

Traffic Impact Study

7564 Tenth Line, Proposed Data Center Development

September 2026 | Project # 100658

Prologis

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TYLin

Project Sheet

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1 INTRODUCTION

1.1 Scope and Objective

T.Y. Lin International Canada Inc. (TYLin) was retained by Prologis to complete a Traffic Impact Study (TIS) in support of the proposed industrial (data center) development at 7564 Tenth Line West in the City of Mississauga, within the Region of Peel. The proposed development consists of a one building data center with a GFA of 21,217 m^2. This report provides an update of TYLin's July 16, 2026 submission and address comments received, which have been detailed in **Appendix A** with corresponding responses.

The purpose of this study is to evaluate the potential transportation impacts associated with the proposed Data Centre development on lands that were previously contemplated as part of a larger development block but are now being advanced independently due to a planned severance of the parcel between the data center and the two industrial buildings. This Transportation Impact Study (TIS) focuses exclusively on the Data Centre component of the site. All trip generation estimates, traffic forecasts, and operational assessments presented herein are based solely on the proposed Data Centre land use. The specific objectives of this study are to:

- Determine the anticipated traffic volumes generated by the proposed development during the weekday AM and PM peak periods.
- Assess the impacts of the site-generated traffic on the existing and future roadway network for the 2032 and 2037 horizon years.
- Confirm that the site plan, access configuration, and on-site circulation meet the applicable City of Mississauga and Region of Peel standards, as well as the Transportation Association of Canada (TAC) guidelines, including:
    - AutoTURN vehicle maneuvering analysis for passenger vehicles, emergency service vehicles, waste collection vehicles, and WB-20 tractor-semitrailers.
- Review of access location, width, curb radii, corner clearance, intersection spacing, intersection angle and sightline assessment at key internal intersections in accordance with municipal and Transportation Association of Canada (TAC) guidelines.
- Prepare a Transportation Demand Management (TDM) Plan in alignment with the City of Mississauga's sustainable transportation objectives.
- Conduct a parking and loading review to confirm that site provisions meet the City's Zoning By-law requirements.

TYLin's detailed scope of work submitted for review and comment to the:

- City of Mississauga,

- Region of Peel, and
- Ontario Ministry of Transportation (MTO).

Approved pre-consultation checklist and the City of Mississauga's certification form are provided in **Appendix A:.**

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2 SITE CHARACTERISTICS

2.1 Study Environment

The subject site is located within the City of Mississauga, the Region of Peel, on the southwest side of Tenth Line West, northeast of Ninth Line, north of Argentia Road, and south of Highways 401 and 407. The latest iteration of the site plan includes the data center with total ground floor area (GFA) of 21,217 m^2.

The site plan will include one access from Tenth Line West entering directly to the Data Centre. A total of 45 parking spaces are proposed, including 4 accessible spaces and 4 electric vehicle (EV) spaces. The proposed development site and surrounding road network are illustrated in **Figure 2-1**. The vehicles entering and exiting the industrial buildings will use the south access on Argentia Road.

Figure 2-1 Site Location



Source: Google Earth

2.2 Development Context

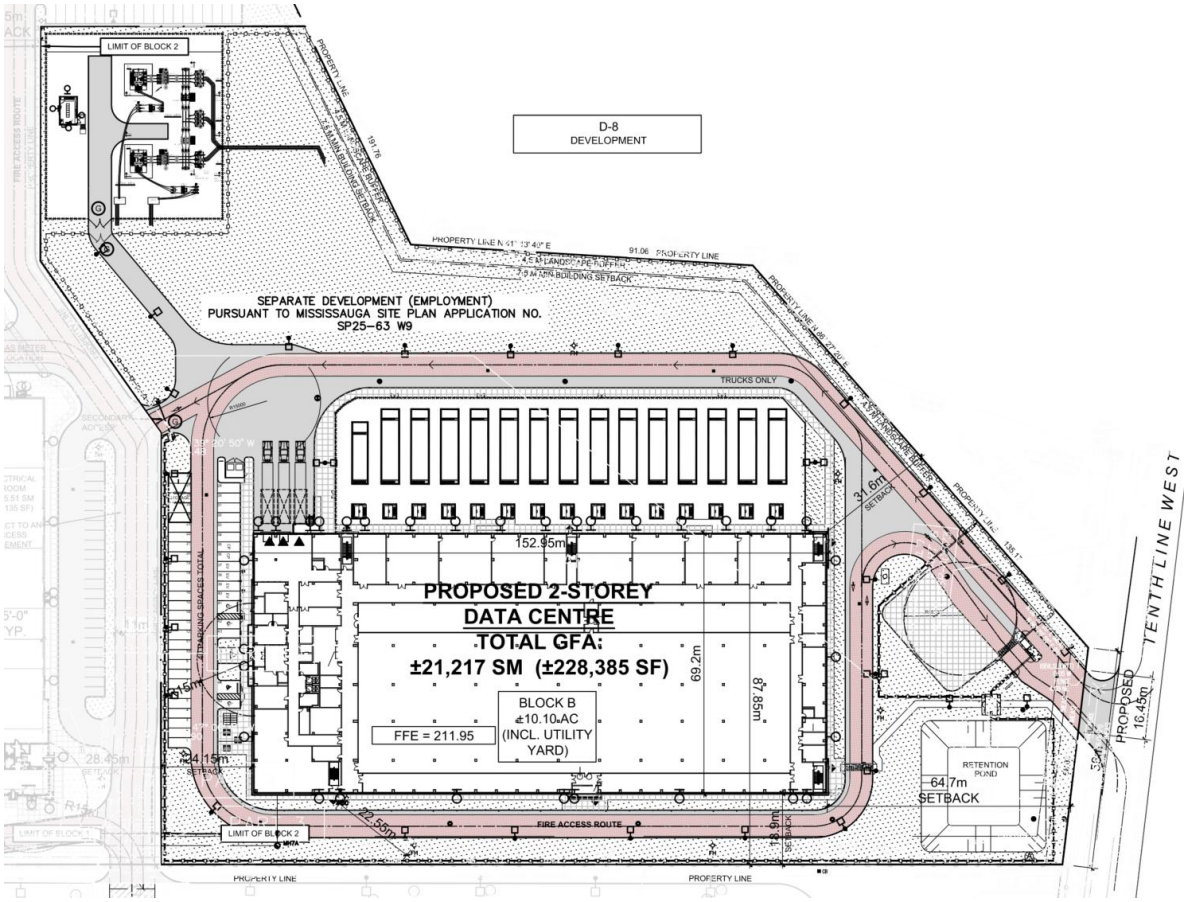
The proposed Data Centre forms part of a larger development block that also includes a proposed warehouse development adjacent to the Data Centre. The overall lands were previously considered as a single development parcel; however, the Data Centre and warehouse components are now being advanced independently as part of a planned severance.

The proposed Data Centre has a total site area of 40,874.40 m^2, with a building gross floor area of 21,217 m^2 (10,608.50 m^2 per floor over two floors). Access to the Data Centre will be provided from Tenth Line West. The adjacent warehouse development will be served by the southern site access on Argentia Road.

For the purposes of this Traffic Impact Study, the Data Centre is assessed as the subject development, while traffic associated with the adjacent warehouse development is included as background traffic, as described further in Section 4.2.

The proposed draft site plan, showing the development layout and access points, is illustrated in **Figure 2-2**. The full site plan is provided in **Appendix B**.

Figure 2-2 Site Plan



2.3 Study Area Intersections

The following intersections have been included in the study area:

Existing Intersections

- Winston Churchill Boulevard and Highway 401 Eastbound Ramp Terminal (Signalized)
- Winston Churchill Boulevard and Highway 401 Westbound Ramp Terminal (Signalized)
- Winston Churchill Boulevard and Argentia Road (Signalized)
- Derry Road and Highway 407 Northbound Ramp Terminal (Signalized)
- Derry Road and Highway 407 Southbound Ramp Terminal (Signalized)
- Ninth Line and Derry Road (Signalized)
- Tenth Line West and Argentia Road (Signalized)
- Ninth Line and Argentia Road (Signalized)

Future Intersections

- Tenth line West and North Site Access (Unsignalized)
- Argentia Road and South Site Access (Unsignalized)

3 EXISTING CONDITIONS

3.1 Road Network

The following describes the existing road network within the study area.

- **Argentia Road** is a major collector road under the jurisdiction of the City of Mississauga. Within the study area, it has a three-lane cross section consisting of one travel lane in each direction and a continuous centre two-way left-turn lane between the intersections of Argentia Rd and Ninth Line and Argentia Rd and Tenth Line West. The roadway includes dedicated bike lanes on both sides, sidewalks on both sides, and has a posted speed limit of 60 km/h.

- **Tenth Line West** is a north-south major collector road under the jurisdiction of the City of Mississauga. North of the Argentia Road intersection, it ends at a cul-de-sac at Highway 401. Within this area (North of Argentia Road), Tenth Line West is a two-lane undivided roadway with no posted speed limit. According to the Ontario Highway Traffic Act, the default speed limit of 50 km/h applies where no speed limit is posted. There are no sidewalks, bike lanes, or shoulders in this section. South of Argentia Road, Tenth Line West transitions to a two-lane undivided roadway with sidewalks and bike lanes on both sides. The posted speed limit in this section is 50 km/h

- **Ninth Line** is a north-south arterial road under the jurisdiction of the City of Mississauga. Within the study area, it has a two-lane undivided cross-section including unpaved shoulders and no sidewalks or bike lanes. The roadway has a posted speed limit of 60 km/h near its intersection with Argentia Road.

- **Derry Road West** is an east-west arterial road under the jurisdiction of Peel Region and designated as Regional Road 5. Multi-use trail facilities are present along portions of Derry Road West, with the side and limits varying by segments. The posted speed limit along Derry Road West is 60 kilometers per hour.

- **Winston Churchill Boulevard** is an arterial road under the jurisdiction of Peel Region and designated as Regional Road 19. It is a six-lane roadway with a posted speed limit of 60 kilometers per hour. Within the study area, it has a center median to separate opposing traffic.

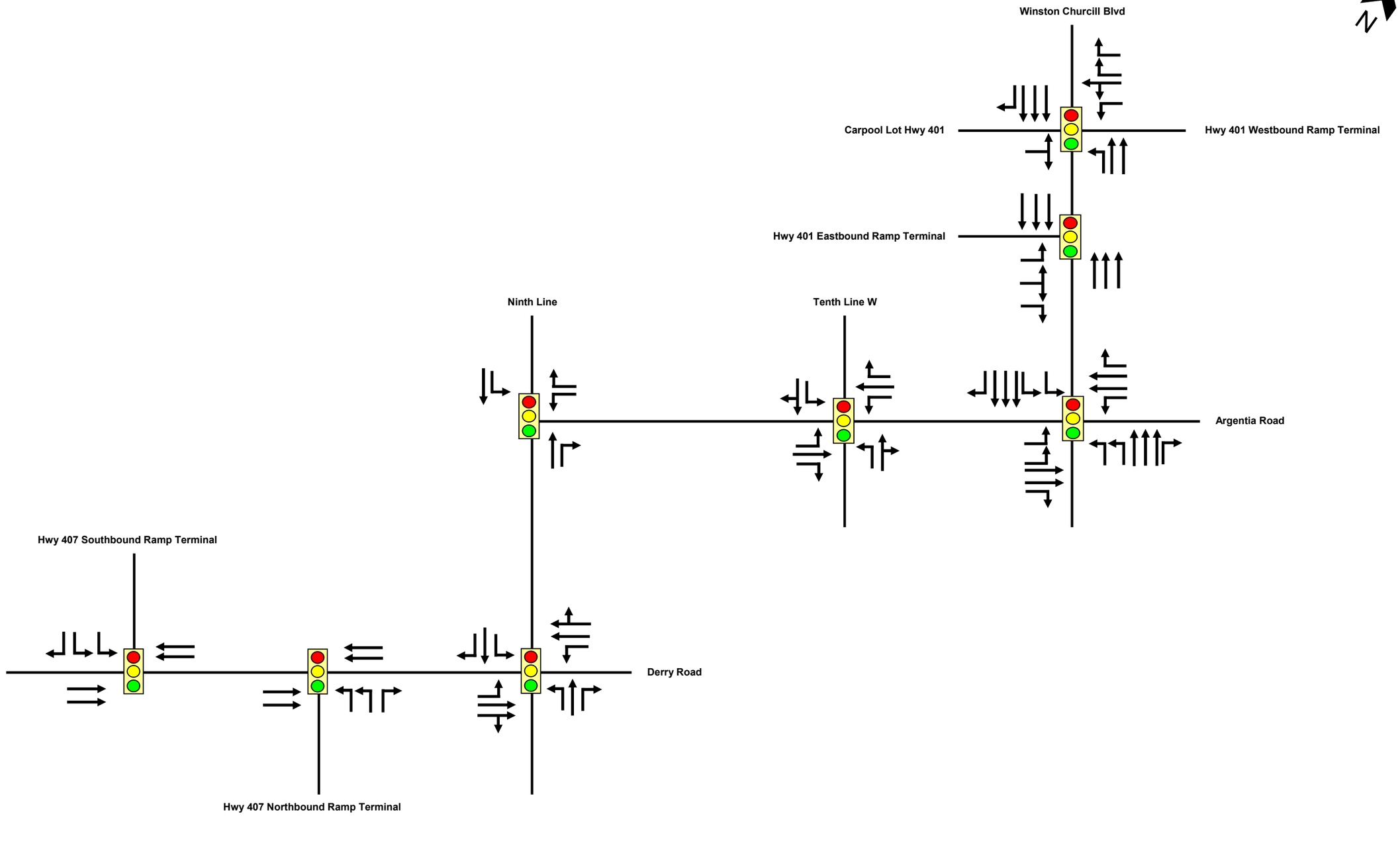
- **Highway 401** is a provincial freeway under the jurisdiction of the Ministry of Transportation

of Ontario (MTO). Within the study area, there are on-ramps from Winston Churchill Boulevard providing access to eastbound and westbound Highway 401. Additionally, there are off-ramps from eastbound and westbound Highway 401, connecting to Winston Churchill Boulevard.

- **Highway 407** is a privately tolled highway under the jurisdiction of 407 ETR Concession Company Limited. Within the study area, there are on-ramps from Derry Road providing access to eastbound and westbound Highway 407, and two on-ramps providing access to southbound Highway 407. Additionally, there are off-ramps from eastbound and westbound Highway 407, providing access to Derry Road.

Existing conditions lane configuration diagram is provided in **Figure 3-1**.

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Signalized Intersection

Lane

Figure 3-1

Existing Lane Configuration

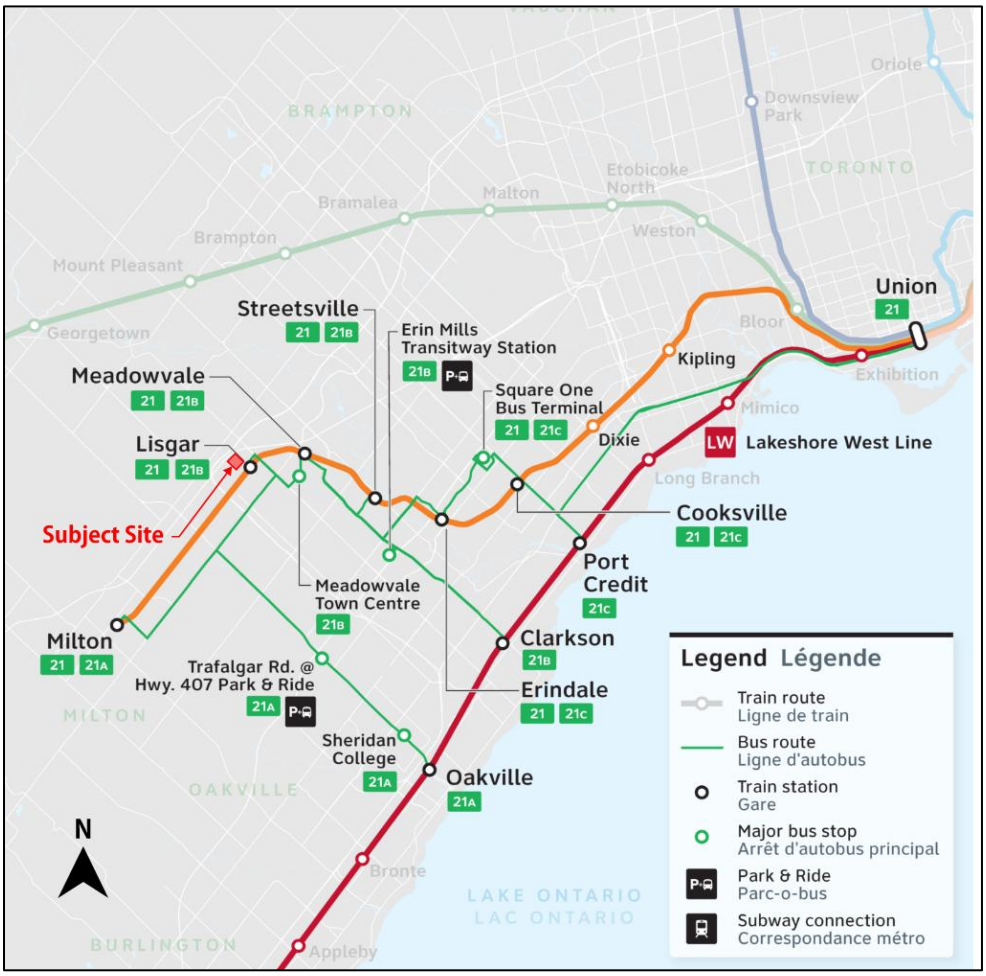
3.2 Transit Network

The subject site is served by GO Regional Rail and Bus transit, Mississauga's MiWay Bus Transit, Brampton Transit Route, and Milton Transit. With many options within a 1 km distance from the proposed site, transit becomes a viable option for people travelling to and from the site.

3.2.1 GO Regional Transit

The closest GO Station to the site is Lisgar GO Station, located at 3250 Argentia Road, which is about 500 meters from the subject site. The station provides access to GO transit, Milton, MiWay and Brampton Transit routes. GO routes from the Lisgar GO station are shown in **Figure 3-2**.

Figure 3-2 GO Transit Network

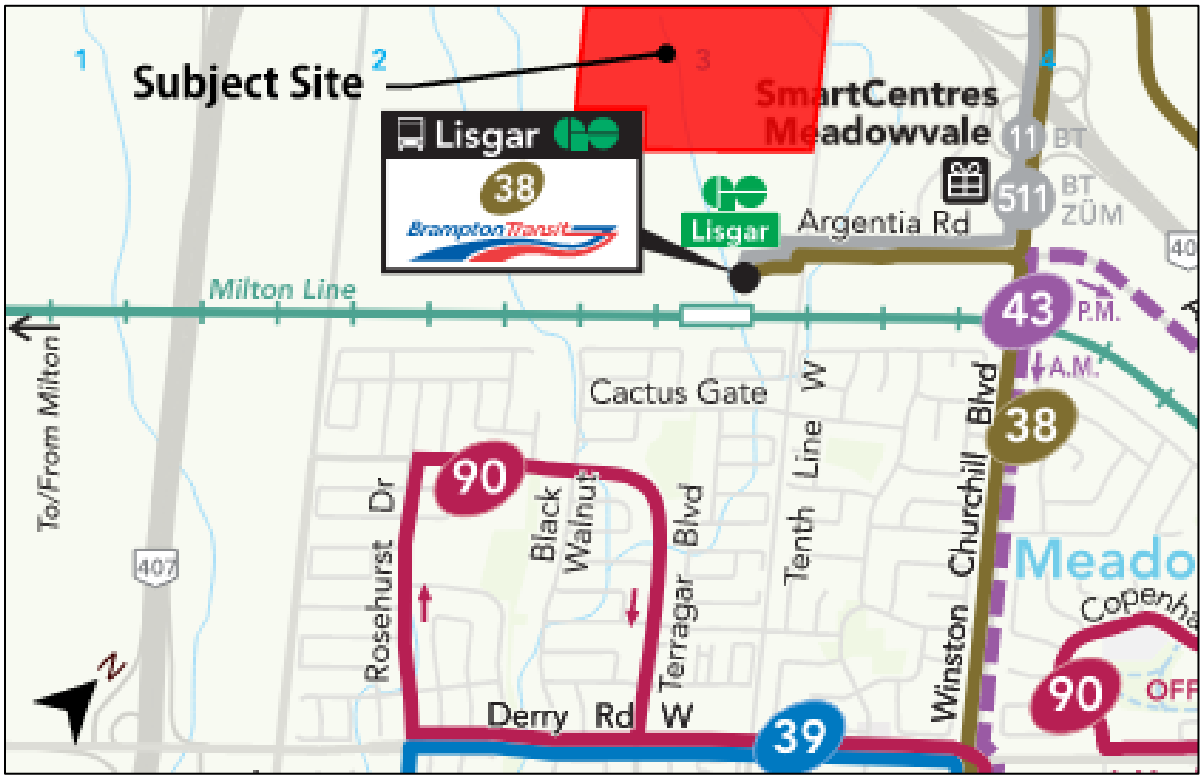


3.2.2 MiWay (Mississauga) Transit

Within the study area, MiWay service is provided by Route 38 Creditview and Route 43 Matheson.

- **MiWay Route 38 (Creditview)** connects Cooksville GO station in the south to Meadowvale Town Centre in the north. The route operates with 30 minute headways on weekdays and Saturdays and 1 hour headways on Sundays. Within the study area, the route has stops along Winston Churchill Boulevard and Argentia Road.
- **MiWay Route 43 (Matheson)** operates Monday to Friday during peak periods with about 40 minute headways. The route operates northbound during the AM peak from Commerce Boulevard/Renforth Station to Meadowvale Town Centre and southbound during the PM peak from Meadowvale Town Centre to Commerce Boulevard/Renforth Station, travelling via Winston Churchill Boulevard and Argentia Road.

Figure 3-3 MiWay Transit Route Near Site



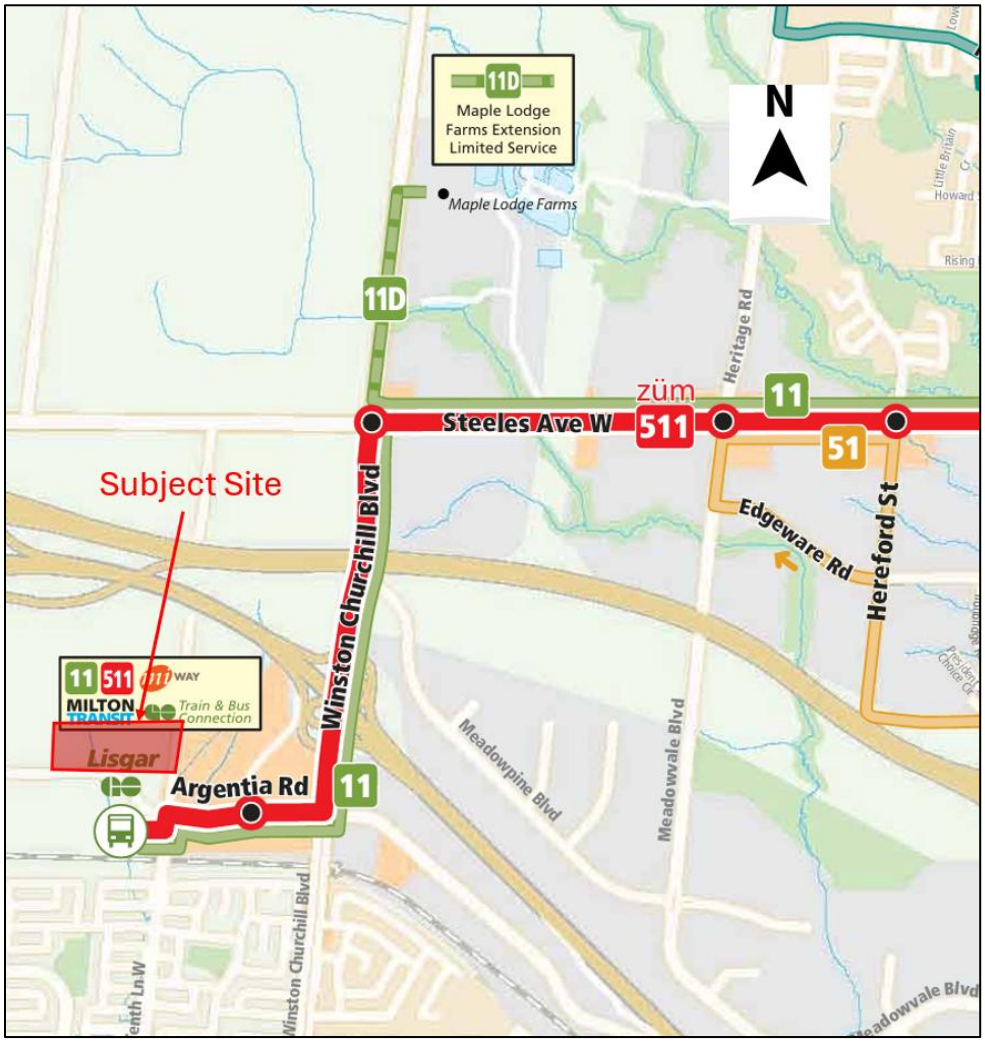
Source: MiWay System Maps

3.2.3 Brampton Transit Route

Within the study area, Brampton Transit service is provided by Route 511 Züm Steeles and Route 11 Steeles. These routes provide connections to Lisgar GO Station and operate primarily along the Steeles Avenue corridor, with connections toward Sheridan College, Brampton Gateway Terminal, and Humber Polytechnic.

- **Route 511 Züm Steeles** operates Monday to Sunday and connects Lisgar GO station in the west and Humber College in the east via Steeles Avenue. It operates at 15 to 20-minute frequency on weekdays and weekends. Within the study area, the route serves one stop along Argentia Road.
- **Route 11 Steeles** operates Monday to Sunday and connects Lisgar GO station in the west and Humber College in the east via Steeles Avenue. It operates at 20 to 45-minute frequencies on weekdays and 40 to 55-minute frequencies on weekends.. Within the study area, the route has stops along Argentia Road and Winston Churchill Boulevard.

Figure 3-4 Brampton Transit Route Near Site



Source: Brampton Transit

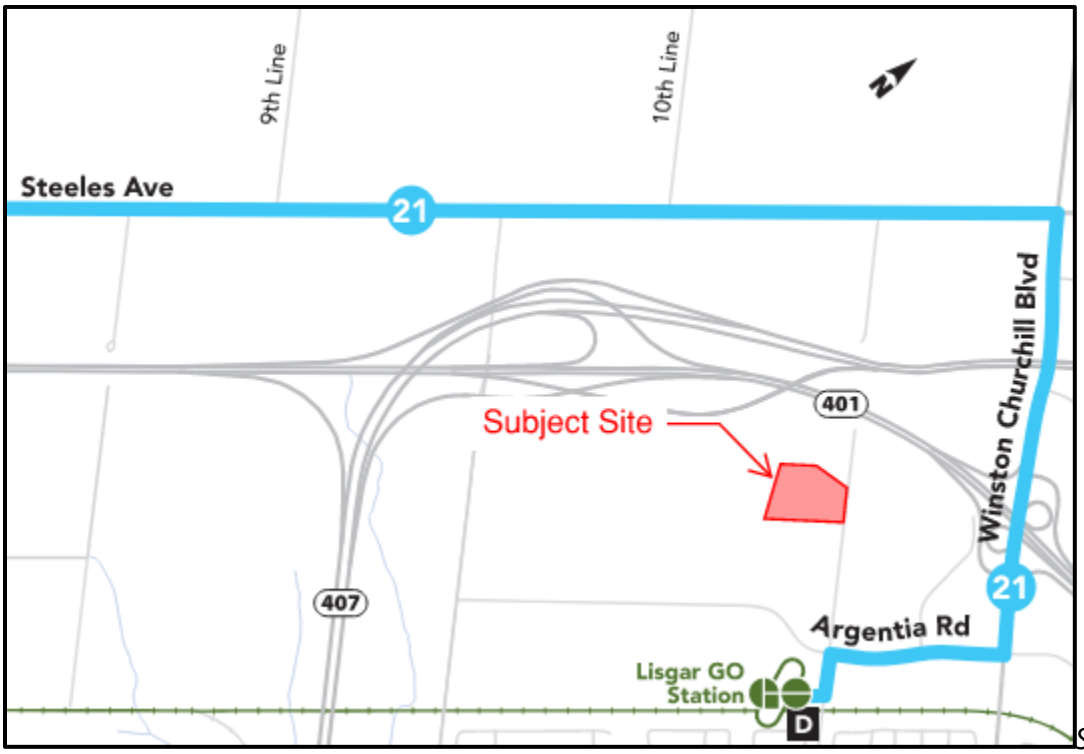
3.2.4 Milton Transit

Within the study area, Milton Transit service is provided by Route 21 Steeles.

Route 21 Steeles runs in the east-west direction between Milton GO Station in the west and Lisgar

GO Station in the east. The route has stops at the Toronto Premium Outlets in Halton Hills, as well as the Amazon Fulfillment Centre YYZ3 on Winston Churchill Boulevard. The route operates from Monday to Sunday with a 35-minute frequency. Within the study area, it services one stop at Lisgar GO. The route map is shown in **Figure 3-5.**

Figure 3-5 Milton Transit 21 Steeles Route



Source: Transit Schedules and Routes - Town of Milton

3.3 Pedestrian Routes

Within the vicinity of the proposed site, Argentia Road is the closest roadway to the site with sidewalks on both sides, which will support pedestrian movement within the study area leading to the site access located on Argentia Road. Sidewalks are also present on the Tenth line, south of Argentia Road.

3.4 Cycling Routes

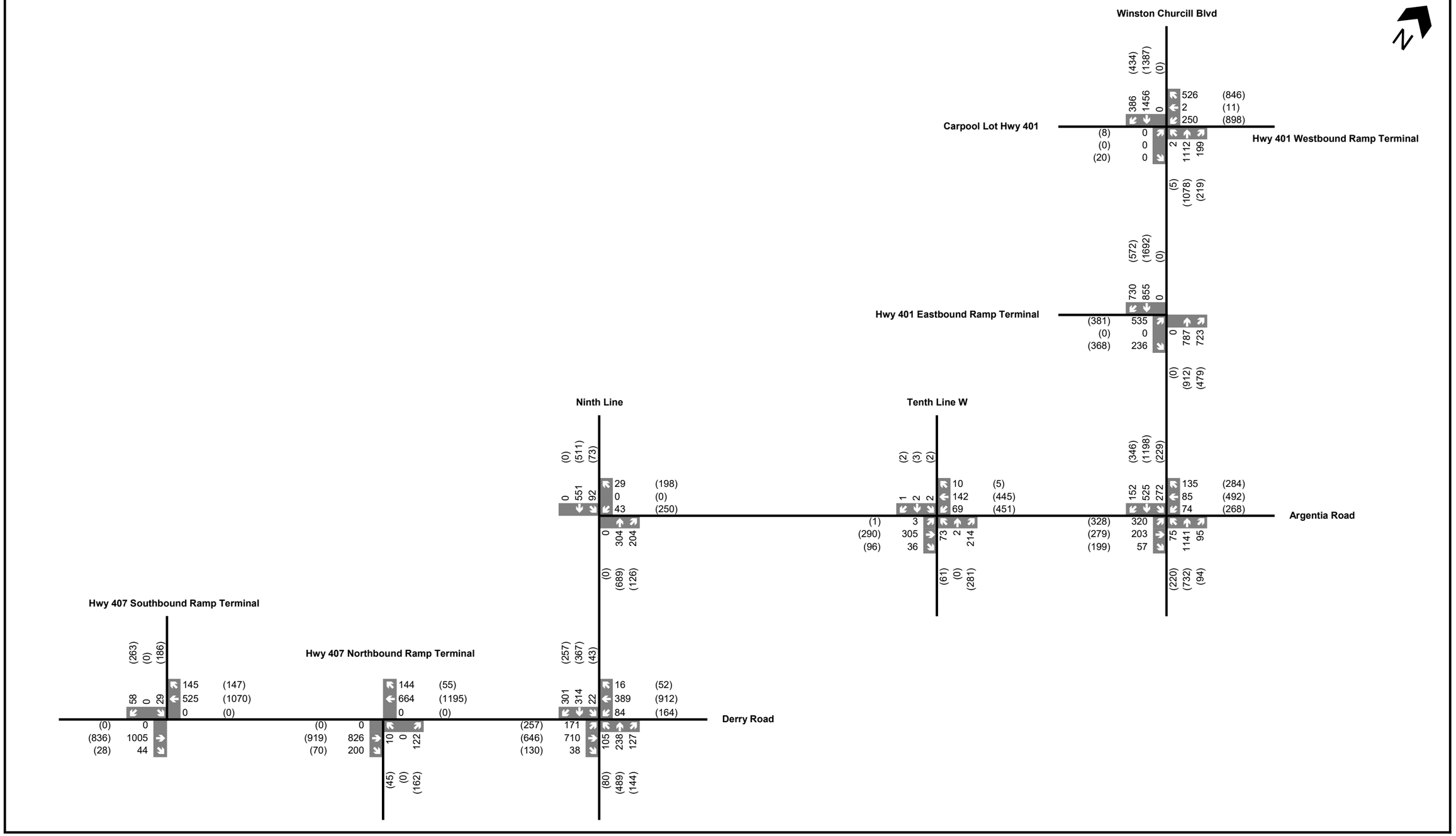
Within the vicinity of the proposed development, there are designated cycling routes on both sides of the road along Argentia Road and on Tenth Line West, south of Argentia Road. These routes are marked with pavement markings that separate cyclists from vehicle traffic.

3.5 Existing Traffic Volumes

Traffic Volumes for existing conditions were obtained via turning movement counts (TMC) data commissioned by TYLin and conducted on August 6th, 2025. Due to the industrial nature of the site, its surrounding land uses, and location in relation to institutional buildings, the use of summer counts was proposed and deemed appropriate for the site. Based on coordination with City Staff, and approval of the Terms of Reference (TOR) attached in **Appendix A:**. Collected traffic count data was used to develop the existing conditions traffic model for the study. Existing conditions traffic volumes are illustrated in **Figure 3-6** below. All TMC data can be found in **Appendix C**.

The existing signal timing plans were obtained from the City of Mississauga, Region of Peel. Signal timing data for Highway 401 and 407 ramp terminals were not provided, as such signal timings were prepared based on MTO Traffic Signal Operating and Timing Policy in conjunction with OTM book 12. All signal timing plans provided are provided in **Appendix D**.

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xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 3-6

Existing Traffic Volumes

4 FUTURE CONDITIONS

4.1 Background Growth

Future traffic volumes for the 2032 (H1) and 2037 (H2) horizon years were developed by applying annual growth to the existing (2025) traffic volumes. Growth rates were obtained from the City of Mississauga and the Region of Peel, based on the jurisdiction of each roadway.

For the 2025 to 2031 period, the growth rates provided by the City of Mississauga which take into account the planned widening of Highway 401.

For the 2031 to 2037 period, the growth rates reflect the planned widening of Ninth Line from one through lane in each direction to two through lanes in each direction, resulting in relatively higher rates along Ninth Line compared to other corridors.

Table 4-1 summarizes the annual growth rates applied in the analysis.

Table 4-1 Background Developments

Roadway/ Jurisdiction	Directions	2025-2031 Rate	2031-2037 Rate	Source/Notes
Winston Churchill Boulevard (City)	NB/SB	3.0% AM/PM	1.0% AM 0.5% PM	City of Mississauga
Tenth Line West (City)	NB/SB	1.0% AM/PM	1.0% AM/PM	City of Mississauga
Ninth Line (City)	NB/SB	2.5% AM 2.0% PM	6.5% AM/PM	City of Mississauga
Argentia Road (City)	EB/WB	2.5% AM/PM	2.5% AM/PM	City of Mississauga
Derry Road (Region of Peel)[1]	EB/WB	0.5% AM/PM	0.5% AM/PM	Region of Peel
Highway 401 Ramp Terminals (MTO)[2]	EB/WB	2% AM/PM	2% AM/PM	MTO
Highway 407 Ramp Terminals (407 International inc.) [3]	NB/SB	2% AM/PM	2% AM/PM	407 Internal Inc.

[1] *The 0.5% annual growth rate for Derry Road was based on values provided by the Region of Peel in a 2330 & 2360 Argentia Road- Proposed Industrial Development traffic study. The 2031–2041 rate was applied to the 2031–2037 period in this study.*
[2] *For the two Highway 401 ramp terminals under MTO jurisdiction, a 2% annual growth rate was adopted in response to MTO's comments on the previous submission. The growth rate was applied linearly.*
[3] *Highway 407 ramp terminals under 407 International inc. Jurisdiction, a 2% annual growth rate was assumed due to absence of agency provided rates, remaining in line with Highway 401. The growth rate was applied linearly*

Growth rate confirmations and jurisdictional agency correspondence is provided in **Appendix A:**.

4.2 Background Developments

A review of the City of Mississauga's Planning Information Hub and Active Development Applications database confirmed that there are no active development applications within the area of influence of the proposed development site. This was further confirmed through correspondence with reviewing agencies. In addition to the proposed Data Centre, the lands owned by the client will also accommodate a warehouse adjacent to the Data Centre. For this study, the site generated traffic associated with the warehouse industrial building is considered to represent the background traffic. A total of 75 site trips, consisting of 58 inbound and 17 outbound trips, are generated by the industrial development during the AM peak hour. During the PM peak hour, 26 inbound and 67 outbound site trips are predicted, totaling 93 trips. The site trips include 12 truck trips, consisting of 6 inbound and 6 outbound trips during the AM peak hour. During the PM peak hour, 7 inbound and 5 outbound trips are predicted, totaling 12 truck trips. Trucks serving the industrial buildings will be permitted to access the site only via the southern access on Argentia Road.

The distribution of the warehouse generated auto traffic is shown in **Figure 4-1** and the generated truck traffic is shown in **Figure 4-2.**

4.3 Planned Network Improvements

TYLin is aware of two planned network improvements withing the vicinity of the proposed development.

The proposed site is within the MTO Area of interest for the proposed Highway 413 which is planned to the north of the site. At this time the project is still within the preliminary phase and as such no detailed design has been completed to date. Our understanding is that the proposed construction will not impact the subjected site. Timelines for the completion of the project are unknown at this time and as such the planned Highway 413 is not being considered as part of this TIS.

The City of Mississauga has undergone an EA assessment for the widening of Ninth Line Road. This EA concludes that widening of Ninth Line to the south of Derry Road is warranted from 2 lanes to 4 with timelines subjected to council review. Additionally, the widening of Ninth Line north of the study section, Derry Road intersection to Highway 401 overpass, is proposed with a timeline of 2033. As such TYLin incorporated the proposed widening of Ninth Line north of Derry Road for the background and total 2037 horizon analysis.

Figure 4-3 illustrates the future proposed lane configurations.

4.4 Horizon Years

In accordance with the City of Mississauga's Transportation Impact Study (TIS) Guidelines and the

Ministry of Transportation of Ontario (MTO) requirements, the following study horizon years were established for this assessment:

- Existing Year (2025),
- 5-Year post buildout Horizon (2032), and
- 10-Year post buildout Horizon (2037)

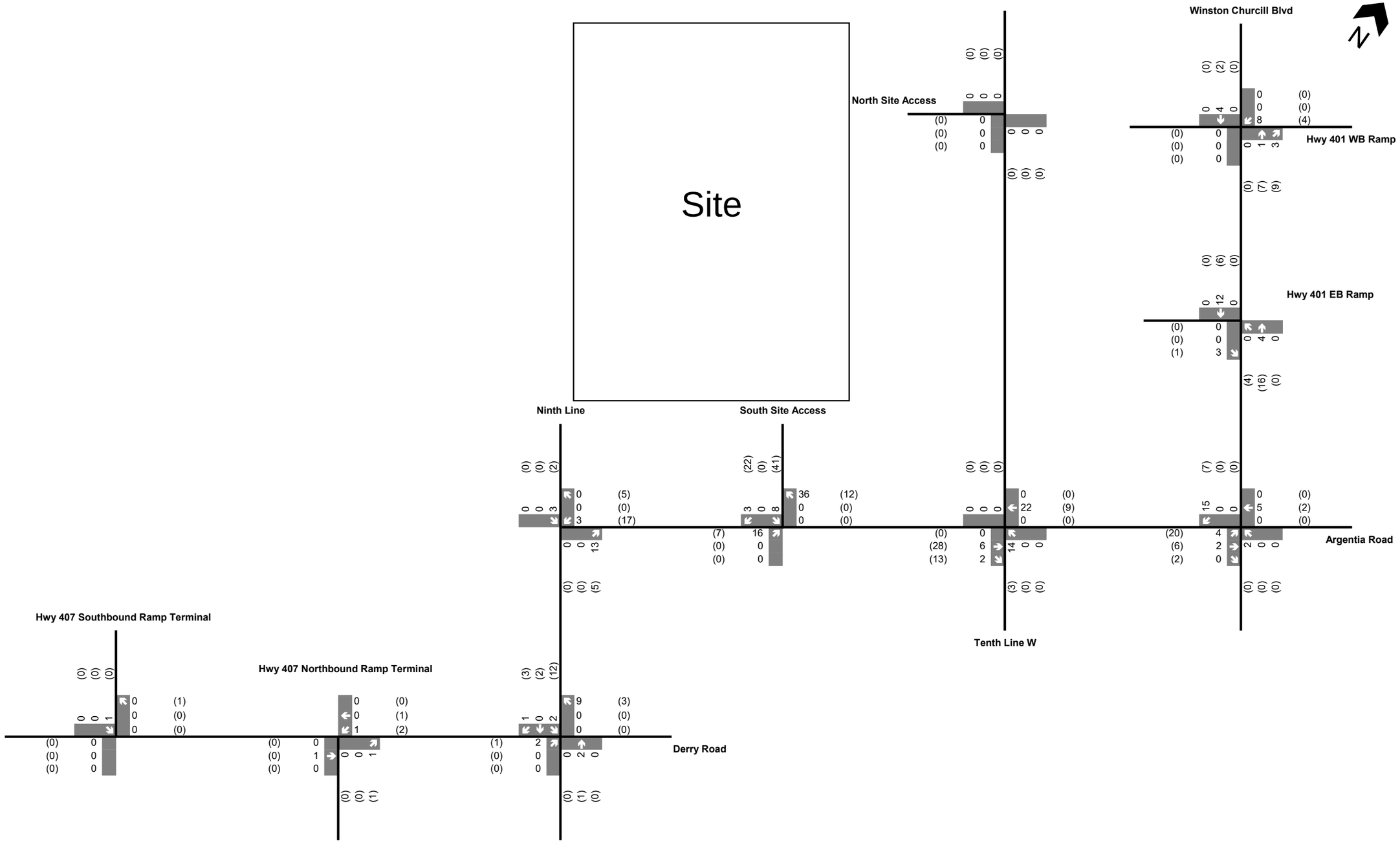
These horizons provide a basis for evaluating existing conditions, short-term post-buildout impacts, and longer-term traffic operations within the study area.

4.5 Future Background Traffic Volumes

Future background traffic volumes were developed by applying the compounded annual growth rates described in **Section 4.1** to the existing (2025) baseline traffic volumes for each study intersection, and the background development traffic described in **Section 4.2**. Growth rates were obtained from the City of Mississauga, the Region of Peel, and the Ministry of Transportation of Ontario (MTO), depending on the jurisdiction of each roadway.

The 2032 (5-year) and 2037 (10-year) background traffic volumes represent the traffic growth anticipated within the study area from the 2025 baseline year, independent of the proposed development. **Figure 4-4** presents the future background 2032 weekday AM and PM peak hour traffic volumes, while **Figure 4-5** presents the corresponding future background 2037 volumes.

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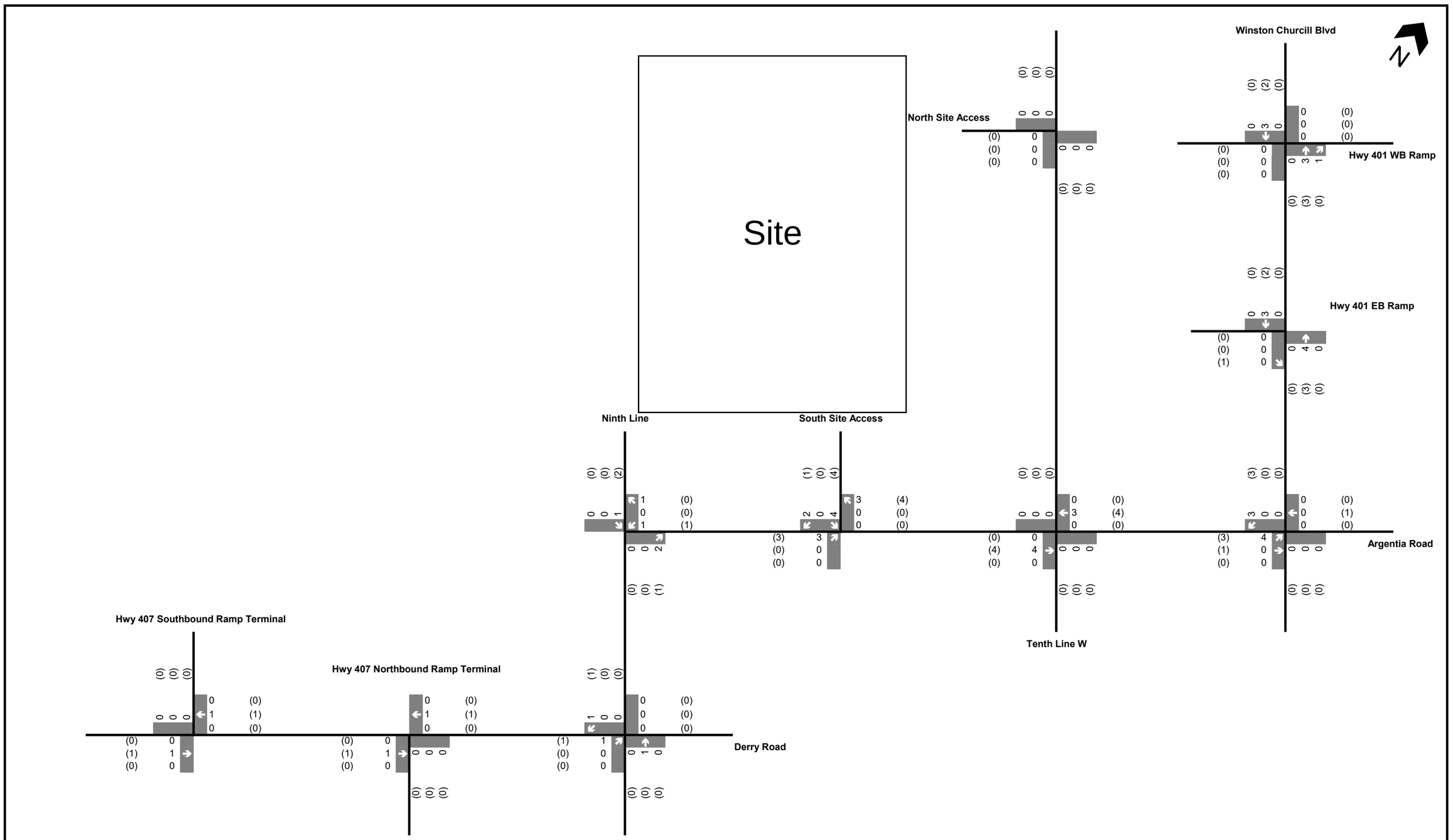
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xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 4-1

Background Development (Warehouse) Auto Volumes



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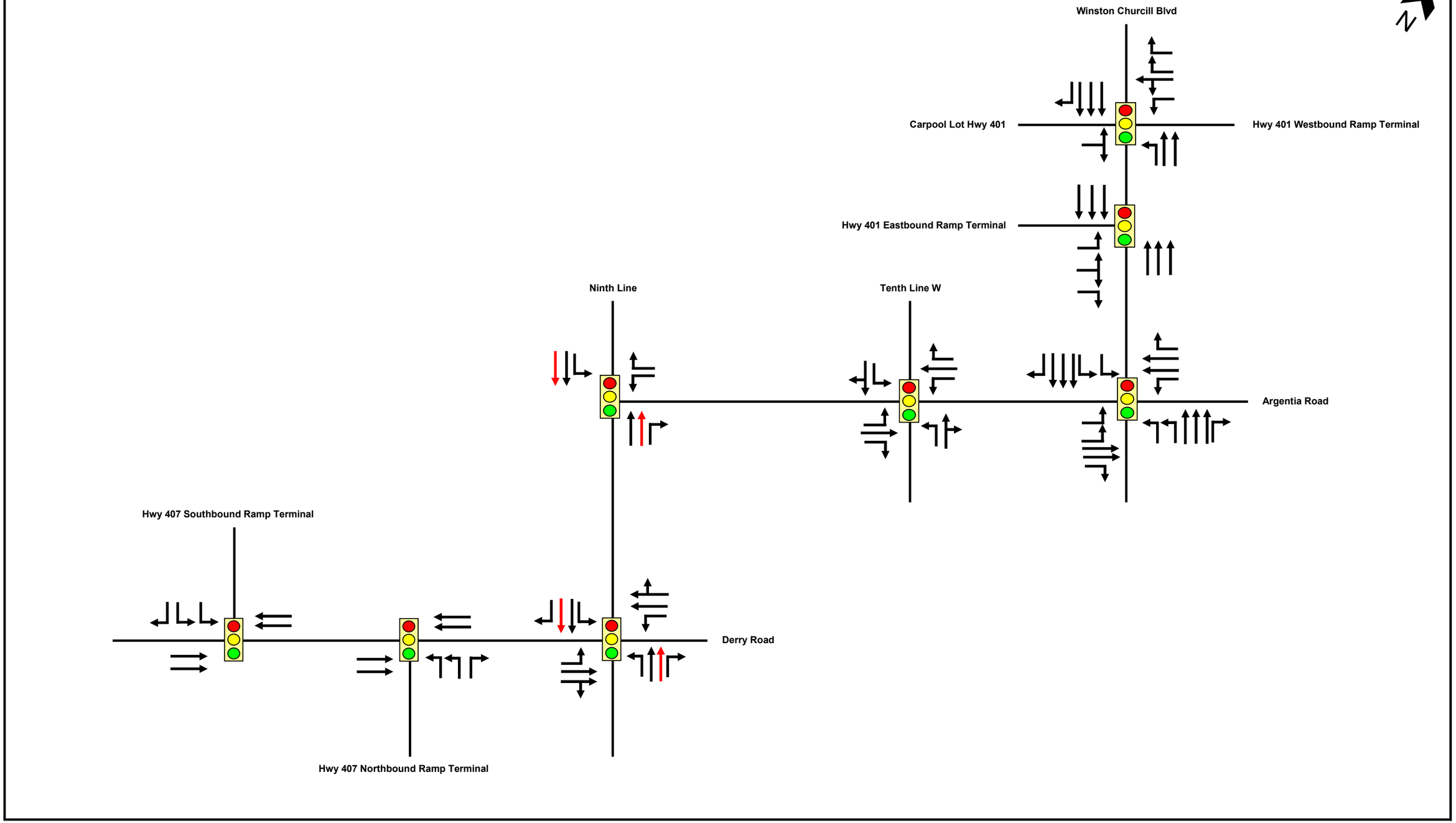
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xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 4-2

Background Development (Warehouse) Truck Volumes



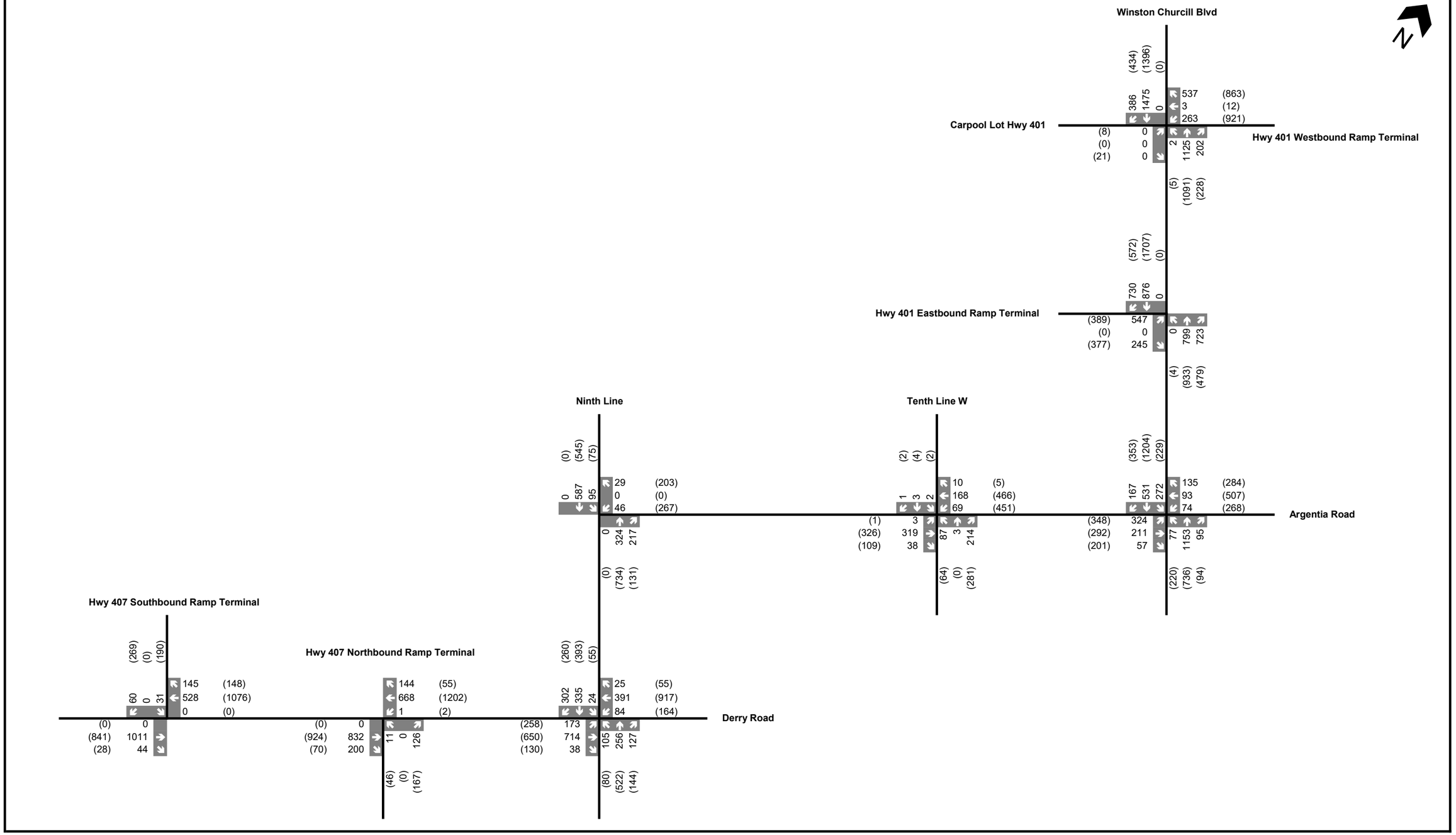
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Signalized Intersection | Lane | Future Lane

Figure 4-3

Future Lane Configuration



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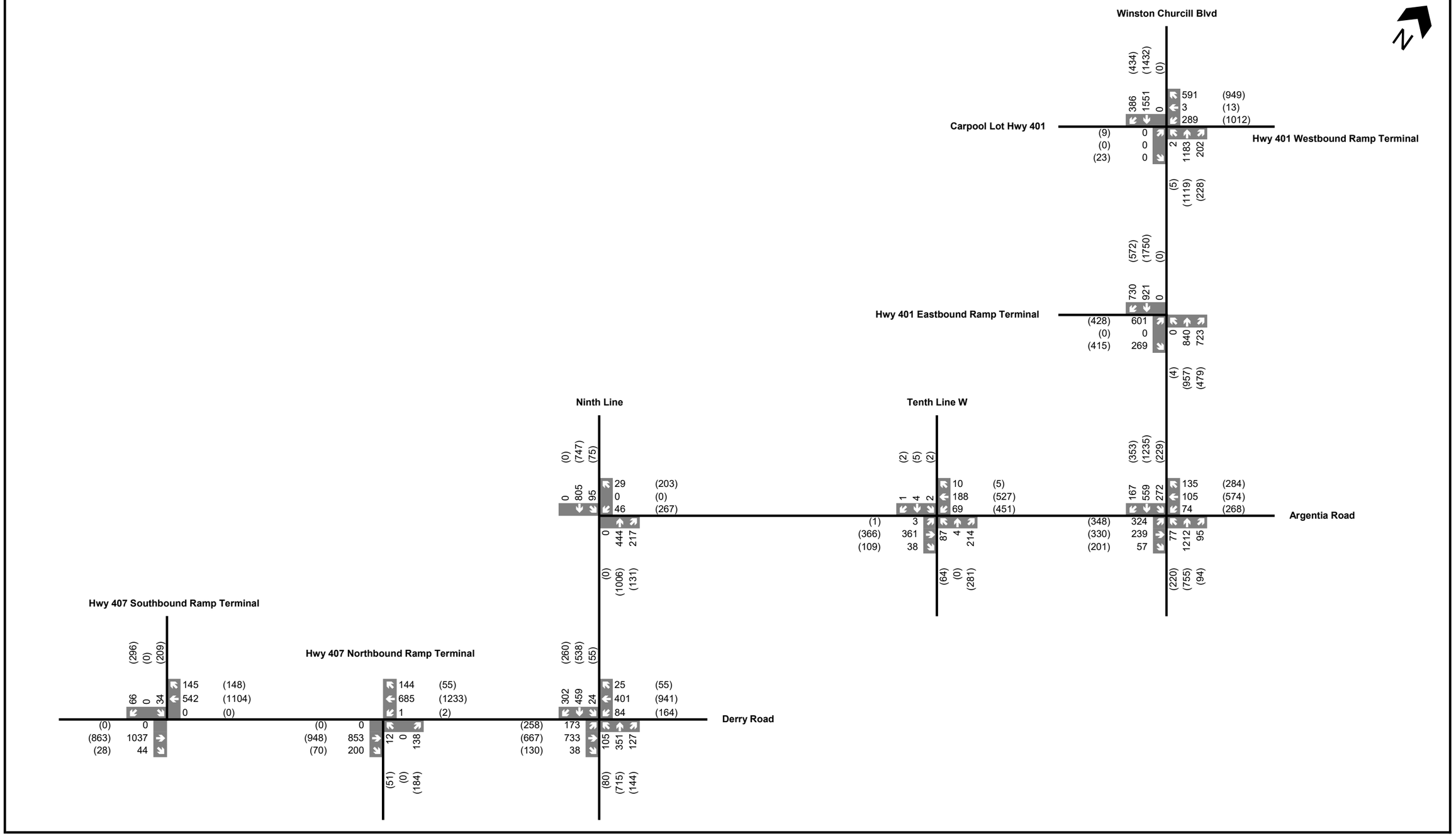
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xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 4-4

Future Background 2032 Traffic Volumes



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Legend

xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 4-5

Future Background 2037Traffic Volumes

5 FUTURE TOTAL TRAFFIC VOLUMES

5.1 Site Trip Generation

Trip generation was estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition. Based on the latest site plan, the proposed development includes the 2-storey Data Centre with total GFA of 21,217 m^2.

The data center was assessed under ITE Land Use Code (LUC) 160 – Data Centre, which provides peak hour vehicle trip estimates for facilities with primarily employee, maintenance, and service traffic.

Table 5-1 summarizes the estimated weekday AM and PM peak-hour trip generation for each land use based on the fitted curve equations from the ITE Manual, with the corresponding inbound/outbound splits applied.

Table 5-1 Site Trip Generation for Data Center

Land Use	Parameters	Peak Hour Trip Generation					
		Weekday AM			Weekday PM		
		In	Out	Total	In	Out	Total
LUC 160 Data Centre 228,385 ft^2 (21,217 m^2)	Fitted Curve Equation	T=0.05(X)+9.87			Average Rate		
	Trip Distribution	71%	29%	100%	30%	70%	100%
	Gross Auto Trips	15	6	21	2	9	11
Total Vehicle Trips		**15**	**6**	**21**	**2**	**9**	**11**

A total of 21 site trips, consisting of 15 inbound and 6 outbound trips, are predicted to be generated by the subject site during the AM peak hour. During the PM peak hour, 2 inbound and 9 outbound net auto site trips are predicted, totaling 11 trips.

No truck trips are expected to be generated by the Data Centre during the weekday AM and PM peak hours. During normal operations, the Data Centre is not expected to generate regular daily truck traffic.

5.2 Site Trip Distribution and Assignment

The distribution of site-generated traffic was derived from the 2022 Transportation Tomorrow Survey (TTS) summary data for Traffic Analysis Zones (TAZ) 3817, 3819, 3719, 3720, 3616, 3617, and 3638, and assigned to the road network accordingly.

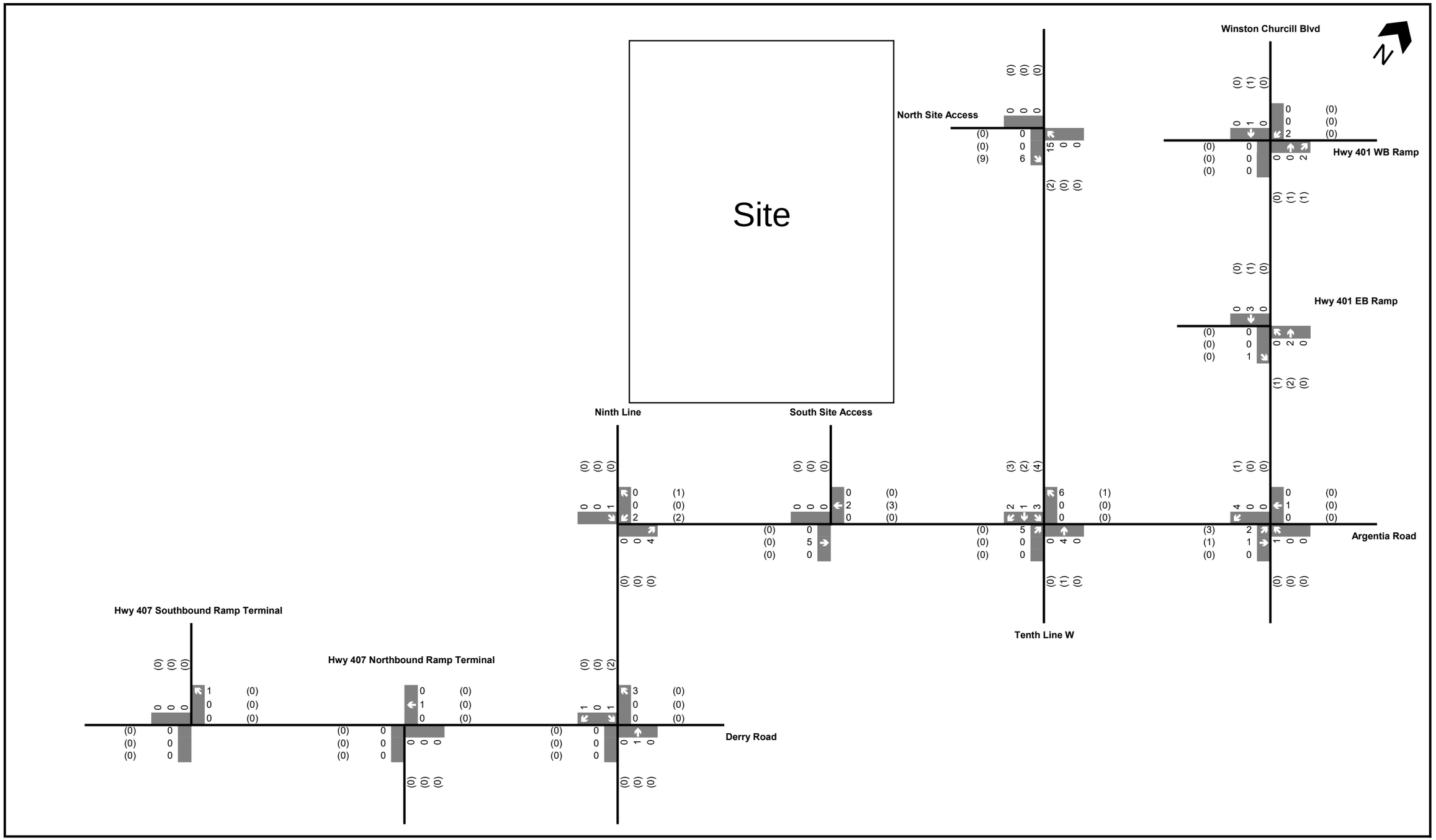
The resulting site traffic distribution is summarized in **Table 5-2**. **Figure 5-1** illustrates the assigned site-generated traffic for the data center.

Table 5-2 Site Trip Distribution

To/From	Distribution (%)			
	AM peak period		PM peak period	
	Inbound	Outbound	Inbound	Outbound
Northwest	6%	5%	8%	12%
North	1%	2%	4%	2%
Northeast	8%	6%	8%	8%
East	7%	19%	18%	10%
Southeast	35%	35%	27%	35%
South	31%	26%	26%	23%
Southwest	8%	6%	6%	6%
West	4%	2%	3%	4%
Total	100%	100%	100%	100%

5.3 Future Total Traffic Volumes

The future total traffic volumes during the weekday peak hours for the 2032 and 2037 planning horizons were derived by combining the corresponding estimates of Data Center site-generated traffic with the total background traffic volumes derived in **Section 4**. **Figure 5-2** summarizes the Data Center future total traffic volumes for the 2032 planning horizon during the weekday AM and PM peak hours, while **Figure 5-3** presents the Data Center future total traffic volumes for the 2037 planning horizon during the weekday AM and PM peak hours.



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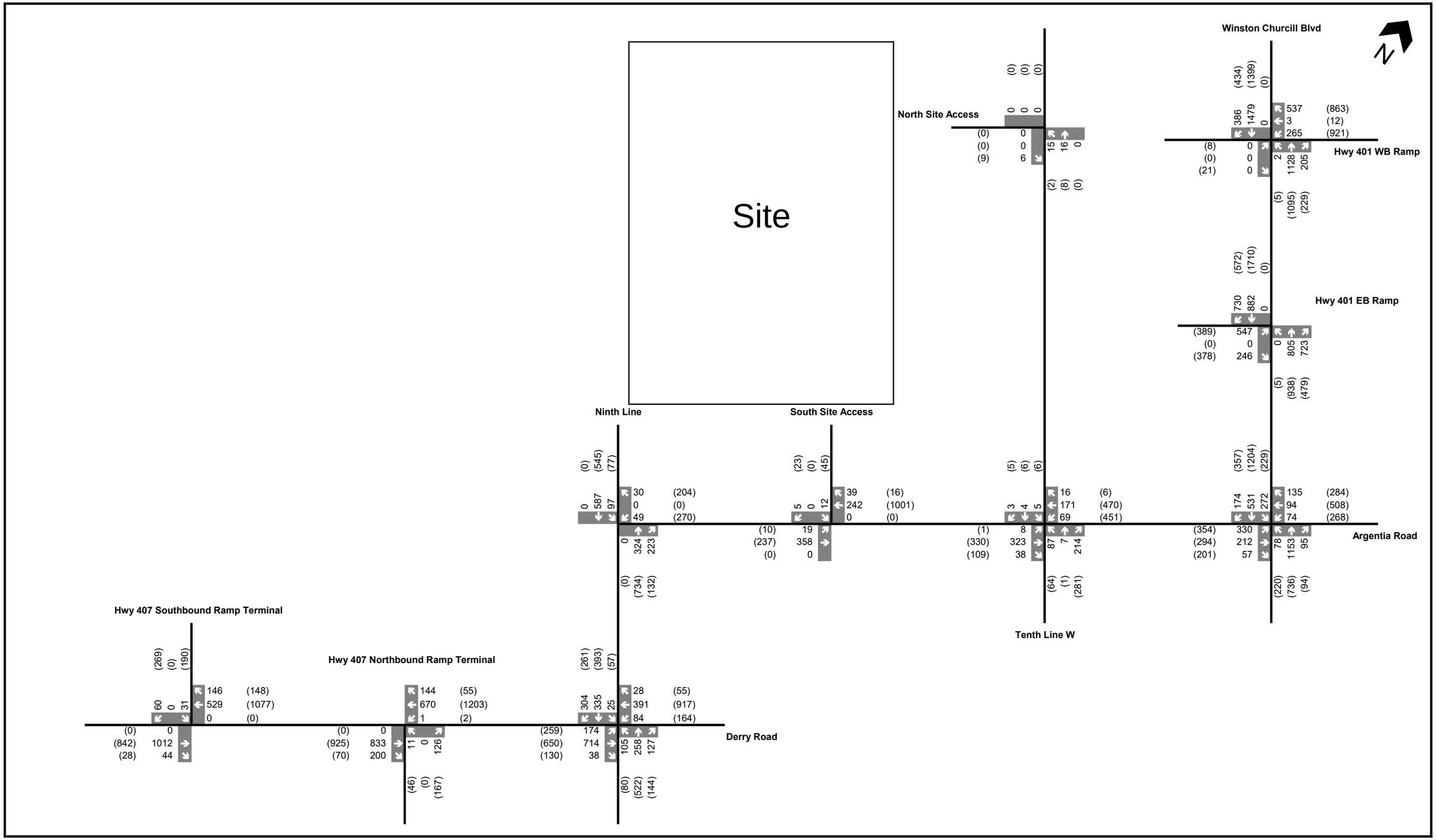
Legend

xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 5-1

Data Center Site Traffic



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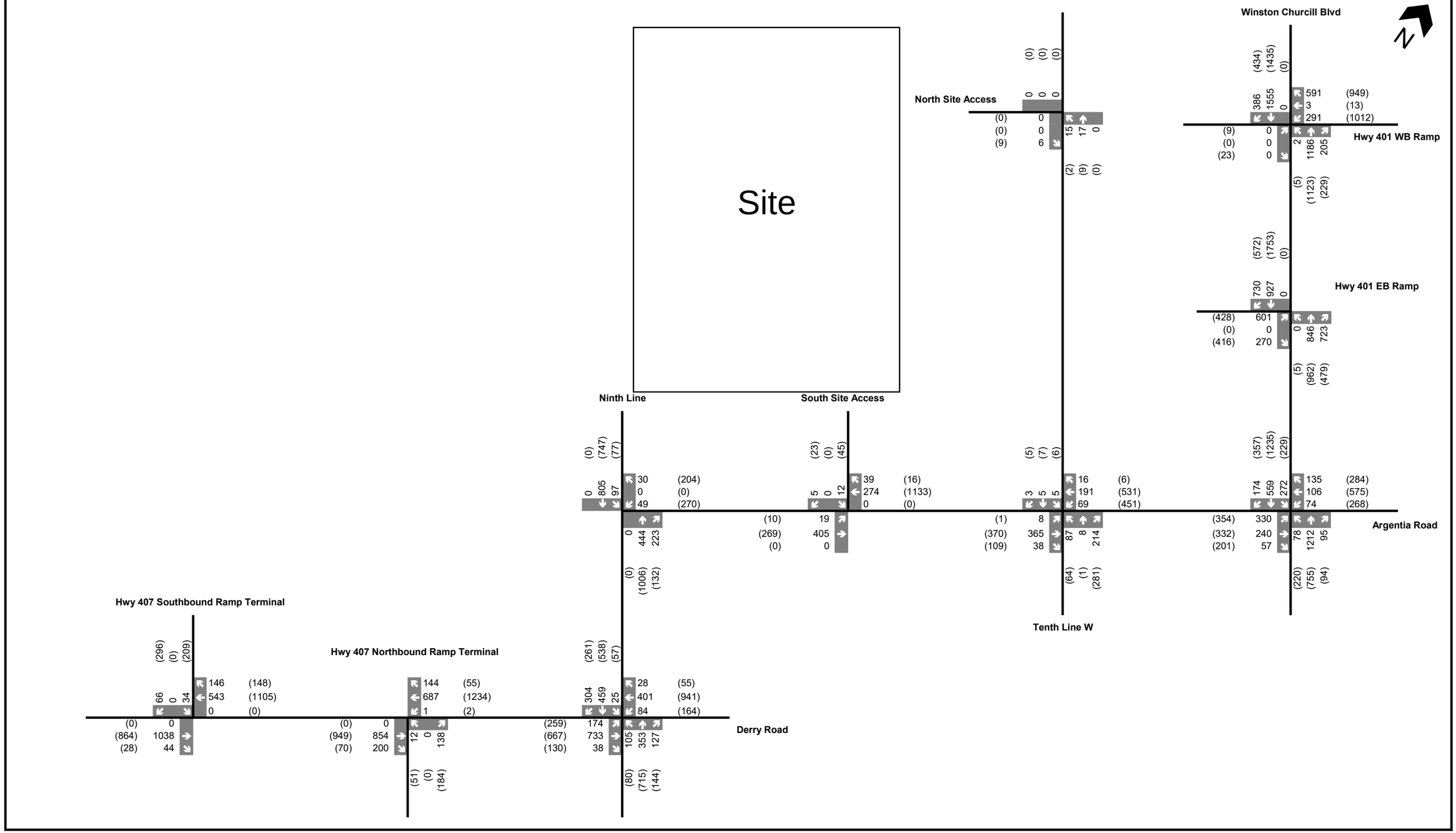
Legend

xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 5-2

Future Total 2032 Traffic Volumes



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Legend

xx A.M. Peak Hour Traffic Volumes

(xx) P.M. Peak Hour Traffic Volumes

Figure 5-3

Future Total 2037 Traffic Volumes

6 TRAFFIC CAPACITY ANALYSIS

The traffic capacity analysis identifies how well the intersections and access driveways are operating and how they are expected to operate in the future. The analysis contained in this report utilized the Highway Capacity Manual (HCM) 6 methodology within the Synchro Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement.

In accordance with the Ministry of Transportation (MTO) capacity requirements, capacity analysis was performed for all proposed site access points and study intersections. At signalized intersections, movements with a v/c ratio greater than 0.85 are deemed "critical" and evaluated for possible operational improvements. For MTO ramps, terminal ramp approaches with a v/c ratio greater than 0.75 are also deemed critical and assessed for potential improvements.

The following tables summarize the Synchro/HCM capacity results for the study intersections during the weekday a.m. and p.m. peak hours under baseline (2025), future background and future total (2032 and 2037) traffic conditions. Detailed Synchro reports are attached in **Appendix E**.

6.1 Existing Conditions

The traffic capacity analysis results for the intersections in the study area are summarized in **Table 6-1** for both the weekday a.m. and p.m. peak hours under existing traffic conditions.

Table 6-1 Existing 2025 Capacity Analysis

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Winston Churchill Blvd & Carpool Lot Hwy 401 WB Ramp Terminal	*Overall*	-	*23*	*C*	-	*35*	*D*
	WBL	0.32	51	D	0.80	55	E
	WBR	**0.84**	**63**	**E**	**0.90**	**65**	**E**
	NBL	0.01	17	B	0.02	24	C
	NBT	0.54	15	B	0.61	23	C
	NBR	0.55	16	B	0.61	23	C
	SBT	0.42	12	B	0.44	18	B
	SBR	0.45	14	B	0.53	21	C
Winston Churchill Blvd & Hwy 401 EB Ramp Terminal	*Overall*	-	*26*	*C*	-	*23*	*C*
	EBL	0.80	63	E	0.76	62	E
	EBR	**0.75**	**64**	**E**	**0.80**	**66**	**E**

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBL	0	0		0	0	
	NBT	0.21	8	A	0.24	9	A
	SBT	0.35	10	A	0.63	14	B
	SBR	0.76	21	C	0.65	16	B
Winston Churchill Blvd & Argentia Rd	*Overall*	-	*47*	*D*	-	*43*	*D*
	EBL	**1.07**	**142**	**F**	**1.04**	**133**	**F**
	EBT	0.18	43	D	0.24	44	D
	EBR	0.12	38	D	0.36	38	D
	WBL	0.21	45	D	0.55	38	D
	WBT	0.1	49	D	0.43	47	D
	WBR	0.3	41	D	0.52	41	D
	NBL	0.54	**78**	**E**	0.82	**86**	**F**
	NBT	0.46	33	C	0.32	35	C
	SBL	0.89	**86**	**F**	0.85	**78**	**E**
	SBT	0.20	2	A	0.51	13	B
	SBR	0.19	1	A	0.46	10	B
Tenth Line W & Argentia Rd	*Overall*	-	*17*	*B*	*0.85*	*22*	*C*
	EBL	0	12	B	0.01	15	B
	EBT	0.34	15	B	0.38	19	B
	EBR	0.05	12	B	0.17	17	B
	WBL	0.12	9	A	**0.85**	30	C
	WBT	0.13	8	A	0.42	13	B
	WBR	0.01	8	A	0.01	9	A
	NBL	0.17	22	C	0.14	21	C
	NBR	0.54	25	C	0.66	26	C
	SBL	0.01	28	C	0.01	30	C
	SBR	0.01	27	C	0.01	26	C
Ninth Line & Argentia Rd	*Overall*	-	*9*	*A*	*0.63*	*15*	*B*
	WBL	0.12	20	B	0.50	21	C
	WBR	0.09	20	B	0.45	21	C
	NBT	0.26	8	A	0.63	15	B
	NBR	0.24	7	A	0.16	9	A
	SBL	0.18	10	A	0.25	22	C
	SBT	0.48	10	A	0.47	12	B
Ninth Line & Derry Rd	*Overall*	-	*28*	*C*	-	*38*	*D*
	EBL	0.29	15	B	0.70	23	C

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	EBT	0.39	1	A	0.43	24	C
	EBR	0.39	1	A	0.43	24	C
	WBL	0.18	16	B	0.41	19	B
	WBT	0.21	21	C	0.54	30	C
	WBR	0.21	21	C	0.54	30	C
	NBL	0.46	43	D	0.46	46	D
	NBT	0.36	42	D	0.80	54	D
	NBR	0.26	41	D	0.32	43	D
	SBL	0.08	48	D	0.41	74	E
	SBT	0.62	**55**	**E**	0.77	**64**	**E**
	SBR	0.82	**62**	**E**	0.72	**62**	**E**
Derry Rd & Hwy 407 NB Ramp Terminal	*Overall*	-	*13*	*B*	-	*16*	*B*
	EBT	0.56	14	B	0.61	15	B
	EBR	0.56	14	B	0.61	15	B
	WBT	0.36	11	B	0.75	16	B
	NBL	0.01	19	B	0.04	14	B
	NBR	0.24	21	C	0.30	16	B
Derry Rd & Hwy 407 SB Ramp Terminal	*Overall*	-	*10*	*A*	-	*14*	*B*
	EBT	0.50	10	A	0.48	11	B
	WBT	0.34	9	A	0.70	16	B
	WBR	0.35	9	A	0.70	16	B
	SBL	0.03	21	C	0.15	14	B
	SBR	0.15	22	C	0.46	18	B

Under existing conditions, most movements at the study intersections operate acceptably during the weekday AM and PM peak hours. Critical movements and delays are primarily observed at the Highway 401 ramp terminals, Winston Churchill Boulevard and Argentia Road, and Ninth Line and Derry Road.

At Winston Churchill Boulevard and the Highway 401 WB Ramp Terminal, the westbound right-turn movement operates at a v/c ratio of 0.84 and LOS E in the AM peak hour and 0.90 and LOS E in the PM peak hour. At the Highway 401 EB Ramp Terminal, the eastbound left- and right-turn movements operate at or near critical conditions, with v/c ratios ranging from 0.75 to 0.80 and LOS E. The most critical movement occurs at Winston Churchill Boulevard and Argentia Road, where the eastbound left-turn movement operates over capacity in both peak hours, with v/c ratios of 1.07 and 1.04, delays of 142 and 133 seconds, and LOS F during the AM and PM peak hours, respectively. Significant delays

are also observed at northbound left and southbound left approaches at this intersection. At Ninth Line and Derry Road, the southbound through and right-turn movements experience LOS E, with delays of up to 64 seconds. All other movements generally operate below critical capacity thresholds with acceptable levels of service.

6.2 Future Background Conditions

The traffic capacity analysis results for the study area intersections under 2032 future background conditions are summarized in **Table 6-2**, and the results under 2037 future background traffic conditions are summarized in **Table 6-3**, for both the weekday AM and PM peak hours.

