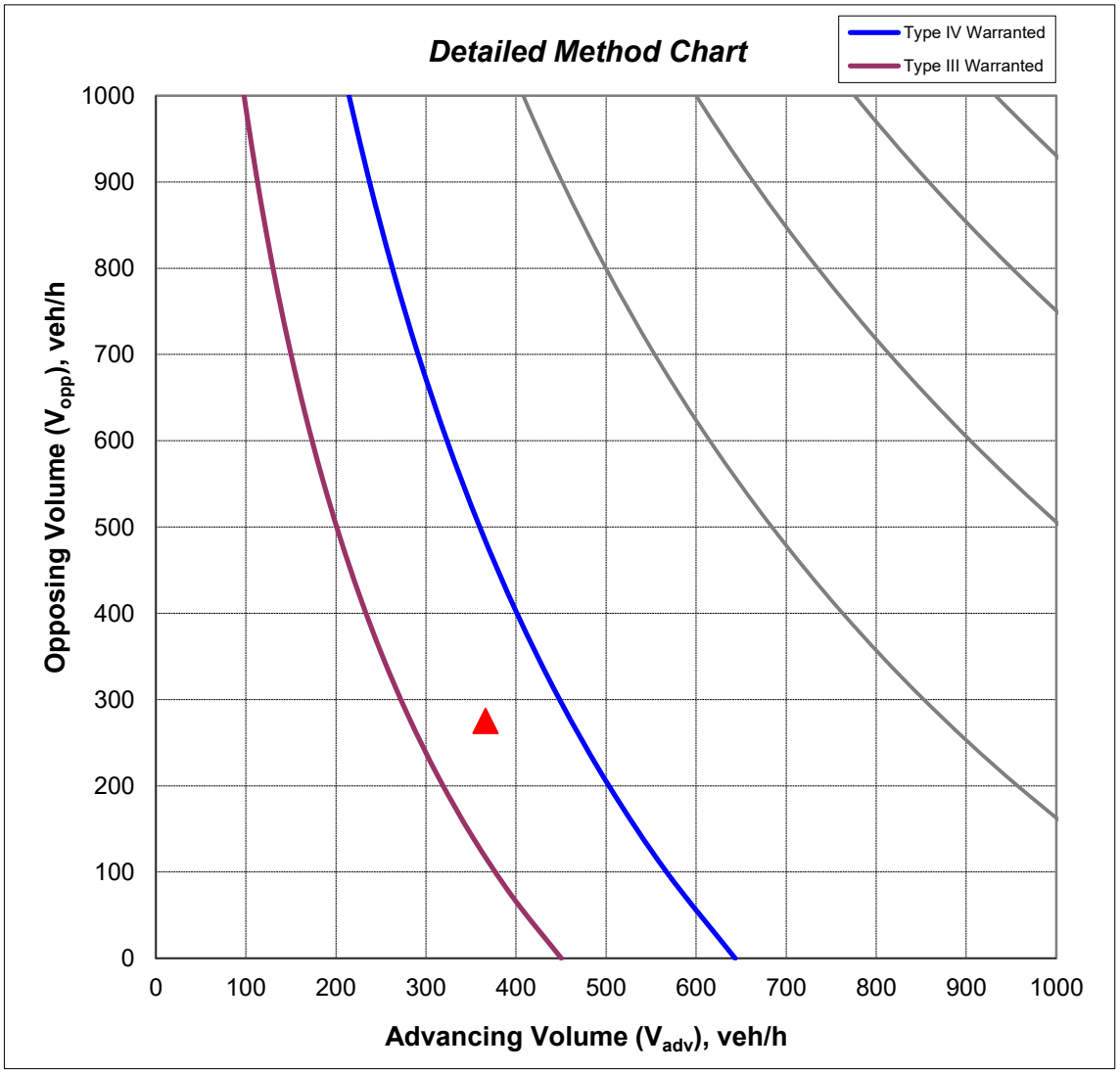
Year of Analysis: 2040 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	7,054
Minor (intersecting) Road A.A.D.T	964
Left turn volume (V_{LT}), veh/h:	8
Advancing volume (V_{adv}), veh/h:	366
Opposing volume (V_{opp}), veh/h:	275
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	9

OUTPUT	Value
Percent left-turns in advancing volume:	2.2%
Percent trucks in left turn volume:	12.5%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.4%
Calculated conflicts per hour, veh/h:	1.3
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

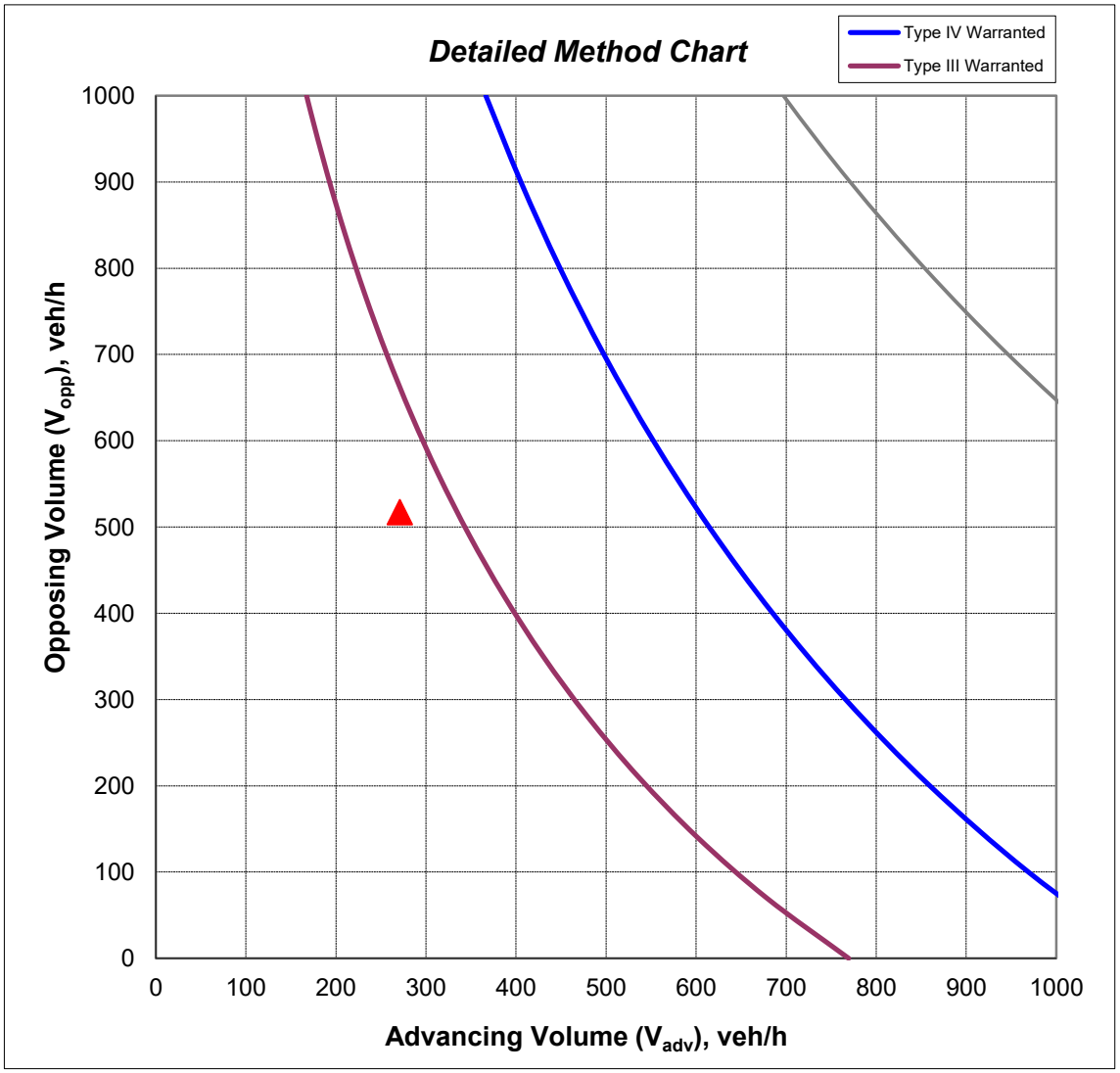
Year of Analysis: 2040 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	7,054
Minor (intersecting) Road A.A.D.T	964
Left turn volume (V_{LT}), veh/h:	2
Advancing volume (V_{adv}), veh/h:	271
Opposing volume (V_{opp}), veh/h:	517
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	3

OUTPUT	Value
Percent left-turns in advancing volume:	0.7%
Percent trucks in left turn volume:	50.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.3
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

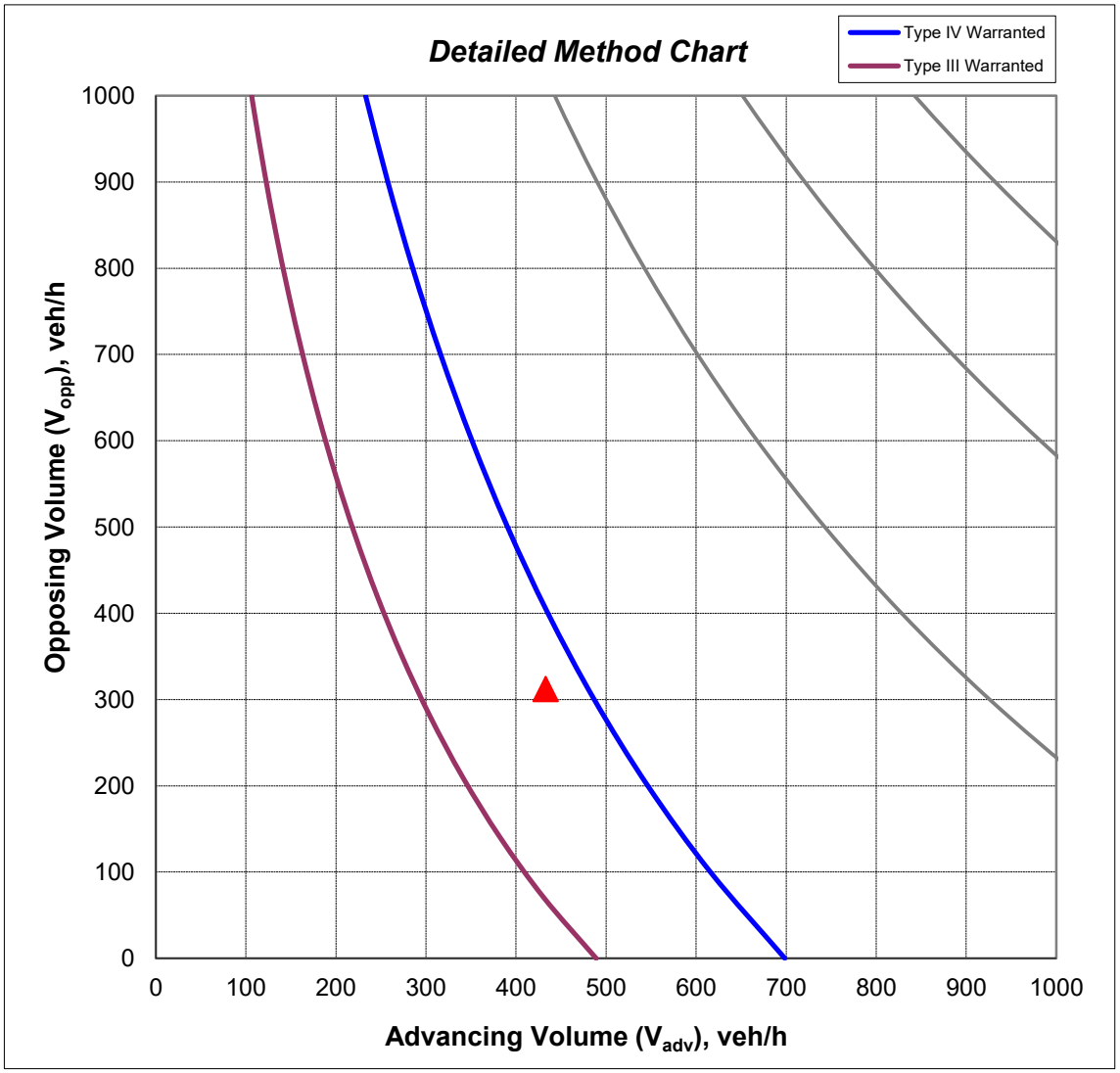
Year of Analysis: 2050 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,336
Minor (intersecting) Road A.A.D.T	1,000
Left turn volume (V_{LT}), veh/h:	8
Advancing volume (V_{adv}), veh/h:	433
Opposing volume (V_{opp}), veh/h:	312
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	11

OUTPUT	Value
Percent left-turns in advancing volume:	1.8%
Percent trucks in left turn volume:	12.5%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.5%
Calculated conflicts per hour, veh/h:	2.1
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: PM. Peak

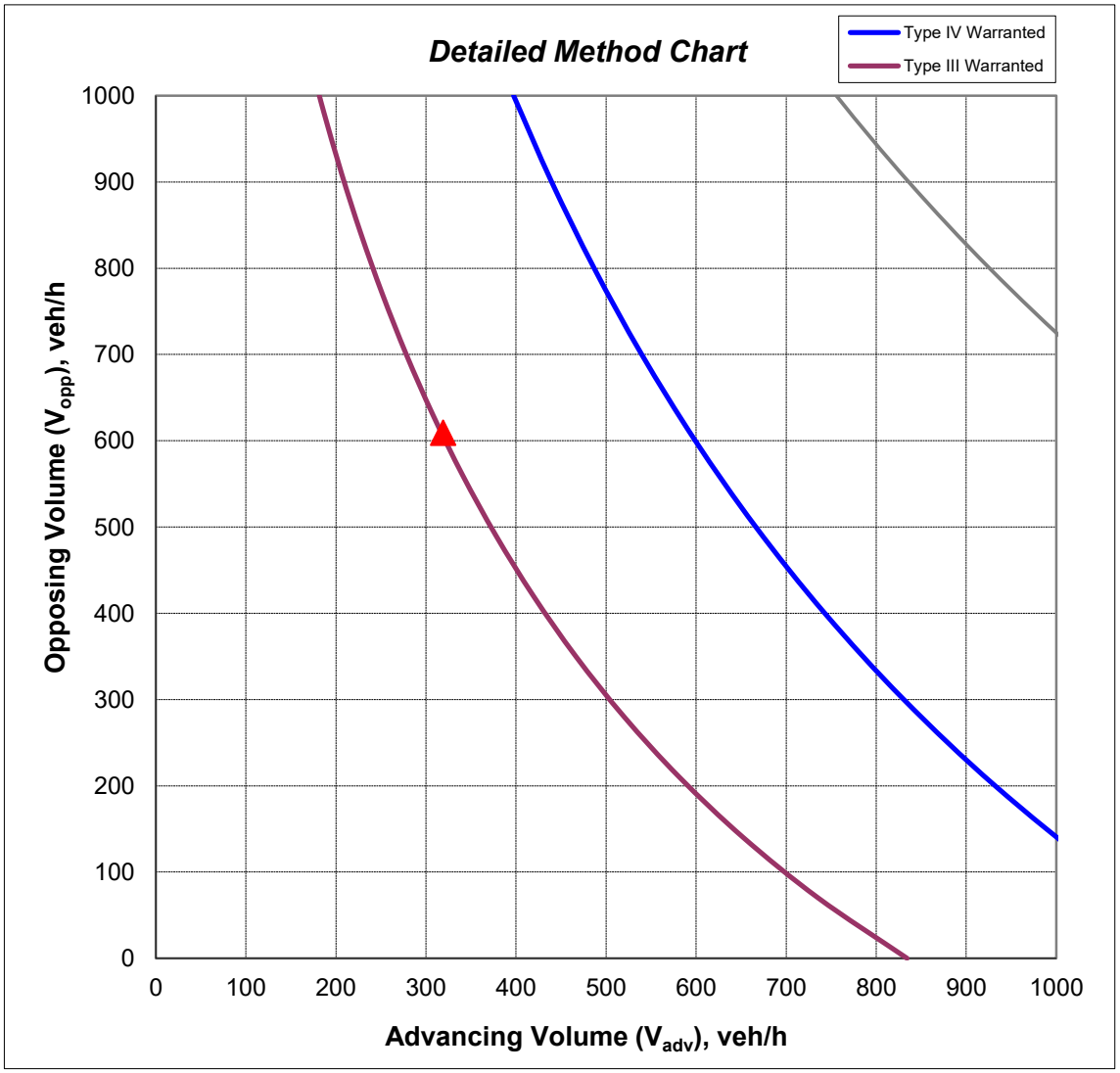
Year of Analysis: 2050 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,336
Minor (intersecting) Road A.A.D.T	1,000
Left turn volume (V_{LT}), veh/h:	2
Advancing volume (V_{adv}), veh/h:	319
Opposing volume (V_{opp}), veh/h:	609
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	3

OUTPUT	Value
Percent left-turns in advancing volume:	0.6%
Percent trucks in left turn volume:	50.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.2%
Calculated conflicts per hour, veh/h:	0.5
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

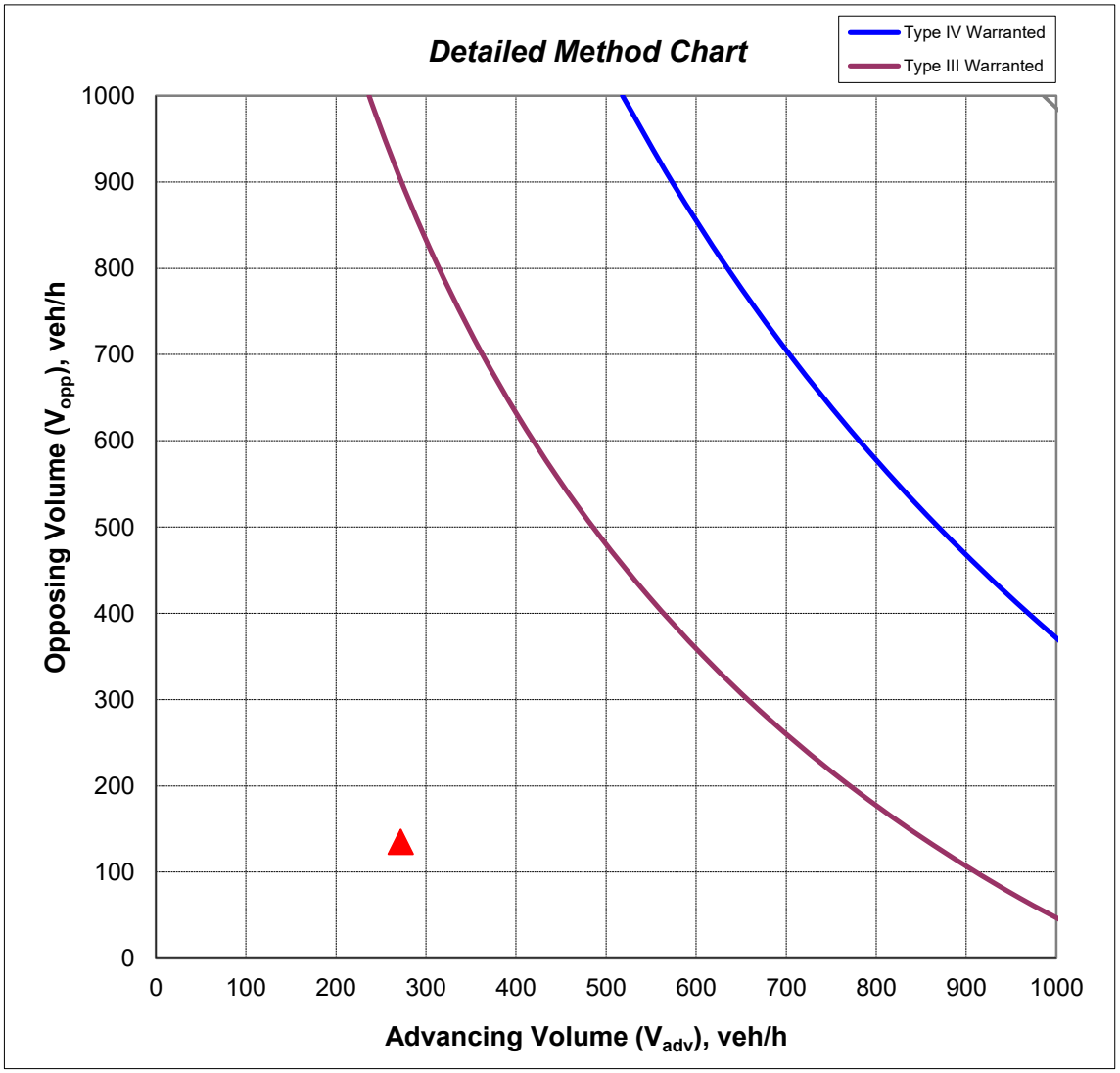
Year of Analysis: 2027 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,182
Minor (intersecting) Road A.A.D.T	45
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	272
Opposing volume (V_{opp}), veh/h:	135
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.4%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

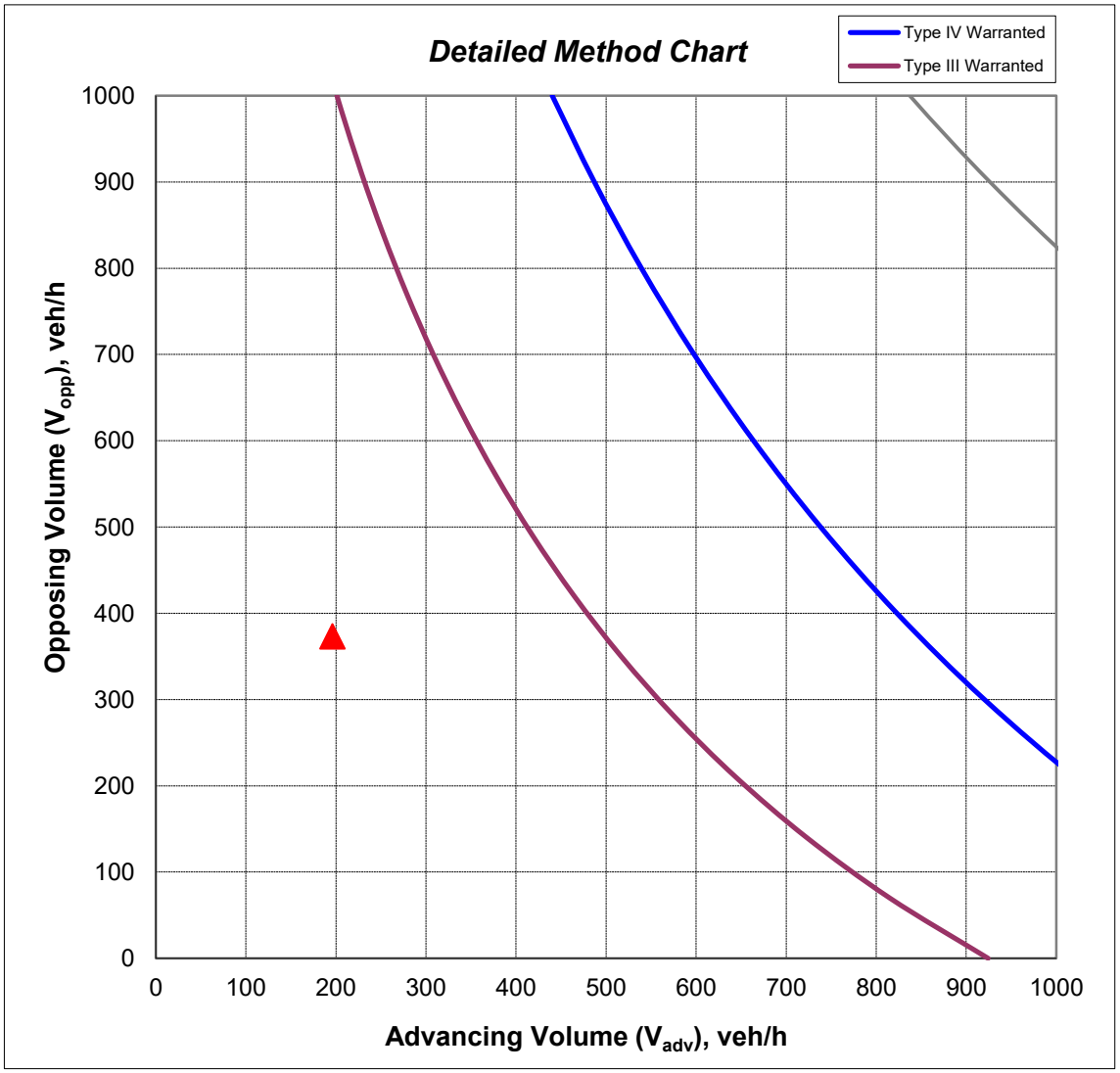
Year of Analysis: 2027 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,182
Minor (intersecting) Road A.A.D.T	45
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	196
Opposing volume (V_{opp}), veh/h:	373
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