Note that the signal timing splits for intersections has been optimized using Synchro's built in optimization feature. The detailed synchro reports and timings are attached in **Appendix E.**

Table 6-2 Future Background 2032 Capacity Analysis

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal	*Overall*	-	*26*	*C*	-	*37*	*D*
	WBL	0.34	48	D	0.84	54	D
	WBT	0.00	0	A	0.00	0	A
	WBR	**0.85**	**62**	**E**	**0.87**	**58**	**E**
	NBL	0.01	24	C	0.03	32	C
	NBT	0.66	21	C	0.71	29	C
	NBR	0.67	21	C	0.71	30	C
	SBL	0.00	0	A	0.00	0	A
	SBT	0.53	16	B	0.55	23	C
	SBR	0.47	16	B	0.55	24	C
Winston Churchill Blvd & Hwy 401 EB Ramp Terminal	*Overall*	-	*27*	*C*	-	*26*	*C*
	EBL	**0.80**	**61**	**E**	**0.77**	**60**	**E**
	EBR	**0.77**	**62**	**E**	**0.81**	**63**	**E**
	NBL	0.00	0	A	0.32	12	B
	NBT	0.26	10	B	0.32	11	B
	SBT	0.44	13	B	0.74	19	B
	SBR	0.79	25	C	0.78	24	C
Winston Churchill Blvd & Argentia Rd	*Overall*	-	*46*	*D*	-	*40*	*D*
	EBL	**0.87**	**84**	**F**	**0.86**	**82**	**F**
	EBT	0.20	41	D	0.27	42	D
	EBR	0.11	35	D	0.34	35	C
	WBL	0.22	45	D	0.55	37	D
	WBT	0.12	49	D	0.51	48	D
	WBR	0.30	41	D	0.52	41	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBL	0.55	**78**	**E**	0.83	**87**	**F**
	NBT	0.59	39	D	0.40	39	D
	SBL	**0.85**	**82**	**F**	**0.83**	**73**	**E**
	SBT	0.25	27	C	0.66	18	B
	SBR	0.21	17	B	0.47	12	B
Tenth Line W & Argentia Rd	*Overall*	-	*17*	*B*	-	*27*	*C*
	EBL	0.00	12	B	0.00	16	B
	EBT	0.41	16	B	0.49	21	C
	EBR	0.06	12	B	0.20	17	B
	WBL	0.14	10	A	**0.96**	50	D
	WBT	0.17	9	A	0.50	13	B
	WBR	0.01	8	A	0.01	9	A
	NBL	0.21	22	C	0.15	21	C
	NBT	0.00	0	A	0.00	0	A
	NBR	0.53	25	C	0.65	26	C
	SBL	0.01	28	C	0.01	30	C
	SBT	0.00	0	A	0.00	0	A
	SBR	0.02	28	C	0.02	26	C
Ninth Line & Argentia Rd	*Overall*	-	*5*	*A*	-	*13*	*B*
	WBL	0.43	26	C	0.75	26	C
	WBR	0.31	25	C	0.64	24	C
	NBT	0.26	3	A	0.66	11	B
	NBR	0.20	3	A	0.14	5	A
	SBL	0.15	4	A	0.23	16	B
	SBT	0.47	4	A	0.51	8	A
Ninth Line & Derry Rd E/Derry Rd W	*Overall*	-	*29*	*C*	-	*42*	*D*
	EBL	0.31	15	B	0.80	32	C
	EBTR	0.40	1	A	0.49	31	C
	WBL	0.19	17	B	0.46	24	C
	WBTR	0.23	22	C	0.65	39	D
	NBL	0.52	44	D	0.44	41	D
	NBT	0.44	43	D	0.84	53	D
	NBR	0.25	40	D	0.27	37	D
	SBL	0.10	51	D	0.56	**80**	**E**
	SBT	0.74	**58**	**E**	0.75	**57**	**E**
	SBR	0.79	**60**	**E**	0.59	50	D
Hwy 407 NB Ramp	*Overall*	-	*14*	*B*	-	*17*	*B*
	EBT	0.58	14	B	0.63	16	B
	WBT	0.38	12	B	0.79	20	C

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Terminal & Derry Rd E	NBL	0.01	19	B	0.04	14	B
	NBR	0.27	22	C	0.34	17	B
Derry Rd E & Hwy 407 SB Ramp Terminal	*Overall*	-	*10*	*B*	-	*15*	*B*
	EBT	0.52	10	B	0.50	11	B
	WBT	0.35	9	A	0.72	17	B
	SBL	0.04	21	C	0.17	14	B
	SBR	0.17	23	C	0.53	20	B

Under future background 2032 conditions, most movements at study intersections are expected to operate acceptably with reserve capacity with a few exceptions. These movements include Highway 401 ramp terminal approaches at Winston Churchill Boulevard, and eastbound, northbound and southbound left turn at Winston Churchill Boulevard and Argentia Road. Significant delays are observed at southbound approaches at Ninth Line and Derry Road. Westbound left turn at Tenth Line and Argentia Road is also expected to operate close to capacity in the PM peak hour.

Table 6-3 Future Background 2037 Capacity Analysis

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal	*Overall*	-	*29*	*C*	-	*44*	*D*
	WBL	0.34	46	D	**0.89**	**57**	**E**
	WBR	**0.87**	**62**	**E**	**0.99**	**80**	**E**
	NBL	0.02	28	C	0.03	36	D
	NBT	0.71	25	C	0.78	35	D
	NBR	0.72	25	C	0.79	36	D
	SBT	0.57	19	B	0.58	25	C
	SBR	0.49	18	B	0.57	26	C
Winston Churchill Blvd & Hwy 401 EB Ramp Terminal	*Overall*	-	*28*	*C*	-	*29*	*C*
	EBL	**0.81**	**59**	**E**	**0.77**	**57**	**E**
	EBR	**0.77**	**60**	**E**	**0.81**	**61**	**E**
	NBL	0	0		0.34	13	B
	NBT	0.28	12	B	0.34	13	B
	SBT	0.48	15	B	0.78	23	C
	SBR	0.81	28	C	0.82	28	C
Winston Churchill Blvd & Argentia Rd	*Overall*	-	*40*	*D*	-	*40*	*D*
	EBL	**0.87**	**84**	**F**	**0.86**	**82**	**F**
	EBT	0.23	41	D	0.30	42	D
	EBR	0.11	35	D	0.34	35	C
	WBL	0.22	45	D	0.57	38	D

	WBT	0.14	50	D	0.58	50	D
	WBR	0.3	41	D	0.52	41	D
	NBL	0.55	**78**	**E**	0.82	**86**	**F**
	NBT	0.62	39	D	0.43	40	D
	SBL	**0.86**	**75**	**E**	0.83	**72**	**E**
	SBT	0.26	4	A	0.67	18	B
	SBR	0.21	3	A	0.47	12	B
Tenth Line W & Argentia Rd	*Overall*	-	*17*	*B*	-	*29*	*C*
	EBL	0	12	B	0.01	18	B
	EBT	0.47	17	B	0.59	24	C
	EBR	0.06	12	B	0.21	18	B
	WBL	0.14	10	A	**0.98**	**55**	**E**
	WBT	0.2	9	A	0.58	15	B
	WBR	0.01	8	A	0.01	9	A
	NBL	0.21	23	C	0.15	21	C
	NBR	0.53	25	C	0.65	26	C
	SBL	0.01	28	C	0.01	30	C
	SBR	0.02	28	C	0.02	26	C
Ninth Line & Argentia Rd	*Overall*	-	*4*	*A*	-	*11*	*B*
	WBL	0.43	26	C	0.75	26	C
	WBR	0.31	25	C	0.64	24	C
	NBT	0.19	3	A	0.48	7	A
	NBR	0.20	3	A	0.14	5	A
	SBL	0.16	4	A	0.24	13	B
	SBT	0.34	3	A	0.36	6	A
Ninth Line & Derry Rd E/Derry Rd W	*Overall*	-	*37*	*D*	-	*53*	*D*
	EBL	0.35	21	C	0.75	58	C
	EBTR	0.46	30	C	0.45	44	C
	WBL	0.26	23	C	0.43	34	B
	WBTR	0.26	28	C	0.59	66	C
	NBL	0.57	42	D	0.44	36	D
	NBT	0.52	39	D	0.68	56	D
	NBR	0.22	34	C	0.31	28	D
	SBL	0.10	49	D	0.48	**101**	**E**
	SBT	0.83	**58**	**E**	0.65	**51**	**E**
	SBR	0.65	50	D	0.72	**38**	**E**
	Overall	-	*14*	*B*	-	*18*	*B*
	EBT	0.59	15	B	0.65	16	B

Hwy 407 NB Ramp Terminal & Derry Rd E	WBT	0.39	12	B	0.81	21	C
	NBL	0.01	19	B	0.05	14	B
	NBR	0.30	22	C	0.38	17	B
Derry Rd E & Hwy 407 SB Ramp Terminal	*Overall*	-	*10*	*B*	-	*15*	*B*
	EBT	0.54	10	B	0.51	11	B
	WBT	0.36	9	A	0.74	17	B
	SBL	0.04	21	C	0.19	14	C
	SBR	0.18	23	C	0.58	21	C

Under future background 2037 conditions, most movements are expected to operate acceptably, with anticipated delays and critical movements along the approaches identified in future background 2032 conditions.

6.3 Future Total Conditions

The future total road network consists of the future background traffic combined with the subject site traffic. The proposed site access to the data center and warehouse has been included within the future total analysis, operating as an unsignalized intersection permitting full movements. The traffic capacity analysis results for the intersections in the study area are summarized in **Table 6-4** for the 2032 horizon year and in **Table 6-5** for the 2037 horizon year, for both the weekday AM and PM peak hours.

Note that the signal timing splits for intersections has been optimized using Synchro's built in optimization feature. The detailed synchro reports and timings are attached in **Appendix E.**

Table 6-4 Future Total 2032 Capacity Analysis

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal	*Overall*	-	*26*	*C*	-	*39*	*D*
	WBL	0.34	48	D	0.82	52	D
	WBT	**0.85**	**63**	**E**	**0.92**	**64**	**E**
	WBR	0.01	24	C	0.03	34	C
	NBL	0.66	21	C	0.76	33	C
	NBT	0.67	21	C	0.77	34	C
	SBT	0.53	16	B	0.56	24	C
	SBR	0.47	16	B	0.57	26	C
Winston Churchill Blvd & Hwy 401 EB Ramp Terminal	*Overall*	-	*27*	*C*	-	*27*	*C*
	EBL	**0.83**	**64**	**E**	**0.81**	**65**	**E**
	EBR	**0.80**	**66**	**E**	**0.86**	**75**	**E**
	NBT	0.26	10	B	0.32	11	B

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBT	0.44	12	C	0.73	18	B
	SBR	0.78	24	C	0.77	22	C
Winston Churchill Blvd & Argentia Rd	*Overall*	-	*41*	*D*	-	*40*	*D*
	EBL	**0.87**	**84**	**F**	**0.87**	**83**	**F**
	EBT	0.20	41	D	0.27	42	D
	EBR	0.11	35	C	0.34	35	D
	WBL	0.22	45	D	0.54	36	D
	WBT	0.12	49	D	0.51	49	D
	WBR	0.30	41	D	0.52	41	D
	NBL	0.56	**78**	**E**	0.82	**86**	**F**
	NBT	0.59	39	D	0.42	39	D
	SBL	**0.87**	**77**	**E**	0.83	**73**	**E**
	SBT	0.25	4	A	0.66	18	B
	SBR	0.22	3	A	0.48	12	B
Tenth Line W & Argentia Rd	*Overall*	-	*17*	*B*	-	*25*	*C*
	EBL	0.01	12	B	0.01	16	B
	EBT	0.42	16	B	0.49	21	C
	EBR	0.06	12	B	0.19	17	B
	WBL	0.14	10	A	**0.91**	38	D
	WBT	0.18	9	A	0.49	13	B
	WBR	0.02	8	A	0.01	9	A
	NBL	0.21	23	C	0.15	24	C
	NBTR	0.54	25	C	0.67	29	C
	SBL	0.03	28	C	0.03	33	C
	SBTR	0.03	28	C	0.04	29	C
Ninth Line & Argentia Rd	*Overall*	-	*5*	*A*	-	*13*	*B*
	WBL	0.45	26	C	0.75	26	C
	WBR	0.31	25	C	0.64	24	C
	NBT	0.26	3	A	0.66	11	B
	NBR	0.21	3	A	0.14	5	A
	SBL	0.15	3	A	0.25	17	B
	SBT	0.47	3	A	0.50	8	A
Ninth Line & Derry Rd	*Overall*	-	*27*	*C*	-	*41*	*D*
	EBL	0.31	15	B	0.79	32	C
	EBTR	0.41	1	A	0.49	30	C
	WBL	0.19	17	B	0.45	23	C
	WBTR	0.23	22	C	0.64	38	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBL	0.52	44	D	0.45	42	D
	NBT	0.44	43	D	0.83	53	D
	NBR	0.25	40	D	0.27	37	D
	SBL	0.10	51	D	0.57	**80**	**F**
	SBT	0.74	**57**	**E**	0.77	**59**	**E**
	SBR	0.80	**61**	**E**	0.61	52	D
Derry Rd & Hwy 407 NB Ramp Terminal	*Overall*	-	*14*	*B*	-	*18*	*B*
	EBT	0.58	15	B	0.63	16	B
	WBT	0.37	12	B	0.79	21	C
	NBL	0.01	19	B	0.05	14	B
	NBR	0.27	22	C	0.34	17	B
Derry Rd & Hwy 407 SB Ramp Terminal	*Overall*	-	*10*	*B*	-	*15*	*B*
	EBT	0.52	10	A	0.50	11	B
	WBT	0.35	9	A	0.72	17	B
	SBL	0.04	21	C	0.17	14	B
	SBR	0.17	23	C	0.53	20	B
Tenth Line & North Site Access	EBLR	0.01	8	A	0.01	8	A
	NBL	0.01	7	A	0.00	7	A
Argentia Road & South Site Access	SBLR	0.03	12	B	0.35	31	D
	EBL	0.02	8	A	0.02	11	B

The intersections under future total 2032 conditions operate similar to future background 2032 conditions. Delays are identified along Highway 401 ramp terminal approaches at Winston Churchill Boulevard, and eastbound, northbound and southbound left turn at Winston Churchill Boulevard and Argentia Road. Delays are also observed at southbound approaches at Ninth Line and Derry Road. Westbound left turn at Tenth Line and Argentia Road is expected to operate close to capacity in the PM peak hour.

Table 6-5 Future Total 2037 Capacity Analysis

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal	*Overall*	-	*29*	*C*	-	*40*	*D*
	WBL	0.34	46	D	**0.89**	**58**	**E**
	WBT	**0.87**	**62**	**E**	**0.93**	**64**	**E**
	WBR	0.02	28	C	0.03	35	C

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBL	0.72	25	C	0.74	32	C
	NBT	0.72	25	C	0.75	32	C
	SBT	0.57	19	B	0.58	24	C
	SBR	0.49	18	B	0.56	26	C
Winston Churchill Blvd & Hwy 401 EB Ramp Terminal	*Overall*	-	*29*	*C*	-	*29*	*C*
	EBL	**0.84**	**64**	**E**	**0.84**	**66**	**E**
	EBR	**0.81**	**66**	**E**	**0.88**	**78**	**E**
	NBT	0.28	11	B	0.34	12	B
	SBT	0.47	14	B	0.76	20	C
	SBR	0.80	26	C	0.80	25	C
Winston Churchill Blvd & Argentia Rd	*Overall*	-	*41*	*D*	-	*40*	*D*
	EBL	**0.87**	**84**	**F**	**0.87**	**82**	**F**
	EBT	0.23	41	D	0.31	43	D
	EBR	0.11	35	C	0.34	35	D
	WBL	0.22	45	D	0.56	37	D
	WBT	0.14	50	D	0.57	50	D
	WBR	0.30	41	D	0.52	41	D
	NBL	0.56	**78**	**E**	**0.83**	**87**	**F**
	NBT	0.62	39	D	0.41	39	D
	SBL	**0.87**	**77**	**E**	**0.83**	**73**	**E**
	SBT	0.26	4	A	0.69	18	B
	SBR	0.22	3	A	0.47	12	B
Tenth Line W & Argentia Rd	*Overall*	-	*17*	*B*	-	*28*	*C*
	EBL	0.01	12	B	0.01	17	B
	EBT	0.47	17	B	0.55	23	C
	EBR	0.06	12	B	0.19	17	B
	WBL	0.15	10	A	**0.96**	50	D
	WBT	0.20	9	A	0.56	14	B
	WBR	0.02	8	A	0.01	9	A
	NBL	0.21	23	C	0.16	24	C
	NBTR	0.54	25	C	0.67	29	C
	SBL	0.03	28	C	0.03	33	C
	SBTR	0.03	28	C	0.04	29	C
Ninth Line & Argentia Rd	*Overall*	-	*4*	*A*	-	*11*	*B*
	WBL	0.45	26	C	0.75	26	C
	WBR	0.31	25	C	0.64	24	C
	NBT	0.19	3	A	0.48	7	A

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBR	0.21	3	A	0.14	5	A
	SBL	0.16	4	A	0.24	13	B
	SBT	0.34	3	A	0.37	6	A
Ninth Line & Derry Rd	*Overall*	-	*28*	*C*	-	*39*	*D*
	EBL	0.32	16	B	0.75	26	C
	EBT	0.43	1	A	0.45	25	C
	WBL	0.19	18	B	0.43	19	B
	WBT	0.24	24	C	0.59	32	C
	NBL	0.44	41	D	0.44	44	D
	NBT	0.31	39	D	0.68	49	D
	NBR	0.24	38	D	0.31	42	D
	SBL	0.09	45	D	0.50	**71**	**E**
	SBT	0.51	50	D	0.65	**56**	**E**
	SBR	0.76	**58**	**E**	0.71	**61**	**E**
Derry Rd & Hwy 407 NB Ramp Terminal	*Overall*	-	*14*	*B*	-	*18*	*B*
	EBT	0.59	15	B	0.65	16	B
	WBT	0.39	12	B	0.81	21	C
	NBL	0.01	19	B	0.05	14	B
	NBR	0.30	22	C	0.38	17	B
Derry Rd & Hwy 407 SB Ramp Terminal	*Overall*	-	*10*	*B*	-	*15*	*B*
	EBT	0.54	10	A	0.52	11	B
	WBT	0.36	9	A	0.74	17	B
	SBL	0.04	21	C	0.19	14	B
	SBR	0.18	23	C	0.58	21	B
Tenth Line & North Site Access	EBLR	0.01	8	A	0.01	8	A
	NBL	0.01	7	A	0.00	8	A
Argentia Road & South Site Access	SBLR	0.04	12	B	0.44	**43**	**E**
	EBL	0.02	8	A	0.02	12	B

The intersections under future total 2037 conditions operate similar to future background 2037 conditions. Delays are identified along Highway 401 ramp terminal approaches at Winston Churchill Boulevard, and eastbound, northbound and southbound left turn at Winston Churchill Boulevard and Argentia Road. Delays are also observed at southbound approaches at Ninth Line and Derry Road. Westbound left turn at Tenth Line and Argentia Road is expected to operate close to capacity in the PM peak hour.

The capacity analysis indicates that the proposed development will have minimal impact on the existing road network, where all study intersections and roadways are able to accommodate the site

generate traffic at all horizon years. It is recommended that the City and Region continue to monitor the study intersections and movements nearing capacity and implement slight signal timing adjustments as required.

7 QUEUING ANALYSIS

Table 7-1 provides a summary of the 95th percentile queues derived from the Synchro analysis for all exclusive turning movements at the study intersection. Queueing analysis details are provided in **Appendix E.**

Table 7-1 Queuing Analysis Future Total Conditions

Intersection	Movement	Storage (m)	95th Percentile Queue (m)					
			EX 2025		FT 2032		FT 2037	
			AM	PM	AM	PM	AM	PM
Winston Churchill Blvd & Hwy 401 WB Ramp (Signalized)	EBL	35		8	-	8	-	10
	EBR	35		0	-	0	-	-
	WBL	400	61	148	67	216	60	248
	WBR	160	59	31	67	**161**	81	**168**
Winston Churchill Blvd & Hwy 401 EB Ramp	EBR	190	51	97	55	115	70	137
Winston Churchill Blvd & Argentia Rd	EBL	185	97	93	76	77	76	77
	EBR	100	13	44	5	40	5	39
	WBL	85	36	94	35	82	35	79
	WBR	85	44	84	36	73	35	70
	NBL	150	22	49	23	49	23	50
	NBR	70	12	11	1	8	1	8
	SBL	145	62	52	56	48	56	46
	SBR	185	28	58	13	98	11	98
Tenth Line W & Argentia Rd	EBL	35	2	2	3	2	3	2
	WBL	65	9	55	4	55	9	64
	EBR	125	0	0	0	9	0	9
	NBL	130	17	15	9	17	19	17
	SBL	45	3	2	1	4	5	4
Ninth Line & Argentia Rd	NBR	100	9	7	9	7	9	7
	SBL	45	14	14	14	14	14	16
Ninth Line & Derry Rd W	EBL	90	43	70	37	57	41	74
	WBL	100	22	41	18	34	20	38
	NBL	185	38	29	42	33	39	31
	NBR	135	15	15	16	17	15	15

Intersection	Movement	Storage (m)	95th Percentile Queue (m)					
			EX 2025		FT 2032		FT 2037	
			AM	PM	AM	PM	AM	PM
	SBL	105	14	25	16	33	16	36
	SBR	95	25	22	29	26	27	23
Hwy 407 NB Ramp & Derry Rd E	NBR	160	14	19	15	23	17	26
Derry Rd & Hwy 407 SB Ramp	SBR	160	11	32	12	37	12	42
Tenth Line & North Site Access	EBRL	15	-	-	0	0	0	0
	NBTL	15	-	-	0	0	0	0
Argentia Road & South Site Access	SBLR	30	-	-	1	11	1	15
	EBL	30	-	-	1	1	1	1

The 95th percentile queues for all study intersections were reviewed where auxiliary lanes are present for turning movements. The storage lengths for each auxiliary lane took into account the deceleration, storage and effective taper length for each auxiliary lane. All queues for the 2025 existing, 2032 and 2037 total traffic scenarios are shown to be accommodated with the existing auxiliary lanes during both the AM and PM peak hours. Exception includes the 95th percentile queue length for the westbound right-turn movement at Winston Churchill Boulevard and the Highway 401 westbound ramp during the PM peak hour under the 2032 and 2037 future total traffic. The anticipated queue marginally exceeds the storage length. However, the queue can still be accommodated within the available 43 m taper.

8 PARKING AND LOADING ASSESSMENT

8.1 Parking Requirements

The parking requirements for developments in the City of Mississauga are governed by the Zoning By-law 0225-2007. The required parking space for the site is outlined in **Table 8-1**.

Table 8-1 Required and Proposed Parking Supply

Land Use	Units/ Density	Parking Rate	Proposed Parking Supply	Required Parking Supply
Data Centre	21,217 m^2	2 spaces per 100 m^2 of GFA	45	45
Total Number of Parking Spaces			**45**	**45**

The table above illustrates that the site meets and exceeds the minimum number of parking spaces required by the zoning by-law.

The City of Mississauga Zoning By-law 0225-2007 does not include a provision for parking for a data center. However, there are provisions for a Science and Technology facility that includes a rate of 2 parking spaces for 100 m^2 GFA, resulting in 407 required parking spaces. Additionally, there are provisions for all other non-residential uses that are specified in Table 3.1.2.2 of the zoning bylaw, which has a rate of 5.4 parking spaces for 100 m^2 GFA resulting in 1,099 parking spaces. Both potential land uses and parking rates overestimate the required parking for a data center. Based on the applicants' experience with data center and the parking justification study prepared on September 14, 2026, the proposed 45 parking spaces is anticipated to be sufficient for the needs of the site, with potential spillover parking able to be accommodated via the surplus for the industrial warehouses if required. The parking justification is provided in **Appendix F**.

8.2 Barrier-Free Parking

Under Zoning By-law 0225-2007 Section 3.1.3 requires accessible parking spaces to be provided on site. For a site with 13-100 required parking spaces, 4% of the total required parking spaces must be accessible. For a site with 101-200 required parking spaces, 1 + 3% of the total required parking spaces must be accessible. For a site with 201-1000 required total parking spaces, the required number of barrier-free parking spaces is 2.0 plus 2% of the required number of parking spaces. **Table 8-2** shows the proposed number of accessible parking spaces.

Table 8-2 Required Accessible Parking Spaces

Use	Barrier- free Parking Supply Rate	Minimum Barrier-free Parking Supply	Proposed Barrier-free Parking Supply
Data Centre	4% of required parking	2	4

Accordingly, the proposed barrier-free parking supply of 4 parking spaces meets the minimum parking supply required.

8.3 Electric Vehicle Parking Spaces

In accordance with Zoning By-law 0225-2007, Table 3.1.1.12 (Line 6.0), non-residential uses identified in Table 3.1.1.12 are required to provide electric vehicle parking spaces at a rate of 10% of the total required parking spaces or 1 space, for whichever is greater. **Table 8-3** shows the proposed number of electric vehicle parking spaces.

Table 8-3 Required Electrical Vehicle Parking Spaces

Use	Parking Supply Rate	Minimum Required EV Spaces	Proposed EV Spaces
Data Centre	10% of total required (4)	4	4

Accordingly, the proposed EV supply of 4 parking spaces meets the minimum parking supply required.

8.4 Bicycle Parking Requirements

The site is subject to the City of Mississauga Zoning By-law 0225-2007 and requires a total of 23 bicycle parking spaces. The proposed development provides a total of 32 bicycle parking spaces. The requirements and provision of bicycle parking are summarized in **Table 8-4** below.

Table 8-4 Required Bicycle Parking Spaces

Use	Bicycle Parking Supply Rate	Minimum Bicycle Parking Supply	Proposed Bicycle Parking Supply
Data Centre	0.1 Spaces per 100 m^2 (Class A)- non-residential	21	22
	2 spaces (Class B)- non-residential	2	10
Total		**23**	**32**

Accordingly, the proposed bicycle parking supply spaces exceeds the minimum parking supply required by one Class A bicycle parking space and eight Class B bicycle parking spaces.

8.5 Loading Assessment

According to Zoning By-law 0225-2007 Section 3.1.4.3, developments with a GFA greater than 14,000 m^2 require 3 loading spaces plus 1 additional space for each 9,300 m^2 GFA. Loading space requirements are provided in **Table 8-5**.

Table 8-5 Loading Spaces Requirements and Proposed Supply

Buildings	Loading Spaces Rate	Minimum Required Loading Spaces Supply	Proposed Loading Space
Data Centre	3+1 per 9,300 m^2 over 14,000 m^2	3	3

The proposed supply meets the minimum required number of loading spaces. The proposed loading space dimensions meet the by-law requirement of 3 loading spaces.

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9 SITE PLAN REVIEW

As part of this traffic study, TYLin reviewed the proposed site plan for the development. The proposed site is anticipated to utilize one site access from Tenth Line. The review was conducted in accordance with the applicable City of Mississauga standards and the guidelines set by the Transportation Association of Canada (TAC).

9.1 Sightline Analysis

A desktop sightline review of the site accesses has been completed by TYLin. TAC Geometric Design Guide for Canadian Roads (June 2019) was used to determine the required sight distances. Chapter 9 of the TAC guidelines provided tables to determine the minimum requirements for the design Intersection Sight Distance (ISD) while Chapter 2 provided the minimum Stopping Sight Distance (SSD). The ISD requirement is greater than that for minimum Stopping Sight Distance, thus only ISD was reviewed as an available sight distance satisfying this requirement would satisfy both requirements.

The required ISD is determined by using the time gap required by a vehicle to perform a maneuver and accelerate to the design speed of the road. The TAC Guidelines use different "Cases" to determine the Time Gap. Requirements for sight distances will therefore vary based on the type of intersection, the approach grade of the road, as well as the maneuver being performed by the vehicle. The Cases investigated for the site access are as follows:

- Case B (TAC Chapter 9) – Intersections with stop control on minor road;
- Case B1 – left turn from minor road;
- Case B2 – right turn from the minor road;

Table 9-1 summarizes the available sight distances at the site access. 10th Line has minimal horizontal or vertical curvature and assumed posted speed of 50 km/h, and design speed of 50km/h. City of Mississauga Complete Street Guide states that best practice in urban area is to design street so that operating speeds are the same as posted speed. For a major collector, with posted speed 50km/h or above, the design speed = posted speed, similar to best practices in other Canadian jurisdictions.

Table 9-1 ISD Requirements

Access	Maneuver	Design Speed	TAC ISD Passenger Car Requirement (m)	TAC ISD Combination Truck Requirement (m)	Minimum Available Sight Distance (m)	Meets Standards (Y/N)
Site Access (10th Line)	Left Turn from Stop	50 km/h	105	170	500	Y
	Right Turn from Stop		95	150	180	Y

The available sight distance exceeds the required ISD and will also satisfy minimum stopping sight distance requirements. The sight distance review confirms all sight distance requirements have been met and are illustrated in **Appendix G.**

9.2 Access Review

As part of the site plan review, an evaluation of the proposed site accesses along 10th Line West was conducted. This review is based on the City of Mississauga Design Standards and the Transportation Association of Canada (TAC) Geometric Design Guidelines.

9.2.1 Intersection Angle

The proposed site access will intersect 10th Line at an angle of 106 degrees respectively. Both intersection angles fall within the recommended range of 70 to 110 degrees, as outlined by the Transportation Association of Canada (TAC), which is considered acceptable for ensuring safe and efficient access. These angles are illustrated in **Appendix G**.

9.2.2 Corner Clearence

Regarding the recommended minimum corner clearance distance between an intersection and an entranceway (driveway), the Transportation Association of Canada (TAC) outlines the suggested minimum corner clearances in Chapter 8 of the TAC Geometric Design Guide for Canadian Roads (June 2017). Figure 8.8.2 in TAC Chapter 8, Section 8.8.1, specifies the minimum corner clearance for collector roads as 55 meters for signalized intersections and 20 meters for unsignalized intersections. 10th Line Road is a collector road and an undivided roadway. The site access is not located near any adjacent intersection with the closes being over 500 m away to the south, and a private driveway access to the Hope Church located approximately 70m northernly. These corner clearance requirements have been met for the proposed driveway along 10th Line, as shown in **Appendix G**.

9.2.3 Intersection Curb Radii

Based on TAC design guidelines for industrial land uses, a minimum curb radius of 6 to 15 meters is required at the proposed two-way site accesses onto 10th Line. These requirements have been met at the southern curbline. The northern curb is shown to have a radii of 4.5m, not meeting the standard. However, as all site generated traffic will be entering the site from the south, this is deemed acceptable. All site access measurements are illustrated in **Appendix G**.

9.2.4 Clear Throat Length

Based on TAC design guidelines, the minimum clear throat length for an industrial land use between greater than 45,000m^2 is 15m, measured from the curb return. This requirement has been met for the proposed driveway, as illustrated in **Appendix G.**

9.3 Site Circulation Review

Site access will be provided via one full moves unsignalized intersections.

Vehicle maneuvering diagrams have been prepared for the proposed site. This includes a review of heavy vehicles, waste collection, passenger vehicles and fire route access. The vehicle maneuvering diagrams are provided in **Appendix H**.

9.4 Loading Vehicles

Loading vehicle turning movements were simulated using the Transportation Association of Canada (TAC) WB-20 design vehicle. Trucks serving the industrial buildings are permitted to access the site only via the southern access on Argentia Road. The turning movement analysis demonstrates that the WB-20 vehicle can enter the site, circulate to and from the loading area, and exit the site without conflict.

9.5 Waste Collection Vehicles

For this site, the waste collection vehicle is a Front-End Waste Truck, which can access the site and maneuver in the waste collection area without conflict. The waste collection truck was simulated using a Front-End Waste Truck model from the Peel Region.

9.6 Passenger Vehicles

Passenger vehicle turning movements were simulated using a Transportation Association of Canada (TAC) passenger vehicle. The simulations indicate that passenger vehicles can access the site and circulate within the parking areas without conflict.

9.7 Fire Route Vehicle

Emergency fire truck vehicles were simulated using a Mississauga Pumper Fire Truck design vehicle. Turning movements indicate that the selected fire truck vehicle can ingress, circulate and egress the site.

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10 PEDESTRIAN CICULATION PLAN

A pedestrian Circulation Plan is proposed to guide the provisions to encourage people to walk more. When people walk more, they are more physically fit and have fewer health problems. Walking more and driving less also reduces greenhouse gas emissions and results in other environmental benefits. In addition, good pedestrian design brings economic benefits as walkable places attract consumers. Since all trips begin and end with an individual walking, providing a well-designed pedestrian network within a proposed development is crucial. Major considerations in developing walkable, connected neighborhoods, and creating a pedestrian oriented environment include:

- Creating safe pedestrian facilities at all pathways and while crossing intersections;
- Providing adequate separation between pedestrian and vehicular facilities;
- Remaining sensitive to the needs of persons with physical challenges; and
- Completing missing pedestrian linkages within and immediately adjacent to the development to create connectivity.

Currently, there are no designated pedestrian facilities within the vicinity of the site or on boundary roads (10th Line). The current site plan includes sidewalks around the exterior of each building with the exception of the loading areas. As there are no existing pedestrian facilitates leading to the site it is anticipated that any pedestrians will utilize the side of the road (10th Line) as well as the adjacent development to the south to access the site. Once on the site pedestrians will have to utilize the landscaped areas and cross the associated parking areas/travel lanes to access the proposed pedestrian facilities. Based on the proposed land use of the site as well as the location, the site is in line with adjacent properties for pedestrian connectivity. It is recommended that designated pedestrian crossings be included within farther updates to the site plan to ensure safe crossing of vehicle travel lanes.

Appendix I summarizes potential pedestrian paths as well as highlights the proposed pedestrian facilities.

11 COMMUNITY IMPACT

The subject site is located within an established employment/industrial area of the City of Mississauga. Surrounding land uses consist predominantly of industrial, warehouse, logistics, and related commercial operations. There are no immediately adjacent residential neighborhoods in close proximity to the site.

The traffic generated by the proposed development during the weekday AM and PM peak hours represents a minor increase relative to the existing and future background traffic volumes on the adjacent roadway network. The surrounding arterial and collector roadways are designed to accommodate employment-area traffic, including commercial vehicles, and have sufficient capacity to accommodate the forecast site-generated trips.

Based on the analysis completed for the Future Total (2032 and 2037) scenarios:

- Traffic increases attributable to the Data Centre are small in nature, 21 trips or less during the assessed peak hour periods.
- Overall intersection operations remain acceptable under Future Total conditions
- No significant adverse operational or capacity-related impacts are anticipated on the surrounding road network.
- The forecast increase in site-generated truck traffic is not expected to materially alter existing traffic conditions or introduce a significant additional road-safety impact for surrounding developments.

Given the industrial context of the area and the absence of nearby residential neighborhoods, the incremental traffic associated with the development is not expected to result in measurable community disruption.

Concerns regarding truck interactions with other road users, truck turning movements, site access, and conditions along Tenth Line should be considered through the development review process. Where warranted, potential measures such as designated truck routes, appropriate access design and signage, sightline maintenance, and other site-specific safety improvements may be evaluated in consultation with City staff.

Should Public Information Centers (PICs) or community engagement sessions be undertaken as part of the development review process, any traffic-related comments or concerns raised by stakeholders will be reviewed and addressed as required by the City of Mississauga. Potential concerns related to traffic operations, safety, truck activity, or access configuration will be evaluated in coordination with City staff, and appropriate mitigation measures will be considered, where warranted.

12 TRANSPORTATION DEMAND MANAGEMENT

12.1 TDM Objectives

Development of site-specific Transportation Demand Management Plan (TDM) measures for the proposed development is based on a four-year planning horizon. Therefore, in the context that the primary objective is to reduce single occupancy vehicle use, the plan will review opportunities to set realistic targets for increased use of carpooling, transit, cycling, and walking trips. This plan recommends measures with a pre-and post-baseline commuter survey of all employees.

Transportation Demand Management (TDM) refers to a variety of strategies to reduce congestion, minimize the number of single-occupant vehicles, encourage non-auto modes of travel, and reduce vehicle dependency to create a sustainable transportation system. TDM strategies have multiple benefits including the following:

- Reduced auto-related emissions to improve air quality
- Decreased traffic congestion to reduce travel time
- Increased travel options for businesses and commuters
- Reduced personal transportation costs and energy consumptions

The combined benefits listed above will assist in creating a more active and liable community through improvements to overall active transportation facilities for businesses and the surrounding community. Typical TDM measures include:

1. Carpool/vanpool ride sharing
2. Bicycle and pedestrian programs
3. Promotion of public transit
4. Parking supply and management strategies

Establishment of Transportation Management Associations (TMA's) in employment areas and car sharing organizations

All recommended and proposed TDM measures are noted as the responsibility of the owner.

12.2 City and Region TDM Objectives

A Transportation Demand Management (TDM) Plan is proposed to guide the provision of viable alternative personal transportation options beyond the private, single-occupant vehicle (SOV). Consistent with the Region of Peel and City of Mississauga Official Plan, this TDM Plan intends to support the development by outlining TDM measures and a suite of strategies under consideration

to promote the use of more active and sustainable transportation modes, respond to the mobility needs of employees and patrons of the site, and reduce dependence on the private automobile, especially SOV travel.

12.2.1 City of Mississauga Official Plan

Per the City of Mississauga Official Plan Policy 8.5 "Transportation Demand Management (TDM) measures encourage people to take fewer and shorter vehicle trips to support transit and active transportation choices, enhance public health and reduce harmful environmental impacts. TDM is most effective when supported by complementary land use planning, good urban design and transit improvements." Typical TDM strategies reduce vehicle dependency, single occupant vehicle travel, trip distance and time and peak period congestion. Typical TDM measures highlighted in the City's Official Plan include:

- To encourage TDM strategies that promote transit use and active transportation, and reduce vehicle dependency, single occupant vehicle travel, trip distance and time and peak period congestion.
- To manage parking in intensification area to encourage the use of alternative modes of transportation and the reduction of vehicular congestion.
- To encourage land uses permitted by this Plan that make efficient use of the transportation system and parking facilities during off-peak hours.
- In appropriate areas, to encourage a fee for parking and the separation of parking costs from other costs, such as transit fares, building occupancy and residential unit prices.

Prior to approval of development applications, particularly those that will generate significant employment opportunities, a TDM plan may be required that demonstrates, among other things, the following:

- building orientation that supports transit service.
- minimize distance between main building entrances and transit stations/stops.
- development that is integrated into the surrounding pedestrian and cycling network.
- parking facilities designed to provide safe and efficient access for pedestrians and cyclists emanating from the surrounding transit and active transportation network; and secure, conveniently located, weather protected, on-site bicycle storage facilities, and associated amenities such as showers, change rooms and clothing lockers.

12.2.2 Region of Peel Official Plan

Policy 5.9.9 of the Region of Peel Official Plan (OP) states "Growth in population end employment in Peel Region has led, and will continue to lead, to increased travel demand through the

construction of new roads and the widening of existing roads. Such "supply side" solutions, however, will not be enough in the future. Exclusive dependence on roads is neither sustainable nor desirable. It is necessary to also consider "demand side" solutions, such as Transportation Demand Management measures. While TDM alone cannot be expected to meet the future growth in demand, it is an important component of the range of solutions that will be needed to meet forecast travel demand."

Peel Region TDM objectives include:

- To reduce auto dependency by promoting sustain- able modes of transportation.
- To provide a range of transportation services to meet the diverse needs of the population.
- To maximize the capacity of the transportation system to move both people and goods.

It is the policy of Regional Council to:

Encourage area municipalities to:

- Provide land uses and site design which foster the use of sustainable modes of transportation.
- Promote infrastructure to encourage teleworking.
- Promote a balance of jobs and housing in communities to reduce the need for long distance commuting.
- For new development in designated greenfield areas, create street configurations, densities and an urban form that support walking, cycling and the early integration and sustained viability of transit services and create high quality public opens spaces with site design and urban design standards that support opportunities.

Work with all levels of the public and private sectors to develop programs that place primary consideration on the reduction or elimination of trips and the increased use of sustainable modes of transportation and to develop programs for implementing these and other travel demand management strategies.

Work with the area municipalities, local Transportation Management Associations and school boards to evaluate and measure to progress of TDM programs and to develop new innovative strategies and initiatives.

Work with the public and private sectors to develop and support outreach and marketing programs that promote sustainable transportation alternatives, such as active transportation and transit, to affect changes in peoples' travel behavior and to encourage increased use of these alternatives.

Work with the area municipalities to promote and support the development and implantation of TDM strategies and programs within the Regional and area municipal governments.

Encourage area municipalities, local Transportation Management Associations and the private sector to develop parking management strategies that make more efficient use of parking resources and that encourage the use of sustainable modes of transportation.

Encourage area municipalities to update their parking and zoning by-laws to support and facilitate transportation demand management measures.

12.2.3 Region of Peel Sustainable Transportation Strategy

The Sustainable Transportation Strategy (STS), approved by Regional Council in February 2018, sets a goal of a 50% sustainable mode share by 2041.

The Peel Region Sustainable Transportation Strategy provides a framework for how the Region will:

- Increase the current 37% share of trips by walking, cycling, transit, carpooling and telework in Peel Region, to achieve a 50% sustainable mode share by 2041.
- Accommodate growth in a way that prioritizes environmental, societal and economic sustainability.
- Contribute to a Regional transportation system that is safe, convenient, efficient, multi-modal, well- integrated and sustainable.

The Region's STS includes "ambitious mode share targets for transit, walking, cycling, carpooling and telework in 2041, aiming to maximize the role of sustainable modes in serving the Region's projected 40% growth in travel demand. Achieving these targets will require substantial improvements in major transportation infrastructure (notably facilities for rapid transit, walking and cycling) and services (notable regional and local public transit services, and maintenance of walking and cycling facilities)".

The STS has two accompanying implementation plans, one focusing on active transportation and another focusing on transportation demand management. With their 2018-2022 timelines, the implementation plans lay out the short-term priorities of the STS, such as:

- The locations of new and upgraded walking and cycling infrastructure.
- Encouraging and supporting cycling and walking to and from schools, transit hubs, and other community destinations.
- Implementation of new carpool lots and targeted carpooling promotion.
- The development of a teleworking toolkit.
- Guidance for new development.

12.3 Proposed TDM Measures

The TDM Plan provides measures as they relate to the physical site plan that will reduce reliance on the automobile at the site and in the area by providing several strategies as part of the site development and as part of their day-to-day operations.

12.3.1 Carpooling

Carpool parking is proposed as a way of encouraging the reduction of single-occupancy vehicle use. Among designated car-pool spaces, the following additional measures are recommended to encourage alternatives to SOV use:

- The provision of car-share parking spaces to accommodate a car-share service provider.
- The provision of additional bicycle parking spaces; and
- The introduction of a ride-share program.

It is recommended the subject site provide such TDM measures to meet the objectives and targets to reduce vehicular travel demand and encourage cycling and walking.

12.3.2 Local Transit Consideration

As discussed in Section 3.2 there are several transit routes operating in the vicinity of the subject area including the Go Transit, Mississauga MiWay Transit, Brampton Transit Route, and Milton Transit. The presence of these transit services should be communicated to new employees of the development as part of an information brochure on available transportation alternatives.

12.3.3 Rideshare Services

With ride hailing services like Uber, Lyft and other emerging competitors, it should be noted these platforms would provide employees with flexible alternatives to transit, cycling and driving for short, local trips. For future site employees who may not own or have access to a car, rideshare services may be used to reach a local transit station, home, or needed services. This is also an option for those who may not be able to participate in active transportation options and require a door-to-door service, at potentially lower costs than a traditional taxi service.

12.3.4 Information Brochure

The TDM opportunities would benefit from an additional measure of preparing a customized commuter options brochure for employees. This brochure would contain details on a variety of travel options such as: local/regional transit, pedestrian trails, cycling, and transit facilities and carpool options. The package may include a community map, Mississauga Transit route maps, and GO Transit route map and schedules.

People who cycle for recreational purposes are good groups to target as potential commuter cyclists. They have access to a bicycle and may already be familiar with the City's network of cycling and trail facilities. Many commuters, however, may have simply never tried cycling and could be unfamiliar with appropriate routes, techniques and advice for commuting by bike. This could be reinforced through a Bicycle Network Way-finder Map for commuters that could be included in the information package.

Short-distance commuters could be targeted with messages focusing on the convenience, cost and health benefits of walking or cycling to work. In addition, practical advice regarding route selection, bike parking, and remaining active in cold or wet weather would be useful and effective. This information could be provided to employees during regular communications throughout the year by the City.

Elderly commuters as well as people with physical limitations may be prevented from getting to their destination on their own. In these instances, carpooling, car-share, and shuttle services are important transportation options. The marketing of these opportunities and availability of the services should be provided in further detail to better inform these individuals.

12.4 TDM Monitoring and Measures of Success

Baseline Commuter Survey

The City of Mississauga, in collaboration with the future potential employers of the site, should conduct a confidential transportation survey amongst all employees in the proposed development. The comprehensive survey will provide a measure of current commuter traffic patterns, modes of transportation, behaviors and perceptions for the area. Results will also assist in identifying the demand for sustainable transportation options and opportunities to provide better site access and reduce auto trips (such as, an employer initiated car-pooling program).

Follow-Up Commuter Survey

The City of Mississauga, in collaboration with future potential employers, should conduct a follow-up TDM survey two years after the baseline commuter survey. Results will identify areas of success and improvement for sustainable options for the development and surrounding area. A revised work plan could be developed with strategies to improve sustainable transportation that meet the needs of employers and employees.

13 CONCLUSIONS AND RECOMMENDATIONS

The conclusions and recommendations for the analysis associated with the proposed development are as follows:

The analysis of the proposed development indicates that the existing road network generally performs well. However, certain intersections experience challenges during peak traffic periods. Specifically, the intersection of Winston Churchill Blvd and Argentia Rd where the EBL is shown to operate at an LOS of F during the am peak hour due to high delay.

The expected traffic generated by the proposed development includes a total of 21 site trips, consisting of 15 inbound and 6 outbound trips, during the AM peak hour. During the PM peak hour, 2 inbound and 9 outbound net auto site trips are predicted, totaling 11 trips.

During future background and future total (2032 and 2037), the overall road network is projected to continue operating effectively, with minor revisions to signal timings able to aid in the critical operations.

TYLin recommends that the Peel Region and the City of Mississauga monitor the intersections with identified operational concerns, the intersection of Winston Churchill Blvd and Argentia Rd and the intersection of Tenth Line W and Argentia Rd. Ongoing monitoring will help assess traffic conditions and ensure that any capacity constraints are effectively addressed.

- The addition of site traffic to/from the proposed development does not appear to have significant impact on the operations of nearby intersections when compared to the future background conditions.
- There are no issues with the site's proposed access or internal layout based on the assessed design vehicle and relevant standards.
- A site-specific parking standard of 45 spaces is proposed for the data center, reflecting its operational parking demand, as the City of Mississauga Zoning By-law does not include parking requirements for this land use.
- The evaluation of sight distance requirements at all locations have been met
- It is recommended that the TDM measures mentioned within this report are followed to ensure that the site can provide and guide the provision of viable alternative personal transportation options beyond the private, single-occupant vehicle (SOV) as per the City and Regions Policies.

Appendix A:
Pre-Consultation Correspondence & Response to Comments Matrix

Data Center ZBA Comments - Cycle 2

Owner: PROLOGIS
Address: 7700 Tenth Line W - DATA CENTER
File #: SP 25-63 W9

Please also review ZBA comments - sheet 2 of this excel doc

Updated: July 6, 2026

REF #	REVIEWED BY	COMMENT TEXT	CONSULTANT	RESPONSE
145	MIN OF TRANSPORTATION David Pillay david.pillay@ontario.ca 4165088745	New Cycle 2: Design Please ensure these general comments are met: • Anything deemed essential to the viability and operation of the site (ie. permanent buildings and structures both above and below ground, utilities, frontage roads/fire routes, parking spaces required by by-law, storm water management facilities, including ponds and associated berms, storages, fire routes, etc.) must be setback a minimum of 14 metres from the Highway 407ETR right-of-way. Any parking within the 14m setback must be surplus to the site requirements and so denoted on the Site Plan. Setbacks must be clearly indicated on all plans. • The developer is solely responsible for all noise mitigation measures and such must be located beyond ministry property, noise berms or grading of any kind will not be permitted on Highway 407ETR corridor property. This will be a condition under the BLU Permit. • The developer is solely responsible for all light trespassing mitigation measures. All external illumination must be directed away from the highway right-of-way. Light levels must be 0 lux at the Hwy property line with no light spillage. This will be a condition under the BLU Permit. • The developer shall be solely responsible for any and all issues related to light trespass onto the subject property arising from the installation of highway lighting, whether existing or future, within or adjacent to the development area. Should highway lighting be installed or modified by 407 ETR, the developer is required to implement, at their own expense, any mitigation measures deemed necessary to address light trespass concerns, including but not limited to installing shielding, landscaping, or other appropriate solutions. 407 ETR shall bear no responsibility for remedying, altering, or compensating for any impacts associated with such highway lighting installations. This will be a condition under the BLU Permit. • Material during excavation to be stockpiled away from 407 ETR highway fence line. • The proponent will need to place erosion and sediment control measures for the proposed development prior to any works. • No drainage is allowed to enter 407 ETR lands. All drainage to be contained to the site with flows away from 407 ROW • Access to the construction area must be from the owner's property limits and fence line • Any excavated/disturbed areas must be backfilled and returned to equal or better conditions Drainage No further comments. Traffic • TY Lin is not RAQS approved the Ministry will not review the TIS submitted. • MTO require the submission of a full TIS (following MTO TIS guidelines and by a RAQS qualified consultant) to assess the future impact of the proposed development to identify if there are any warranted highway/road improvements. Digital Synchro version 12 files are required at the time of submission. Both editable/printable and locked/stamped/signed by P.Eng, version of the TIS is required. MTO will not review a TIS completed by a company that is not RAQS qualified, or that includes counts/data that is collected by a non RAQS qualified company. ITE 12th edition is the latest version and must be used. • The consultant is responsible for thoroughly reading and adhering to the MTO TIS guidelines. If any reasonable requirements are missed, it is the consultant's obligation to provide them. The absence of a specific instruction in the TOR does not negate the necessity of fulfilling the reasonable requirement. • Wrong growth rate applied as well as a compounded growth rate – the MTO uses a simple growth rate (linear) and a minimum of 2% at our ramp terminals. Electrical No comments currently.		1. TYLin is currently RAQS approved by the Ministry 2. The second submission TIS is stamped and signed by a P.Eng and Synchro V12 files are provided as part of the 2nd submission 3. Noted. A linear growth rate, with an annual growth rate of 2%, was applied to the MTO-operated ramps.

116	TRAFFIC REVIEW Ayat Mazin-I-Khalil Ayat.Khalil@mississauga.ca 9056153200 x4863	Cycle 2: An updated Traffic Impact Study dated March 2026 was submitted, the following remains outstanding: (A) Revised, cleared. (B) Revised, the alternative access route to the industrial buildings was shown in the figure 4-4 only and not reflected in the subsequent scenarios. The TIS still has to include a capacity and sensitivity analysis of this alternative. Few additional comments to consider are: (i) In section 4.2, the trips estimated for the industrial buildings for background traffic are only vehicles traffic estimates and does not include truck traffic estimates from ITE Trip Generation Manual. Please revise the volumes in this submission and the related files (SP 25-65 W9 and OZ 25-22 W9) accordingly, to include an estimate and breakdown of the number of trucks. Please provide further analysis on the heavy vehicles operations and logistics planned (ex. number of heavy vehicles entering the site from each of the accesses from Tenth Line and Argentia Rd, times of operations, potential traffic conflicts with the existing traffic, etc). As per the the City of Mississauga Traffic By-Law schedule 13, Tenth Line W has no heavy vehicles restriction implemented at all times. Given that, please clarify the truck traffic logistics that are planned within the site access(es) and the secondary access connecting the data center and the Industrial Building. (C) The Community Impact section should be updated to address the public concerns regarding truck traffic activity impacting road safety on Tenth Line with respect to the surrounding existing developments. [TRAFFIC IMPACT STUDY] A Traffic Impact Study prepared by TYLin dated August 2025 was submitted in support of the proposed development. Based on the information provided to date, staff provide the following comments: (B) EXISTING CONDITIONS (i) Traffic Data - Please revise Figure 3-1 Existing Lane Configuration to show the dual EB left turn lane at Argentia Rd and Winston Churchill Blvd. - Please revise Figure 3-6 Existing Traffic Volume, as the NBL traffic volume is shown to be 7 at Argentia Road and Tenth Line W, whereas the traffic count for this movement is 73 in the TMC attached in Appendix C. Please revise this figure, and the subsequent scenarios and synchro assessments accordingly. (C) ADDITIONAL COMMENTS (i) The TIS shall include a section in the report to address Community Impacts. This section shall include summary statements outlining the resulting traffic increases to the critical streets, movements and intersections. Comments or concerns from the community through future public meetings and engagements that are related to traffic shall also be addressed in this section.		A) Noted B) The alternative access route to the industrial buildings shown in Figure 4-4 has been updated and included subsequent scenarios. Capacity and sensitivity analysis of this alternative have been included as requested i) Truck traffic estimates have have been included for the industrial building and breakdowns have been provided in Section 4. During normal operations, the data centre is not expected to generate regular daily truck traffic. South access at Argentia Road is added to the model. Please note that the access to the data center is assumed from north access (10th line) and the vehicles accessing the warehouse use the south access. Truck route analysis is added to the report and has been described in Section 4of the report. C) Community impact section is updated to reflect the effect of truck activity (Section 11)
	TRAFFIC REVIEW Ayat Mazin-I-Khalil Ayat.Khalil@mississauga.ca 9056153200 x4864	Cycle 2: Remains outstanding. To be revised as per the comment: The existing Right-of-Way limits of Tenth Line W road pavement is still missing, the curb line of the road limits to be clearly depicted in the diagrams to confirm the design vehicles is travelling on the existing lanes and not driving over the road ditch. [SITE CIRCULATION] The Vehicle Maneuvering Diagrams in Appendix G in the submitted Traffic Impact Study (Drawing No.17-22) to be revised as per the following comments: a) The existing Right-of-Way limit of the Tenth Line W road pavement to be accurately depicted in the diagrams to confirm that the design vehicle (WB-20) is travelling within the existing lanes. b) Geometric design of the access(es) and dimensions such as curb radii to be revised to better accommodate truck ingress and egress turning movement at the access points, this is to avoid turning over the opposite direction lane and over the road ditch. c) Additional provisions to aid in the safety and operation of these features may be required. d) Confirmation from Fire and Emergency Services that the internal road is acceptable from an emergency response perspective. e) Confirmation from the Region of Peel that the internal road is acceptable from a waste collection perspective.		The VMDs have been updated to show the existing right-of-way limits along Tenth Line West and are provided in Appendix G of the updated TIS. Reviews confirm design vehicles can operate within existing lanes and do not enter the road ditch

Data Center ZBA Comments - Cycle 2

Owner: PROLOGIS
Address: 7700 Tenth Line W - DATA CENTER
File #: OZ 25-21 W9

Please also review SPA comments - sheet 1 of this excel doc

Updated: July 6, 2026

REF #	REVIEWED BY	COMMENT TEXT	CONSULTANT	RESPONSE
94	TRAFFIC REVIEW Ayat Mazin-I-Khalil Ayat.Khalil@mississauga.ca 9056153200 x4863	Cycle 2: An updated Traffic Impact Study dated March 2026 was submitted, the following remains outstanding: (A) Revised, cleared. (B) Revised, the alternative access route to the industrial buildings was shown in the figure 4-4 only and not reflected in the subsequent scenarios. The TIS still has to include a capacity and sensitivity analysis of this alternative. Few additional comments to consider are: (i) In section 4.2, the trips estimated for the industrial buildings for background traffic are only vehicles traffic estimates and does not include truck traffic estimates from ITE Trip Generation Manual. Please revise the volumes in this submission and the related files (SP 25-65 W9 and OZ 25-22 W9) accordingly, to include an estimate and breakdown of the number of trucks. Please provide further analysis on the heavy vehicles operations and logistics planned (ex. number of heavy vehicles entering the site from each of the accesses from Tenth Line and Argentia Rd, times of operations, potential traffic conflicts with the existing traffic, etc). As per the the City of Mississauga Traffic By-Law schedule 13, Tenth Line W has no heavy vehicles restriction implemented at all times. Given that, please clarify the truck traffic logistics that are planned within the site access(es) and the secondary access connecting the data center and the Industrial Building. (C) The Community Impact section should be updated to address the public concerns regarding truck traffic activity impacting road safety on Tenth Line with respect to the surrounding existing developments. [TRAFFIC IMPACT STUDY] A Traffic Impact Study prepared by TYLin dated August 2025 was submitted in support of the proposed development. Based on the information provided to date, staff provide the following comments: (A) EXISTING CONDITIONS (i) Traffic Data - Please revise Figure 3-1 Existing Lane Configuration to show the dual EB left turn lane at Argentia Rd and Winston Churchill Blvd. - Please revise Figure 3-6 Existing Traffic Volume, as the NBL traffic volume is shown to be 7 at Argentia Road and Tenth Line W, whereas the traffic count for this movement is 73 in the TMC attached in Appendix C. Please revise this figure, and the subsequent scenarios and synchro assessments accordingly. (B) ADDITIONAL COMMENTS (i) The TIS shall include a section in the report to address Community Impacts. This section shall include summary statements outlining the resulting traffic increases to the critical streets, movements and intersections. Comments or concerns from the community through future public meetings and engagements that are related to traffic shall also be addressed in this section.	TYLIN	A) Noted B) The alternative access route to the industrial buildings shown in Figure 4-4 has been updated and included subsequent scenarios. Capacity and sensitivity analysis of this alternative have been included as requested i) Truck traffic estimates have have been included for the industrial building and breakdowns have been provided in Section 4. During normal operations, the data centre is not expected to generate regular daily truck traffic. South access at Argentia Road is added to the model. Please note that the access to the data center is assumed from north access (10th line) and the vehicles accessing the warehouse use the south access. Truck route analysis is added to the report and has been described in Section 4of the report. C) Community impact section is updated to reflect the effect of truck activity (Section 11)
97	TRAFFIC REVIEW Ayat Mazin-I-Khalil Ayat.Khalil@mississauga.ca 9056153200 x4863	Cycle 2: Remains outstanding. To be revised as per the comment: The existing Right-of-Way limits of Tenth Line W road pavement is still missing, the curb line of the road limits to be clearly depicted in the diagrams to confirm the design vehicles is travelling on the existing lanes and not driving over the road ditch. [SITE CIRCULATION] The Vehicle Maneuvering Diagrams in Appendix G in the submitted Traffic Impact Study (Drawing No.17-22) to be revised as per the following comments: a) The existing Right-of-Way limit of the Tenth Line W road pavement to be accurately depicted in the diagrams to confirm that the design vehicle (WB-20) is travelling within the existing lanes. b) Geometric design of the access(es) and dimensions such as curb radii to be revised to better accommodate truck ingress and egress turning movement at the access points, this is to avoid turning over the opposite direction lane and over the road ditch. c) Additional provisions to aid in the safety and operation of these features may be required. d) Confirmation from Fire and Emergency Services that the internal road is acceptable from an emergency response perspective. e) Confirmation from the Region of Peel that the internal road is acceptable from a waste collection perspective.	TYLIN	The VMDs have been updated to show the existing right-of-way limits along Tenth Line West and are provided in Appendix G of the updated TIS. Reviews confirm design vehicles can operate within existing lanes and do not enter the road ditch

Appendix A

Certification Form

Individuals submitting reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Mississauga's Official Plan, Transportation Master Plan, and Transportation Impact Study Guidelines.

By submitting the attached report (and any associated documents) and signing this document, I acknowledge that:

- I have reviewed and have a sound understanding of the objectives, needs, and requirements of the City of Mississauga's Official Plan, Transportation Master Plan, and the Transportation Impact Study Guidelines as they apply to this submission;
- I have sound knowledge of industry standard practices pertaining to the preparation of development-related transportation study reports;
- I have substantial experience (more than five years) in completing development-related transportation studies and strong background knowledge of the transportation planning and engineering principles underpinning these studies; and
- I am registered as a Professional Engineer (P.Eng.), Licensed Engineering Technologist (LET), Certified Engineering Technologist (C.E.T.), or Registered Professional Planner (RPP) in good standing in the Province of Ontario with specific training in transportation planning and engineering.

Dated at City of Ottawa (City) this 18 (Day) day of August (Month), 2025 (Year).

Name: William Sherwin

Professional Title: Traffic Engineer/Project Manager

Signature: William Sherwin

Office Contact Information (Please Print)

Address: Suite 315, 3381 Steeles Avenue East

City/Postal Code: Toronto, ON / M2H 3S7

Telephone/Extension: +1 905.738.5700

E-mail Address:

From: James Emerson <James.Emerson@mississauga.ca>
Sent: Monday, July 28, 2025 3:08 PM
To: William Sherwin
Cc: Michael Dowdall; Bruce LI; Trans Projects
Subject: RE: 7564 10th Line Industrial Development TIS - Terms of Reference
Attachments: Appendix B Pre-Study Consultation Checklist - 7564 10th Line TIS (003) APPROVED.pdf; Appendix A Certification Form - TEMPLATE.pdf

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Hi William,

Please find attached stamped and approved ToR for the proposed development, which encompasses City comments. Other items to note:

- **Certification Form** - The Transportation Consultant must complete, sign, and seal (if appropriate) the attached Certification Form from the City's TIS Guidelines (2022) and append the document to the report to ensure compliance with qualification requirements. The TIS Guidelines can be found at https://www.mississauga.ca/wp-content/uploads/2023/03/CMississauga-TIS-Guidelines-Version-5.1-Dec-2022.pdf . It must be ensured that the report conforms to the City's TIS Guidelines.
- **Growth Rates/Traffic Data** - Please contact Tyler Xuereb from the City's Transportation Planning Section (tyler.xuereb@mississauga.ca, Ext. 4783) to confirm growth rates and/or obtain traffic data for the study area roadways. **Please include the correspondence with the city confirming the growth rates in the TIS appendices.**
- **Signal Timing Plans** - Signal timing plans for signalized intersections under the City's jurisdiction can be obtained from Jim Kartsomanis (Jim.Kartsomanis@mississauga.ca, Ext. 3964). **Please include the correspondence with the city confirming the timing plans in the TIS appendices.**
- **TOR Document and Correspondence -** Please include the TOR approved by the city in the TIS appendices as well as any relevant additional correspondence with Traffic Planning staff, if applicable.

Regards,

MISSISSAUGA

James Emerson
Traffic Planning Technologist
T 905-615-3200 ext.3043

james.emerson@mississauga.ca

City of Mississauga |Transportation and Works Department,
300 City Centre Drive | Mississauga ON | L5B 3C1

Please consider the environment before printing.

From: William Sherwin <william.sherwin@tylin.com>
Sent: Tuesday, July 22, 2025 10:52 AM
To: James Emerson <James.Emerson@mississauga.ca>
Cc: Michael Dowdall <michael.dowdall@tylin.com>; Bruce LI <bruce.li@tylin.com>; Ryan Au <Ryan.Au@mississauga.ca>
Subject: [EXTERNAL] 7564 10th Line Industrial Development TIS - Terms of Reference

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Hi James/Ryan

We hope this email finds you well. T.Y. Lin International Canada Inc. (TYLin) is pleased to present this draft Terms of Reference to prepare a Traffic Impact Study (TIS) in support of Site Plan Approval (SPA) Application for the proposed Industrial development on the lands municipally known as 7564 Tenth Line West, Mississauga, Peel Region.

Terms of Reference

The latest iteration of the site plan includes 3 buildings; Industrial Building DC4 (26,823 m^2 GFA) Industrial Building DC 5 (30,503 m^2 GFA) and a Data Centre (20,338 m^2 GFA). The site plan includes two site access located off 10th Line West, the northern site ass is to serve the Data Centre and southern site access will be through an easement with the property to the south of the site and extension of the existing laneway. The proposed development is anticipated to include a total of 536 parking spaces, inclusive of 20 accessible parking spaces and 45 Electric vehicle spaces.

In order to properly scope this project, we ask the City of Mississauga to confirm the proposed scope of work and provide comments as needed.

1. Study Intersections:
    - Winston Churchill Boulevard / Highway 401 Eastbound Ramp Terminal;
    - Winston Churchill Boulevard / Highway 401 Westbond Ramp Terminal;
    - Winston Churchill Boulevard / Argentina Road;
    - Tenth Line West / Argentina Road;
    - Ninth Line / Argentina Road;
    - Derry Road / Highway 407 Northbound Ramp Terminal;

- Derry Road/Highway 407 Southbound Ramp Terminal;
- Tenth Line West/ North site access; and
- Tenth Line West/ South site access.
- Proposed West Site Access & future Winchester Drive Extension (unsignalized)

2. Existing Traffic Data Collection
    - Traffic data for the study intersections will be obtained through a sub consultant specializing in traffic data collection.
    - It should be noted that we are proposing to obtain Summer Count Data. Due to the industrial location of the site and surrounding area, and location in relation to educational facilities that summer count data will be acceptable for this project.
        - Ryan I believe Michael has already spoken to you about this to confirm.

    Please confirm if the proposed plan for counts is acceptable.
3. Study Horizon years – in compliance with the City of Mississauga's TIS Guidelines and MTO, the following study horizon years are proposed.
    - Existing Year (2025)
    - Buildout Year (assumed 2027 to be confirmed)
    - 5-Year Horizon (2032)
    - 10-year horizon (2037)

    Currently, the TIS assume the proposed Sites will be constructed concurrently under one phase. TYLin acknowledges that part of the site is within the MTO Area of Interest for the new proposed Hwy 413 to the north of the site. As such should the development need to be phased, an interim/ultimate scenario will be required. This will be confirmed with MTO corridor.

4. Growth rates – will be determined based on available data including travel surveys, census data and Planning documents. As such TYLin proposed the following growth rates per roadway (All MTO ramp terminals growth rates will be confirmed with MTO)
    - Winston Churchill Boulevard 1% compounded annually
    - Tenth Line 0.5% compounded annually
    - Argentia Road 0.5% compounded annually
    - Ninth Line 0.5% compounded annually
    - Derry Road 1% compounded annually
5. Based on the City of Mississauga's Planning Information Hub and Active development applications website indicated that no active development applications are within the area of impact of the proposed site – Please confirm.

6. Obtain from the City any potential/committed future road or intersection improvements, that will be on-stream within the development horizon of 7564 Tenth Line West. This information will inform the 'future background' traffic condition against which to measure site traffic impacts.
7. Derive future background traffic volumes by applying the growth rate and background traffic to existing conditions. A review of traffic operations under future background conditions will be completed to assess if any remedial measures would be required at the study intersections to support the forecasted traffic demand prior to the development implementation.
8. Trip Generation – The site trip generation estimates will be confirmed as part of the study based on the 11th Edition ITE Trip Generation Manual.
9. Trip Distribution/Assignment will be distributed and assigned to the surrounding road network using Transportation Tomorrow Survey (TTS) data and engineering judgement.
10. Create a traffic operations model (Synchro/SimTraffic) for the existing study intersections as well as proposed site accesses to evaluate the effects of the proposed development on the study area.
11. Prepare peak hour operational analyses to investigate and document the impacts of the proposed development. This will include a review of intersection turning movement delays, volume to capacity ratios, and vehicular queuing. We will report any operational deficiencies and recommend mitigating measures, if necessary, to improve traffic operations, including recommending lane configuration changes, turn lane requirements and/or traffic control alterations.
12. Conduct traffic signal warrants at all non-signalized intersections and site accesses based on the future traffic conditions.
13. Conduct a site visit to confirm the existing traffic operations and infrastructure within the study area.
14. Review Multi-Modal LOS for the study area intersections as per City of Mississauga's Guidelines.
15. Completion of a Transportation Demand Management Plan to support non-auto mode of travel in accordance with the City of Mississauga's guidelines. This will be included as a separate chapter within the TIS
16. Completion of a Pedestrian Circulation Plan to ensure it is designed to minimize pedestrian and cyclist conflict points while maintaining pedestrian connectivity. This will be included as a separate chapter within the TIS
17. Review of site circulation for the site accesses and internal driveways based on relevant applicable design criteria.

18. Conduct a Parking Study based on the in-force Zoning By-law requirements. Should a parking reduction be contemplated for the site, a Parking Justification Study will also be conducted.

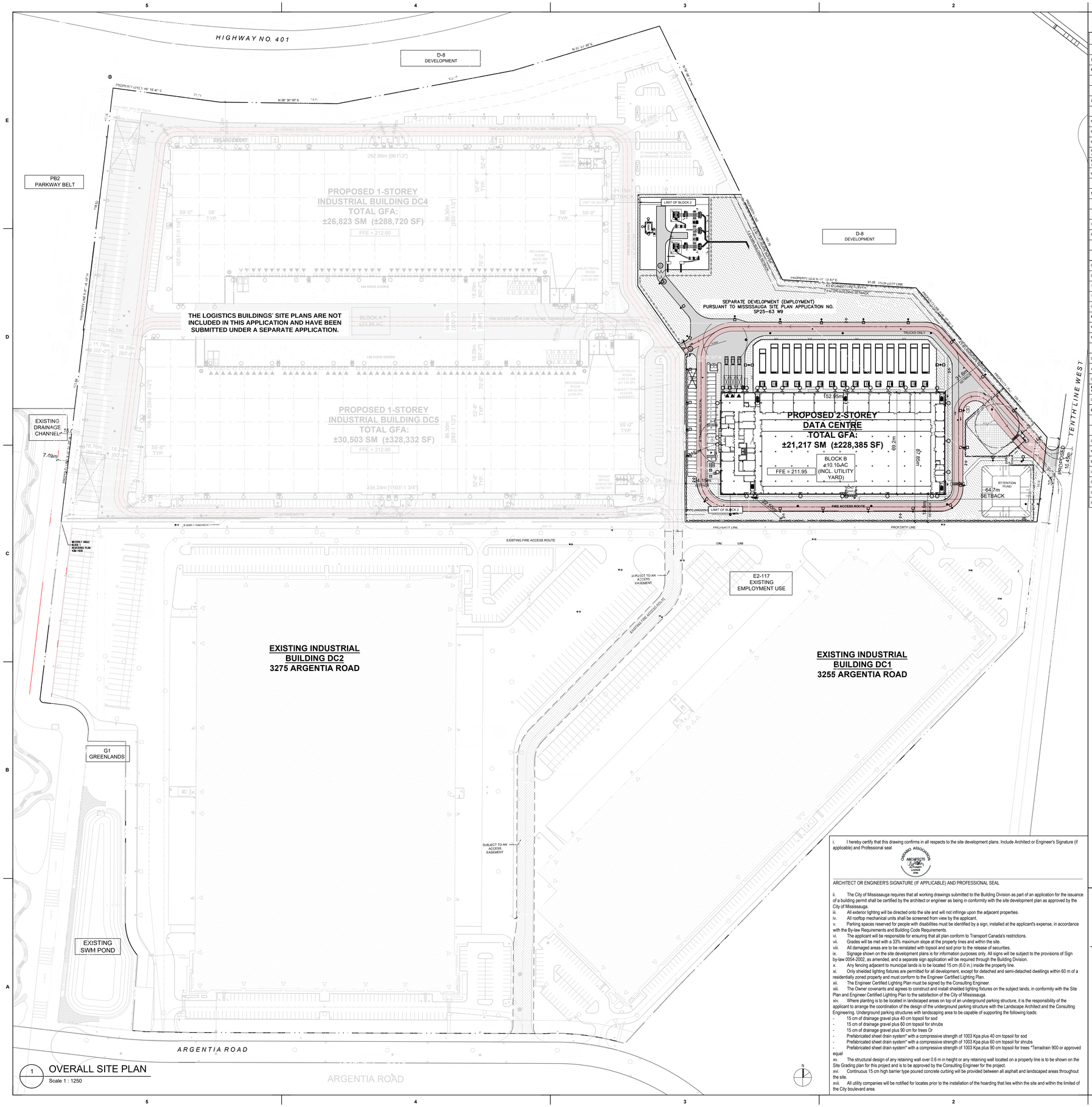
Furthermore, see below a list of items and data (if available): we kindly request from the City for use in our Traffic Impact study:

1. Historic turning movement counts at study area intersections that are within City's jurisdiction (from the list above)
1. Any Average Annual Daily Traffic (AADT) volumes along road segments in the study area
2. Capital roadworks planned on study area network (and when to expect construction)
3. Future background development application details (including TIS reports) for any noted developments identified.

Thank you in advance for your attention to this matter. We look forward to your comments on the preceding scope of work. Should you have any questions about this email, please do not hesitate to contact myself.
William

William Sherwin
TRAFFIC ENGINEER - PROJECT MANAGER
T +1 289.902.0519
william.sherwin@tylin.com
TYLin
Suite 315
3381 Steeles Avenue East
Toronto, ON M2H 3S7, Canada
TYLin.com

Appendix B:
Site Plan



1 OVERALL SITE PLAN
Scale 1 : 1250

PROJECT DATA

7700 TENTH LINE WEST

ZONING CATEGORY	EMPLOYMENT - E2 (EXISTING D-8)					
PROPOSED USE	INDUSTRIAL BUSINESS					

CITY OF MISSISSAUGA ZONING BY-LAW NO. 0225-2007 PART 8 TABLE 8.2.1

ZONING REGULATIONS	REQ'D	EXISTING BLDG DC1	EXISTING BLDG DC2	BLDG DATA		
	(m)	(m)	(m)	(m)		
MIN. LOT FRONTAGE	30	>30		58		
MIN. HEIGHT	N/A					
MIN. FRONT YARD BUILDING SETBACK	7.5	>7.5	>7.5	64.7		
MIN. INTERIOR SIDE YARD BUILDING SETBACK (SOUTH ADJACENT TO EXIST. PH1)	7.5	>7.5	>7.5	18.9		
MIN. INTERIOR SIDE YARD BUILDING SETBACK (NORTH ADJACENT TO HWY 401)	7.5	>7.5	>7.5	>7.5		
MIN. REAR YARD BUILDING SETBACK	7.5	>7.5	>7.5			

SITE AREA AND COVERAGE				
	PROPOSED			
	(m2)		(AC)	
GROSS SITE AREA	345,112.27		85.27	
BLOCK B - DATA CENTRE LAND	40,874.40		10.10	
	PROPOSED			
	(m2)		(ft2)	
DATA CENTRE - LEVEL 1	10,608.50		114192.5	
DATA CENTRE - LEVEL 2	10,608.50		114192.5	
TOTAL BUILDING FOOTPRINT	10,608.50		114192.5	
TOTAL BUILDING GFA	21,217.00		228,385	
LOT COVERAGE			25.95%	

PARKING REQUIREMENTS (0225-2007 PART 3 TABLE 3.1.2.2.)				
MIN. PARKING SPACE DIMENSIONS	STANDARD - 2.6m x 5.2m			
MIN. AISLE WIDTH	7.0m			
	PROPOSED		REQUIRED	
DATA CENTRE	45		637	
ACCESSIBLE PARKING SPACES				
DATA CENTRE	4		4	
ELECTRIC VEHICLE PARKING SPACES (1 EV CHARGER PER 100,000 SF GFA)				
DATA CENTRE	4		4	

BICYCLE PARKING REQUIRMENETS (0225-2007 PART 3 TABLE 3.1.4.6.)				
	PROPOSED		REQUIRED	
	CLASS A	CLASS B	CLASS A	CLASS B
DATA CENTRE	22	10	22	2
MIN. BICYCLE PARKING SPACE DIMENSIONS	1.8m x0.6m			

LOADING SPACE REQUIREMENTS (0225-2007 PART 3 TABLE 3.1.4.3.)		
LOADING SPACES	PROPOSED	REQUIRED
DATA CENTRE	3	3
LANDSCAPE AREA	12,579 m2	
PAVED AREA	11,481 m2	

PRIOR TO SITE PLAN APPROVAL, THE FOLLOWING NOTE SHALL BE PROVIDED ON THE SITE PLAN:

THE ACOUSTICAL CONSULTANT SHALL CERTIFY TO THE PLANNING AND BUILDING DEPARTMENT THAT THE "AS CONSTRUCTED" SITE FEATURES FOR NOISE AND VIBRATION CONTROL INCLUDING, BUT NOT LIMITED TO, NOISE WALLS AND BERMS, THE AS CONSTRUCTED BUILDINGS, MECHANICAL EQUIPMENT, AND VENTILATION SYSTEMS FOR THE BUILDINGS ON-SITE, AND THE OFF-SITE STATIONARY NOISE SOURCES ARE IN COMPLIANCE WITH THE DETAILED NOISE REPORT AS PREPARED FOR THE PARTICULAR BUILDING AND IN COMPLIANCE WITH THE MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) GUIDELINES FOR TRANSPORTATION AND STATIONARY NOISE SOURCES. THE ACOUSTICAL CONSULTANT SHALL ALSO CERTIFY TO THE PLANNING AND BUILDING DEPARTMENT THAT THE INDOOR NOISE LEVELS AND NOISE LEVELS FOR OUTDOOR LIVING AREAS RESULTANT FROM ALL TRANSPORTATION NOISE SOURCES WILL MEET REGIONAL GUIDELINE CONDITIONS BASED ON OUTSIDE SOUND ENERGY EXPOSURES OUTLINED IN THE DETAILED NOISE REPORT FOR THE SUBJECT BUILDING AND THAT NO NEW NOISE IMPACTS HAVE BEEN IDENTIFIED SINCE THE LATEST APPROVED DETAILED NOISE STUDY.

i. I hereby certify that this drawing confirms in all respects to the site development plans. Include Architect or Engineer's Signature (if applicable) and Professional seal

ONTARIO ASSOCIATION ARCHITECTS ALI HAMDY LICENCE 8768

ARCHITECT OR ENGINEER'S SIGNATURE (IF APPLICABLE) AND PROFESSIONAL SEAL

ii. The City of Mississauga requires that all working drawings submitted to the Building Division as part of an application for the issuance of a building permit shall be certified by the architect or engineer as being in conformity with the site development plan as approved by the City of Mississauga.
iii. All exterior lighting will be directed onto the site and will not infringe upon the adjacent properties.
iv. All rooftop mechanical units shall be screened from view by the applicant.
v. Parking spaces reserved for people with disabilities must be identified by a sign, installed at the applicant's expense, in accordance with the By-law Requirements and Building Code Requirements.
vi. The applicant will be responsible for ensuring that all plan conform to Transport Canada's restrictions.
vii. Grades will be met with a 33% maximum slope at the property lines and within the site.
viii. All damaged areas are to be reinstated with topsoil and sod prior to the release of securities.
ix. Signage shown on the site development plans is for information purposes only. All signs will be subject to the provisions of Sign by-law 0054-2002, as amended, and a separate sign application will be required through the Building Division.
x. Any fencing adjacent to municipal lands is to be located 15 cm (6.0 in.) inside the property line.
xi. Only shielded lighting fixtures are permitted for all development, except for detached and semi-detached dwellings within 60 m of a residentially zoned property and must conform to the Engineer Certified Lighting Plan.
xii. The Engineer Certified Lighting Plan must be signed by the Consulting Engineer.
xiii. The Owner covenants and agrees to construct and install shielded lighting fixtures on the subject lands, in conformity with the Site Plan and Engineer Certified Lighting Plan to the satisfaction of the City of Mississauga.
xiv. Where planting is to be located in landscaped areas on top of an underground parking structure, it is the responsibility of the applicant to arrange the coordination of the design of the underground parking structure with the Landscape Architect and the Consulting Engineering. Underground parking structures with landscaping area to be capable of supporting the following loads:
- 15 cm of drainage gravel plus 40 cm topsoil for sod
- 15 cm of drainage gravel plus 60 cm topsoil for shrubs
- 15 cm of drainage gravel plus 90 cm for trees Or
- Prefabricated sheet drain system* with a compressive strength of 1003 Kpa plus 40 cm topsoil for sod
- Prefabricated sheet drain system* with a compressive strength of 1003 Kpa plus 60 cm topsoil for shrubs
- Prefabricated sheet drain system* with a compressive strength of 1003 Kpa plus 90 cm topsoil for trees *Terradrain 900 or approved equal

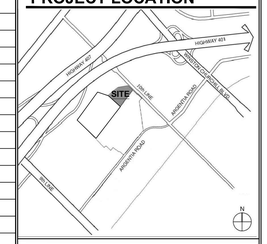
xv. The structural design of any retaining wall over 0.6 m in height or any retaining wall located on a property line is to be shown on the Site Grading plan for this project and is to be approved by the Consulting Engineer for the project.
xvi. Continuous 15 cm high barrier type poured concrete curbing will be provided between all asphalt and landscaped areas throughout the site.
xvii. All utility companies will be notified for locates prior to the installation of the hoarding that lies within the site and within the limited of the City boulevard area.

SITE LEGEND

- PRINCIPAL ENTRANCE
- LOADING DOCK DOOR
- DRIVE-IN DOOR
- PROPERTY LINE
- FENCE
- FIRE ACCESS ROUTE
- ACCESSIBLE PARKING SPACE
- HYBRID AND LOW EMMISION VEHICLE PARKING SPACE
- BOLLARD
- FIRE HYDRANT
- CAR POOL VEHICLE PARKING SPACE
- HEAVY DUTY ASPHALT
- CONCRETE PAVEMENT
- CONCRETE SIDEWALK
- FIRE TRUCK ROUTE
- CATCH BASIN SEE CIVIL DWGS
- MANHOLE SEE CIVIL DWGS
- TRAFFIC SIGNAGE
- LIGHT STANDARD SEE ELECTRICAL DWGS
- WALL MOUNTED LIGHT FIXTURE SEE ELECTRICAL DWGS
- FIRE DEPARTMENT CONNECTION

PETROFF
PETROFF PARTNERSHIP ARCHITECTS
10 AVIVA WAY
SUITE 400
MARKHAM, ONTARIO
L6G 0G1
T 905.470.7000
F 905.470.2500
www.petroff.com

PROJECT LOCATION



LEGAL DESCRIPTION

FOR LEGAL SURVEY INFORMATION REFER TO:
PART OF LOT 14
CONCESSION 10, NEW SURVEY
GEOGRAPHIC TOWNSHIP OF TRAFALGAR
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL
PREPARED BY GENESIS LAND SURVEYING INC.,
10 FOUR SEASONS PLACE, 10TH FLOOR,
TORONTO, ON M9B 6H7 DATED OCTOBER 16, 2024,

SITE SPECIFIC ZONING TO BE VERIFIED UPON CONSULTATION WITH CITY OF MISSISSAUGA. LAYOUT IS SUBJECT TO IMPLEMENTATION OF ENVIRONMENTAL, STORM WATER MANAGEMENT, ETC. REQUIREMENTS UPON CONSULTATION WITH AUTHORITIES HAVING JURISDICTION

ADDITIONAL SITE WORKS

NOTE:
FOR LANDSCAPE AND SITE FURNITURE INFORMATION, REFER TO DRAWINGS BY MHBC LANDSCAPE.

FOR GRADING AND SERVICING INFORMATION, REFER TO DRAWINGS BY MTE CONSULTANTS.

FOR SITE PHOTOMETRIC AND ELECTRICAL INFORMATION, REFER TO DRAWINGS BY HAMMERSCHLAG & JOFFE.

FOR TRAFFIC SIGNAGE AND DESIGN REFER TO DRAWINGS BY TYLIN.

NOTE:
FIRE ACCESS ROUTE TO BE DESIGNED TO SUPPORT A LOAD OF NOT LESS THAN 11,363 KG PER AXLE AND HAVE A CHANGE IN GRADIENT OF NOT MORE THAN 1 IN 12.5 OVER A MINIMUM DISTANCE OF 15M.

ROUTE TO BE DESIGNATED AS PER BYLAW 1036-81 AS AMENDED

REV #	DATE	REVISION TITLE
1	AUG 15, 2025	ISSUED FOR SPA
2	MAR 4, 2026	ISSUED FOR SPA
3	JULY 4, 2026	ISSUED FOR SPA
4	SEP 10, 2026	ISSUED FOR SPA

PROJECT NO: 25026.00
DRAWN BY: TY
CHECKED BY: RCB

■ NOT RELEASED FOR CONSTRUCTION
□ RELEASED FOR CONSTRUCTION

PROJECT TITLE:

7700 TENTH LINE WEST
MISSISSAUGA, ON
TOR00394
INDUSTRIAL DEVELOPMENT

PROLOGIS

Prologis Inc. (Canada)
185 The West Mall, Suite 700, Toronto
647-258-2600
Tony Nguyen: Tnguyen4@prologis.com
https://www.prologis.com

SHEET TITLE:

OVERALL SITE PLAN

SITE PLAN APPLICATION NUMBER:
SP 25-63 W9

SEAL:

ONTARIO ASSOCIATION ARCHITECTS ALI HAMDY LICENCE 8768

SHEET NO.

A.100-1a

Appendix C:
Turning Movement Counts

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Mississauga
Site #: 2512400001
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total:	2583			
North Entering:	1446			
North Peds:	0			
Peds Cross:	⋈			

Heavys	66	15	0	81
Trucks	11	30	0	41
Cars	653	671	0	1324
Totals	730	716	0	

Heavys	38	
Trucks	21	
Cars	1078	
Totals	1137	

East Leg Total:	723
East Entering:	0
East Peds:	0
Peds Cross:	⧖

Winston Churchill Blvd

Heavys	Trucks	Cars	Totals
66	11	653	730

Highway 401 Eastbound Ramp

Cars	Trucks	Heavys	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

Heavys	Trucks	Cars	Totals
29	13	436	478
0	0	0	0
3	2	206	211
32	15	642	

Highway 401 Eastbound Ramp

Cars	Trucks	Heavys	Totals
700	14	9	723

Winston Churchill Blvd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	689			
West Leg Total:	1419			

Cars	877			
Trucks	32			
Heavys	18			
Totals	927			

Cars	0	642	700	1342
Trucks	0	8	14	22
Heavys	0	9	9	18
Totals	0	659	723	

Peds Cross:	⋈
South Peds:	0
South Entering:	1382
South Leg Total:	2309

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

Municipality: Mississauga
Site #: 2512400001
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total:	3092			
North Entering:	1989			
North Peds:	0			
Peds Cross:	⋈			
Heavys	68	11	0	79
Trucks	8	9	0	17
Cars	496	1397	0	1893
Totals	572	1417	0	
Heavys	44			
Trucks	21			
Cars	1038			
Totals	1103			
East Leg Total:	479			
East Entering:	0			
East Peds:	0			
Peds Cross:	⧖			

Winston Churchill Blvd

Heavys	Trucks	Cars	Totals
68	8	496	572

Highway 401 Eastbound Ramp

Heavys	Trucks	Cars	Totals
30	12	298	340
0	0	0	0
6	4	319	329
36	16	617	

Cars	Trucks	Heavys	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

Highway 401 Eastbound Ramp

Cars	Trucks	Heavys	Totals
454	8	17	479

Winston Churchill Blvd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	669			
West Leg Total:	1241			
Cars	1716			
Trucks	13			
Heavys	17			
Totals	1746			
Cars	0	740	454	1194
Trucks	0	9	8	17
Heavys	0	14	17	31
Totals	0	763	479	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	1242			
South Leg Total:	2988			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

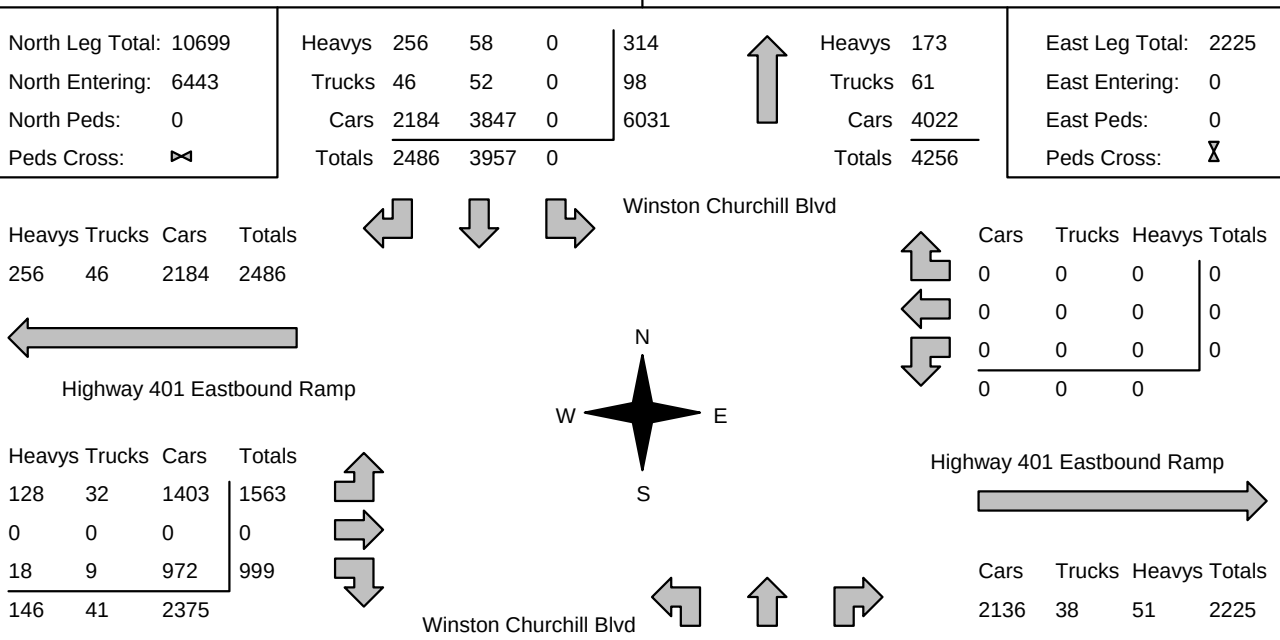
Municipality: Mississauga
Site #: 2512400001
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Winston Churchill Blvd & Highway | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*554*	*720*	*1274*	*0*	*2384*
9:00:00	*0*	*716*	*730*	*1446*	*0*	*2828*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1253*	*531*	*1784*	*0*	*2998*
18:00:00	*0*	*1434*	*505*	*1939*	*0*	*3151*
Totals:	0	3957	2486	6443	0	11361

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*521*	*589*	*1110*	*0*
9:00:00	*0*	*659*	*723*	*1382*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*758*	*456*	*1214*	*0*
18:00:00	*0*	*755*	*457*	*1212*	*0*
S Totals:	0	2693	2225	4918	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*	*581*
9:00:00	*0*	*0*	*0*	*0*	*0*	*689*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*	*640*
18:00:00	*0*	*0*	*0*	*0*	*0*	*652*
Totals:	0	0	0	0	0	2562

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*384*	*0*	*197*	*581*	*2*
9:00:00	*478*	*0*	*211*	*689*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*354*	*0*	*286*	*640*	*0*
18:00:00	*347*	*0*	*305*	*652*	*0*
W Totals:	1563	0	999	2562	2

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*384*	*478*	*0*	*354*	*347*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400001

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	110	110	149	149	0	0	3	3	3	3	0	0	9	9	15	15	0	0
7:30:00	0	0	232	122	311	162	0	0	7	4	6	3	0	0	17	8	27	12	0	0
7:45:00	0	0	345	113	475	164	0	0	7	0	11	5	0	0	23	6	51	24	0	0
8:00:00	0	0	521	176	634	159	0	0	10	3	18	7	0	0	23	0	68	17	0	0
8:15:00	0	0	660	139	804	170	0	0	13	3	20	2	0	0	26	3	84	16	0	0
8:30:00	0	0	823	163	955	151	0	0	24	11	26	6	0	0	30	4	103	19	0	0
8:45:00	0	0	990	167	1125	170	0	0	30	6	29	3	0	0	33	3	122	19	0	0
9:00:00	0	0	1192	202	1287	162	0	0	40	10	29	0	0	0	38	5	134	12	0	0
9:15:00	0	0	1192	0	1287	0	0	0	40	0	29	0	0	0	38	0	134	0	0	0
16:00:00	0	0	1192	0	1287	0	0	0	40	0	29	0	0	0	38	0	134	0	0	0
16:15:00	0	0	1474	282	1409	122	0	0	40	0	32	3	0	0	42	4	151	17	0	0
16:30:00	0	0	1755	281	1517	108	0	0	40	0	33	1	0	0	44	2	164	13	0	0
16:45:00	0	0	2064	309	1635	118	0	0	40	0	36	3	0	0	48	4	188	24	0	0
17:00:00	0	0	2426	362	1740	105	0	0	47	7	38	2	0	0	50	2	203	15	0	0
17:15:00	0	0	2784	358	1875	135	0	0	49	2	38	0	0	0	54	4	216	13	0	0
17:30:00	0	0	3152	368	2013	138	0	0	49	0	41	3	0	0	55	1	232	16	0	0
17:45:00	0	0	3520	368	2096	83	0	0	50	1	43	2	0	0	56	1	243	11	0	0
18:00:00	0	0	3847	327	2184	88	0	0	52	2	46	3	0	0	58	2	256	13	0	0
18:15:00	0	0	3847	0	2184	0	0	0	52	0	46	0	0	0	58	0	256	0	0	0
18:15:15	0	0	3847	0	2184	0	0	0	52	0	46	0	0	0	58	0	256	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400001

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400001

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	122	122	119	119	0	0	0	0	1	1	0	0	3	3	3	3	0	0
7:30:00	0	0	238	116	259	140	0	0	0	0	2	1	0	0	7	4	5	2	0	0
7:45:00	0	0	377	139	436	177	0	0	1	1	4	2	0	0	9	2	7	2	0	0
8:00:00	0	0	508	131	575	139	0	0	2	1	4	0	0	0	11	2	10	3	0	0
8:15:00	0	0	673	165	745	170	0	0	5	3	6	2	0	0	13	2	11	1	0	0
8:30:00	0	0	822	149	921	176	0	0	6	1	9	3	0	0	17	4	16	5	0	0
8:45:00	0	0	993	171	1128	207	0	0	8	2	14	5	0	0	19	2	17	1	0	0
9:00:00	0	0	1150	157	1275	147	0	0	10	2	18	4	0	0	20	1	19	2	0	0
9:15:00	0	0	1150	0	1275	0	0	0	10	0	18	0	0	0	20	0	19	0	0	0
16:00:00	0	0	1150	0	1275	0	0	0	10	0	18	0	0	0	20	0	19	0	0	0
16:15:00	0	0	1351	201	1385	110	0	0	10	0	22	4	0	0	23	3	24	5	0	0
16:30:00	0	0	1525	174	1489	104	0	0	16	6	26	4	0	0	24	1	28	4	0	0
16:45:00	0	0	1721	196	1607	118	0	0	18	2	30	4	0	0	28	4	29	1	0	0
17:00:00	0	0	1887	166	1706	99	0	0	20	2	31	1	0	0	31	3	31	2	0	0
17:15:00	0	0	2081	194	1834	128	0	0	23	3	32	1	0	0	32	1	38	7	0	0
17:30:00	0	0	2265	184	1943	109	0	0	25	2	34	2	0	0	38	6	45	7	0	0
17:45:00	0	0	2455	190	2034	91	0	0	27	2	37	3	0	0	40	2	46	1	0	0
18:00:00	0	0	2619	164	2136	102	0	0	29	2	38	1	0	0	45	5	51	5	0	0
18:15:00	0	0	2619	0	2136	0	0	0	29	0	38	0	0	0	45	0	51	0	0	0
18:15:15	0	0	2619	0	2136	0	0	0	29	0	38	0	0	0	45	0	51	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400001

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	53	53	0	0	31	31	0	0	0	0	0	0	10	10	0	0	0	0	0	0
7:30:00	140	87	0	0	81	50	1	1	0	0	0	0	18	8	0	0	4	4	0	0
7:45:00	222	82	0	0	120	39	1	0	0	0	2	2	25	7	0	0	6	2	1	1
8:00:00	349	127	0	0	187	67	1	0	0	0	2	0	34	9	0	0	8	2	2	1
8:15:00	454	105	0	0	233	46	2	1	0	0	3	1	47	13	0	0	8	0	2	0
8:30:00	555	101	0	0	286	53	6	4	0	0	4	1	52	5	0	0	8	0	2	0
8:45:00	663	108	0	0	337	51	11	5	0	0	4	0	58	6	0	0	9	1	2	0
9:00:00	785	122	0	0	393	56	14	3	0	0	4	0	63	5	0	0	11	2	2	0
9:15:00	785	0	0	0	393	0	14	0	0	0	4	0	63	0	0	0	11	0	2	0
16:00:00	785	0	0	0	393	0	14	0	0	0	4	0	63	0	0	0	11	0	2	0
16:15:00	856	71	0	0	440	47	14	0	0	0	4	0	72	9	0	0	11	0	2	0
16:30:00	953	97	0	0	512	72	17	3	0	0	4	0	85	13	0	0	12	1	2	0
16:45:00	1011	58	0	0	597	85	22	5	0	0	5	1	89	4	0	0	13	1	2	0
17:00:00	1092	81	0	0	671	74	23	1	0	0	7	2	101	12	0	0	16	3	2	0
17:15:00	1179	87	0	0	762	91	27	4	0	0	7	0	107	6	0	0	18	2	2	0
17:30:00	1251	72	0	0	831	69	29	2	0	0	8	1	115	8	0	0	18	0	2	0
17:45:00	1322	71	0	0	902	71	30	1	0	0	9	1	124	9	0	0	18	0	2	0
18:00:00	1403	81	0	0	972	70	32	2	0	0	9	0	128	4	0	0	18	0	2	0
18:15:00	1403	0	0	0	972	0	32	0	0	0	9	0	128	0	0	0	18	0	2	0
18:15:15	1403	0	0	0	972	0	32	0	0	0	9	0	128	0	0	0	18	0	2	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

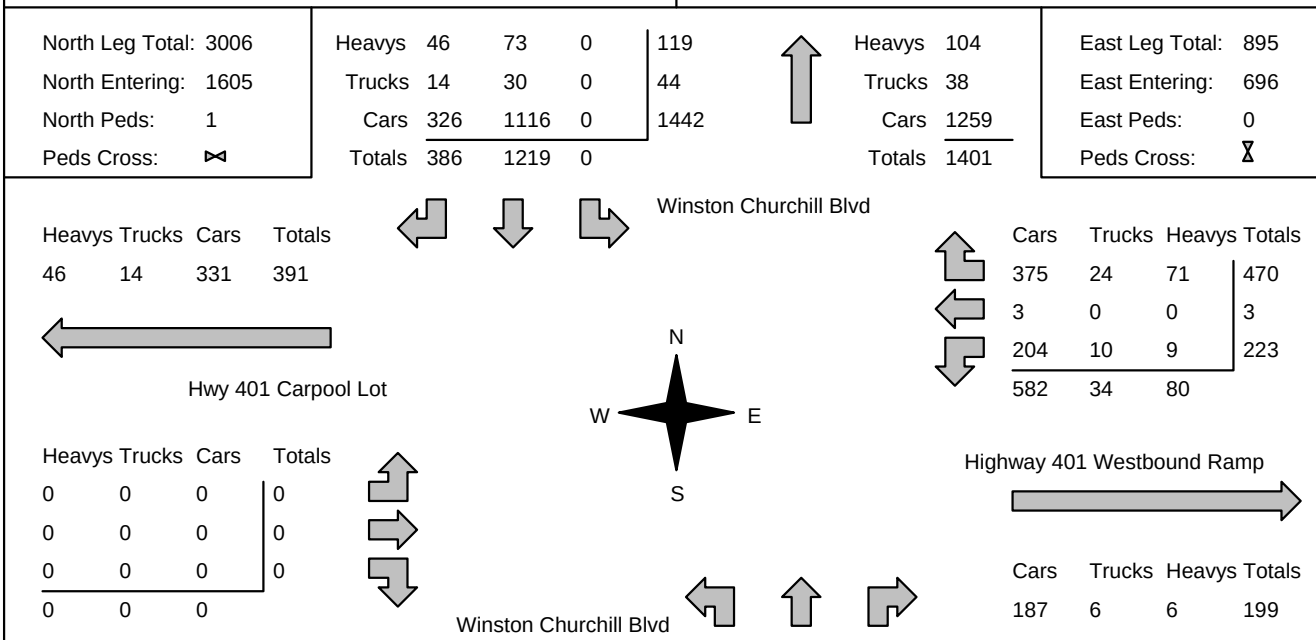
Municipality: Mississauga
Site #: 2512400002
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 2512400002
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total:	3259			
North Entering:	1595			
North Peds:	0			
Peds Cross:	⋈			
Heavys	31	65	0	96
Trucks	1	11	0	12
Cars	402	1085	0	1487
Totals	434	1161	0	
Heavys	104			
Trucks	25			
Cars	1535			
Totals	1664			
East Leg Total:	1786			
East Entering:	1567			
East Peds:	0			
Peds Cross:	⧖			

Winston Churchill Blvd

Heavys	Trucks	Cars	Totals
31	1	417	449

Hwy 401 Carpool Lot

Cars	Trucks	Heavys	Totals
683	9	63	755
10	0	0	10
795	6	1	802
1488	15	64	

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	7	7
0	0	0	0
0	0	18	18
0	0	25	

Highway 401 Westbound Ramp

Cars	Trucks	Heavys	Totals
216	0	3	219

Winston Churchill Blvd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	25			
West Leg Total:	474			
Cars	1898			
Trucks	17			
Heavys	66			
Totals	1981			
Cars	5	845	216	1066
Trucks	0	16	0	16
Heavys	0	41	3	44
Totals	5	902	219	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	1126			
South Leg Total:	3107			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

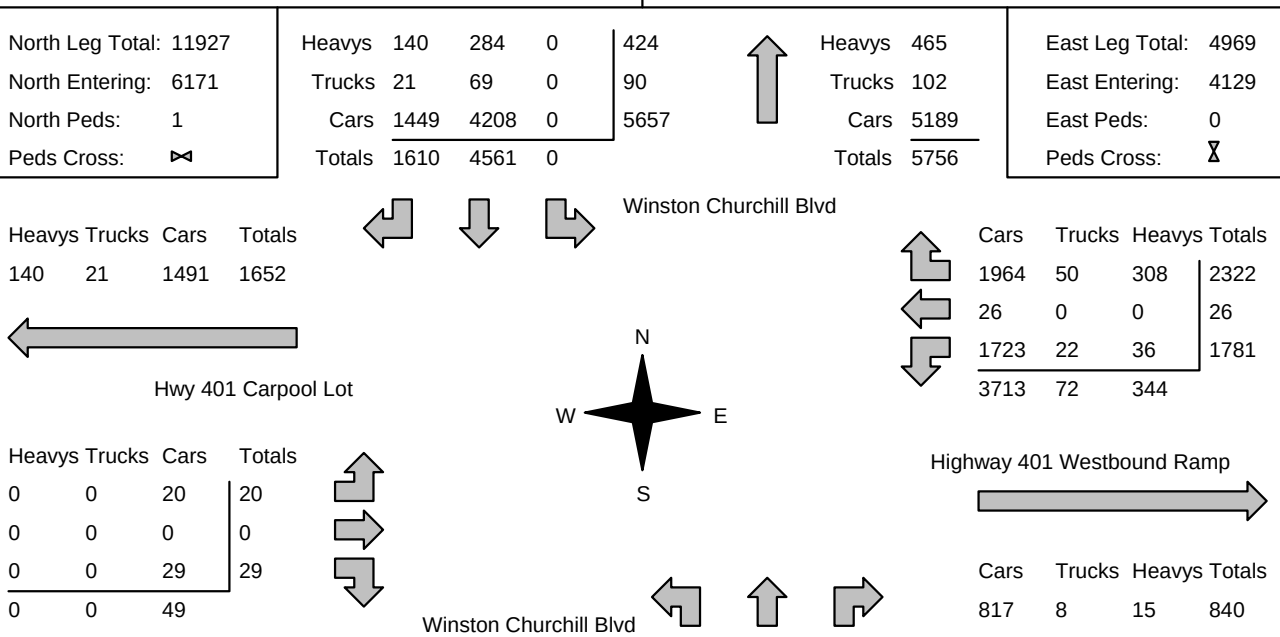
Municipality: Mississauga
Site #: 2512400002
Intersection: Winston Churchill Blvd & Highway
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Winston Churchill Blvd & Highway | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*1098*	*388*	*1486*	*0*
9:00:00	*0*	*1219*	*386*	*1605*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1152*	*416*	*1568*	*0*
18:00:00	*0*	*1092*	*420*	*1512*	*0*
Totals:	0	4561	1610	6171	1

North/South Total Approaches: 10441

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*3*	*713*	*203*	*919*	*0*
9:00:00	*2*	*931*	*199*	*1132*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*8*	*865*	*219*	*1092*	*0*
18:00:00	*3*	*905*	*219*	*1127*	*0*
S Totals:	16	3414	840	4270	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*164*	*2*	*395*	*561*	*0*
9:00:00	*223*	*3*	*470*	*696*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*584*	*15*	*726*	*1325*	*0*
18:00:00	*810*	*6*	*731*	*1547*	*0*
Totals:	1781	26	2322	4129	0

East/West Total Approaches: 4178

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*0*	*1*	*2*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*11*	*0*	*20*	*31*	*0*
18:00:00	*8*	*0*	*8*	*16*	*0*
W Totals:	20	0	29	49	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*167*	*227*	*0*	*610*	*824*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400002

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	232	232	85	85	0	0	4	4	0	0	0	0	18	18	9	9	0	0
7:30:00	0	0	482	250	162	77	0	0	9	5	1	1	0	0	30	12	16	7	0	0
7:45:00	0	0	725	243	249	87	0	0	12	3	2	1	0	0	56	26	28	12	0	0
8:00:00	0	0	1006	281	350	101	0	0	19	7	4	2	0	0	73	17	34	6	0	0
8:15:00	0	0	1285	279	429	79	0	0	22	3	4	0	0	0	90	17	51	17	0	0
8:30:00	0	0	1542	257	501	72	0	0	36	14	6	2	0	0	111	21	62	11	1	1
8:45:00	0	0	1824	282	588	87	0	0	44	8	15	9	0	0	132	21	72	10	1	0
9:00:00	0	0	2122	298	676	88	0	0	49	5	18	3	0	0	146	14	80	8	1	0
9:15:00	0	0	2122	0	676	0	0	0	49	0	18	0	0	0	146	0	80	0	1	0
16:00:00	0	0	2122	0	676	0	0	0	49	0	18	0	0	0	146	0	80	0	1	0
16:15:00	0	0	2398	276	782	106	0	0	51	2	19	1	0	0	164	18	85	5	1	0
16:30:00	0	0	2660	262	877	95	0	0	52	1	19	0	0	0	180	16	91	6	1	0
16:45:00	0	0	2908	248	969	92	0	0	55	3	20	1	0	0	206	26	100	9	1	0
17:00:00	0	0	3184	276	1064	95	0	0	61	6	21	1	0	0	224	18	105	5	1	0
17:15:00	0	0	3443	259	1193	129	0	0	62	1	21	0	0	0	239	15	114	9	1	0
17:30:00	0	0	3760	317	1282	89	0	0	65	3	21	0	0	0	255	16	123	9	1	0
17:45:00	0	0	3993	233	1371	89	0	0	66	1	21	0	0	0	271	16	131	8	1	0
18:00:00	0	0	4208	215	1449	78	0	0	69	3	21	0	0	0	284	13	140	9	1	0
18:15:00	0	0	4208	0	1449	0	0	0	69	0	21	0	0	0	284	0	140	0	1	0
18:15:15	0	0	4208	0	1449	0	0	0	69	0	21	0	0	0	284	0	140	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400002

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	29	29	0	0	73	73	0	0	0	0	0	0	7	7	0	0	15	15	0	0
7:30:00	63	34	0	0	141	68	2	2	0	0	4	4	16	9	0	0	33	18	0	0
7:45:00	89	26	2	2	222	81	3	1	0	0	4	0	19	3	0	0	56	23	0	0
8:00:00	140	51	2	0	318	96	5	2	0	0	5	1	19	0	0	0	72	16	0	0
8:15:00	183	43	3	1	406	88	7	2	0	0	10	5	22	3	0	0	88	16	0	0
8:30:00	228	45	3	0	495	89	10	3	0	0	15	5	25	3	0	0	105	17	0	0
8:45:00	280	52	4	1	583	88	10	0	0	0	22	7	25	0	0	0	125	20	0	0
9:00:00	344	64	5	1	693	110	15	5	0	0	29	7	28	3	0	0	143	18	0	0
9:15:00	344	0	5	0	693	0	15	0	0	0	29	0	28	0	0	0	143	0	0	0
16:00:00	344	0	5	0	693	0	15	0	0	0	29	0	28	0	0	0	143	0	0	0
16:15:00	455	111	8	3	847	154	15	0	0	0	35	6	32	4	0	0	160	17	0	0
16:30:00	592	137	12	4	1010	163	15	0	0	0	40	5	32	0	0	0	197	37	0	0
16:45:00	739	147	14	2	1130	120	16	1	0	0	40	0	33	1	0	0	222	25	0	0
17:00:00	918	179	20	6	1311	181	20	4	0	0	44	4	33	0	0	0	236	14	0	0
17:15:00	1145	227	22	2	1482	171	21	1	0	0	46	2	34	1	0	0	248	12	0	0
17:30:00	1322	177	24	2	1651	169	21	0	0	0	48	2	34	0	0	0	263	15	0	0
17:45:00	1534	212	24	0	1813	162	22	1	0	0	49	1	34	0	0	0	285	22	0	0
18:00:00	1723	189	26	2	1964	151	22	0	0	0	50	1	36	2	0	0	308	23	0	0
18:15:00	1723	0	26	0	1964	0	22	0	0	0	50	0	36	0	0	0	308	0	0	0
18:15:15	1723	0	26	0	1964	0	22	0	0	0	50	0	36	0	0	0	308	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400002

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	128	128	48	48	0	0	0	0	0	0	0	0	12	12	1	1	0	0
7:30:00	2	0	283	155	95	47	0	0	1	1	0	0	0	0	20	8	3	2	0	0
7:45:00	2	0	453	170	151	56	0	0	2	1	0	0	0	0	29	9	4	1	0	0
8:00:00	3	1	670	217	198	47	0	0	5	3	0	0	0	0	38	9	5	1	0	0
8:15:00	3	0	879	209	247	49	0	0	6	1	3	3	0	0	49	11	6	1	0	0
8:30:00	4	1	1100	221	284	37	0	0	10	4	3	0	0	0	59	10	8	2	0	0
8:45:00	5	1	1320	220	346	62	0	0	15	5	5	2	0	0	66	7	10	2	0	0
9:00:00	5	0	1554	234	385	39	0	0	19	4	6	1	0	0	71	5	11	1	0	0
9:15:00	5	0	1554	0	385	0	0	0	19	0	6	0	0	0	71	0	11	0	0	0
16:00:00	5	0	1554	0	385	0	0	0	19	0	6	0	0	0	71	0	11	0	0	0
16:15:00	8	3	1765	211	445	60	0	0	19	0	6	0	0	0	83	12	11	0	0	0
16:30:00	9	1	1946	181	497	52	0	0	24	5	8	2	0	0	91	8	11	0	0	0
16:45:00	9	0	2172	226	551	54	0	0	33	9	8	0	0	0	103	12	12	1	0	0
17:00:00	13	4	2358	186	600	49	0	0	36	3	8	0	0	0	115	12	13	1	0	0
17:15:00	13	0	2560	202	649	49	0	0	42	6	8	0	0	0	124	9	14	1	0	0
17:30:00	13	0	2798	238	710	61	0	0	46	4	8	0	0	0	137	13	15	1	0	0
17:45:00	14	1	3017	219	767	57	0	0	49	3	8	0	0	0	144	7	15	0	0	0
18:00:00	16	2	3205	188	817	50	0	0	52	3	8	0	0	0	157	13	15	0	0	0
18:15:00	16	0	3205	0	817	0	0	0	52	0	8	0	0	0	157	0	15	0	0	0
18:15:15	16	0	3205	0	817	0	0	0	52	0	8	0	0	0	157	0	15	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400002

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	5	4	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	6	1	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	10	4	0	0	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	12	2	0	0	21	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	12	0	0	0	24	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	16	4	0	0	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	17	1	0	0	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	20	3	0	0	29	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	20	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	20	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Mississauga
Site #: 2512400003
Intersection: Winston Churchill Blvd & Argentia
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

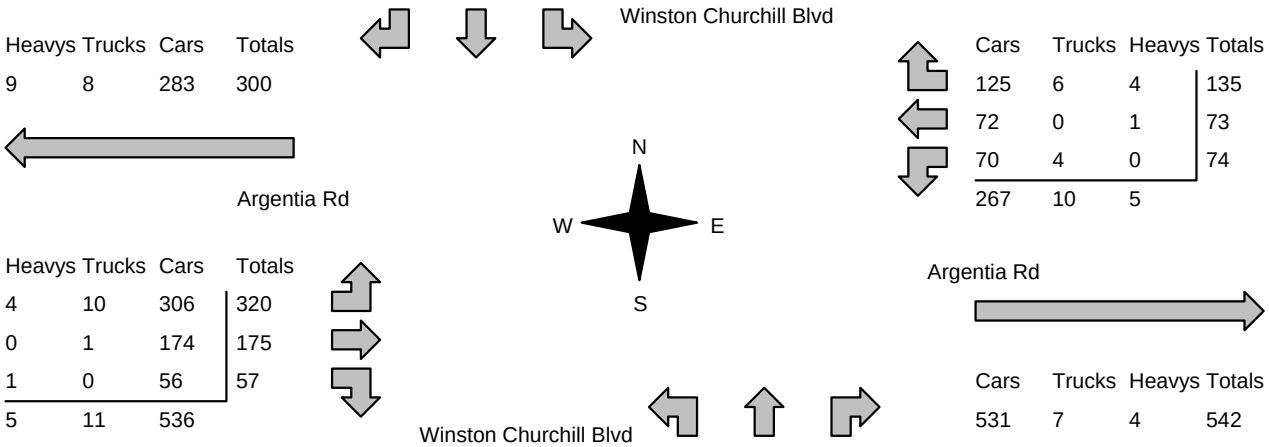
Major Road: Winston Churchill Blvd runs N/S

North Leg Total: 2273
North Entering: 863
North Peds: 23
Peds Cross: ⋈

Heavys	7	10	2	19
Trucks	8	17	5	30
Cars	137	412	265	814
Totals	152	439	272	

Heavys	18
Trucks	23
Cars	1369
Totals	1410

East Leg Total: 824
East Entering: 282
East Peds: 7
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 9
West Entering: 552
West Leg Total: 852

Cars	538			
Trucks	21			
Heavys	11			
Totals	570			

Cars	74	938	92	1104
Trucks	0	7	1	8
Heavys	1	10	2	13
Totals	75	955	95	

Peds Cross: ⋈
South Peds: 18
South Entering: 1125
South Leg Total: 1695

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 2512400003
Intersection: Winston Churchill Blvd & Argentia
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S

North Leg Total:	2803
North Entering:	1578
North Peds:	40
Peds Cross:	⋈

Heavys	5	5	2	12
Trucks	2	6	7	15
Cars	339	992	220	1551
Totals	346	1003	229	

Heavys	29
Trucks	17
Cars	1179
Totals	1225

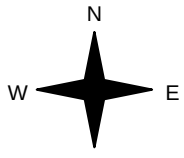
East Leg Total:	1539
East Entering:	976
East Peds:	2
Peds Cross:	⧖

Winston Churchill Blvd

Heavys	Trucks	Cars	Totals
7	6	977	990

Cars	Trucks	Heavys	Totals
277	5	2	284
419	4	1	424
267	1	0	268
963	10	3	

Argentia Rd



Heavys	Trucks	Cars	Totals
10	3	315	328
1	2	237	240
0	1	198	199
11	6	750	

Argentia Rd

Cars	Trucks	Heavys	Totals
550	9	4	563

Winston Churchill Blvd

Peds Cross:	⧖
West Peds:	6
West Entering:	767
West Leg Total:	1757

Cars	1457			
Trucks	8			
Heavys	5			
Totals	1470			

Cars	219	587	93	899
Trucks	0	9	0	9
Heavys	1	17	1	19
Totals	220	613	94	

Peds Cross:	⋈
South Peds:	32
South Entering:	927
South Leg Total:	2397

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

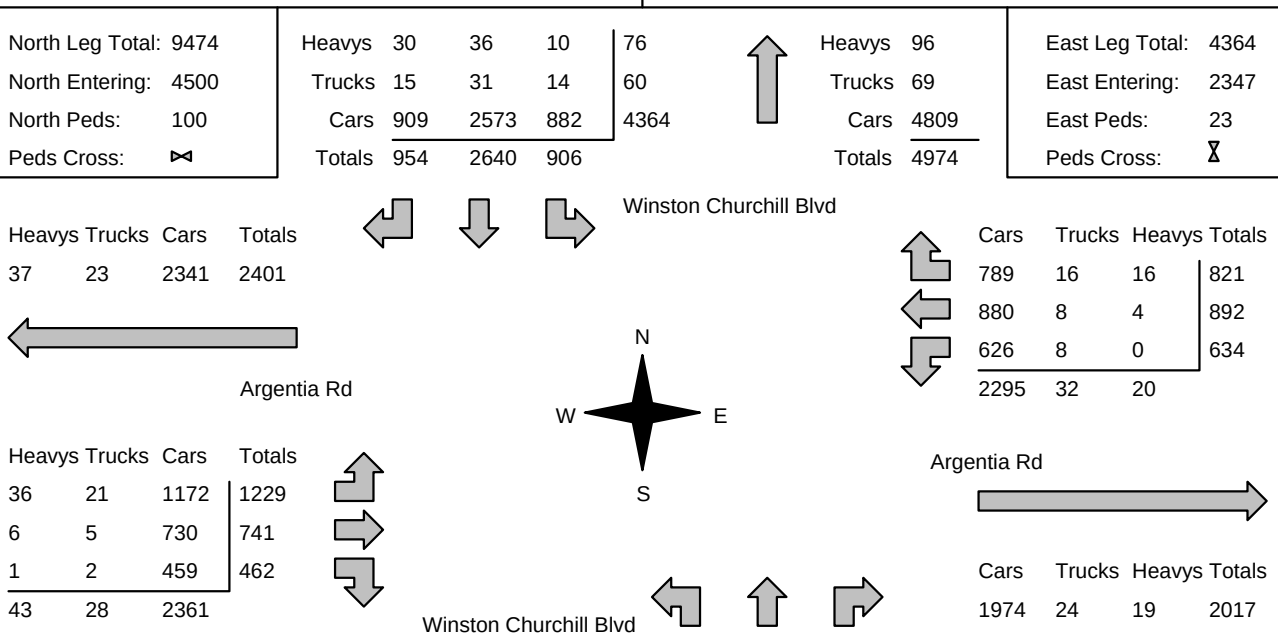
Municipality: Mississauga
Site #: 2512400003
Intersection: Winston Churchill Blvd & Argentia
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Winston Churchill Blvd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Winston Churchill Blvd & Argentia | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*205*	*337*	*138*	*680*	*19*
9:00:00	*272*	*439*	*152*	*863*	*23*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*225*	*847*	*307*	*1379*	*34*
18:00:00	*204*	*1017*	*357*	*1578*	*24*
Totals:	906	2640	954	4500	100

North/South Total Approaches: *8349*

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*41*	*742*	*78*	*861*	*13*
9:00:00	*75*	*955*	*95*	*1125*	*18*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*223*	*603*	*98*	*924*	*24*
18:00:00	*216*	*624*	*99*	*939*	*26*
S Totals:	555	2924	370	3849	81

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*41*	*52*	*106*	*199*	*5*
9:00:00	*74*	*73*	*135*	*282*	*7*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*250*	*378*	*327*	*955*	*9*
18:00:00	*269*	*389*	*253*	*911*	*2*
Totals:	634	892	821	2347	23

East/West Total Approaches: *4779*

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*253*	*124*	*31*	*408*	*4*
9:00:00	*320*	*175*	*57*	*552*	*9*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*315*	*208*	*180*	*703*	*4*
18:00:00	*341*	*234*	*194*	*769*	*5*
W Totals:	1229	741	462	2432	22

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*450*	*610*	*0*	*1001*	*1049*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400003

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	26	26	65	65	34	34	0	0	3	3	0	0	0	0	6	6	3	3	1	1
7:30:00	69	43	147	82	57	23	0	0	4	1	3	3	0	0	8	2	9	6	6	5
7:45:00	122	53	225	78	85	28	0	0	6	2	3	0	2	2	13	5	13	4	10	4
8:00:00	201	79	316	91	121	36	1	1	7	1	4	1	3	1	14	1	13	0	19	9
8:15:00	253	52	418	102	152	31	2	1	9	2	5	1	4	1	15	1	15	2	28	9
8:30:00	317	64	520	102	188	36	4	2	16	7	8	3	4	0	17	2	16	1	32	4
8:45:00	371	54	612	92	224	36	5	1	22	6	8	0	5	1	20	3	16	0	39	7
9:00:00	466	95	728	116	258	34	6	1	24	2	12	4	5	0	24	4	20	4	42	3
9:15:00	466	0	728	0	258	0	6	0	24	0	12	0	5	0	24	0	20	0	42	0
16:00:00	466	0	728	0	258	0	6	0	24	0	12	0	5	0	24	0	20	0	42	0
16:15:00	517	51	898	170	327	69	6	0	24	0	12	0	6	1	27	3	21	1	43	1
16:30:00	567	50	1080	182	401	74	6	0	24	0	12	0	6	0	28	1	22	1	47	4
16:45:00	621	54	1326	246	474	73	6	0	24	0	13	1	8	2	30	2	24	2	55	8
17:00:00	681	60	1562	236	560	86	11	5	28	4	13	0	10	2	33	3	24	0	76	21
17:15:00	724	43	1800	238	636	76	11	0	28	0	15	2	10	0	35	2	28	4	88	12
17:30:00	771	47	2094	294	725	89	12	1	29	1	15	0	10	0	35	0	28	0	91	3
17:45:00	841	70	2318	224	813	88	13	1	30	1	15	0	10	0	35	0	29	1	95	4
18:00:00	882	41	2573	255	909	96	14	1	31	1	15	0	10	0	36	1	30	1	100	5
18:15:00	882	0	2573	0	909	0	14	0	31	0	15	0	10	0	36	0	30	0	100	0
18:15:15	882	0	2573	0	909	0	14	0	31	0	15	0	10	0	36	0	30	0	100	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400003

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	6	6	9	9	26	26	1	1	0	0	1	1	0	0	1	1	3	3	1	1
7:30:00	16	10	20	11	46	20	1	0	1	1	1	0	0	0	1	0	4	1	1	0
7:45:00	21	5	31	11	70	24	2	1	1	0	1	0	0	0	1	0	4	0	1	0
8:00:00	39	18	49	18	100	30	2	0	2	1	1	0	0	0	1	0	5	1	5	4
8:15:00	51	12	57	8	130	30	2	0	2	0	1	0	0	0	2	1	5	0	10	5
8:30:00	57	6	75	18	156	26	3	1	2	0	3	2	0	0	2	0	8	3	10	0
8:45:00	83	26	101	26	198	42	6	3	2	0	6	3	0	0	2	0	9	1	11	1
9:00:00	109	26	121	20	225	27	6	0	2	0	7	1	0	0	2	0	9	0	12	1
9:15:00	109	0	121	0	225	0	6	0	2	0	7	0	0	0	2	0	9	0	12	0
16:00:00	109	0	121	0	225	0	6	0	2	0	7	0	0	0	2	0	9	0	12	0
16:15:00	173	64	188	67	304	79	6	0	3	1	9	2	0	0	2	0	11	2	13	1
16:30:00	224	51	279	91	394	90	7	1	4	1	10	1	0	0	3	1	12	1	19	6
16:45:00	297	73	373	94	471	77	7	0	4	0	11	1	0	0	3	0	13	1	21	2
17:00:00	358	61	494	121	543	72	7	0	6	2	12	1	0	0	3	0	13	0	21	0
17:15:00	435	77	598	104	631	88	7	0	7	1	13	1	0	0	3	0	15	2	22	1
17:30:00	495	60	672	74	699	68	7	0	8	1	15	2	0	0	4	1	15	0	22	0
17:45:00	564	69	792	120	748	49	8	1	8	0	16	1	0	0	4	0	15	0	23	1
18:00:00	626	62	880	88	789	41	8	0	8	0	16	0	0	0	4	0	16	1	23	0
18:15:00	626	0	880	0	789	0	8	0	8	0	16	0	0	0	4	0	16	0	23	0
18:15:15	626	0	880	0	789	0	8	0	8	0	16	0	0	0	4	0	16	0	23	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400003

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	9	9	166	166	10	10	0	0	0	0	1	1	0	0	0	0	0	0	6	6
7:30:00	17	8	339	173	28	18	0	0	1	1	2	1	0	0	3	3	0	0	6	0
7:45:00	27	10	554	215	56	28	0	0	2	1	2	0	0	0	6	3	0	0	10	4
8:00:00	41	14	732	178	76	20	0	0	3	1	2	0	0	0	7	1	0	0	13	3
8:15:00	50	9	958	226	103	27	0	0	5	2	2	0	0	0	9	2	2	2	22	9
8:30:00	78	28	1211	253	120	17	0	0	6	1	3	1	0	0	12	3	2	0	26	4
8:45:00	94	16	1446	235	144	24	0	0	8	2	3	0	0	0	14	2	2	0	26	0
9:00:00	115	21	1670	224	168	24	0	0	10	2	3	0	1	1	17	3	2	0	31	5
9:15:00	115	0	1670	0	168	0	0	0	10	0	3	0	1	0	17	0	2	0	31	0
16:00:00	115	0	1670	0	168	0	0	0	10	0	3	0	1	0	17	0	2	0	31	0
16:15:00	171	56	1828	158	192	24	0	0	11	1	5	2	1	0	20	3	2	0	34	3
16:30:00	217	46	1947	119	213	21	0	0	17	6	5	0	1	0	20	0	2	0	40	6
16:45:00	280	63	2109	162	240	27	0	0	21	4	5	0	1	0	22	2	2	0	45	5
17:00:00	338	58	2253	144	264	24	0	0	23	2	5	0	1	0	24	2	2	0	55	10
17:15:00	375	37	2392	139	291	27	0	0	25	2	5	0	1	0	27	3	2	0	69	14
17:30:00	439	64	2553	161	316	25	0	0	27	2	5	0	1	0	37	10	2	0	71	2
17:45:00	499	60	2696	143	333	17	0	0	30	3	5	0	2	1	39	2	3	1	77	6
18:00:00	552	53	2848	152	362	29	0	0	32	2	5	0	3	1	44	5	3	0	81	4
18:15:00	552	0	2848	0	362	0	0	0	32	0	5	0	3	0	44	0	3	0	81	0
18:15:15	552	0	2848	0	362	0	0	0	32	0	5	0	3	0	44	0	3	0	81	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400003

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	51	51	16	16	7	7	0	0	0	0	0	0	2	2	0	0	0	0	0	0
7:30:00	106	55	44	28	15	8	1	1	0	0	0	0	4	2	0	0	0	0	1	1
7:45:00	180	74	80	36	26	11	2	1	0	0	1	1	6	2	1	1	0	0	3	2
8:00:00	242	62	123	43	30	4	2	0	0	0	1	0	9	3	1	0	0	0	4	1
8:15:00	324	82	165	42	38	8	5	3	0	0	1	0	10	1	1	0	0	0	11	7
8:30:00	384	60	215	50	48	10	6	1	1	1	1	0	13	3	1	0	0	0	13	2
8:45:00	475	91	261	46	65	17	8	2	1	0	1	0	13	0	1	0	1	1	13	0
9:00:00	548	73	297	36	86	21	12	4	1	0	1	0	13	0	1	0	1	0	13	0
9:15:00	548	0	297	0	86	0	12	0	1	0	1	0	13	0	1	0	1	0	13	0
16:00:00	548	0	297	0	86	0	12	0	1	0	1	0	13	0	1	0	1	0	13	0
16:15:00	625	77	349	52	139	53	13	1	1	0	1	0	16	3	2	1	1	0	13	0
16:30:00	702	77	404	55	183	44	16	3	2	1	1	0	20	4	3	1	1	0	13	0
16:45:00	781	79	445	41	221	38	17	1	2	0	1	0	22	2	5	2	1	0	14	1
17:00:00	845	64	498	53	266	45	18	1	3	1	1	0	25	3	6	1	1	0	17	3
17:15:00	939	94	564	66	319	53	19	1	3	0	1	0	28	3	6	0	1	0	19	2
17:30:00	1003	64	615	51	377	58	19	0	4	1	2	1	31	3	6	0	1	0	20	1
17:45:00	1096	93	682	67	419	42	20	1	4	0	2	0	32	1	6	0	1	0	20	0
18:00:00	1172	76	730	48	459	40	21	1	5	1	2	0	36	4	6	0	1	0	22	2
18:15:00	1172	0	730	0	459	0	21	0	5	0	2	0	36	0	6	0	1	0	22	0
18:15:15	1172	0	730	0	459	0	21	0	5	0	2	0	36	0	6	0	1	0	22	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

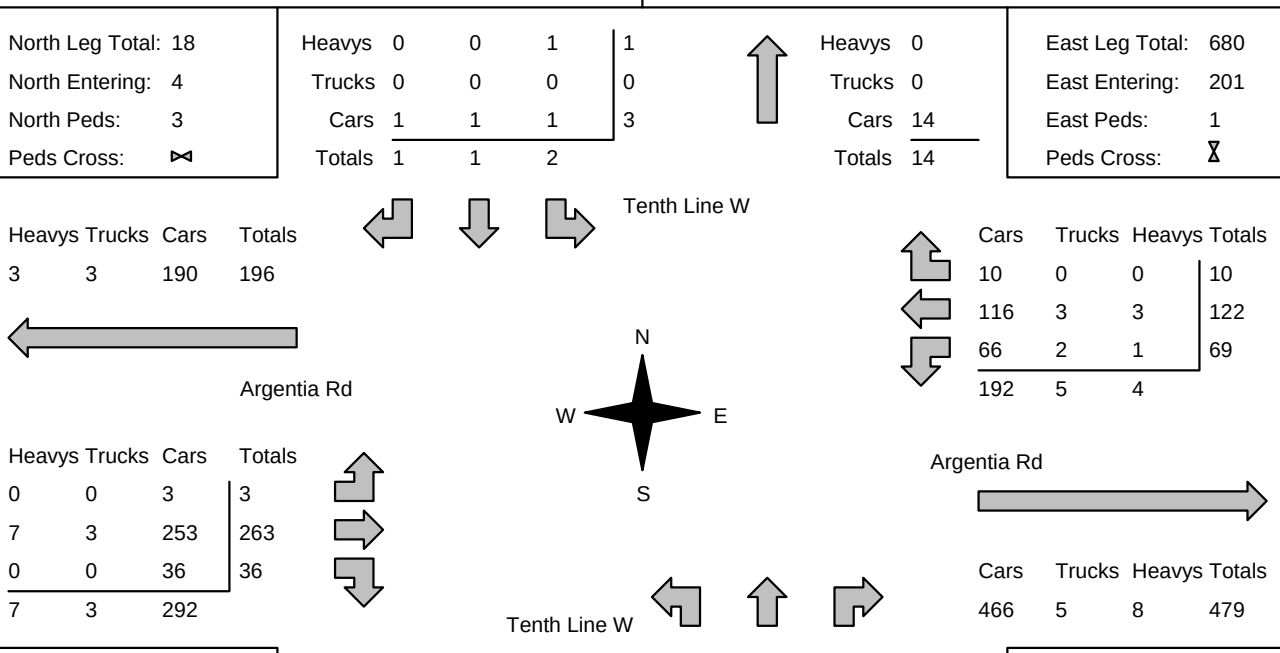
Municipality: Mississauga
Site #: 2512400004
Intersection: Argentia Rd & Tenth Line W
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Argentia Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 17:00:00
To: 18:00:00

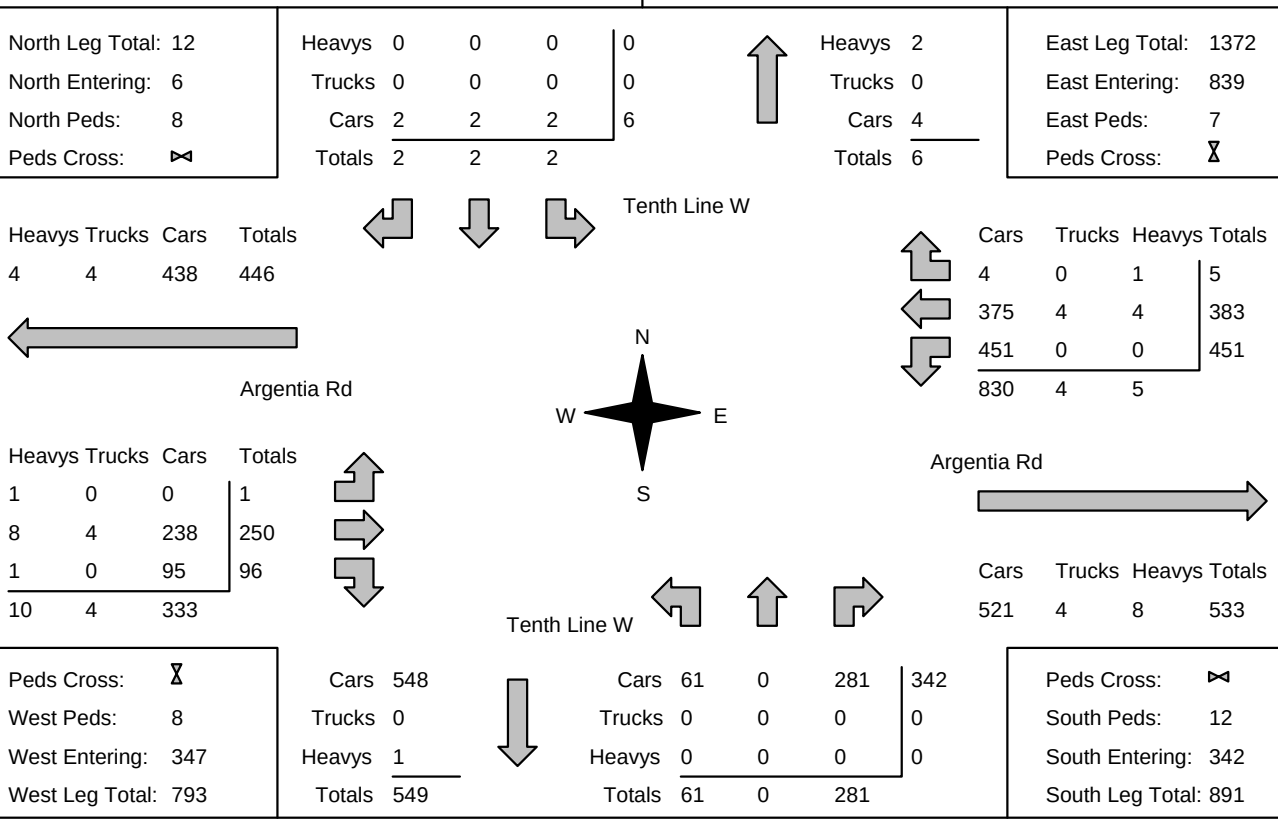
Municipality: Mississauga
Site #: 2512400004
Intersection: Argentia Rd & Tenth Line W
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Argentia Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

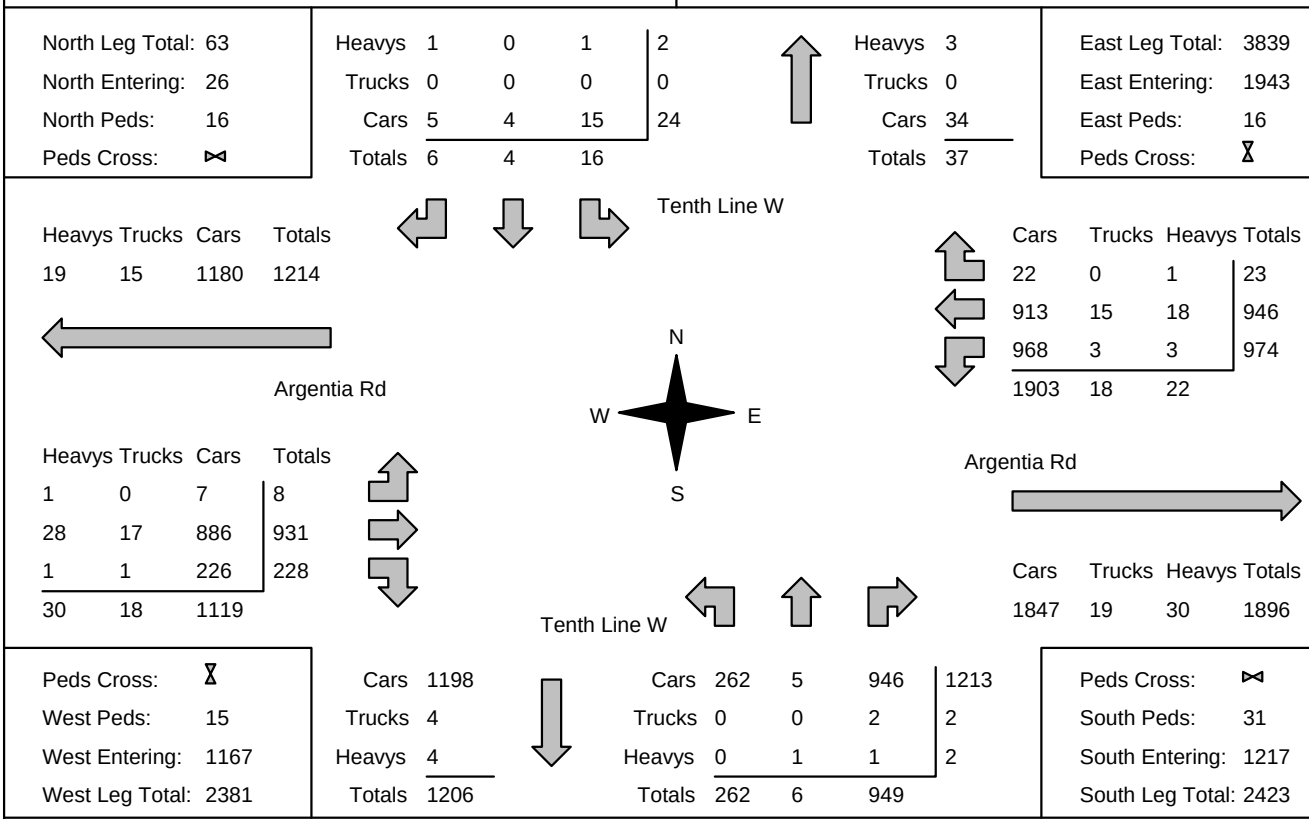
Municipality: Mississauga
Site #: 2512400004
Intersection: Argentia Rd & Tenth Line W
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Argentia Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Argentia Rd & Tenth Line W | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*2*	*0*	*1*	*3*	*1*
9:00:00	*2*	*1*	*1*	*4*	*5*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*10*	*1*	*2*	*13*	*2*
18:00:00	*2*	*2*	*2*	*6*	*8*
Totals:	16	4	6	26	16

North/South Total Approaches: 1243

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*123*	*1*	*179*	*303*	*4*
9:00:00	*43*	*4*	*236*	*283*	*9*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*35*	*1*	*253*	*289*	*6*
18:00:00	*61*	*0*	*281*	*342*	*12*
S Totals:	262	6	949	1217	31

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*49*	*113*	*0*	*162*	*0*
9:00:00	*83*	*115*	*17*	*215*	*3*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*391*	*335*	*1*	*727*	*6*
18:00:00	*451*	*383*	*5*	*839*	*7*
Totals:	974	946	23	1943	16

East/West Total Approaches: 3110

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*216*	*52*	*269*	*1*
9:00:00	*6*	*251*	*20*	*277*	*5*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*214*	*60*	*274*	*1*
18:00:00	*1*	*250*	*96*	*347*	*8*
W Totals:	8	931	228	1167	15

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*127*	*57*	*0*	*53*	*80*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400004

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1
8:00:00	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0
8:15:00	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	2
8:30:00	2	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	0
8:45:00	2	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	5	2
9:00:00	3	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	6	1
9:15:00	3	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	6	0
16:00:00	3	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	6	0
16:15:00	8	5	2	1	3	2	0	0	0	0	0	0	1	0	0	0	1	0	6	0
16:30:00	12	4	2	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	7	1
16:45:00	13	1	2	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	7	0
17:00:00	13	0	2	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	8	1
17:15:00	13	0	2	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	9	1
17:30:00	13	0	3	1	3	0	0	0	0	0	0	0	1	0	0	0	1	0	12	3
17:45:00	14	1	4	1	4	1	0	0	0	0	0	0	1	0	0	0	1	0	14	2
18:00:00	15	1	4	0	5	1	0	0	0	0	0	0	1	0	0	0	1	0	16	2
18:15:00	15	0	4	0	5	0	0	0	0	0	0	0	1	0	0	0	1	0	16	0
18:15:15	15	0	4	0	5	0	0	0	0	0	0	0	1	0	0	0	1	0	16	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400004

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	13	13	29	29	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0
7:30:00	24	11	49	20	0	0	1	0	0	0	0	0	1	1	5	4	0	0	0	0
7:45:00	33	9	75	26	0	0	1	0	0	0	0	0	1	0	6	1	0	0	0	0
8:00:00	46	13	105	30	0	0	2	1	2	2	0	0	1	0	6	0	0	0	0	0
8:15:00	70	24	128	23	3	3	2	0	3	1	0	0	2	1	7	1	0	0	1	1
8:30:00	90	20	165	37	10	7	3	1	3	0	0	0	2	0	8	1	0	0	1	0
8:45:00	103	13	188	23	13	3	3	0	5	2	0	0	2	0	8	0	0	0	3	2
9:00:00	127	24	209	21	17	4	3	0	8	3	0	0	2	0	11	3	0	0	3	0
9:15:00	127	0	209	0	17	0	3	0	8	0	0	0	2	0	11	0	0	0	3	0
16:00:00	127	0	209	0	17	0	3	0	8	0	0	0	2	0	11	0	0	0	3	0
16:15:00	217	90	271	62	18	1	3	0	9	1	0	0	2	0	12	1	0	0	4	1
16:30:00	321	104	355	84	18	0	3	0	9	0	0	0	2	0	12	0	0	0	4	0
16:45:00	424	103	450	95	18	0	3	0	10	1	0	0	2	0	13	1	0	0	6	2
17:00:00	517	93	538	88	18	0	3	0	11	1	0	0	3	1	14	1	0	0	9	3
17:15:00	627	110	632	94	18	0	3	0	14	3	0	0	3	0	16	2	0	0	11	2
17:30:00	736	109	728	96	18	0	3	0	15	1	0	0	3	0	17	1	0	0	11	0
17:45:00	852	116	834	106	20	2	3	0	15	0	0	0	3	0	18	1	1	1	13	2
18:00:00	968	116	913	79	22	2	3	0	15	0	0	0	3	0	18	0	1	0	16	3
18:15:00	968	0	913	0	22	0	3	0	15	0	0	0	3	0	18	0	1	0	16	0
18:15:15	968	0	913	0	22	0	3	0	15	0	0	0	3	0	18	0	1	0	16	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400004

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	38	38	0	0	36	36	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:30:00	76	38	0	0	78	42	0	0	0	0	0	0	0	0	0	0	0	0	3	1
7:45:00	101	25	1	1	134	56	0	0	0	0	1	1	0	0	0	0	0	0	4	1
8:00:00	123	22	1	0	178	44	0	0	0	0	1	0	0	0	0	0	0	0	4	0
8:15:00	137	14	1	0	234	56	0	0	0	0	2	1	0	0	0	0	0	0	5	1
8:30:00	149	12	1	0	290	56	0	0	0	0	2	0	0	0	0	0	0	0	8	3
8:45:00	159	10	3	2	356	66	0	0	0	0	2	0	0	0	0	0	0	0	13	5
9:00:00	166	7	4	1	413	57	0	0	0	0	2	0	0	0	1	1	0	0	13	0
9:15:00	166	0	4	0	413	0	0	0	0	0	2	0	0	0	1	0	0	0	13	0
16:00:00	166	0	4	0	413	0	0	0	0	0	2	0	0	0	1	0	0	0	13	0
16:15:00	170	4	5	1	468	55	0	0	0	0	2	0	0	0	1	0	0	0	16	3
16:30:00	181	11	5	0	532	64	0	0	0	0	2	0	0	0	1	0	0	0	18	2
16:45:00	189	8	5	0	603	71	0	0	0	0	2	0	0	0	1	0	0	0	19	1
17:00:00	201	12	5	0	665	62	0	0	0	0	2	0	0	0	1	0	1	1	19	0
17:15:00	217	16	5	0	739	74	0	0	0	0	2	0	0	0	1	0	1	0	20	1
17:30:00	232	15	5	0	814	75	0	0	0	0	2	0	0	0	1	0	1	0	24	4
17:45:00	246	14	5	0	874	60	0	0	0	0	2	0	0	0	1	0	1	0	29	5
18:00:00	262	16	5	0	946	72	0	0	0	0	2	0	0	0	1	0	1	0	31	2
18:15:00	262	0	5	0	946	0	0	0	0	0	2	0	0	0	1	0	1	0	31	0
18:15:15	262	0	5	0	946	0	0	0	0	0	2	0	0	0	1	0	1	0	31	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400004

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	38	38	17	17	0	0	0	0	1	1	0	0	0	0	0	0	0	0
7:30:00	0	0	87	49	26	9	0	0	0	0	1	0	0	0	0	0	0	0	0	0
7:45:00	0	0	160	73	38	12	0	0	0	0	1	0	0	0	1	1	0	0	1	1
8:00:00	1	1	212	52	51	13	0	0	0	0	1	0	0	0	4	3	0	0	1	0
8:15:00	2	1	280	68	57	6	0	0	1	1	1	0	0	0	6	2	0	0	2	1
8:30:00	3	1	340	60	62	5	0	0	3	2	1	0	0	0	7	1	0	0	2	0
8:45:00	4	1	402	62	71	9	0	0	6	3	1	0	0	0	8	1	0	0	3	1
9:00:00	7	3	452	50	71	0	0	0	7	1	1	0	0	0	8	0	0	0	6	3
9:15:00	7	0	452	0	71	0	0	0	7	0	1	0	0	0	8	0	0	0	6	0
16:00:00	7	0	452	0	71	0	0	0	7	0	1	0	0	0	8	0	0	0	6	0
16:15:00	7	0	514	62	76	5	0	0	8	1	1	0	0	0	12	4	0	0	6	0
16:30:00	7	0	549	35	85	9	0	0	10	2	1	0	0	0	16	4	0	0	6	0
16:45:00	7	0	598	49	125	40	0	0	12	2	1	0	0	0	18	2	0	0	6	0
17:00:00	7	0	648	50	131	6	0	0	13	1	1	0	0	0	20	2	0	0	7	1
17:15:00	7	0	719	71	156	25	0	0	13	0	1	0	0	0	21	1	0	0	7	0
17:30:00	7	0	781	62	175	19	0	0	14	1	1	0	0	0	26	5	0	0	9	2
17:45:00	7	0	824	43	195	20	0	0	15	1	1	0	1	1	26	0	0	0	13	4
18:00:00	7	0	886	62	226	31	0	0	17	2	1	0	1	0	28	2	1	1	15	2
18:15:00	7	0	886	0	226	0	0	0	17	0	1	0	1	0	28	0	1	0	15	0
18:15:15	7	0	886	0	226	0	0	0	17	0	1	0	1	0	28	0	1	0	15	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Mississauga
Site #: 2512400005
Intersection: Ninth Line & Argentia Rd
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S

North Leg Total: 858
North Entering: 567
North Peds: 0
Peds Cross: ⋈

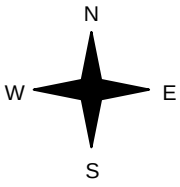
Heavys	3	0	3
Trucks	9	1	10
Cars	463	91	554
Totals	475	92	

Heavys	4
Trucks	3
Cars	284
Totals	291

East Leg Total: 368
East Entering: 72
East Peds: 0
Peds Cross: ⋈



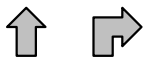
Cars	Trucks	Heavys	Totals
27	0	2	29
40	1	2	43
67	1	4	



Argentia Rd



Cars	Trucks	Heavys	Totals
291	2	3	296



Cars	503		
Trucks	10		
Heavys	5		
Totals	518		

Cars	257	200	457
Trucks	3	1	4
Heavys	2	3	5
Totals	262	204	

Peds Cross: ⋈
South Peds: 0
South Entering: 466
South Leg Total: 984

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Mississauga
Site #: 2512400005
Intersection: Ninth Line & Argentia Rd
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S

North Leg Total: 1335
North Entering: 526
North Peds: 0
Peds Cross: ⋈

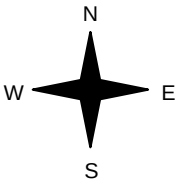
Heavys	1	2	3
Trucks	7	2	9
Cars	445	69	514
Totals	453	73	

Heavys	2
Trucks	3
Cars	804
Totals	809

East Leg Total: 647
East Entering: 448
East Peds: 0
Peds Cross: ⋈

Ninth Line

Cars	Trucks	Heavys	Totals
197	1	0	198
248	1	1	250
445	2	1	



Argentia Rd

Cars	Trucks	Heavys	Totals
192	3	4	199

Ninth Line

Cars	693		
Trucks	8		
Heavys	2		
Totals	703		

Cars	607	123	730
Trucks	2	1	3
Heavys	2	2	4
Totals	611	126	

Peds Cross: ⋈
South Peds: 0
South Entering: 737
South Leg Total: 1440

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Mississauga
Site #: 2512400005
Intersection: Ninth Line & Argentia Rd
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Ninth Line runs N/S

North Leg Total: 4094
North Entering: 2068
North Peds: 0
Peds Cross: ⋈

Heavys	13	2	15
Trucks	28	4	32
Cars	1709	312	2021
Totals	1750	318	

Heavys	12	
Trucks	14	
Cars	2000	
Totals	2026	

East Leg Total: 1905
East Entering: 943
East Peds: 0
Peds Cross: ⋈

Ninth Line

Cars	Trucks	Heavys	Totals
410	2	4	416
516	4	7	527
926	6	11	

N
W E
S

Argentia Rd

Cars	Trucks	Heavys	Totals
940	8	14	962

Ninth Line

Cars	2225		
Trucks	32		
Heavys	20		
Totals	2277		

Cars	1590	628	2218
Trucks	12	4	16
Heavys	8	12	20
Totals	1610	644	

Peds Cross: ⋈
South Peds: 0
South Entering: 2254
South Leg Total: 4531

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Ninth Line & Argentia Rd | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*91*	*417*	*0*	*508*	*0*
9:00:00	*92*	*475*	*0*	*567*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*70*	*422*	*0*	*492*	*0*
18:00:00	*65*	*436*	*0*	*501*	*0*
Totals:	318	1750	0	2068	0

North/South Total Approaches: 4322

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*217*	*199*	*416*	*0*
9:00:00	*0*	*262*	*204*	*466*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*552*	*108*	*660*	*0*
18:00:00	*0*	*579*	*133*	*712*	*0*
S Totals:	0	1610	644	2254	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*45*	*0*	*39*	*84*	*0*
9:00:00	*43*	*0*	*29*	*72*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*184*	*0*	*162*	*346*	*0*
18:00:00	*255*	*0*	*186*	*441*	*0*
Totals:	527	0	416	943	0

East/West Total Approaches: 943

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
W Totals:	0	0	0	0	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*45*	*43*	*0*	*184*	*255*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400005

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	15	15	103	103	0	0	0	0	1	1	0	0	0	0	2	2	0	0	0	0
7:30:00	41	26	212	109	0	0	0	0	1	0	0	0	0	0	3	1	0	0	0	0
7:45:00	69	28	323	111	0	0	0	0	4	3	0	0	0	0	3	0	0	0	0	0
8:00:00	91	22	406	83	0	0	0	0	7	3	0	0	0	0	4	1	0	0	0	0
8:15:00	111	20	533	127	0	0	0	0	9	2	0	0	0	0	4	0	0	0	0	0
8:30:00	138	27	634	101	0	0	0	0	10	1	0	0	0	0	5	1	0	0	0	0
8:45:00	159	21	749	115	0	0	0	0	14	4	0	0	0	0	7	2	0	0	0	0
9:00:00	182	23	869	120	0	0	1	1	16	2	0	0	0	0	7	0	0	0	0	0
9:15:00	182	0	869	0	0	0	1	0	16	0	0	0	0	0	7	0	0	0	0	0
16:00:00	182	0	869	0	0	0	1	0	16	0	0	0	0	0	7	0	0	0	0	0
16:15:00	196	14	954	85	0	0	1	0	18	2	0	0	0	0	8	1	0	0	0	0
16:30:00	217	21	1054	100	0	0	1	0	19	1	0	0	0	0	10	2	0	0	0	0
16:45:00	231	14	1167	113	0	0	2	1	20	1	0	0	0	0	11	1	0	0	0	0
17:00:00	250	19	1279	112	0	0	2	0	23	3	0	0	1	1	12	1	0	0	0	0
17:15:00	269	19	1383	104	0	0	2	0	25	2	0	0	2	1	12	0	0	0	0	0
17:30:00	285	16	1503	120	0	0	2	0	27	2	0	0	2	0	12	0	0	0	0	0
17:45:00	300	15	1612	109	0	0	4	2	27	0	0	0	2	0	12	0	0	0	0	0
18:00:00	312	12	1709	97	0	0	4	0	28	1	0	0	2	0	13	1	0	0	0	0
18:15:00	312	0	1709	0	0	0	4	0	28	0	0	0	2	0	13	0	0	0	0	0
18:15:15	312	0	1709	0	0	0	4	0	28	0	0	0	2	0	13	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400005

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	8	8	0	0	3	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0
7:30:00	20	12	0	0	8	5	0	0	0	0	0	0	2	1	0	0	0	0	0	0
7:45:00	28	8	0	0	28	20	1	1	0	0	0	0	2	0	0	0	1	1	0	0
8:00:00	40	12	0	0	38	10	2	1	0	0	0	0	3	1	0	0	1	0	0	0
8:15:00	47	7	0	0	43	5	2	0	0	0	0	0	3	0	0	0	1	0	0	0
8:30:00	63	16	0	0	52	9	2	0	0	0	0	0	4	1	0	0	1	0	0	0
8:45:00	73	10	0	0	54	2	3	1	0	0	0	0	4	0	0	0	1	0	0	0
9:00:00	80	7	0	0	65	11	3	0	0	0	0	0	5	1	0	0	3	2	0	0
9:15:00	80	0	0	0	65	0	3	0	0	0	0	0	5	0	0	0	3	0	0	0
16:00:00	80	0	0	0	65	0	3	0	0	0	0	0	5	0	0	0	3	0	0	0
16:15:00	112	32	0	0	89	24	3	0	0	0	1	1	6	1	0	0	3	0	0	0
16:30:00	161	49	0	0	130	41	3	0	0	0	1	0	6	0	0	0	3	0	0	0
16:45:00	213	52	0	0	177	47	3	0	0	0	1	0	6	0	0	0	3	0	0	0
17:00:00	262	49	0	0	226	49	4	1	0	0	1	0	6	0	0	0	3	0	0	0
17:15:00	322	60	0	0	292	66	4	0	0	0	2	1	6	0	0	0	3	0	0	0
17:30:00	394	72	0	0	330	38	4	0	0	0	2	0	7	1	0	0	3	0	0	0
17:45:00	461	67	0	0	374	44	4	0	0	0	2	0	7	0	0	0	3	0	0	0
18:00:00	516	55	0	0	410	36	4	0	0	0	2	0	7	0	0	0	4	1	0	0
18:15:00	516	0	0	0	410	0	4	0	0	0	2	0	7	0	0	0	4	0	0	0
18:15:15	516	0	0	0	410	0	4	0	0	0	2	0	7	0	0	0	4	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400005

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	45	45	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	99	54	96	55	0	0	0	0	0	0	0	0	1	1	0	0	0	0
7:45:00	0	0	155	56	147	51	0	0	1	1	0	0	0	0	1	0	0	0	0	0
8:00:00	0	0	212	57	196	49	0	0	3	2	0	0	0	0	2	1	3	3	0	0
8:15:00	0	0	282	70	259	63	0	0	5	2	0	0	0	0	3	1	4	1	0	0
8:30:00	0	0	345	63	314	55	0	0	6	1	1	1	0	0	3	0	5	1	0	0
8:45:00	0	0	415	70	356	42	0	0	6	0	1	0	0	0	3	0	5	0	0	0
9:00:00	0	0	469	54	396	40	0	0	6	0	1	0	0	0	4	1	6	1	0	0
9:15:00	0	0	469	0	396	0	0	0	6	0	1	0	0	0	4	0	6	0	0	0
16:00:00	0	0	469	0	396	0	0	0	6	0	1	0	0	0	4	0	6	0	0	0
16:15:00	0	0	582	113	418	22	0	0	7	1	2	1	0	0	4	0	7	1	0	0
16:30:00	0	0	701	119	447	29	0	0	8	1	2	0	0	0	4	0	8	1	0	0
16:45:00	0	0	863	162	469	22	0	0	9	1	3	1	0	0	6	2	9	1	0	0
17:00:00	0	0	1015	152	497	28	0	0	10	1	4	1	0	0	6	0	10	1	0	0
17:15:00	0	0	1139	124	532	35	0	0	11	1	4	0	0	0	7	1	10	0	0	0
17:30:00	0	0	1302	163	564	32	0	0	11	0	4	0	0	0	7	0	11	1	0	0
17:45:00	0	0	1470	168	592	28	0	0	11	0	4	0	0	0	8	1	11	0	0	0
18:00:00	0	0	1590	120	628	36	0	0	12	1	4	0	0	0	8	0	12	1	0	0
18:15:00	0	0	1590	0	628	0	0	0	12	0	4	0	0	0	8	0	12	0	0	0
18:15:15	0	0	1590	0	628	0	0	0	12	0	4	0	0	0	8	0	12	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400005

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

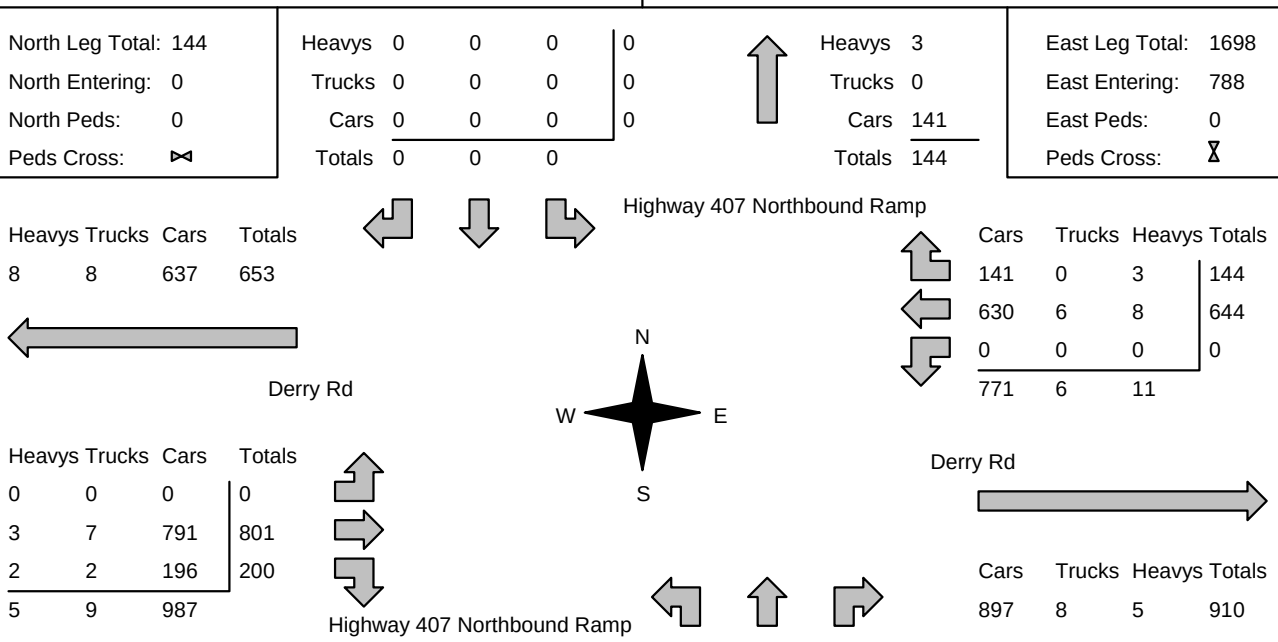
Municipality: Mississauga
Site #: 2512400006
Intersection: Derry Rd & Highway 407 Northbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

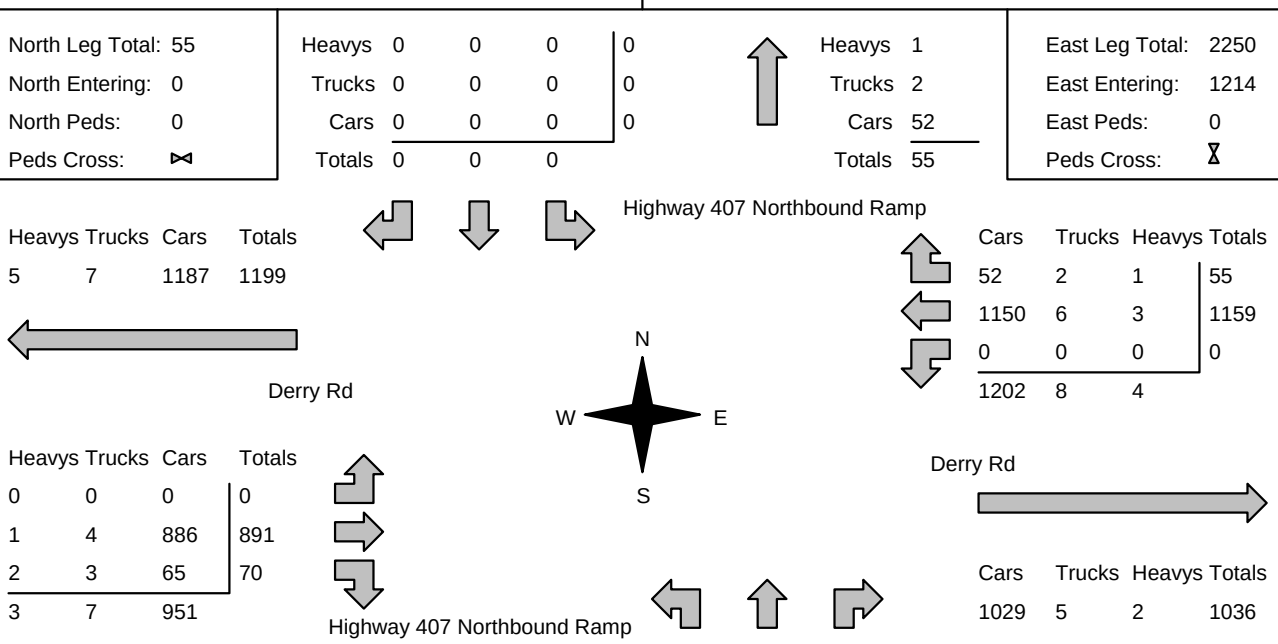
Municipality: Mississauga
Site #: 2512400006
Intersection: Derry Rd & Highway 407 Northbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

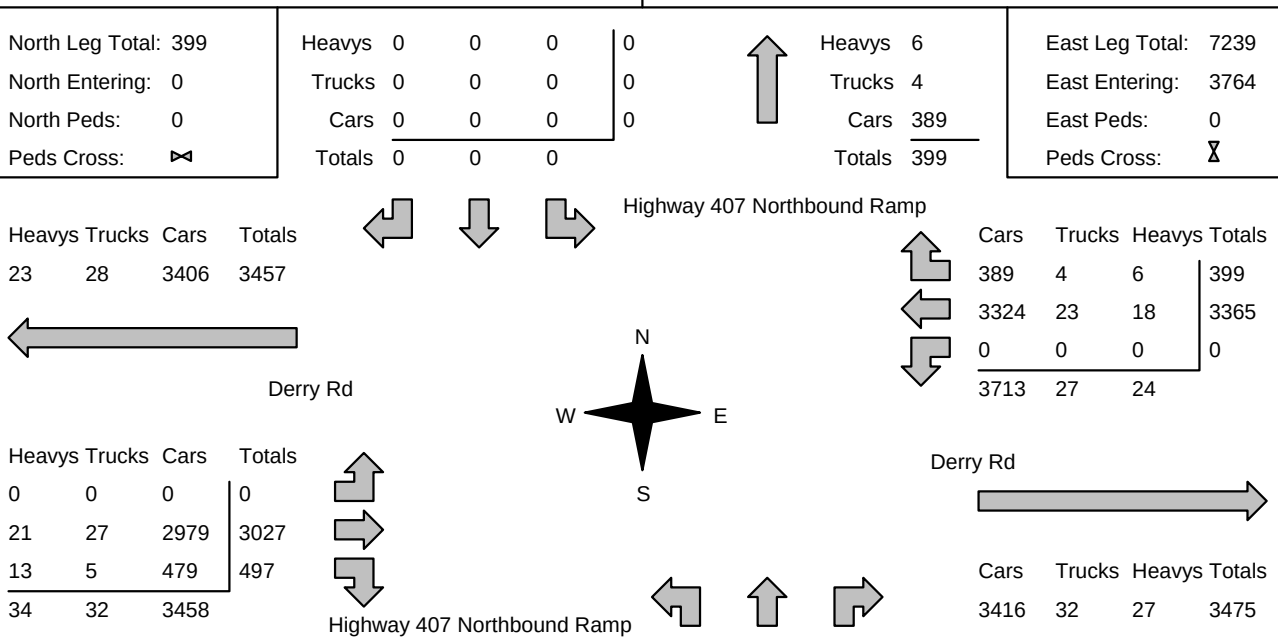
Municipality: Mississauga
Site #: 2512400006
Intersection: Derry Rd & Highway 407 Northbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Derry Rd & Highway 407 Northbou | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
Totals:	0	0	0	0	0

North/South Total Approaches: 540

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*13*	*0*	*78*	*91*	*0*
9:00:00	*9*	*0*	*109*	*118*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*37*	*0*	*125*	*162*	*0*
18:00:00	*33*	*0*	*136*	*169*	*0*
S Totals:	92	0	448	540	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*580*	*143*	*723*	*0*
9:00:00	*0*	*644*	*144*	*788*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*1040*	*64*	*1104*	*0*
18:00:00	*0*	*1101*	*48*	*1149*	*0*
Totals:	0	3365	399	3764	0

East/West Total Approaches: 7288

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*583*	*165*	*748*	*0*
9:00:00	*0*	*801*	*200*	*1001*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*749*	*77*	*826*	*0*
18:00:00	*0*	*894*	*55*	*949*	*0*
W Totals:	0	3027	497	3524	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*13*	*9*	*0*	*37*	*33*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400006