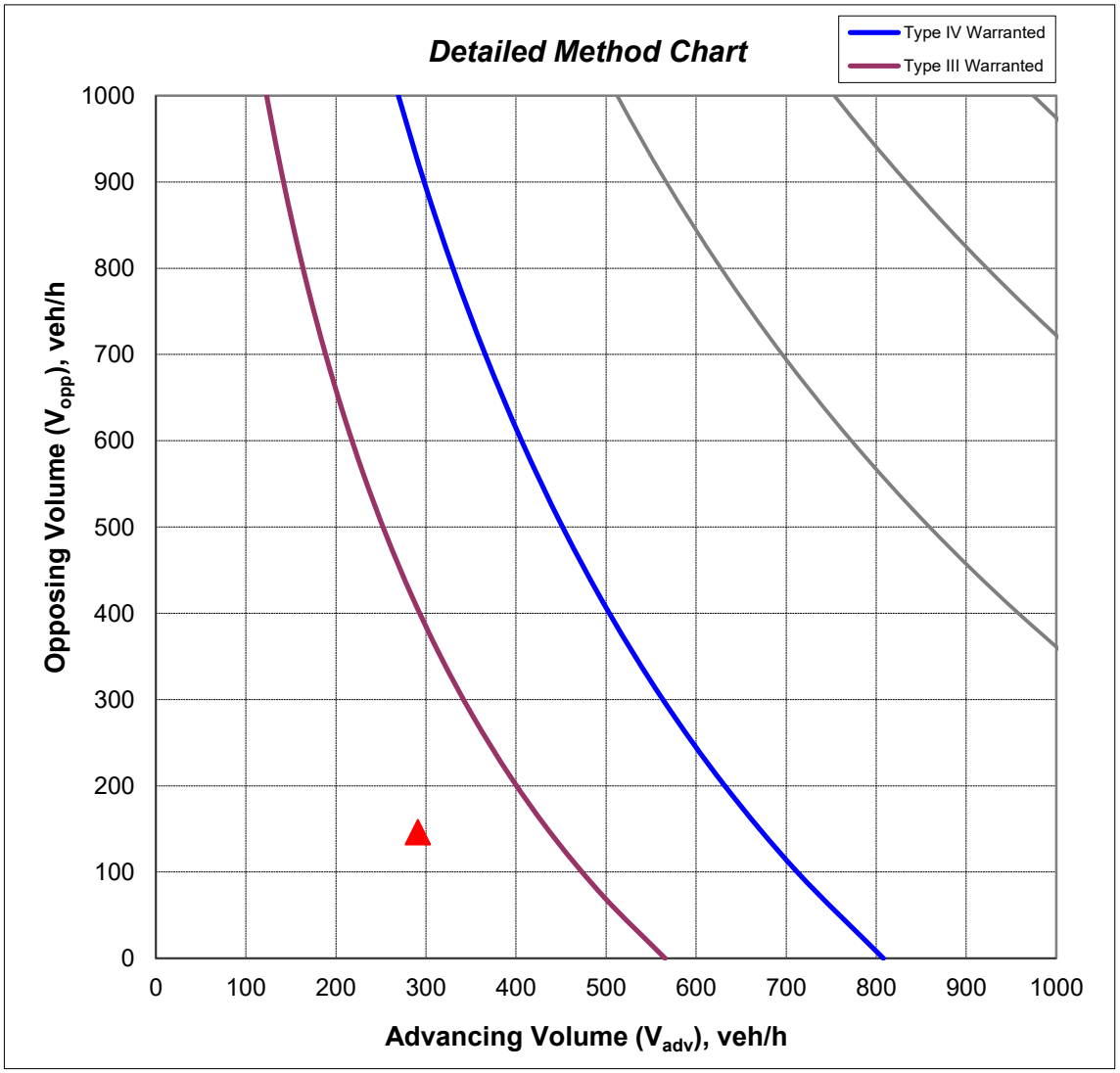
Year of Analysis: 2030 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,554
Minor (intersecting) Road A.A.D.T	45
Left turn volume (V_{LT}), veh/h:	4
Advancing volume (V_{adv}), veh/h:	291
Opposing volume (V_{opp}), veh/h:	146
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	1.4%
Percent trucks in left turn volume:	25.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.3
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

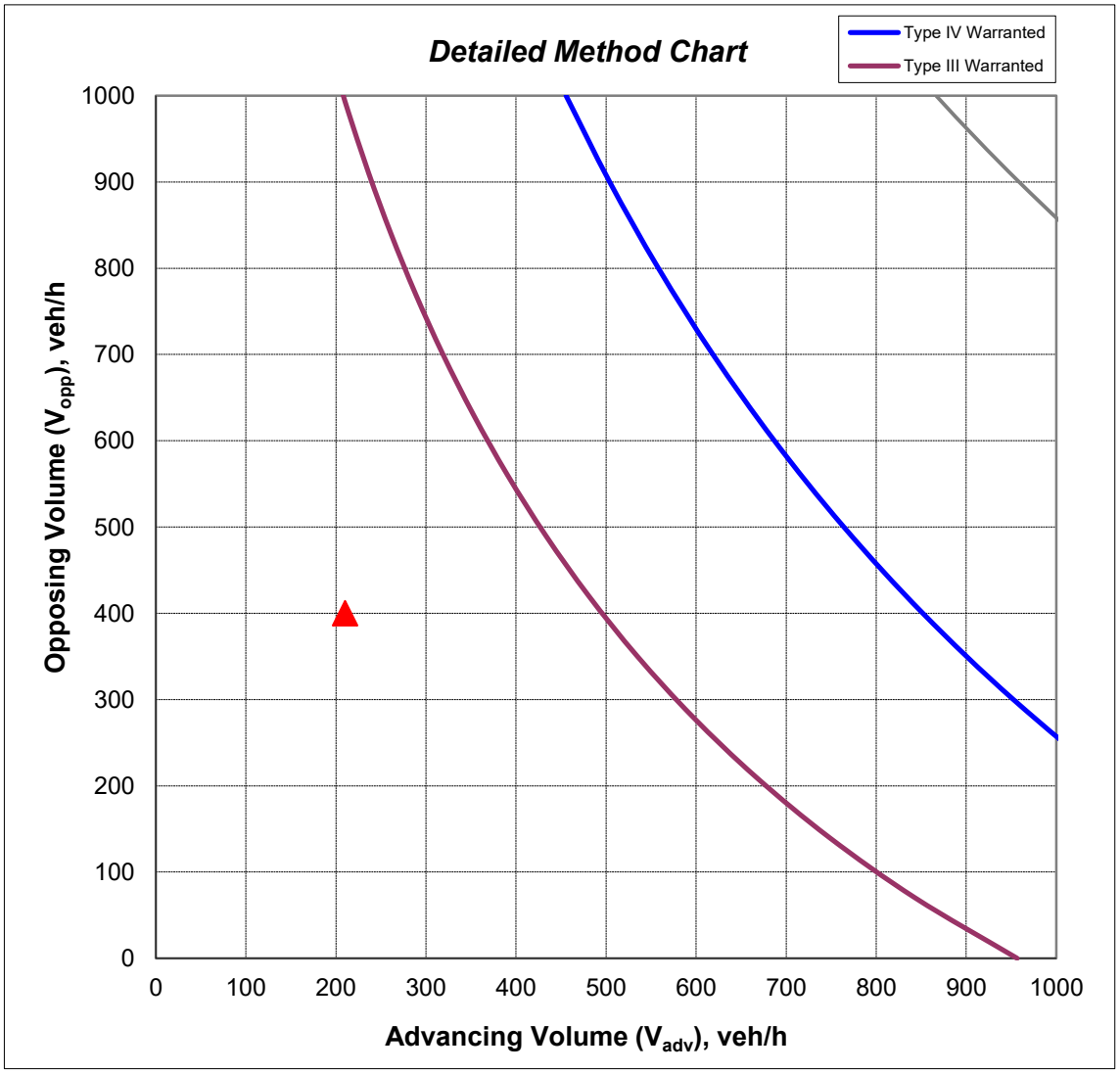
Year of Analysis: 2030 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,554
Minor (intersecting) Road A.A.D.T	45
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	210
Opposing volume (V_{opp}), veh/h:	400
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

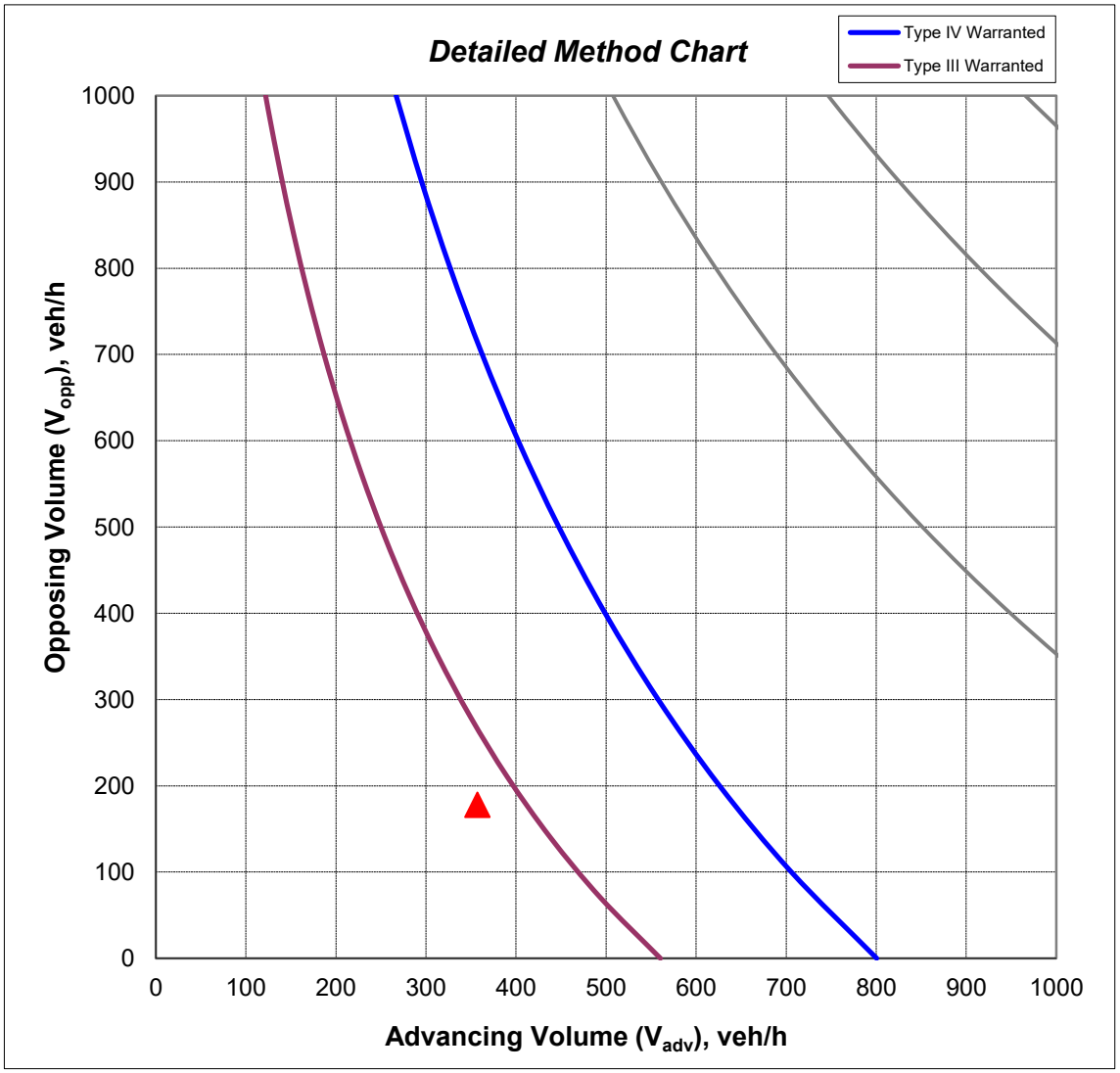
Year of Analysis: 2040 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,818
Minor (intersecting) Road A.A.D.T	54
Left turn volume (V_{LT}), veh/h:	5
Advancing volume (V_{adv}), veh/h:	357
Opposing volume (V_{opp}), veh/h:	178
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	1.4%
Percent trucks in left turn volume:	20.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.2%
Calculated conflicts per hour, veh/h:	0.6
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