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400006

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	128	128	26	26	0	0	0	0	0	0	0	0	1	1	0	0	0	0
7:30:00	0	0	258	130	64	38	0	0	1	1	0	0	0	0	1	0	0	0	0	0
7:45:00	0	0	408	150	106	42	0	0	2	1	0	0	0	0	2	1	0	0	0	0
8:00:00	0	0	571	163	141	35	0	0	6	4	1	1	0	0	3	1	1	1	0	0
8:15:00	0	0	728	157	176	35	0	0	8	2	1	0	0	0	4	1	3	2	0	0
8:30:00	0	0	880	152	223	47	0	0	8	0	1	0	0	0	7	3	3	0	0	0
8:45:00	0	0	1032	152	249	26	0	0	11	3	1	0	0	0	8	1	4	1	0	0
9:00:00	0	0	1201	169	282	33	0	0	12	1	1	0	0	0	11	3	4	0	0	0
9:15:00	0	0	1201	0	282	0	0	0	12	0	1	0	0	0	11	0	4	0	0	0
16:00:00	0	0	1201	0	282	0	0	0	12	0	1	0	0	0	11	0	4	0	0	0
16:15:00	0	0	1381	180	298	16	0	0	12	0	1	0	0	0	12	1	5	1	0	0
16:30:00	0	0	1674	293	311	13	0	0	12	0	1	0	0	0	12	0	5	0	0	0
16:45:00	0	0	1934	260	330	19	0	0	16	4	1	0	0	0	15	3	5	0	0	0
17:00:00	0	0	2228	294	344	14	0	0	19	3	2	1	0	0	17	2	5	0	0	0
17:15:00	0	0	2499	271	354	10	0	0	20	1	2	0	0	0	17	0	5	0	0	0
17:30:00	0	0	2787	288	374	20	0	0	20	0	3	1	0	0	18	1	6	1	0	0
17:45:00	0	0	3084	297	382	8	0	0	22	2	3	0	0	0	18	0	6	0	0	0
18:00:00	0	0	3324	240	389	7	0	0	23	1	4	1	0	0	18	0	6	0	0	0
18:15:00	0	0	3324	0	389	0	0	0	23	0	4	0	0	0	18	0	6	0	0	0
18:15:15	0	0	3324	0	389	0	0	0	23	0	4	0	0	0	18	0	6	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400006

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	3	3	0	0	12	12	1	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	4	1	0	0	32	20	1	0	0	0	1	1	1	1	0	0	0	0	0	0
7:45:00	7	3	0	0	47	15	1	0	0	0	1	0	1	0	0	0	2	2	0	0
8:00:00	11	4	0	0	74	27	1	0	0	0	2	1	1	0	0	0	2	0	0	0
8:15:00	11	0	0	0	93	19	1	0	0	0	2	0	1	0	0	0	2	0	0	0
8:30:00	13	2	0	0	126	33	2	1	0	0	2	0	1	0	0	0	2	0	0	0
8:45:00	16	3	0	0	155	29	3	1	0	0	3	1	1	0	0	0	2	0	0	0
9:00:00	18	2	0	0	180	25	3	0	0	0	3	0	1	0	0	0	4	2	0	0
9:15:00	18	0	0	0	180	0	3	0	0	0	3	0	1	0	0	0	4	0	0	0
16:00:00	18	0	0	0	180	0	3	0	0	0	3	0	1	0	0	0	4	0	0	0
16:15:00	22	4	0	0	210	30	4	1	0	0	3	0	3	2	0	0	5	1	0	0
16:30:00	33	11	0	0	240	30	4	0	0	0	4	1	3	0	0	0	5	0	0	0
16:45:00	41	8	0	0	269	29	4	0	0	0	4	0	3	0	0	0	5	0	0	0
17:00:00	51	10	0	0	302	33	5	1	0	0	5	1	3	0	0	0	5	0	0	0
17:15:00	59	8	0	0	339	37	5	0	0	0	5	0	5	2	0	0	6	1	0	0
17:30:00	69	10	0	0	378	39	5	0	0	0	5	0	5	0	0	0	6	0	0	0
17:45:00	78	9	0	0	412	34	5	0	0	0	5	0	5	0	0	0	6	0	0	0
18:00:00	82	4	0	0	437	25	5	0	0	0	5	0	5	0	0	0	6	0	0	0
18:15:00	82	0	0	0	437	0	5	0	0	0	5	0	5	0	0	0	6	0	0	0
18:15:15	82	0	0	0	437	0	5	0	0	0	5	0	5	0	0	0	6	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400006

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	108	108	29	29	0	0	0	0	0	0	0	0	3	3	1	1	0	0
7:30:00	0	0	231	123	69	40	0	0	3	3	0	0	0	0	4	1	1	0	0	0
7:45:00	0	0	386	155	109	40	0	0	7	4	0	0	0	0	5	1	3	2	0	0
8:00:00	0	0	567	181	161	52	0	0	9	2	0	0	0	0	7	2	4	1	0	0
8:15:00	0	0	741	174	205	44	0	0	9	0	0	0	0	0	8	1	4	0	0	0
8:30:00	0	0	920	179	268	63	0	0	13	4	0	0	0	0	9	1	6	2	0	0
8:45:00	0	0	1136	216	325	57	0	0	15	2	0	0	0	0	10	1	6	0	0	0
9:00:00	0	0	1358	222	357	32	0	0	16	1	2	2	0	0	10	0	6	0	0	0
9:15:00	0	0	1358	0	357	0	0	0	16	0	2	0	0	0	10	0	6	0	0	0
16:00:00	0	0	1358	0	357	0	0	0	16	0	2	0	0	0	10	0	6	0	0	0
16:15:00	0	0	1508	150	372	15	0	0	18	2	2	0	0	0	13	3	6	0	0	0
16:30:00	0	0	1697	189	390	18	0	0	21	3	2	0	0	0	15	2	7	1	0	0
16:45:00	0	0	1886	189	406	16	0	0	22	1	2	0	0	0	16	1	8	1	0	0
17:00:00	0	0	2094	208	429	23	0	0	22	0	3	1	0	0	17	1	10	2	0	0
17:15:00	0	0	2306	212	446	17	0	0	22	0	4	1	0	0	17	0	10	0	0	0
17:30:00	0	0	2534	228	456	10	0	0	25	3	5	1	0	0	17	0	10	0	0	0
17:45:00	0	0	2772	238	471	15	0	0	26	1	5	0	0	0	17	0	10	0	0	0
18:00:00	0	0	2979	207	479	8	0	0	27	1	5	0	0	0	21	4	13	3	0	0
18:15:00	0	0	2979	0	479	0	0	0	27	0	5	0	0	0	21	0	13	0	0	0
18:15:15	0	0	2979	0	479	0	0	0	27	0	5	0	0	0	21	0	13	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Mississauga
Site #: 2512400007
Intersection: Derry Rd & Highway 407 Southbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E

North Leg Total: 223
North Entering: 78
North Peds: 0
Peds Cross: ⋈

Heavys	5	0	1	6
Trucks	3	0	1	4
Cars	44	0	24	68
Totals	52	0	26	

Heavys	1
Trucks	2
Cars	142
Totals	145

East Leg Total: 1655
East Entering: 654
East Peds: 0
Peds Cross: ⧖

Highway 407 Southbound Ramp

Heavys	Trucks	Cars	Totals
13	7	541	561

Cars	Trucks	Heavys	Totals
142	2	1	145
497	4	8	509
0	0	0	0
639	6	9	

Derry Rd

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	0	0
4	8	963	975
1	0	43	44
5	8	1006	

Derry Rd

Cars	Trucks	Heavys	Totals
987	9	5	1001

Highway 407 Southbound Ramp

Peds Cross: ⧖
West Peds: 0
West Entering: 1019
West Leg Total: 1580

Cars	43
Trucks	0
Heavys	1
Totals	44

Cars	0	0	0
Trucks	0	0	0
Heavys	0	0	0
Totals	0	0	0

Peds Cross: ⋈
South Peds: 0
South Entering: 0
South Leg Total: 44

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

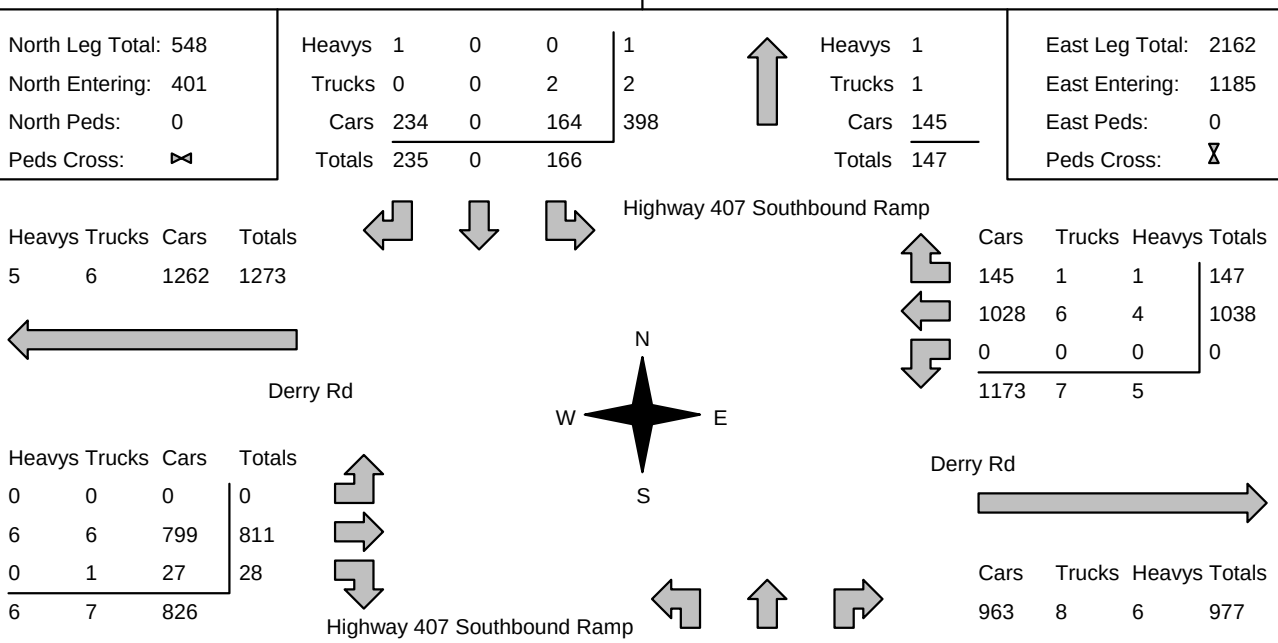
Municipality: Mississauga
Site #: 2512400007
Intersection: Derry Rd & Highway 407 Southbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

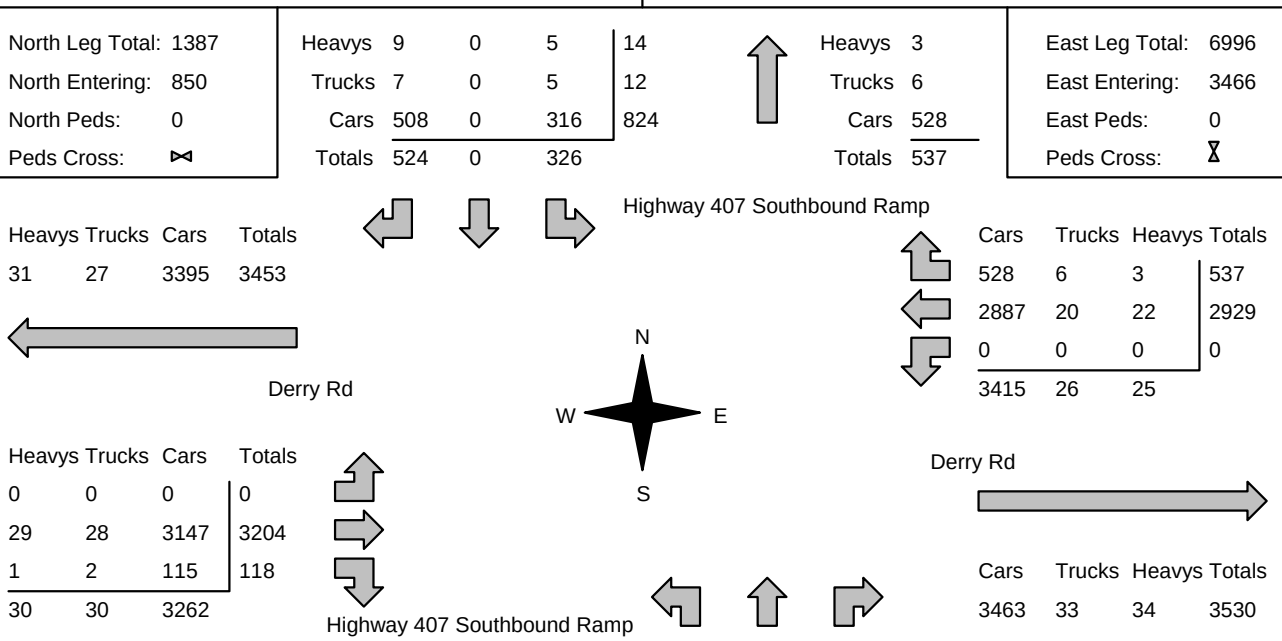
Municipality: Mississauga
Site #: 2512400007
Intersection: Derry Rd & Highway 407 Southbou
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Derry Rd & Highway 407 Southbo | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*30*	*0*	*33*	*63*	*0*
9:00:00	*26*	*0*	*52*	*78*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*124*	*0*	*215*	*339*	*0*
18:00:00	*146*	*0*	*224*	*370*	*0*
Totals:	326	0	524	850	0

North/South Total Approaches: 850

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
S Totals:	0	0	0	0	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*459*	*135*	*594*	*0*
9:00:00	*0*	*509*	*145*	*654*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*965*	*123*	*1088*	*0*
18:00:00	*0*	*996*	*134*	*1130*	*0*
Totals:	0	2929	537	3466	0

East/West Total Approaches: 6788

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*714*	*25*	*739*	*0*
9:00:00	*0*	*975*	*44*	*1019*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*706*	*19*	*725*	*0*
18:00:00	*0*	*809*	*30*	*839*	*0*
W Totals:	0	3204	118	3322	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*30*	*26*	*0*	*124*	*146*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400007

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	4	4	0	0	2	2	0	0	0	0	0	0	3	3	0	0	0	0	0	0
7:30:00	7	3	0	0	11	9	2	2	0	0	0	0	3	0	0	0	2	2	0	0
7:45:00	13	6	0	0	18	7	2	0	0	0	1	1	3	0	0	0	2	0	0	0
8:00:00	25	12	0	0	29	11	2	0	0	0	2	1	3	0	0	0	2	0	0	0
8:15:00	26	1	0	0	39	10	2	0	0	0	3	1	4	1	0	0	6	4	0	0
8:30:00	30	4	0	0	48	9	3	1	0	0	4	1	4	0	0	0	6	0	0	0
8:45:00	39	9	0	0	60	12	3	0	0	0	4	0	4	0	0	0	7	1	0	0
9:00:00	49	10	0	0	73	13	3	0	0	0	5	1	4	0	0	0	7	0	0	0
9:15:00	49	0	0	0	73	0	3	0	0	0	5	0	4	0	0	0	7	0	0	0
16:00:00	49	0	0	0	73	0	3	0	0	0	5	0	4	0	0	0	7	0	0	0
16:15:00	66	17	0	0	115	42	3	0	0	0	5	0	5	1	0	0	7	0	0	0
16:30:00	98	32	0	0	173	58	3	0	0	0	6	1	5	0	0	0	7	0	0	0
16:45:00	123	25	0	0	233	60	3	0	0	0	7	1	5	0	0	0	8	1	0	0
17:00:00	171	48	0	0	285	52	4	1	0	0	7	0	5	0	0	0	8	0	0	0
17:15:00	205	34	0	0	353	68	4	0	0	0	7	0	5	0	0	0	9	1	0	0
17:30:00	243	38	0	0	410	57	5	1	0	0	7	0	5	0	0	0	9	0	0	0
17:45:00	287	44	0	0	467	57	5	0	0	0	7	0	5	0	0	0	9	0	0	0
18:00:00	316	29	0	0	508	41	5	0	0	0	7	0	5	0	0	0	9	0	0	0
18:15:00	316	0	0	0	508	0	5	0	0	0	7	0	5	0	0	0	9	0	0	0
18:15:15	316	0	0	0	508	0	5	0	0	0	7	0	5	0	0	0	9	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400007

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	100	100	30	30	0	0	1	1	0	0	0	0	1	1	0	0	0	0
7:30:00	0	0	203	103	58	28	0	0	1	0	1	1	0	0	2	1	0	0	0	0
7:45:00	0	0	319	116	97	39	0	0	2	1	1	0	0	0	3	1	0	0	0	0
8:00:00	0	0	449	130	134	37	0	0	6	4	1	0	0	0	4	1	0	0	0	0
8:15:00	0	0	575	126	166	32	0	0	7	1	2	1	0	0	5	1	0	0	0	0
8:30:00	0	0	699	124	198	32	0	0	8	1	2	0	0	0	7	2	1	1	0	0
8:45:00	0	0	807	108	240	42	0	0	10	2	3	1	0	0	9	2	1	0	0	0
9:00:00	0	0	946	139	276	36	0	0	10	0	3	0	0	0	12	3	1	0	0	0
9:15:00	0	0	946	0	276	0	0	0	10	0	3	0	0	0	12	0	1	0	0	0
16:00:00	0	0	946	0	276	0	0	0	10	0	3	0	0	0	12	0	1	0	0	0
16:15:00	0	0	1116	170	294	18	0	0	11	1	3	0	0	0	15	3	2	1	0	0
16:30:00	0	0	1396	280	318	24	0	0	11	0	3	0	0	0	15	0	2	0	0	0
16:45:00	0	0	1622	226	362	44	0	0	13	2	5	2	0	0	18	3	2	0	0	0
17:00:00	0	0	1897	275	395	33	0	0	17	4	5	0	0	0	19	1	3	1	0	0
17:15:00	0	0	2127	230	439	44	0	0	18	1	5	0	0	0	21	2	3	0	0	0
17:30:00	0	0	2384	257	479	40	0	0	18	0	5	0	0	0	22	1	3	0	0	0
17:45:00	0	0	2650	266	507	28	0	0	19	1	6	1	0	0	22	0	3	0	0	0
18:00:00	0	0	2887	237	528	21	0	0	20	1	6	0	0	0	22	0	3	0	0	0
18:15:00	0	0	2887	0	528	0	0	0	20	0	6	0	0	0	22	0	3	0	0	0
18:15:15	0	0	2887	0	528	0	0	0	20	0	6	0	0	0	22	0	3	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400007

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400007

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	133	133	5	5	0	0	0	0	0	0	0	0	1	1	0	0	0	0
7:30:00	0	0	292	159	12	7	0	0	1	1	0	0	0	0	2	1	0	0	0	0
7:45:00	0	0	486	194	18	6	0	0	6	5	1	1	0	0	4	2	0	0	0	0
8:00:00	0	0	700	214	24	6	0	0	7	1	1	0	0	0	7	3	0	0	0	0
8:15:00	0	0	922	222	34	10	0	0	7	0	1	0	0	0	7	0	1	1	0	0
8:30:00	0	0	1158	236	44	10	0	0	10	3	1	0	0	0	10	3	1	0	0	0
8:45:00	0	0	1422	264	54	10	0	0	12	2	1	0	0	0	11	1	1	0	0	0
9:00:00	0	0	1663	241	67	13	0	0	15	3	1	0	0	0	11	0	1	0	0	0
9:15:00	0	0	1663	0	67	0	0	0	15	0	1	0	0	0	11	0	1	0	0	0
16:00:00	0	0	1663	0	67	0	0	0	15	0	1	0	0	0	11	0	1	0	0	0
16:15:00	0	0	1802	139	70	3	0	0	17	2	1	0	0	0	13	2	1	0	0	0
16:30:00	0	0	1981	179	75	5	0	0	20	3	1	0	0	0	16	3	1	0	0	0
16:45:00	0	0	2159	178	79	4	0	0	21	1	1	0	0	0	18	2	1	0	0	0
17:00:00	0	0	2353	194	86	7	0	0	21	0	1	0	0	0	21	3	1	0	0	0
17:15:00	0	0	2537	184	94	8	0	0	23	2	1	0	0	0	22	1	1	0	0	0
17:30:00	0	0	2747	210	99	5	0	0	26	3	2	1	0	0	22	0	1	0	0	0
17:45:00	0	0	2958	211	106	7	0	0	27	1	2	0	0	0	24	2	1	0	0	0
18:00:00	0	0	3147	189	115	9	0	0	28	1	2	0	0	0	29	5	1	0	0	0
18:15:00	0	0	3147	0	115	0	0	0	28	0	2	0	0	0	29	0	1	0	0	0
18:15:15	0	0	3147	0	115	0	0	0	28	0	2	0	0	0	29	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Mississauga
Site #: 2512400008
Intersection: Derry Rd W & Ninth Line
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

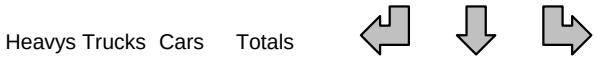
Major Road: Derry Rd W runs W/E

North Leg Total: 992
North Entering: 593
North Peds: 0
Peds Cross: ⋈

Heavys	5	1	0	6
Trucks	5	5	0	10
Cars	291	264	22	577
Totals	301	270	22	

Heavys	6
Trucks	6
Cars	387
Totals	399

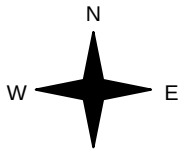
East Leg Total: 1318
East Entering: 477
East Peds: 0
Peds Cross: ⧗



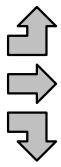
Heavys	Trucks	Cars	Totals
11	6	770	787

Derry Rd W

Cars	Trucks	Heavys	Totals
16	0	0	16
374	1	2	377
79	4	1	84
469	5	3	



Heavys	Trucks	Cars	Totals
4	1	166	171
2	5	682	689
0	2	36	38
6	8	884	



Derry Rd W

Cars	Trucks	Heavys	Totals
831	7	3	841



Peds Cross: ⧗
West Peds: 0
West Entering: 898
West Leg Total: 1685

Cars	379			
Trucks	11			
Heavys	2			
Totals	392			

Cars	105	205	127	437
Trucks	0	5	2	7
Heavys	4	2	1	7
Totals	109	212	130	

Peds Cross: ⋈
South Peds: 0
South Entering: 451
South Leg Total: 843

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

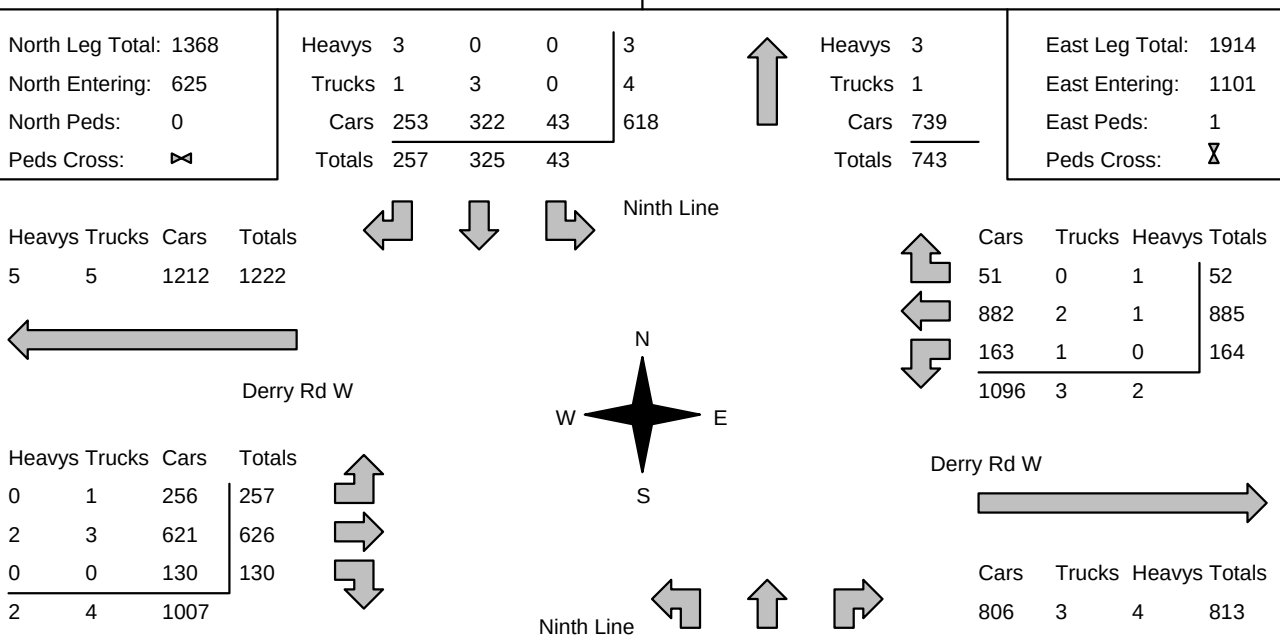
Municipality: Mississauga
Site #: 2512400008
Intersection: Derry Rd W & Ninth Line
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd W runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

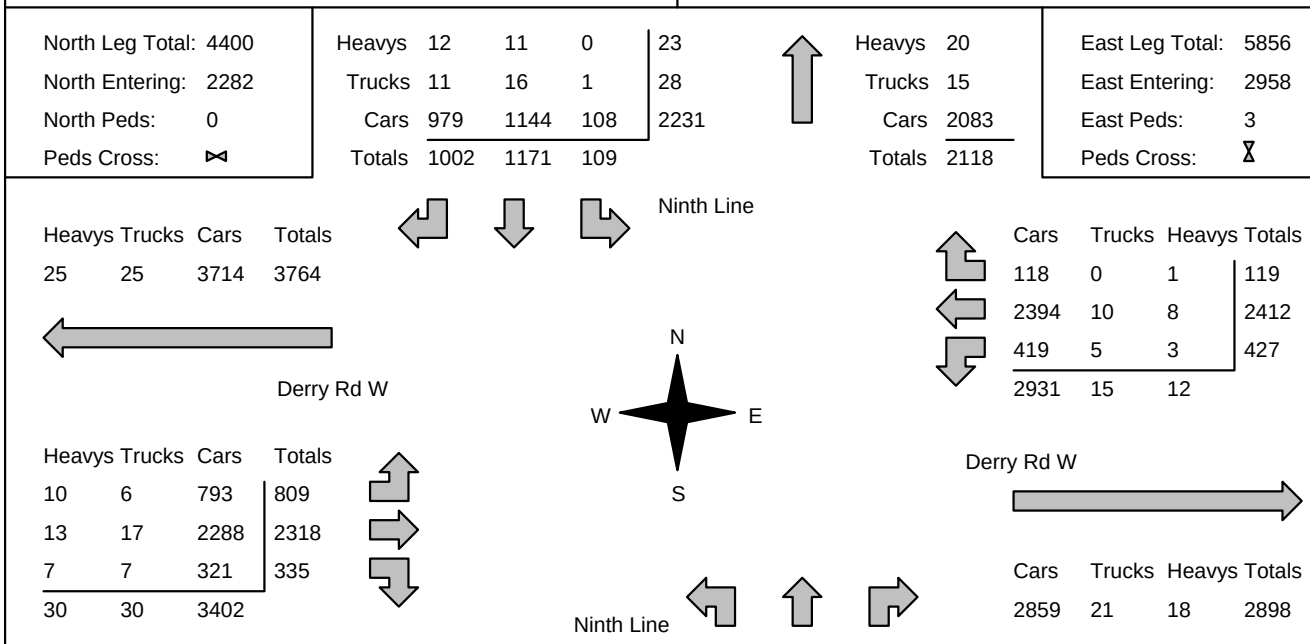
Municipality: Mississauga
Site #: 2512400008
Intersection: Derry Rd W & Ninth Line
TFR File #: 1
Count date: 6-Aug-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd W runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Derry Rd W & Ninth Line | **Count Date:** 6-Aug-25 | **Municipality:** Mississauga

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*13*	*250*	*242*	*505*	*0*	*822*
9:00:00	*22*	*270*	*301*	*593*	*0*	*1044*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*38*	*313*	*215*	*566*	*0*	*1159*
18:00:00	*36*	*338*	*244*	*618*	*0*	*1268*
Totals:	109	1171	1002	2282	0	4293

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*86*	*164*	*67*	*317*	*0*
9:00:00	*109*	*212*	*130*	*451*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*80*	*381*	*132*	*593*	*0*
18:00:00	*75*	*433*	*142*	*650*	*1*
S Totals:	350	1190	471	2011	1

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*63*	*395*	*13*	*471*	*2*	*1130*
9:00:00	*84*	*377*	*16*	*477*	*0*	*1375*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*114*	*809*	*37*	*960*	*0*	*1812*
18:00:00	*166*	*831*	*53*	*1050*	*1*	*2103*
Totals:	427	2412	119	2958	3	6420

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*131*	*483*	*45*	*659*	*0*
9:00:00	*171*	*689*	*38*	*898*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*249*	*486*	*117*	*852*	*0*
18:00:00	*258*	*660*	*135*	*1053*	*0*
W Totals:	809	2318	335	3462	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*351*	*401*	*0*	*499*	*545*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400008

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	5	5	55	55	55	55	0	0	1	1	0	0	0	0	3	3	0	0	0	0
7:30:00	7	2	120	65	106	51	0	0	1	0	1	1	0	0	4	1	0	0	0	0
7:45:00	10	3	199	79	171	65	0	0	4	3	2	1	0	0	5	1	0	0	0	0
8:00:00	12	2	240	41	236	65	1	1	4	0	5	3	0	0	6	1	1	1	0	0
8:15:00	17	5	312	72	316	80	1	0	5	1	6	1	0	0	6	0	1	0	0	0
8:30:00	23	6	375	63	377	61	1	0	6	1	6	0	0	0	6	0	2	1	0	0
8:45:00	29	6	438	63	445	68	1	0	8	2	9	3	0	0	7	1	4	2	0	0
9:00:00	34	5	504	66	527	82	1	0	9	1	10	1	0	0	7	0	6	2	0	0
9:15:00	34	0	504	0	527	0	1	0	9	0	10	0	0	0	7	0	6	0	0	0
16:00:00	34	0	504	0	527	0	1	0	9	0	10	0	0	0	7	0	6	0	0	0
16:15:00	41	7	559	55	568	41	1	0	11	2	10	0	0	0	8	1	7	1	0	0
16:30:00	47	6	640	81	618	50	1	0	11	0	10	0	0	0	9	1	7	0	0	0
16:45:00	60	13	739	99	673	55	1	0	13	2	10	0	0	0	10	1	9	2	0	0
17:00:00	72	12	809	70	736	63	1	0	14	1	11	1	0	0	10	0	11	2	0	0
17:15:00	83	11	887	78	804	68	1	0	16	2	11	0	0	0	10	0	11	0	0	0
17:30:00	92	9	977	90	868	64	1	0	16	0	11	0	0	0	10	0	12	1	0	0
17:45:00	103	11	1061	84	926	58	1	0	16	0	11	0	0	0	10	0	12	0	0	0
18:00:00	108	5	1144	83	979	53	1	0	16	0	11	0	0	0	11	1	12	0	0	0
18:15:00	108	0	1144	0	979	0	1	0	16	0	11	0	0	0	11	0	12	0	0	0
18:15:15	108	0	1144	0	979	0	1	0	16	0	11	0	0	0	11	0	12	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400008

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	18	18	85	85	3	3	0	0	0	0	0	0	0	0	1	1	0	0	1	1
7:30:00	30	12	183	98	4	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:45:00	44	14	278	95	8	4	0	0	0	0	0	0	1	1	2	1	0	0	1	0
8:00:00	62	18	391	113	13	5	0	0	1	1	0	0	1	0	3	1	0	0	2	1
8:15:00	82	20	485	94	20	7	1	1	2	1	0	0	2	1	3	0	0	0	2	0
8:30:00	102	20	586	101	24	4	1	0	2	0	0	0	2	0	4	1	0	0	2	0
8:45:00	121	19	680	94	26	2	3	2	2	0	0	0	2	0	4	0	0	0	2	0
9:00:00	141	20	765	85	29	3	4	1	2	0	0	0	2	0	5	1	0	0	2	0
9:15:00	141	0	765	0	29	0	4	0	2	0	0	0	2	0	5	0	0	0	2	0
16:00:00	141	0	765	0	29	0	4	0	2	0	0	0	2	0	5	0	0	0	2	0
16:15:00	166	25	903	138	41	12	4	0	2	0	0	0	3	1	6	1	0	0	2	0
16:30:00	194	28	1148	245	50	9	4	0	2	0	0	0	3	0	6	0	0	0	2	0
16:45:00	221	27	1342	194	60	10	4	0	5	3	0	0	3	0	7	1	0	0	2	0
17:00:00	253	32	1568	226	66	6	5	1	6	1	0	0	3	0	7	0	0	0	2	0
17:15:00	294	41	1769	201	79	13	5	0	6	0	0	0	3	0	7	0	0	0	2	0
17:30:00	339	45	1994	225	88	9	5	0	6	0	0	0	3	0	8	1	0	0	3	1
17:45:00	384	45	2224	230	111	23	5	0	7	1	0	0	3	0	8	0	1	1	3	0
18:00:00	419	35	2394	170	118	7	5	0	10	3	0	0	3	0	8	0	1	0	3	0
18:15:00	419	0	2394	0	118	0	5	0	10	0	0	0	3	0	8	0	1	0	3	0
18:15:15	419	0	2394	0	118	0	5	0	10	0	0	0	3	0	8	0	1	0	3	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400008

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	14	14	33	33	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	34	20	78	45	33	18	0	0	0	0	0	0	0	0	1	1	2	2	0	0
7:45:00	66	32	134	56	52	19	0	0	1	1	0	0	0	0	2	1	2	0	0	0
8:00:00	85	19	159	25	65	13	1	1	1	0	0	0	0	0	4	2	2	0	0	0
8:15:00	110	25	220	61	98	33	1	0	3	2	0	0	3	3	5	1	2	0	0	0
8:30:00	142	32	270	50	131	33	1	0	5	2	1	1	4	1	5	0	3	1	0	0
8:45:00	159	17	316	46	157	26	1	0	5	0	1	0	4	0	5	0	3	0	0	0
9:00:00	190	31	364	48	192	35	1	0	6	1	2	1	4	0	6	1	3	0	0	0
9:15:00	190	0	364	0	192	0	1	0	6	0	2	0	4	0	6	0	3	0	0	0
16:00:00	190	0	364	0	192	0	1	0	6	0	2	0	4	0	6	0	3	0	0	0
16:15:00	203	13	436	72	218	26	1	0	7	1	2	0	4	0	6	0	3	0	0	0
16:30:00	221	18	522	86	251	33	1	0	7	0	3	1	4	0	6	0	3	0	0	0
16:45:00	246	25	642	120	296	45	2	1	9	2	3	0	4	0	7	1	3	0	0	0
17:00:00	268	22	740	98	323	27	2	0	9	0	3	0	5	1	8	1	3	0	0	0
17:15:00	287	19	836	96	367	44	3	1	9	0	3	0	5	0	8	0	3	0	0	0
17:30:00	300	13	969	133	408	41	4	1	9	0	3	0	5	0	8	0	5	2	1	1
17:45:00	323	23	1074	105	438	30	4	0	9	0	3	0	5	0	9	1	5	0	1	0
18:00:00	341	18	1172	98	463	25	4	0	9	0	3	0	5	0	9	0	5	0	1	0
18:15:00	341	0	1172	0	463	0	4	0	9	0	3	0	5	0	9	0	5	0	1	0
18:15:15	341	0	1172	0	463	0	4	0	9	0	3	0	5	0	9	0	5	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 6-Aug-25 Site #: 2512400008

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	24	24	82	82	12	12	0	0	0	0	0	0	0	0	1	1	2	2	0	0
7:30:00	59	35	189	107	20	8	0	0	1	1	2	2	0	0	2	1	3	1	0	0
7:45:00	87	28	312	123	24	4	0	0	2	1	3	1	2	2	2	0	4	1	0	0
8:00:00	127	40	477	165	36	12	2	2	3	1	4	1	2	0	3	1	5	1	0	0
8:15:00	168	41	618	141	46	10	2	0	3	0	4	0	3	1	3	0	5	0	0	0
8:30:00	214	46	765	147	49	3	2	0	5	2	6	2	4	1	3	0	5	0	0	0
8:45:00	260	46	972	207	58	9	3	1	7	2	6	0	4	0	5	2	5	0	0	0
9:00:00	293	33	1159	187	72	14	3	0	8	1	6	0	6	2	5	0	5	0	0	0
9:15:00	293	0	1159	0	72	0	3	0	8	0	6	0	6	0	5	0	5	0	0	0
16:00:00	293	0	1159	0	72	0	3	0	8	0	6	0	6	0	5	0	5	0	0	0
16:15:00	350	57	1261	102	95	23	3	0	10	2	6	0	8	2	8	3	5	0	0	0
16:30:00	413	63	1389	128	126	31	4	1	12	2	7	1	9	1	8	0	6	1	0	0
16:45:00	472	59	1509	120	154	28	4	0	13	1	7	0	10	1	8	0	6	0	0	0
17:00:00	536	64	1637	128	187	33	5	1	13	0	7	0	10	0	8	0	6	0	0	0
17:15:00	606	70	1804	167	207	20	5	0	13	0	7	0	10	0	10	2	6	0	0	0
17:30:00	664	58	1949	145	237	30	5	0	15	2	7	0	10	0	10	0	6	0	0	0
17:45:00	728	64	2130	181	284	47	5	0	16	1	7	0	10	0	10	0	6	0	0	0
18:00:00	793	65	2288	158	321	37	6	1	17	1	7	0	10	0	13	3	7	1	0	0
18:15:00	793	0	2288	0	321	0	6	0	17	0	7	0	10	0	13	0	7	0	0	0
18:15:15	793	0	2288	0	321	0	6	0	17	0	7	0	10	0	13	0	7	0	0	0

Appendix D:
Signal Timing Plan

File: CA.13.SIG
Signal Timing Request
RT.07. 5401
RT.07. 5402
RT.07. 5403
RT.07. 5409
RT.07. 5512

August 14, 2025

To Baharak Hosseini:

Re: Traffic Signal Timing

WCB N @ Highway 401/ Off-Ramp- North Terminal
WCB N @ Highway 401/ Off-Ramp- South Terminal
WCB N @ Argentia Road
TENTH LINE N @ Argentia Road
NINTH LINE N @ Argentia

The side street phases (4,8) are actuated, unless noted in the timing plan, this means a vehicle or pedestrian must be present on the side street before the side street is given a green indication. Vehicle presence on the side street would result in a possible green time of between the minimum and maximum time noted, depending on demand. Also phases 1 and 5 are also actuated. Pedestrian "Walk" and flashing "Don't Walk" time on the side street, as noted, would be used in the event that the pedestrian push button is activated. During the side street pedestrian indications, the side street vehicle green is concurrently displayed. Should there be no demand on the actuated phase, the signals would result in a green indication on the major street (2,6).

Note: All times recorded in seconds, based on full demand.

The time of day plan is used for system control operation. In the event that the coordination pattern has a cycle length, offset and split value identified, the cycle length, split and offset values, as noted, would be used. However, when the time of day plan is programed using 'Action' 8, the mode is 'Free', meaning no cycle length, split and offset values are given and the intersection operates using the phase timings provided in the report.

The phases for each intersection are included in the "Phasing Info" tab of the attached spreadsheet. If the Leading Pedestrian Interval (LPI) is programmed at the intersection for phase 2 and/or 6, the pedestrian 'Walk' indication will be displayed 5 seconds in advance

of the green signal indication. However, in order for the Leading Pedestrian Interval to be displayed 5 seconds in advance of the green signal indication for phase 4 or 8, the pedestrian push button must be pressed, unless noted in the timing plan. Should an LPI be programmed at the intersection, it will be noted in the "Phasing Info" tab on the attached spreadsheet.

Should you require further information, please contact Amir Koda, at (905) 615-3200 ext. 3468.

Thank you,

Amir Koda
ITS Technologist
Traffic Systems and ITS
Transportation and Works Department
City of Mississauga
(905) 615-3200 ext. 3468
amir.koda@mississauga.ca

Location	WINSTON CHURCHILL BOULEVARD N @ Highway 401/ Off-
Phase 1	
Phase 2	WCB - SB
Phase 3	EBL/EBR Split Phase
Phase 4	401 N. Term (WB)
Phase 5	
Phase 6	WCB - NB
Phase 7	
Phase 8	Computer Phase

Controller Type: **Intelight** ID: **5401** Location: **WINSTON CHURCHILL BOULEVARD N @ Highway 401/ Off-**

Phase - Parameter 1-16	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Phase Description*	String								
Walk	Sec	0	10	0	10	0	10	0	10
Ped Clear	Sec	0	24	0	33	0	24	0	33
Min Green	Sec	7	20	10	10	0	20	0	10
Passage	Sec	2	9	3	3	0	9	0	3
Maximum 1	Sec	10	45	15	40	0	45	0	40
Maximum 2	Sec	10	45	15	40	0	45	0	40
Yellow Change	Sec	3	5	4.5	5	3	5	3	5
Red Clearance	Sec	1	2.5	2.8	2.6	0	2.5	0	2.6
Red Revert	Sec	0	0	0	0	0	0	0	0
Added Initial	Sec	0	0	0	0	0	0	0	0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0	0	0	0	0	0	0	0
Min Gap	Sec	0	0	0	0	0	0	0	0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0	0	0	0	0	0	0	0
[P2] Start Up	Enum	phaseNotOn	redClear	phaseNotOn	phaseNotOn	other	redClear	other	other
[P2] Options	Bit	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 5:Non Lock Detector Memory 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 5:Non Lock Detector Memory 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase		10:Dual Entry Phase
[P2] Ring	Ring	1	1	1	1	0	2	0	0
[P2] Concurrency	Phase (,)	-6	-6	()	()	()	(1,2)	()	()

Coordination - Pattern 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Cycle Time	Sec	160	160	160	0	0	0	0	0
Offset	Sec	147	138	56	0	0	0	0	0
Split	Split	1	2	3	4	5	6	7	8
Sequence	Sequence	1	1	1	1	1	1	1	1
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive

Coordination - Splits	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Split 1 - Mode	Enum	none	other	none	none	none	other	none	none
Split 1 - Time	Sec	11	77	21	51	0	88	0	0
Split 1 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 1 - Coord Phase Options*	Bit		0: Reference Point						
Split 2 - Mode	Enum	none	other	none	none	none	other	none	none
Split 2 - Time	Sec	11	65	18	66	0	76	0	0
Split 2 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 2 - Coord Phase Options*	Bit		0: Reference Point						
Split 3 - Mode	Enum	none	other	none	none	none	other	none	none
Split 3 - Time	Sec	11	77	18	54	0	88	0	0
Split 3 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 3 - Coord Phase Options*	Bit		0: Reference Point						

Time Base - Schedule 1-16	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A--------	----M-------	-----J-----
Day of Week	Bit	-MTWTF-	S------	------S	----T--	-M-----	-----F-	-M-----	--T----
Day of Month	Bit	1.23457E+30	1.23457E+30	1.23457E+30	1----------	----------7----------	----------8----------	----------9----------	1----------
Day Plan	Number	1	3	2	3	3	3	3	3

Time Base - Schedule 1-16	**Units**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Month	Bit	-------A---	--------S---	---------O--	----------D	----------D	----------D	--------S---	----------
Day of Week	Bit	-M-----	-M-----	-M-----	----T--	-----F-	---W---	--T----	SMTWTFS
Day of Month	Bit	---4----------	1----------	----------3----------	----------5------	----------6-----	----------4-------	----------0-	----------
Day Plan	Number	3	3	3	3	3	3	3	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**	**Evt 3**	**Evt 4**	**Evt 5**	**Evt 6**
Plan 1 Hour	Hour	0	6	9	15	19	3
Plan 1 Minute	Min	0	0	30	0	30	0
Plan 1 Action	Number	8	1	2	3	2	7
Plan 2 Hour	Hour	0	7	3	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0
Plan 2 Action	Number	8	2	7	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0
Plan 3 Minute	Min	0	0	0	0	0	0
Plan 3 Action	Number	8	2	8	7	0	0

Time Base - Action 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								

Location	Winston Churchill Boulevard @ Highway 401_Off-Ramp- South Terminal
Phase 1	
Phase 2	Winston Churchill Boulevard (N/S)
Phase 3	
Phase 4	Highway 401/ Off-Ramp- South Terminal (EB)

Controller Type: **Intelight** ID: **5402** Location: **Winston Churchill Boulevard @ Highway 401_Off-Ramp- South Terminal**

Phase - Parameter 1-16	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Phase Description*	String								
Walk	Sec	0	7	0	0	0	0	0	0
Ped Clear	Sec	0	17	0	0	0	0	0	0
Min Green	Sec	0	20	0	10	0	0	0	0
Passage	Sec	0	4	0	2	0	0	0	0
Maximum 1	Sec	0	82	0	61	0	0	0	0
Maximum 2	Sec	0	0	0	0	0	0	0	0
Yellow Change	Sec	3	5	3	5	3	4	3	4
Red Clearance	Sec	0	2.5	0	3.5	0	0	0	0
Red Revert	Sec	0	0	0	0	0	0	0	0
Added Initial	Sec	0	0	0	0	0	0	0	0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0	0	0	0	0	0	0	0
Min Gap	Sec	0	4	0	2	0	0	0	0
Dynamic Max Limit	Sec	0	0	0	20	0	0	0	0
Dynamic Max Step	Sec	0	0	0	0	0	0	0	0
[P2] Start Up	Enum	other	redClear	other	phaseNotOn	other	other	other	other
[P2] Options	Bit		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 6:Min. Vehicle Recall		0:Enabled Phase 5:Non Lock Detector Memory				
[P2] Ring	Ring	0	1	0	1	0	0	0	0
[P2] Concurrency	Phase (,)	()	()	()	()	()	()	()	()

Coordination - Pattern 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Cycle Time	Sec	160	160	160	0	0	0	0	0
Offset	Sec	149	13	48	0	0	0	0	0
Split	Split	1	2	3	4	5	6	7	8
Sequence	Sequence	1	1	1	1	1	1	1	1
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive

Coordination - Splits	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	0	92	0	68	0	0	0	0
Split 1 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Split 1 - Coord Phase Options*	Bit		0: Reference Point						
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	0	104	0	56	0	0	0	0
Split 2 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Split 2 - Coord Phase Options*	Bit		0: Reference Point						
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	0	115	0	45	0	0	0	0
Split 3 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	FALSE
Split 3 - Coord Phase Options*	Bit		0: Reference Point						

Time Base - Schedule 1-16	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A--------	----M-------	------J-----
Day of Week	Bit	SMTWTFS	-MTWTF-	S------	----T--	-M-----	-----F-	-M-----	--T----
Day of Month	Bit	----------3--------	1.23457E+30	1.23457E+30	1----------	----------7----------	----------8----------	----------9----------	1----------
Day Plan	Number	3	1	3	3	3	3	3	3

Time Base - Schedule 1-16	**Units**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Month	Bit	-------A----	--------S---	---------O--	----------D	----------D	----------D	--------S---	----------
Day of Week	Bit	-M-----	-M-----	-M-----	----T--	-----F-	---W---	--T----	SMTWTFS
Day of Month	Bit	---4----------	1----------	----------3----------	----------5------	----------6-----	----------4-------	----------0-	----------
Day Plan	Number	3	3	3	3	3	3	3	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**	**Evt 3**	**Evt 4**	**Evt 5**	**Evt 6**
Plan 1 Hour	Hour	0	3	6	9	15	19
Plan 1 Minute	Min	0	0	0	30	0	30
Plan 1 Action	Number	8	2	1	7	3	2
Plan 2 Hour	Hour	0	3	7	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0
Plan 2 Action	Number	8	7	2	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0
Plan 3 Minute	Min	0	0	0	0	0	0
Plan 3 Action	Number	8	2	8	7	0	0

Time Base - Action 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								

Location	WINSTON CHURCHILL BOULEVARD N @ Argentia Road	LPI	Bike Phase
Phase 1	WCB - NBL Protected + EBRT		
Phase 2	WCB - SB	**5 Sec**	
Phase 3	Argentia Road - EBL Protected + SBRT		
Phase 4	Argentia Road - WB	**5 Sec**	✓
Phase 5	WCB - SBL Protected + WBRT		
Phase 6	WCB - NB	**5 Sec**	✓
Phase 7	Argentia Road - WBL		
Phase 8	Argentia Road - EB	**5 Sec**	✓

Controller Type: **Intelight** ID: **5403** Location: **WINSTON CHURCHILL BOULEVARD N @ Argentia Road**

Phase - Parameter 1-16	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Phase Description*	String								
Walk	Sec	0	10	0	10	0	10	0	10
Ped Clear	Sec	0	34	0	37	0	34	0	37
Min Green	Sec	7	10	7	10	7	10	7	10
Passage	Sec	3	3	3	3	3	3	2	3
Maximum 1	Sec	15	23	15	25	15	23	15	25
Maximum 2	Sec	15	23	15	25	15	23	15	25
Yellow Change	Sec	3	4	3	4	3	4	3	4
Red Clearance	Sec	2	3.5	2	3.5	2	3.5	0	3.5
Red Revert	Sec	0	0	0	0	0	0	0	0
Added Initial	Sec	0	0	0	0	0	0	0	0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0	0	0	0	0	0	0	0
Min Gap	Sec	0	0	0	0	0	0	0	0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0	0	0	0	0	0	0	0
[P2] Start Up	Enum	phaseNotOn	redClear	phaseNotOn	phaseNotOn	phaseNotOn	redClear	phaseNotOn	phaseNotOn
[P2] Options	Bit	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase
[P2] Ring	Ring	1	1	1	1	2	2	2	2
[P2] Concurrency	Phase (,)	(5,6,15,11)	(5,6,15,11)	(7,8,14,16,12)	(7,8,14,10,16,12)	(1,2,15)	(1,2,15,11)	(3,4,14,10,16)	(3,4,14,10,16,12)

Coordination - Pattern 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Cycle Time	Sec	160	160	160	0	160	0	0	0
Offset	Sec	16	40	65	0	40	0	0	0
Split	Split	1	2	3	4	5	6	7	8
Sequence	Sequence	1	1	1	1	1	1	1	1
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive	singlePermissive

Coordination - Splits	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	20	57	28	55	25	52	16	67
Split 1 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 1 - Coord Phase Options*	Bit						0: Reference Point		
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	21	55	26	58	21	55	18	66
Split 2 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 2 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	22	56	27	55	22	56	21	61
Split 3 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 3 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		
Split 5 - Mode	Enum	none	none	none	none	none	none	none	none
Split 5 - Time	Sec	23	53	28	56	23	53	18	66
Split 5 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 5 - Coord Phase Options*	Bit		0: Reference Point				0: Reference Point		

Time Base - Schedule 1-16	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A-------	----M------	------J----
Day of Week	Bit	-MTWTF-	S------	------S	----T--	-M-----	-----F-	-M-----	--T----
Day of Month	Bit	1.23457E+30	1.23457E+30	1.23457E+30	1----------	----------7----------	----------8----------	----------9----------	1----------
Day Plan	Number	1	3	2	3	3	3	3	3

Time Base - Schedule 1-16	**Units**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Month	Bit	-------A----	--------S---	---------O--	----------D	----------D	----------D	--------S---	----------
Day of Week	Bit	-M-----	-M-----	-M-----	----T--	-----F-	---W---	--T----	SMTWTFS
Day of Month	Bit	---4----------	1----------	----------3----------	----------5------	----------6-----	----------4-------	----------0-	----------
Day Plan	Number	3	3	3	3	3	3	3	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**	**Evt 3**	**Evt 4**	**Evt 5**	**Evt 6**
Plan 1 Hour	Hour	0	3	6	9	15	19
Plan 1 Minute	Min	0	0	0	30	0	30
Plan 1 Action	Number	8	7	1	2	3	2
Plan 2 Hour	Hour	0	7	3	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**	**Evt 3**	**Evt 4**	**Evt 5**	**Evt 6**
Plan 2 Action	Number	8	5	7	0	0	0
Plan 3 Hour	Hour	0	8	23	3	0	0
Plan 3 Minute	Min	0	0	0	0	0	0
Plan 3 Action	Number	8	5	8	7	0	0

Time Base - Action 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								

Location	TENTH LINE N @ Argentia Road	LPI	Bike Phase
Phase 1	WBLT - Argentia Rd		
Phase 2	EB - Argentia Rd	**5 Sec**	✓
Phase 3			
Phase 4	NB - Tenth Line	**5 Sec**	
Phase 5			
Phase 6	WB - Argentia Rd	**5 Sec**	✓
Phase 7	NBLT - Tenth Line		
Phase 8	SB - Tenth Line	**5 Sec**	

Controller Type: **Intelight** ID: **5509** Location: **TENTH LINE N @ Argentia Road**

Phase - Parameter 1-16	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Phase Description*	String	"P.P. WBL"	"EB"		"NB"		"WB"	"P.P. NBL"	"SB"
Walk	Sec	0	10	0	10	0	10	0	10
Ped Clear	Sec	0	18	0	23	0	18	0	23
Min Green	Sec	7	10	0	10	0	10	7	10
Passage	Sec	2	3	0	3	0	3	2	3
Maximum 1	Sec	20	30	0	30	0	30	10	30
Maximum 2	Sec	20	30	0	30	0	30	10	30
Yellow Change	Sec	3	4	3	3.5	3	4	3	3.5
Red Clearance	Sec	0	3.5	0	3	0	3.5	0	3
Red Revert	Sec	0	0	0	0	0	0	0	0
Added Initial	Sec	0	0	0	0	0	0	0	0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0	0	0	0	0	0	0	0
Min Gap	Sec	0	0	0	0	0	0	0	0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0	0	0	0	0	0	0	0
[P2] Start Up	Enum	phaseNotOn	redClear	other	phaseNotOn	other	redClear	phaseNotOn	phaseNotOn
[P2] Options	Bit	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk	Non Lock Detector Memo	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase	Non Lock Detector Memo	0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk	0:Enabled Phase 5:Non Lock Detector Memory	0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase
[P2] Ring	Ring	1	1	0	1	0	2	2	2
[P2] Concurrency	Phase (,)	(6,13,15,11)	(6,13,9,15,11)	()	(7,8)	()	(1,2,13,9,15,11)	-4	-4

Coordination - Pattern 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Cycle Time	Sec	100	125	100	0	0	0	0	0
Offset	Sec	0	0	0	0	0	0	0	0
Split	Split	1	2	3	0	0	0	0	0
Sequence	Sequence	1	1	1	0	0	0	0	0
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	singlePermissive	singlePermissive	singlePermissive	standard	standard	standard	standard	standard

Coordination - Splits	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	17	36	0	47	0	53	15	32
Split 1 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 1 - Coord Phase Options*	Bit	0: Reference Point	0: Reference Point				0: Reference Point		
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	14	36	0	75	0	50	0	75
Split 2 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 2 - Coord Phase Options*	Bit	0: Reference Point	0: Reference Point				0: Reference Point		
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	33	36	0	31	0	69	0	31
Split 3 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 3 - Coord Phase Options*	Bit	0: Reference Point	0: Reference Point				0: Reference Point		

Time Base - Schedule 1-16	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A--------	----M-------	------J-----
Day of Week	Bit	-MTWTF-	S------	------S	----T--	-M-----	-----F-	-M-----	--T----
Day of Month	Bit	1.23457E+30	1.23457E+30	1.23457E+30	1----------	----------7----------	----------8----------	----------9----------	1----------
Day Plan	Number	1	3	2	3	3	3	3	3

Time Base - Schedule 1-16	**Units**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Month	Bit	--------A---	--------S---	---------O--	----------D	----------D	----------D	--------S---	----------
Day of Week	Bit	-M-----	-M-----	-M-----	----T--	-----F-	---W---	--T----	SMTWTFS
Day of Month	Bit	---4----------	1----------	----------3----------	----------5------	----------6-----	----------4-------	----------0-	----------
Day Plan	Number	3	3	3	3	3	3	3	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**	**Evt 3**	**Evt 4**	**Evt 5**	**Evt 6**
Plan 1 Hour	Hour	0	3	6	9	15	19
Plan 1 Minute	Min	0	0	0	30	0	30
Plan 1 Action	Number	8	7	1	8	3	8
Plan 2 Hour	Hour	0	3	0	0	0	0
Plan 2 Minute	Min	0	0	0	0	0	0
Plan 2 Action	Number	8	7	0	0	0	0
Plan 3 Hour	Hour	0	3	10	13	0	0
Plan 3 Minute	Min	0	0	0	30	0	0
Plan 3 Action	Number	8	7	2	8	0	0

Time Base - Action 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								

Location	NINTH LINE N @ Argentia Road	LPI
Phase 1		
Phase 2	Ninth Line - SB	**5 Sec**
Phase 3		
Phase 4	Argentia Road - WB	**5 Sec**
Phase 5		
Phase 6	Ninth Line - NB	**5 Sec**
Phase 7		
Phase 8	Computer Phase	**5 Sec**

Controller Type: **Intelight** ID: **5512** Location: **NINTH LINE N @ Argentia Road**

Phase - Parameter 1-16	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Phase Description*	String	" "	" SB"	" "	"WB"	" "	"NB"	" "	"dummy"
Walk	Sec	0	10	0	10	0	10	0	10
Ped Clear	Sec	0	27	0	14	0	27	0	14
Min Green	Sec	0	10	0	20	0	10	0	10
Passage	Sec	0	3	0	3	0	3	0	3
Maximum 1	Sec	0	20	0	25	0	20	0	25
Maximum 2	Sec	0	20	0	25	0	20	0	25
Yellow Change	Sec	3	4	3	4	3	4	3	4
Red Clearance	Sec	0	2.5	0	2	0	2.5	0	2
Red Revert	Sec	0	0	0	0	0	0	0	0
Added Initial	Sec	0	0	0	0	0	0	0	0
Max Initial	Sec	0	0	0	0	0	0	0	0
Time Before Reduction	Sec	0	0	0	0	0	0	0	0
Cars Before Reduction	Veh	0	0	0	0	0	0	0	0
Time To Reduce	Sec	0	0	0	0	0	0	0	0
Reduce By	Sec	0	0	0	0	0	0	0	0
Min Gap	Sec	0	0	0	0	0	0	0	0
Dynamic Max Limit	Sec	0	0	0	0	0	0	0	0
Dynamic Max Step	Sec	0	0	0	0	0	0	0	0
[P2] Start Up	Enum	other	redClear	other	phaseNotOn	other	redClear	other	phaseNotOn
[P2] Options	Bit		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory 6:Min. Vehicle Recall 10:Dual Entry Phase		0:Enabled Phase 1:Automatic Flash Entry Phase 2:Automatic Flash Exit Phase 3:Non-Actuated 1 7:Max Vehicle Recall 8:Ped. Recall 10:Dual Entry Phase 13:Actuated Rest In Walk		0:Enabled Phase 5:Non Lock Detector Memory 10:Dual Entry Phase
[P2] Ring	Ring	0	1	0	1	0	2	0	2
[P2] Concurrency	Phase (,)	()	-6	()	-8	()	-2	()	-4

Coordination - Pattern 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Cycle Time	Sec	0	0	0	0	0	0	0	0
Offset	Sec	0	0	0	0	0	0	0	0
Split	Split	1	2	3	4	5	6	7	8
Sequence	Sequence	1	1	1	1	1	1	1	1
Phase Parameter Table*	Number	1	1	1	1	1	1	1	1
Coord Phase Reference Point*	Enum	green	green	green	green	green	green	green	green
Coord Mode*	Enum	standard	standard	standard	standard	standard	standard	standard	standard

Coordination - Splits	**Units**	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6**	**Phase 7**	**Phase 8**
Split 1 - Mode	Enum	none	none	none	none	none	none	none	none
Split 1 - Time	Sec	0	0	0	0	0	0	0	0
Split 1 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 1 - Coord Phase Options*	Bit						0: Reference Point		
Split 2 - Mode	Enum	none	none	none	none	none	none	none	none
Split 2 - Time	Sec	0	0	0	0	0	0	0	0
Split 2 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 2 - Coord Phase Options*	Bit						0: Reference Point		
Split 3 - Mode	Enum	none	none	none	none	none	none	none	none
Split 3 - Time	Sec	0	0	0	0	0	0	0	0
Split 3 - Coord	Enum	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Split 3 - Coord Phase Options*	Bit		0: Reference Point						

Time Base - Schedule 1-16	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Month	Bit	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	J----------	-F---------	---A--------	----M-------	------J-----
Day of Week	Bit	-MTWTF-	S------	------S	----T--	-M-----	-----F-	-M-----	--T----
Day of Month	Bit	1.23457E+30	1.23457E+30	1.23457E+30	1----------	----------7----------	----------8----------	----------9----------	1----------
Day Plan	Number	1	3	2	3	3	3	3	3

Time Base - Schedule 1-16	**Units**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Month	Bit	--------A---	--------S---	---------O--	----------D	----------D	----------D	--------S---	----------
Day of Week	Bit	-M-----	-M-----	-M-----	----T--	-----F-	---W---	--T----	SMTWTFS
Day of Month	Bit	---4----------	1----------	----------3----------	----------5------	----------6-----	----------4-------	----------0-	----------
Day Plan	Number	3	3	3	3	3	3	3	0

Time Base - Day Plans	**Units**	**Evt 1**	**Evt 2**
Plan 1 Hour	Hour	0	3
Plan 1 Minute	Min	0	0
Plan 1 Action	Number	8	7
Plan 2 Hour	Hour	0	3
Plan 2 Minute	Min	0	0
Plan 2 Action	Number	8	7
Plan 3 Hour	Hour	0	3
Plan 3 Minute	Min	0	0
Plan 3 Action	Number	8	7

Time Base - Action 1-32	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Pattern	Enum	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5	Pattern 6	Free	Free
Aux. Functions	Bit								

REGIONAL MUNICIPALITY OF PEEL

Traffic Signal Timing Parameters

Database Date	**July 30, 2025**		**Prepared Date**	**July 30, 2025**
Database Rev	**iNet**		**Completed By**	**A.P**
Timing Card / Field rev	**N/A**		**Checked By**	**N.M**

Location — **Derry Road E. @ Ninth Line Road West**

Phase #	Street Name - Direction	Vehicle Minimum (s)	Pedestrian Minimum (s)		Amber (s)	All Red (s)	TIME PERIOD (s)		
			WALK	FDWALK			AM SPLITS	OFF SPLITS	PM SPLITS
1	Derry Road E. - WB P.P. LT	7.0	0.0	0.0	3.0	0.0	13.0	13.0	15.0
2	Derry Road E. - EB	10.0	10.0	26.0	4.0	2.5	62.0	48.0	68.0
3	Not in Use	-	-	-	-	-	-	-	-
4	Ninth Line - NB	10.0	10.0	24.0	4.0	2.5	85.0	49.0	77.0
5	Derry Road E. - EB P.P. LT	7.0	0.0	0.0	3.0	0.0	13.0	13.0	16.0
6	Derry Road E. - WB	10.0	10.0	26.0	4.0	2.5	62.0	48.0	67.0
7	Ninth Line - NB P.P. LT	7.0	0.0	0.0	3.0	0.0	18.0	10.0	16.0
8	Ninth Line - SB	10.0	10.0	24.0	4.0	2.5	67.0	39.0	61.0

System Control
Yes

Semi-Actuated Mode
Yes

TIME (M-F)	PEAK	CYCLE LENGTH (s)	OFFSET (s)
06:00 - 09:30	AM	160	115
09:30 - 15:00 19:30 - 00:00	OFF	110	43
15:00 - 19:30	PM	160	154

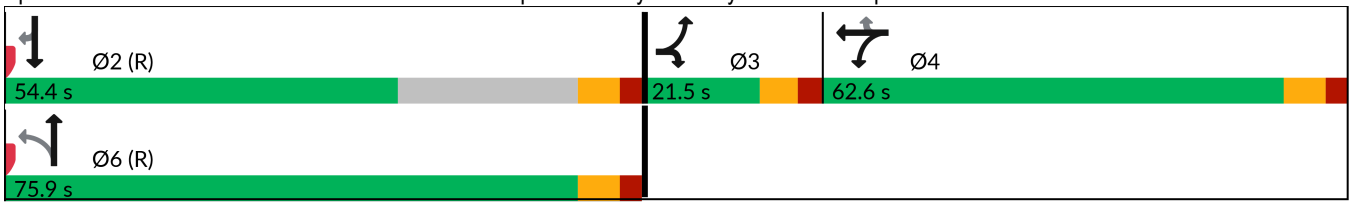
Appendix E:
Capacity and Queuing Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	223	2	470	2	931	199	0	1219	386
Future Volume (vph)	0	0	0	223	2	470	2	931	199	0	1219	386
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Ped Bike Factor						0.98						
Frt						0.850		0.974				0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	1784	0	1784	1507	1514	2250	1729	3172	0	0	4558	1334
Flt Permitted				0.950	0.953		0.196					
Satd. Flow (perm)	1784	0	1784	1507	1514	2201	357	3172	0	0	4558	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						404		20				373
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	9%	0%	21%	0%	6%	7%	2%	9%	16%
Adj. Flow (vph)	0	0	0	235	2	495	2	980	209	0	1283	406
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	117	120	495	2	1189	0	0	1283	406
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	21.5		21.5	62.6	62.6	62.6	75.9	75.9			54.4	54.4
Total Split (%)	13.4%		13.4%	39.1%	39.1%	39.1%	47.4%	47.4%			34.0%	34.0%
Maximum Green (s)	14.2		14.2	55.0	55.0	55.0	68.4	68.4			46.9	46.9
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)				19.9	19.9	19.9	125.0	125.0			125.0	125.0
Actuated g/C Ratio				0.12	0.12	0.12	0.78	0.78			0.78	0.78
v/c Ratio				0.63	0.64	0.79	0.01	0.48			0.36	0.36
Control Delay (s/veh)				80.0	80.8	22.5	4.0	10.0			6.1	1.7
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)				80.0	80.8	22.5	4.0	10.0			6.1	1.7
LOS				E	F	C	A	B			A	A
Approach Delay (s/veh)					41.2			10.0			5.1	
Approach LOS					D			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 147 (92%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 14.0		Intersection LOS: B	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal





Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	117	120	495	2	1189	1283	406
v/c Ratio	0.63	0.64	0.79	0.01	0.48	0.36	0.36
Control Delay (s/veh)	80.0	80.8	22.5	4.0	10.0	6.1	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.0	80.8	22.5	4.0	10.0	6.1	1.7
Queue Length 50th (m)	40.5	38.8	17.8	0.1	55.7	43.1	2.3
Queue Length 95th (m)	61.1	58.5	43.0	m0.4	130.3	64.6	13.6
Internal Link Dist (m)		193.3			369.8	835.9	
Turn Bay Length (m)							
Base Capacity (vph)	518	520	1021	279	2483	3562	1124
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.23	0.48	0.01	0.48	0.36	0.36

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	223	2	470	2	931	199	0	1219	386
Future Volume (veh/h)	0	0	0	223	2	470	2	931	199	0	1219	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	0	1772	1674	1800	1505	1800	1716	1702	0	1674	1575
Adj Flow Rate, veh/h	0	0	0	236	0	495	2	980	209	0	1283	406
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	9	0	21	0	6	7	0	9	16
Cap, veh/h	0	0	0	741	0	592	198	1800	383	0	3076	899
Arrive On Green	0.00	0.00	0.00	0.23	0.00	0.23	0.67	0.67	0.67	0.00	0.67	0.67
Sat Flow, veh/h		0		3188	0	2546	281	2674	569	0	4720	1335
Grp Volume(v), veh/h		0.0		236	0	495	2	597	592	0	1283	406
Grp Sat Flow(s),veh/h/ln				1594	0	1273	281	1630	1613	0	1523	1335
Q Serve(g_s), s				9.8	0.0	29.6	0.5	30.2	30.3	0.0	20.4	22.9
Cycle Q Clear(g_c), s				9.8	0.0	29.6	20.9	30.2	30.3	0.0	20.4	22.9
Prop In Lane				1.00		1.00	1.00		0.35	0.00		1.00
Lane Grp Cap(c), veh/h				741	0	592	198	1097	1086	0	3076	899
V/C Ratio(X)				0.32	0.00	0.84	0.01	0.54	0.55	0.00	0.42	0.45
Avail Cap(c_a), veh/h				1096	0	875	198	1097	1086	0	3076	899
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.9	0.0	58.5	16.6	13.5	13.5	0.0	11.9	12.3
Incr Delay (d2), s/veh				0.2	0.0	4.7	0.1	1.9	2.0	0.0	0.4	1.6
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.9	0.0	7.4	0.0	3.6	3.6	0.0	2.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				51.1	0.0	63.2	16.7	15.4	15.5	0.0	12.3	13.9
LnGrp LOS				D		E	B	B	B		B	B
Approach Vol, veh/h					731			1191			1689	
Approach Delay, s/veh					59.3			15.4			12.7	
Approach LOS					E			B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	115.2	44.8	115.2
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	46.9	55.0	68.4
Max Q Clear Time (g_c+I1), s	24.9	31.6	32.3
Green Ext Time (p_c), s	19.0	5.4	25.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	23.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

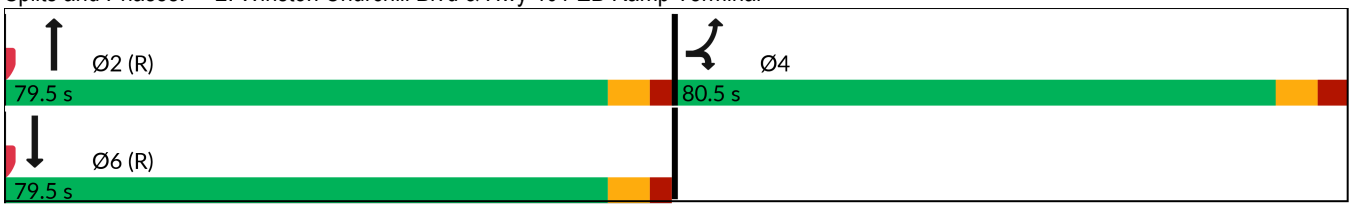


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	478	211	0	659	716	730
Future Volume (vph)	478	211	0	659	716	730
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	0.91
Frt	0.994	0.850			0.924	
Flt Protected	0.954					
Satd. Flow (prot)	3079	1367	0	4824	4211	0
Flt Permitted	0.954					
Satd. Flow (perm)	3079	1367	0	4824	4211	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	4	119			209	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	3%	2%	3%	7%	11%
Adj. Flow (vph)	503	222	0	694	754	768
Shared Lane Traffic (%)		10%				
Lane Group Flow (vph)	525	200	0	694	1522	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Prot		NA	NA	
Protected Phases	4	4		2	6	
Permitted Phases						
Detector Phase	4	4		2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	22.5	22.5		31.5	31.5	
Total Split (s)	80.5	80.5		79.5	79.5	
Total Split (%)	50.3%	50.3%		49.7%	49.7%	
Maximum Green (s)	72.0	72.0		72.0	72.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	3.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0	
Flash Don't Walk (s)				17.0	17.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	34.0	34.0		110.0	110.0	
Actuated g/C Ratio	0.21	0.21		0.69	0.69	
v/c Ratio	0.80	0.52		0.21	0.51	
Control Delay (s/veh)	68.5	26.1		9.3	10.7	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.5	26.1		9.3	10.7	
LOS	E	C		A	B	
Approach Delay (s/veh)	56.8			9.3	10.7	
Approach LOS	E			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 149 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 21.7		Intersection LOS: C	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	525	200	694	1522
v/c Ratio	0.80	0.52	0.21	0.51
Control Delay (s/veh)	68.5	26.1	9.3	10.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.5	26.1	9.3	10.7
Queue Length 50th (m)	88.1	25.1	19.0	42.1
Queue Length 95th (m)	103.4	51.3	m43.8	44.4
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	1387	680	3315	2959
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.29	0.21	0.51

Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	478	211	0	659	716	730
Future Volume (veh/h)	478	211	0	659	716	730
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1674	1758	0	1758	1702	1646
Adj Flow Rate, veh/h	503	222	0	694	754	768
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	3	0	3	7	11
Cap, veh/h	632	295	0	3367	2173	1012
Arrive On Green	0.20	0.20	0.00	0.70	0.70	0.70
Sat Flow, veh/h	3188	1490	0	5115	3250	1442
Grp Volume(v), veh/h	503	222	0	694	754	768
Grp Sat Flow(s),veh/h/ln	1594	1490	0	1600	1549	1442
Q Serve(g_s), s	24.0	22.5	0.0	8.1	15.4	54.4
Cycle Q Clear(g_c), s	24.0	22.5	0.0	8.1	15.4	54.4
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	632	295	0	3367	2173	1012
V/C Ratio(X)	0.80	0.75	0.00	0.21	0.35	0.76
Avail Cap(c_a), veh/h	1435	670	0	3367	2173	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.84	1.00	1.00
Uniform Delay (d), s/veh	61.0	60.4	0.0	8.3	9.4	15.2
Incr Delay (d2), s/veh	2.3	3.8	0.0	0.1	0.4	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.9	0.0	0.6	1.1	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	63.4	64.3	0.0	8.4	9.8	20.6
LnGrp LOS	E	E		A	A	C
Approach Vol, veh/h	725			694	1522	
Approach Delay, s/veh	63.7			8.4	15.3	
Approach LOS	E			A	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		119.8		40.2		119.8
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		72.0		72.0		72.0
Max Q Clear Time (g_c+I1), s		10.1		26.0		56.4
Green Ext Time (p_c), s		16.8		5.7		14.3

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		25.6
HCM 6th LOS		C

Notes

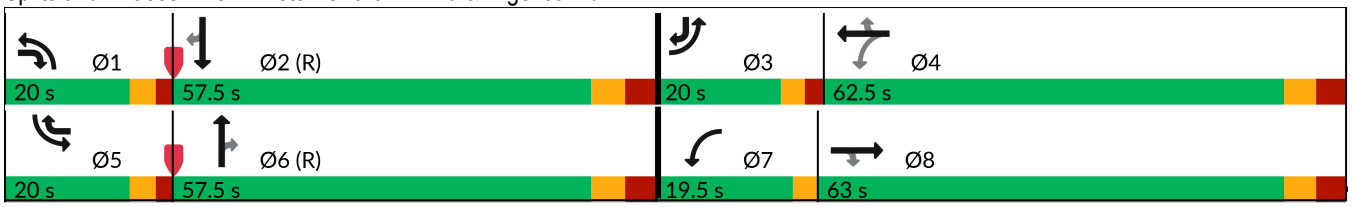
User approved volume balancing among the lanes for turning movement.

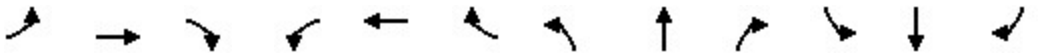
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	175	57	74	73	135	75	955	95	272	439	152
Future Volume (vph)	320	175	57	74	73	135	75	955	95	272	439	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.97	0.99		0.96	0.99		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	3614	1601	1722	3579	1512	3471	5142	1570	3437	4902	1484
Flt Permitted	0.950			0.636			0.950			0.950		
Satd. Flow (perm)	3301	3614	1553	1136	3579	1459	3453	5142	1540	3427	4902	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60			51			91			160
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	23		18	18		23	9		7	7		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	1%	2%	6%	2%	8%	2%	2%	4%	3%	7%	10%
Adj. Flow (vph)	337	184	60	78	77	142	79	1005	100	286	462	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	337	184	60	78	77	142	79	1005	100	286	462	160
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	20.0	63.0	20.0	19.5	62.5	20.0	20.0	57.5	57.5	20.0	57.5	20.0
Total Split (%)	12.5%	39.4%	12.5%	12.2%	39.1%	12.5%	12.5%	35.9%	35.9%	12.5%	35.9%	12.5%
Maximum Green (s)	15.0	55.5	15.0	16.5	55.0	15.0	15.0	50.0	50.0	15.0	50.0	15.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	None	None	Min	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	15.0	16.9	28.5	27.4	11.4	33.2	9.1	89.3	89.3	19.3	99.5	117.0
Actuated g/C Ratio	0.09	0.11	0.18	0.17	0.07	0.21	0.06	0.56	0.56	0.12	0.62	0.73
v/c Ratio	1.07	0.48	0.18	0.33	0.30	0.41	0.40	0.35	0.11	0.69	0.15	0.14
Control Delay (s/veh)	135.4	72.3	12.3	54.1	73.1	34.6	78.5	20.4	4.5	63.8	19.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	135.4	72.3	12.3	54.1	73.1	34.6	78.5	20.4	4.5	63.8	19.2	5.6
LOS	F	E	B	D	E	C	E	C	A	E	B	A
Approach Delay (s/veh)		102.7			49.7			22.9			30.8	
Approach LOS		F			D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 65 (41%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay (s/veh): 43.6		Intersection LOS: D	
Intersection Capacity Utilization 99.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd



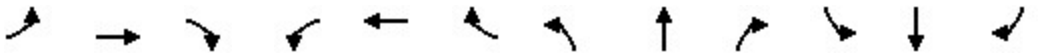


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	337	184	60	78	77	142	79	1005	100	286	462	160
v/c Ratio	1.07	0.48	0.18	0.33	0.30	0.41	0.40	0.35	0.11	0.69	0.15	0.14
Control Delay (s/veh)	135.4	72.3	12.3	54.1	73.1	34.6	78.5	20.4	4.5	63.8	19.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	135.4	72.3	12.3	54.1	73.1	34.6	78.5	20.4	4.5	63.8	19.2	5.6
Queue Length 50th (m)	~63.1	30.0	0.0	21.6	12.7	25.6	12.9	62.4	1.3	47.7	33.2	7.1
Queue Length 95th (m)	#96.7	43.1	12.5	35.9	21.2	44.4	21.8	82.9	11.5	62.2	44.6	27.5
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	316	1253	385	290	1230	349	325	2870	899	414	3048	1107
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.15	0.16	0.27	0.06	0.41	0.24	0.35	0.11	0.69	0.15	0.14

Intersection Summary

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

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



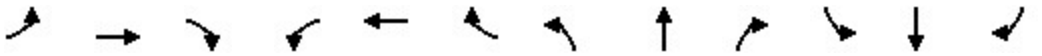
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	175	57	74	73	135	75	955	95	272	439	152
Future Volume (veh/h)	320	175	57	74	73	135	75	955	95	272	439	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1870	1811	1870	1781	1870	1870	1841	1856	1796	1752
Adj Flow Rate, veh/h	337	184	60	78	77	142	79	1005	0	286	462	160
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	1	2	6	2	8	2	2	4	3	7	10
Cap, veh/h	316	1021	508	368	801	471	147	2201		321	2365	851
Arrive On Green	0.09	0.28	0.28	0.05	0.23	0.23	0.04	0.43	0.00	0.19	0.96	0.96
Sat Flow, veh/h	3374	3582	1547	1725	3554	1463	3456	5106	1560	3428	4904	1476
Grp Volume(v), veh/h	337	184	60	78	77	142	79	1005	0	286	462	160
Grp Sat Flow(s),veh/h/ln	1687	1791	1547	1725	1777	1463	1728	1702	1560	1714	1635	1476
Q Serve(g_s), s	15.0	6.2	4.3	5.5	2.7	11.7	3.6	22.3	0.0	13.0	0.7	0.6
Cycle Q Clear(g_c), s	15.0	6.2	4.3	5.5	2.7	11.7	3.6	22.3	0.0	13.0	0.7	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	1021	508	368	801	471	147	2201		321	2365	851
V/C Ratio(X)	1.07	0.18	0.12	0.21	0.10	0.30	0.54	0.46		0.89	0.20	0.19
Avail Cap(c_a), veh/h	316	1242	604	465	1222	645	324	2201		321	2365	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	72.5	43.1	37.6	44.4	49.1	41.1	75.1	32.3	0.0	64.2	1.5	1.0
Incr Delay (d2), s/veh	69.0	0.1	0.1	0.3	0.1	0.4	3.1	0.7	0.0	22.0	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	2.0	1.2	1.7	0.9	3.0	1.3	6.0	0.0	5.0	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	141.5	43.2	37.7	44.7	49.1	41.4	78.1	32.9	0.0	86.2	1.6	1.4
LnGrp LOS	F	D	D	D	D	D	E	C		F	A	A
Approach Vol, veh/h		581			297			1084			908	
Approach Delay, s/veh		99.7			44.3			36.2			28.2	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	84.7	20.0	43.5	20.0	76.5	10.4	53.1
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	15.0	55.0	15.0	50.0	16.5	55.5
Max Q Clear Time (g_c+I1), s	5.6	2.7	17.0	13.7	15.0	24.3	7.5	8.2
Green Ext Time (p_c), s	0.2	10.9	0.0	2.2	0.0	16.6	0.2	3.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.4
HCM 6th LOS	D

Notes

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

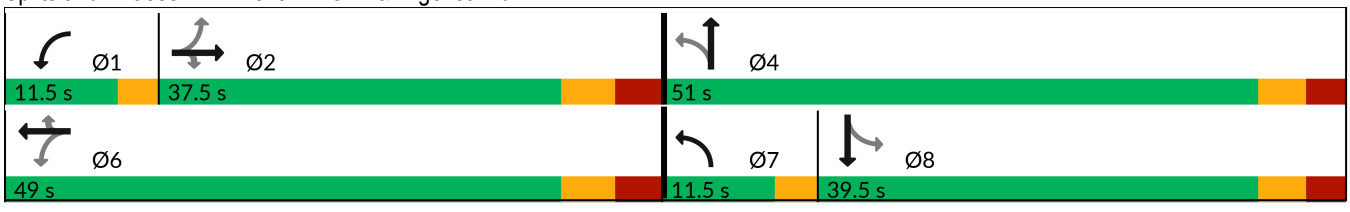


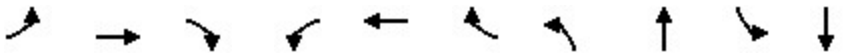
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	263	36	69	122	10	73	1	214	2	1	1
Future Volume (vph)	3	263	36	69	122	10	73	1	214	2	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	0.99		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.851			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1847	1633	1738	1830	1633	1825	1598	0	1217	1765	0
Flt Permitted	0.676			0.542			0.582			0.619		
Satd. Flow (perm)	1293	1847	1586	986	1830	1592	1116	1598	0	792	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			71		223			1	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		1323.5			633.5			748.2			676.6	
Travel Time (s)		79.4			38.0			53.9			48.7	
Confl. Peds. (#/hr)	3		5	5		3	2		1	1		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	0%	5%	5%	0%	0%	0%	1%	50%	0%	0%
Adj. Flow (vph)	3	274	38	72	127	10	76	1	223	2	1	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	274	38	72	127	10	76	224	0	2	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	37.5	37.5	37.5	11.5	49.0	49.0	11.5	51.0		39.5	39.5	
Total Split (%)	37.5%	37.5%	37.5%	11.5%	49.0%	49.0%	11.5%	51.0%		39.5%	39.5%	
Maximum Green (s)	30.0	30.0	30.0	8.5	41.5	41.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	33.6	33.6	33.6	46.2	41.7	41.7	22.2	18.7		10.0	10.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.62	0.56	0.56	0.30	0.25		0.13	0.13	
v/c Ratio	0.01	0.33	0.05	0.11	0.12	0.01	0.19	0.40		0.02	0.01	
Control Delay (s/veh)	14.0	16.6	0.1	6.9	9.0	0.0	19.8	5.7		30.0	25.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	14.0	16.6	0.1	6.9	9.0	0.0	19.8	5.7		30.0	25.5	
LOS	B	B	A	A	A	A	B	A		C	C	
Approach Delay (s/veh)		14.6			7.9			9.3			27.8	
Approach LOS		B			A			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 74.4			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 11.0		Intersection LOS: B	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

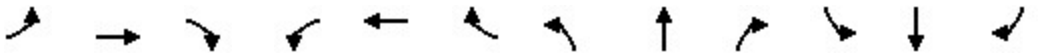
Splits and Phases: 4: Tenth Line W & Argentia Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	3	274	38	72	127	10	76	224	2	2
v/c Ratio	0.01	0.33	0.05	0.11	0.12	0.01	0.19	0.40	0.02	0.01
Control Delay (s/veh)	14.0	16.6	0.1	6.9	9.0	0.0	19.8	5.7	30.0	25.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	16.6	0.1	6.9	9.0	0.0	19.8	5.7	30.0	25.5
Queue Length 50th (m)	0.3	27.5	0.0	4.1	8.8	0.0	7.7	0.1	0.4	0.1
Queue Length 95th (m)	1.7	47.2	0.0	9.0	17.0	0.0	16.7	14.8	3.0	2.0
Internal Link Dist (m)		1299.5			609.5			724.2		652.6
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	584	835	773	698	1025	922	414	1048	352	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.33	0.05	0.10	0.12	0.01	0.18	0.21	0.01	0.00

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	263	36	69	122	10	73	1	214	2	1	1
Future Volume (veh/h)	3	263	36	69	122	10	73	1	214	2	1	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1826	1826	1900	1900	1900	1885	1159	1900	1900
Adj Flow Rate, veh/h	3	274	38	72	127	10	76	1	223	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	0	5	5	0	0	0	1	50	0	0
Cap, veh/h	654	811	706	578	1010	887	438	2	416	196	127	127
Arrive On Green	0.44	0.44	0.44	0.07	0.55	0.55	0.07	0.26	0.26	0.15	0.15	0.15
Sat Flow, veh/h	1266	1841	1601	1739	1826	1603	1810	7	1600	715	870	870
Grp Volume(v), veh/h	3	274	38	72	127	10	76	0	224	2	0	2
Grp Sat Flow(s),veh/h/ln	1266	1841	1601	1739	1826	1603	1810	0	1608	715	0	1739
Q Serve(g_s), s	0.1	7.3	1.0	1.5	2.5	0.2	2.5	0.0	9.0	0.2	0.0	0.1
Cycle Q Clear(g_c), s	0.1	7.3	1.0	1.5	2.5	0.2	2.5	0.0	9.0	0.6	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	654	811	706	578	1010	887	438	0	418	196	0	254
V/C Ratio(X)	0.00	0.34	0.05	0.12	0.13	0.01	0.17	0.00	0.54	0.01	0.00	0.01
Avail Cap(c_a), veh/h	654	811	706	649	1010	887	509	0	954	406	0	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.8	13.8	12.0	8.9	8.0	7.5	22.2	0.0	23.9	27.8	0.0	27.4
Incr Delay (d2), s/veh	0.0	1.1	0.1	0.1	0.3	0.0	0.2	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.0	0.0	0.1	0.0	0.4	0.0	1.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.8	14.9	12.2	9.0	8.3	7.6	22.4	0.0	24.9	27.8	0.0	27.4
LnGrp LOS	B	B	B	A	A	A	C		C	C		C
Approach Vol, veh/h		315			209			300			4	
Approach Delay, s/veh		14.6			8.5			24.3			27.6	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	8.4	40.6		26.0		49.0	8.6	17.5				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	3.5	9.3		11.0		4.5	4.5	2.6				
Green Ext Time (p_c), s	0.1	4.1		4.2		2.0	0.1	0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.6									
HCM 6th LOS			B									

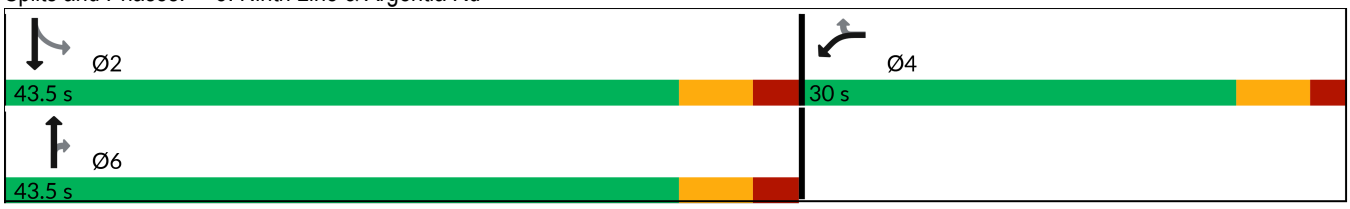


Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Volume (vph)	43	29	0	262	204	92	475	0	0	0
Future Volume (vph)	43	29	0	262	204	92	475	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0		100.0	45.0		0.0	0.0	0.0
Storage Lanes	1	1	0		1	1		0	0	0
Taper Length (m)	7.6		7.6			7.6			7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850					
Flt Protected	0.950					0.950				
Satd. Flow (prot)	1706	1526	0	1883	1601	1789	1865	0	0	0
Flt Permitted	0.950					0.587				
Satd. Flow (perm)	1706	1526	0	1883	1601	1106	1865	0	0	0
Right Turn on Red		Yes			Yes			Yes		
Satd. Flow (RTOR)		52			219					
Link Speed (k/h)	60			60			60		48	
Link Distance (m)	1323.5			1616.5			667.9		25.4	
Travel Time (s)	79.4			97.0			40.1		1.9	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	7%	7%	2%	2%	2%	2%	3%	2%	2%	2%
Adj. Flow (vph)	46	31	0	282	219	99	511	0	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	46	31	0	282	219	99	511	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right
Median Width(m)	7.4			3.7			3.7		0.0	
Link Offset(m)	0.0			0.0			0.0		0.0	
Crosswalk Width(m)	4.9			4.9			4.9		4.9	
Two way Left Turn Lane										
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24		14	24		14	24	14
Number of Detectors	1	1		2	1	1	2		1	
Detector Template	Left	Right		Thru	Right	Left	Thru		Left	
Leading Detector (m)	6.1	6.1		30.5	6.1	6.1	30.5		6.1	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Size(m)	6.1	6.1		1.8	6.1	6.1	1.8			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 2 Position(m)				28.7			28.7			
Detector 2 Size(m)				1.8			1.8			
Detector 2 Type				Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)				0.0			0.0			
Turn Type	Prot	Perm		NA	Perm	Perm	NA			
Protected Phases	4			6			2			

Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Permitted Phases		4			6	2				
Detector Phase	4	4		6	6	2	2			
Switch Phase										
Minimum Initial (s)	20.0	20.0		10.0	10.0	10.0	10.0			
Minimum Split (s)	30.0	30.0		43.5	43.5	43.5	43.5			
Total Split (s)	30.0	30.0		43.5	43.5	43.5	43.5			
Total Split (%)	40.8%	40.8%		59.2%	59.2%	59.2%	59.2%			
Maximum Green (s)	24.0	24.0		37.0	37.0	37.0	37.0			
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0			
All-Red Time (s)	2.0	2.0		2.5	2.5	2.5	2.5			
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.0	6.0		6.5	6.5	6.5	6.5			
Lead/Lag										
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0			
Recall Mode	None	None		Max	Max	Max	Max			
Walk Time (s)	10.0	10.0		10.0	10.0	10.0	10.0			
Flash Don't Walk (s)	14.0	14.0		27.0	27.0	27.0	27.0			
Pedestrian Calls (#/hr)	0	0		0	0	0	0			
Act Effct Green (s)	20.4	20.4		51.1	51.1	51.1	51.1			
Actuated g/C Ratio	0.30	0.30		0.74	0.74	0.74	0.74			
v/c Ratio	0.09	0.06		0.20	0.18	0.12	0.37			
Control Delay (s/veh)	20.4	3.4		7.1	1.8	7.6	8.5			
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0			
Total Delay (s/veh)	20.4	3.4		7.1	1.8	7.6	8.5			
LOS	C	A		A	A	A	A			
Approach Delay (s/veh)	13.5			4.8			8.4			
Approach LOS	B			A			A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 68.9			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 7.2		Intersection LOS: A	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	46	31	282	219	99	511
v/c Ratio	0.09	0.06	0.20	0.18	0.12	0.37
Control Delay (s/veh)	20.4	3.4	7.1	1.8	7.6	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.4	3.4	7.1	1.8	7.6	8.5
Queue Length 50th (m)	6.2	0.0	18.9	0.0	6.2	40.4
Queue Length 95th (m)	11.8	3.5	32.0	8.5	13.5	64.3
Internal Link Dist (m)	1299.5		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	606	575	1395	1243	819	1382
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.05	0.20	0.18	0.12	0.37

Intersection Summary



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Volume (veh/h)	43	29	0	262	204	92	475	0	0	0
Future Volume (veh/h)	43	29	0	262	204	92	475	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No			No			
Adj Sat Flow, veh/h/ln	1796	1796	0	1870	1870	1870	1856	0		
Adj Flow Rate, veh/h	46	31	0	282	219	99	511	0		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93		
Percent Heavy Veh, %	7	7	0	2	2	2	3	0		
Cap, veh/h	397	353	0	1074	910	559	1065	0		
Arrive On Green	0.23	0.23	0.00	0.57	0.57	0.57	0.57	0.00		
Sat Flow, veh/h	1711	1522	0	1870	1585	897	1856	0		
Grp Volume(v), veh/h	46	31	0	282	219	99	511	0		
Grp Sat Flow(s),veh/h/ln	1711	1522	0	1870	1585	897	1856	0		
Q Serve(g_s), s	1.4	1.0	0.0	4.9	4.4	4.0	10.4	0.0		
Cycle Q Clear(g_c), s	1.4	1.0	0.0	4.9	4.4	8.9	10.4	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	1.00		0.00		
Lane Grp Cap(c), veh/h	397	353	0	1074	910	559	1065	0		
V/C Ratio(X)	0.12	0.09	0.00	0.26	0.24	0.18	0.48	0.00		
Avail Cap(c_a), veh/h	637	567	0	1074	910	559	1065	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	19.5	19.4	0.0	6.9	6.8	9.1	8.1	0.0		
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.6	0.6	0.7	1.5	0.0		
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.0	0.2	0.2	0.1	0.5	0.0		
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	19.7	19.5	0.0	7.5	7.4	9.8	9.6	0.0		
LnGrp LOS	B	B		A	A	A	A			
Approach Vol, veh/h	77			501			610			
Approach Delay, s/veh	19.6			7.5			9.7			
Approach LOS	B			A			A			

Timer - Assigned Phs		2		4		6				
Phs Duration (G+Y+Rc), s		43.5		21.0		43.5				
Change Period (Y+Rc), s		6.5		6.0		6.5				
Max Green Setting (Gmax), s		37.0		24.0		37.0				
Max Q Clear Time (g_c+I1), s		12.4		3.4		6.9				
Green Ext Time (p_c), s		9.6		0.3		6.1				

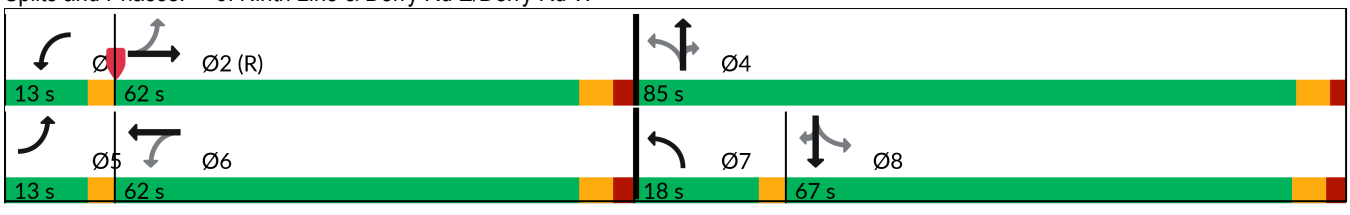
Intersection Summary										
HCM 6th Ctrl Delay, s/veh			9.4							
HCM 6th LOS			A							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	689	38	84	377	16	105	205	127	22	270	301
Future Volume (vph)	171	689	38	84	377	16	105	205	127	22	270	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.994				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3543	0	1722	3594	0	1755	1847	1585	1825	1865	1570
Flt Permitted	0.476			0.323			0.242			0.626		
Satd. Flow (perm)	888	3543	0	585	3594	0	447	1847	1585	1203	1865	1570
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			3				131			310
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	2%	6%	6%	1%	0%	4%	4%	3%	0%	3%	4%
Adj. Flow (vph)	176	710	39	87	389	16	108	211	131	23	278	310
Shared Lane Traffic (%)												
Lane Group Flow (vph)	176	749	0	87	405	0	108	211	131	23	278	310
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.0	40.0	40.5	40.5	40.5
Total Split (s)	13.0	62.0		13.0	62.0		18.0	85.0	85.0	67.0	67.0	67.0
Total Split (%)	8.1%	38.8%		8.1%	38.8%		11.3%	53.1%	53.1%	41.9%	41.9%	41.9%
Maximum Green (s)	10.0	55.5		10.0	55.5		15.0	79.0	79.0	60.5	60.5	60.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.0	2.0	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.0	6.0	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?		Yes		Yes			Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	Max		None	Min	Min	Min	Min	Min
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	103.2	88.4		97.5	85.1		50.3	47.3	47.3	30.6	30.6	30.6
Actuated g/C Ratio	0.65	0.55		0.61	0.53		0.31	0.30	0.30	0.19	0.19	0.19
v/c Ratio	0.28	0.38		0.21	0.21		0.44	0.39	0.23	0.10	0.78	0.56
Control Delay (s/veh)	14.0	21.1		13.6	21.9		43.5	45.4	6.2	50.7	75.9	8.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	21.1		13.6	21.9		43.5	45.4	6.2	50.7	75.9	8.9
LOS	B	C		B	C		D	D	A	D	E	A
Approach Delay (s/veh)		19.8			20.4			33.5			41.0	
Approach LOS		B			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 115 (72%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 64.4%		ICU Level of Service C	
Analysis Period (min) 15			

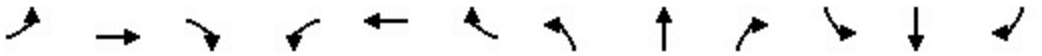
Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	176	749	87	405	108	211	131	23	278	310
v/c Ratio	0.28	0.38	0.21	0.21	0.44	0.39	0.23	0.10	0.78	0.56
Control Delay (s/veh)	14.0	21.1	13.6	21.9	43.5	45.4	6.2	50.7	75.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.0	21.1	13.6	21.9	43.5	45.4	6.2	50.7	75.9	8.9
Queue Length 50th (m)	23.8	67.8	10.5	35.4	25.7	54.7	0.0	6.1	87.1	0.0
Queue Length 95th (m)	42.6	94.2	21.5	55.9	37.8	71.9	14.4	13.6	112.3	25.3
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	644	1958	435	1913	263	911	848	454	705	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.38	0.20	0.21	0.41	0.23	0.15	0.05	0.39	0.39

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	689	38	84	377	16	105	205	127	22	270	301
Future Volume (veh/h)	171	689	38	84	377	16	105	205	127	22	270	301
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1811	1811	1885	1900	1841	1841	1856	1900	1856	1841
Adj Flow Rate, veh/h	176	710	39	87	389	16	108	211	131	23	278	310
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	2	6	6	1	0	4	4	3	0	3	4
Cap, veh/h	598	1839	101	477	1821	75	237	590	504	290	451	380
Arrive On Green	0.12	1.00	1.00	0.04	0.52	0.52	0.06	0.32	0.32	0.24	0.24	0.24
Sat Flow, veh/h	1767	3425	188	1725	3506	144	1753	1841	1572	1055	1856	1560
Grp Volume(v), veh/h	176	368	381	87	198	207	108	211	131	23	278	310
Grp Sat Flow(s),veh/h/ln	1767	1777	1837	1725	1791	1859	1753	1841	1572	1055	1856	1560
Q Serve(g_s), s	7.6	0.0	0.0	3.7	9.6	9.6	7.2	14.1	9.9	2.7	21.3	30.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	3.7	9.6	9.6	7.2	14.1	9.9	4.5	21.3	30.0
Prop In Lane	1.00		0.10	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	598	954	986	477	930	966	237	590	504	290	451	380
V/C Ratio(X)	0.29	0.39	0.39	0.18	0.21	0.21	0.46	0.36	0.26	0.08	0.62	0.82
Avail Cap(c_a), veh/h	602	954	986	511	930	966	299	909	776	432	702	590
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	0.0	0.0	16.1	20.8	20.8	42.1	41.7	40.3	48.2	53.9	57.2
Incr Delay (d2), s/veh	0.2	1.1	1.1	0.2	0.5	0.5	1.4	0.4	0.3	0.1	1.4	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.3	0.3	0.8	2.4	2.5	2.3	4.6	2.7	0.5	7.5	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	1.1	1.1	16.3	21.3	21.3	43.4	42.1	40.6	48.3	55.3	62.3
LnGrp LOS	B	A	A	B	C	C	D	D	D	D	E	E
Approach Vol, veh/h		925			492			450			611	
Approach Delay, s/veh		3.7			20.4			42.0			58.6	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	92.4		57.7	12.6	89.6	12.3	45.4				
Change Period (Y+Rc), s	3.0	6.5		* 6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	55.5		* 79	10.0	55.5	15.0	60.5				
Max Q Clear Time (g_c+I1), s	5.7	2.0		16.1	9.6	11.6	9.2	32.0				
Green Ext Time (p_c), s	0.1	17.2		4.7	0.0	7.6	0.2	6.9				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		27.5	
HCM 6th LOS		C	

Notes

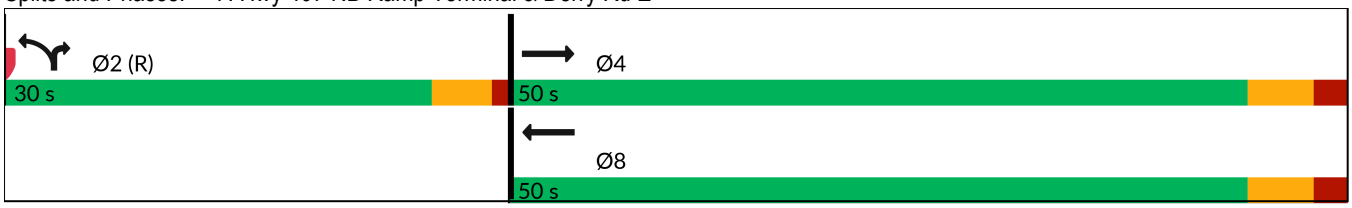
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	801	200	0	644	9	109
Future Volume (vph)	801	200	0	644	9	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	0.97	1.00
Frt	0.970					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3288	0	0	3357	2727	1502
Flt Permitted					0.950	
Satd. Flow (perm)	3288	0	0	3357	2727	1502
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	61					112
Link Speed (k/h)	80			60	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			14.5	30.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	23%	3%
Adj. Flow (vph)	826	206	0	664	9	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1032	0	0	664	9	112
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases						
Detector Phase	4			8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0			8.0	5.0	5.0
Minimum Split (s)	26.0			26.0	24.5	24.5
Total Split (s)	50.0			50.0	30.0	30.0
Total Split (%)	62.5%			62.5%	37.5%	37.5%
Maximum Green (s)	44.0			44.0	25.5	25.5
Yellow Time (s)	4.0			4.0	3.5	3.5
All-Red Time (s)	2.0			2.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	Max			Max	C-Min	C-Min
Walk Time (s)	8.0			8.0	8.0	8.0
Flash Don't Walk (s)	12.0			12.0	12.0	12.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	62.5			62.5	7.0	7.0
Actuated g/C Ratio	0.78			0.78	0.09	0.09
v/c Ratio	0.40			0.25	0.04	0.48
Control Delay (s/veh)	2.8			2.0	32.2	14.4
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	2.8			2.0	32.2	14.4
LOS	A			A	C	B
Approach Delay (s/veh)	2.8			2.0	15.8	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 3.4		Intersection LOS: A	
Intersection Capacity Utilization 46.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E





Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1032	664	9	112
v/c Ratio	0.40	0.25	0.04	0.48
Control Delay (s/veh)	2.8	2.0	32.2	14.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.8	2.0	32.2	14.4
Queue Length 50th (m)	15.2	8.1	0.7	0.0
Queue Length 95th (m)	23.0	12.5	3.1	13.8
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2583	2624	869	555
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.40	0.25	0.01	0.20

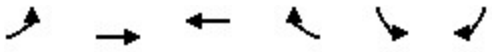
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	801	200	0	644	9	109
Future Volume (veh/h)	801	200	0	644	9	109
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1772	0	1758	1477	1758
Adj Flow Rate, veh/h	826	206	0	664	9	112
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	3	23	3
Cap, veh/h	1468	366	0	1837	870	475
Arrive On Green	0.55	0.55	0.00	0.55	0.32	0.32
Sat Flow, veh/h	2758	666	0	3516	2729	1490
Grp Volume(v), veh/h	521	511	0	664	9	112
Grp Sat Flow(s),veh/h/ln	1683	1652	0	1670	1365	1490
Q Serve(g_s), s	16.1	16.1	0.0	8.9	0.2	4.4
Cycle Q Clear(g_c), s	16.1	16.1	0.0	8.9	0.2	4.4
Prop In Lane		0.40	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	926	909	0	1837	870	475
V/C Ratio(X)	0.56	0.56	0.00	0.36	0.01	0.24
Avail Cap(c_a), veh/h	926	909	0	1837	870	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.94	1.00	1.00
Uniform Delay (d), s/veh	11.7	11.7	0.0	10.1	18.6	20.1
Incr Delay (d2), s/veh	2.5	2.5	0.0	0.5	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.6	0.0	0.1	0.0	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.2	14.2	0.0	10.6	18.6	21.2
LnGrp LOS	B	B		B	B	C
Approach Vol, veh/h	1032			664	121	
Approach Delay, s/veh	14.2			10.6	21.0	
Approach LOS	B			B	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	30.0	50.0	50.0
Change Period (Y+Rc), s	4.5	6.0	6.0
Max Green Setting (Gmax), s	25.5	44.0	44.0
Max Q Clear Time (g_c+I1), s	6.4	18.1	10.9
Green Ext Time (p_c), s	0.6	17.2	13.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.4
HCM 6th LOS	B

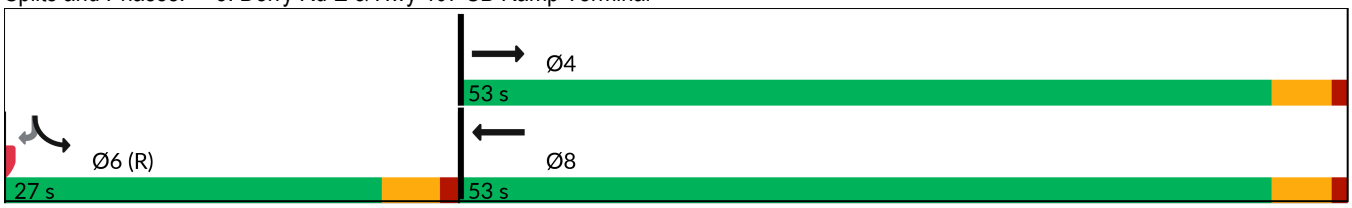


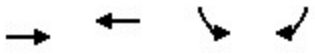
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	975	509	145	26	52
Future Volume (vph)	0	975	509	145	26	52
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.967			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3246	0	3106	1334
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3246	0	3106	1334
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			83			55
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	3%	8%	16%
Adj. Flow (vph)	0	1026	536	153	27	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1026	689	0	27	55
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		53.0	53.0		27.0	27.0
Total Split (%)		66.3%	66.3%		33.8%	33.8%
Maximum Green (s)		48.5	48.5		22.5	22.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		64.3	64.3		6.7	6.7
Actuated g/C Ratio		0.80	0.80		0.08	0.08
v/c Ratio		0.38	0.26		0.10	0.34
Control Delay (s/veh)		2.8	1.3		33.8	16.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.8	1.3		33.8	16.1
LOS		A	A		C	B
Approach Delay (s/veh)		2.8	1.3		22.0	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay (s/veh): 3.1		Intersection LOS: A	
Intersection Capacity Utilization 40.1%		ICU Level of Service A	
Analysis Period (min) 15			

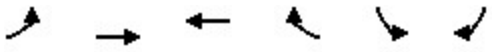
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1026	689	27	55
v/c Ratio	0.38	0.26	0.10	0.34
Control Delay (s/veh)	2.8	1.3	33.8	16.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.8	1.3	33.8	16.1
Queue Length 50th (m)	15.1	5.9	2.1	0.0
Queue Length 95th (m)	27.2	6.3	5.8	11.0
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2724	2624	873	414
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.26	0.03	0.13

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	975	509	145	26	52
Future Volume (veh/h)	0	975	509	145	26	52
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1758	1758	1688	1575
Adj Flow Rate, veh/h	0	1026	536	153	27	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	3	8	16
Cap, veh/h	0	2041	1556	442	877	375
Arrive On Green	0.00	0.61	0.61	0.61	0.28	0.28
Sat Flow, veh/h	0	3544	2655	730	3118	1335
Grp Volume(v), veh/h	0	1026	348	341	27	55
Grp Sat Flow(s),veh/h/ln	0	1683	1670	1627	1559	1335
Q Serve(g_s), s	0.0	13.8	8.3	8.4	0.5	2.5
Cycle Q Clear(g_c), s	0.0	13.8	8.3	8.4	0.5	2.5
Prop In Lane	0.00			0.45	1.00	1.00
Lane Grp Cap(c), veh/h	0	2041	1012	986	877	375
V/C Ratio(X)	0.00	0.50	0.34	0.35	0.03	0.15
Avail Cap(c_a), veh/h	0	2041	1012	986	877	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.9	7.8	7.8	20.8	21.6
Incr Delay (d2), s/veh	0.0	0.9	0.9	1.0	0.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.3	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	9.8	8.8	8.8	20.9	22.4
LnGrp LOS		A	A	A	C	C
Approach Vol, veh/h		1026	689		82	
Approach Delay, s/veh		9.8	8.8		21.9	
Approach LOS		A	A		C	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		53.0		27.0	53.0
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		48.5		22.5	48.5
Max Q Clear Time (g_c+I1), s		15.8		4.5	10.4
Green Ext Time (p_c), s		20.5		0.3	13.9

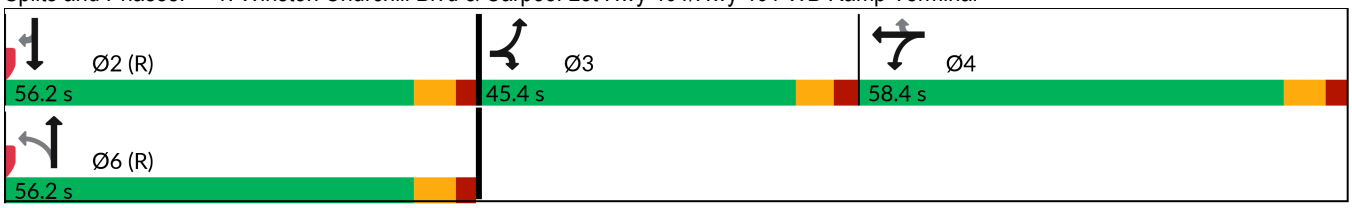
Intersection Summary		
HCM 6th Ctrl Delay, s/veh	10.0	
HCM 6th LOS	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	0	18	802	10	755	5	902	219	0	1161	434
Future Volume (vph)	7	0	18	802	10	755	5	902	219	0	1161	434
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Frt			0.850			0.850		0.971				0.850
Flt Protected	0.950			0.950	0.953		0.950					
Satd. Flow (prot)	1729	0	1547	1626	1632	2475	1729	3167	0	0	4644	1432
Flt Permitted	0.950			0.950	0.953		0.164					
Satd. Flow (perm)	1729	0	1547	1626	1632	2475	298	3167	0	0	4644	1432
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			680		19				363
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	0%	10%	0%	7%	2%	2%	7%	8%
Adj. Flow (vph)	7	0	19	835	10	786	5	940	228	0	1209	452
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	7	0	19	426	419	786	5	1168	0	0	1209	452
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	97		97	24		14	97		14	24		97
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	45.4		45.4	58.4	58.4	58.4	56.2	56.2			56.2	56.2
Total Split (%)	28.4%		28.4%	36.5%	36.5%	36.5%	35.1%	35.1%			35.1%	35.1%
Maximum Green (s)	38.1		38.1	50.8	50.8	50.8	48.7	48.7			48.7	48.7
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)	10.0		10.0	55.0	55.0	55.0	79.5	79.5			79.5	79.5
Actuated g/C Ratio	0.06		0.06	0.34	0.34	0.34	0.50	0.50			0.50	0.50
v/c Ratio	0.06		0.11	0.76	0.75	0.61	0.03	0.74			0.52	0.51
Control Delay (s/veh)	72.1		1.3	55.1	54.1	7.1	30.2	37.6			31.5	9.2
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	72.1		1.3	55.1	54.1	7.1	30.2	37.6			31.5	9.2
LOS	E		A	E	D	A	C	D			C	A
Approach Delay (s/veh)		20.4			31.7			37.6			25.5	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 56 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 30.9		Intersection LOS: C	
Intersection Capacity Utilization 87.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal





Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	7	19	426	419	786	5	1168	1209	452
v/c Ratio	0.06	0.11	0.76	0.75	0.61	0.03	0.74	0.52	0.51
Control Delay (s/veh)	72.1	1.3	55.1	54.1	7.1	30.2	37.6	31.5	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.1	1.3	55.1	54.1	7.1	30.2	37.6	31.5	9.2
Queue Length 50th (m)	2.1	0.0	128.0	124.1	14.2	0.8	181.1	108.6	17.4
Queue Length 95th (m)	7.7	0.0	148.1	143.8	30.5	m3.2	#238.3	146.1	59.9
Internal Link Dist (m)				193.3			369.8	835.9	
Turn Bay Length (m)									
Base Capacity (vph)	411	430	583	585	1323	148	1584	2308	894
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.04	0.73	0.72	0.59	0.03	0.74	0.52	0.51

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	18	802	10	755	5	902	219	0	1161	434
Future Volume (veh/h)	7	0	18	802	10	755	5	902	219	0	1161	434
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	0	1800	1786	1800	1660	1800	1702	1772	0	1702	1688
Adj Flow Rate, veh/h	7	0	19	842	0	786	5	940	228	0	1209	452
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	0	10	0	7	2	0	7	8
Cap, veh/h	0	0	0	1051	0	869	247	1540	373	0	2773	854
Arrive On Green	0.00	0.00	0.00	0.31	0.00	0.31	0.60	0.60	0.60	0.00	0.60	0.60
Sat Flow, veh/h		0		3402	0	2813	445	2581	625	0	4799	1430
Grp Volume(v), veh/h		0.0		842	0	786	5	588	580	0	1209	452
Grp Sat Flow(s),veh/h/ln				1701	0	1406	445	1617	1589	0	1549	1430
Q Serve(g_s), s				36.4	0.0	42.9	1.0	36.9	37.1	0.0	22.7	29.8
Cycle Q Clear(g_c), s				36.4	0.0	42.9	23.7	36.9	37.1	0.0	22.7	29.8
Prop In Lane				1.00		1.00	1.00		0.39	0.00		1.00
Lane Grp Cap(c), veh/h				1051	0	869	247	965	948	0	2773	854
V/C Ratio(X)				0.80	0.00	0.90	0.02	0.61	0.61	0.00	0.44	0.53
Avail Cap(c_a), veh/h				1080	0	893	247	965	948	0	2773	854
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.8	0.0	53.0	24.0	20.4	20.5	0.0	17.6	19.0
Incr Delay (d2), s/veh				4.3	0.0	12.4	0.2	2.9	2.9	0.0	0.5	2.3
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.5	0.0	12.1	0.1	6.9	6.8	0.0	3.7	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				55.1	0.0	65.4	24.2	23.3	23.4	0.0	18.1	21.4
LnGrp LOS				E		E	C	C	C		B	C
Approach Vol, veh/h					1628			1173			1661	
Approach Delay, s/veh					60.1			23.4			19.0	
Approach LOS					E			C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	103.0	57.0	103.0
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	48.7	50.8	48.7
Max Q Clear Time (g_c+I1), s	31.8	44.9	39.1
Green Ext Time (p_c), s	14.7	4.5	8.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	35.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

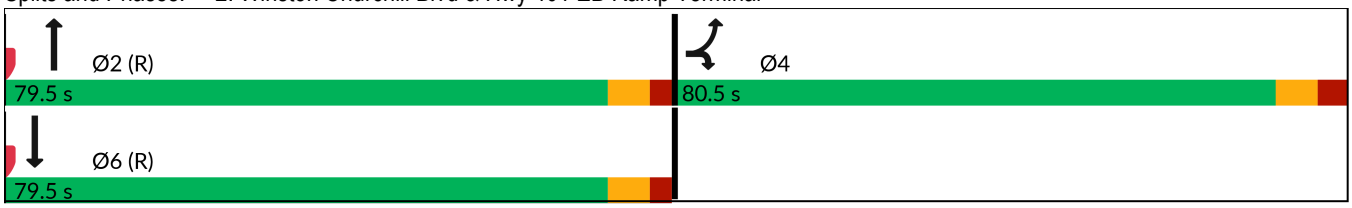


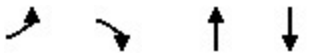
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	340	329	0	763	1417	572
Future Volume (vph)	340	329	0	763	1417	572
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	0.91
Frt	0.961	0.850			0.957	
Flt Protected	0.964					
Satd. Flow (prot)	2955	1354	0	4778	4509	0
Flt Permitted	0.964					
Satd. Flow (perm)	2955	1354	0	4778	4509	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11	11			83	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	13%	4%	2%	4%	2%	14%
Adj. Flow (vph)	362	350	0	812	1507	609
Shared Lane Traffic (%)		36%				
Lane Group Flow (vph)	488	224	0	812	2116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Prot		NA	NA	
Protected Phases	4	4		2	6	
Permitted Phases						
Detector Phase	4	4		2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	22.5	22.5		31.5	31.5	
Total Split (s)	80.5	80.5		79.5	79.5	
Total Split (%)	50.3%	50.3%		49.7%	49.7%	
Maximum Green (s)	72.0	72.0		72.0	72.0	
Yellow Time (s)	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	3.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0	
Flash Don't Walk (s)				17.0	17.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	33.6	33.6		110.4	110.4	
Actuated g/C Ratio	0.21	0.21		0.69	0.69	
v/c Ratio	0.78	0.77		0.25	0.67	
Control Delay (s/veh)	66.6	72.9		9.2	10.4	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	66.6	72.9		9.2	10.4	
LOS	E	E		A	B	
Approach Delay (s/veh)	68.5			9.2	10.4	
Approach LOS	E			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 48 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.5		Intersection LOS: C	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal





Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	488	224	812	2116
v/c Ratio	0.78	0.77	0.25	0.67
Control Delay (s/veh)	66.6	72.9	9.2	10.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.6	72.9	9.2	10.4
Queue Length 50th (m)	83.4	74.0	39.0	102.9
Queue Length 95th (m)	96.0	100.3	m50.9	107.8
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	1335	615	3296	3136
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.37	0.36	0.25	0.67

Intersection Summary

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	340	329	0	763	1417	572
Future Volume (veh/h)	340	329	0	763	1417	572
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1617	1744	0	1744	1772	1603
Adj Flow Rate, veh/h	467	237	0	812	1507	609
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	13	4	0	4	2	14
Cap, veh/h	616	296	0	3333	2389	940
Arrive On Green	0.20	0.20	0.00	0.70	0.70	0.70
Sat Flow, veh/h	3081	1478	0	5075	3572	1343
Grp Volume(v), veh/h	467	237	0	812	1422	694
Grp Sat Flow(s),veh/h/ln	1540	1478	0	1587	1612	1530
Q Serve(g_s), s	22.9	24.4	0.0	9.9	37.9	39.8
Cycle Q Clear(g_c), s	22.9	24.4	0.0	9.9	37.9	39.8
Prop In Lane	1.00	1.00	0.00			0.88
Lane Grp Cap(c), veh/h	616	296	0	3333	2257	1071
V/C Ratio(X)	0.76	0.80	0.00	0.24	0.63	0.65
Avail Cap(c_a), veh/h	1386	665	0	3333	2257	1071
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.82	1.00	1.00
Uniform Delay (d), s/veh	60.4	61.0	0.0	8.7	12.9	13.2
Incr Delay (d2), s/veh	1.9	5.0	0.0	0.1	1.3	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	7.5	0.0	0.7	3.0	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.3	66.0	0.0	8.8	14.2	16.2
LnGrp LOS	E	E		A	B	B
Approach Vol, veh/h	704			812	2116	
Approach Delay, s/veh	63.5			8.8	14.9	
Approach LOS	E			A	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		119.5		40.5		119.5
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		72.0		72.0		72.0
Max Q Clear Time (g_c+I1), s		11.9		26.4		41.8
Green Ext Time (p_c), s		20.6		5.5		29.0

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		23.0
HCM 6th LOS		C

Notes

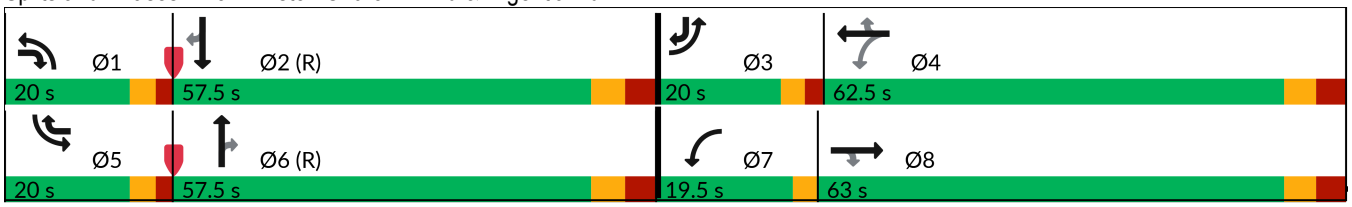
User approved volume balancing among the lanes for turning movement.

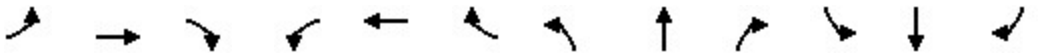
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	328	240	199	268	424	284	220	613	94	229	1003	346
Future Volume (vph)	328	240	199	268	424	284	220	613	94	229	1003	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.96	0.98		0.95	1.00		0.99	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3404	3579	1617	1807	3579	1585	3506	4995	1601	3404	5142	1585
Flt Permitted	0.950			0.547			0.950			0.950		
Satd. Flow (perm)	3328	3579	1546	1016	3579	1503	3500	4995	1578	3399	5142	1556
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			97			60			95			133
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	40		32	32		40	6		2	2		6
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	2%	1%	1%	2%	3%	1%	5%	2%	4%	2%	3%
Adj. Flow (vph)	331	242	201	271	428	287	222	619	95	231	1013	349
Shared Lane Traffic (%)												
Lane Group Flow (vph)	331	242	201	271	428	287	222	619	95	231	1013	349
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	20.0	63.0	20.0	19.5	62.5	20.0	20.0	57.5	57.5	20.0	57.5	20.0
Total Split (%)	12.5%	39.4%	12.5%	12.2%	39.1%	12.5%	12.5%	35.9%	35.9%	12.5%	35.9%	12.5%
Maximum Green (s)	15.0	55.5	15.0	16.5	55.0	15.0	15.0	50.0	50.0	15.0	50.0	15.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	15.0	25.5	43.3	46.0	25.0	43.6	15.4	78.9	78.9	16.1	79.7	97.2
Actuated g/C Ratio	0.09	0.16	0.27	0.29	0.16	0.27	0.10	0.49	0.49	0.10	0.50	0.61
v/c Ratio	1.04	0.43	0.41	0.73	0.77	0.62	0.66	0.25	0.12	0.67	0.40	0.35
Control Delay (s/veh)	128.5	62.3	23.2	57.6	74.0	41.9	79.2	24.8	4.8	71.4	29.6	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	128.5	62.3	23.2	57.6	74.0	41.9	79.2	24.8	4.8	71.4	29.6	11.1
LOS	F	E	C	E	E	D	E	C	A	E	C	B
Approach Delay (s/veh)		80.5			60.1			35.6			31.6	
Approach LOS		F			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 47.9		Intersection LOS: D	
Intersection Capacity Utilization 106.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd



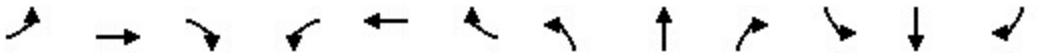


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	331	242	201	271	428	287	222	619	95	231	1013	349
v/c Ratio	1.04	0.43	0.41	0.73	0.77	0.62	0.66	0.25	0.12	0.67	0.40	0.35
Control Delay (s/veh)	128.5	62.3	23.2	57.6	74.0	41.9	79.2	24.8	4.8	71.4	29.6	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	128.5	62.3	23.2	57.6	74.0	41.9	79.2	24.8	4.8	71.4	29.6	11.1
Queue Length 50th (m)	~60.1	37.7	25.4	71.1	70.8	62.3	36.0	42.6	0.0	39.8	66.0	35.6
Queue Length 95th (m)	#93.4	49.5	43.7	93.6	86.1	84.2	49.1	59.1	11.3	52.3	110.1	58.4
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	319	1241	505	373	1230	468	358	2463	826	359	2560	1000
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.20	0.40	0.73	0.35	0.61	0.62	0.25	0.12	0.64	0.40	0.35

Intersection Summary

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

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



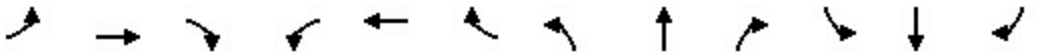
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	240	199	268	424	284	220	613	94	229	1003	346
Future Volume (veh/h)	328	240	199	268	424	284	220	613	94	229	1003	346
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1870	1885	1885	1870	1856	1885	1826	1870	1841	1870	1856
Adj Flow Rate, veh/h	331	242	201	271	428	287	222	619	0	231	1013	349
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	2	1	1	2	3	1	5	2	4	2	3
Cap, veh/h	319	1014	560	490	1003	551	269	1932		273	1994	759
Arrive On Green	0.09	0.29	0.29	0.10	0.28	0.28	0.08	0.39	0.00	0.16	0.78	0.78
Sat Flow, veh/h	3401	3554	1530	1795	3554	1506	3483	4985	1585	3401	5106	1565
Grp Volume(v), veh/h	331	242	201	271	428	287	222	619	0	231	1013	349
Grp Sat Flow(s),veh/h/ln	1700	1777	1530	1795	1777	1506	1742	1662	1585	1700	1702	1565
Q Serve(g_s), s	15.0	8.4	15.4	16.5	15.7	24.0	10.0	13.9	0.0	10.6	11.5	11.9
Cycle Q Clear(g_c), s	15.0	8.4	15.4	16.5	15.7	24.0	10.0	13.9	0.0	10.6	11.5	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1014	560	490	1003	551	269	1932		273	1994	759
V/C Ratio(X)	1.04	0.24	0.36	0.55	0.43	0.52	0.82	0.32		0.85	0.51	0.46
Avail Cap(c_a), veh/h	319	1233	654	490	1222	644	327	1932		319	1994	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	72.5	43.8	37.4	36.2	46.9	40.2	72.7	34.3	0.0	66.2	11.9	8.8
Incr Delay (d2), s/veh	60.6	0.1	0.4	1.4	0.3	0.8	13.3	0.4	0.0	11.8	0.6	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	2.7	4.0	5.3	5.1	6.2	4.0	3.8	0.0	3.8	2.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	133.1	44.0	37.8	37.6	47.2	40.9	86.1	34.7	0.0	78.0	12.6	10.1
LnGrp LOS	F	D	D	D	D	D	F	C		E	B	B
Approach Vol, veh/h		774			986			841			1593	
Approach Delay, s/veh		80.5			42.7			48.3			21.5	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	70.0	20.0	52.6	17.8	69.5	19.5	53.1
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	15.0	55.0	15.0	50.0	16.5	55.5
Max Q Clear Time (g_c+I1), s	12.0	13.9	17.0	26.0	12.6	15.9	18.5	17.4
Green Ext Time (p_c), s	0.3	23.8	0.0	9.6	0.3	12.1	0.0	5.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	42.7
HCM 6th LOS	D

Notes

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

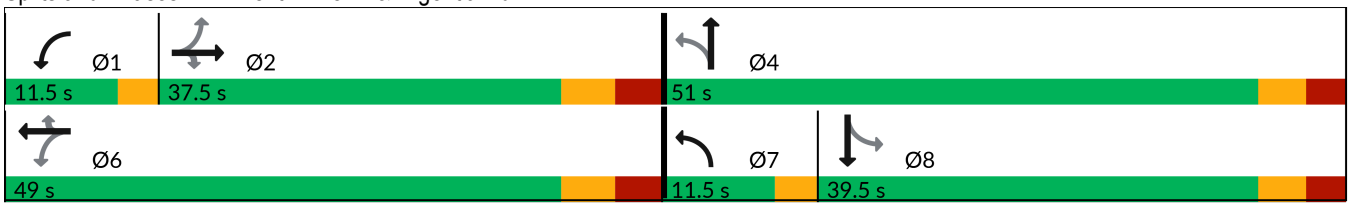


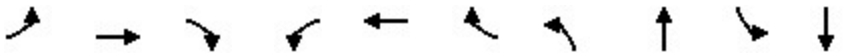
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	250	96	451	383	5	61	0	281	2	2	2
Future Volume (vph)	1	250	96	451	383	5	61	0	281	2	2	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.96	0.99		0.97	0.99	0.98		1.00	0.99	
Frt			0.850			0.850		0.850			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	913	1830	1601	1825	1865	1361	1825	1603	0	1825	1760	0
Flt Permitted	0.521			0.534			0.581			0.576		
Satd. Flow (perm)	496	1830	1535	1013	1865	1315	1108	1603	0	1102	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			71		480			2	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		1323.5			633.5			748.2			676.6	
Travel Time (s)		79.4			38.0			53.9			48.7	
Confl. Peds. (#/hr)	8		12	12		8	8		7	7		8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	5%	2%	0%	3%	20%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	1	269	103	485	412	5	66	0	302	2	2	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	269	103	485	412	5	66	302	0	2	4	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	37.5	37.5	37.5	11.5	49.0	49.0	11.5	51.0		39.5	39.5	
Total Split (%)	37.5%	37.5%	37.5%	11.5%	49.0%	49.0%	11.5%	51.0%		39.5%	39.5%	
Maximum Green (s)	30.0	30.0	30.0	8.5	41.5	41.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	30.1	30.1	30.1	46.2	41.7	41.7	22.1	18.6		10.0	10.0	
Actuated g/C Ratio	0.41	0.41	0.41	0.62	0.56	0.56	0.30	0.25		0.13	0.13	
v/c Ratio	0.00	0.36	0.15	0.67	0.39	0.01	0.16	0.40		0.01	0.02	
Control Delay (s/veh)	15.0	18.0	4.1	14.1	11.3	0.0	19.5	1.6		29.5	24.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	15.0	18.0	4.1	14.1	11.3	0.0	19.5	1.6		29.5	24.8	
LOS	B	B	A	B	B	A	B	A		C	C	
Approach Delay (s/veh)		14.2			12.7			4.8			26.3	
Approach LOS		B			B			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 74.3			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 83.4%		ICU Level of Service E	
Analysis Period (min) 15			

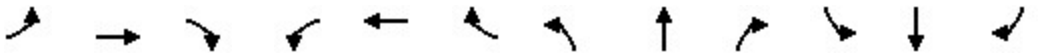
Splits and Phases: 4: Tenth Line W & Argentia Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	269	103	485	412	5	66	302	2	4
v/c Ratio	0.00	0.36	0.15	0.67	0.39	0.01	0.16	0.40	0.01	0.02
Control Delay (s/veh)	15.0	18.0	4.1	14.1	11.3	0.0	19.5	1.6	29.5	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	18.0	4.1	14.1	11.3	0.0	19.5	1.6	29.5	24.8
Queue Length 50th (m)	0.2	27.9	0.0	33.9	32.9	0.0	6.7	0.0	0.3	0.3
Queue Length 95th (m)	1.8	47.3	8.5	54.6	53.2	0.0	14.9	0.0	2.1	2.8
Internal Link Dist (m)		1299.5			609.5			724.2		652.6
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	201	742	684	723	1046	768	411	1155	491	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.36	0.15	0.67	0.39	0.01	0.16	0.26	0.00	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	250	96	451	383	5	61	0	281	2	2	2
Future Volume (veh/h)	1	250	96	451	383	5	61	0	281	2	2	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1870	1900	1856	1604	1900	1870	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	269	103	485	412	5	66	0	302	2	2	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	100	5	2	0	3	20	0	2	0	0	0	0
Cap, veh/h	174	699	597	570	982	711	476	0	459	226	161	161
Arrive On Green	0.38	0.38	0.38	0.11	0.53	0.53	0.07	0.00	0.29	0.19	0.19	0.19
Sat Flow, veh/h	215	1826	1560	1810	1856	1344	1810	0	1572	1087	865	865
Grp Volume(v), veh/h	1	269	103	485	412	5	66	0	302	2	0	4
Grp Sat Flow(s),veh/h/ln	215	1826	1560	1810	1856	1344	1810	0	1572	1087	0	1731
Q Serve(g_s), s	0.2	8.4	3.4	8.5	10.5	0.1	2.1	0.0	13.2	0.1	0.0	0.1
Cycle Q Clear(g_c), s	0.2	8.4	3.4	8.5	10.5	0.1	2.1	0.0	13.2	5.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	174	699	597	570	982	711	476	0	459	226	0	321
V/C Ratio(X)	0.01	0.38	0.17	0.85	0.42	0.01	0.14	0.00	0.66	0.01	0.00	0.01
Avail Cap(c_a), veh/h	174	699	597	570	982	711	549	0	892	482	0	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	17.5	16.0	18.2	11.2	8.7	21.2	0.0	24.3	30.2	0.0	26.1
Incr Delay (d2), s/veh	0.1	1.6	0.6	11.8	1.3	0.0	0.1	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	0.3	1.9	0.4	0.0	0.4	0.0	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.1	19.1	16.6	30.1	12.5	8.7	21.3	0.0	25.9	30.2	0.0	26.1
LnGrp LOS	B	B	B	C	B	A	C		C	C		C
Approach Vol, veh/h		373			902			368			6	
Approach Delay, s/veh		18.4			21.9			25.1			27.4	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	11.5	37.5		29.4		49.0	8.3	21.0				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	10.5	10.4		15.2		12.5	4.1	7.0				
Green Ext Time (p_c), s	0.0	4.3		5.7		7.3	0.1	0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			21.9									
HCM 6th LOS			C									

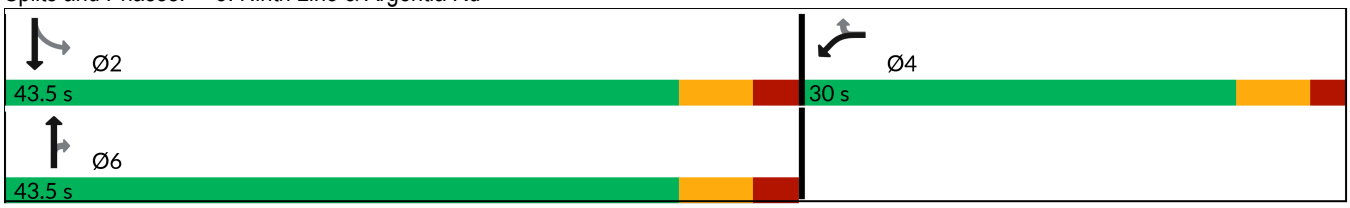


Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Volume (vph)	250	198	0	611	126	73	453	0	0	0
Future Volume (vph)	250	198	0	611	126	73	453	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0		100.0	45.0		0.0	0.0	0.0
Storage Lanes	1	1	0		1	1		0	0	0
Taper Length (m)	7.6		7.6			7.6			7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850					
Flt Protected	0.950					0.950				
Satd. Flow (prot)	1807	1617	0	1902	1585	1722	1883	0	0	0
Flt Permitted	0.950					0.293				
Satd. Flow (perm)	1807	1617	0	1902	1585	531	1883	0	0	0
Right Turn on Red		Yes			Yes			Yes		
Satd. Flow (RTOR)		206			131					
Link Speed (k/h)	60			60			60		48	
Link Distance (m)	1323.5			1616.5			667.9		25.4	
Travel Time (s)	79.4			97.0			40.1		1.9	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	2%	1%	3%	6%	2%	2%	2%	2%
Adj. Flow (vph)	260	206	0	636	131	76	472	0	0	0
Shared Lane Traffic (%)										
Lane Group Flow (vph)	260	206	0	636	131	76	472	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right
Median Width(m)	7.4			3.7			3.7		0.0	
Link Offset(m)	0.0			0.0			0.0		0.0	
Crosswalk Width(m)	4.9			4.9			4.9		4.9	
Two way Left Turn Lane										
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	14	24		14	24		14	24	97
Number of Detectors	1	1		2	1	1	2		1	
Detector Template	Left	Right		Thru	Right	Left	Thru		Left	
Leading Detector (m)	6.1	6.1		30.5	6.1	6.1	30.5		6.1	
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0	0.0		0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Size(m)	6.1	6.1		1.8	6.1	6.1	1.8			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Detector 2 Position(m)				28.7			28.7			
Detector 2 Size(m)				1.8			1.8			
Detector 2 Type				Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)				0.0			0.0			
Turn Type	Prot	Perm		NA	Perm	Perm	NA			
Protected Phases	4			6			2			

Lane Group	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Permitted Phases		4			6	2				
Detector Phase	4	4		6	6	2	2			
Switch Phase										
Minimum Initial (s)	20.0	20.0		10.0	10.0	10.0	10.0			
Minimum Split (s)	30.0	30.0		43.5	43.5	43.5	43.5			
Total Split (s)	30.0	30.0		43.5	43.5	43.5	43.5			
Total Split (%)	40.8%	40.8%		59.2%	59.2%	59.2%	59.2%			
Maximum Green (s)	24.0	24.0		37.0	37.0	37.0	37.0			
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0			
All-Red Time (s)	2.0	2.0		2.5	2.5	2.5	2.5			
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.0	6.0		6.5	6.5	6.5	6.5			
Lead/Lag										
Lead-Lag Optimize?										
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0			
Recall Mode	None	None		Max	Max	Max	Max			
Walk Time (s)	10.0	10.0		10.0	10.0	10.0	10.0			
Flash Don't Walk (s)	14.0	14.0		27.0	27.0	27.0	27.0			
Pedestrian Calls (#/hr)	0	0		0	0	0	0			
Act Effct Green (s)	20.3	20.3		37.0	37.0	37.0	37.0			
Actuated g/C Ratio	0.29	0.29		0.53	0.53	0.53	0.53			
v/c Ratio	0.50	0.33		0.63	0.15	0.27	0.47			
Control Delay (s/veh)	24.3	4.8		15.2	2.2	12.4	12.4			
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0			
Total Delay (s/veh)	24.3	4.8		15.2	2.2	12.4	12.4			
LOS	C	A		B	A	B	B			
Approach Delay (s/veh)	15.7			13.0			12.4			
Approach LOS	B			B			B			

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 69.8			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 13.5		Intersection LOS: B	
Intersection Capacity Utilization 73.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	260	206	636	131	76	472
v/c Ratio	0.50	0.33	0.63	0.15	0.27	0.47
Control Delay (s/veh)	24.3	4.8	15.2	2.2	12.4	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	4.8	15.2	2.2	12.4	12.4
Queue Length 50th (m)	28.1	0.0	53.9	0.0	5.2	35.8
Queue Length 95th (m)	48.2	13.2	89.4	7.0	14.2	60.0
Internal Link Dist (m)	1299.5		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	621	691	1008	902	281	998
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.30	0.63	0.15	0.27	0.47

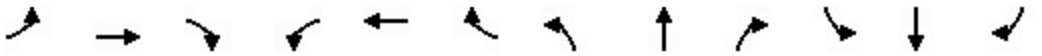
Intersection Summary



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations										
Traffic Volume (veh/h)	250	198	0	611	126	73	453	0	0	0
Future Volume (veh/h)	250	198	0	611	126	73	453	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach	No			No			No			
Adj Sat Flow, veh/h/ln	1885	1885	0	1885	1856	1811	1870	0		
Adj Flow Rate, veh/h	260	206	0	636	131	76	472	0		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	1	1	0	1	3	6	2	0		
Cap, veh/h	517	460	0	1004	837	303	996	0		
Arrive On Green	0.29	0.29	0.00	0.53	0.53	0.53	0.53	0.00		
Sat Flow, veh/h	1795	1598	0	1885	1572	679	1870	0		
Grp Volume(v), veh/h	260	206	0	636	131	76	472	0		
Grp Sat Flow(s),veh/h/ln	1795	1598	0	1885	1572	679	1870	0		
Q Serve(g_s), s	8.4	7.3	0.0	16.5	3.0	6.2	11.0	0.0		
Cycle Q Clear(g_c), s	8.4	7.3	0.0	16.5	3.0	22.7	11.0	0.0		
Prop In Lane	1.00	1.00	0.00		1.00	1.00		0.00		
Lane Grp Cap(c), veh/h	517	460	0	1004	837	303	996	0		
V/C Ratio(X)	0.50	0.45	0.00	0.63	0.16	0.25	0.47	0.00		
Avail Cap(c_a), veh/h	620	552	0	1004	837	303	996	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	20.6	20.2	0.0	11.5	8.3	19.5	10.2	0.0		
Incr Delay (d2), s/veh	0.8	0.7	0.0	3.0	0.4	2.0	1.6	0.0		
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.9	0.7	0.0	0.8	0.1	0.4	0.4	0.0		
Unsig. Movement Delay, s/veh										
LnGrp Delay(d), s/veh	21.4	20.9	0.0	14.5	8.7	21.5	11.8	0.0		
LnGrp LOS	C	C		B	A	C	B			
Approach Vol, veh/h	466			767			548			
Approach Delay, s/veh	21.2			13.5			13.1			
Approach LOS	C			B			B			

Timer - Assigned Phs		2		4		6				
Phs Duration (G+Y+Rc), s		43.5		26.0		43.5				
Change Period (Y+Rc), s		6.5		6.0		6.5				
Max Green Setting (Gmax), s		37.0		24.0		37.0				
Max Q Clear Time (g_c+I1), s		24.7		10.4		18.5				
Green Ext Time (p_c), s		5.7		2.3		10.0				

Intersection Summary										
HCM 6th Ctrl Delay, s/veh			15.4							
HCM 6th LOS			B							



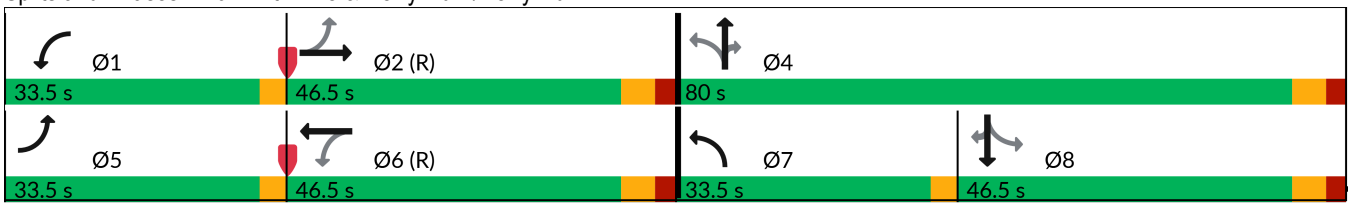
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	626	130	164	885	52	80	434	144	43	325	257
Future Volume (vph)	257	626	130	164	885	52	80	434	144	43	325	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00					0.99	1.00		
Frt		0.974			0.992				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	3513	0	1807	3583	0	1755	1902	1601	1825	1902	1601
Flt Permitted	0.169			0.281			0.174			0.248		
Satd. Flow (perm)	321	3513	0	534	3583	0	321	1902	1579	476	1902	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			4				153			273
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	4%	1%	2%	0%	1%	2%
Adj. Flow (vph)	273	666	138	174	941	55	85	462	153	46	346	273
Shared Lane Traffic (%)												
Lane Group Flow (vph)	273	804	0	174	996	0	85	462	153	46	346	273
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.5	40.5	40.5	40.5	40.5
Total Split (s)	33.5	46.5		33.5	46.5		33.5	80.0	80.0	46.5	46.5	46.5
Total Split (%)	20.9%	29.1%		20.9%	29.1%		20.9%	50.0%	50.0%	29.1%	29.1%	29.1%
Maximum Green (s)	30.5	40.0		30.5	40.0		30.5	73.5	73.5	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	None
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	100.7	78.5		93.9	74.2		52.8	49.3	49.3	35.2	35.2	35.2
Actuated g/C Ratio	0.63	0.49		0.59	0.46		0.33	0.31	0.31	0.22	0.22	0.22
v/c Ratio	0.70	0.46		0.39	0.60		0.41	0.79	0.26	0.44	0.83	0.48
Control Delay (s/veh)	25.9	29.9		16.7	36.7		41.4	59.9	5.5	65.3	75.6	7.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	29.9		16.7	36.7		41.4	59.9	5.5	65.3	75.6	7.6
LOS	C	C		B	D		D	E	A	E	E	A
Approach Delay (s/veh)		28.9			33.7			45.8			47.0	
Approach LOS		C			C			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 154 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay (s/veh): 37.1 Intersection LOS: D
Intersection Capacity Utilization 91.3% ICU Level of Service F
Analysis Period (min) 15

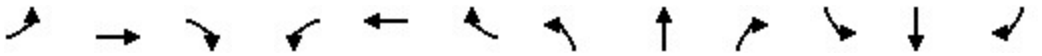
Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	273	804	174	996	85	462	153	46	346	273
v/c Ratio	0.70	0.46	0.39	0.60	0.41	0.79	0.26	0.44	0.83	0.48
Control Delay (s/veh)	25.9	29.9	16.7	36.7	41.4	59.9	5.5	65.3	75.6	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	29.9	16.7	36.7	41.4	59.9	5.5	65.3	75.6	7.6
Queue Length 50th (m)	36.2	86.3	21.7	122.2	19.7	136.0	0.0	12.8	107.0	0.0
Queue Length 95th (m)	69.8	132.0	40.7	188.6	29.4	157.2	14.8	25.2	133.4	22.4
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	487	1731	577	1664	379	873	808	122	487	613
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.46	0.30	0.60	0.22	0.53	0.19	0.38	0.71	0.45

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	626	130	164	885	52	80	434	144	43	325	257
Future Volume (veh/h)	257	626	130	164	885	52	80	434	144	43	325	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1885	1885	1870	1841	1885	1870	1900	1885	1870
Adj Flow Rate, veh/h	273	666	138	174	941	55	85	462	153	46	346	273
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	0	1	1	2	4	1	2	0	1	2
Cap, veh/h	389	1565	324	428	1728	101	184	577	485	111	449	377
Arrive On Green	0.09	0.53	0.53	0.06	0.50	0.50	0.05	0.31	0.31	0.24	0.24	0.24
Sat Flow, veh/h	1795	2954	611	1795	3439	201	1753	1885	1583	820	1885	1583
Grp Volume(v), veh/h	273	404	400	174	490	506	85	462	153	46	346	273
Grp Sat Flow(s),veh/h/ln	1795	1791	1774	1795	1791	1849	1753	1885	1583	820	1885	1583
Q Serve(g_s), s	11.3	21.9	21.9	7.4	30.0	30.0	5.7	36.0	11.9	8.7	27.4	25.4
Cycle Q Clear(g_c), s	11.3	21.9	21.9	7.4	30.0	30.0	5.7	36.0	11.9	33.9	27.4	25.4
Prop In Lane	1.00		0.34	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	389	949	940	428	900	929	184	577	485	111	449	377
V/C Ratio(X)	0.70	0.43	0.43	0.41	0.54	0.54	0.46	0.80	0.32	0.41	0.77	0.72
Avail Cap(c_a), veh/h	567	949	940	655	900	929	432	866	727	121	471	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	22.8	22.9	17.9	27.3	27.3	44.2	51.0	42.6	71.6	56.9	56.1
Incr Delay (d2), s/veh	2.1	1.2	1.3	0.6	2.4	2.3	1.8	3.2	0.4	2.4	7.3	6.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.3	5.3	1.6	7.9	8.2	1.9	12.5	3.4	1.5	10.5	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.8	24.1	24.1	18.6	29.6	29.6	46.0	54.3	43.0	74.0	64.2	62.2
LnGrp LOS	C	C	C	B	C	C	D	D	D	E	E	E
Approach Vol, veh/h		1077			1170			700			665	
Approach Delay, s/veh		23.8			28.0			50.8			64.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	91.3		55.5	17.6	86.9	10.9	44.6				
Change Period (Y+Rc), s	3.0	6.5		6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	30.5	40.0		73.5	30.5	40.0	30.5	40.0				
Max Q Clear Time (g_c+I1), s	9.4	23.9		38.0	13.3	32.0	7.7	35.9				
Green Ext Time (p_c), s	0.8	9.7		10.0	1.3	6.3	0.3	2.2				

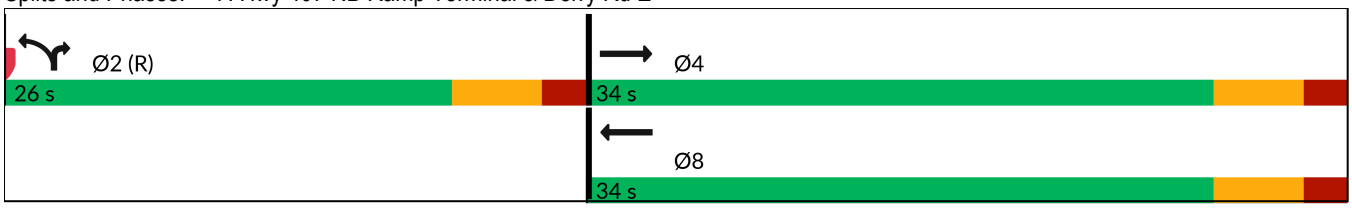
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			37.8									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	891	70	0	1159	40	145
Future Volume (vph)	891	70	0	1159	40	145
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	0.97	1.00
Frt	0.989					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3369	0	0	3424	3106	1517
Flt Permitted					0.950	
Satd. Flow (perm)	3369	0	0	3424	3106	1517
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	18					82
Link Speed (k/h)	80			48	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			18.2	30.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	8%	2%	1%	8%	2%
Adj. Flow (vph)	909	71	0	1183	41	148
Shared Lane Traffic (%)						
Lane Group Flow (vph)	980	0	0	1183	41	148
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases						
Detector Phase	4			8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0			8.0	8.0	8.0
Minimum Split (s)	26.0			26.0	26.0	26.0
Total Split (s)	34.0			34.0	26.0	26.0
Total Split (%)	56.7%			56.7%	43.3%	43.3%
Maximum Green (s)	28.0			28.0	20.0	20.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	Max			Max	C-Min	C-Min
Walk Time (s)	8.0			8.0	8.0	8.0
Flash Don't Walk (s)	12.0			12.0	12.0	12.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	38.6			38.6	9.4	9.4
Actuated g/C Ratio	0.64			0.64	0.16	0.16
v/c Ratio	0.45			0.54	0.08	0.48
Control Delay (s/veh)	4.8			7.3	20.9	16.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	4.8			7.3	20.9	16.8
LOS	A			A	C	B
Approach Delay (s/veh)	4.8			7.3	17.7	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 50.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E





Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	980	1183	41	148
v/c Ratio	0.45	0.54	0.08	0.48
Control Delay (s/veh)	4.8	7.3	20.9	16.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.8	7.3	20.9	16.8
Queue Length 50th (m)	13.6	28.5	2.2	6.8
Queue Length 95th (m)	30.8	54.1	5.4	19.2
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2171	2200	1035	560
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.54	0.04	0.26

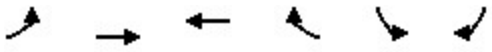
Intersection Summary



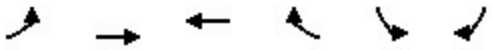
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	891	70	0	1159	40	145
Future Volume (veh/h)	891	70	0	1159	40	145
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1786	1688	0	1786	1688	1772
Adj Flow Rate, veh/h	909	71	0	1183	41	148
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	8	0	1	8	2
Cap, veh/h	1488	116	0	1584	1039	501
Arrive On Green	0.47	0.47	0.00	0.47	0.33	0.33
Sat Flow, veh/h	3278	249	0	3572	3118	1502
Grp Volume(v), veh/h	484	496	0	1183	41	148
Grp Sat Flow(s),veh/h/ln	1697	1741	0	1697	1559	1502
Q Serve(g_s), s	12.8	12.8	0.0	17.1	0.5	4.4
Cycle Q Clear(g_c), s	12.8	12.8	0.0	17.1	0.5	4.4
Prop In Lane		0.14	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	792	813	0	1584	1039	501
V/C Ratio(X)	0.61	0.61	0.00	0.75	0.04	0.30
Avail Cap(c_a), veh/h	792	813	0	1584	1039	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.80	1.00	1.00
Uniform Delay (d), s/veh	11.9	11.9	0.0	13.1	13.5	14.8
Incr Delay (d2), s/veh	3.5	3.4	0.0	2.6	0.1	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.0	0.6	0.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	15.3	0.0	15.7	13.6	16.3
LnGrp LOS	B	B		B	B	B
Approach Vol, veh/h	980			1183	189	
Approach Delay, s/veh	15.4			15.7	15.7	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	26.0	34.0	34.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	20.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	6.4	14.8	19.1
Green Ext Time (p_c), s	0.8	9.7	7.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	15.6
HCM 6th LOS	B



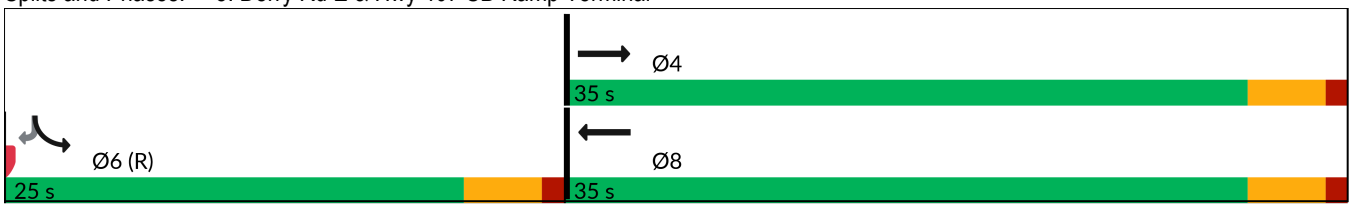
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	811	1038	147	166	235
Future Volume (vph)	0	811	1038	147	166	235
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.981			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3355	0	3288	1532
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3355	0	3288	1532
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			38			68
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	1%	2%	2%	1%
Adj. Flow (vph)	0	828	1059	150	169	240
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	828	1209	0	169	240
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

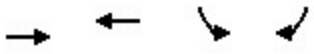


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		35.0	35.0		25.0	25.0
Total Split (%)		58.3%	58.3%		41.7%	41.7%
Maximum Green (s)		30.5	30.5		20.5	20.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		38.7	38.7		12.3	12.3
Actuated g/C Ratio		0.65	0.65		0.21	0.21
v/c Ratio		0.38	0.56		0.25	0.65
Control Delay (s/veh)		6.4	5.1		19.4	23.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		6.4	5.1		19.4	23.3
LOS		A	A		B	C
Approach Delay (s/veh)		6.4	5.1		21.7	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 8.3		Intersection LOS: A	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

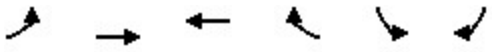
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	828	1209	169	240
v/c Ratio	0.38	0.56	0.25	0.65
Control Delay (s/veh)	6.4	5.1	19.4	23.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.4	5.1	19.4	23.3
Queue Length 50th (m)	18.9	16.5	8.1	17.2
Queue Length 95th (m)	37.8	25.4	13.1	32.1
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2187	2178	1123	568
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.38	0.56	0.15	0.42

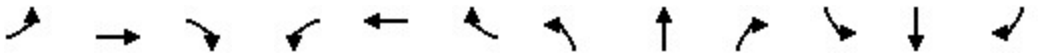
Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	811	1038	147	166	235
Future Volume (veh/h)	0	811	1038	147	166	235
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1786	1772	1772	1786
Adj Flow Rate, veh/h	0	828	1059	150	169	240
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	1	2	2	1
Cap, veh/h	0	1711	1517	215	1119	517
Arrive On Green	0.00	0.51	0.51	0.51	0.34	0.34
Sat Flow, veh/h	0	3544	3074	422	3274	1514
Grp Volume(v), veh/h	0	828	601	608	169	240
Grp Sat Flow(s),veh/h/ln	0	1683	1697	1710	1637	1514
Q Serve(g_s), s	0.0	9.6	16.2	16.3	2.2	7.4
Cycle Q Clear(g_c), s	0.0	9.6	16.2	16.3	2.2	7.4
Prop In Lane	0.00			0.25	1.00	1.00
Lane Grp Cap(c), veh/h	0	1711	862	869	1119	517
V/C Ratio(X)	0.00	0.48	0.70	0.70	0.15	0.46
Avail Cap(c_a), veh/h	0	1711	862	869	1119	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.6	11.2	11.2	13.7	15.5
Incr Delay (d2), s/veh	0.0	1.0	4.6	4.6	0.3	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	1.1	1.1	0.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.6	15.9	15.9	14.0	18.4
LnGrp LOS		B	B	B	B	B
Approach Vol, veh/h		828	1209		409	
Approach Delay, s/veh		10.6	15.9		16.6	
Approach LOS		B	B		B	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		35.0		25.0	35.0
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		30.5		20.5	30.5
Max Q Clear Time (g_c+I1), s		11.6		9.4	18.3
Green Ext Time (p_c), s		11.5		1.8	10.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.2
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	263	3	537	2	1125	202	0	1475	386
Future Volume (veh/h)	0	0	0	263	3	537	2	1125	202	0	1475	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	0	1772	1674	1800	1505	1800	1716	1702	0	1674	1575
Adj Flow Rate, veh/h	0	0	0	279	0	565	2	1184	213	0	1553	406
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	9	0	21	0	6	7	0	9	16
Cap, veh/h	0	0	0	831	0	663	145	1782	319	0	2947	861
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.65	0.65	0.65	0.00	0.65	0.65
Sat Flow, veh/h		0		3188	0	2546	216	2763	494	0	4720	1335
Grp Volume(v), veh/h		0.0		279	0	565	2	696	701	0	1553	406
Grp Sat Flow(s),veh/h/ln				1594	0	1273	216	1630	1627	0	1523	1335
Q Serve(g_s), s				11.3	0.0	33.7	0.8	42.3	43.0	0.0	29.2	24.8
Cycle Q Clear(g_c), s				11.3	0.0	33.7	30.0	42.3	43.0	0.0	29.2	24.8
Prop In Lane				1.00		1.00	1.00		0.30	0.00		1.00
Lane Grp Cap(c), veh/h				831	0	663	145	1051	1049	0	2947	861
V/C Ratio(X)				0.34	0.00	0.85	0.01	0.66	0.67	0.00	0.53	0.47
Avail Cap(c_a), veh/h				1096	0	875	145	1051	1049	0	2947	861
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.9	0.0	56.2	23.3	17.6	17.7	0.0	15.3	14.5
Incr Delay (d2), s/veh				0.2	0.0	6.3	0.2	3.3	3.4	0.0	0.7	1.8
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.3	0.0	8.4	0.0	6.4	6.5	0.0	3.7	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				48.2	0.0	62.5	23.5	20.9	21.1	0.0	15.9	16.3
LnGrp LOS				D		E	C	C	C		B	B
Approach Vol, veh/h					844			1399			1959	
Approach Delay, s/veh					57.8			21.0			16.0	
Approach LOS					E			C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	110.7	49.3	110.7
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	46.9	55.0	68.4
Max Q Clear Time (g_c+I1), s	31.2	35.7	45.0
Green Ext Time (p_c), s	14.7	5.9	20.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	26.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



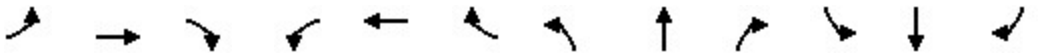
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	547	245	0	799	876	730
Future Volume (veh/h)	547	245	0	799	876	730
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1674	1758	0	1758	1702	1646
Adj Flow Rate, veh/h	576	258	0	841	922	768
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	3	0	3	7	11
Cap, veh/h	719	336	0	3237	2089	973
Arrive On Green	0.23	0.23	0.00	0.67	0.67	0.67
Sat Flow, veh/h	3188	1490	0	5115	3250	1442
Grp Volume(v), veh/h	576	258	0	841	922	768
Grp Sat Flow(s),veh/h/ln	1594	1490	0	1600	1549	1442
Q Serve(g_s), s	27.3	26.0	0.0	11.1	22.1	59.3
Cycle Q Clear(g_c), s	27.3	26.0	0.0	11.1	22.1	59.3
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	719	336	0	3237	2089	973
V/C Ratio(X)	0.80	0.77	0.00	0.26	0.44	0.79
Avail Cap(c_a), veh/h	1435	670	0	3237	2089	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.85	1.00	1.00
Uniform Delay (d), s/veh	58.6	58.0	0.0	10.3	12.1	18.1
Incr Delay (d2), s/veh	2.1	3.7	0.0	0.2	0.7	6.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.8	0.0	1.1	2.3	7.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	60.7	61.7	0.0	10.4	12.7	24.6
LnGrp LOS	E	E		B	B	C
Approach Vol, veh/h	834			841	1690	
Approach Delay, s/veh	61.0			10.4	18.1	
Approach LOS	E			B	B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	115.4	44.6	115.4
Change Period (Y+Rc), s	7.5	8.5	7.5
Max Green Setting (Gmax), s	72.0	72.0	72.0
Max Q Clear Time (g_c+I1), s	13.1	29.3	61.3
Green Ext Time (p_c), s	21.4	6.8	10.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	26.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



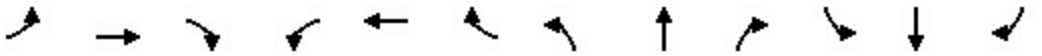
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	211	57	74	93	135	77	1153	95	272	531	167
Future Volume (veh/h)	324	211	57	74	93	135	77	1153	95	272	531	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1870	1811	1870	1781	1870	1870	1841	1856	1796	1752
Adj Flow Rate, veh/h	341	222	60	78	98	142	81	1214	0	286	559	176
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	1	2	6	2	8	2	2	4	3	7	10
Cap, veh/h	393	1107	546	359	802	479	147	2059		337	2250	850
Arrive On Green	0.12	0.31	0.31	0.05	0.23	0.23	0.04	0.40	0.00	0.10	0.46	0.46
Sat Flow, veh/h	3374	3582	1550	1725	3554	1464	3456	5106	1560	3428	4904	1476
Grp Volume(v), veh/h	341	222	60	78	98	142	81	1214	0	286	559	176
Grp Sat Flow(s),veh/h/ln	1687	1791	1550	1725	1777	1464	1728	1702	1560	1714	1635	1476
Q Serve(g_s), s	15.9	7.3	4.2	5.5	3.5	11.6	3.7	29.8	0.0	13.1	11.1	9.2
Cycle Q Clear(g_c), s	15.9	7.3	4.2	5.5	3.5	11.6	3.7	29.8	0.0	13.1	11.1	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1107	546	359	802	479	147	2059		337	2250	850
V/C Ratio(X)	0.87	0.20	0.11	0.22	0.12	0.30	0.55	0.59		0.85	0.25	0.21
Avail Cap(c_a), veh/h	464	1397	672	373	1044	578	173	2059		407	2250	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	69.5	40.7	35.0	44.5	49.3	40.5	75.1	37.4	0.0	71.0	26.4	16.4
Incr Delay (d2), s/veh	14.1	0.1	0.1	0.3	0.1	0.3	3.2	1.2	0.0	10.8	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.3	1.1	1.7	1.2	3.0	1.4	8.3	0.0	5.0	2.7	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	83.6	40.8	35.1	44.8	49.4	40.8	78.3	38.6	0.0	81.8	26.6	16.8
LnGrp LOS	F	D	D	D	D	D	E	D		F	C	B
Approach Vol, veh/h		623			318			1295			1021	
Approach Delay, s/veh		63.7			44.4			41.1			40.4	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	80.9	23.7	43.6	20.7	72.0	10.3	57.0
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	8.0	58.0	22.0	47.0	19.0	47.0	8.6	62.4
Max Q Clear Time (g_c+I1), s	5.7	13.1	17.9	13.6	15.1	31.8	7.5	9.3
Green Ext Time (p_c), s	0.1	13.4	0.8	2.5	0.6	12.4	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	45.5
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	319	38	69	168	10	87	3	214	2	3	1
Future Volume (veh/h)	3	319	38	69	168	10	87	3	214	2	3	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1826	1826	1900	1900	1900	1885	1159	1900	1900
Adj Flow Rate, veh/h	3	332	40	72	175	10	91	3	223	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	0	5	5	0	0	0	1	50	0	0
Cap, veh/h	627	807	702	531	1005	882	444	6	420	198	198	66
Arrive On Green	0.44	0.44	0.44	0.07	0.55	0.55	0.08	0.26	0.26	0.15	0.15	0.15
Sat Flow, veh/h	1212	1841	1601	1739	1826	1603	1810	21	1588	713	1362	454
Grp Volume(v), veh/h	3	332	40	72	175	10	91	0	226	2	0	4
Grp Sat Flow(s),veh/h/ln	1212	1841	1601	1739	1826	1603	1810	0	1610	713	0	1816
Q Serve(g_s), s	0.1	9.3	1.1	1.5	3.6	0.2	3.0	0.0	9.1	0.2	0.0	0.1
Cycle Q Clear(g_c), s	0.1	9.3	1.1	1.5	3.6	0.2	3.0	0.0	9.1	0.3	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.25
Lane Grp Cap(c), veh/h	627	807	702	531	1005	882	444	0	425	198	0	264
V/C Ratio(X)	0.00	0.41	0.06	0.14	0.17	0.01	0.21	0.00	0.53	0.01	0.00	0.02
Avail Cap(c_a), veh/h	627	807	702	601	1005	882	505	0	950	407	0	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	14.5	12.2	9.4	8.4	7.7	22.3	0.0	23.8	27.7	0.0	27.6
Incr Delay (d2), s/veh	0.0	1.6	0.2	0.1	0.4	0.0	0.2	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.0	0.0	0.1	0.0	0.5	0.0	1.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.9	16.1	12.4	9.5	8.8	7.7	22.5	0.0	24.8	27.7	0.0	27.6
LnGrp LOS	B	B	B	A	A	A	C		C	C		C
Approach Vol, veh/h		375			257			317			6	
Approach Delay, s/veh		15.6			9.0			24.1			27.7	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	8.5	40.5		26.4		49.0	9.0	17.5				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	3.5	11.3		11.1		5.6	5.0	2.3				
Green Ext Time (p_c), s	0.1	4.8		4.3		2.9	0.1	0.0				