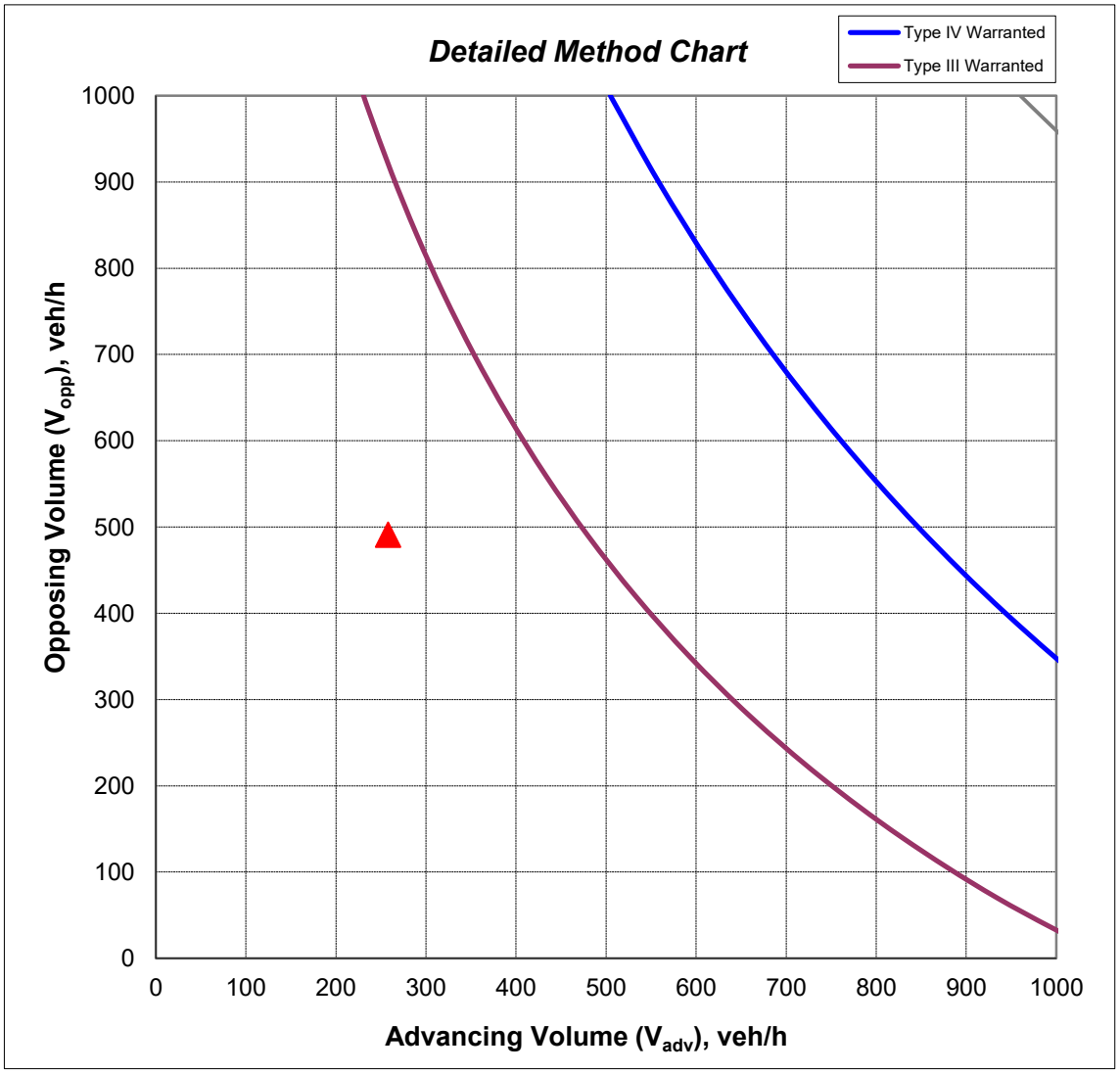
Year of Analysis: 2040 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,818
Minor (intersecting) Road A.A.D.T	54
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	258
Opposing volume (V_{opp}), veh/h:	491
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.4%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

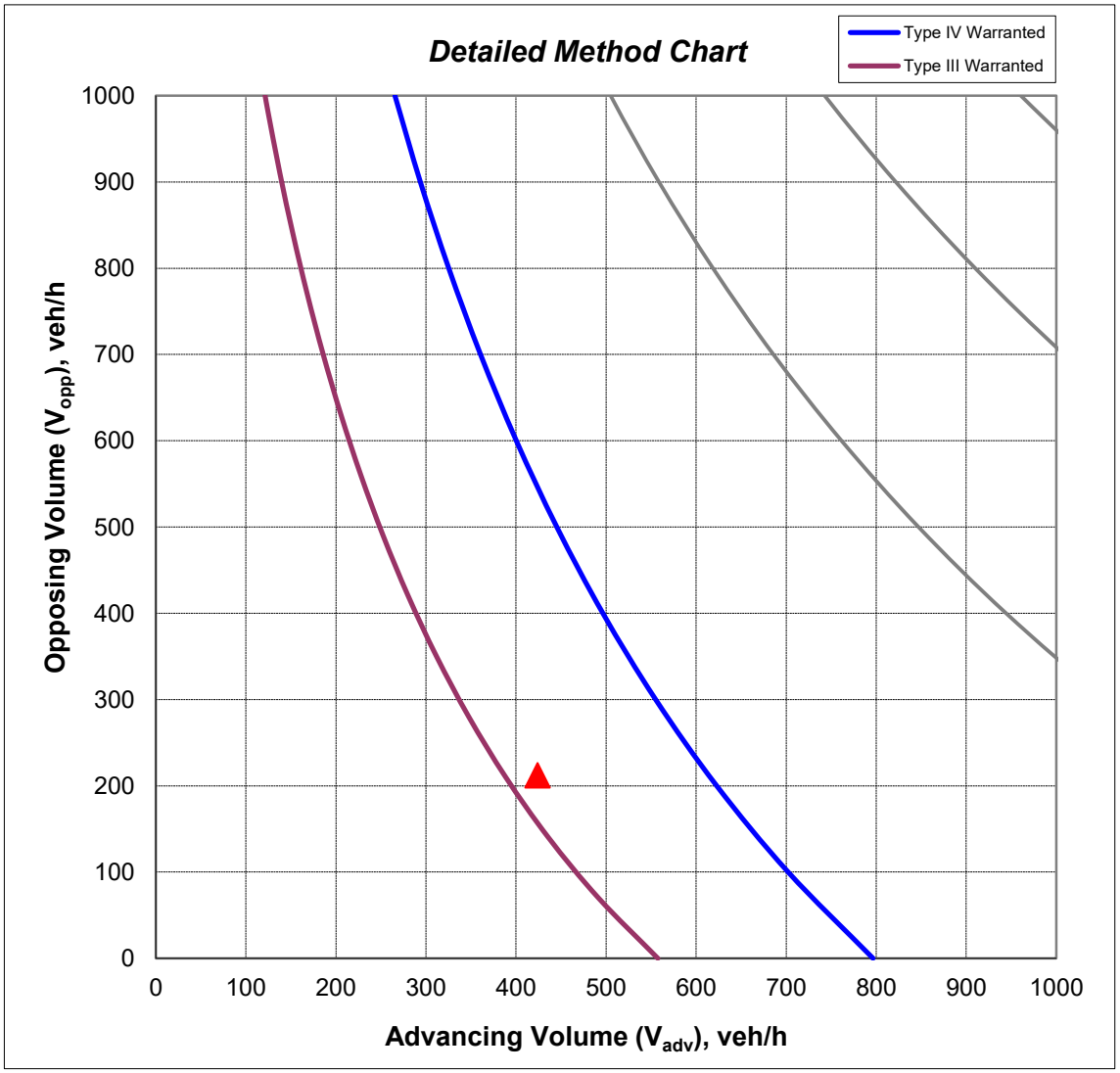
Year of Analysis: 2050 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,091
Minor (intersecting) Road A.A.D.T	73
Left turn volume (V_{LT}), veh/h:	6
Advancing volume (V_{adv}), veh/h:	424
Opposing volume (V_{opp}), veh/h:	212
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	1.4%
Percent trucks in left turn volume:	16.7%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.3%
Calculated conflicts per hour, veh/h:	1.2
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

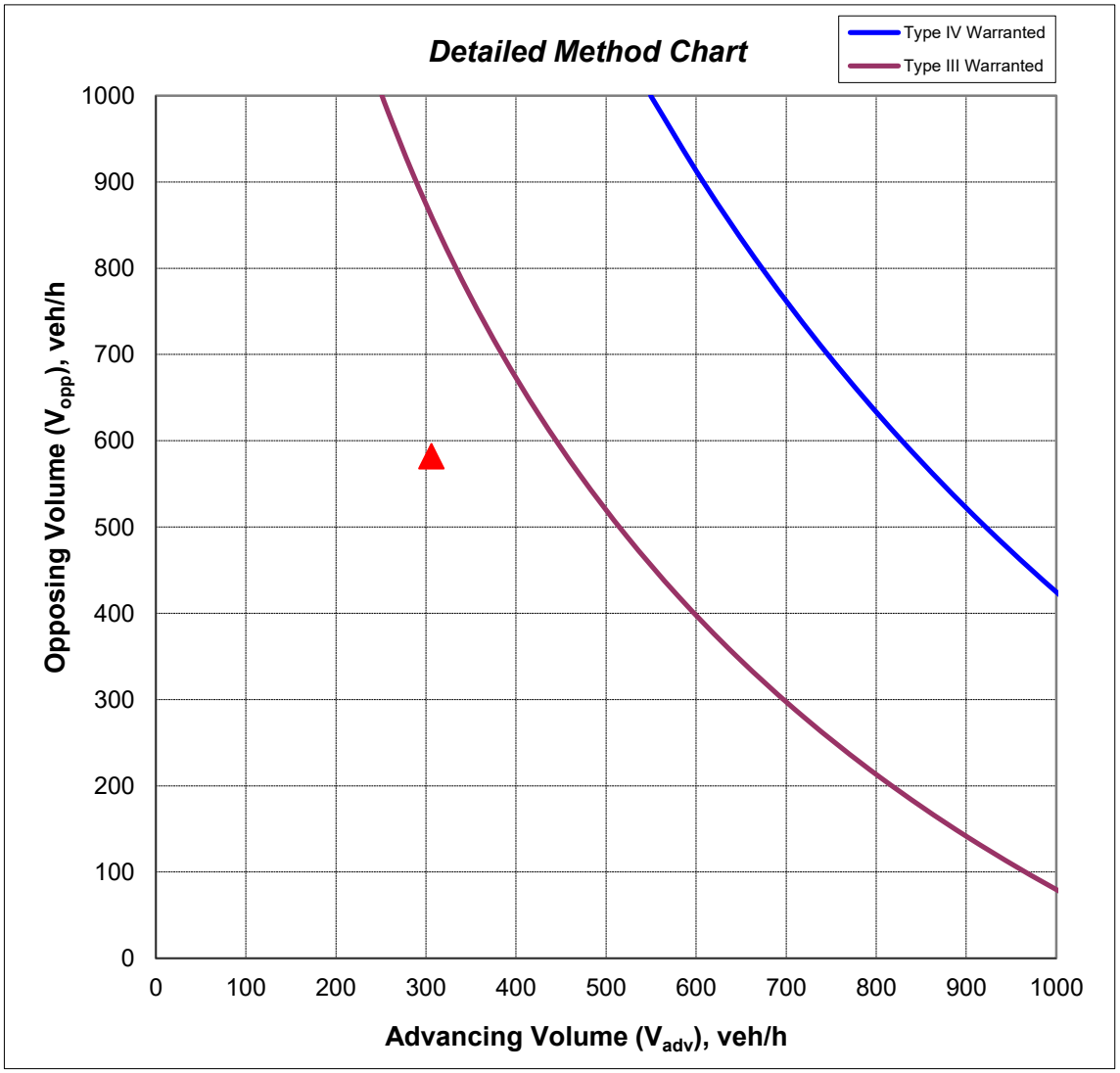
Year of Analysis: 2050 Background
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,091
Minor (intersecting) Road A.A.D.T	73
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	306
Opposing volume (V_{opp}), veh/h:	582
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.3%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.2
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Rainbow Drive

Direction: SB
Period: AM. Peak

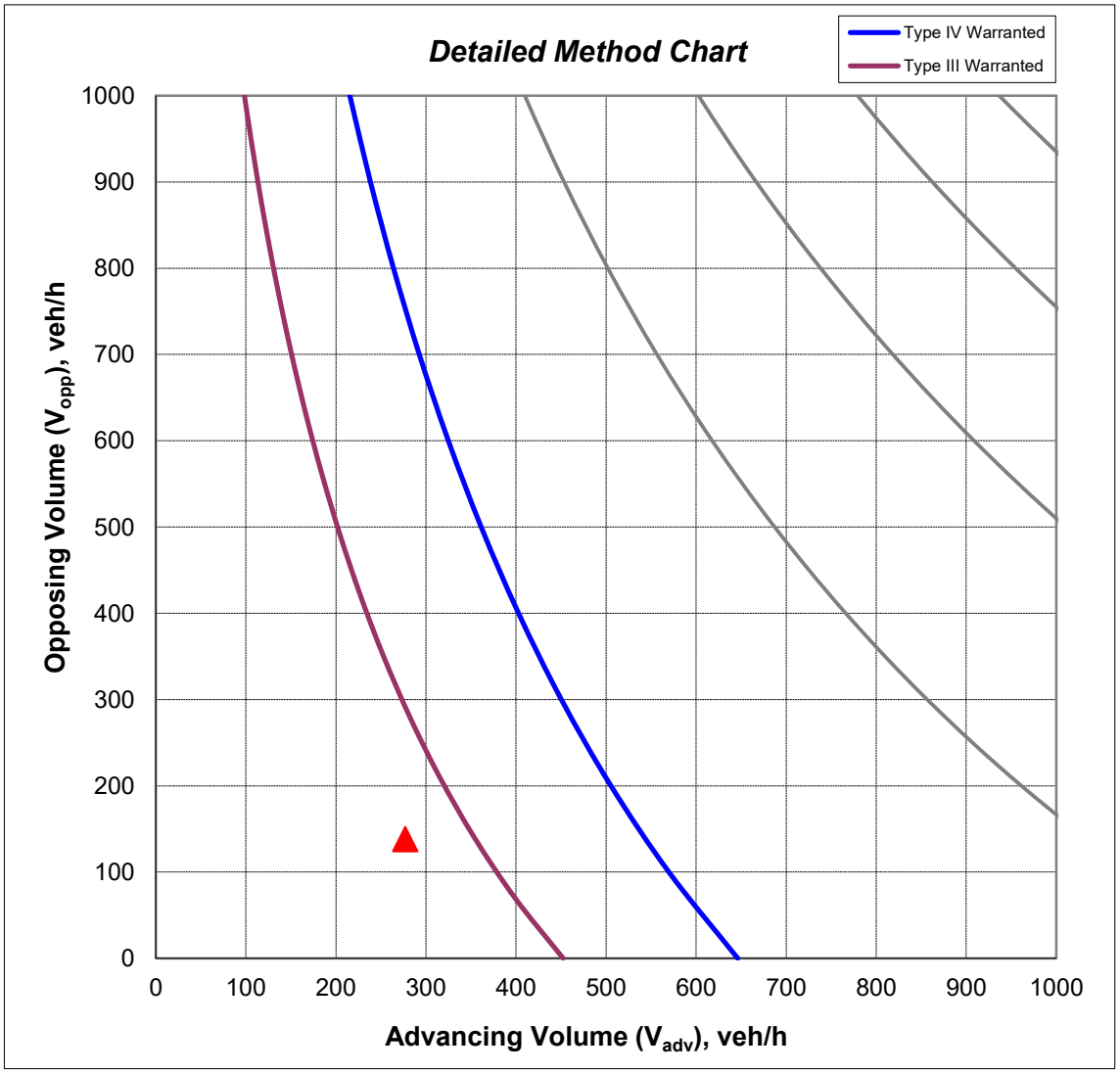
Year of Analysis: 2027 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,236
Minor (intersecting) Road A.A.D.T	82
Left turn volume (V_{LT}), veh/h:	6
Advancing volume (V_{adv}), veh/h:	277
Opposing volume (V_{opp}), veh/h:	138
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	2.2%
Percent trucks in left turn volume:	16.7%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.2%
Calculated conflicts per hour, veh/h:	0.4
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

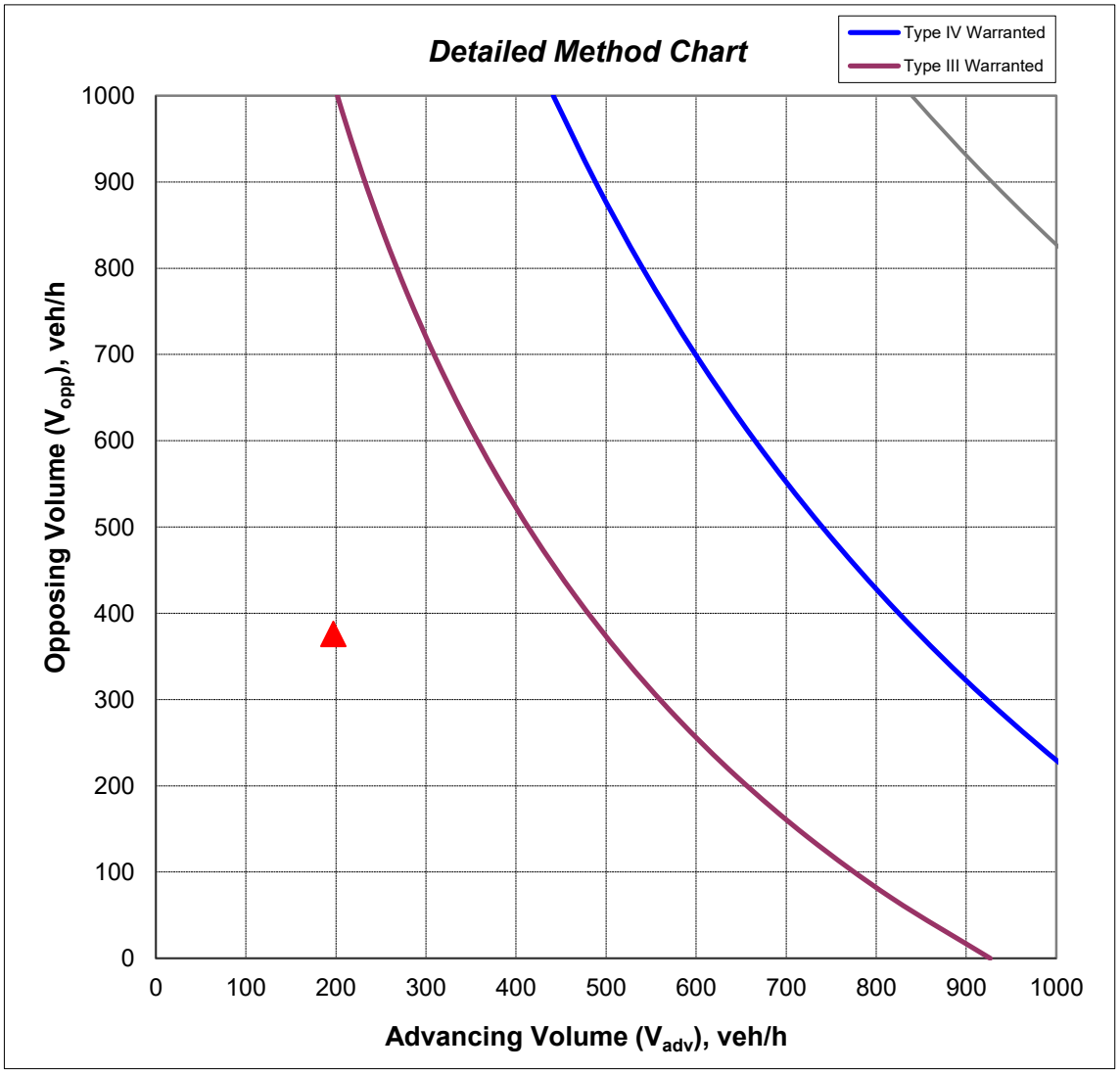
Year of Analysis: 2027 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,236
Minor (intersecting) Road A.A.D.T	82
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	197
Opposing volume (V_{opp}), veh/h:	376
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Type I or Type II	
Detailed Mehod Not Required	
base storage requirement	-
- standard storage length	-
+ additional truck storage	-
= total additional storage required	-

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

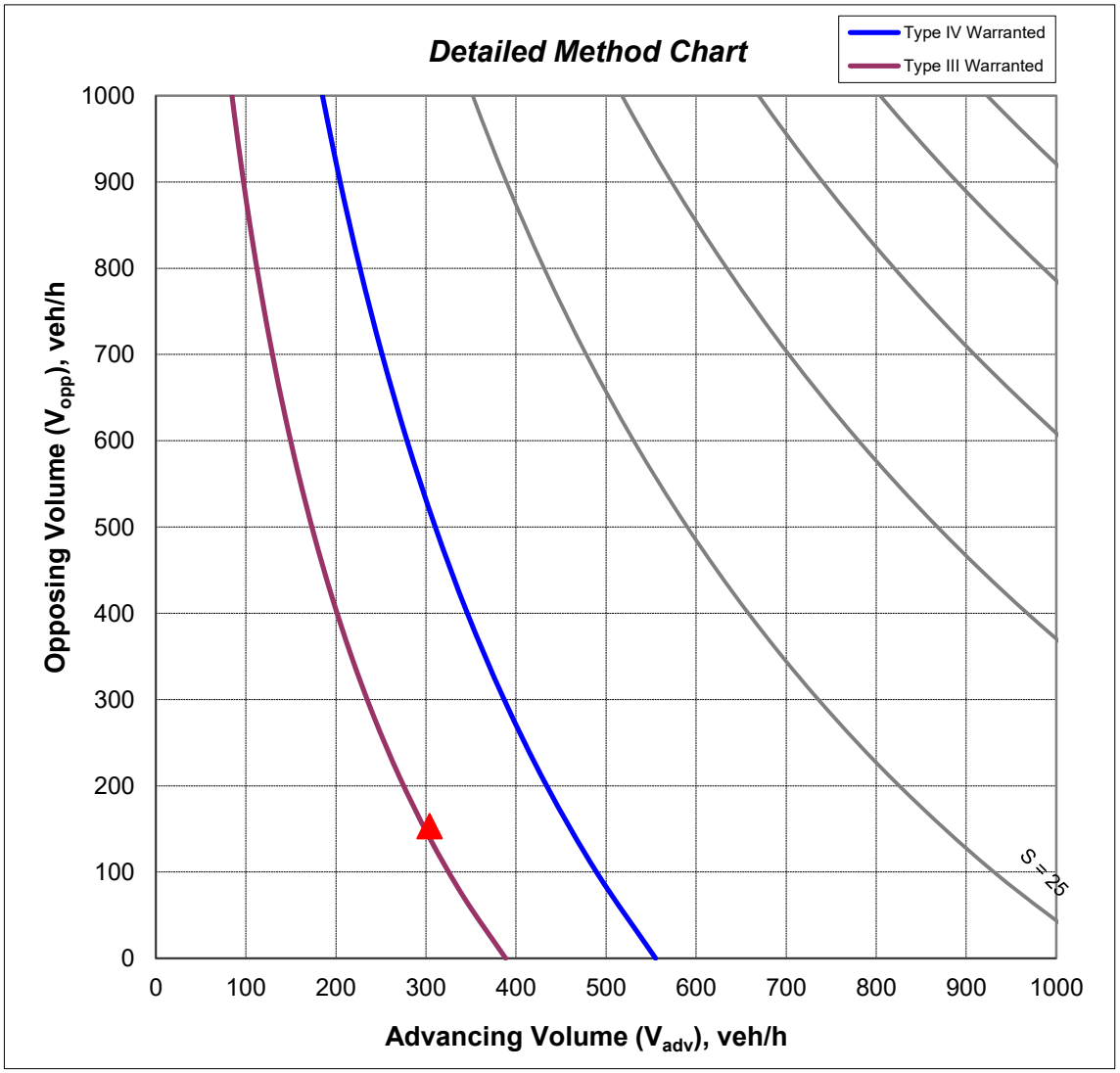
Year of Analysis: 2030 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,700
Minor (intersecting) Road A.A.D.T	155
Left turn volume (V_{LT}), veh/h:	9
Advancing volume (V_{adv}), veh/h:	304
Opposing volume (V_{opp}), veh/h:	153
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	3.0%
Percent trucks in left turn volume:	11.1%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.3%
Calculated conflicts per hour, veh/h:	0.8
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