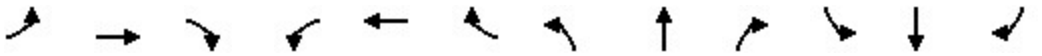
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.7									
HCM 6th LOS			B									



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	29	324	217	95	587
Future Volume (veh/h)	46	29	324	217	95	587
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1870	1870	1870	1856
Adj Flow Rate, veh/h	49	31	348	233	102	631
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	7	7	2	2	2	3
Cap, veh/h	113	101	1346	1141	686	1336
Arrive On Green	0.07	0.07	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1711	1522	1870	1585	833	1856
Grp Volume(v), veh/h	49	31	348	233	102	631
Grp Sat Flow(s),veh/h/ln	1711	1522	1870	1585	833	1856
Q Serve(g_s), s	1.4	1.0	3.3	2.5	2.5	7.4
Cycle Q Clear(g_c), s	1.4	1.0	3.3	2.5	5.8	7.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	113	101	1346	1141	686	1336
V/C Ratio(X)	0.43	0.31	0.26	0.20	0.15	0.47
Avail Cap(c_a), veh/h	599	533	1346	1141	686	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.9	2.5	2.4	3.5	3.1
Incr Delay (d2), s/veh	2.6	1.7	0.5	0.4	0.5	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.2	0.1	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.7	24.6	2.9	2.8	3.9	4.3
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	80		581			733
Approach Delay, s/veh	25.2		2.9			4.2
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	7.9
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		9.4			5.3	3.4
Green Ext Time (p_c), s		13.0			7.7	0.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	4.9
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	714	38	84	391	25	105	256	127	24	335	302
Future Volume (veh/h)	173	714	38	84	391	25	105	256	127	24	335	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1811	1811	1885	1900	1841	1841	1856	1900	1856	1841
Adj Flow Rate, veh/h	178	736	39	87	403	26	108	264	131	25	345	311
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	2	6	6	1	0	4	4	3	0	3	4
Cap, veh/h	578	1819	96	463	1747	112	207	603	515	261	465	391
Arrive On Green	0.12	1.00	1.00	0.04	0.51	0.51	0.06	0.33	0.33	0.25	0.25	0.25
Sat Flow, veh/h	1767	3433	182	1725	3417	220	1753	1841	1572	1005	1856	1560
Grp Volume(v), veh/h	178	381	394	87	211	218	108	264	131	25	345	311
Grp Sat Flow(s),veh/h/ln	1767	1777	1838	1725	1791	1846	1753	1841	1572	1005	1856	1560
Q Serve(g_s), s	7.8	0.0	0.0	3.8	10.4	10.5	7.1	18.0	9.8	3.2	27.4	29.9
Cycle Q Clear(g_c), s	7.8	0.0	0.0	3.8	10.4	10.5	7.1	18.0	9.8	9.0	27.4	29.9
Prop In Lane	1.00		0.10	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	578	941	974	463	915	943	207	603	515	261	465	391
V/C Ratio(X)	0.31	0.40	0.40	0.19	0.23	0.23	0.52	0.44	0.25	0.10	0.74	0.79
Avail Cap(c_a), veh/h	579	941	974	497	915	943	270	909	776	389	702	590
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	16.8	21.7	21.7	42.4	42.3	39.5	50.6	55.2	56.1
Incr Delay (d2), s/veh	0.3	1.2	1.1	0.2	0.6	0.6	2.0	0.5	0.3	0.2	2.3	4.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.3	0.3	0.8	2.6	2.7	2.3	5.8	2.7	0.6	9.6	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	1.2	1.1	17.0	22.2	22.3	44.5	42.8	39.7	50.8	57.5	60.5
LnGrp LOS	B	A	A	B	C	C	D	D	D	D	E	E
Approach Vol, veh/h		953			516			503			681	
Approach Delay, s/veh		3.8			21.4			42.3			58.6	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	91.3		58.9	12.8	88.3	12.2	46.6				
Change Period (Y+Rc), s	3.0	6.5		* 6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	55.5		* 79	10.0	55.5	15.0	60.5				
Max Q Clear Time (g_c+I1), s	5.8	2.0		20.0	9.8	12.5	9.1	31.9				
Green Ext Time (p_c), s	0.1	18.1		5.9	0.0	8.1	0.2	8.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			28.6									
HCM 6th LOS			C									

Notes

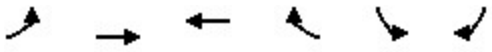
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	832	200	1	668	11	126
Future Volume (veh/h)	832	200	1	668	11	126
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1758	1477	1758
Adj Flow Rate, veh/h	858	206	1	689	11	130
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	3	23	3
Cap, veh/h	1481	355	45	1802	870	475
Arrive On Green	0.55	0.55	0.55	0.55	0.32	0.32
Sat Flow, veh/h	2781	646	0	3356	2729	1490
Grp Volume(v), veh/h	536	528	370	320	11	130
Grp Sat Flow(s),veh/h/ln	1683	1656	1757	1520	1365	1490
Q Serve(g_s), s	16.8	16.8	0.0	9.6	0.2	5.2
Cycle Q Clear(g_c), s	16.8	16.8	9.6	9.6	0.2	5.2
Prop In Lane		0.39	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	926	911	1011	836	870	475
V/C Ratio(X)	0.58	0.58	0.37	0.38	0.01	0.27
Avail Cap(c_a), veh/h	926	911	1011	836	870	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	11.9	11.9	10.3	10.3	18.6	20.3
Incr Delay (d2), s/veh	2.6	2.7	1.0	1.3	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.3	0.3	0.0	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.5	14.6	11.2	11.5	18.7	21.8
LnGrp LOS	B	B	B	B	B	C
Approach Vol, veh/h	1064			690	141	
Approach Delay, s/veh	14.6			11.4	21.5	
Approach LOS	B			B	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	30.0	50.0	50.0
Change Period (Y+Rc), s	4.5	6.0	6.0
Max Green Setting (Gmax), s	25.5	44.0	44.0
Max Q Clear Time (g_c+I1), s	7.2	18.8	11.6
Green Ext Time (p_c), s	0.7	17.3	12.8

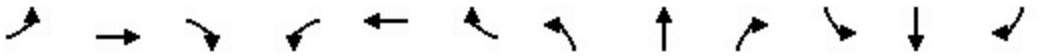
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.9
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1011	528	145	31	60
Future Volume (veh/h)	0	1011	528	145	31	60
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1758	1758	1688	1575
Adj Flow Rate, veh/h	0	1064	556	153	33	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	3	8	16
Cap, veh/h	0	2041	1570	431	877	375
Arrive On Green	0.00	0.61	0.61	0.61	0.28	0.28
Sat Flow, veh/h	0	3544	2678	710	3118	1335
Grp Volume(v), veh/h	0	1064	358	351	33	63
Grp Sat Flow(s),veh/h/ln	0	1683	1670	1630	1559	1335
Q Serve(g_s), s	0.0	14.6	8.6	8.6	0.6	2.8
Cycle Q Clear(g_c), s	0.0	14.6	8.6	8.6	0.6	2.8
Prop In Lane	0.00			0.44	1.00	1.00
Lane Grp Cap(c), veh/h	0	2041	1012	988	877	375
V/C Ratio(X)	0.00	0.52	0.35	0.36	0.04	0.17
Avail Cap(c_a), veh/h	0	2041	1012	988	877	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.1	7.9	7.9	20.9	21.7
Incr Delay (d2), s/veh	0.0	1.0	1.0	1.0	0.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.3	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.0	8.9	8.9	21.0	22.7
LnGrp LOS		B	A	A	C	C
Approach Vol, veh/h		1064	709		96	
Approach Delay, s/veh		10.0	8.9		22.1	
Approach LOS		B	A		C	

Timer - Assigned Phs	4	6	8
Phs Duration (G+Y+Rc), s	53.0	27.0	53.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	48.5	22.5	48.5
Max Q Clear Time (g_c+I1), s	16.6	4.8	10.6
Green Ext Time (p_c), s	20.9	0.4	14.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	10.2
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	21	921	12	863	5	1091	228	0	1396	434
Future Volume (veh/h)	8	0	21	921	12	863	5	1091	228	0	1396	434
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1688	0	1800	1800	1786	1800	1786	1800	1702	0	1702	1702
Adj Flow Rate, veh/h	8	0	22	968	0	899	5	1136	238	0	1454	452
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	0	0	0	1	0	1	0	7	0	7	7
Cap, veh/h	0	0	0	1158	0	1030	175	1600	333	0	2639	819
Arrive On Green	0.00	0.00	0.00	0.34	0.00	0.34	0.57	0.57	0.57	0.00	0.57	0.57
Sat Flow, veh/h		0		3429	0	3051	349	2818	587	0	4799	1442
Grp Volume(v), veh/h		0.0		968	0	899	5	687	687	0	1454	452
Grp Sat Flow(s),veh/h/ln				1714	0	1525	349	1710	1694	0	1549	1442
Q Serve(g_s), s				41.7	0.0	44.3	1.5	46.4	47.2	0.0	31.5	31.6
Cycle Q Clear(g_c), s				41.7	0.0	44.3	33.0	46.4	47.2	0.0	31.5	31.6
Prop In Lane				1.00		1.00	1.00		0.35	0.00		1.00
Lane Grp Cap(c), veh/h				1158	0	1030	175	971	962	0	2639	819
V/C Ratio(X)				0.84	0.00	0.87	0.03	0.71	0.71	0.00	0.55	0.55
Avail Cap(c_a), veh/h				1209	0	1075	175	971	962	0	2639	819
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				48.9	0.0	49.8	32.1	25.0	25.1	0.0	21.7	21.7
Incr Delay (d2), s/veh				5.1	0.0	7.8	0.3	4.3	4.5	0.0	0.8	2.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.1	0.0	12.7	0.1	10.3	10.4	0.0	5.8	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				54.0	0.0	57.6	32.4	29.3	29.6	0.0	22.6	24.4
LnGrp LOS				D		E	C	C	C		C	C
Approach Vol, veh/h					1867			1379			1906	
Approach Delay, s/veh					55.7			29.5			23.0	
Approach LOS					E			C			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	98.4	61.6	98.4
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	71.2	56.4	71.2
Max Q Clear Time (g_c+I1), s	33.6	46.3	49.2
Green Ext Time (p_c), s	32.4	7.8	18.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	36.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



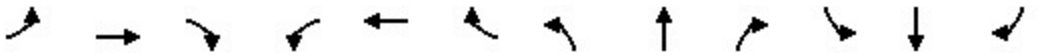
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	389	377	4	933	1707	572
Future Volume (veh/h)	389	377	4	933	1707	572
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1603	1744	1772	1744	1772	1772
Adj Flow Rate, veh/h	535	272	4	993	1816	609
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	4	2	4	2	2
Cap, veh/h	695	336	26	3078	2439	780
Arrive On Green	0.23	0.23	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3054	1478	4	4720	3787	1161
Grp Volume(v), veh/h	535	272	369	628	1605	820
Grp Sat Flow(s),veh/h/ln	1527	1478	1693	1444	1612	1563
Q Serve(g_s), s	26.2	27.9	0.0	14.6	51.9	57.9
Cycle Q Clear(g_c), s	26.2	27.9	14.1	14.6	51.9	57.9
Prop In Lane	1.00	1.00	0.01			0.74
Lane Grp Cap(c), veh/h	695	336	1161	1942	2168	1051
V/C Ratio(X)	0.77	0.81	0.32	0.32	0.74	0.78
Avail Cap(c_a), veh/h	1374	665	1161	1942	2168	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.86	0.86	1.00	1.00
Uniform Delay (d), s/veh	57.9	58.5	10.9	11.0	17.1	18.1
Incr Delay (d2), s/veh	1.8	4.6	0.6	0.4	2.3	5.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	8.4	1.7	1.4	5.9	7.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	59.7	63.1	11.5	11.4	19.4	23.8
LnGrp LOS	E	E	B	B	B	C
Approach Vol, veh/h	807			997	2425	
Approach Delay, s/veh	60.8			11.4	20.9	
Approach LOS	E			B	C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		115.1		44.9		115.1
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		72.0		72.0		72.0
Max Q Clear Time (g_c+I1), s		16.6		29.9		59.9
Green Ext Time (p_c), s		25.9		6.5		12.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	26.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



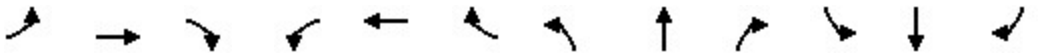
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	292	201	268	507	284	220	736	94	229	1204	353
Future Volume (veh/h)	348	292	201	268	507	284	220	736	94	229	1204	353
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1870	1885	1885	1870	1856	1885	1826	1870	1841	1870
Adj Flow Rate, veh/h	352	295	203	271	512	287	222	743	0	231	1216	357
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	4	2	1	1	2	3	1	5	2	4	2
Cap, veh/h	408	1083	596	493	1010	555	268	1866		278	1832	764
Arrive On Green	0.12	0.31	0.31	0.10	0.28	0.28	0.08	0.36	0.00	0.16	0.73	0.73
Sat Flow, veh/h	3428	3497	1524	1795	3582	1518	3428	5147	1547	3456	5025	1577
Grp Volume(v), veh/h	352	295	203	271	512	287	222	743	0	231	1216	357
Grp Sat Flow(s),veh/h/ln	1714	1749	1524	1795	1791	1518	1714	1716	1547	1728	1675	1577
Q Serve(g_s), s	16.1	10.2	15.1	16.6	19.2	23.8	10.2	17.2	0.0	10.4	20.3	14.6
Cycle Q Clear(g_c), s	16.1	10.2	15.1	16.6	19.2	23.8	10.2	17.2	0.0	10.4	20.3	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	408	1083	596	493	1010	555	268	1866		278	1832	764
V/C Ratio(X)	0.86	0.27	0.34	0.55	0.51	0.52	0.83	0.40		0.83	0.66	0.47
Avail Cap(c_a), veh/h	493	1211	652	493	1052	573	321	1866		367	1832	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.53	0.53	0.53
Uniform Delay (d), s/veh	69.2	41.6	34.6	36.0	48.1	40.1	72.7	38.0	0.0	66.1	16.5	10.7
Incr Delay (d2), s/veh	12.7	0.1	0.3	1.3	0.4	0.8	14.0	0.6	0.0	6.5	1.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	3.1	3.8	5.3	6.2	6.2	4.0	5.0	0.0	3.6	3.4	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.9	41.8	34.9	37.3	48.5	40.9	86.7	38.6	0.0	72.6	17.5	11.8
LnGrp LOS	F	D	C	D	D	D	F	D		E	B	B
Approach Vol, veh/h		850			1070			965			1804	
Approach Delay, s/veh		56.8			43.6			49.7			23.4	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	65.8	24.0	52.6	17.9	65.5	19.6	57.0
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	23.0	47.0	17.0	48.0	16.6	55.4
Max Q Clear Time (g_c+I1), s	12.2	22.3	18.1	25.8	12.4	19.2	18.6	17.1
Green Ext Time (p_c), s	0.3	22.2	0.9	9.6	0.5	13.4	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.5
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	326	109	451	466	5	64	0	281	2	4	2
Future Volume (veh/h)	1	326	109	451	466	5	64	0	281	2	4	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1826	1870	1900	1856	1841	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	351	117	485	501	5	69	0	302	2	4	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	3	5	2	0	3	4	0	0	0	0	0
Cap, veh/h	419	712	585	507	1009	825	460	0	463	227	216	108
Arrive On Green	0.38	0.38	0.38	0.11	0.53	0.53	0.07	0.00	0.29	0.18	0.18	0.18
Sat Flow, veh/h	900	1856	1523	1781	1900	1555	1753	0	1597	1086	1189	595
Grp Volume(v), veh/h	1	351	117	485	501	5	69	0	302	2	0	6
Grp Sat Flow(s),veh/h/ln	900	1856	1523	1781	1900	1555	1753	0	1597	1086	0	1784
Q Serve(g_s), s	0.1	11.2	4.0	8.5	13.1	0.1	2.3	0.0	12.9	0.1	0.0	0.2
Cycle Q Clear(g_c), s	1.7	11.2	4.0	8.5	13.1	0.1	2.3	0.0	12.9	4.6	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	419	712	585	507	1009	825	460	0	463	227	0	325
V/C Ratio(X)	0.00	0.49	0.20	0.96	0.50	0.01	0.15	0.00	0.65	0.01	0.00	0.02
Avail Cap(c_a), veh/h	419	712	585	507	1009	825	529	0	909	488	0	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.9	18.3	16.1	20.3	11.7	8.6	21.3	0.0	24.3	30.0	0.0	26.2
Incr Delay (d2), s/veh	0.0	2.4	0.8	29.4	1.7	0.0	0.1	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.4	0.4	4.1	0.5	0.0	0.4	0.0	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	20.7	16.8	49.7	13.4	8.6	21.4	0.0	25.9	30.0	0.0	26.3
LnGrp LOS	B	C	B	D	B	A	C		C	C		C
Approach Vol, veh/h		469			991			371			8	
Approach Delay, s/veh		19.8			31.2			25.0			27.2	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	11.5	37.5		29.2		49.0	8.4	20.7				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	10.5	13.2		14.9		15.1	4.3	6.6				
Green Ext Time (p_c), s	0.0	5.2		5.7		8.8	0.1	0.0				

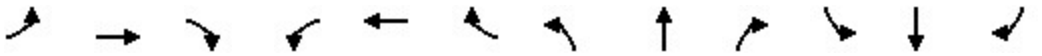
Intersection Summary			
HCM 6th Ctrl Delay, s/veh		27.0	
HCM 6th LOS		C	



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	267	203	734	131	75	545
Future Volume (veh/h)	267	203	734	131	75	545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1856	1811
Adj Flow Rate, veh/h	278	211	765	136	78	568
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	3	6
Cap, veh/h	370	329	1154	978	332	1109
Arrive On Green	0.21	0.21	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1795	1598	1885	1598	613	1811
Grp Volume(v), veh/h	278	211	765	136	78	568
Grp Sat Flow(s),veh/h/ln	1795	1598	1885	1598	613	1811
Q Serve(g_s), s	8.8	7.3	16.0	2.2	5.7	10.7
Cycle Q Clear(g_c), s	8.8	7.3	16.0	2.2	21.8	10.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	370	329	1154	978	332	1109
V/C Ratio(X)	0.75	0.64	0.66	0.14	0.23	0.51
Avail Cap(c_a), veh/h	535	476	1154	978	332	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	22.0	7.6	5.0	14.7	6.6
Incr Delay (d2), s/veh	3.5	2.1	3.0	0.3	1.7	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.7	1.0	0.1	0.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.1	24.1	10.7	5.3	16.4	8.3
LnGrp LOS	C	C	B	A	B	A
Approach Vol, veh/h	489		901			646
Approach Delay, s/veh	25.2		9.8			9.3
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	16.9
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		23.8			18.0	10.8
Green Ext Time (p_c), s		7.3			12.2	1.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	650	130	164	917	55	80	522	144	55	393	260
Future Volume (veh/h)	258	650	130	164	917	55	80	522	144	55	393	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1885	1885	1811	1841	1885	1870	1900	1885
Adj Flow Rate, veh/h	274	691	138	174	976	59	85	555	153	59	418	277
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	1	1	0	1	1	6	4	1	2	0	1
Cap, veh/h	344	1403	280	381	1509	91	194	660	573	106	556	467
Arrive On Green	0.10	0.47	0.47	0.07	0.44	0.44	0.05	0.36	0.36	0.29	0.29	0.29
Sat Flow, veh/h	1781	2975	594	1810	3431	207	1725	1841	1596	741	1900	1596
Grp Volume(v), veh/h	274	416	413	174	509	526	85	555	153	59	418	277
Grp Sat Flow(s),veh/h/ln	1781	1791	1778	1810	1791	1848	1725	1841	1596	741	1900	1596
Q Serve(g_s), s	13.0	25.6	25.6	8.4	35.6	35.6	5.4	44.3	10.9	12.7	31.9	23.8
Cycle Q Clear(g_c), s	13.0	25.6	25.6	8.4	35.6	35.6	5.4	44.3	10.9	46.5	31.9	23.8
Prop In Lane	1.00		0.33	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	845	838	381	787	812	194	660	573	106	556	467
V/C Ratio(X)	0.80	0.49	0.49	0.46	0.65	0.65	0.44	0.84	0.27	0.56	0.75	0.59
Avail Cap(c_a), veh/h	503	845	838	599	787	812	441	846	733	106	556	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	29.1	29.1	23.1	35.1	35.1	39.4	47.1	36.4	73.3	51.3	48.4
Incr Delay (d2), s/veh	4.8	1.8	1.8	0.9	4.1	4.0	1.6	6.1	0.2	6.4	5.7	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	7.0	7.0	2.1	10.6	10.9	1.6	14.8	3.0	2.1	11.7	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	30.9	30.9	23.9	39.2	39.1	40.9	53.2	36.6	79.7	57.0	50.4
LnGrp LOS	C	C	C	C	D	D	D	D	D	E	E	D
Approach Vol, veh/h		1103			1209			793			754	
Approach Delay, s/veh		31.3			36.9			48.7			56.4	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.2	82.0		63.9	19.3	76.9	10.5	53.3				
Change Period (Y+Rc), s	3.0	6.5		6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	30.5	40.0		73.5	30.5	40.0	30.5	40.0				
Max Q Clear Time (g_c+I1), s	10.4	27.6		46.3	15.0	37.6	7.4	48.5				
Green Ext Time (p_c), s	0.8	8.1		11.1	1.3	2.0	0.4	0.0				

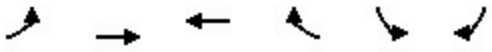
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			41.5									
HCM 6th LOS			D									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	924	70	2	1202	46	167
Future Volume (veh/h)	924	70	2	1202	46	167
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1786	1786	1688	1786	1702	1772
Adj Flow Rate, veh/h	943	71	2	1227	47	170
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	8	1	7	2
Cap, veh/h	1493	112	61	1553	1048	501
Arrive On Green	0.47	0.47	0.47	0.47	0.33	0.33
Sat Flow, veh/h	3288	241	1	3409	3144	1502
Grp Volume(v), veh/h	500	514	659	570	47	170
Grp Sat Flow(s),veh/h/ln	1697	1743	1784	1544	1572	1502
Q Serve(g_s), s	13.4	13.4	0.0	18.7	0.6	5.1
Cycle Q Clear(g_c), s	13.4	13.4	18.7	18.7	0.6	5.1
Prop In Lane		0.14	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	792	813	893	721	1048	501
V/C Ratio(X)	0.63	0.63	0.74	0.79	0.04	0.34
Avail Cap(c_a), veh/h	792	813	893	721	1048	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	12.1	12.1	13.5	13.5	13.5	15.0
Incr Delay (d2), s/veh	3.8	3.7	4.1	6.5	0.1	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	1.0	1.3	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.9	15.8	17.6	20.1	13.6	16.9
LnGrp LOS	B	B	B	C	B	B
Approach Vol, veh/h	1014			1229	217	
Approach Delay, s/veh	15.9			18.7	16.2	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	26.0	34.0	34.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	20.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	7.1	15.4	20.7
Green Ext Time (p_c), s	0.9	9.5	6.5

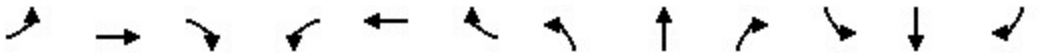
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.3
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	841	1076	148	190	269
Future Volume (veh/h)	0	841	1076	148	190	269
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1786	1786	1772	1786
Adj Flow Rate, veh/h	0	858	1098	151	194	274
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	1	1	2	1
Cap, veh/h	0	1711	1524	209	1119	517
Arrive On Green	0.00	0.51	0.51	0.51	0.34	0.34
Sat Flow, veh/h	0	3544	3086	411	3274	1514
Grp Volume(v), veh/h	0	858	621	628	194	274
Grp Sat Flow(s),veh/h/ln	0	1683	1697	1712	1637	1514
Q Serve(g_s), s	0.0	10.1	17.0	17.1	2.5	8.7
Cycle Q Clear(g_c), s	0.0	10.1	17.0	17.1	2.5	8.7
Prop In Lane	0.00			0.24	1.00	1.00
Lane Grp Cap(c), veh/h	0	1711	862	870	1119	517
V/C Ratio(X)	0.00	0.50	0.72	0.72	0.17	0.53
Avail Cap(c_a), veh/h	0	1711	862	870	1119	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.7	11.4	11.5	13.8	15.9
Incr Delay (d2), s/veh	0.0	1.1	5.1	5.2	0.3	3.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.2	1.2	0.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.8	16.6	16.6	14.2	19.7
LnGrp LOS		B	B	B	B	B
Approach Vol, veh/h		858	1249		468	
Approach Delay, s/veh		10.8	16.6		17.4	
Approach LOS		B	B		B	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		35.0		25.0	35.0
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		30.5		20.5	30.5
Max Q Clear Time (g_c+I1), s		12.1		10.7	19.1
Green Ext Time (p_c), s		11.6		2.0	9.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	289	3	591	2	1183	202	0	1551	386
Future Volume (veh/h)	0	0	0	289	3	591	2	1183	202	0	1551	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	0	1772	1674	1800	1505	1800	1716	1702	0	1674	1575
Adj Flow Rate, veh/h	0	0	0	306	0	622	2	1245	213	0	1633	406
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	9	0	21	0	6	7	0	9	16
Cap, veh/h	0	0	0	899	0	718	128	1738	295	0	2850	833
Arrive On Green	0.00	0.00	0.00	0.28	0.00	0.28	0.62	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h		0		3188	0	2547	199	2787	473	0	4720	1335
Grp Volume(v), veh/h		0.0		306	0	622	2	724	734	0	1633	406
Grp Sat Flow(s),veh/h/ln				1594	0	1273	199	1630	1631	0	1523	1335
Q Serve(g_s), s				12.2	0.0	37.1	0.9	48.2	49.3	0.0	33.5	26.3
Cycle Q Clear(g_c), s				12.2	0.0	37.1	34.4	48.2	49.3	0.0	33.5	26.3
Prop In Lane				1.00		1.00	1.00		0.29	0.00		1.00
Lane Grp Cap(c), veh/h				899	0	718	128	1017	1017	0	2850	833
V/C Ratio(X)				0.34	0.00	0.87	0.02	0.71	0.72	0.00	0.57	0.49
Avail Cap(c_a), veh/h				1096	0	875	128	1017	1017	0	2850	833
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				45.6	0.0	54.6	27.7	20.4	20.6	0.0	17.6	16.3
Incr Delay (d2), s/veh				0.2	0.0	7.8	0.2	4.2	4.4	0.0	0.8	2.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.5	0.0	9.3	0.0	8.3	8.5	0.0	4.8	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				45.9	0.0	62.4	27.9	24.6	25.0	0.0	18.5	18.3
LnGrp LOS				D		E	C	C	C		B	B
Approach Vol, veh/h					928			1460			2039	
Approach Delay, s/veh					57.0			24.8			18.4	
Approach LOS					E			C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	107.3	52.7	107.3
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	46.9	55.0	68.4
Max Q Clear Time (g_c+I1), s	35.5	39.1	51.3
Green Ext Time (p_c), s	11.0	6.0	15.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



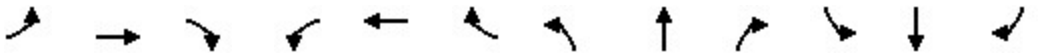
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	601	269	0	840	921	730
Future Volume (veh/h)	601	269	0	840	921	730
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1674	1758	0	1758	1702	1646
Adj Flow Rate, veh/h	633	283	0	884	969	768
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	3	0	3	7	11
Cap, veh/h	786	367	0	3136	2024	942
Arrive On Green	0.25	0.25	0.00	0.65	0.65	0.65
Sat Flow, veh/h	3188	1490	0	5115	3250	1442
Grp Volume(v), veh/h	633	283	0	884	969	768
Grp Sat Flow(s),veh/h/ln	1594	1490	0	1600	1549	1442
Q Serve(g_s), s	29.9	28.3	0.0	12.5	25.2	63.2
Cycle Q Clear(g_c), s	29.9	28.3	0.0	12.5	25.2	63.2
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	786	367	0	3136	2024	942
V/C Ratio(X)	0.81	0.77	0.00	0.28	0.48	0.81
Avail Cap(c_a), veh/h	1435	670	0	3136	2024	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.84	1.00	1.00
Uniform Delay (d), s/veh	56.7	56.1	0.0	11.8	14.0	20.5
Incr Delay (d2), s/veh	2.0	3.4	0.0	0.2	0.8	7.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	8.4	0.0	1.5	3.1	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.7	59.5	0.0	12.0	14.8	28.2
LnGrp LOS	E	E		B	B	C
Approach Vol, veh/h	916			884	1737	
Approach Delay, s/veh	58.9			12.0	20.7	
Approach LOS	E			B	C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	112.1	47.9	112.1
Change Period (Y+Rc), s	7.5	8.5	7.5
Max Green Setting (Gmax), s	72.0	72.0	72.0
Max Q Clear Time (g_c+I1), s	14.5	31.9	65.2
Green Ext Time (p_c), s	22.6	7.6	6.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



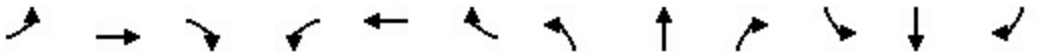
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	239	57	74	105	135	77	1212	95	272	559	167
Future Volume (veh/h)	324	239	57	74	105	135	77	1212	95	272	559	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1870	1811	1870	1781	1870	1870	1841	1856	1796	1752
Adj Flow Rate, veh/h	341	252	60	78	111	142	81	1276	0	286	588	176
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	1	2	6	2	8	2	2	4	3	7	10
Cap, veh/h	393	1109	547	353	804	478	147	2063		332	2248	850
Arrive On Green	0.12	0.31	0.31	0.05	0.23	0.23	0.04	0.40	0.00	0.19	0.92	0.92
Sat Flow, veh/h	3374	3582	1550	1725	3554	1464	3456	5106	1560	3428	4904	1476
Grp Volume(v), veh/h	341	252	60	78	111	142	81	1276	0	286	588	176
Grp Sat Flow(s),veh/h/ln	1687	1791	1550	1725	1777	1464	1728	1702	1560	1714	1635	1476
Q Serve(g_s), s	15.9	8.4	4.2	5.5	4.0	11.6	3.7	31.8	0.0	12.9	2.1	1.6
Cycle Q Clear(g_c), s	15.9	8.4	4.2	5.5	4.0	11.6	3.7	31.8	0.0	12.9	2.1	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1109	547	353	804	478	147	2063		332	2248	850
V/C Ratio(X)	0.87	0.23	0.11	0.22	0.14	0.30	0.55	0.62		0.86	0.26	0.21
Avail Cap(c_a), veh/h	464	1397	672	367	1044	576	173	2063		407	2248	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	69.5	41.0	34.9	44.4	49.4	40.6	75.1	37.9	0.0	63.4	3.7	2.3
Incr Delay (d2), s/veh	14.1	0.1	0.1	0.3	0.1	0.3	3.2	1.4	0.0	11.2	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.6	1.1	1.7	1.3	3.0	1.4	8.9	0.0	4.5	0.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	83.6	41.1	35.0	44.7	49.5	40.9	78.3	39.3	0.0	74.6	3.9	2.7
LnGrp LOS	F	D	D	D	D	D	E	D		E	A	A
Approach Vol, veh/h		653			331			1357			1050	
Approach Delay, s/veh		62.7			44.7			41.6			23.0	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	80.8	23.7	43.7	20.5	72.1	10.3	57.0
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	8.0	58.0	22.0	47.0	19.0	47.0	8.6	62.4
Max Q Clear Time (g_c+I1), s	5.7	4.1	17.9	13.6	14.9	33.8	7.5	10.4
Green Ext Time (p_c), s	0.1	14.9	0.8	2.7	0.6	11.2	0.0	5.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.2
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	361	38	69	188	10	87	4	214	2	4	1
Future Volume (veh/h)	3	361	38	69	188	10	87	4	214	2	4	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1826	1826	1900	1900	1900	1885	1159	1900	1900
Adj Flow Rate, veh/h	3	376	40	72	196	10	91	4	223	2	4	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	0	5	5	0	0	0	1	50	0	0
Cap, veh/h	617	807	702	499	1005	882	443	7	418	198	213	53
Arrive On Green	0.44	0.44	0.44	0.07	0.55	0.55	0.08	0.26	0.26	0.15	0.15	0.15
Sat Flow, veh/h	1189	1841	1601	1739	1826	1603	1810	28	1583	713	1466	366
Grp Volume(v), veh/h	3	376	40	72	196	10	91	0	227	2	0	5
Grp Sat Flow(s),veh/h/ln	1189	1841	1601	1739	1826	1603	1810	0	1611	713	0	1832
Q Serve(g_s), s	0.1	10.9	1.1	1.5	4.1	0.2	3.0	0.0	9.1	0.2	0.0	0.2
Cycle Q Clear(g_c), s	0.1	10.9	1.1	1.5	4.1	0.2	3.0	0.0	9.1	0.3	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.20
Lane Grp Cap(c), veh/h	617	807	702	499	1005	882	443	0	426	198	0	266
V/C Ratio(X)	0.00	0.47	0.06	0.14	0.20	0.01	0.21	0.00	0.53	0.01	0.00	0.02
Avail Cap(c_a), veh/h	617	807	702	569	1005	882	504	0	950	406	0	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.9	15.0	12.2	9.6	8.5	7.7	22.3	0.0	23.8	27.7	0.0	27.6
Incr Delay (d2), s/veh	0.0	1.9	0.2	0.1	0.4	0.0	0.2	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.0	0.0	0.1	0.0	0.5	0.0	1.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.9	16.9	12.4	9.8	9.0	7.7	22.5	0.0	24.8	27.8	0.0	27.6
LnGrp LOS	B	B	B	A	A	A	C		C	C		C
Approach Vol, veh/h		419			278			318			7	
Approach Delay, s/veh		16.4			9.1			24.2			27.7	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	8.5	40.5		26.4		49.0	9.0	17.5				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	3.5	12.9		11.1		6.1	5.0	2.3				
Green Ext Time (p_c), s	0.1	5.2		4.3		3.3	0.1	0.0				

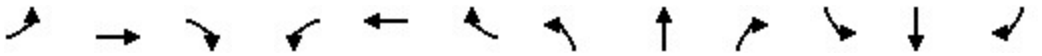
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.9									
HCM 6th LOS			B									



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	29	444	217	95	805
Future Volume (veh/h)	46	29	444	217	95	805
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1870	1870	1870	1856
Adj Flow Rate, veh/h	49	31	477	233	102	866
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	7	7	2	2	2	3
Cap, veh/h	113	101	2558	1141	640	2538
Arrive On Green	0.07	0.07	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1711	1522	3647	1585	739	3618
Grp Volume(v), veh/h	49	31	477	233	102	866
Grp Sat Flow(s),veh/h/ln	1711	1522	1777	1585	739	1763
Q Serve(g_s), s	1.4	1.0	2.2	2.5	2.7	4.7
Cycle Q Clear(g_c), s	1.4	1.0	2.2	2.5	4.9	4.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	113	101	2558	1141	640	2538
V/C Ratio(X)	0.43	0.31	0.19	0.20	0.16	0.34
Avail Cap(c_a), veh/h	599	533	2558	1141	640	2538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.9	2.3	2.4	3.1	2.7
Incr Delay (d2), s/veh	2.6	1.7	0.2	0.4	0.5	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.1	0.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.7	24.6	2.5	2.8	3.7	3.0
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	80		710			968
Approach Delay, s/veh	25.2		2.6			3.1
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	7.9
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		6.9			4.5	3.4
Green Ext Time (p_c), s		17.6			10.5	0.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	3.9
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	733	38	84	401	25	105	351	127	24	459	302
Future Volume (veh/h)	173	733	38	84	401	25	105	351	127	24	459	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1811	1811	1885	1900	1841	1841	1856	1900	1856	1841
Adj Flow Rate, veh/h	178	756	39	87	413	26	108	362	131	25	473	311
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	2	6	6	1	0	4	4	3	0	3	4
Cap, veh/h	559	1779	92	448	1703	107	247	1188	534	287	931	412
Arrive On Green	0.13	1.00	1.00	0.04	0.50	0.50	0.06	0.34	0.34	0.26	0.26	0.26
Sat Flow, veh/h	1767	3438	177	1725	3423	215	1753	3497	1572	918	3526	1560
Grp Volume(v), veh/h	178	391	404	87	215	224	108	362	131	25	473	311
Grp Sat Flow(s),veh/h/ln	1767	1777	1838	1725	1791	1847	1753	1749	1572	918	1763	1560
Q Serve(g_s), s	8.0	0.0	0.0	3.9	11.0	11.1	7.0	12.2	9.6	3.3	18.2	29.3
Cycle Q Clear(g_c), s	8.0	0.0	0.0	3.9	11.0	11.1	7.0	12.2	9.6	3.4	18.2	29.3
Prop In Lane	1.00		0.10	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	559	919	951	448	891	919	247	1188	534	287	931	412
V/C Ratio(X)	0.32	0.42	0.43	0.19	0.24	0.24	0.44	0.30	0.25	0.09	0.51	0.76
Avail Cap(c_a), veh/h	559	919	951	482	891	919	311	1727	776	392	1333	590
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	17.8	22.9	23.0	39.4	38.9	38.0	44.6	50.0	54.1
Incr Delay (d2), s/veh	0.3	1.3	1.3	0.2	0.6	0.6	1.2	0.1	0.2	0.1	0.4	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.3	0.3	0.9	2.9	3.0	2.2	3.7	2.6	0.6	5.9	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	1.3	1.3	18.0	23.6	23.6	40.6	39.0	38.3	44.7	50.5	57.5
LnGrp LOS	B	A	A	B	C	C	D	D	D	D	D	E
Approach Vol, veh/h		973			526			601			809	
Approach Delay, s/veh		4.0			22.7			39.2			53.0	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	89.3		60.9	13.0	86.1	12.1	48.7				
Change Period (Y+Rc), s	3.0	6.5		* 6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	55.5		* 79	10.0	55.5	15.0	60.5				
Max Q Clear Time (g_c+I1), s	5.9	2.0		14.2	10.0	13.1	9.0	31.3				
Green Ext Time (p_c), s	0.1	18.7		8.4	0.0	8.3	0.2	10.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			28.3									
HCM 6th LOS			C									

Notes

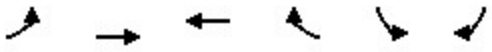
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	853	200	1	685	12	138
Future Volume (veh/h)	853	200	1	685	12	138
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1758	1477	1758
Adj Flow Rate, veh/h	879	206	1	706	12	142
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	3	23	3
Cap, veh/h	1489	349	45	1802	870	475
Arrive On Green	0.55	0.55	0.55	0.55	0.32	0.32
Sat Flow, veh/h	2796	634	0	3356	2729	1490
Grp Volume(v), veh/h	546	539	379	328	12	142
Grp Sat Flow(s),veh/h/ln	1683	1658	1757	1520	1365	1490
Q Serve(g_s), s	17.3	17.3	0.0	9.9	0.2	5.7
Cycle Q Clear(g_c), s	17.3	17.3	9.9	9.9	0.2	5.7
Prop In Lane		0.38	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	926	912	1011	836	870	475
V/C Ratio(X)	0.59	0.59	0.37	0.39	0.01	0.30
Avail Cap(c_a), veh/h	926	912	1011	836	870	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.0	10.3	10.3	18.6	20.5
Incr Delay (d2), s/veh	2.8	2.8	1.0	1.3	0.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.3	0.3	0.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.8	14.8	11.3	11.6	18.7	22.1
LnGrp LOS	B	B	B	B	B	C
Approach Vol, veh/h	1085			707	154	
Approach Delay, s/veh	14.8			11.5	21.9	
Approach LOS	B			B	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	30.0	50.0	50.0
Change Period (Y+Rc), s	4.5	6.0	6.0
Max Green Setting (Gmax), s	25.5	44.0	44.0
Max Q Clear Time (g_c+I1), s	7.7	19.3	11.9
Green Ext Time (p_c), s	0.7	17.4	13.1

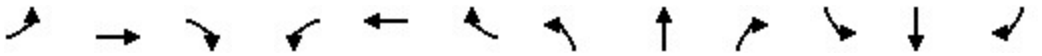
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.1
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1037	542	145	34	66
Future Volume (veh/h)	0	1037	542	145	34	66
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1758	1758	1688	1575
Adj Flow Rate, veh/h	0	1092	571	153	36	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	3	8	16
Cap, veh/h	0	2041	1580	422	877	375
Arrive On Green	0.00	0.61	0.61	0.61	0.28	0.28
Sat Flow, veh/h	0	3544	2694	696	3118	1335
Grp Volume(v), veh/h	0	1092	365	359	36	69
Grp Sat Flow(s),veh/h/ln	0	1683	1670	1633	1559	1335
Q Serve(g_s), s	0.0	15.1	8.8	8.9	0.7	3.1
Cycle Q Clear(g_c), s	0.0	15.1	8.8	8.9	0.7	3.1
Prop In Lane	0.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	0	2041	1012	990	877	375
V/C Ratio(X)	0.00	0.54	0.36	0.36	0.04	0.18
Avail Cap(c_a), veh/h	0	2041	1012	990	877	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	7.9	7.9	20.9	21.8
Incr Delay (d2), s/veh	0.0	1.0	1.0	1.0	0.1	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.3	0.1	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.2	8.9	9.0	21.0	22.9
LnGrp LOS		B	A	A	C	C
Approach Vol, veh/h		1092	724		105	
Approach Delay, s/veh		10.2	9.0		22.2	
Approach LOS		B	A		C	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		53.0		27.0	53.0
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		48.5		22.5	48.5
Max Q Clear Time (g_c+I1), s		17.1		5.1	10.9
Green Ext Time (p_c), s		21.2		0.5	14.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	10.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	23	1012	13	949	5	1119	228	0	1432	434
Future Volume (veh/h)	9	0	23	1012	13	949	5	1119	228	0	1432	434
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	0	1800	1786	1800	1660	1800	1702	1772	0	1702	1688
Adj Flow Rate, veh/h	9	0	24	1064	0	989	5	1166	238	0	1492	452
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	0	10	0	7	2	0	7	8
Cap, veh/h	0	0	0	1199	0	992	161	1481	300	0	2570	791
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.55	0.55	0.55	0.00	0.55	0.55
Sat Flow, veh/h		0		3402	0	2813	339	2678	543	0	4799	1430
Grp Volume(v), veh/h		0.0		1064	0	989	5	701	703	0	1492	452
Grp Sat Flow(s),veh/h/ln				1701	0	1406	339	1617	1604	0	1549	1430
Q Serve(g_s), s				47.2	0.0	56.2	1.6	54.7	55.8	0.0	33.8	33.0
Cycle Q Clear(g_c), s				47.2	0.0	56.2	35.4	54.7	55.8	0.0	33.8	33.0
Prop In Lane				1.00		1.00	1.00		0.34	0.00		1.00
Lane Grp Cap(c), veh/h				1199	0	992	161	894	887	0	2570	791
V/C Ratio(X)				0.89	0.00	1.00	0.03	0.78	0.79	0.00	0.58	0.57
Avail Cap(c_a), veh/h				1199	0	992	161	894	887	0	2570	791
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				48.8	0.0	51.7	35.2	28.2	28.4	0.0	23.5	23.4
Incr Delay (d2), s/veh				8.4	0.0	27.9	0.4	6.8	7.2	0.0	1.0	3.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.9	0.0	17.2	0.1	12.3	12.5	0.0	6.5	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				57.2	0.0	79.6	35.5	35.0	35.6	0.0	24.5	26.3
LnGrp LOS				E		E	D	D	D		C	C
Approach Vol, veh/h					2053			1409			1944	
Approach Delay, s/veh					68.0			35.3			24.9	
Approach LOS					E			D			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	96.0	64.0	96.0
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	71.2	56.4	71.2
Max Q Clear Time (g_c+I1), s	35.8	58.2	57.8
Green Ext Time (p_c), s	31.0	0.0	12.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	44.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



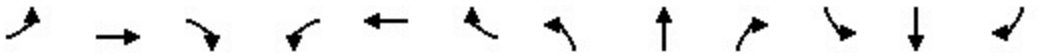
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	428	415	4	957	1750	572
Future Volume (veh/h)	428	415	4	957	1750	572
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1617	1744	1772	1744	1772	1603
Adj Flow Rate, veh/h	588	299	4	1018	1862	609
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	13	4	2	4	2	14
Cap, veh/h	766	368	25	2981	2380	740
Arrive On Green	0.25	0.25	0.65	0.65	0.65	0.65
Sat Flow, veh/h	3081	1478	4	4720	3815	1137
Grp Volume(v), veh/h	588	299	378	644	1632	839
Grp Sat Flow(s),veh/h/ln	1540	1478	1693	1444	1612	1567
Q Serve(g_s), s	28.4	30.5	0.0	16.0	57.1	64.4
Cycle Q Clear(g_c), s	28.4	30.5	15.5	16.0	57.1	64.4
Prop In Lane	1.00	1.00	0.01			0.73
Lane Grp Cap(c), veh/h	766	368	1125	1881	2100	1021
V/C Ratio(X)	0.77	0.81	0.34	0.34	0.78	0.82
Avail Cap(c_a), veh/h	1386	665	1125	1881	2100	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.85	0.85	1.00	1.00
Uniform Delay (d), s/veh	55.8	56.6	12.4	12.5	19.7	21.0
Incr Delay (d2), s/veh	1.6	4.4	0.7	0.4	2.9	7.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	9.0	2.3	1.9	7.8	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	57.4	61.0	13.1	12.9	22.6	28.4
LnGrp LOS	E	E	B	B	C	C
Approach Vol, veh/h	887			1022	2471	
Approach Delay, s/veh	58.6			13.0	24.6	
Approach LOS	E			B	C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		111.7		48.3		111.7
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		72.0		72.0		72.0
Max Q Clear Time (g_c+I1), s		18.0		32.5		66.4
Green Ext Time (p_c), s		26.4		7.3		5.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



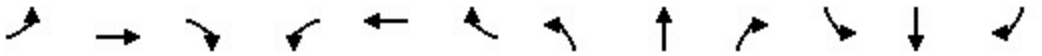
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	348	330	201	268	574	284	220	755	94	229	1235	353
Future Volume (veh/h)	348	330	201	268	574	284	220	755	94	229	1235	353
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1870	1885	1885	1870	1856	1885	1826	1870	1841	1870	1856
Adj Flow Rate, veh/h	352	333	203	271	580	287	222	763	0	231	1247	357
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	2	1	1	2	3	1	5	2	4	2	3
Cap, veh/h	407	1107	602	479	1006	554	269	1793		277	1857	757
Arrive On Green	0.12	0.31	0.31	0.10	0.28	0.28	0.08	0.36	0.00	0.16	0.73	0.73
Sat Flow, veh/h	3401	3554	1536	1795	3554	1506	3483	4985	1585	3401	5106	1565
Grp Volume(v), veh/h	352	333	203	271	580	287	222	763	0	231	1247	357
Grp Sat Flow(s),veh/h/ln	1700	1777	1536	1795	1777	1506	1742	1662	1585	1700	1702	1565
Q Serve(g_s), s	16.3	11.4	14.9	16.6	22.4	23.9	10.0	18.5	0.0	10.5	20.8	14.9
Cycle Q Clear(g_c), s	16.3	11.4	14.9	16.6	22.4	23.9	10.0	18.5	0.0	10.5	20.8	14.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	1107	602	479	1006	554	269	1793		277	1857	757
V/C Ratio(X)	0.86	0.30	0.34	0.57	0.58	0.52	0.82	0.43		0.83	0.67	0.47
Avail Cap(c_a), veh/h	489	1230	655	479	1044	570	327	1793		361	1857	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.43	0.43	0.43
Uniform Delay (d), s/veh	69.2	41.8	34.4	35.9	49.1	39.9	72.7	38.7	0.0	65.9	16.7	10.8
Incr Delay (d2), s/veh	13.1	0.2	0.3	1.6	0.7	0.8	13.3	0.7	0.0	5.7	0.8	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	3.6	3.8	5.3	7.2	6.1	4.0	5.3	0.0	3.5	3.5	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.2	42.0	34.8	37.5	49.9	40.7	86.1	39.5	0.0	71.6	17.6	11.7
LnGrp LOS	F	D	C	D	D	D	F	D		E	B	B
Approach Vol, veh/h		888			1138			985			1835	
Approach Delay, s/veh		56.3			44.6			50.0			23.2	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	65.7	24.1	52.8	18.0	65.0	19.6	57.3
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	23.0	47.0	17.0	48.0	16.6	55.4
Max Q Clear Time (g_c+I1), s	12.0	22.8	18.3	25.9	12.5	20.5	18.6	16.9
Green Ext Time (p_c), s	0.3	22.1	0.9	10.6	0.5	13.5	0.0	7.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.7
HCM 6th LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	366	109	451	527	5	64	0	281	2	5	2
Future Volume (veh/h)	1	366	109	451	527	5	64	0	281	2	5	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1870	1900	1856	1604	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	394	117	485	567	5	69	0	302	2	5	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	100	5	2	0	3	20	0	0	0	0	0	0
Cap, veh/h	153	666	568	494	985	713	471	0	463	227	234	94
Arrive On Green	0.36	0.36	0.36	0.13	0.53	0.53	0.07	0.00	0.29	0.18	0.18	0.18
Sat Flow, veh/h	186	1826	1559	1810	1856	1344	1810	0	1597	1086	1285	514
Grp Volume(v), veh/h	1	394	117	485	567	5	69	0	302	2	0	7
Grp Sat Flow(s),veh/h/ln	186	1826	1559	1810	1856	1344	1810	0	1597	1086	0	1799
Q Serve(g_s), s	0.3	13.7	4.0	10.0	16.1	0.1	2.2	0.0	12.9	0.1	0.0	0.2
Cycle Q Clear(g_c), s	3.4	13.7	4.0	10.0	16.1	0.1	2.2	0.0	12.9	4.6	0.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	153	666	568	494	985	713	471	0	463	227	0	328
V/C Ratio(X)	0.01	0.59	0.21	0.98	0.58	0.01	0.15	0.00	0.65	0.01	0.00	0.02
Avail Cap(c_a), veh/h	153	666	568	494	985	713	542	0	909	488	0	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	20.1	17.1	19.5	12.4	8.6	21.3	0.0	24.3	30.0	0.0	26.3
Incr Delay (d2), s/veh	0.1	3.8	0.8	35.6	2.4	0.0	0.1	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	0.4	4.9	0.7	0.0	0.4	0.0	2.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.0	24.0	17.9	55.1	14.8	8.6	21.4	0.0	25.9	30.0	0.0	26.3
LnGrp LOS	B	C	B	E	B	A	C		C	C		C
Approach Vol, veh/h		512			1057			371			9	
Approach Delay, s/veh		22.6			33.3			25.0			27.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	13.0	36.0		29.2		49.0	8.4	20.7				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	28.5		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	12.0	15.7		14.9		18.1	4.2	6.6				
Green Ext Time (p_c), s	0.0	5.0		5.7		9.6	0.1	0.0				

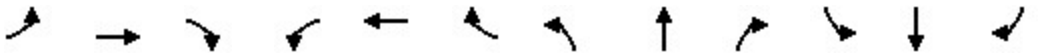
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			28.9									
HCM 6th LOS			C									



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	267	203	1006	131	75	747
Future Volume (veh/h)	267	203	1006	131	75	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1856	1811	1870
Adj Flow Rate, veh/h	278	211	1048	136	78	778
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	3	6	2
Cap, veh/h	370	329	2193	963	326	2175
Arrive On Green	0.21	0.21	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1795	1598	3676	1572	458	3647
Grp Volume(v), veh/h	278	211	1048	136	78	778
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1572	458	1777
Q Serve(g_s), s	8.8	7.3	9.7	2.2	6.8	6.6
Cycle Q Clear(g_c), s	8.8	7.3	9.7	2.2	16.5	6.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	370	329	2193	963	326	2175
V/C Ratio(X)	0.75	0.64	0.48	0.14	0.24	0.36
Avail Cap(c_a), veh/h	535	476	2193	963	326	2175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	22.0	6.4	5.0	10.9	5.8
Incr Delay (d2), s/veh	3.5	2.1	0.7	0.3	1.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.7	0.2	0.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.1	24.1	7.2	5.3	12.7	6.3
LnGrp LOS	C	C	A	A	B	A
Approach Vol, veh/h	489		1184			856
Approach Delay, s/veh	25.2		7.0			6.9
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	16.9
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		18.5			11.7	10.8
Green Ext Time (p_c), s		11.7			18.0	1.6

Intersection Summary		
HCM 6th Ctrl Delay, s/veh	10.5	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	667	130	164	941	55	80	715	144	55	538	260
Future Volume (veh/h)	258	667	130	164	941	55	80	715	144	55	538	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1885	1885	1870	1841	1885	1870	1900	1885	1870
Adj Flow Rate, veh/h	274	710	138	174	1001	59	85	761	153	59	572	277
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	0	1	1	2	4	1	2	0	1	2
Cap, veh/h	366	1565	304	407	1703	100	195	1116	494	123	874	386
Arrive On Green	0.09	0.52	0.52	0.06	0.50	0.50	0.05	0.31	0.31	0.24	0.24	0.24
Sat Flow, veh/h	1795	2990	581	1795	3437	203	1753	3582	1584	620	3582	1583
Grp Volume(v), veh/h	274	425	423	174	522	538	85	761	153	59	572	277
Grp Sat Flow(s),veh/h/ln	1795	1791	1780	1795	1791	1849	1753	1791	1584	620	1791	1583
Q Serve(g_s), s	11.5	23.7	23.8	7.5	33.2	33.2	5.7	29.7	11.8	14.7	23.0	25.7
Cycle Q Clear(g_c), s	11.5	23.7	23.8	7.5	33.2	33.2	5.7	29.7	11.8	33.6	23.0	25.7
Prop In Lane	1.00		0.33	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	938	932	407	888	916	195	1116	494	123	874	386
V/C Ratio(X)	0.75	0.45	0.45	0.43	0.59	0.59	0.44	0.68	0.31	0.48	0.65	0.72
Avail Cap(c_a), veh/h	542	938	932	633	888	916	443	1645	727	127	895	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	23.8	23.8	18.7	28.7	28.7	42.8	48.1	42.0	67.5	54.4	55.4
Incr Delay (d2), s/veh	2.7	1.3	1.4	0.7	2.8	2.8	1.5	0.7	0.4	2.9	1.7	6.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.9	5.8	1.7	8.9	9.2	1.8	9.4	3.3	1.9	7.8	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.7	25.2	25.2	19.4	31.6	31.5	44.3	48.9	42.3	70.4	56.1	61.4
LnGrp LOS	C	C	C	B	C	C	D	D	D	E	E	E
Approach Vol, veh/h		1122			1234			999			908	
Approach Delay, s/veh		25.3			29.8			47.5			58.6	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	90.3		56.4	17.8	85.8	10.8	45.5				
Change Period (Y+Rc), s	3.0	6.5		6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	30.5	40.0		73.5	30.5	40.0	30.5	40.0				
Max Q Clear Time (g_c+I1), s	9.5	25.8		31.7	13.5	35.2	7.7	35.6				
Green Ext Time (p_c), s	0.8	9.3		18.2	1.3	4.1	0.3	3.2				

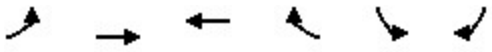
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			38.9									
HCM 6th LOS			D									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	948	70	2	1233	51	184
Future Volume (veh/h)	948	70	2	1233	51	184
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1786	1688	1688	1786	1688	1772
Adj Flow Rate, veh/h	967	71	2	1258	52	188
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	8	8	1	8	2
Cap, veh/h	1496	110	61	1553	1039	501
Arrive On Green	0.47	0.47	0.47	0.47	0.33	0.33
Sat Flow, veh/h	3294	235	1	3409	3118	1502
Grp Volume(v), veh/h	512	526	676	584	52	188
Grp Sat Flow(s),veh/h/ln	1697	1744	1784	1544	1559	1502
Q Serve(g_s), s	13.8	13.8	0.0	19.5	0.7	5.7
Cycle Q Clear(g_c), s	13.8	13.8	19.5	19.5	0.7	5.7
Prop In Lane		0.13	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	792	814	893	721	1039	501
V/C Ratio(X)	0.65	0.65	0.76	0.81	0.05	0.38
Avail Cap(c_a), veh/h	792	814	893	721	1039	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.78	0.78	1.00	1.00
Uniform Delay (d), s/veh	12.2	12.2	13.7	13.7	13.6	15.2
Incr Delay (d2), s/veh	4.1	3.9	4.7	7.7	0.1	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	1.2	1.5	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.3	16.2	18.4	21.4	13.7	17.4
LnGrp LOS	B	B	B	C	B	B
Approach Vol, veh/h	1038			1260	240	
Approach Delay, s/veh	16.2			19.8	16.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	26.0	34.0	34.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	20.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	7.7	15.8	21.5
Green Ext Time (p_c), s	1.0	9.4	5.9

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	18.0
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	863	1104	148	209	296
Future Volume (veh/h)	0	863	1104	148	209	296
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1786	1772	1772	1786
Adj Flow Rate, veh/h	0	881	1127	151	213	302
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	1	2	2	1
Cap, veh/h	0	1711	1529	204	1119	517
Arrive On Green	0.00	0.51	0.51	0.51	0.34	0.34
Sat Flow, veh/h	0	3544	3097	402	3274	1514
Grp Volume(v), veh/h	0	881	635	643	213	302
Grp Sat Flow(s),veh/h/ln	0	1683	1697	1714	1637	1514
Q Serve(g_s), s	0.0	10.5	17.6	17.7	2.7	9.8
Cycle Q Clear(g_c), s	0.0	10.5	17.6	17.7	2.7	9.8
Prop In Lane	0.00			0.23	1.00	1.00
Lane Grp Cap(c), veh/h	0	1711	862	871	1119	517
V/C Ratio(X)	0.00	0.51	0.74	0.74	0.19	0.58
Avail Cap(c_a), veh/h	0	1711	862	871	1119	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.6	11.6	13.9	16.2
Incr Delay (d2), s/veh	0.0	1.1	5.6	5.6	0.4	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.3	1.3	0.1	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.9	17.1	17.2	14.3	21.0
LnGrp LOS		B	B	B	B	C
Approach Vol, veh/h		881	1278		515	
Approach Delay, s/veh		10.9	17.2		18.2	
Approach LOS		B	B		B	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			35.0		25.0	35.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			30.5		20.5	30.5
Max Q Clear Time (g_c+I1), s			12.5		11.8	19.7
Green Ext Time (p_c), s			11.7		2.1	9.4

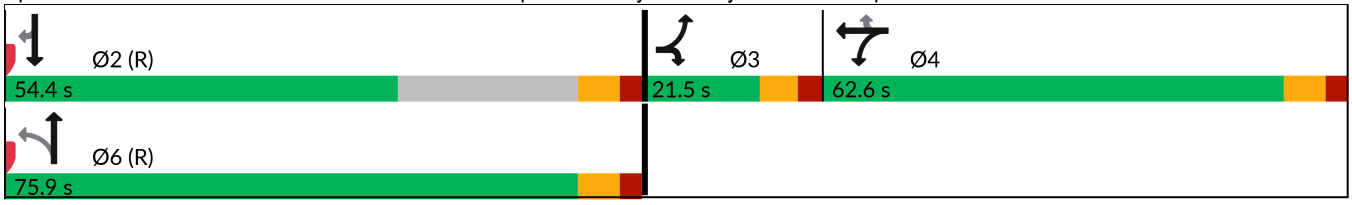
Intersection Summary		
HCM 6th Ctrl Delay, s/veh		15.3
HCM 6th LOS		B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	265	3	537	2	1128	205	0	1479	386
Future Volume (vph)	0	0	0	265	3	537	2	1128	205	0	1479	386
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Ped Bike Factor						0.98						
Frt						0.850		0.977				0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	1784	0	1784	1507	1514	2250	1729	3183	0	0	4558	1334
Flt Permitted				0.950	0.953		0.138					
Satd. Flow (perm)	1784	0	1784	1507	1514	2201	251	3183	0	0	4558	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						367		16				308
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	9%	0%	21%	0%	6%	7%	2%	9%	16%
Adj. Flow (vph)	0	0	0	279	3	565	2	1187	216	0	1557	406
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	0	0	0	142	140	565	2	1403	0	0	1557	406
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	21.5		21.5	62.6	62.6	62.6	75.9	75.9			54.4	54.4
Total Split (%)	13.4%		13.4%	39.1%	39.1%	39.1%	47.4%	47.4%			34.0%	34.0%
Maximum Green (s)	14.2		14.2	55.0	55.0	55.0	68.4	68.4			46.9	46.9
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)				25.6	25.6	25.6	119.3	119.3			119.3	119.3
Actuated g/C Ratio				0.16	0.16	0.16	0.75	0.75			0.75	0.75
v/c Ratio				0.59	0.58	0.86	0.01	0.59			0.46	0.38
Control Delay (s/veh)				70.4	69.8	34.7	7.0	12.3			9.3	3.2
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)				70.4	69.8	34.7	7.0	12.3			9.3	3.2
LOS				E	E	C	A	B			A	A
Approach Delay (s/veh)					46.5			12.3			8.1	
Approach LOS					D			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 147 (92%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal

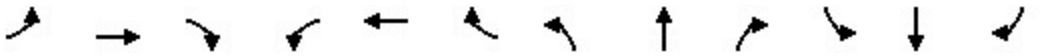




Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	142	140	565	2	1403	1557	406
v/c Ratio	0.59	0.58	0.86	0.01	0.59	0.46	0.38
Control Delay (s/veh)	70.4	69.8	34.7	7.0	12.3	9.3	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	70.4	69.8	34.7	7.0	12.3	9.3	3.2
Queue Length 50th (m)	48.3	44.3	44.2	0.2	84.0	66.0	8.5
Queue Length 95th (m)	67.1	61.5	66.7	m0.6	202.4	107.5	30.3
Internal Link Dist (m)		193.3			369.8	835.9	
Turn Bay Length (m)							
Base Capacity (vph)	518	520	997	187	2376	3397	1072
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.27	0.57	0.01	0.59	0.46	0.38

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	265	3	537	2	1128	205	0	1479	386
Future Volume (veh/h)	0	0	0	265	3	537	2	1128	205	0	1479	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	0	1772	1674	1800	1505	1800	1716	1702	0	1674	1575
Adj Flow Rate, veh/h	0	0	0	281	0	565	2	1187	216	0	1557	406
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	9	0	21	0	6	7	0	9	16
Cap, veh/h	0	0	0	831	0	664	144	1779	322	0	2947	861
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.65	0.65	0.65	0.00	0.65	0.65
Sat Flow, veh/h		0		3188	0	2546	215	2757	499	0	4720	1335
Grp Volume(v), veh/h		0.0		281	0	565	2	699	704	0	1557	406
Grp Sat Flow(s),veh/h/ln				1594	0	1273	215	1630	1626	0	1523	1335
Q Serve(g_s), s				11.4	0.0	33.7	0.8	42.6	43.4	0.0	29.4	24.8
Cycle Q Clear(g_c), s				11.4	0.0	33.7	30.2	42.6	43.4	0.0	29.4	24.8
Prop In Lane				1.00		1.00	1.00		0.31	0.00		1.00
Lane Grp Cap(c), veh/h				831	0	664	144	1051	1049	0	2947	861
V/C Ratio(X)				0.34	0.00	0.85	0.01	0.66	0.67	0.00	0.53	0.47
Avail Cap(c_a), veh/h				1096	0	875	144	1051	1049	0	2947	861
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				48.0	0.0	56.2	23.4	17.6	17.8	0.0	15.3	14.5
Incr Delay (d2), s/veh				0.2	0.0	6.3	0.2	3.3	3.4	0.0	0.7	1.9
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.8	0.0	9.4	0.0	9.7	9.9	0.0	5.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				48.2	0.0	62.5	23.6	21.0	21.2	0.0	16.0	16.3
LnGrp LOS				D		E	C	C	C		B	B
Approach Vol, veh/h					846			1405			1963	
Approach Delay, s/veh					57.8			21.1			16.0	
Approach LOS					E			C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	110.7	49.3	110.7
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	46.9	55.0	68.4
Max Q Clear Time (g_c+I1), s	31.4	35.7	45.4
Green Ext Time (p_c), s	14.6	5.9	19.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	26.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

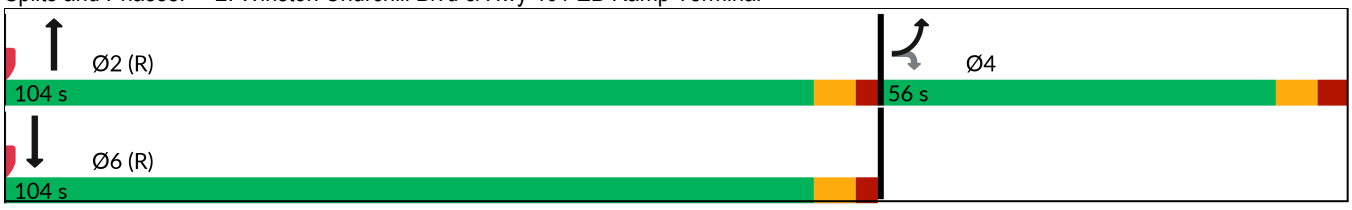


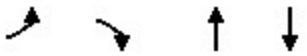
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	547	246	0	805	882	730
Future Volume (vph)	547	246	0	805	882	730
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	0.91
Frt	0.994	0.850			0.932	
Flt Protected	0.954					
Satd. Flow (prot)	3079	1367	0	4824	4256	0
Flt Permitted	0.954					
Satd. Flow (perm)	3079	1367	0	4824	4256	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3	144			235	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	3%	2%	3%	7%	11%
Adj. Flow (vph)	576	259	0	847	928	768
Shared Lane Traffic (%)		10%				
Lane Group Flow (vph)	602	233	0	847	1696	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	22.5	22.5		31.5	31.5	
Total Split (s)	56.0	56.0		104.0	104.0	
Total Split (%)	35.0%	35.0%		65.0%	65.0%	
Maximum Green (s)	47.5	47.5		96.5	96.5	
Yellow Time (s)	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	3.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0	
Flash Don't Walk (s)				17.0	17.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	37.4	37.4		106.6	106.6	
Actuated g/C Ratio	0.23	0.23		0.67	0.67	
v/c Ratio	0.83	0.54		0.26	0.58	
Control Delay (s/veh)	68.6	23.9		8.5	17.8	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	68.6	23.9		8.5	17.8	
LOS	E	C		A	B	
Approach Delay (s/veh)	56.2			8.5	17.8	
Approach LOS	E			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 149 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 25.0		Intersection LOS: C	
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal





Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	602	233	847	1696
v/c Ratio	0.83	0.54	0.26	0.58
Control Delay (s/veh)	68.6	23.9	8.5	17.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.6	23.9	8.5	17.8
Queue Length 50th (m)	101.2	27.2	29.1	29.0
Queue Length 95th (m)	117.2	55.3	44.7	160.4
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	916	507	3215	2915
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.66	0.46	0.26	0.58

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	547	246	0	805	882	730
Future Volume (veh/h)	547	246	0	805	882	730
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1674	1758	0	1758	1702	1646
Adj Flow Rate, veh/h	576	259	0	847	928	768
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	3	0	3	7	11
Cap, veh/h	697	326	0	3270	2110	983
Arrive On Green	0.22	0.22	0.00	0.68	0.68	0.68
Sat Flow, veh/h	3188	1490	0	5115	3250	1442
Grp Volume(v), veh/h	576	259	0	847	928	768
Grp Sat Flow(s),veh/h/ln	1594	1490	0	1600	1549	1442
Q Serve(g_s), s	27.6	26.3	0.0	10.9	21.8	58.1
Cycle Q Clear(g_c), s	27.6	26.3	0.0	10.9	21.8	58.1
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	697	326	0	3270	2110	983
V/C Ratio(X)	0.83	0.80	0.00	0.26	0.44	0.78
Avail Cap(c_a), veh/h	946	442	0	3270	2110	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.85	1.00	1.00
Uniform Delay (d), s/veh	59.6	59.1	0.0	9.9	11.6	17.4
Incr Delay (d2), s/veh	4.5	7.0	0.0	0.2	0.7	6.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	9.0	0.0	1.9	3.9	10.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.1	66.1	0.0	10.0	12.3	23.5
LnGrp LOS	E	E		B	B	C
Approach Vol, veh/h	835			847	1696	
Approach Delay, s/veh	64.7			10.0	17.4	
Approach LOS	E			B	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		116.5		43.5		116.5
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		96.5		47.5		96.5
Max Q Clear Time (g_c+I1), s		12.9		29.6		60.1
Green Ext Time (p_c), s		23.7		5.4		32.4

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		27.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

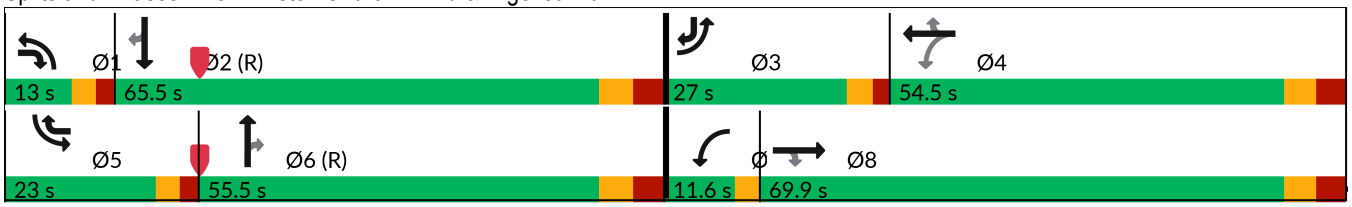
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	212	57	74	94	135	78	1153	95	272	531	174
Future Volume (vph)	330	212	57	74	94	135	78	1153	95	272	531	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.97	0.99		0.96	1.00		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	3614	1601	1722	3579	1512	3471	5142	1570	3437	4902	1484
Flt Permitted	0.950			0.612			0.950			0.950		
Satd. Flow (perm)	3303	3614	1553	1094	3579	1459	3456	5142	1540	3429	4902	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85			153			183
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	23		18	18		23	9		7	7		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	1%	2%	6%	2%	8%	2%	2%	4%	3%	7%	10%
Adj. Flow (vph)	347	223	60	78	99	142	82	1214	100	286	559	183
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	223	60	78	99	142	82	1214	100	286	559	183
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

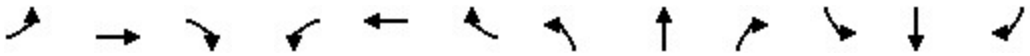
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	27.0	69.9	13.0	11.6	54.5	23.0	13.0	55.5	55.5	23.0	65.5	27.0
Total Split (%)	16.9%	43.7%	8.1%	7.3%	34.1%	14.4%	8.1%	34.7%	34.7%	14.4%	40.9%	16.9%
Maximum Green (s)	22.0	62.4	8.0	8.6	47.0	18.0	8.0	48.0	48.0	18.0	58.0	22.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	None	None	Min	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.3	24.7	36.4	23.5	10.7	31.7	9.2	85.5	85.5	18.5	94.8	117.6
Actuated g/C Ratio	0.13	0.15	0.23	0.15	0.07	0.20	0.06	0.53	0.53	0.12	0.59	0.74
v/c Ratio	0.81	0.40	0.14	0.40	0.42	0.39	0.41	0.44	0.11	0.72	0.19	0.16
Control Delay (s/veh)	83.4	62.8	3.7	54.1	76.9	23.7	78.6	24.0	0.6	72.8	12.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.4	62.8	3.7	54.1	76.9	23.7	78.6	24.0	0.6	72.8	12.6	2.5
LOS	F	E	A	D	E	C	E	C	A	E	B	A
Approach Delay (s/veh)		68.5			47.6			25.6			27.6	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 65 (41%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay (s/veh): 36.3 Intersection LOS: D
Intersection Capacity Utilization 99.5% ICU Level of Service F
Analysis Period (min) 15

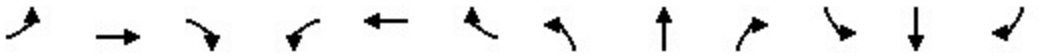
Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	347	223	60	78	99	142	82	1214	100	286	559	183
v/c Ratio	0.81	0.40	0.14	0.40	0.42	0.39	0.41	0.44	0.11	0.72	0.19	0.16
Control Delay (s/veh)	83.4	62.8	3.7	54.1	76.9	23.7	78.6	24.0	0.6	72.8	12.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.4	62.8	3.7	54.1	76.9	23.7	78.6	24.0	0.6	72.8	12.6	2.5
Queue Length 50th (m)	57.9	34.3	0.0	20.4	16.5	15.7	13.4	86.3	0.0	42.1	35.1	9.9
Queue Length 95th (m)	76.1	47.2	5.4	34.8	26.5	35.5	22.6	108.7	1.2	56.2	39.8	13.2
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	463	1409	423	196	1051	372	204	2748	894	421	2904	1133
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.16	0.14	0.40	0.09	0.38	0.40	0.44	0.11	0.68	0.19	0.16

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	212	57	74	94	135	78	1153	95	272	531	174
Future Volume (veh/h)	330	212	57	74	94	135	78	1153	95	272	531	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1870	1811	1870	1781	1870	1870	1841	1856	1796	1752
Adj Flow Rate, veh/h	347	223	60	78	99	142	82	1214	0	286	559	183
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	1	2	6	2	8	2	2	4	3	7	10
Cap, veh/h	399	1113	549	359	802	476	147	2060		330	2242	850
Arrive On Green	0.12	0.31	0.31	0.05	0.23	0.23	0.04	0.40	0.00	0.19	0.91	0.91
Sat Flow, veh/h	3374	3582	1550	1725	3554	1464	3456	5106	1560	3428	4904	1476
Grp Volume(v), veh/h	347	223	60	78	99	142	82	1214	0	286	559	183
Grp Sat Flow(s),veh/h/ln	1687	1791	1550	1725	1777	1464	1728	1702	1560	1714	1635	1476
Q Serve(g_s), s	16.2	7.3	4.2	5.5	3.5	11.7	3.7	29.8	0.0	12.9	2.0	1.8
Cycle Q Clear(g_c), s	16.2	7.3	4.2	5.5	3.5	11.7	3.7	29.8	0.0	12.9	2.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1113	549	359	802	476	147	2060		330	2242	850
V/C Ratio(X)	0.87	0.20	0.11	0.22	0.12	0.30	0.56	0.59		0.87	0.25	0.22
Avail Cap(c_a), veh/h	464	1397	672	372	1044	575	173	2060		386	2242	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	69.3	40.5	34.8	44.5	49.3	40.7	75.1	37.3	0.0	63.6	3.8	2.3
Incr Delay (d2), s/veh	14.7	0.1	0.1	0.3	0.1	0.3	3.3	1.2	0.0	13.6	0.2	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	2.6	1.3	2.0	1.3	3.4	1.5	9.7	0.0	5.0	0.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	84.0	40.6	34.9	44.8	49.4	41.1	78.4	38.6	0.0	77.1	4.0	2.8
LnGrp LOS	F	D	C	D	D	D	E	D		E	A	A
Approach Vol, veh/h		630			319			1296			1028	
Approach Delay, s/veh		64.0			44.6			41.1			24.1	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	80.6	23.9	43.6	20.4	72.1	10.3	57.2
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	8.0	58.0	22.0	47.0	18.0	48.0	8.6	62.4
Max Q Clear Time (g_c+I1), s	5.7	4.0	18.2	13.7	14.9	31.8	7.5	9.3
Green Ext Time (p_c), s	0.1	14.1	0.7	2.5	0.5	13.1	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.5
HCM 6th LOS	D

Notes

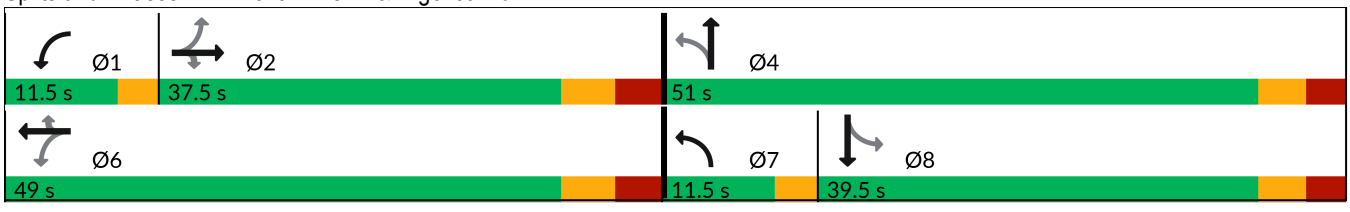
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

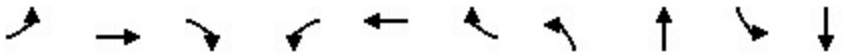
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	323	38	69	171	16	87	7	214	5	4	3
Future Volume (vph)	8	323	38	69	171	16	87	7	214	5	4	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.855			0.936	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1847	1633	1738	1830	1633	1825	1606	0	1217	1788	0
Flt Permitted	0.645			0.480			0.579			0.615		
Satd. Flow (perm)	1234	1847	1586	874	1830	1592	1110	1606	0	787	1788	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			71		223			3	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		577.3			633.5			748.2			571.7	
Travel Time (s)		34.6			38.0			53.9			41.2	
Confl. Peds. (#/hr)	3		5	5		3	2		1	1		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	0%	5%	5%	0%	0%	0%	1%	50%	0%	0%
Adj. Flow (vph)	8	336	40	72	178	17	91	7	223	5	4	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	336	40	72	178	17	91	230	0	5	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	37.5	37.5	37.5	11.5	49.0	49.0	11.5	51.0		39.5	39.5	
Total Split (%)	37.5%	37.5%	37.5%	11.5%	49.0%	49.0%	11.5%	51.0%		39.5%	39.5%	
Maximum Green (s)	30.0	30.0	30.0	8.5	41.5	41.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	33.6	33.6	33.6	46.2	41.7	41.7	22.3	18.8		10.0	10.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.62	0.56	0.56	0.30	0.25		0.13	0.13	
v/c Ratio	0.01	0.40	0.05	0.12	0.17	0.02	0.22	0.40		0.05	0.03	
Control Delay (s/veh)	14.1	17.7	0.1	7.0	9.4	0.1	20.2	6.1		30.8	24.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	14.1	17.7	0.1	7.0	9.4	0.1	20.2	6.1		30.8	24.7	
LOS	B	B	A	A	A	A	C	A		C	C	
Approach Delay (s/veh)		15.8			8.1			10.1			27.3	
Approach LOS		B			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 74.5			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 12.0		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

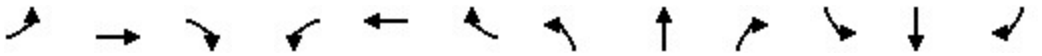
Splits and Phases: 4: Tenth Line W & Argentia Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	336	40	72	178	17	91	230	5	7
v/c Ratio	0.01	0.40	0.05	0.12	0.17	0.02	0.22	0.40	0.05	0.03
Control Delay (s/veh)	14.1	17.7	0.1	7.0	9.4	0.1	20.2	6.1	30.8	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.1	17.7	0.1	7.0	9.4	0.1	20.2	6.1	30.8	24.7
Queue Length 50th (m)	0.7	35.4	0.0	4.1	12.8	0.0	9.3	0.7	0.9	0.5
Queue Length 95th (m)	3.2	58.8	0.0	9.0	22.9	0.0	19.2	15.8	5.1	3.9
Internal Link Dist (m)		553.3			609.5			724.2		547.7
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	556	833	772	640	1023	921	414	1052	350	797
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.40	0.05	0.11	0.17	0.02	0.22	0.22	0.01	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	323	38	69	171	16	87	7	214	5	4	3
Future Volume (veh/h)	8	323	38	69	171	16	87	7	214	5	4	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1826	1826	1900	1900	1900	1885	1159	1900	1900
Adj Flow Rate, veh/h	8	336	40	72	178	17	91	7	223	5	4	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	0	5	5	0	0	0	1	50	0	0
Cap, veh/h	622	807	702	528	1005	882	441	13	413	196	146	110
Arrive On Green	0.44	0.44	0.44	0.07	0.55	0.55	0.08	0.26	0.26	0.15	0.15	0.15
Sat Flow, veh/h	1201	1841	1601	1739	1826	1603	1810	49	1565	711	1006	754
Grp Volume(v), veh/h	8	336	40	72	178	17	91	0	230	5	0	7
Grp Sat Flow(s),veh/h/ln	1201	1841	1601	1739	1826	1603	1810	0	1614	711	0	1760
Q Serve(g_s), s	0.3	9.5	1.1	1.5	3.7	0.4	3.0	0.0	9.2	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.3	9.5	1.1	1.5	3.7	0.4	3.0	0.0	9.2	0.7	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.43
Lane Grp Cap(c), veh/h	622	807	702	528	1005	882	441	0	426	196	0	256
V/C Ratio(X)	0.01	0.42	0.06	0.14	0.18	0.02	0.21	0.00	0.54	0.03	0.00	0.03
Avail Cap(c_a), veh/h	622	807	702	598	1005	882	502	0	952	404	0	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	14.6	12.2	9.4	8.5	7.7	22.3	0.0	23.8	28.0	0.0	27.7
Incr Delay (d2), s/veh	0.0	1.6	0.2	0.1	0.4	0.0	0.2	0.0	1.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.6	0.2	0.1	0.3	0.0	0.8	0.0	2.1	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	16.1	12.4	9.5	8.8	7.8	22.5	0.0	24.9	28.0	0.0	27.7
LnGrp LOS	B	B	B	A	A	A	C		C	C		C
Approach Vol, veh/h		384			267			321			12	
Approach Delay, s/veh		15.7			8.9			24.2			27.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	8.5	40.5		26.4		49.0	9.0	17.5				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	3.5	11.5		11.2		5.7	5.0	2.7				
Green Ext Time (p_c), s	0.1	4.9		4.3		3.0	0.1	0.1				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			16.8									
HCM 6th LOS			B									

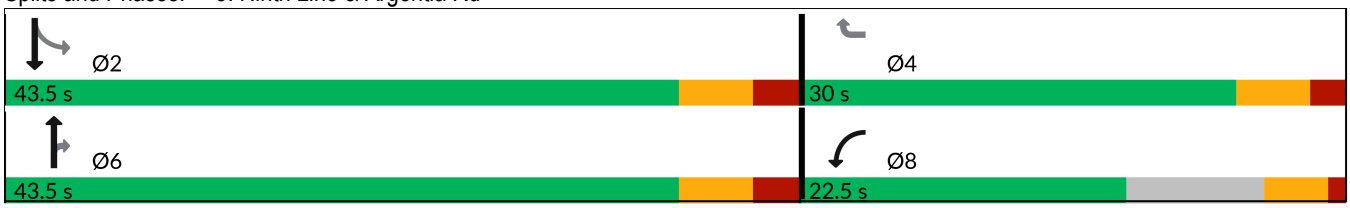


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	30	324	223	97	587
Future Volume (vph)	49	30	324	223	97	587
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		100.0	45.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.6				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1706	1526	1883	1601	1789	1865
Flt Permitted	0.950				0.552	
Satd. Flow (perm)	1706	1526	1883	1601	1040	1865
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		32		240		
Link Speed (k/h)	60		60			60
Link Distance (m)	746.3		1616.5			667.9
Travel Time (s)	44.8		97.0			40.1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	7%	7%	2%	2%	2%	3%
Adj. Flow (vph)	53	32	348	240	104	631
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	32	348	240	104	631
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	6.1	6.1	30.5	6.1	6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8	6.1	6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		6			2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		4		6	2	
Detector Phase	8	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	20.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (%)	30.6%	40.8%	59.2%	59.2%	59.2%	59.2%
Maximum Green (s)	18.0	24.0	37.0	37.0	37.0	37.0
Yellow Time (s)	3.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	6.5	6.5	6.5	6.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	11.0	14.0	27.0	27.0	27.0	27.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	14.6	20.4	50.6	50.6	50.6	50.6
Actuated g/C Ratio	0.21	0.30	0.74	0.74	0.74	0.74
v/c Ratio	0.15	0.07	0.25	0.19	0.14	0.46
Control Delay (s/veh)	20.6	7.9	7.5	1.7	7.8	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	7.9	7.5	1.7	7.8	9.7
LOS	C	A	A	A	A	A
Approach Delay (s/veh)	15.8		5.1			9.4
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 68.5			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 8.0		Intersection LOS: A	
Intersection Capacity Utilization 44.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	53	32	348	240	104	631
v/c Ratio	0.15	0.07	0.25	0.19	0.14	0.46
Control Delay (s/veh)	20.6	7.9	7.5	1.7	7.8	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	7.9	7.5	1.7	7.8	9.7
Queue Length 50th (m)	6.8	0.0	24.3	0.0	6.6	54.8
Queue Length 95th (m)	12.6	5.8	40.0	8.8	14.4	86.8
Internal Link Dist (m)	722.3		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	646	564	1391	1245	768	1378
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.06	0.25	0.19	0.14	0.46

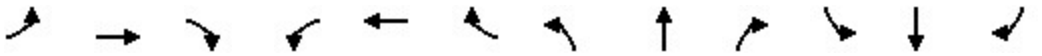
Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	49	30	324	223	97	587
Future Volume (veh/h)	49	30	324	223	97	587
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1870	1870	1870	1856
Adj Flow Rate, veh/h	53	32	348	240	104	631
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	7	7	2	2	2	3
Cap, veh/h	117	104	1343	1138	681	1333
Arrive On Green	0.07	0.07	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1711	1522	1870	1585	828	1856
Grp Volume(v), veh/h	53	32	348	240	104	631
Grp Sat Flow(s),veh/h/ln	1711	1522	1870	1585	828	1856
Q Serve(g_s), s	1.5	1.0	3.3	2.6	2.6	7.5
Cycle Q Clear(g_c), s	1.5	1.0	3.3	2.6	5.9	7.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	117	104	1343	1138	681	1333
V/C Ratio(X)	0.45	0.31	0.26	0.21	0.15	0.47
Avail Cap(c_a), veh/h	598	532	1343	1138	681	1333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.8	2.5	2.4	3.5	3.1
Incr Delay (d2), s/veh	2.7	1.7	0.5	0.4	0.5	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.2	0.1	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.8	24.5	3.0	2.8	4.0	4.3
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	85		588			735
Approach Delay, s/veh	25.3		2.9			4.3
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	8.0
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		9.5			5.3	3.5
Green Ext Time (p_c), s		13.0			7.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	5.0
HCM 6th LOS	A

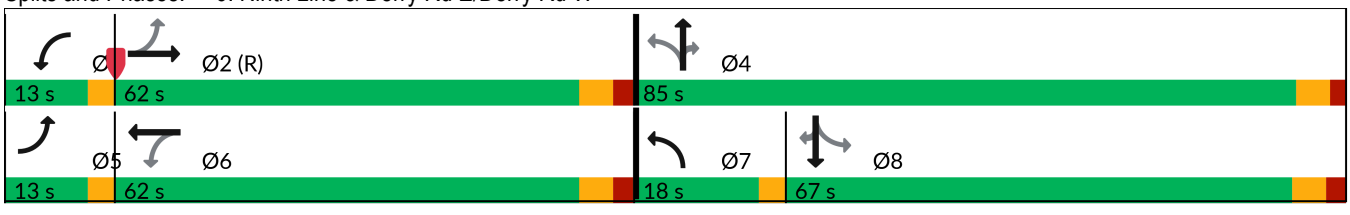


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	714	38	84	391	28	105	258	127	25	335	304
Future Volume (vph)	174	714	38	84	391	28	105	258	127	25	335	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.990				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3543	0	1722	3580	0	1755	1847	1585	1825	1865	1570
Flt Permitted	0.449			0.300			0.200			0.595		
Satd. Flow (perm)	837	3543	0	544	3580	0	369	1847	1585	1143	1865	1570
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			5				131			313
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	2%	6%	6%	1%	0%	4%	4%	3%	0%	3%	4%
Adj. Flow (vph)	179	736	39	87	403	29	108	266	131	26	345	313
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	775	0	87	432	0	108	266	131	26	345	313
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.0	40.0	40.5	40.5	40.5
Total Split (s)	13.0	62.0		13.0	62.0		18.0	85.0	85.0	67.0	67.0	67.0
Total Split (%)	8.1%	38.8%		8.1%	38.8%		11.3%	53.1%	53.1%	41.9%	41.9%	41.9%
Maximum Green (s)	10.0	55.5		10.0	55.5		15.0	79.0	79.0	60.5	60.5	60.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.0	2.0	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.0	6.0	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?		Yes		Yes			Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	Max		None	Min	Min	Min	Min	Min
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	97.3	82.0		90.9	78.2		56.3	53.3	53.3	36.8	36.8	36.8
Actuated g/C Ratio	0.61	0.51		0.57	0.49		0.35	0.33	0.33	0.23	0.23	0.23
v/c Ratio	0.31	0.43		0.23	0.25		0.44	0.43	0.21	0.10	0.81	0.52
Control Delay (s/veh)	17.2	25.4		16.7	26.2		39.5	42.4	5.3	45.7	72.1	7.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.2	25.4		16.7	26.2		39.5	42.4	5.3	45.7	72.1	7.4
LOS	B	C		B	C		D	D	A	D	E	A
Approach Delay (s/veh)		23.9			24.7			32.1			41.5	
Approach LOS		C			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 115 (72%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 30.1		Intersection LOS: C	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

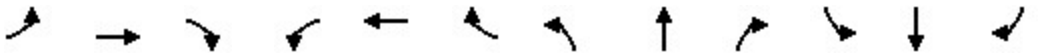
Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	179	775	87	432	108	266	131	26	345	313
v/c Ratio	0.31	0.43	0.23	0.25	0.44	0.43	0.21	0.10	0.81	0.52
Control Delay (s/veh)	17.2	25.4	16.7	26.2	39.5	42.4	5.3	45.7	72.1	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.2	25.4	16.7	26.2	39.5	42.4	5.3	45.7	72.1	7.4
Queue Length 50th (m)	26.8	71.3	11.6	41.4	24.3	67.6	0.0	6.6	107.5	0.0
Queue Length 95th (m)	44.4	104.4	24.1	65.7	34.8	83.7	13.3	14.0	132.7	23.5
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	588	1816	390	1753	259	911	848	432	705	788
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.43	0.22	0.25	0.42	0.29	0.15	0.06	0.49	0.40

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	714	38	84	391	28	105	258	127	25	335	304
Future Volume (veh/h)	174	714	38	84	391	28	105	258	127	25	335	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1811	1811	1885	1900	1841	1841	1856	1900	1856	1841
Adj Flow Rate, veh/h	179	736	39	87	403	29	108	266	131	26	345	313
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	2	6	6	1	0	4	4	3	0	3	4
Cap, veh/h	575	1815	96	462	1727	124	208	605	517	261	468	393
Arrive On Green	0.12	1.00	1.00	0.04	0.51	0.51	0.06	0.33	0.33	0.25	0.25	0.25
Sat Flow, veh/h	1767	3433	182	1725	3389	243	1753	1841	1572	1003	1856	1560
Grp Volume(v), veh/h	179	381	394	87	212	220	108	266	131	26	345	313
Grp Sat Flow(s),veh/h/ln	1767	1777	1838	1725	1791	1841	1753	1841	1572	1003	1856	1560
Q Serve(g_s), s	7.9	0.0	0.0	3.8	10.5	10.6	7.1	18.1	9.8	3.3	27.3	30.0
Cycle Q Clear(g_c), s	7.9	0.0	0.0	3.8	10.5	10.6	7.1	18.1	9.8	9.3	27.3	30.0
Prop In Lane	1.00		0.10	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	575	939	972	462	913	938	208	605	517	261	468	393
V/C Ratio(X)	0.31	0.41	0.41	0.19	0.23	0.23	0.52	0.44	0.25	0.10	0.74	0.80
Avail Cap(c_a), veh/h	576	939	972	496	913	938	271	909	776	387	702	590
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	16.9	21.8	21.8	42.3	42.2	39.4	50.6	55.0	56.0
Incr Delay (d2), s/veh	0.3	1.2	1.1	0.2	0.6	0.6	2.0	0.5	0.3	0.2	2.3	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.3	0.3	1.1	3.3	3.4	2.6	6.7	3.1	0.7	10.7	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.3	1.2	1.1	17.1	22.4	22.4	44.3	42.7	39.6	50.8	57.3	60.5
LnGrp LOS	B	A	A	B	C	C	D	D	D	D	E	E
Approach Vol, veh/h		954			519			505			684	
Approach Delay, s/veh		3.8			21.5			42.2			58.5	
Approach LOS		A			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	91.1		59.1	12.9	88.0	12.2	46.8				
Change Period (Y+Rc), s	3.0	6.5		* 6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	55.5		* 79	10.0	55.5	15.0	60.5				
Max Q Clear Time (g_c+I1), s	5.8	2.0		20.1	9.9	12.6	9.1	32.0				
Green Ext Time (p_c), s	0.1	18.1		5.9	0.0	8.1	0.2	8.3				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			28.6									
HCM 6th LOS			C									

Notes

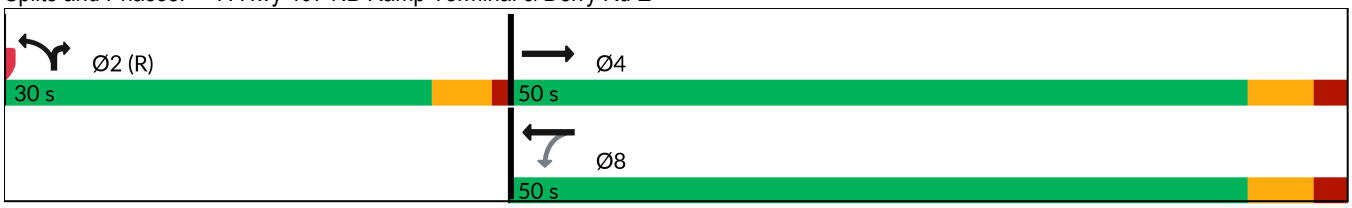
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	833	200	1	670	11	126
Future Volume (vph)	833	200	1	670	11	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.97	1.00
Frt	0.971					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3292	0	0	3357	2727	1502
Flt Permitted				0.954	0.950	
Satd. Flow (perm)	3292	0	0	3203	2727	1502
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	58					130
Link Speed (k/h)	80			60	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			14.5	30.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	23%	3%
Adj. Flow (vph)	859	206	1	691	11	130
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1065	0	0	692	11	130
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases			8			
Detector Phase	4		8	8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0		8.0	8.0	5.0	5.0
Minimum Split (s)	26.0		26.0	26.0	24.5	24.5
Total Split (s)	50.0		50.0	50.0	30.0	30.0
Total Split (%)	62.5%		62.5%	62.5%	37.5%	37.5%
Maximum Green (s)	44.0		44.0	44.0	25.5	25.5
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	2.0		2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Max	Max	C-Min	C-Min
Walk Time (s)	8.0		8.0	8.0	8.0	8.0
Flash Don't Walk (s)	12.0		12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	62.4			62.4	7.1	7.1
Actuated g/C Ratio	0.78			0.78	0.09	0.09
v/c Ratio	0.41			0.28	0.05	0.52
Control Delay (s/veh)	2.9			2.0	32.1	14.3
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	2.9			2.0	32.1	14.3
LOS	A			A	C	B
Approach Delay (s/veh)	2.9			2.0	15.7	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 48.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1065	692	11	130
v/c Ratio	0.41	0.28	0.05	0.52
Control Delay (s/veh)	2.9	2.0	32.1	14.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	2.0	32.1	14.3
Queue Length 50th (m)	16.1	8.6	0.9	0.0
Queue Length 95th (m)	23.6	13.7	3.5	14.6
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2580	2498	869	567
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.28	0.01	0.23

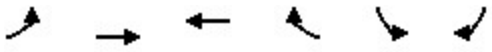
Intersection Summary



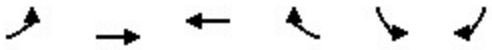
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	833	200	1	670	11	126
Future Volume (veh/h)	833	200	1	670	11	126
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1758	1477	1758
Adj Flow Rate, veh/h	859	206	1	691	11	130
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	3	23	3
Cap, veh/h	1481	355	45	1802	870	475
Arrive On Green	0.55	0.55	0.55	0.55	0.32	0.32
Sat Flow, veh/h	2782	646	0	3356	2729	1490
Grp Volume(v), veh/h	537	528	371	321	11	130
Grp Sat Flow(s),veh/h/ln	1683	1656	1757	1520	1365	1490
Q Serve(g_s), s	16.9	16.9	0.0	9.6	0.2	5.2
Cycle Q Clear(g_c), s	16.9	16.9	9.6	9.6	0.2	5.2
Prop In Lane		0.39	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	926	911	1011	836	870	475
V/C Ratio(X)	0.58	0.58	0.37	0.38	0.01	0.27
Avail Cap(c_a), veh/h	926	911	1011	836	870	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	11.9	11.9	10.3	10.3	18.6	20.3
Incr Delay (d2), s/veh	2.6	2.7	1.0	1.3	0.0	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.7	0.9	0.8	0.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.5	14.6	11.2	11.5	18.7	21.8
LnGrp LOS	B	B	B	B	B	C
Approach Vol, veh/h	1065			692	141	
Approach Delay, s/veh	14.6			11.4	21.5	
Approach LOS	B			B	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	30.0	50.0	50.0
Change Period (Y+Rc), s	4.5	6.0	6.0
Max Green Setting (Gmax), s	25.5	44.0	44.0
Max Q Clear Time (g_c+I1), s	7.2	18.9	11.6
Green Ext Time (p_c), s	0.7	17.3	12.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.9
HCM 6th LOS	B



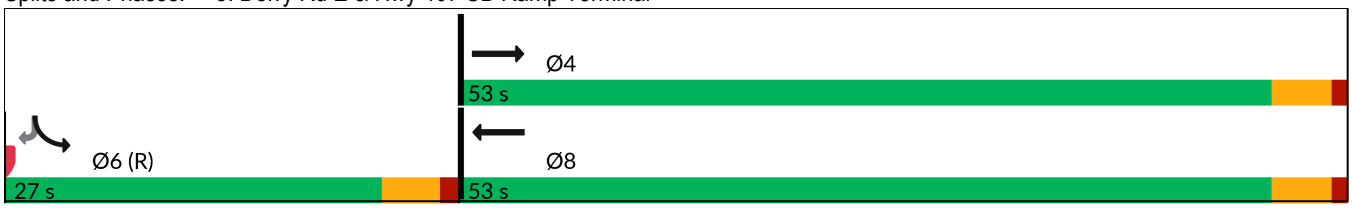
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1012	529	146	31	60
Future Volume (vph)	0	1012	529	146	31	60
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.968			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3250	0	3106	1334
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3250	0	3106	1334
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			80			63
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	3%	8%	16%
Adj. Flow (vph)	0	1065	557	154	33	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1065	711	0	33	63
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

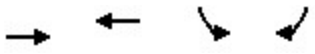


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		53.0	53.0		27.0	27.0
Total Split (%)		66.3%	66.3%		33.8%	33.8%
Maximum Green (s)		48.5	48.5		22.5	22.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		64.1	64.1		6.9	6.9
Actuated g/C Ratio		0.80	0.80		0.09	0.09
v/c Ratio		0.39	0.27		0.12	0.37
Control Delay (s/veh)		2.9	1.6		34.0	15.8
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		2.9	1.6		34.0	15.8
LOS		A	A		C	B
Approach Delay (s/veh)		2.9	1.6		22.1	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay (s/veh): 3.4		Intersection LOS: A	
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

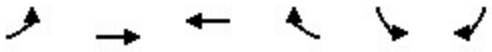
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1065	711	33	63
v/c Ratio	0.39	0.27	0.12	0.37
Control Delay (s/veh)	2.9	1.6	34.0	15.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.9	1.6	34.0	15.8
Queue Length 50th (m)	16.4	6.2	2.6	0.0
Queue Length 95th (m)	29.4	18.5	6.5	11.9
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2716	2620	873	420
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.27	0.04	0.15

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1012	529	146	31	60
Future Volume (veh/h)	0	1012	529	146	31	60
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1758	1758	1688	1575
Adj Flow Rate, veh/h	0	1065	557	154	33	63
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	3	8	16
Cap, veh/h	0	2041	1568	432	877	375
Arrive On Green	0.00	0.61	0.61	0.61	0.28	0.28
Sat Flow, veh/h	0	3544	2675	713	3118	1335
Grp Volume(v), veh/h	0	1065	359	352	33	63
Grp Sat Flow(s),veh/h/ln	0	1683	1670	1630	1559	1335
Q Serve(g_s), s	0.0	14.6	8.6	8.7	0.6	2.8
Cycle Q Clear(g_c), s	0.0	14.6	8.6	8.7	0.6	2.8
Prop In Lane	0.00			0.44	1.00	1.00
Lane Grp Cap(c), veh/h	0	2041	1012	988	877	375
V/C Ratio(X)	0.00	0.52	0.35	0.36	0.04	0.17
Avail Cap(c_a), veh/h	0	2041	1012	988	877	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.1	7.9	7.9	20.9	21.7
Incr Delay (d2), s/veh	0.0	1.0	1.0	1.0	0.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.3	0.3	0.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.0	8.9	8.9	21.0	22.7
LnGrp LOS		B	A	A	C	C
Approach Vol, veh/h		1065	711		96	
Approach Delay, s/veh		10.0	8.9		22.1	
Approach LOS		B	A		C	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			53.0		27.0	53.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			48.5		22.5	48.5
Max Q Clear Time (g_c+I1), s			16.6		4.8	10.7
Green Ext Time (p_c), s			20.9		0.4	14.4

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		10.2
HCM 6th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	6	15	16	0	0
Future Volume (vph)	0	6	15	16	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.976		
Satd. Flow (prot)	1629	0	0	1838	1883	0
Flt Permitted				0.976		
Satd. Flow (perm)	1629	0	0	1838	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	124.9			571.7	104.9	
Travel Time (s)	9.4			41.2	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	16	17	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	33	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

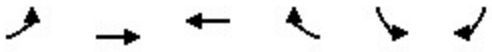
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	15	16	0	0
Future Vol, veh/h	0	6	15	16	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	16	17	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	50	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	959	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	949	1084	1622	-	-	-
Mov Cap-2 Maneuver	949	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	973	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.3	3.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.01	-	0.006	-	-
HCM Ctrl Dly (s/v)	7.2	0	8.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	358	242	39	12	5
Future Volume (vph)	19	358	242	39	12	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.979		0.962	
Flt Protected		0.997			0.965	
Satd. Flow (prot)	0	3568	3503	0	1748	0
Flt Permitted		0.997			0.965	
Satd. Flow (perm)	0	3568	3503	0	1748	0
Link Speed (k/h)		60	60		48	
Link Distance (m)		746.3	577.3		446.6	
Travel Time (s)		44.8	34.6		33.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	389	263	42	13	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	410	305	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	358	242	39	12	5
Future Vol, veh/h	19	358	242	39	12	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	389	263	42	13	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	305	0	-	0	521	153
Stage 1	-	-	-	-	284	-
Stage 2	-	-	-	-	237	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1253	-	-	-	485	866
Stage 1	-	-	-	-	739	-
Stage 2	-	-	-	-	780	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1253	-	-	-	475	866
Mov Cap-2 Maneuver	-	-	-	-	475	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	780	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.5	0	11.8
HCM LOS			B

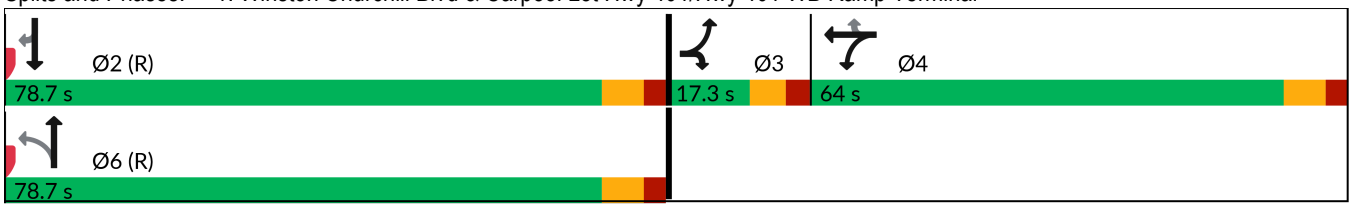
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1253	-	-	-	548
HCM Lane V/C Ratio	0.016	-	-	-	0.034
HCM Ctrl Dly (s/v)	7.9	0.1	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	21	921	12	863	5	1095	229	0	1399	434
Future Volume (vph)	8	0	21	921	12	863	5	1095	229	0	1399	434
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Frt			0.850			0.850		0.974				0.850
Flt Protected	0.950			0.950	0.954		0.950					
Satd. Flow (prot)	1729	0	1547	1626	1634	2475	1729	3173	0	0	4644	1432
Flt Permitted	0.950			0.950	0.954		0.109					
Satd. Flow (perm)	1729	0	1547	1626	1634	2475	198	3173	0	0	4644	1432
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			254		20				377
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	0%	0%	1%	0%	10%	0%	7%	2%	2%	7%	8%
Adj. Flow (vph)	8	0	22	959	13	899	5	1141	239	0	1457	452
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	8	0	22	489	483	899	5	1380	0	0	1457	452
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	17.3		17.3	64.0	64.0	64.0	78.7	78.7			78.7	78.7
Total Split (%)	10.8%		10.8%	40.0%	40.0%	40.0%	49.2%	49.2%			49.2%	49.2%
Maximum Green (s)	10.0		10.0	56.4	56.4	56.4	71.2	71.2			71.2	71.2
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)	10.0		10.0	54.9	54.9	54.9	79.7	79.7			79.7	79.7
Actuated g/C Ratio	0.06		0.06	0.34	0.34	0.34	0.50	0.50			0.50	0.50
v/c Ratio	0.07		0.13	0.88	0.86	0.89	0.05	0.87			0.63	0.50
Control Delay (s/veh)	72.4		1.5	67.0	65.2	46.4	15.0	29.2			32.5	7.4
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	72.4		1.5	67.0	65.2	46.4	15.0	29.2			32.5	7.4
LOS	E		A	E	E	D	B	C			C	A
Approach Delay (s/veh)		20.4			56.6			29.1			26.6	
Approach LOS		C			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 56 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 38.0		Intersection LOS: D	
Intersection Capacity Utilization 91.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal

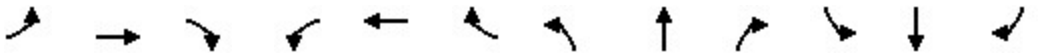




Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	8	22	489	483	899	5	1380	1457	452
v/c Ratio	0.07	0.13	0.88	0.86	0.89	0.05	0.87	0.63	0.50
Control Delay (s/veh)	72.4	1.5	67.0	65.2	46.4	15.0	29.2	32.5	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.4	1.5	67.0	65.2	46.4	15.0	29.2	32.5	7.4
Queue Length 50th (m)	2.5	0.0	152.8	148.7	125.0	0.6	248.9	143.5	14.7
Queue Length 95th (m)	8.3	0.0	#216.3	#208.7	161.4	m1.4	#291.3	161.9	46.1
Internal Link Dist (m)				193.3			369.8	835.9	
Turn Bay Length (m)									
Base Capacity (vph)	108	173	575	577	1038	98	1590	2312	902
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.13	0.85	0.84	0.87	0.05	0.87	0.63	0.50

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	21	921	12	863	5	1095	229	0	1399	434
Future Volume (veh/h)	8	0	21	921	12	863	5	1095	229	0	1399	434
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	0	1800	1786	1800	1660	1800	1702	1772	0	1702	1688
Adj Flow Rate, veh/h	8	0	22	968	0	899	5	1141	239	0	1457	452
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	1	0	10	0	7	2	0	7	8
Cap, veh/h	0	0	0	1180	0	976	170	1488	310	0	2596	799
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.56	0.56	0.56	0.00	0.56	0.56
Sat Flow, veh/h		0		3402	0	2813	351	2664	555	0	4799	1430
Grp Volume(v), veh/h		0.0		968	0	899	5	690	690	0	1457	452
Grp Sat Flow(s),veh/h/ln				1701	0	1406	351	1617	1602	0	1549	1430
Q Serve(g_s), s				41.6	0.0	49.1	1.5	52.5	53.5	0.0	32.3	32.6
Cycle Q Clear(g_c), s				41.6	0.0	49.1	33.7	52.5	53.5	0.0	32.3	32.6
Prop In Lane				1.00		1.00	1.00		0.35	0.00		1.00
Lane Grp Cap(c), veh/h				1180	0	976	170	903	895	0	2596	799
V/C Ratio(X)				0.82	0.00	0.92	0.03	0.76	0.77	0.00	0.56	0.57
Avail Cap(c_a), veh/h				1199	0	992	170	903	895	0	2596	799
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.7	0.0	50.1	33.5	27.2	27.4	0.0	22.7	22.8
Incr Delay (d2), s/veh				4.6	0.0	13.4	0.3	6.1	6.4	0.0	0.9	2.9
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.6	0.0	15.3	0.1	14.8	15.0	0.0	8.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				52.3	0.0	63.5	33.9	33.3	33.8	0.0	23.6	25.7
LnGrp LOS				D		E	C	C	C		C	C
Approach Vol, veh/h					1867			1385			1909	
Approach Delay, s/veh					57.7			33.5			24.1	
Approach LOS					E			C			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	96.9	63.1	96.9
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	71.2	56.4	71.2
Max Q Clear Time (g_c+I1), s	34.6	51.1	55.5
Green Ext Time (p_c), s	31.6	4.4	13.9

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	38.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

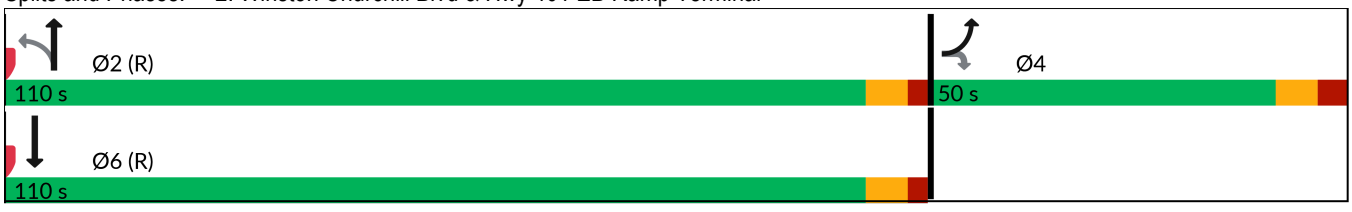


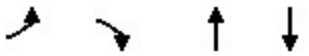
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	389	378	5	938	1710	572
Future Volume (vph)	389	378	5	938	1710	572
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	0.91
Frt	0.961	0.850			0.962	
Flt Protected	0.964					
Satd. Flow (prot)	2956	1354	0	4778	4552	0
Flt Permitted	0.964			0.913		
Satd. Flow (perm)	2956	1354	0	4362	4552	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	23	23			105	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	13%	4%	2%	4%	2%	14%
Adj. Flow (vph)	414	402	5	998	1819	609
Shared Lane Traffic (%)		36%				
Lane Group Flow (vph)	559	257	0	1003	2428	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0	20.0	20.0	20.0	
Minimum Split (s)	22.5	22.5	31.5	31.5	31.5	
Total Split (s)	50.0	50.0	110.0	110.0	110.0	
Total Split (%)	31.3%	31.3%	68.8%	68.8%	68.8%	
Maximum Green (s)	41.5	41.5	102.5	102.5	102.5	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	3.5	3.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	C-Max	
Walk Time (s)			7.0	7.0	7.0	
Flash Don't Walk (s)			17.0	17.0	17.0	
Pedestrian Calls (#/hr)			0	0	0	
Act Effct Green (s)	34.8	34.8		109.2	109.2	
Actuated g/C Ratio	0.22	0.22		0.68	0.68	
v/c Ratio	0.85	0.82		0.34	0.77	
Control Delay (s/veh)	69.8	75.2		18.0	12.8	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	69.8	75.2		18.0	12.8	
LOS	E	E		B	B	
Approach Delay (s/veh)	71.5			18.0	12.8	
Approach LOS	E			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 48 (30%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 25.3		Intersection LOS: C	
Intersection Capacity Utilization 78.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal





Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	559	257	1003	2428
v/c Ratio	0.85	0.82	0.34	0.77
Control Delay (s/veh)	69.8	75.2	18.0	12.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.8	75.2	18.0	12.8
Queue Length 50th (m)	94.0	81.6	68.7	116.1
Queue Length 95th (m)	112.6	115.4	81.5	123.8
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	783	368	2978	3141
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.71	0.70	0.34	0.77

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	389	378	5	938	1710	572
Future Volume (veh/h)	389	378	5	938	1710	572
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1617	1744	1772	1744	1772	1603
Adj Flow Rate, veh/h	535	272	5	998	1819	609
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	13	4	2	4	2	14
Cap, veh/h	663	318	27	3117	2485	794
Arrive On Green	0.22	0.22	0.68	0.68	0.68	0.68
Sat Flow, veh/h	3081	1478	6	4694	3789	1159
Grp Volume(v), veh/h	535	272	368	635	1607	821
Grp Sat Flow(s),veh/h/ln	1540	1478	1669	1444	1612	1563
Q Serve(g_s), s	26.4	28.3	0.0	14.2	50.1	55.8
Cycle Q Clear(g_c), s	26.4	28.3	13.5	14.2	50.1	55.8
Prop In Lane	1.00	1.00	0.01			0.74
Lane Grp Cap(c), veh/h	663	318	1166	1978	2209	1071
V/C Ratio(X)	0.81	0.86	0.32	0.32	0.73	0.77
Avail Cap(c_a), veh/h	799	383	1166	1978	2209	1071
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.85	0.85	1.00	1.00
Uniform Delay (d), s/veh	59.6	60.4	10.1	10.2	15.8	16.7
Incr Delay (d2), s/veh	5.2	14.9	0.6	0.4	2.1	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	10.3	2.7	2.3	9.3	10.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.8	75.2	10.7	10.5	18.0	22.0
LnGrp LOS	E	E	B	B	B	C
Approach Vol, veh/h	807			1003	2428	
Approach Delay, s/veh	68.3			10.6	19.3	
Approach LOS	E			B	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		117.1		42.9		117.1
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		102.5		41.5		102.5
Max Q Clear Time (g_c+I1), s		16.2		30.3		57.8
Green Ext Time (p_c), s		30.9		4.1		43.6

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		26.6
HCM 6th LOS		C

Notes

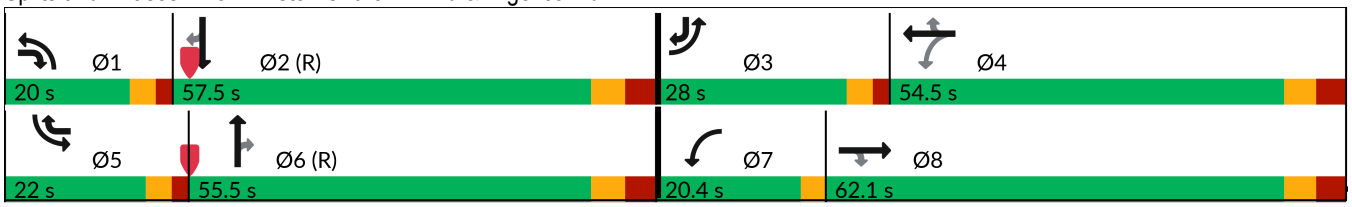
User approved volume balancing among the lanes for turning movement.

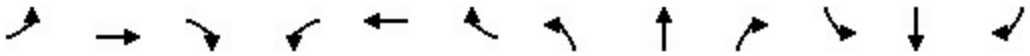
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	354	294	201	268	508	284	220	736	94	229	1204	357
Future Volume (vph)	354	294	201	268	508	284	220	736	94	229	1204	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.96	0.98		0.95	1.00		0.99	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3404	3579	1617	1807	3579	1585	3506	4995	1601	3404	5142	1585
Flt Permitted	0.950			0.570			0.950			0.950		
Satd. Flow (perm)	3336	3579	1546	1061	3579	1503	3501	4995	1578	3400	5142	1556
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			93			85			119			67
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	40		32	32		40	6		2	2		6
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	4%	2%	1%	1%	2%	3%	1%	5%	2%	4%	2%	3%
Adj. Flow (vph)	358	297	203	271	513	287	222	743	95	231	1216	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	358	297	203	271	513	287	222	743	95	231	1216	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	28.0	62.1	20.0	20.4	54.5	22.0	20.0	55.5	55.5	22.0	57.5	28.0
Total Split (%)	17.5%	38.8%	12.5%	12.8%	34.1%	13.8%	12.5%	34.7%	34.7%	13.8%	35.9%	17.5%
Maximum Green (s)	23.0	54.6	15.0	17.4	47.0	17.0	15.0	48.0	48.0	17.0	50.0	23.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.9	34.3	52.2	50.6	28.8	47.4	15.4	69.2	69.2	16.1	70.0	93.4
Actuated g/C Ratio	0.13	0.21	0.33	0.32	0.18	0.30	0.10	0.43	0.43	0.10	0.44	0.58
v/c Ratio	0.81	0.39	0.35	0.65	0.80	0.56	0.66	0.34	0.13	0.68	0.54	0.38
Control Delay (s/veh)	81.9	54.2	19.7	45.8	72.3	33.3	79.2	32.3	2.9	59.5	45.2	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.9	54.2	19.7	45.8	72.3	33.3	79.2	32.3	2.9	59.5	45.2	22.4
LOS	F	D	B	D	E	C	E	C	A	E	D	C
Approach Delay (s/veh)		57.6			55.1			39.5			42.5	
Approach LOS		E			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 47.3		Intersection LOS: D	
Intersection Capacity Utilization 106.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd

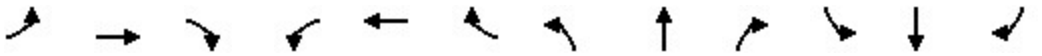




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	358	297	203	271	513	287	222	743	95	231	1216	361
v/c Ratio	0.81	0.39	0.35	0.65	0.80	0.56	0.66	0.34	0.13	0.68	0.54	0.38
Control Delay (s/veh)	81.9	54.2	19.7	45.8	72.3	33.3	79.2	32.3	2.9	59.5	45.2	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.9	54.2	19.7	45.8	72.3	33.3	79.2	32.3	2.9	59.5	45.2	22.4
Queue Length 50th (m)	59.3	43.5	24.4	63.8	84.8	53.0	36.0	60.1	0.0	36.4	125.0	62.8
Queue Length 95th (m)	77.3	54.5	39.8	82.1	100.6	73.7	49.1	81.6	7.5	m47.8	147.6	98.2
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	489	1221	583	417	1051	529	358	2160	750	379	2248	959
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.24	0.35	0.65	0.49	0.54	0.62	0.34	0.13	0.61	0.54	0.38

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	354	294	201	268	508	284	220	736	94	229	1204	357
Future Volume (veh/h)	354	294	201	268	508	284	220	736	94	229	1204	357
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1870	1885	1885	1870	1856	1885	1826	1870	1841	1870	1856
Adj Flow Rate, veh/h	358	297	203	271	513	287	222	743	0	231	1216	361
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	2	1	1	2	3	1	5	2	4	2	3
Cap, veh/h	412	1091	595	499	1002	553	269	1790		277	1854	759
Arrive On Green	0.12	0.31	0.31	0.11	0.28	0.28	0.08	0.36	0.00	0.16	0.73	0.73
Sat Flow, veh/h	3401	3554	1535	1795	3554	1506	3483	4985	1585	3401	5106	1565
Grp Volume(v), veh/h	358	297	203	271	513	287	222	743	0	231	1216	361
Grp Sat Flow(s),veh/h/ln	1700	1777	1535	1795	1777	1506	1742	1662	1585	1700	1702	1565
Q Serve(g_s), s	16.5	10.1	15.0	17.3	19.4	24.0	10.0	18.0	0.0	10.5	19.9	15.2
Cycle Q Clear(g_c), s	16.5	10.1	15.0	17.3	19.4	24.0	10.0	18.0	0.0	10.5	19.9	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	1091	595	499	1002	553	269	1790		277	1854	759
V/C Ratio(X)	0.87	0.27	0.34	0.54	0.51	0.52	0.82	0.42		0.83	0.66	0.48
Avail Cap(c_a), veh/h	489	1213	647	499	1044	570	327	1790		361	1854	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.54	0.54	0.54
Uniform Delay (d), s/veh	69.0	41.9	34.9	35.1	48.2	40.1	72.7	38.6	0.0	65.9	16.7	10.8
Incr Delay (d2), s/veh	13.6	0.1	0.3	1.2	0.4	0.8	13.3	0.7	0.0	7.0	1.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	3.6	4.4	6.0	7.0	7.1	4.3	5.9	0.0	3.9	4.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.6	42.0	35.3	36.3	48.6	40.8	86.1	39.3	0.0	73.0	17.7	12.0
LnGrp LOS	F	D	D	D	D	D	F	D		E	B	B
Approach Vol, veh/h		858			1071			965			1808	
Approach Delay, s/veh		57.4			43.4			50.1			23.6	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	65.6	24.4	52.6	18.0	64.9	20.4	56.6
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	23.0	47.0	17.0	48.0	17.4	54.6
Max Q Clear Time (g_c+I1), s	12.0	21.9	18.5	26.0	12.5	20.0	19.3	17.0
Green Ext Time (p_c), s	0.3	22.4	0.9	9.6	0.5	13.3	0.0	6.9

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.7
HCM 6th LOS	D

Notes

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

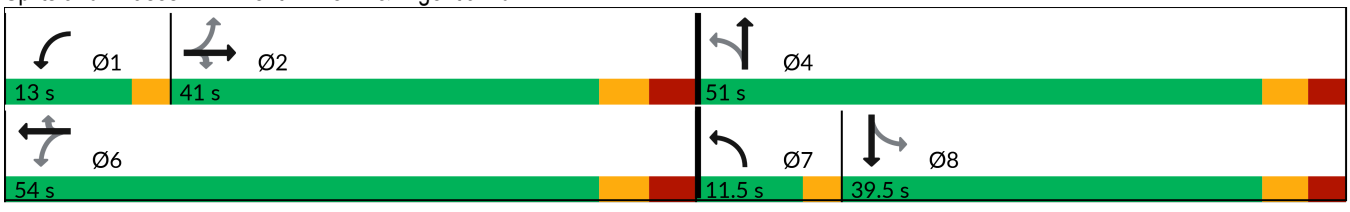
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	330	109	451	470	6	64	1	281	6	6	5
Future Volume (vph)	1	330	109	451	470	6	64	1	281	6	6	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.96	0.99		0.97	0.99	0.98		1.00	0.99	
Frt			0.850			0.850		0.850			0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	913	1830	1601	1825	1865	1361	1825	1603	0	1825	1775	0
Flt Permitted	0.478			0.446			0.577			0.575		
Satd. Flow (perm)	456	1830	1534	848	1865	1314	1101	1603	0	1100	1775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			68		302			5	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		577.3			633.5			748.2			571.7	
Travel Time (s)		34.6			38.0			53.9			41.2	
Confl. Peds. (#/hr)	8		12	12		8	8		7	7		8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	5%	2%	0%	3%	20%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	355	117	485	505	6	69	1	302	6	6	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	355	117	485	505	6	69	303	0	6	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

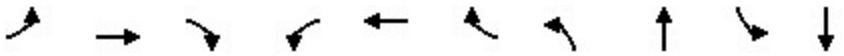
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	41.0	41.0	41.0	13.0	54.0	54.0	11.5	51.0		39.5	39.5	
Total Split (%)	39.0%	39.0%	39.0%	12.4%	51.4%	51.4%	11.0%	48.6%		37.6%	37.6%	
Maximum Green (s)	33.5	33.5	33.5	10.0	46.5	46.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	33.6	33.6	33.6	51.1	46.6	46.6	22.1	18.6		10.0	10.0	
Actuated g/C Ratio	0.42	0.42	0.42	0.64	0.59	0.59	0.28	0.23		0.13	0.13	
v/c Ratio	0.01	0.46	0.16	0.72	0.46	0.01	0.18	0.50		0.04	0.05	
Control Delay (s/veh)	15.0	19.5	3.9	15.7	11.6	0.0	22.1	6.4		32.8	25.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	15.0	19.5	3.9	15.7	11.6	0.0	22.1	6.4		32.8	25.9	
LOS	B	B	A	B	B	A	C	A		C	C	
Approach Delay (s/veh)		15.7			13.6			9.3			28.3	
Approach LOS		B			B			A			C	

Intersection Summary

Area Type: Other
Cycle Length: 105
Actuated Cycle Length: 79.3
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay (s/veh): 13.4 Intersection LOS: B
Intersection Capacity Utilization 83.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 4: Tenth Line W & Argentia Rd

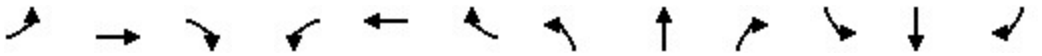




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	355	117	485	505	6	69	303	6	11
v/c Ratio	0.01	0.46	0.16	0.72	0.46	0.01	0.18	0.50	0.04	0.05
Control Delay (s/veh)	15.0	19.5	3.9	15.7	11.6	0.0	22.1	6.4	32.8	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	19.5	3.9	15.7	11.6	0.0	22.1	6.4	32.8	25.9
Queue Length 50th (m)	0.2	40.7	0.0	34.4	43.6	0.0	7.7	0.1	0.8	0.8
Queue Length 95th (m)	1.8	64.9	9.2	#55.2	67.6	0.0	16.8	18.0	4.3	5.3
Internal Link Dist (m)		553.3			609.5			724.2		547.7
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	193	775	717	670	1096	800	385	1034	458	743
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.46	0.16	0.72	0.46	0.01	0.18	0.29	0.01	0.01

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	330	109	451	470	6	64	1	281	6	6	5
Future Volume (veh/h)	1	330	109	451	470	6	64	1	281	6	6	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1870	1900	1856	1604	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	355	117	485	505	6	69	1	302	6	6	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	100	5	2	0	3	20	0	0	0	0	0	0
Cap, veh/h	161	726	621	535	1024	742	452	1	449	209	171	143
Arrive On Green	0.40	0.40	0.40	0.12	0.55	0.55	0.07	0.28	0.28	0.18	0.18	0.18
Sat Flow, veh/h	197	1826	1561	1810	1856	1344	1810	5	1592	1086	952	793
Grp Volume(v), veh/h	1	355	117	485	505	6	69	0	303	6	0	11
Grp Sat Flow(s),veh/h/ln	197	1826	1561	1810	1856	1344	1810	0	1597	1086	0	1745
Q Serve(g_s), s	0.3	12.2	4.1	10.0	14.1	0.2	2.4	0.0	14.2	0.4	0.0	0.4
Cycle Q Clear(g_c), s	1.4	12.2	4.1	10.0	14.1	0.2	2.4	0.0	14.2	6.0	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	161	726	621	535	1024	742	452	0	450	209	0	314
V/C Ratio(X)	0.01	0.49	0.19	0.91	0.49	0.01	0.15	0.00	0.67	0.03	0.00	0.04
Avail Cap(c_a), veh/h	161	726	621	535	1024	742	514	0	844	439	0	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.0	19.0	16.5	19.0	11.6	8.5	23.4	0.0	26.8	33.3	0.0	28.5
Incr Delay (d2), s/veh	0.1	2.3	0.7	19.0	1.7	0.0	0.2	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	0.8	4.2	1.8	0.0	0.7	0.0	3.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	21.3	17.2	38.1	13.3	8.5	23.5	0.0	28.6	33.3	0.0	28.6
LnGrp LOS	B	C	B	D	B	A	C		C	C		C
Approach Vol, veh/h		473			996			372			17	
Approach Delay, s/veh		20.3			25.4			27.6			30.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	13.0	41.0		30.2		54.0	8.6	21.6				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	33.5		44.5		46.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	12.0	14.2		16.2		16.1	4.4	8.0				
Green Ext Time (p_c), s	0.0	5.7		5.6		9.6	0.1	0.1				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		24.6	
HCM 6th LOS		C	

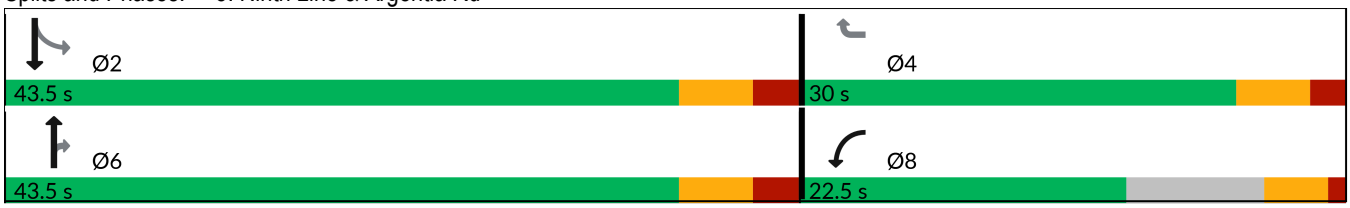


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	270	204	734	132	77	545
Future Volume (vph)	270	204	734	132	77	545
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		100.0	45.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.6				7.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1807	1617	1902	1585	1722	1883
Flt Permitted	0.950				0.198	
Satd. Flow (perm)	1807	1617	1902	1585	359	1883
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		148		138		
Link Speed (k/h)	60		60			60
Link Distance (m)	746.3		1616.5			667.9
Travel Time (s)	44.8		97.0			40.1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	3%	6%	2%
Adj. Flow (vph)	281	213	765	138	80	568
Shared Lane Traffic (%)						
Lane Group Flow (vph)	281	213	765	138	80	568
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	6.1	6.1	30.5	6.1	6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8	6.1	6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		6			2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		4		6	2	
Detector Phase	8	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	20.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (%)	30.6%	40.8%	59.2%	59.2%	59.2%	59.2%
Maximum Green (s)	18.0	24.0	37.0	37.0	37.0	37.0
Yellow Time (s)	3.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	6.5	6.5	6.5	6.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	11.0	14.0	27.0	27.0	27.0	27.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	21.5	20.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.31	0.29	0.53	0.53	0.53	0.53
v/c Ratio	0.50	0.37	0.76	0.15	0.42	0.57
Control Delay (s/veh)	23.4	9.2	18.8	2.1	18.3	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	9.2	18.8	2.1	18.3	13.7
LOS	C	A	B	A	B	B
Approach Delay (s/veh)	17.3		16.2			14.2
Approach LOS	B		B			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 69.5			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 15.9		Intersection LOS: B	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	281	213	765	138	80	568
v/c Ratio	0.50	0.37	0.76	0.15	0.42	0.57
Control Delay (s/veh)	23.4	9.2	18.8	2.1	18.3	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	9.2	18.8	2.1	18.3	13.7
Queue Length 50th (m)	29.8	6.3	72.2	0.0	6.0	46.4
Queue Length 95th (m)	50.6	21.1	115.0	6.8	18.4	73.3
Internal Link Dist (m)	722.3		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	663	655	1012	908	191	1002
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.33	0.76	0.15	0.42	0.57

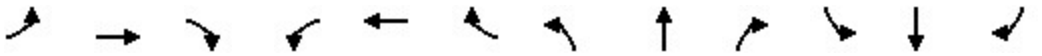
Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	270	204	734	132	77	545
Future Volume (veh/h)	270	204	734	132	77	545
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1856	1811	1870
Adj Flow Rate, veh/h	281	213	765	138	80	568
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	3	6	2
Cap, veh/h	372	331	1152	961	325	1143
Arrive On Green	0.21	0.21	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1795	1598	1885	1572	598	1870
Grp Volume(v), veh/h	281	213	765	138	80	568
Grp Sat Flow(s),veh/h/ln	1795	1598	1885	1572	598	1870
Q Serve(g_s), s	8.9	7.4	16.1	2.3	6.1	10.3
Cycle Q Clear(g_c), s	8.9	7.4	16.1	2.3	22.2	10.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	372	331	1152	961	325	1143
V/C Ratio(X)	0.75	0.64	0.66	0.14	0.25	0.50
Avail Cap(c_a), veh/h	534	475	1152	961	325	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	22.0	7.7	5.0	15.0	6.6
Incr Delay (d2), s/veh	3.7	2.1	3.0	0.3	1.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.3	1.0	0.1	0.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.3	24.0	10.7	5.3	16.8	8.1
LnGrp LOS	C	C	B	A	B	A
Approach Vol, veh/h	494		903			648
Approach Delay, s/veh	25.3		9.9			9.2
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	17.1
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		24.2			18.1	10.9
Green Ext Time (p_c), s		7.1			12.2	1.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.4
HCM 6th LOS	B

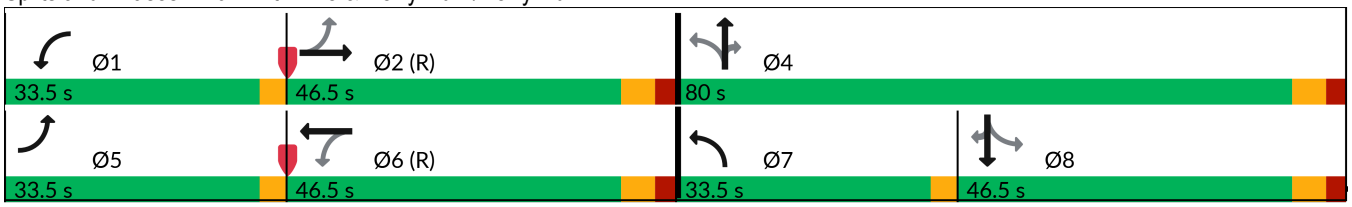


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	650	130	164	917	55	80	522	144	57	393	261
Future Volume (vph)	259	650	130	164	917	55	80	522	144	57	393	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00					0.99	1.00		
Frt		0.975			0.991				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	3516	0	1807	3579	0	1755	1902	1601	1825	1902	1601
Flt Permitted	0.128			0.256			0.151			0.176		
Satd. Flow (perm)	243	3516	0	487	3579	0	279	1902	1579	338	1902	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			4				153			269
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	4%	1%	2%	0%	1%	2%
Adj. Flow (vph)	276	691	138	174	976	59	85	555	153	61	418	278
Shared Lane Traffic (%)												
Lane Group Flow (vph)	276	829	0	174	1035	0	85	555	153	61	418	278
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.5	40.5	40.5	40.5	40.5
Total Split (s)	33.5	46.5		33.5	46.5		33.5	80.0	80.0	46.5	46.5	46.5
Total Split (%)	20.9%	29.1%		20.9%	29.1%		20.9%	50.0%	50.0%	29.1%	29.1%	29.1%
Maximum Green (s)	30.5	40.0		30.5	40.0		30.5	73.5	73.5	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	None
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	94.3	71.8		86.0	66.3		59.5	56.0	56.0	42.3	42.3	42.3
Actuated g/C Ratio	0.59	0.45		0.54	0.41		0.37	0.35	0.35	0.26	0.26	0.26
v/c Ratio	0.78	0.52		0.44	0.70		0.42	0.83	0.23	0.69	0.83	0.45
Control Delay (s/veh)	40.5	35.3		20.8	43.7		37.2	58.6	4.8	88.6	69.8	7.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.5	35.3		20.8	43.7		37.2	58.6	4.8	88.6	69.8	7.3
LOS	D	D		C	D		D	E	A	F	E	A
Approach Delay (s/veh)		36.6			40.4			45.9			48.4	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 154 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 42.0		Intersection LOS: D	
Intersection Capacity Utilization 96.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W

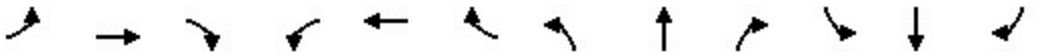




Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	276	829	174	1035	85	555	153	61	418	278
v/c Ratio	0.78	0.52	0.44	0.70	0.42	0.83	0.23	0.69	0.83	0.45
Control Delay (s/veh)	40.5	35.3	20.8	43.7	37.2	58.6	4.8	88.6	69.8	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.5	35.3	20.8	43.7	37.2	58.6	4.8	88.6	69.8	7.3
Queue Length 50th (m)	47.8	99.0	24.7	143.4	18.2	162.2	0.0	17.4	126.6	2.2
Queue Length 95th (m)	85.8	145.1	44.1	#236.5	27.6	187.0	13.9	#36.3	156.7	23.6
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	446	1585	535	1485	385	873	808	93	525	637
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.52	0.33	0.70	0.22	0.64	0.19	0.66	0.80	0.44

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	259	650	130	164	917	55	80	522	144	57	393	261
Future Volume (veh/h)	259	650	130	164	917	55	80	522	144	57	393	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1885	1885	1870	1841	1885	1870	1900	1885	1870
Adj Flow Rate, veh/h	276	691	138	174	976	59	85	555	153	61	418	278
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	0	1	1	2	4	1	2	0	1	2
Cap, veh/h	350	1421	284	383	1532	93	189	665	559	107	542	455
Arrive On Green	0.10	0.48	0.48	0.07	0.45	0.45	0.05	0.35	0.35	0.29	0.29	0.29
Sat Flow, veh/h	1795	2975	594	1795	3431	207	1753	1885	1584	752	1885	1583
Grp Volume(v), veh/h	276	416	413	174	509	526	85	555	153	61	418	278
Grp Sat Flow(s),veh/h/ln	1795	1791	1778	1795	1791	1848	1753	1885	1584	752	1885	1583
Q Serve(g_s), s	12.8	25.3	25.3	8.3	35.2	35.2	5.3	43.2	11.1	12.9	32.5	24.3
Cycle Q Clear(g_c), s	12.8	25.3	25.3	8.3	35.2	35.2	5.3	43.2	11.1	45.6	32.5	24.3
Prop In Lane	1.00		0.33	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	855	849	383	800	825	189	665	559	107	542	455
V/C Ratio(X)	0.79	0.49	0.49	0.45	0.64	0.64	0.45	0.83	0.27	0.57	0.77	0.61
Avail Cap(c_a), veh/h	512	855	849	600	800	825	441	866	728	107	542	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	28.4	28.4	22.5	34.3	34.3	40.1	47.5	37.1	73.2	52.2	49.3
Incr Delay (d2), s/veh	4.4	1.7	1.7	0.8	3.9	3.7	1.7	5.5	0.3	6.9	6.8	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	8.3	8.3	2.6	12.2	12.6	1.9	16.9	3.4	2.3	13.4	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	30.2	30.2	23.3	38.1	38.0	41.8	53.0	37.3	80.1	59.0	51.7
LnGrp LOS	C	C	C	C	D	D	D	D	D	F	E	D
Approach Vol, veh/h		1105			1209			793			757	
Approach Delay, s/veh		30.5			35.9			48.8			58.0	
Approach LOS		C			D			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	82.9		63.0	19.1	77.9	10.5	52.5				
Change Period (Y+Rc), s	3.0	6.5		6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	30.5	40.0		73.5	30.5	40.0	30.5	40.0				
Max Q Clear Time (g_c+I1), s	10.3	27.3		45.2	14.8	37.2	7.3	47.6				
Green Ext Time (p_c), s	0.8	8.3		11.3	1.3	2.4	0.4	0.0				

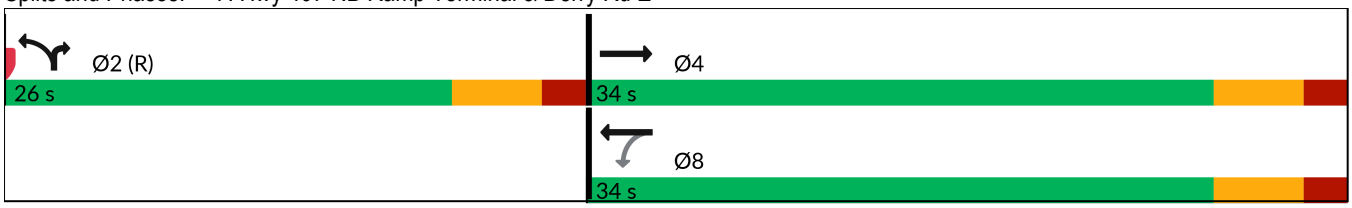
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			41.3									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	925	70	2	1203	46	167
Future Volume (vph)	925	70	2	1203	46	167
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.97	1.00
Frt	0.990					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3373	0	0	3423	3106	1517
Flt Permitted				0.954	0.950	
Satd. Flow (perm)	3373	0	0	3266	3106	1517
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	17					74
Link Speed (k/h)	80			60	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			14.5	30.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	8%	8%	1%	8%	2%
Adj. Flow (vph)	944	71	2	1228	47	170
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1015	0	0	1230	47	170
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases			8			
Detector Phase	4		8	8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	26.0		26.0	26.0	26.0	26.0
Total Split (s)	34.0		34.0	34.0	26.0	26.0
Total Split (%)	56.7%		56.7%	56.7%	43.3%	43.3%
Maximum Green (s)	28.0		28.0	28.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Max	Max	C-Min	C-Min
Walk Time (s)	8.0		8.0	8.0	8.0	8.0
Flash Don't Walk (s)	12.0		12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	37.7			37.7	10.3	10.3
Actuated g/C Ratio	0.63			0.63	0.17	0.17
v/c Ratio	0.48			0.60	0.09	0.53
Control Delay (s/veh)	5.8			8.7	19.9	19.2
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	5.8			8.7	19.9	19.2
LOS	A			A	B	B
Approach Delay (s/veh)	5.8			8.7	19.3	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 8.5		Intersection LOS: A	
Intersection Capacity Utilization 53.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1015	1230	47	170
v/c Ratio	0.48	0.60	0.09	0.53
Control Delay (s/veh)	5.8	8.7	19.9	19.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.8	8.7	19.9	19.2
Queue Length 50th (m)	14.0	33.8	2.4	9.8
Queue Length 95th (m)	25.3	64.4	5.7	23.0
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2127	2054	1035	555
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.48	0.60	0.05	0.31

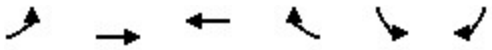
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	925	70	2	1203	46	167
Future Volume (veh/h)	925	70	2	1203	46	167
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1786	1688	1688	1786	1688	1772
Adj Flow Rate, veh/h	944	71	2	1228	47	170
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	8	8	1	8	2
Cap, veh/h	1493	112	61	1553	1039	501
Arrive On Green	0.47	0.47	0.47	0.47	0.33	0.33
Sat Flow, veh/h	3288	241	1	3409	3118	1502
Grp Volume(v), veh/h	501	514	659	571	47	170
Grp Sat Flow(s),veh/h/ln	1697	1743	1784	1544	1559	1502
Q Serve(g_s), s	13.4	13.4	0.0	18.8	0.6	5.1
Cycle Q Clear(g_c), s	13.4	13.4	18.7	18.8	0.6	5.1
Prop In Lane		0.14	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	792	813	893	721	1039	501
V/C Ratio(X)	0.63	0.63	0.74	0.79	0.05	0.34
Avail Cap(c_a), veh/h	792	813	893	721	1039	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	12.1	12.1	13.5	13.5	13.5	15.0
Incr Delay (d2), s/veh	3.8	3.7	4.1	6.6	0.1	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	1.3	1.5	0.1	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.9	15.8	17.6	20.1	13.6	16.9
LnGrp LOS	B	B	B	C	B	B
Approach Vol, veh/h	1015			1230	217	
Approach Delay, s/veh	15.9			18.8	16.2	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	26.0	34.0	34.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	20.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	7.1	15.4	20.8
Green Ext Time (p_c), s	0.9	9.5	6.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.3
HCM 6th LOS	B

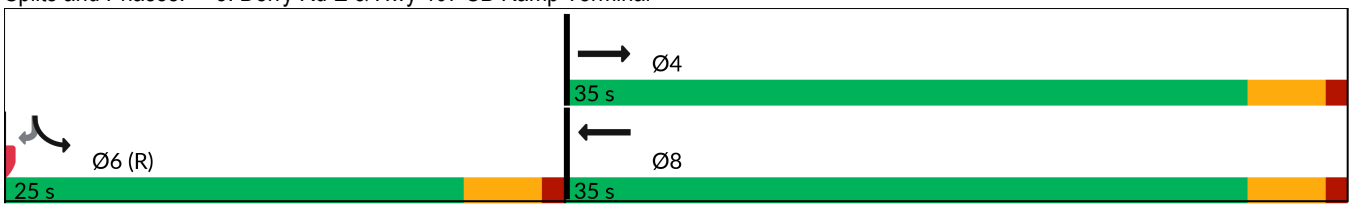


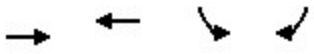
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	842	1077	148	190	269
Future Volume (vph)	0	842	1077	148	190	269
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.982			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3358	0	3288	1532
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3358	0	3288	1532
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			36			60
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	1%	2%	2%	1%
Adj. Flow (vph)	0	859	1099	151	194	274
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	859	1250	0	194	274
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		35.0	35.0		25.0	25.0
Total Split (%)		58.3%	58.3%		41.7%	41.7%
Maximum Green (s)		30.5	30.5		20.5	20.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		37.1	37.1		13.9	13.9
Actuated g/C Ratio		0.62	0.62		0.23	0.23
v/c Ratio		0.41	0.60		0.25	0.68
Control Delay (s/veh)		7.6	6.6		18.2	24.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		7.6	6.6		18.2	24.3
LOS		A	A		B	C
Approach Delay (s/veh)		7.6	6.6		21.8	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			

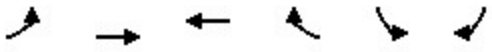
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	859	1250	194	274
v/c Ratio	0.41	0.60	0.25	0.68
Control Delay (s/veh)	7.6	6.6	18.2	24.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.6	6.6	18.2	24.3
Queue Length 50th (m)	22.0	21.5	9.1	21.3
Queue Length 95th (m)	43.7	36.9	13.7	36.6
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2094	2087	1123	562
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.41	0.60	0.17	0.49

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	842	1077	148	190	269
Future Volume (veh/h)	0	842	1077	148	190	269
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1786	1772	1772	1786
Adj Flow Rate, veh/h	0	859	1099	151	194	274
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	1	2	2	1
Cap, veh/h	0	1711	1524	209	1119	517
Arrive On Green	0.00	0.51	0.51	0.51	0.34	0.34
Sat Flow, veh/h	0	3544	3087	411	3274	1514
Grp Volume(v), veh/h	0	859	621	629	194	274
Grp Sat Flow(s),veh/h/ln	0	1683	1697	1712	1637	1514
Q Serve(g_s), s	0.0	10.1	17.0	17.1	2.5	8.7
Cycle Q Clear(g_c), s	0.0	10.1	17.0	17.1	2.5	8.7
Prop In Lane	0.00			0.24	1.00	1.00
Lane Grp Cap(c), veh/h	0	1711	862	870	1119	517
V/C Ratio(X)	0.00	0.50	0.72	0.72	0.17	0.53
Avail Cap(c_a), veh/h	0	1711	862	870	1119	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.7	11.4	11.5	13.8	15.9
Incr Delay (d2), s/veh	0.0	1.1	5.2	5.2	0.3	3.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.2	1.3	0.3	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.8	16.6	16.6	14.2	19.7
LnGrp LOS		B	B	B	B	B
Approach Vol, veh/h		859	1250		468	
Approach Delay, s/veh		10.8	16.6		17.4	
Approach LOS		B	B		B	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			35.0		25.0	35.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			30.5		20.5	30.5
Max Q Clear Time (g_c+I1), s			12.1		10.7	19.1
Green Ext Time (p_c), s			11.6		2.0	9.8

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		14.8
HCM 6th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	9	2	8	0	0
Future Volume (vph)	0	9	2	8	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.991		
Satd. Flow (prot)	1629	0	0	1866	1883	0
Flt Permitted				0.991		
Satd. Flow (perm)	1629	0	0	1866	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	124.9			571.7	104.9	
Travel Time (s)	9.4			41.2	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	10	2	9	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	0	11	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

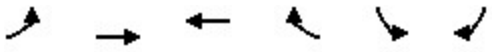
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	2	8	0	0
Future Vol, veh/h	0	9	2	8	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	2	9	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	14	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	13	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1005	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1010	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1004	1084	1622	-	-	-
Mov Cap-2 Maneuver	1004	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1010	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.4	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.001	-	0.009	-	-
HCM Ctrl Dly (s/v)	7.2	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	237	1001	16	45	23
Future Volume (vph)	10	237	1001	16	45	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.954	
Flt Protected		0.998			0.968	
Satd. Flow (prot)	0	3571	3571	0	1739	0
Flt Permitted		0.998			0.968	
Satd. Flow (perm)	0	3571	3571	0	1739	0
Link Speed (k/h)		60	60		48	
Link Distance (m)		746.3	577.3		446.6	
Travel Time (s)		44.8	34.6		33.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	258	1088	17	49	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	269	1105	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	237	1001	16	45	23
Future Vol, veh/h	10	237	1001	16	45	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	258	1088	17	49	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1105	0	-	0	1248	553
Stage 1	-	-	-	-	1097	-
Stage 2	-	-	-	-	151	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	628	-	-	-	165	477
Stage 1	-	-	-	-	281	-
Stage 2	-	-	-	-	861	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	628	-	-	-	162	477
Mov Cap-2 Maneuver	-	-	-	-	162	-
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	861	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.5	0	31.4
HCM LOS			D

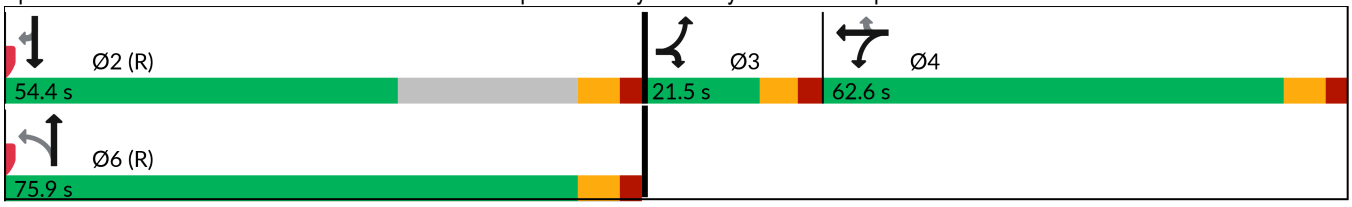
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	628	-	-	-	209
HCM Lane V/C Ratio	0.017	-	-	-	0.354
HCM Ctrl Dly (s/v)	10.8	0.1	-	-	31.4
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q (veh)	0.1	-	-	-	1.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	291	3	591	2	1186	205	0	1555	386
Future Volume (vph)	0	0	0	291	3	591	2	1186	205	0	1555	386
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Ped Bike Factor						0.98						
Frt						0.850		0.978				0.850
Flt Protected				0.950	0.953		0.950					
Satd. Flow (prot)	1784	0	1784	1507	1514	2250	1729	3186	0	0	4558	1334
Flt Permitted				0.950	0.953		0.121					
Satd. Flow (perm)	1784	0	1784	1507	1514	2201	220	3186	0	0	4558	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						360		15				293
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Confl. Peds. (#/hr)	1					1						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	9%	0%	21%	0%	6%	7%	2%	9%	16%
Adj. Flow (vph)	0	0	0	306	3	622	2	1248	216	0	1637	406
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	153	156	622	2	1464	0	0	1637	406
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	21.5		21.5	62.6	62.6	62.6	75.9	75.9			54.4	54.4
Total Split (%)	13.4%		13.4%	39.1%	39.1%	39.1%	47.4%	47.4%			34.0%	34.0%
Maximum Green (s)	14.2		14.2	55.0	55.0	55.0	68.4	68.4			46.9	46.9
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)				31.0	31.0	31.0	113.9	113.9			113.9	113.9
Actuated g/C Ratio				0.19	0.19	0.19	0.71	0.71			0.71	0.71
v/c Ratio				0.53	0.53	0.87	0.01	0.64			0.50	0.39
Control Delay (s/veh)				62.2	62.5	38.1	8.5	16.3			12.3	4.3
Queue Delay				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)				62.2	62.5	38.1	8.5	16.3			12.3	4.3
LOS				E	E	D	A	B			B	A
Approach Delay (s/veh)					46.1			16.3			10.7	
Approach LOS					D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 147 (92%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: B	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal

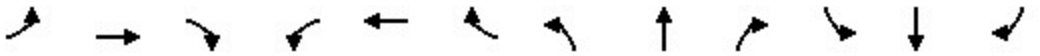




Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	153	156	622	2	1464	1637	406
v/c Ratio	0.53	0.53	0.87	0.01	0.64	0.50	0.39
Control Delay (s/veh)	62.2	62.5	38.1	8.5	16.3	12.3	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.2	62.5	38.1	8.5	16.3	12.3	4.3
Queue Length 50th (m)	49.8	47.5	58.8	0.2	160.3	85.0	11.8
Queue Length 95th (m)	68.0	64.3	80.5	m0.5	213.7	131.2	38.8
Internal Link Dist (m)		193.3			369.8	835.9	
Turn Bay Length (m)							
Base Capacity (vph)	518	520	992	156	2272	3244	1034
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.30	0.63	0.01	0.64	0.50	0.39

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	291	3	591	2	1186	205	0	1555	386
Future Volume (veh/h)	0	0	0	291	3	591	2	1186	205	0	1555	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	0	1772	1674	1800	1505	1800	1716	1702	0	1674	1575
Adj Flow Rate, veh/h	0	0	0	308	0	622	2	1248	216	0	1637	406
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	0	2	9	0	21	0	6	7	0	9	16
Cap, veh/h	0	0	0	899	0	718	127	1735	298	0	2849	833
Arrive On Green	0.00	0.00	0.00	0.28	0.00	0.28	0.62	0.62	0.62	0.00	0.62	0.62
Sat Flow, veh/h		0		3188	0	2547	199	2782	478	0	4720	1335
Grp Volume(v), veh/h		0.0		308	0	622	2	727	737	0	1637	406
Grp Sat Flow(s),veh/h/ln				1594	0	1273	199	1630	1630	0	1523	1335
Q Serve(g_s), s				12.3	0.0	37.1	1.0	48.5	49.7	0.0	33.6	26.3
Cycle Q Clear(g_c), s				12.3	0.0	37.1	34.6	48.5	49.7	0.0	33.6	26.3
Prop In Lane				1.00		1.00	1.00		0.29	0.00		1.00
Lane Grp Cap(c), veh/h				899	0	718	127	1016	1016	0	2849	833
V/C Ratio(X)				0.34	0.00	0.87	0.02	0.72	0.72	0.00	0.57	0.49
Avail Cap(c_a), veh/h				1096	0	875	127	1016	1016	0	2849	833
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				45.7	0.0	54.6	27.8	20.5	20.7	0.0	17.7	16.3
Incr Delay (d2), s/veh				0.2	0.0	7.8	0.2	4.3	4.5	0.0	0.8	2.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.0	0.0	10.4	0.0	11.9	12.2	0.0	7.1	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				45.9	0.0	62.4	28.0	24.8	25.2	0.0	18.5	18.3
LnGrp LOS				D		E	C	C	C		B	B
Approach Vol, veh/h					930			1466			2043	
Approach Delay, s/veh					56.9			25.0			18.5	
Approach LOS					E			C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	107.3	52.7	107.3
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	46.9	55.0	68.4
Max Q Clear Time (g_c+I1), s	35.6	39.1	51.7
Green Ext Time (p_c), s	10.8	6.0	15.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

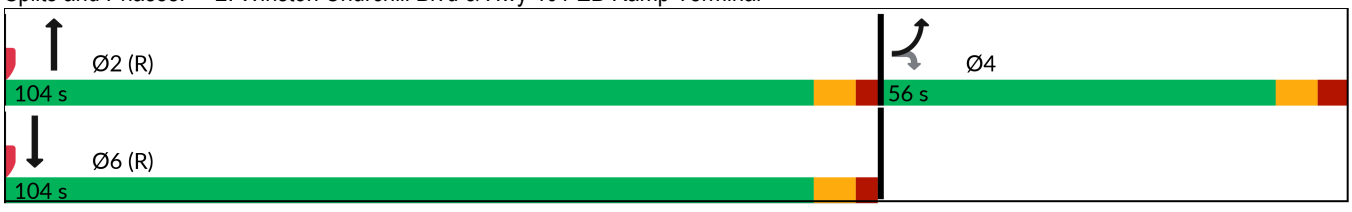


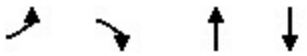
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	601	270	0	846	927	730
Future Volume (vph)	601	270	0	846	927	730
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	0.91
Frt	0.994	0.850			0.934	
Flt Protected	0.954					
Satd. Flow (prot)	3079	1367	0	4824	4267	0
Flt Permitted	0.954					
Satd. Flow (perm)	3079	1367	0	4824	4267	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3	129			223	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	3%	2%	3%	7%	11%
Adj. Flow (vph)	633	284	0	891	976	768
Shared Lane Traffic (%)		10%				
Lane Group Flow (vph)	661	256	0	891	1744	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	22.5	22.5		31.5	31.5	
Total Split (s)	56.0	56.0		104.0	104.0	
Total Split (%)	35.0%	35.0%		65.0%	65.0%	
Maximum Green (s)	47.5	47.5		96.5	96.5	
Yellow Time (s)	5.0	5.0		5.0	5.0	
All-Red Time (s)	3.5	3.5		2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Max	C-Max	
Walk Time (s)				7.0	7.0	
Flash Don't Walk (s)				17.0	17.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	40.2	40.2		103.8	103.8	
Actuated g/C Ratio	0.25	0.25		0.65	0.65	
v/c Ratio	0.85	0.58		0.28	0.61	
Control Delay (s/veh)	67.8	29.9		9.8	18.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	67.8	29.9		9.8	18.1	
LOS	E	C		A	B	
Approach Delay (s/veh)	57.2			9.8	18.1	
Approach LOS	E			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 149 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 26.1		Intersection LOS: C	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal





Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	661	256	891	1744
v/c Ratio	0.85	0.58	0.28	0.61
Control Delay (s/veh)	67.8	29.9	9.8	18.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.8	29.9	9.8	18.1
Queue Length 50th (m)	111.0	39.8	37.7	30.4
Queue Length 95th (m)	128.4	69.8	50.6	30.0
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	916	496	3129	2846
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.72	0.52	0.28	0.61

Intersection Summary



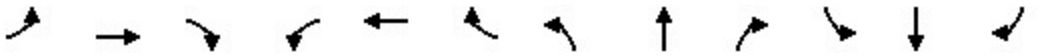
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	601	270	0	846	927	730
Future Volume (veh/h)	601	270	0	846	927	730
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1674	1758	0	1758	1702	1646
Adj Flow Rate, veh/h	633	284	0	891	976	768
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	3	0	3	7	11
Cap, veh/h	753	352	0	3185	2056	957
Arrive On Green	0.24	0.24	0.00	0.66	0.66	0.66
Sat Flow, veh/h	3188	1490	0	5115	3250	1442
Grp Volume(v), veh/h	633	284	0	891	976	768
Grp Sat Flow(s),veh/h/ln	1594	1490	0	1600	1549	1442
Q Serve(g_s), s	30.3	28.8	0.0	12.3	24.8	61.3
Cycle Q Clear(g_c), s	30.3	28.8	0.0	12.3	24.8	61.3
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	753	352	0	3185	2056	957
V/C Ratio(X)	0.84	0.81	0.00	0.28	0.47	0.80
Avail Cap(c_a), veh/h	946	442	0	3185	2056	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.84	1.00	1.00
Uniform Delay (d), s/veh	58.2	57.6	0.0	11.1	13.2	19.4
Incr Delay (d2), s/veh	5.6	8.5	0.0	0.2	0.8	7.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.0	0.0	2.4	4.7	12.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	63.8	66.2	0.0	11.3	14.0	26.4
LnGrp LOS	E	E		B	B	C
Approach Vol, veh/h	917			891	1744	
Approach Delay, s/veh	64.6			11.3	19.5	
Approach LOS	E			B	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		113.7		46.3		113.7
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		96.5		47.5		96.5
Max Q Clear Time (g_c+I1), s		14.3		32.3		63.3
Green Ext Time (p_c), s		25.5		5.5		30.1

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		29.1
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



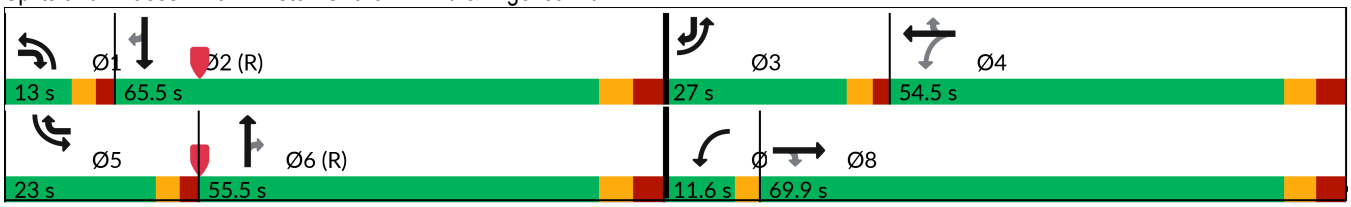
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	240	57	74	106	135	78	1212	95	272	559	174
Future Volume (vph)	330	240	57	74	106	135	78	1212	95	272	559	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.97	0.99		0.96	1.00		0.98	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	3614	1601	1722	3579	1512	3471	5142	1570	3437	4902	1484
Flt Permitted	0.950			0.595			0.950			0.950		
Satd. Flow (perm)	3304	3614	1553	1064	3579	1459	3456	5142	1540	3430	4902	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85			85			153			183
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	23		18	18		23	9		7	7		9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	1%	2%	6%	2%	8%	2%	2%	4%	3%	7%	10%
Adj. Flow (vph)	347	253	60	78	112	142	82	1276	100	286	588	183
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	253	60	78	112	142	82	1276	100	286	588	183
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

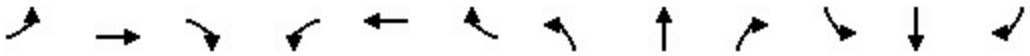
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	27.0	69.9	13.0	11.6	54.5	23.0	13.0	55.5	55.5	23.0	65.5	27.0
Total Split (%)	16.9%	43.7%	8.1%	7.3%	34.1%	14.4%	8.1%	34.7%	34.7%	14.4%	40.9%	16.9%
Maximum Green (s)	22.0	62.4	8.0	8.6	47.0	18.0	8.0	48.0	48.0	18.0	58.0	22.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	None	None	Min	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.3	25.0	36.8	23.9	11.1	32.1	9.2	85.1	85.1	18.5	94.4	117.2
Actuated g/C Ratio	0.13	0.16	0.23	0.15	0.07	0.20	0.06	0.53	0.53	0.12	0.59	0.73
v/c Ratio	0.81	0.45	0.14	0.41	0.45	0.39	0.41	0.47	0.11	0.72	0.20	0.16
Control Delay (s/veh)	83.4	63.4	3.6	53.7	77.4	23.4	78.6	24.8	0.6	76.5	12.7	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.4	63.4	3.6	53.7	77.4	23.4	78.6	24.8	0.6	76.5	12.7	1.9
LOS	F	E	A	D	E	C	E	C	A	E	B	A
Approach Delay (s/veh)		68.5			48.7			26.1			28.1	
Approach LOS		E			D			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 65 (41%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay (s/veh): 36.8 Intersection LOS: D
Intersection Capacity Utilization 99.5% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd