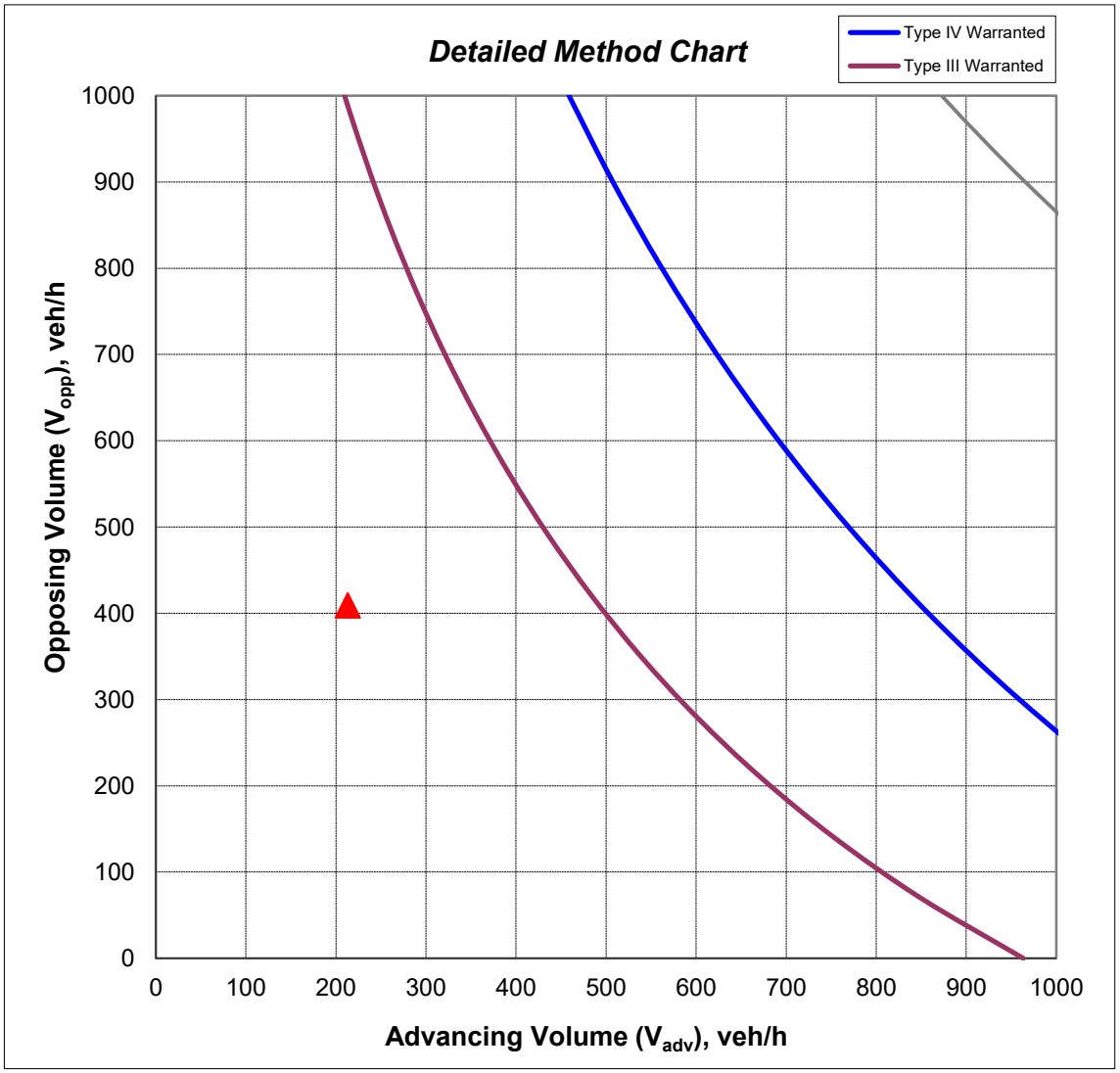
Year of Analysis: 2030 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	5,700
Minor (intersecting) Road A.A.D.T	155
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	213
Opposing volume (V_{opp}), veh/h:	409
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.5%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

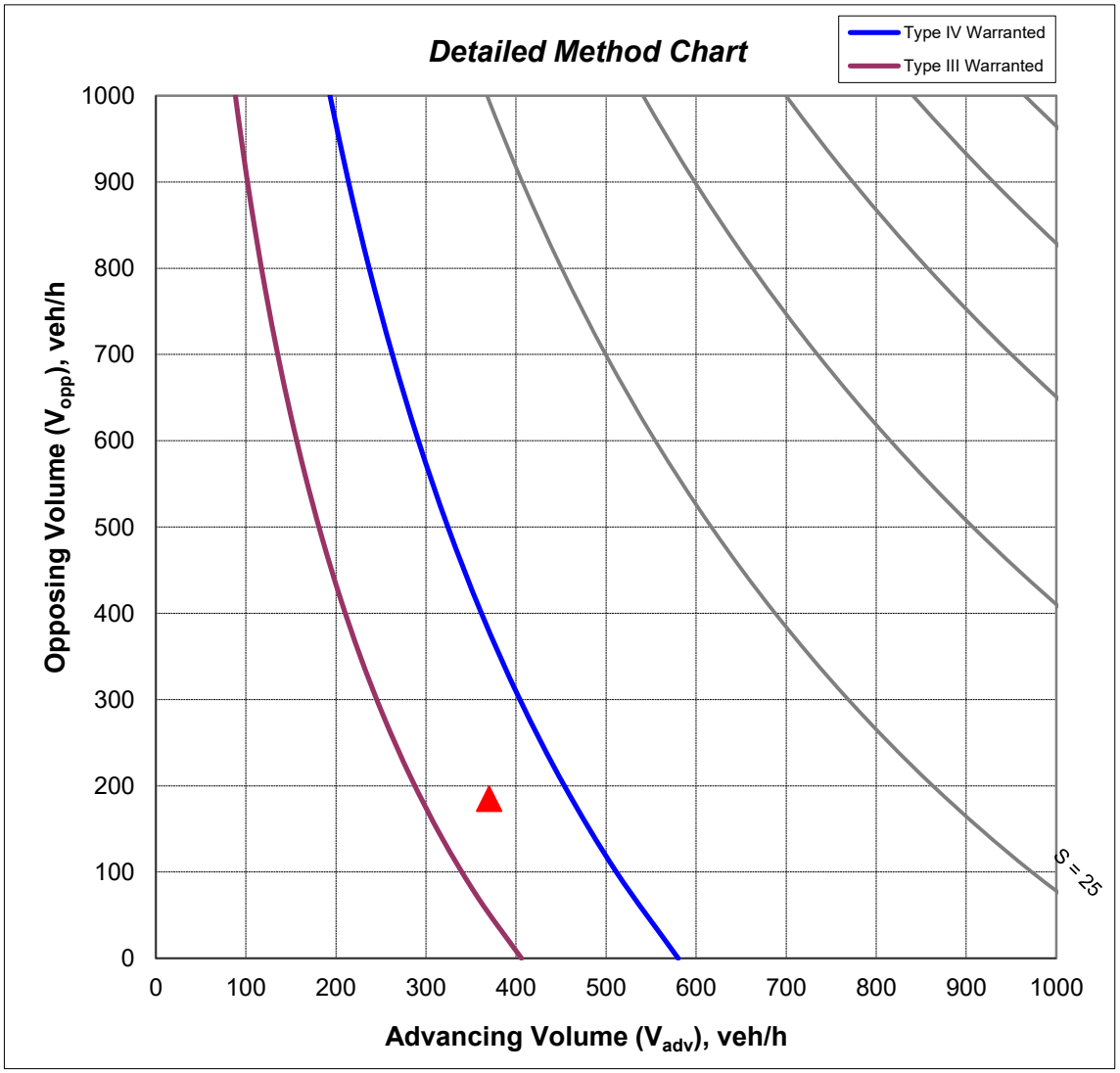
Year of Analysis: 2040 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,964
Minor (intersecting) Road A.A.D.T	164
Left turn volume (V_{LT}), veh/h:	10
Advancing volume (V_{adv}), veh/h:	370
Opposing volume (V_{opp}), veh/h:	185
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	2.7%
Percent trucks in left turn volume:	10.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.4%
Calculated conflicts per hour, veh/h:	1.4
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

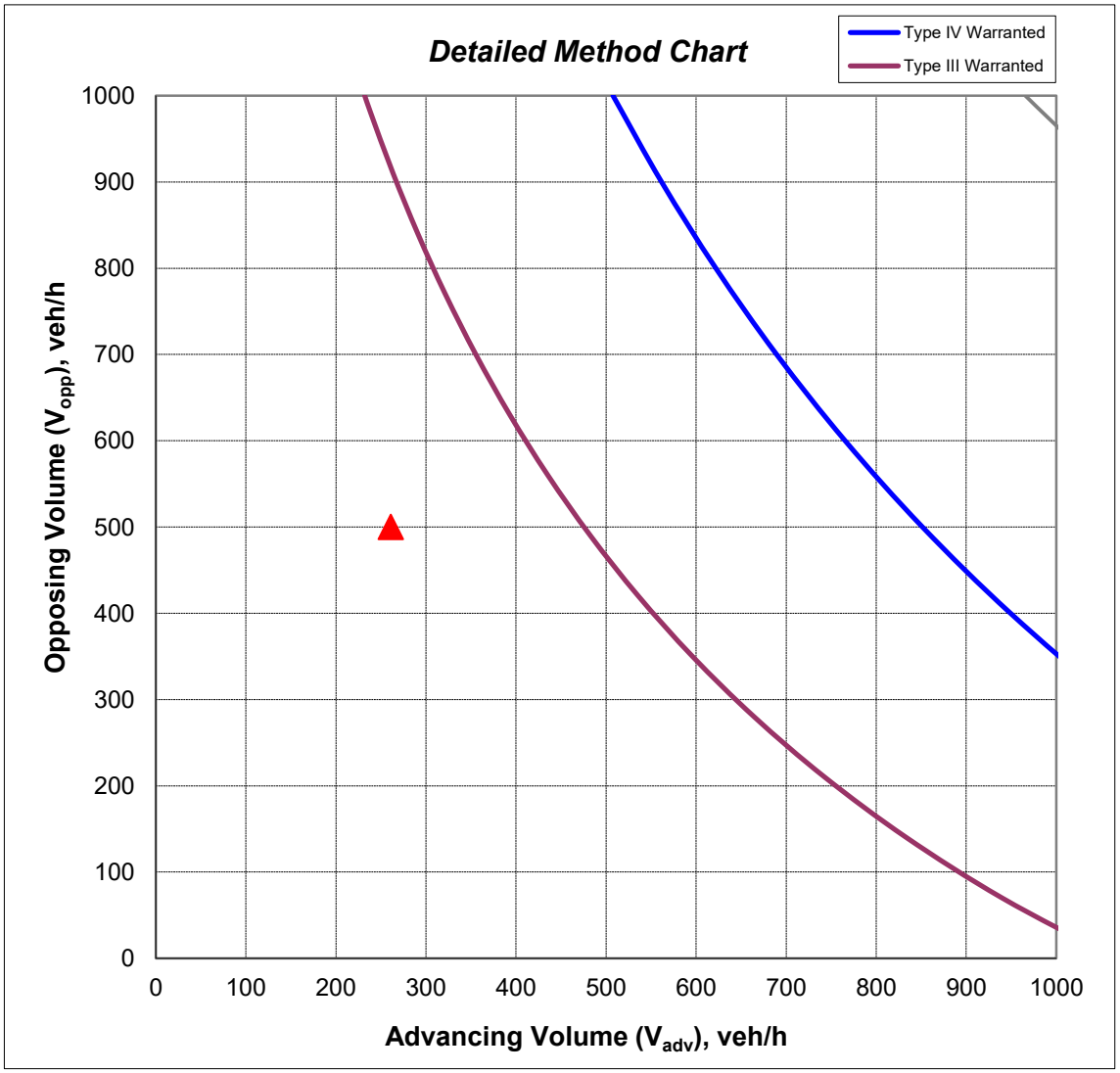
Year of Analysis: 2040 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	6,964
Minor (intersecting) Road A.A.D.T	164
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	261
Opposing volume (V_{opp}), veh/h:	500
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	1

OUTPUT	Value
Percent left-turns in advancing volume:	0.4%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.1
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: AM. Peak

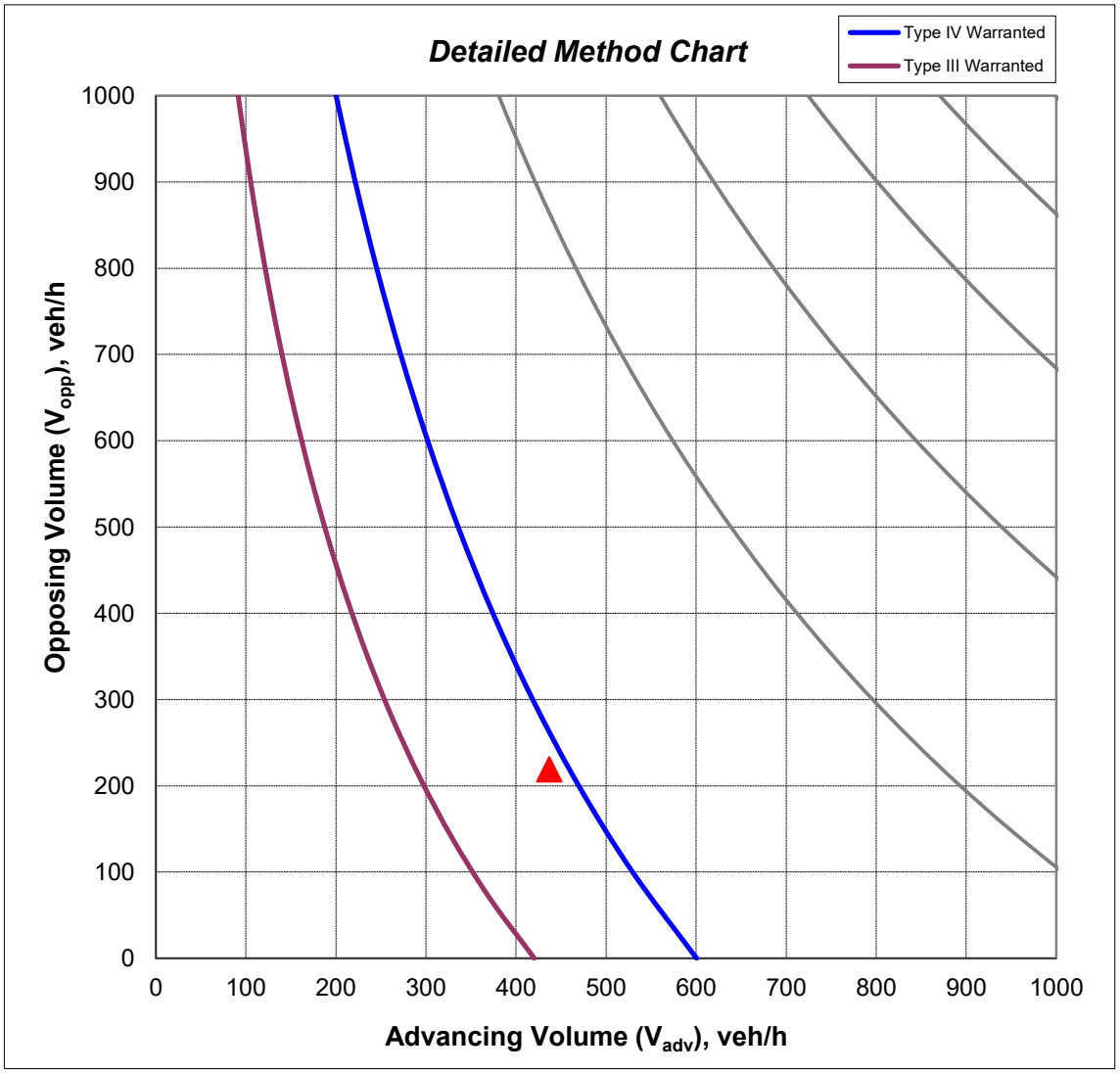
Year of Analysis: 2050 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,237
Minor (intersecting) Road A.A.D.T	182
Left turn volume (V_{LT}), veh/h:	11
Advancing volume (V_{adv}), veh/h:	437
Opposing volume (V_{opp}), veh/h:	219
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	2.5%
Percent trucks in left turn volume:	9.1%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.5%
Calculated conflicts per hour, veh/h:	2.3
Use Detailed Method	
Type III	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transportation
Intersection Analysis
Two-Lane Undivided Highways

Main Rd: Highway 2A
Minor Rd: Township Road 294

Direction: SB
Period: PM. Peak

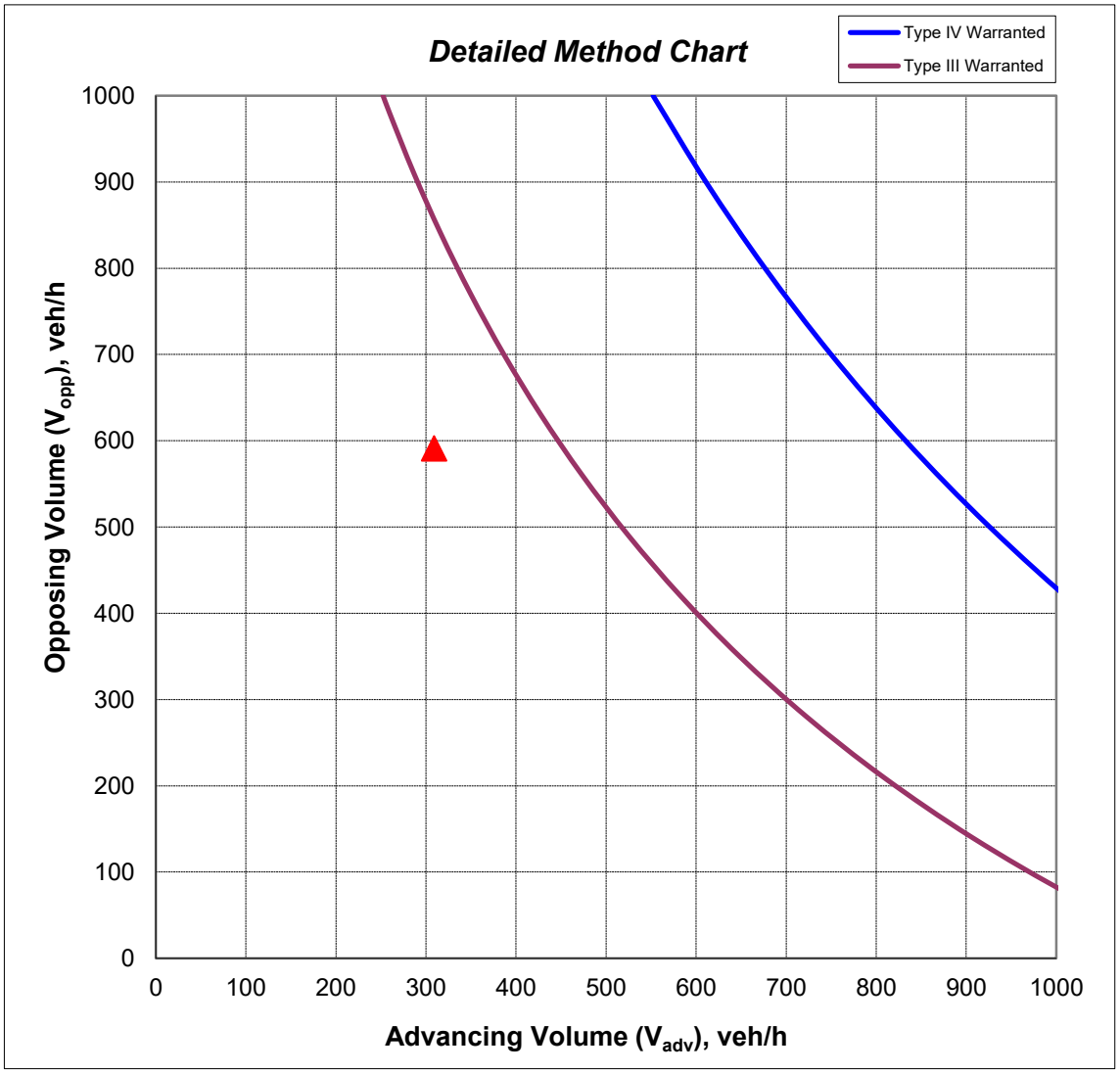
Year of Analysis: 2050 Total
Date of Analysis: 09-Apr-2026

INPUT	Value
85th percentile speed, km/h:	110
Main Road A.A.D.T.	8,237
Minor (intersecting) Road A.A.D.T	182
Left turn volume (V_{LT}), veh/h:	1
Advancing volume (V_{adv}), veh/h:	309
Opposing volume (V_{opp}), veh/h:	591
Left turn truck volume, trucks/h:	1
Right turn volume (V_{RT}), veh/h:	2

OUTPUT	Value
Percent left-turns in advancing volume:	0.3%
Percent trucks in left turn volume:	100.0%
Probability of conflict threshold:	0.58%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.2
Use Detailed Method	
Type II	
Additonal Storage Not Requied	*base storage requirement* -
	- standard storage length -
	+ additional truck storage -
	= total additional storage required -

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



Alberta Transporation - Traffic Signal Warrant Analysis

Main Street (name)	Highway 2A	Direction (EW or NS)	NS
Side Street (name)	Rainbow Drive	Direction (EW or NS)	EW
Quadrant / Int #	1	Comments	2050 Total Traffic
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET		

Road Authority:	Alberta Transporation
City:	Mountain View County
Analysis Date:	2026 Apr 10, Fri
Count Date:	2026 Mar 10, Tue
Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
Highway 2A	NB	1				1		1,000	1
Highway 2A	SB		1				1	1,000	1
Rainbow Drive	WB				1				
Rainbow Drive	EB				1				
Are the Rainbow Drive WB right turns significantly impeded by through movements? (y/n)							n		
Are the Rainbow Drive EB right turns significantly impeded by through movements? (y/n)							n		

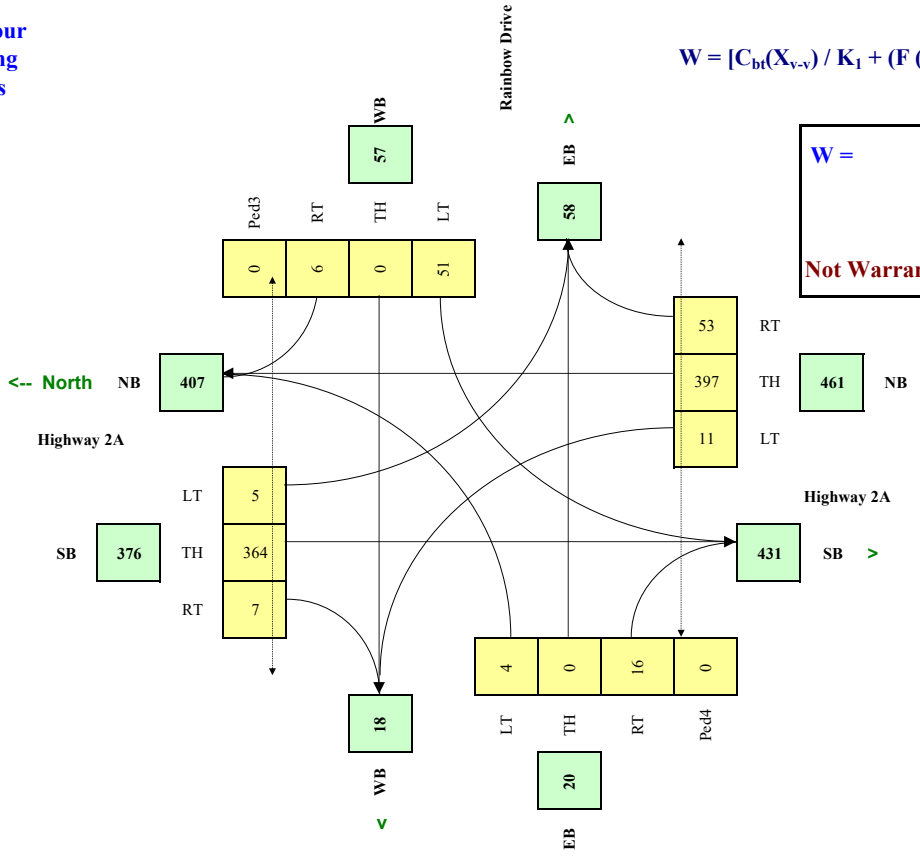
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	1,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
Highway 2A	NS	100	5.0%	n	0.0
Rainbow Drive	EW	50	5.0%	n	0.0

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	19	211	82	8	414	11	26	0	2	3	0	5	0	0	0	0
8:00 - 9:00	19	211	82	8	414	11	26	0	2	3	0	5	0	0	0	0
12:00 - 13:00	19	211	82	8	414	11	26	0	2	3	0	5	0	0	0	0
13:00 - 14:00	3	583	23	2	314	3	75	0	10	5	0	27	0	0	0	0
16:00 - 17:00	3	583	23	2	314	3	75	0	10	5	0	27	0	0	0	0
17:00 - 18:00	3	583	23	2	314	3	75	0	10	5	0	27	0	0	0	0
Total (6-hour peak)	**66**	**2,382**	**315**	**30**	**2,184**	**42**	**303**	**0**	**36**	**24**	**0**	**96**	**0**	**0**	**0**	**0**
Average (6-hour peak)	**11**	**397**	**53**	**5**	**364**	**7**	**51**	**0**	**6**	**4**	**0**	**16**	**0**	**0**	**0**	**0**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	38	38	0
		Veh	*Ped*

Not Warranted - Vs<75

RESET SHEET

Alberta Transporation - Traffic Signal Warrant Analysis

Main Street (name)	Highway 2A	Direction (EW or NS)	NS	Road Authority:	Alberta Transporation
Side Street (name)	Township Road 294	Direction (EW or NS)	EW	City:	Mountain View County
Quadrant / Int #	2	Comments	2050 Total Traffic	Analysis Date:	2026 Apr 10, Fri
for Warrant Calculation Results, please hit 'Page Down'	CHECK SHEET			Count Date:	2026 Mar 10, Tue
				Date Entry Format:	(yyyy-mm-dd)

Lane Configuration		Excl LT	Th & LT	Through	Th+RT+LT	Th & RT	Excl RT	UpStream Signal (m)	# of Thru Lanes
Highway 2A	NB		1				1	1,000	1
Highway 2A	SB		1				1	1,000	1
Township Road 294	WB				1				
Township Road 294	EB				1				
Are the Township Road 294 WB right turns significantly impeded by through movements? (y/n)							n		
Are the Township Road 294 EB right turns significantly impeded by through movements? (y/n)							n		

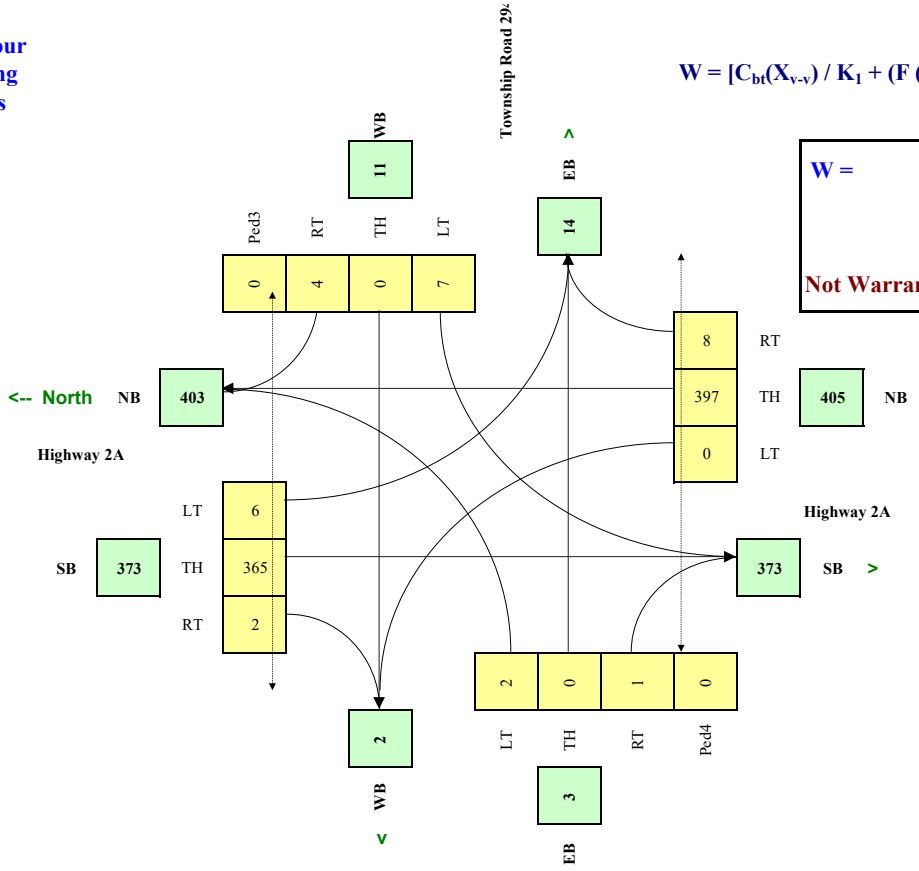
Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	1,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
Highway 2A	NS	100	5.0%	n	0.0
Township Road 294	EW	50	5.0%	n	0.0

Set Peak Hours

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
7:00 - 8:00	0	204	15	11	424	2	3	0	1	3	0	0	0	0	0	0
8:00 - 9:00	0	204	15	11	424	2	3	0	1	3	0	0	0	0	0	0
12:00 - 13:00	0	204	15	11	424	2	3	0	1	3	0	0	0	0	0	0
13:00 - 14:00	0	590	1	1	306	2	11	0	7	0	0	2	0	0	0	0
16:00 - 17:00	0	590	1	1	306	2	11	0	7	0	0	2	0	0	0	0
17:00 - 18:00	0	590	1	1	306	2	11	0	7	0	0	2	0	0	0	0
Total (6-hour peak)	**0**	**2,382**	**48**	**36**	**2,190**	**12**	**42**	**0**	**24**	**9**	**0**	**6**	**0**	**0**	**0**	**0**
Average (6-hour peak)	**0**	**397**	**8**	**6**	**365**	**2**	**7**	**0**	**4**	**2**	**0**	**1**	**0**	**0**	**0**	**0**

Average 6-hour Peak Turning Movements



$$W = [C_{bt}(X_{v\text{-}v}) / K_1 + (F\,(X_{v\text{-}p})\,L) / K_2] \times C_i$$

W =	8	8	0
		Veh	*Ped*

Not Warranted - Vs<75

RESET SHEET

Appendix D

Illumination Warrant Analysis

Illumination of Isolated Rural Intersections
LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections* , Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

INTERSECTION CHARACTERISTICS

Highway 2A	Main Road	**Date**	April 10, 2026
Rainbow Drive	Minor Road	**Other**	Traffic Count Performed March 10, 2026
Alberta Transportation	City/Town		2050 Combined Traffic Scenario
			k=0.11

GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? (Y / N)	n				OK	
Highest operating speed on raised, channelized approach (km/h)	0		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	100				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =	B	0				
Posted Speed Category =		0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	2.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	4	2	3	Number of legs = 3 or more	OK	6
				Geometric Factors Subtotal		**6**

OPERATIONAL FACTORS

Is the intersection signalized ? (Y/ N)	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	8336	4	10	Either Use the two AADT inputs **OR** the Descriptive Signalization	OK	40
AADT on Minor Road (2-way)	1000	2	20	Warrant (Unused values should be set to Zero) Refer to Table	OK	40
Signalization Warrant	Descriptive	0	30	1(B) for description and rating values for signalization warrant.	OK	0
					OK	
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	2	5	Refer to Table 1(B) for ratings.	OK	10
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	50	0	5	Refer to Table 1(B), note #3	OK	0
				Operational Factors Subtotal		**110**

ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	0	0	5	Maximum of 4 quadrants	OK	0
				Environmental Factor Subtotal		**0**

COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole #)	0.0	0	0	Enter **either** the annual frequency (See Table 1(C), note #4)	OK	0
OR				**OR** the number of collisions / MEV		
Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0	(Unused values should be set to Zero)	OK	0
Is the average ratio of **all** night to day collisions >= 1.5 (Y/N)	N	0			OK	
					OK	
				Collision History Subtotal		**0**

Check Intersection Signalization:
Intersection is not Signalized

LIGHTING IS NOT WARRANTED

SUMMARY

Geometric Factors Subtotal	6
Operational Factor Subtotal	110
Environmental Factor Subtotal	0
Collision History Subtotal	0
TOTAL POINTS	**116**

Illumination of Isolated Rural Intersections
LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections* , Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

INTERSECTION CHARACTERISTICS

Highway 2A	Main Road	**Date**	April 10, 2026
Township Road 294	Minor Road	**Other**	Traffic Count Performed March 10, 2026
Alberta Transportation	City/Town		2050 Combined Traffic Scenario
			k=0.11

GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? (Y / N)	n				OK	
Highest operating speed on raised, channelized approach (km/h)	0		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	100				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =	B	0				
Posted Speed Category =		0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	2.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	4	2	3	Number of legs = 3 or more	OK	6
				Geometric Factors Subtotal		**6**

OPERATIONAL FACTORS

Is the intersection signalized ? (Y/ N)	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	8237	4	10	Either Use the two AADT inputs **OR** the Descriptive Signalization	OK	40
AADT on Minor Road (2-way)	182	0	20	Warrant (Unused values should be set to Zero) Refer to Table	OK	0
Signalization Warrant	Descriptive	0	30	1(B) for description and rating values for signalization warrant.	OK	0
					OK	
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	2	5	Refer to Table 1(B) for ratings.	OK	10
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	50	0	5	Refer to Table 1(B), note #3	OK	0
				Operational Factors Subtotal		**70**

ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	0	0	5	Maximum of 4 quadrants	OK	0
				Environmental Factor Subtotal		**0**

COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole #)	0.0	0	0	Enter **either** the annual frequency (See Table 1(C), note #4)	OK	0
OR				**OR** the number of collisions / MEV		
Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0	(Unused values should be set to Zero)	OK	0
Is the average ratio of **all** night to day collisions >= 1.5 (Y/N)	N	0			OK	
					OK	
				Collision History Subtotal		**0**

Check Intersection Signalization:
Intersection is not Signalized

LIGHTING IS NOT WARRANTED

SUMMARY

Geometric Factors Subtotal	6
Operational Factor Subtotal	70
Environmental Factor Subtotal	0
Collision History Subtotal	0
TOTAL POINTS	**76**