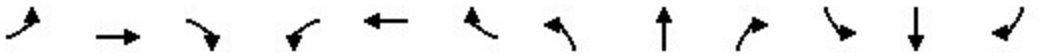




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	347	253	60	78	112	142	82	1276	100	286	588	183
v/c Ratio	0.81	0.45	0.14	0.41	0.45	0.39	0.41	0.47	0.11	0.72	0.20	0.16
Control Delay (s/veh)	83.4	63.4	3.6	53.7	77.4	23.4	78.6	24.8	0.6	76.5	12.7	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.4	63.4	3.6	53.7	77.4	23.4	78.6	24.8	0.6	76.5	12.7	1.9
Queue Length 50th (m)	57.9	39.2	0.0	20.4	18.7	15.7	13.4	92.6	0.0	42.3	35.1	7.8
Queue Length 95th (m)	76.1	52.4	5.3	34.5	29.4	35.2	22.6	117.1	1.2	56.4	41.0	m11.1
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	463	1409	427	195	1051	376	204	2736	891	421	2892	1130
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.18	0.14	0.40	0.11	0.38	0.40	0.47	0.11	0.68	0.20	0.16

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	240	57	74	106	135	78	1212	95	272	559	174
Future Volume (veh/h)	330	240	57	74	106	135	78	1212	95	272	559	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.98		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1885	1870	1811	1870	1781	1870	1870	1841	1856	1796	1752
Adj Flow Rate, veh/h	347	253	60	78	112	142	82	1276	0	286	588	183
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	1	2	6	2	8	2	2	4	3	7	10
Cap, veh/h	399	1115	550	353	804	477	147	2058		330	2240	849
Arrive On Green	0.12	0.31	0.31	0.05	0.23	0.23	0.04	0.40	0.00	0.19	0.91	0.91
Sat Flow, veh/h	3374	3582	1550	1725	3554	1464	3456	5106	1560	3428	4904	1476
Grp Volume(v), veh/h	347	253	60	78	112	142	82	1276	0	286	588	183
Grp Sat Flow(s),veh/h/ln	1687	1791	1550	1725	1777	1464	1728	1702	1560	1714	1635	1476
Q Serve(g_s), s	16.2	8.4	4.2	5.5	4.0	11.6	3.7	31.8	0.0	12.9	2.2	1.8
Cycle Q Clear(g_c), s	16.2	8.4	4.2	5.5	4.0	11.6	3.7	31.8	0.0	12.9	2.2	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1115	550	353	804	477	147	2058		330	2240	849
V/C Ratio(X)	0.87	0.23	0.11	0.22	0.14	0.30	0.56	0.62		0.87	0.26	0.22
Avail Cap(c_a), veh/h	464	1397	672	367	1044	575	173	2058		386	2240	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	69.3	40.8	34.7	44.4	49.4	40.7	75.1	38.0	0.0	63.6	3.9	2.4
Incr Delay (d2), s/veh	14.7	0.1	0.1	0.3	0.1	0.3	3.3	1.4	0.0	13.1	0.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	3.0	1.3	2.0	1.5	3.4	1.5	10.4	0.0	5.0	0.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	84.0	40.9	34.8	44.7	49.5	41.0	78.4	39.4	0.0	76.7	4.1	2.8
LnGrp LOS	F	D	C	D	D	D	E	D		E	A	A
Approach Vol, veh/h		660			332			1358			1057	
Approach Delay, s/veh		63.0			44.8			41.8			23.5	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	80.6	23.9	43.7	20.4	72.0	10.3	57.3
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	8.0	58.0	22.0	47.0	18.0	48.0	8.6	62.4
Max Q Clear Time (g_c+I1), s	5.7	4.2	18.2	13.6	14.9	33.8	7.5	10.4
Green Ext Time (p_c), s	0.1	14.9	0.7	2.7	0.5	12.0	0.0	5.2

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.5
HCM 6th LOS	D

Notes

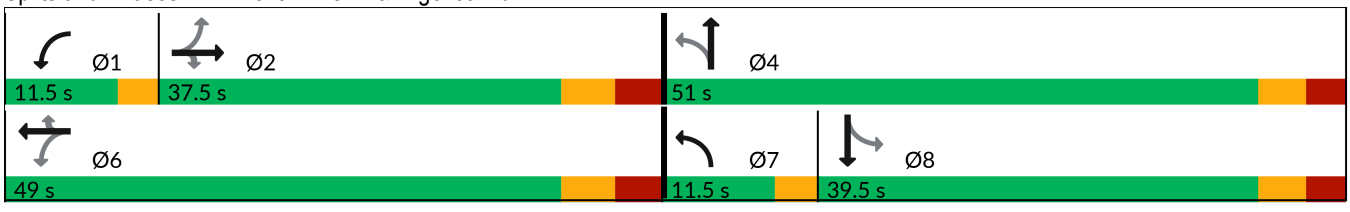
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

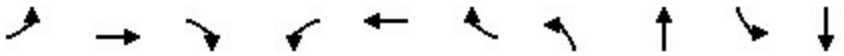
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	365	38	69	191	16	87	8	214	5	5	3
Future Volume (vph)	8	365	38	69	191	16	87	8	214	5	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97	1.00		0.97	1.00	0.99		1.00	0.99	
Frt			0.850			0.850		0.855			0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1847	1633	1738	1830	1633	1825	1607	0	1217	1804	0
Flt Permitted	0.633			0.437			0.579			0.615		
Satd. Flow (perm)	1211	1847	1586	796	1830	1592	1110	1607	0	787	1804	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			71		223			3	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		577.3			633.5			748.2			479.2	
Travel Time (s)		34.6			38.0			53.9			34.5	
Confl. Peds. (#/hr)	3		5	5		3	2		1	1		2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	4%	0%	5%	5%	0%	0%	0%	1%	50%	0%	0%
Adj. Flow (vph)	8	380	40	72	199	17	91	8	223	5	5	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	380	40	72	199	17	91	231	0	5	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	37.5	37.5	37.5	11.5	49.0	49.0	11.5	51.0		39.5	39.5	
Total Split (%)	37.5%	37.5%	37.5%	11.5%	49.0%	49.0%	11.5%	51.0%		39.5%	39.5%	
Maximum Green (s)	30.0	30.0	30.0	8.5	41.5	41.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	33.6	33.6	33.6	46.2	41.7	41.7	22.3	18.8		10.0	10.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.62	0.56	0.56	0.30	0.25		0.13	0.13	
v/c Ratio	0.01	0.46	0.05	0.12	0.19	0.02	0.22	0.40		0.05	0.03	
Control Delay (s/veh)	14.1	18.5	0.1	7.0	9.5	0.1	20.2	6.2		30.8	25.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	14.1	18.5	0.1	7.0	9.5	0.1	20.2	6.2		30.8	25.3	
LOS	B	B	A	A	A	A	C	A		C	C	
Approach Delay (s/veh)		16.7			8.3			10.1			27.4	
Approach LOS		B			A			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 74.5			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

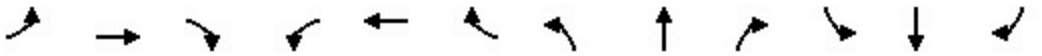
Splits and Phases: 4: Tenth Line W & Argentia Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	380	40	72	199	17	91	231	5	8
v/c Ratio	0.01	0.46	0.05	0.12	0.19	0.02	0.22	0.40	0.05	0.03
Control Delay (s/veh)	14.1	18.5	0.1	7.0	9.5	0.1	20.2	6.2	30.8	25.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.1	18.5	0.1	7.0	9.5	0.1	20.2	6.2	30.8	25.3
Queue Length 50th (m)	0.7	41.2	0.0	4.1	14.5	0.0	9.3	0.9	0.9	0.7
Queue Length 95th (m)	3.2	67.4	0.0	9.0	25.3	0.0	19.2	15.9	5.1	4.3
Internal Link Dist (m)		553.3			609.5			724.2		455.2
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	546	833	772	601	1023	921	414	1052	350	803
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.46	0.05	0.12	0.19	0.02	0.22	0.22	0.01	0.01

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	365	38	69	191	16	87	8	214	5	5	3
Future Volume (veh/h)	8	365	38	69	191	16	87	8	214	5	5	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1841	1900	1826	1826	1900	1900	1900	1885	1159	1900	1900
Adj Flow Rate, veh/h	8	380	40	72	199	17	91	8	223	5	5	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	4	0	5	5	0	0	0	1	50	0	0
Cap, veh/h	612	807	702	496	1005	882	440	15	412	196	161	97
Arrive On Green	0.44	0.44	0.44	0.07	0.55	0.55	0.08	0.26	0.26	0.15	0.15	0.15
Sat Flow, veh/h	1179	1841	1601	1739	1826	1603	1810	56	1559	710	1111	666
Grp Volume(v), veh/h	8	380	40	72	199	17	91	0	231	5	0	8
Grp Sat Flow(s),veh/h/ln	1179	1841	1601	1739	1826	1603	1810	0	1615	710	0	1777
Q Serve(g_s), s	0.3	11.0	1.1	1.5	4.1	0.4	3.0	0.0	9.3	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.3	11.0	1.1	1.5	4.1	0.4	3.0	0.0	9.3	0.8	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.38
Lane Grp Cap(c), veh/h	612	807	702	496	1005	882	440	0	427	196	0	258
V/C Ratio(X)	0.01	0.47	0.06	0.15	0.20	0.02	0.21	0.00	0.54	0.03	0.00	0.03
Avail Cap(c_a), veh/h	612	807	702	567	1005	882	501	0	953	403	0	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	15.0	12.2	9.7	8.6	7.7	22.3	0.0	23.8	28.0	0.0	27.7
Incr Delay (d2), s/veh	0.0	2.0	0.2	0.1	0.4	0.0	0.2	0.0	1.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.9	0.2	0.1	0.3	0.0	0.8	0.0	2.1	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	17.0	12.4	9.8	9.0	7.8	22.6	0.0	24.9	28.1	0.0	27.7
LnGrp LOS	B	B	B	A	A	A	C		C	C		C
Approach Vol, veh/h		428			288			322			13	
Approach Delay, s/veh		16.4			9.1			24.2			27.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	8.5	40.5		26.4		49.0	9.0	17.5				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	8.5	30.0		44.5		41.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	3.5	13.0		11.3		6.1	5.0	2.8				
Green Ext Time (p_c), s	0.1	5.3		4.4		3.4	0.1	0.1				

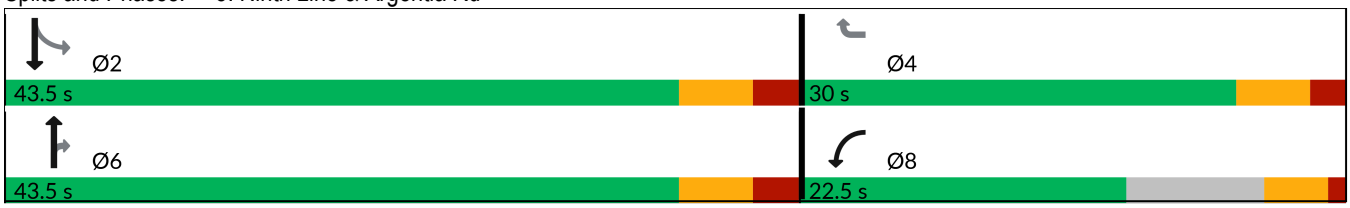
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			17.0									
HCM 6th LOS			B									

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	30	444	223	97	805
Future Volume (vph)	49	30	444	223	97	805
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		100.0	45.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.6				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1706	1526	3579	1601	1789	3544
Flt Permitted	0.950				0.479	
Satd. Flow (perm)	1706	1526	3579	1601	902	3544
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		32		240		
Link Speed (k/h)	60		60			60
Link Distance (m)	746.3		1616.5			667.9
Travel Time (s)	44.8		97.0			40.1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	7%	7%	2%	2%	2%	3%
Adj. Flow (vph)	53	32	477	240	104	866
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	32	477	240	104	866
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	6.1	6.1	30.5	6.1	6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8	6.1	6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		6			2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		4		6	2	
Detector Phase	8	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	20.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (%)	30.6%	40.8%	59.2%	59.2%	59.2%	59.2%
Maximum Green (s)	18.0	24.0	37.0	37.0	37.0	37.0
Yellow Time (s)	3.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	6.5	6.5	6.5	6.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	11.0	14.0	27.0	27.0	27.0	27.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	14.6	20.4	50.6	50.6	50.6	50.6
Actuated g/C Ratio	0.21	0.30	0.74	0.74	0.74	0.74
v/c Ratio	0.15	0.07	0.18	0.19	0.16	0.33
Control Delay (s/veh)	20.6	7.9	6.4	1.7	8.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	7.9	6.4	1.7	8.2	7.3
LOS	C	A	A	A	A	A
Approach Delay (s/veh)	15.8		4.8			7.4
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 68.5			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 6.7		Intersection LOS: A	
Intersection Capacity Utilization 39.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	53	32	477	240	104	866
v/c Ratio	0.15	0.07	0.18	0.19	0.16	0.33
Control Delay (s/veh)	20.6	7.9	6.4	1.7	8.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	7.9	6.4	1.7	8.2	7.3
Queue Length 50th (m)	6.8	0.0	16.4	0.0	6.7	34.6
Queue Length 95th (m)	12.6	5.8	24.3	8.8	14.9	47.6
Internal Link Dist (m)	722.3		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	646	564	2644	1245	666	2618
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.06	0.18	0.19	0.16	0.33

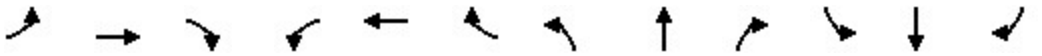
Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	49	30	444	223	97	805
Future Volume (veh/h)	49	30	444	223	97	805
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1870	1870	1870	1856
Adj Flow Rate, veh/h	53	32	477	240	104	866
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	7	7	2	2	2	3
Cap, veh/h	117	104	2552	1138	635	2532
Arrive On Green	0.07	0.07	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1711	1522	3647	1585	734	3618
Grp Volume(v), veh/h	53	32	477	240	104	866
Grp Sat Flow(s),veh/h/ln	1711	1522	1777	1585	734	1763
Q Serve(g_s), s	1.5	1.0	2.3	2.6	2.8	4.7
Cycle Q Clear(g_c), s	1.5	1.0	2.3	2.6	5.0	4.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	117	104	2552	1138	635	2532
V/C Ratio(X)	0.45	0.31	0.19	0.21	0.16	0.34
Avail Cap(c_a), veh/h	598	532	2552	1138	635	2532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	22.8	2.4	2.4	3.2	2.7
Incr Delay (d2), s/veh	2.7	1.7	0.2	0.4	0.6	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.1	0.1	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.8	24.5	2.5	2.8	3.7	3.1
LnGrp LOS	C	C	A	A	A	A
Approach Vol, veh/h	85		717			970
Approach Delay, s/veh	25.3		2.6			3.2
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	8.0
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		7.0			4.6	3.5
Green Ext Time (p_c), s		17.6			10.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	4.0
HCM 6th LOS	A

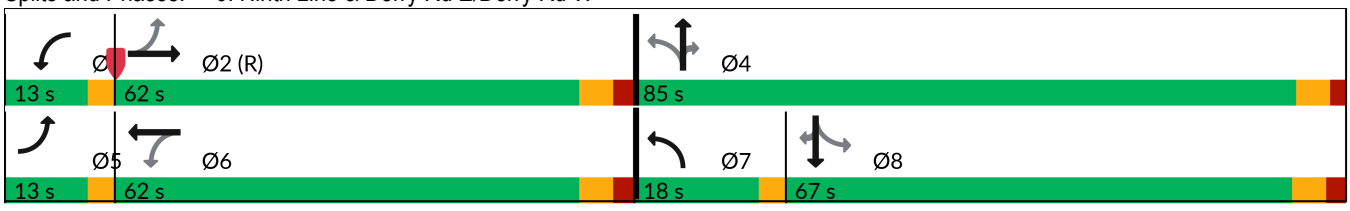


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	733	38	84	401	28	105	353	127	25	459	304
Future Volume (vph)	174	733	38	84	401	28	105	353	127	25	459	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.993			0.990				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3547	0	1722	3580	0	1755	3510	1585	1825	3544	1570
Flt Permitted	0.455			0.305			0.222			0.535		
Satd. Flow (perm)	849	3547	0	553	3580	0	410	3510	1585	1028	3544	1570
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			5				131			313
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	3%	2%	6%	6%	1%	0%	4%	4%	3%	0%	3%	4%
Adj. Flow (vph)	179	756	39	87	413	29	108	364	131	26	473	313
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	795	0	87	442	0	108	364	131	26	473	313
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.0	40.0	40.5	40.5	40.5
Total Split (s)	13.0	62.0		13.0	62.0		18.0	85.0	85.0	67.0	67.0	67.0
Total Split (%)	8.1%	38.8%		8.1%	38.8%		11.3%	53.1%	53.1%	41.9%	41.9%	41.9%
Maximum Green (s)	10.0	55.5		10.0	55.5		15.0	79.0	79.0	60.5	60.5	60.5
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.0	2.0	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.0	6.0	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?		Yes		Yes			Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	Max		None	Min	Min	Min	Min	Min
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	104.8	90.1		99.1	86.9		48.7	45.7	45.7	29.0	29.0	29.0
Actuated g/C Ratio	0.66	0.56		0.62	0.54		0.30	0.29	0.29	0.18	0.18	0.18
v/c Ratio	0.29	0.40		0.21	0.23		0.46	0.36	0.24	0.14	0.74	0.58
Control Delay (s/veh)	13.1	20.3		12.7	20.7		46.0	45.6	6.6	54.3	68.7	9.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	20.3		12.7	20.7		46.0	45.6	6.6	54.3	68.7	9.5
LOS	B	C		B	C		D	D	A	D	E	A
Approach Delay (s/veh)		19.0			19.4			37.2			45.4	
Approach LOS		B			B			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 115 (72%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 30.2		Intersection LOS: C	
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			

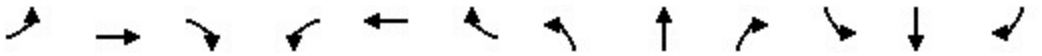
Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	179	795	87	442	108	364	131	26	473	313
v/c Ratio	0.29	0.40	0.21	0.23	0.46	0.36	0.24	0.14	0.74	0.58
Control Delay (s/veh)	13.1	20.3	12.7	20.7	46.0	45.6	6.6	54.3	68.7	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	20.3	12.7	20.7	46.0	45.6	6.6	54.3	68.7	9.5
Queue Length 50th (m)	23.7	71.8	10.1	38.0	26.1	49.8	0.0	7.1	77.6	0.0
Queue Length 95th (m)	40.9	89.5	20.2	57.7	39.4	60.3	15.0	15.5	92.4	26.6
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	629	1999	422	1945	250	1733	848	388	1340	788
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.40	0.21	0.23	0.43	0.21	0.15	0.07	0.35	0.40

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	733	38	84	401	28	105	353	127	25	459	304
Future Volume (veh/h)	174	733	38	84	401	28	105	353	127	25	459	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1811	1811	1885	1900	1841	1841	1856	1900	1856	1841
Adj Flow Rate, veh/h	179	756	39	87	413	29	108	364	131	26	473	313
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	2	6	6	1	0	4	4	3	0	3	4
Cap, veh/h	556	1775	92	447	1686	118	247	1192	536	287	935	414
Arrive On Green	0.13	1.00	1.00	0.04	0.50	0.50	0.06	0.34	0.34	0.27	0.27	0.27
Sat Flow, veh/h	1767	3438	177	1725	3396	238	1753	3497	1572	917	3526	1560
Grp Volume(v), veh/h	179	391	404	87	217	225	108	364	131	26	473	313
Grp Sat Flow(s),veh/h/ln	1767	1777	1838	1725	1791	1842	1753	1749	1572	917	1763	1560
Q Serve(g_s), s	8.1	0.0	0.0	3.9	11.1	11.2	7.0	12.3	9.6	3.4	18.2	29.5
Cycle Q Clear(g_c), s	8.1	0.0	0.0	3.9	11.1	11.2	7.0	12.3	9.6	3.6	18.2	29.5
Prop In Lane	1.00		0.10	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	556	917	949	447	889	915	247	1192	536	287	935	414
V/C Ratio(X)	0.32	0.43	0.43	0.19	0.24	0.25	0.44	0.31	0.24	0.09	0.51	0.76
Avail Cap(c_a), veh/h	556	917	949	481	889	915	312	1727	776	391	1333	590
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	0.0	0.0	17.9	23.1	23.1	39.3	38.8	37.9	44.6	49.9	54.0
Incr Delay (d2), s/veh	0.3	1.3	1.3	0.2	0.7	0.6	1.2	0.1	0.2	0.1	0.4	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.3	0.3	1.1	3.6	3.7	2.5	4.2	3.0	0.7	6.6	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	1.3	1.3	18.1	23.7	23.7	40.5	38.9	38.1	44.7	50.3	57.5
LnGrp LOS	B	A	A	B	C	C	D	D	D	D	D	E
Approach Vol, veh/h		974			529			603			812	
Approach Delay, s/veh		4.0			22.8			39.0			52.9	
Approach LOS		A			C			D			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	89.1		61.0	13.0	86.0	12.1	48.9				
Change Period (Y+Rc), s	3.0	6.5		* 6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	55.5		* 79	10.0	55.5	15.0	60.5				
Max Q Clear Time (g_c+I1), s	5.9	2.0		14.3	10.1	13.2	9.0	31.5				
Green Ext Time (p_c), s	0.1	18.7		8.5	0.0	8.3	0.2	10.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			28.3									
HCM 6th LOS			C									

Notes

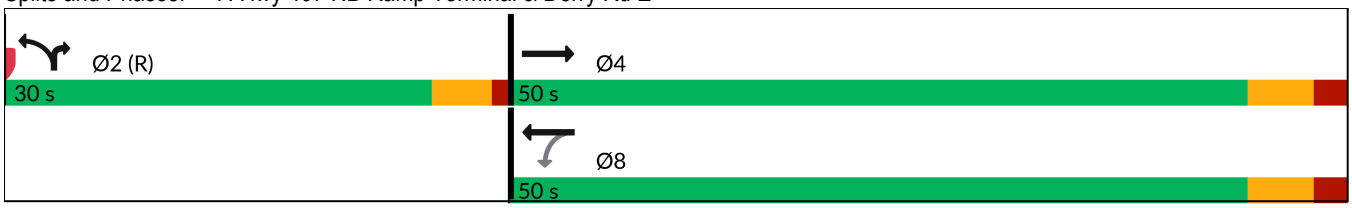
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	854	200	1	687	12	138
Future Volume (vph)	854	200	1	687	12	138
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.97	1.00
Frt	0.972					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3295	0	0	3357	2727	1502
Flt Permitted				0.954	0.950	
Satd. Flow (perm)	3295	0	0	3203	2727	1502
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	56					132
Link Speed (k/h)	80			60	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			14.5	30.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	3%	23%	3%
Adj. Flow (vph)	880	206	1	708	12	142
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1086	0	0	709	12	142
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases			8			
Detector Phase	4		8	8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0		8.0	8.0	5.0	5.0
Minimum Split (s)	26.0		26.0	26.0	24.5	24.5
Total Split (s)	50.0		50.0	50.0	30.0	30.0
Total Split (%)	62.5%		62.5%	62.5%	37.5%	37.5%
Maximum Green (s)	44.0		44.0	44.0	25.5	25.5
Yellow Time (s)	4.0		4.0	4.0	3.5	3.5
All-Red Time (s)	2.0		2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Max	Max	C-Min	C-Min
Walk Time (s)	8.0		8.0	8.0	8.0	8.0
Flash Don't Walk (s)	12.0		12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	62.0			62.0	7.5	7.5
Actuated g/C Ratio	0.78			0.78	0.09	0.09
v/c Ratio	0.42			0.29	0.05	0.55
Control Delay (s/veh)	3.0			2.2	31.4	16.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	3.0			2.2	31.4	16.0
LOS	A			A	C	B
Approach Delay (s/veh)	3.0			2.2	17.2	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 3.8		Intersection LOS: A	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1086	709	12	142
v/c Ratio	0.42	0.29	0.05	0.55
Control Delay (s/veh)	3.0	2.2	31.4	16.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.0	2.2	31.4	16.0
Queue Length 50th (m)	16.9	9.1	1.0	1.5
Queue Length 95th (m)	24.0	15.0	3.6	16.6
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2567	2484	869	568
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.42	0.29	0.01	0.25

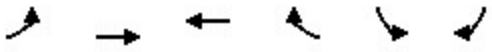
Intersection Summary



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	854	200	1	687	12	138
Future Volume (veh/h)	854	200	1	687	12	138
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1772	1772	1772	1758	1477	1758
Adj Flow Rate, veh/h	880	206	1	708	12	142
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	3	23	3
Cap, veh/h	1489	348	45	1802	870	475
Arrive On Green	0.55	0.55	0.55	0.55	0.32	0.32
Sat Flow, veh/h	2796	634	0	3356	2729	1490
Grp Volume(v), veh/h	547	539	380	329	12	142
Grp Sat Flow(s),veh/h/ln	1683	1658	1757	1520	1365	1490
Q Serve(g_s), s	17.3	17.3	0.0	9.9	0.2	5.7
Cycle Q Clear(g_c), s	17.3	17.3	9.9	9.9	0.2	5.7
Prop In Lane		0.38	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	926	912	1011	836	870	475
V/C Ratio(X)	0.59	0.59	0.38	0.39	0.01	0.30
Avail Cap(c_a), veh/h	926	912	1011	836	870	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	12.0	12.0	10.3	10.3	18.6	20.5
Incr Delay (d2), s/veh	2.8	2.8	1.0	1.3	0.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.8	0.9	0.9	0.0	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.8	14.8	11.3	11.6	18.7	22.1
LnGrp LOS	B	B	B	B	B	C
Approach Vol, veh/h	1086			709	154	
Approach Delay, s/veh	14.8			11.5	21.9	
Approach LOS	B			B	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	30.0	50.0	50.0
Change Period (Y+Rc), s	4.5	6.0	6.0
Max Green Setting (Gmax), s	25.5	44.0	44.0
Max Q Clear Time (g_c+I1), s	7.7	19.3	11.9
Green Ext Time (p_c), s	0.7	17.4	13.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.1
HCM 6th LOS	B

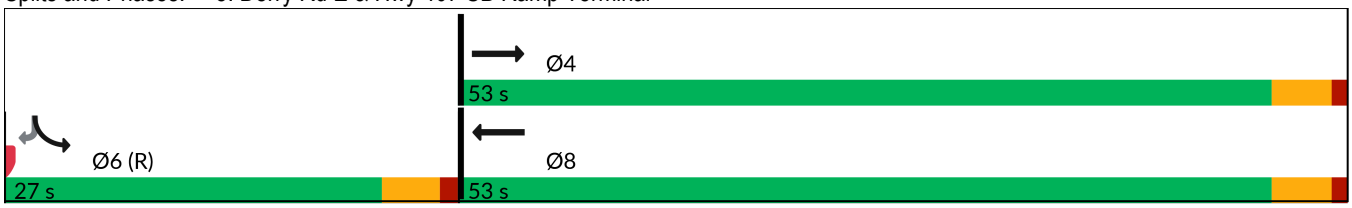


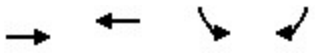
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1038	543	146	34	66
Future Volume (vph)	0	1038	543	146	34	66
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.968			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3250	0	3106	1334
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3250	0	3106	1334
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			77			69
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	3%	3%	8%	16%
Adj. Flow (vph)	0	1093	572	154	36	69
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1093	726	0	36	69
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		53.0	53.0		27.0	27.0
Total Split (%)		66.3%	66.3%		33.8%	33.8%
Maximum Green (s)		48.5	48.5		22.5	22.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		64.1	64.1		6.9	6.9
Actuated g/C Ratio		0.80	0.80		0.09	0.09
v/c Ratio		0.40	0.28		0.13	0.39
Control Delay (s/veh)		3.0	1.3		34.0	15.8
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		3.0	1.3		34.0	15.8
LOS		A	A		C	B
Approach Delay (s/veh)		3.0	1.3		22.0	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.40			
Intersection Signal Delay (s/veh): 3.4		Intersection LOS: A	
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

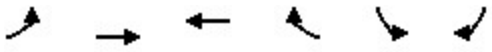
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	1093	726	36	69
v/c Ratio	0.40	0.28	0.13	0.39
Control Delay (s/veh)	3.0	1.3	34.0	15.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.0	1.3	34.0	15.8
Queue Length 50th (m)	16.9	6.4	2.8	0.0
Queue Length 95th (m)	31.0	6.7	7.0	12.3
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2715	2618	873	424
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.40	0.28	0.04	0.16

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	1038	543	146	34	66
Future Volume (veh/h)	0	1038	543	146	34	66
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1758	1758	1688	1575
Adj Flow Rate, veh/h	0	1093	572	154	36	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	3	3	8	16
Cap, veh/h	0	2041	1578	424	877	375
Arrive On Green	0.00	0.61	0.61	0.61	0.28	0.28
Sat Flow, veh/h	0	3544	2691	699	3118	1335
Grp Volume(v), veh/h	0	1093	366	360	36	69
Grp Sat Flow(s),veh/h/ln	0	1683	1670	1632	1559	1335
Q Serve(g_s), s	0.0	15.1	8.9	8.9	0.7	3.1
Cycle Q Clear(g_c), s	0.0	15.1	8.9	8.9	0.7	3.1
Prop In Lane	0.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	0	2041	1012	989	877	375
V/C Ratio(X)	0.00	0.54	0.36	0.36	0.04	0.18
Avail Cap(c_a), veh/h	0	2041	1012	989	877	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.2	7.9	8.0	20.9	21.8
Incr Delay (d2), s/veh	0.0	1.0	1.0	1.0	0.1	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.3	0.3	0.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.2	8.9	9.0	21.0	22.9
LnGrp LOS		B	A	A	C	C
Approach Vol, veh/h		1093	726		105	
Approach Delay, s/veh		10.2	9.0		22.2	
Approach LOS		B	A		C	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		53.0		27.0	53.0
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		48.5		22.5	48.5
Max Q Clear Time (g_c+I1), s		17.1		5.1	10.9
Green Ext Time (p_c), s		21.2		0.5	14.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	10.4
HCM 6th LOS	B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	23	75	13	10	0
Future Volume (vph)	0	23	75	13	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.959		
Satd. Flow (prot)	1629	0	0	1806	1883	0
Flt Permitted				0.959		
Satd. Flow (perm)	1629	0	0	1806	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	117.6			479.2	92.6	
Travel Time (s)	8.8			34.5	6.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	25	82	14	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	0	0	96	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	75	13	10	0
Future Vol, veh/h	0	23	75	13	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	25	82	14	11	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	189	11	11	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	800	1070	1608	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	759	1070	1608	-	-	-
Mov Cap-2 Maneuver	759	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	853	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.4	6.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1608	-	1070	-	-
HCM Lane V/C Ratio	0.051	-	0.023	-	-
HCM Ctrl Dly (s/v)	7.4	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.2	-	0.1	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	6	15	0	0	0
Future Volume (vph)	0	6	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	124.9			92.6	104.9	
Travel Time (s)	9.4			6.7	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	16	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	16	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

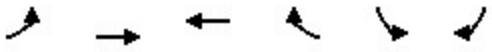
Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	15	0	0	0
Future Vol, veh/h	0	6	15	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	16	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	33	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	980	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	970	1084	1622	-	-	-
Mov Cap-2 Maneuver	970	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	991	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.3	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	1084	-	-
HCM Lane V/C Ratio	0.01	-	0.006	-	-
HCM Ctrl Dly (s/v)	7.2	0	8.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	405	274	39	12	5
Future Volume (vph)	19	405	274	39	12	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.981		0.962	
Flt Protected		0.998			0.965	
Satd. Flow (prot)	0	3571	3511	0	1748	0
Flt Permitted		0.998			0.965	
Satd. Flow (perm)	0	3571	3511	0	1748	0
Link Speed (k/h)		60	60		48	
Link Distance (m)		746.3	577.3		446.6	
Travel Time (s)		44.8	34.6		33.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	440	298	42	13	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	461	340	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	405	274	39	12	5
Future Vol, veh/h	19	405	274	39	12	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	440	298	42	13	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	340	0	-	0	581	170
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	262	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1216	-	-	-	445	844
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	758	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1216	-	-	-	435	844
Mov Cap-2 Maneuver	-	-	-	-	435	-
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	758	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.5	0	12.4
HCM LOS			B

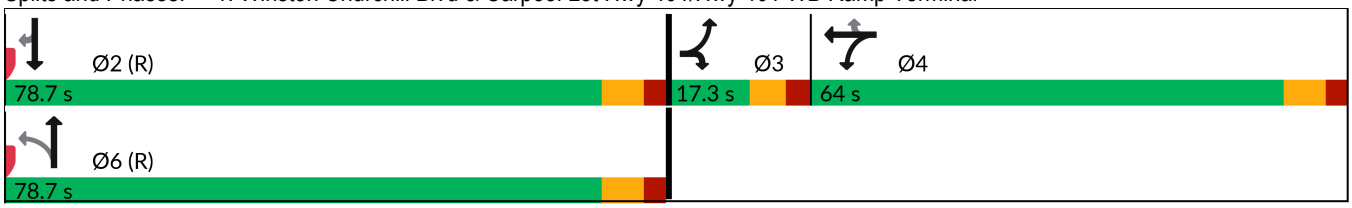
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1216	-	-	-	507
HCM Lane V/C Ratio	0.017	-	-	-	0.036
HCM Ctrl Dly (s/v)	8	0.1	-	-	12.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	0	23	1012	13	949	5	1123	229	0	1435	434
Future Volume (vph)	9	0	23	1012	13	949	5	1123	229	0	1435	434
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.88	1.00	0.95	0.95	1.00	0.91	1.00
Frt			0.850			0.850		0.975				0.850
Flt Protected	0.950			0.950	0.954		0.950					
Satd. Flow (prot)	1601	0	1547	1643	1649	2723	1712	3332	0	0	4644	1446
Flt Permitted	0.950			0.950	0.954		0.096					
Satd. Flow (perm)	1601	0	1547	1643	1649	2723	173	3332	0	0	4644	1446
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			245		19				368
Link Speed (k/h)		50			60			60			60	
Link Distance (m)		149.8			217.3			393.8			859.9	
Travel Time (s)		10.8			13.0			23.6			51.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	8%	0%	0%	0%	1%	0%	1%	0%	7%	2%	7%	7%
Adj. Flow (vph)	9	0	24	1054	14	989	5	1170	239	0	1495	452
Shared Lane Traffic (%)				49%								
Lane Group Flow (vph)	9	0	24	538	530	989	5	1409	0	0	1495	452
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5			30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	6.1		6.1	6.1	1.8	6.1	6.1	1.8			1.8	6.1
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					28.7			28.7			28.7	
Detector 2 Size(m)					1.8			1.8			1.8	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Prot		Prot	Split	NA	Perm	Perm	NA			NA	Perm
Protected Phases	3		3	4	4			6			2	
Permitted Phases						4	6					2
Detector Phase	3		3	4	4	4	6	6			2	2
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	20.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	50.6	50.6	50.6	41.5	41.5			41.5	41.5
Total Split (s)	17.3		17.3	64.0	64.0	64.0	78.7	78.7			78.7	78.7
Total Split (%)	10.8%		10.8%	40.0%	40.0%	40.0%	49.2%	49.2%			49.2%	49.2%
Maximum Green (s)	10.0		10.0	56.4	56.4	56.4	71.2	71.2			71.2	71.2
Yellow Time (s)	4.5		4.5	5.0	5.0	5.0	5.0	5.0			5.0	5.0
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	2.5	2.5			2.5	2.5
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.6	7.6	7.6	7.5	7.5			7.5	7.5
Lead/Lag	Lead		Lead	Lag	Lag	Lag						
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Recall Mode	None		None	None	None	None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)				10.0	10.0	10.0	10.0	10.0			10.0	10.0
Flash Don't Walk (s)				33.0	33.0	33.0	24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)				0	0	0	0	0			0	0
Act Effct Green (s)	10.0		10.0	57.9	57.9	57.9	76.6	76.6			76.6	76.6
Actuated g/C Ratio	0.06		0.06	0.36	0.36	0.36	0.48	0.48			0.48	0.48
v/c Ratio	0.09		0.14	0.91	0.89	0.87	0.06	0.88			0.67	0.51
Control Delay (s/veh)	72.9		1.7	68.4	66.2	44.5	14.4	28.9			34.9	8.0
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	72.9		1.7	68.4	66.2	44.5	14.4	28.9			34.9	8.0
LOS	E		A	E	E	D	B	C			C	A
Approach Delay (s/veh)		21.1			56.3			28.8			28.7	
Approach LOS		C			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 56 (35%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 39.1		Intersection LOS: D	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: Winston Churchill Blvd & Carpool Lot Hwy 401/Hwy 401 WB Ramp Terminal

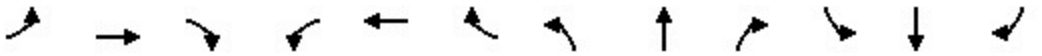




Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	9	24	538	530	989	5	1409	1495	452
v/c Ratio	0.09	0.14	0.91	0.89	0.87	0.06	0.88	0.67	0.51
Control Delay (s/veh)	72.9	1.7	68.4	66.2	44.5	14.4	28.9	34.9	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.9	1.7	68.4	66.2	44.5	14.4	28.9	34.9	8.0
Queue Length 50th (m)	2.9	0.0	173.5	170.8	134.0	0.6	240.5	149.1	16.5
Queue Length 95th (m)	9.6	0.0	#247.8	#243.5	168.2	m1.4	#273.9	167.8	48.5
Internal Link Dist (m)				193.3			369.8	835.9	
Turn Bay Length (m)									
Base Capacity (vph)	100	173	596	598	1144	82	1605	2223	884
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.14	0.90	0.89	0.86	0.06	0.88	0.67	0.51

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	23	1012	13	949	5	1123	229	0	1435	434
Future Volume (veh/h)	9	0	23	1012	13	949	5	1123	229	0	1435	434
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1688	0	1800	1800	1786	1800	1786	1800	1702	0	1702	1702
Adj Flow Rate, veh/h	9	0	24	1064	0	989	5	1170	239	0	1495	452
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	8	0	0	0	1	0	1	0	7	0	7	7
Cap, veh/h	0	0	0	1197	0	1065	161	1576	320	0	2586	803
Arrive On Green	0.00	0.00	0.00	0.35	0.00	0.35	0.56	0.56	0.56	0.00	0.56	0.56
Sat Flow, veh/h		0		3429	0	3051	336	2832	574	0	4799	1442
Grp Volume(v), veh/h		0.0		1064	0	989	5	703	706	0	1495	452
Grp Sat Flow(s),veh/h/ln				1714	0	1525	336	1710	1697	0	1549	1442
Q Serve(g_s), s				46.9	0.0	50.0	1.6	49.5	50.5	0.0	33.7	32.4
Cycle Q Clear(g_c), s				46.9	0.0	50.0	35.2	49.5	50.5	0.0	33.7	32.4
Prop In Lane				1.00		1.00	1.00		0.34	0.00		1.00
Lane Grp Cap(c), veh/h				1197	0	1065	161	952	944	0	2586	803
V/C Ratio(X)				0.89	0.00	0.93	0.03	0.74	0.75	0.00	0.58	0.56
Avail Cap(c_a), veh/h				1209	0	1075	161	952	944	0	2586	803
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.2	0.0	50.2	34.7	26.7	26.9	0.0	23.2	22.9
Incr Delay (d2), s/veh				8.4	0.0	13.5	0.4	5.1	5.4	0.0	0.9	2.8
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				17.1	0.0	16.9	0.1	14.6	14.8	0.0	8.4	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				57.5	0.0	63.7	35.1	31.8	32.3	0.0	24.1	25.8
LnGrp LOS				E		E	D	C	C		C	C
Approach Vol, veh/h					2053			1414			1947	
Approach Delay, s/veh					60.5			32.1			24.5	
Approach LOS					E			C			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	96.6	63.4	96.6
Change Period (Y+Rc), s	7.5	7.6	7.5
Max Green Setting (Gmax), s	71.2	56.4	71.2
Max Q Clear Time (g_c+I1), s	35.7	52.0	52.5
Green Ext Time (p_c), s	31.2	3.9	16.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

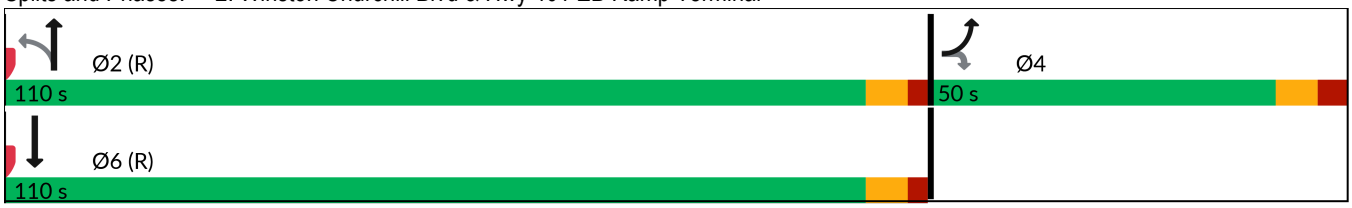


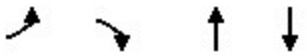
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	428	416	5	962	1753	572
Future Volume (vph)	428	416	5	962	1753	572
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	0.91
Frt	0.961	0.850			0.963	
Flt Protected	0.964					
Satd. Flow (prot)	2936	1354	0	4778	4691	0
Flt Permitted	0.964			0.913		
Satd. Flow (perm)	2936	1354	0	4362	4691	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21	21			102	
Link Speed (k/h)	50			60	60	
Link Distance (m)	280.6			247.8	393.8	
Travel Time (s)	20.2			14.9	23.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	14%	4%	2%	4%	2%	2%
Adj. Flow (vph)	455	443	5	1023	1865	609
Shared Lane Traffic (%)		36%				
Lane Group Flow (vph)	614	284	0	1028	2474	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			7.4	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	6.1	6.1		30.5	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	6.1		1.8	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				28.7	28.7	
Detector 2 Size(m)				1.8	1.8	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	10.0	10.0	20.0	20.0	20.0	
Minimum Split (s)	22.5	22.5	31.5	31.5	31.5	
Total Split (s)	50.0	50.0	110.0	110.0	110.0	
Total Split (%)	31.3%	31.3%	68.8%	68.8%	68.8%	
Maximum Green (s)	41.5	41.5	102.5	102.5	102.5	
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	3.5	3.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	8.5	8.5		7.5	7.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	C-Max	C-Max	C-Max	
Walk Time (s)			7.0	7.0	7.0	
Flash Don't Walk (s)			17.0	17.0	17.0	
Pedestrian Calls (#/hr)			0	0	0	
Act Effct Green (s)	37.3	37.3		106.7	106.7	
Actuated g/C Ratio	0.23	0.23		0.67	0.67	
v/c Ratio	0.88	0.86		0.35	0.78	
Control Delay (s/veh)	71.4	78.0		19.6	13.3	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	71.4	78.0		19.6	13.3	
LOS	E	E		B	B	
Approach Delay (s/veh)	73.5			19.6	13.3	
Approach LOS	E			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 48 (30%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 27.0		Intersection LOS: C	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Winston Churchill Blvd & Hwy 401 EB Ramp Terminal





Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	614	284	1028	2474
v/c Ratio	0.88	0.86	0.35	0.78
Control Delay (s/veh)	71.4	78.0	19.6	13.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.4	78.0	19.6	13.3
Queue Length 50th (m)	104.7	91.7	73.5	126.2
Queue Length 95th (m)	127.4	#136.5	84.7	131.3
Internal Link Dist (m)	256.6		223.8	369.8
Turn Bay Length (m)				
Base Capacity (vph)	777	366	2910	3163
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.79	0.78	0.35	0.78

Intersection Summary

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



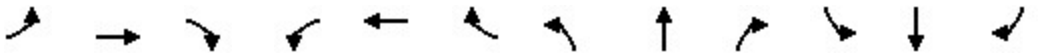
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	428	416	5	962	1753	572
Future Volume (veh/h)	428	416	5	962	1753	572
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1603	1744	1772	1744	1772	1772
Adj Flow Rate, veh/h	589	299	5	1023	1865	609
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	14	4	2	4	2	2
Cap, veh/h	705	341	27	3047	2447	760
Arrive On Green	0.23	0.23	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3054	1478	6	4695	3816	1135
Grp Volume(v), veh/h	589	299	378	650	1633	841
Grp Sat Flow(s),veh/h/ln	1527	1478	1670	1444	1612	1568
Q Serve(g_s), s	29.4	31.2	0.0	15.4	54.3	61.2
Cycle Q Clear(g_c), s	29.4	31.2	14.6	15.4	54.3	61.2
Prop In Lane	1.00	1.00	0.01			0.72
Lane Grp Cap(c), veh/h	705	341	1140	1933	2158	1049
V/C Ratio(X)	0.84	0.88	0.33	0.34	0.76	0.80
Avail Cap(c_a), veh/h	792	383	1140	1933	2158	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.86	0.86	1.00	1.00
Uniform Delay (d), s/veh	58.6	59.3	11.2	11.3	17.7	18.9
Incr Delay (d2), s/veh	7.1	18.4	0.7	0.4	2.5	6.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	11.6	3.1	2.7	10.9	12.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	65.7	77.8	11.8	11.7	20.3	25.3
LnGrp LOS	E	E	B	B	C	C
Approach Vol, veh/h	888			1028	2474	
Approach Delay, s/veh	69.8			11.8	22.0	
Approach LOS	E			B	C	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		114.6		45.4		114.6
Change Period (Y+Rc), s		7.5		8.5		7.5
Max Green Setting (Gmax), s		102.5		41.5		102.5
Max Q Clear Time (g_c+I1), s		17.4		33.2		63.2
Green Ext Time (p_c), s		32.0		3.7		38.6

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		29.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.



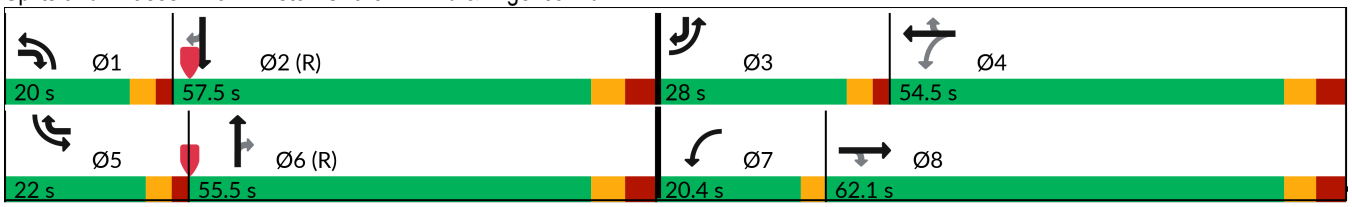
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	354	332	201	268	575	284	220	755	94	229	1235	357
Future Volume (vph)	354	332	201	268	575	284	220	755	94	229	1235	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	7.6			2.5			7.6			7.6		
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Ped Bike Factor	0.98		0.96	0.98		0.95	1.00		0.99	1.00		0.98
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3437	3510	1601	1807	3614	1601	3437	5193	1555	3471	5043	1601
Flt Permitted	0.950			0.545			0.950			0.950		
Satd. Flow (perm)	3375	3510	1530	1015	3614	1518	3434	5193	1533	3467	5043	1571
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			89			85			119			65
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		633.5			370.2			729.2			247.8	
Travel Time (s)		38.0			22.2			43.8			14.9	
Confl. Peds. (#/hr)	40		32	32		40	6		2	2		6
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	3%	4%	2%	1%	1%	2%	3%	1%	5%	2%	4%	2%
Adj. Flow (vph)	358	335	203	271	581	287	222	763	95	231	1247	361
Shared Lane Traffic (%)												
Lane Group Flow (vph)	358	335	203	271	581	287	222	763	95	231	1247	361
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			7.4			7.4	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			1.6			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

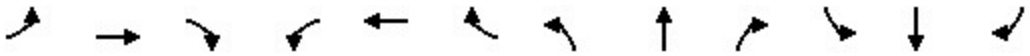
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Prot	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4	5	1	6		5	2	3
Permitted Phases			8	4		4			6			2
Detector Phase	3	8	1	7	4	5	1	6	6	5	2	3
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	10.0	10.0	7.0	10.0	7.0
Minimum Split (s)	12.0	54.5	12.0	11.5	54.5	12.0	12.0	51.5	51.5	12.0	51.5	12.0
Total Split (s)	28.0	62.1	20.0	20.4	54.5	22.0	20.0	55.5	55.5	22.0	57.5	28.0
Total Split (%)	17.5%	38.8%	12.5%	12.8%	34.1%	13.8%	12.5%	34.7%	34.7%	13.8%	35.9%	17.5%
Maximum Green (s)	23.0	54.6	15.0	17.4	47.0	17.0	15.0	48.0	48.0	17.0	50.0	23.0
Yellow Time (s)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0	3.0
All-Red Time (s)	2.0	3.5	2.0	0.0	3.5	2.0	2.0	3.5	3.5	2.0	3.5	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	7.5	5.0	3.0	7.5	5.0	5.0	7.5	7.5	5.0	7.5	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	None
Walk Time (s)		10.0			10.0			10.0	10.0		10.0	
Flash Don't Walk (s)		37.0			37.0			34.0	34.0		34.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	20.8	37.6	55.6	53.8	32.0	50.4	15.6	66.3	66.3	15.9	66.6	89.9
Actuated g/C Ratio	0.13	0.24	0.35	0.34	0.20	0.32	0.10	0.41	0.41	0.10	0.42	0.56
v/c Ratio	0.80	0.41	0.34	0.63	0.80	0.53	0.66	0.35	0.13	0.67	0.59	0.39
Control Delay (s/veh)	81.5	52.3	19.0	42.5	69.7	30.8	79.3	34.4	3.1	58.2	47.7	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.5	52.3	19.0	42.5	69.7	30.8	79.3	34.4	3.1	58.2	47.7	25.0
LOS	F	D	B	D	E	C	E	C	A	E	D	C
Approach Delay (s/veh)		56.4			53.4			40.8			44.6	
Approach LOS		E			D			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay (s/veh): 47.9 Intersection LOS: D
Intersection Capacity Utilization 107.2% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 3: Winston Churchill Blvd & Argentia Rd

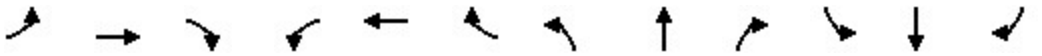




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	358	335	203	271	581	287	222	763	95	231	1247	361
v/c Ratio	0.80	0.41	0.34	0.63	0.80	0.53	0.66	0.35	0.13	0.67	0.59	0.39
Control Delay (s/veh)	81.5	52.3	19.0	42.5	69.7	30.8	79.3	34.4	3.1	58.2	47.7	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	81.5	52.3	19.0	42.5	69.7	30.8	79.3	34.4	3.1	58.2	47.7	25.0
Queue Length 50th (m)	58.8	49.1	24.6	61.5	94.5	50.7	36.5	61.9	0.0	36.5	129.8	66.4
Queue Length 95th (m)	76.5	60.2	39.0	78.5	110.1	70.1	49.8	83.7	8.0	m46.1	159.2	m98.2
Internal Link Dist (m)		609.5			346.2			705.2			223.8	
Turn Bay Length (m)	185.0		100.0	85.0		85.0	150.0		70.0	145.0		185.0
Base Capacity (vph)	494	1197	605	428	1061	561	355	2150	704	384	2097	935
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.28	0.34	0.63	0.55	0.51	0.63	0.35	0.13	0.60	0.59	0.39

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	354	332	201	268	575	284	220	755	94	229	1235	357
Future Volume (veh/h)	354	332	201	268	575	284	220	755	94	229	1235	357
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1870	1885	1885	1870	1856	1885	1826	1870	1841	1870
Adj Flow Rate, veh/h	358	335	203	271	581	287	222	763	0	231	1247	361
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	4	2	1	1	2	3	1	5	2	4	2
Cap, veh/h	413	1074	592	481	1013	557	268	1852		278	1819	762
Arrive On Green	0.12	0.31	0.31	0.11	0.28	0.28	0.08	0.36	0.00	0.16	0.72	0.72
Sat Flow, veh/h	3428	3497	1523	1795	3582	1518	3428	5147	1547	3456	5025	1577
Grp Volume(v), veh/h	358	335	203	271	581	287	222	763	0	231	1247	361
Grp Sat Flow(s),veh/h/ln	1714	1749	1523	1795	1791	1518	1714	1716	1547	1728	1675	1577
Q Serve(g_s), s	16.4	11.7	15.1	17.3	22.2	23.8	10.2	17.8	0.0	10.4	21.7	15.1
Cycle Q Clear(g_c), s	16.4	11.7	15.1	17.3	22.2	23.8	10.2	17.8	0.0	10.4	21.7	15.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	1074	592	481	1013	557	268	1852		278	1819	762
V/C Ratio(X)	0.87	0.31	0.34	0.56	0.57	0.52	0.83	0.41		0.83	0.69	0.47
Avail Cap(c_a), veh/h	493	1193	644	481	1052	573	321	1852		367	1819	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.52	0.52	0.52
Uniform Delay (d), s/veh	69.1	42.5	34.9	35.1	49.1	40.0	72.7	38.5	0.0	66.1	17.1	11.0
Incr Delay (d2), s/veh	13.2	0.2	0.3	1.5	0.7	0.7	14.0	0.7	0.0	6.4	1.1	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	4.1	4.4	6.1	8.2	7.1	4.4	6.0	0.0	3.9	4.2	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.3	42.6	35.2	36.7	49.8	40.7	86.7	39.2	0.0	72.5	18.2	12.1
LnGrp LOS	F	D	D	D	D	D	F	D		E	B	B
Approach Vol, veh/h		896			1139			985			1839	
Approach Delay, s/veh		56.8			44.4			49.9			23.8	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	65.4	24.3	52.8	17.9	65.1	20.4	56.6
Change Period (Y+Rc), s	5.0	7.5	5.0	7.5	5.0	7.5	3.0	7.5
Max Green Setting (Gmax), s	15.0	50.0	23.0	47.0	17.0	48.0	17.4	54.6
Max Q Clear Time (g_c+I1), s	12.2	23.7	18.4	25.8	12.4	19.8	19.3	17.1
Green Ext Time (p_c), s	0.3	21.5	0.9	10.6	0.5	13.6	0.0	7.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.0
HCM 6th LOS	D

Notes

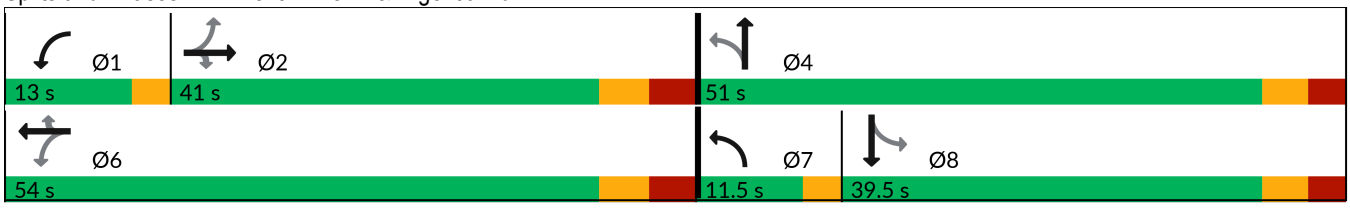
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

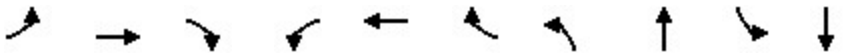
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	370	109	451	531	6	64	1	281	6	7	5
Future Volume (vph)	1	370	109	451	531	6	64	1	281	6	7	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	0.0		0.0	130.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.96	0.99		0.97	0.99	0.98		1.00	0.99	
Frt			0.850			0.850		0.850			0.942	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	913	1830	1601	1825	1865	1361	1755	1603	0	1825	1796	0
Flt Permitted	0.450			0.403			0.576			0.575		
Satd. Flow (perm)	430	1830	1534	767	1865	1314	1056	1603	0	1100	1796	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117			68		302			5	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		577.3			633.5			748.2			479.2	
Travel Time (s)		34.6			38.0			53.9			34.5	
Confl. Peds. (#/hr)	8		12	12		8	8		7	7		8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	100%	5%	2%	0%	3%	20%	4%	0%	0%	0%	0%	0%
Adj. Flow (vph)	1	398	117	485	571	6	69	1	302	6	8	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	398	117	485	571	6	69	303	0	6	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		11.1			11.1			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	
Protected Phases		2		1	6		7	4			8	
Permitted Phases	2		2	6		6	4			8		
Detector Phase	2	2	2	1	6	6	7	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	7.0	10.0		10.0	10.0	
Minimum Split (s)	35.5	35.5	35.5	11.5	35.5	35.5	11.5	39.5		39.5	39.5	
Total Split (s)	41.0	41.0	41.0	13.0	54.0	54.0	11.5	51.0		39.5	39.5	
Total Split (%)	39.0%	39.0%	39.0%	12.4%	51.4%	51.4%	11.0%	48.6%		37.6%	37.6%	
Maximum Green (s)	33.5	33.5	33.5	10.0	46.5	46.5	8.5	44.5		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	3.5		3.5	3.5	
All-Red Time (s)	3.5	3.5	3.5	0.0	3.5	3.5	0.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.5	7.5	7.5	3.0	7.5	7.5	3.0	6.5		6.5	6.5	
Lead/Lag	Lag	Lag	Lag	Lead			Lead			Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	None	Max	Max	None	Min		Min	Min	
Walk Time (s)	10.0	10.0	10.0		10.0	10.0		10.0		10.0	10.0	
Flash Don't Walk (s)	18.0	18.0	18.0		18.0	18.0		23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0		0	0	
Act Effct Green (s)	33.6	33.6	33.6	51.2	46.7	46.7	22.2	18.7		10.0	10.0	
Actuated g/C Ratio	0.42	0.42	0.42	0.64	0.59	0.59	0.28	0.24		0.13	0.13	
v/c Ratio	0.01	0.51	0.16	0.77	0.52	0.01	0.19	0.50		0.04	0.06	
Control Delay (s/veh)	15.0	20.6	3.9	18.7	12.6	0.0	22.3	6.4		32.8	26.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	15.0	20.6	3.9	18.7	12.6	0.0	22.3	6.4		32.8	26.8	
LOS	B	C	A	B	B	A	C	A		C	C	
Approach Delay (s/veh)		16.8			15.3			9.3			28.7	
Approach LOS		B			B			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 79.4			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 14.7		Intersection LOS: B	
Intersection Capacity Utilization 83.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Tenth Line W & Argentia Rd

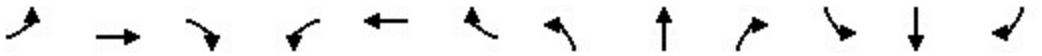




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	1	398	117	485	571	6	69	303	6	13
v/c Ratio	0.01	0.51	0.16	0.77	0.52	0.01	0.19	0.50	0.04	0.06
Control Delay (s/veh)	15.0	20.6	3.9	18.7	12.6	0.0	22.3	6.4	32.8	26.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	20.6	3.9	18.7	12.6	0.0	22.3	6.4	32.8	26.8
Queue Length 50th (m)	0.2	47.2	0.0	34.5	52.0	0.0	8.0	0.1	0.8	1.1
Queue Length 95th (m)	1.8	74.2	9.2	#64.0	79.6	0.0	17.4	18.0	4.3	6.0
Internal Link Dist (m)		553.3			609.5			724.2		455.2
Turn Bay Length (m)	20.0						130.0		45.0	
Base Capacity (vph)	182	775	717	628	1096	800	369	1034	458	752
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.51	0.16	0.77	0.52	0.01	0.19	0.29	0.01	0.02

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	370	109	451	531	6	64	1	281	6	7	5
Future Volume (veh/h)	1	370	109	451	531	6	64	1	281	6	7	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	418	1826	1870	1900	1856	1604	1841	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	398	117	485	571	6	69	1	302	6	8	5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	100	5	2	0	3	20	4	0	0	0	0	0
Cap, veh/h	151	726	621	506	1024	742	439	1	449	209	195	122
Arrive On Green	0.40	0.40	0.40	0.12	0.55	0.55	0.07	0.28	0.28	0.18	0.18	0.18
Sat Flow, veh/h	186	1826	1561	1810	1856	1344	1753	5	1592	1086	1087	680
Grp Volume(v), veh/h	1	398	117	485	571	6	69	0	303	6	0	13
Grp Sat Flow(s),veh/h/ln	186	1826	1561	1810	1856	1344	1753	0	1597	1086	0	1767
Q Serve(g_s), s	0.3	14.1	4.1	10.0	16.8	0.2	2.5	0.0	14.2	0.4	0.0	0.5
Cycle Q Clear(g_c), s	4.1	14.1	4.1	10.0	16.8	0.2	2.5	0.0	14.2	6.0	0.0	0.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	151	726	621	506	1024	742	439	0	450	209	0	318
V/C Ratio(X)	0.01	0.55	0.19	0.96	0.56	0.01	0.16	0.00	0.67	0.03	0.00	0.04
Avail Cap(c_a), veh/h	151	726	621	506	1024	742	499	0	844	439	0	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.7	19.5	16.5	20.1	12.2	8.5	23.4	0.0	26.8	33.3	0.0	28.6
Incr Delay (d2), s/veh	0.1	3.0	0.7	29.6	2.2	0.0	0.2	0.0	1.8	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.4	0.8	5.5	2.2	0.0	0.7	0.0	3.5	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.8	22.5	17.2	49.7	14.4	8.5	23.6	0.0	28.6	33.3	0.0	28.6
LnGrp LOS	B	C	B	D	B	A	C		C	C		C
Approach Vol, veh/h		516			1062			372			19	
Approach Delay, s/veh		21.3			30.5			27.6			30.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4		6	7	8				
Phs Duration (G+Y+Rc), s	13.0	41.0		30.2		54.0	8.6	21.6				
Change Period (Y+Rc), s	3.0	7.5		6.5		7.5	3.0	6.5				
Max Green Setting (Gmax), s	10.0	33.5		44.5		46.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	12.0	16.1		16.2		18.8	4.5	8.0				
Green Ext Time (p_c), s	0.0	6.1		5.6		10.6	0.1	0.1				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		27.5	
HCM 6th LOS		C	

Notes

User approved changes to right turn type.

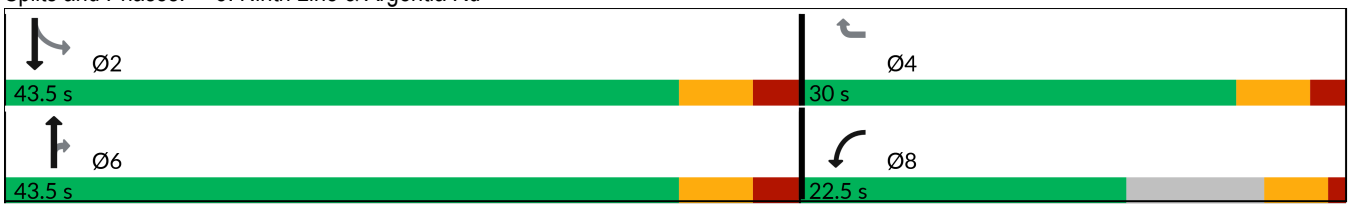


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	270	204	1006	132	77	747
Future Volume (vph)	270	204	1006	132	77	747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0		100.0	45.0	
Storage Lanes	1	1		1	1	
Taper Length (m)	7.6				7.6	
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1807	1617	3614	1617	1772	3444
Flt Permitted	0.950				0.215	
Satd. Flow (perm)	1807	1617	3614	1617	401	3444
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		68		138		
Link Speed (k/h)	60		60			60
Link Distance (m)	746.3		1616.5			667.9
Travel Time (s)	44.8		97.0			40.1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	1%	3%	6%
Adj. Flow (vph)	281	213	1048	138	80	778
Shared Lane Traffic (%)						
Lane Group Flow (vph)	281	213	1048	138	80	778
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.9		4.9			4.9
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2	1	1	2
Detector Template	Left	Right	Thru	Right	Left	Thru
Leading Detector (m)	6.1	6.1	30.5	6.1	6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8	6.1	6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		6			2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		4		6	2	
Detector Phase	8	4	6	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	20.0	10.0	10.0	10.0	10.0
Minimum Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (s)	22.5	30.0	43.5	43.5	43.5	43.5
Total Split (%)	30.6%	40.8%	59.2%	59.2%	59.2%	59.2%
Maximum Green (s)	18.0	24.0	37.0	37.0	37.0	37.0
Yellow Time (s)	3.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.0	6.5	6.5	6.5	6.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)	11.0	14.0	27.0	27.0	27.0	27.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	21.5	20.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.31	0.29	0.53	0.53	0.53	0.53
v/c Ratio	0.50	0.42	0.54	0.15	0.38	0.42
Control Delay (s/veh)	23.4	16.3	12.0	2.1	16.0	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	16.3	12.0	2.1	16.0	10.7
LOS	C	B	B	A	B	B
Approach Delay (s/veh)	20.4		10.9			11.2
Approach LOS	C		B			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 73.5			
Actuated Cycle Length: 69.5			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Ninth Line & Argentia Rd





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	281	213	1048	138	80	778
v/c Ratio	0.50	0.42	0.54	0.15	0.38	0.42
Control Delay (s/veh)	23.4	16.3	12.0	2.1	16.0	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	16.3	12.0	2.1	16.0	10.7
Queue Length 50th (m)	29.8	14.8	43.8	0.0	5.7	31.0
Queue Length 95th (m)	50.6	31.8	59.3	6.7	16.4	43.3
Internal Link Dist (m)	722.3		1592.5			643.9
Turn Bay Length (m)				100.0	45.0	
Base Capacity (vph)	663	602	1924	925	213	1833
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.35	0.54	0.15	0.38	0.42

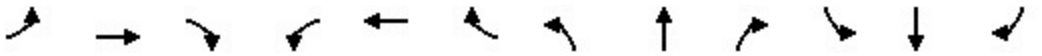
Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	270	204	1006	132	77	747
Future Volume (veh/h)	270	204	1006	132	77	747
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1856	1811
Adj Flow Rate, veh/h	281	213	1048	138	80	778
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	3	6
Cap, veh/h	372	331	2189	976	330	2103
Arrive On Green	0.21	0.21	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1795	1598	3676	1598	469	3532
Grp Volume(v), veh/h	281	213	1048	138	80	778
Grp Sat Flow(s),veh/h/ln	1795	1598	1791	1598	469	1721
Q Serve(g_s), s	8.9	7.4	9.7	2.2	6.9	6.9
Cycle Q Clear(g_c), s	8.9	7.4	9.7	2.2	16.6	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	372	331	2189	976	330	2103
V/C Ratio(X)	0.75	0.64	0.48	0.14	0.24	0.37
Avail Cap(c_a), veh/h	534	475	2189	976	330	2103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	22.0	6.5	5.0	11.0	5.9
Incr Delay (d2), s/veh	3.7	2.1	0.8	0.3	1.7	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.3	0.2	0.1	0.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.3	24.0	7.2	5.3	12.8	6.4
LnGrp LOS	C	C	A	A	B	A
Approach Vol, veh/h	494		1186			858
Approach Delay, s/veh	25.3		7.0			7.0
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		43.5			43.5	17.1
Change Period (Y+Rc), s		6.5			6.5	4.5
Max Green Setting (Gmax), s		37.0			37.0	18.0
Max Q Clear Time (g_c+I1), s		18.6			11.7	10.9
Green Ext Time (p_c), s		11.7			18.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	10.6
HCM 6th LOS	B

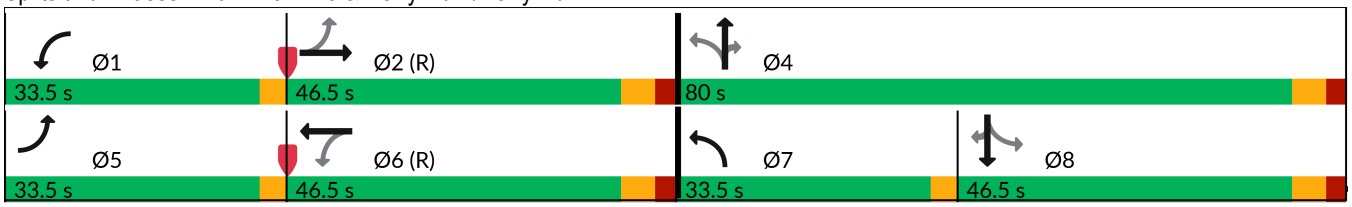


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	667	130	164	941	55	80	715	144	57	538	261
Future Volume (vph)	259	667	130	164	941	55	80	715	144	57	538	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	100.0		0.0	185.0		135.0	105.0		95.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	7.6			7.6			7.6			7.6		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		1.00		1.00					0.99	1.00		
Frt		0.976			0.992				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1807	3525	0	1807	3583	0	1755	3614	1601	1825	3614	1633
Flt Permitted	0.154			0.266			0.170			0.237		
Satd. Flow (perm)	293	3525	0	506	3583	0	314	3614	1579	455	3614	1633
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			4				153			278
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		242.0			667.9			1508.4			1616.5	
Travel Time (s)		14.5			40.1			90.5			97.0	
Confl. Peds. (#/hr)			1	1					1	1		
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	0%	1%	1%	2%	4%	1%	2%	0%	1%	0%
Adj. Flow (vph)	276	710	138	174	1001	59	85	761	153	61	572	278
Shared Lane Traffic (%)												
Lane Group Flow (vph)	276	848	0	174	1060	0	85	761	153	61	572	278
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.9			4.9			4.9			4.9	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	2			6			4		4	8		8
Detector Phase	5	2		1	6		7	4	4	8	8	8
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	11.5	42.5		11.5	42.5		11.5	40.5	40.5	40.5	40.5	40.5
Total Split (s)	33.5	46.5		33.5	46.5		33.5	80.0	80.0	46.5	46.5	46.5
Total Split (%)	20.9%	29.1%		20.9%	29.1%		20.9%	50.0%	50.0%	29.1%	29.1%	29.1%
Maximum Green (s)	30.5	40.0		30.5	40.0		30.5	73.5	73.5	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	2.5		0.0	2.5		0.0	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.0	6.5		3.0	6.5		3.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	None
Walk Time (s)		10.0			10.0			10.0	10.0	10.0	10.0	10.0
Flash Don't Walk (s)		26.0			26.0			24.0	24.0	24.0	24.0	24.0
Pedestrian Calls (#/hr)		0			0			0	0	0	0	0
Act Effct Green (s)	102.7	80.5		95.9	76.2		50.8	47.3	47.3	33.0	33.0	33.0
Actuated g/C Ratio	0.64	0.50		0.60	0.48		0.32	0.30	0.30	0.21	0.21	0.21
v/c Ratio	0.72	0.48		0.40	0.62		0.42	0.71	0.27	0.66	0.77	0.50
Control Delay (s/veh)	28.2	28.8		15.7	35.9		43.5	53.6	6.0	88.6	66.8	8.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.2	28.8		15.7	35.9		43.5	53.6	6.0	88.6	66.8	8.2
LOS	C	C		B	D		D	D	A	F	E	A
Approach Delay (s/veh)		28.7			33.1			45.4			50.4	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 154 (96%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 38.5		Intersection LOS: D	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			

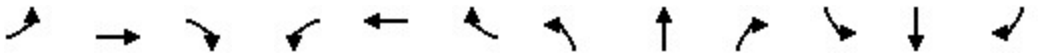
Splits and Phases: 6: Ninth Line & Derry Rd E/Derry Rd W





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	276	848	174	1060	85	761	153	61	572	278
v/c Ratio	0.72	0.48	0.40	0.62	0.42	0.71	0.27	0.66	0.77	0.50
Control Delay (s/veh)	28.2	28.8	15.7	35.9	43.5	53.6	6.0	88.6	66.8	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.2	28.8	15.7	35.9	43.5	53.6	6.0	88.6	66.8	8.2
Queue Length 50th (m)	35.3	90.6	20.9	130.6	20.1	115.0	0.0	18.0	92.0	0.0
Queue Length 95th (m)	72.1	135.3	38.2	196.7	30.7	123.9	15.4	34.7	107.0	23.0
Internal Link Dist (m)		218.0		643.9		1484.4			1592.5	
Turn Bay Length (m)	90.0		100.0		185.0		135.0	105.0		95.0
Base Capacity (vph)	478	1779	571	1708	374	1660	808	113	906	617
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.48	0.30	0.62	0.23	0.46	0.19	0.54	0.63	0.45

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	259	667	130	164	941	55	80	715	144	57	538	261
Future Volume (veh/h)	259	667	130	164	941	55	80	715	144	57	538	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1885	1885	1870	1841	1885	1870	1900	1885	1900
Adj Flow Rate, veh/h	276	710	138	174	1001	59	85	761	153	61	572	278
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	0	1	1	2	4	1	2	0	1	0
Cap, veh/h	367	1565	304	407	1701	100	195	1116	494	123	874	392
Arrive On Green	0.09	0.52	0.52	0.06	0.49	0.49	0.05	0.31	0.31	0.24	0.24	0.24
Sat Flow, veh/h	1795	2990	581	1795	3437	203	1753	3582	1584	620	3582	1608
Grp Volume(v), veh/h	276	425	423	174	522	538	85	761	153	61	572	278
Grp Sat Flow(s),veh/h/ln	1795	1791	1780	1795	1791	1849	1753	1791	1584	620	1791	1608
Q Serve(g_s), s	11.6	23.7	23.8	7.6	33.2	33.2	5.7	29.7	11.8	15.3	23.0	25.3
Cycle Q Clear(g_c), s	11.6	23.7	23.8	7.6	33.2	33.2	5.7	29.7	11.8	34.1	23.0	25.3
Prop In Lane	1.00		0.33	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	367	937	932	407	886	915	195	1116	494	123	874	392
V/C Ratio(X)	0.75	0.45	0.45	0.43	0.59	0.59	0.44	0.68	0.31	0.50	0.65	0.71
Avail Cap(c_a), veh/h	541	937	932	633	886	915	443	1645	727	127	895	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	23.8	23.8	18.7	28.8	28.8	42.8	48.1	42.0	67.8	54.4	55.3
Incr Delay (d2), s/veh	2.9	1.3	1.4	0.7	2.9	2.8	1.5	0.7	0.4	3.1	1.7	5.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	7.4	7.3	2.2	10.9	11.2	2.1	10.7	3.8	2.1	8.7	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	25.2	25.2	19.4	31.6	31.6	44.4	48.9	42.3	70.8	56.1	60.8
LnGrp LOS	C	C	C	B	C	C	D	D	D	E	E	E
Approach Vol, veh/h		1124			1234			999			911	
Approach Delay, s/veh		25.4			29.9			47.5			58.5	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	90.3		56.4	17.9	85.7	10.8	45.5				
Change Period (Y+Rc), s	3.0	6.5		6.5	3.0	6.5	3.0	6.5				
Max Green Setting (Gmax), s	30.5	40.0		73.5	30.5	40.0	30.5	40.0				
Max Q Clear Time (g_c+I1), s	9.6	25.8		31.7	13.6	35.2	7.7	36.1				
Green Ext Time (p_c), s	0.8	9.3		18.2	1.3	4.1	0.3	2.8				

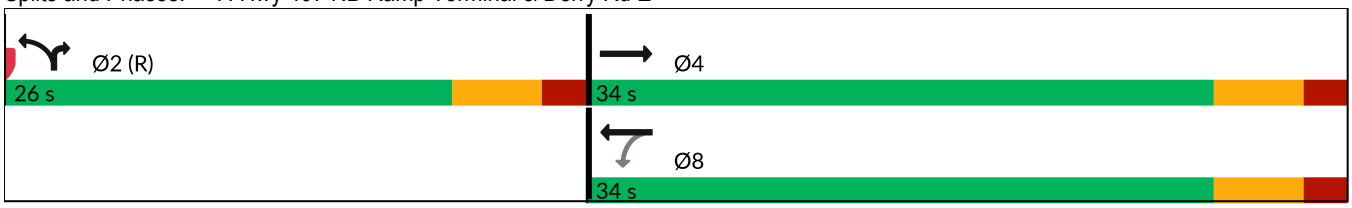
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			38.9									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	949	70	2	1234	51	184
Future Volume (vph)	949	70	2	1234	51	184
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.97	1.00
Frt	0.990					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3390	0	0	3423	3135	1517
Flt Permitted				0.954	0.950	
Satd. Flow (perm)	3390	0	0	3266	3135	1517
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	17					69
Link Speed (k/h)	80			60	60	
Link Distance (m)	358.0			242.0	515.1	
Travel Time (s)	16.1			14.5	30.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	8%	1%	7%	2%
Adj. Flow (vph)	968	71	2	1259	52	188
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1039	0	0	1261	52	188
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	7.4	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.9			4.9	4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)		14	24		24	14
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (m)	30.5			30.5	6.1	6.1
Trailing Detector (m)	0.0			0.0	0.0	0.0
Detector 1 Position(m)	0.0			0.0	0.0	0.0
Detector 1 Size(m)	1.8			1.8	6.1	6.1
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(m)	28.7			28.7		
Detector 2 Size(m)	1.8			1.8		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	Prot
Protected Phases	4			8	2	2
Permitted Phases			8			
Detector Phase	4		8	8	2	2
Switch Phase						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Initial (s)	8.0		8.0	8.0	8.0	8.0
Minimum Split (s)	26.0		26.0	26.0	26.0	26.0
Total Split (s)	34.0		34.0	34.0	26.0	26.0
Total Split (%)	56.7%		56.7%	56.7%	43.3%	43.3%
Maximum Green (s)	28.0		28.0	28.0	20.0	20.0
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	6.0			6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	Max		Max	Max	C-Min	C-Min
Walk Time (s)	8.0		8.0	8.0	8.0	8.0
Flash Don't Walk (s)	12.0		12.0	12.0	12.0	12.0
Pedestrian Calls (#/hr)	0		0	0	0	0
Act Effct Green (s)	37.1			37.1	10.9	10.9
Actuated g/C Ratio	0.62			0.62	0.18	0.18
v/c Ratio	0.49			0.62	0.09	0.57
Control Delay (s/veh)	6.3			9.5	19.2	20.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay (s/veh)	6.3			9.5	19.2	20.7
LOS	A			A	B	C
Approach Delay (s/veh)	6.3			9.5	20.4	
Approach LOS	A			A	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:NBL and 6:, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 9.2		Intersection LOS: A	
Intersection Capacity Utilization 54.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Hwy 407 NB Ramp Terminal & Derry Rd E



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1039	1261	52	188
v/c Ratio	0.49	0.62	0.09	0.57
Control Delay (s/veh)	6.3	9.5	19.2	20.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.3	9.5	19.2	20.7
Queue Length 50th (m)	14.1	37.3	2.6	12.1
Queue Length 95th (m)	26.4	71.0	5.9	26.0
Internal Link Dist (m)	334.0	218.0	491.1	
Turn Bay Length (m)				
Base Capacity (vph)	2103	2020	1045	551
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.49	0.62	0.05	0.34

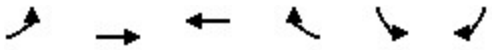
Intersection Summary



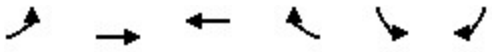
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	949	70	2	1234	51	184
Future Volume (veh/h)	949	70	2	1234	51	184
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1786	1786	1688	1786	1702	1772
Adj Flow Rate, veh/h	968	71	2	1259	52	188
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	8	1	7	2
Cap, veh/h	1496	110	61	1553	1048	501
Arrive On Green	0.47	0.47	0.47	0.47	0.33	0.33
Sat Flow, veh/h	3295	235	1	3409	3144	1502
Grp Volume(v), veh/h	512	527	676	585	52	188
Grp Sat Flow(s),veh/h/ln	1697	1744	1784	1544	1572	1502
Q Serve(g_s), s	13.8	13.8	0.0	19.5	0.7	5.7
Cycle Q Clear(g_c), s	13.8	13.8	19.5	19.5	0.7	5.7
Prop In Lane		0.13	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	792	814	893	721	1048	501
V/C Ratio(X)	0.65	0.65	0.76	0.81	0.05	0.38
Avail Cap(c_a), veh/h	792	814	893	721	1048	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.78	0.78	1.00	1.00
Uniform Delay (d), s/veh	12.2	12.2	13.7	13.7	13.6	15.2
Incr Delay (d2), s/veh	4.1	4.0	4.7	7.7	0.1	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.1	1.4	1.8	0.1	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	16.3	16.2	18.4	21.4	13.6	17.4
LnGrp LOS	B	B	B	C	B	B
Approach Vol, veh/h	1039			1261	240	
Approach Delay, s/veh	16.2			19.8	16.6	
Approach LOS	B			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	26.0	34.0	34.0
Change Period (Y+Rc), s	6.0	6.0	6.0
Max Green Setting (Gmax), s	20.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	7.7	15.8	21.5
Green Ext Time (p_c), s	1.0	9.4	5.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	18.1
HCM 6th LOS	B



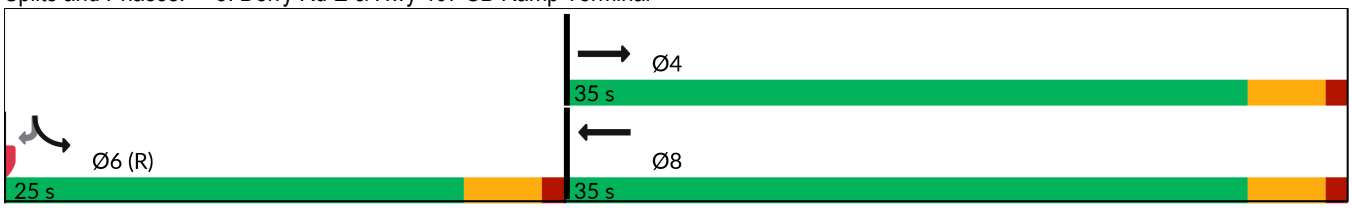
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	864	1105	148	209	296
Future Volume (vph)	0	864	1105	148	209	296
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	1.00
Frt			0.982			0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	3390	3362	0	3288	1532
Flt Permitted					0.950	
Satd. Flow (perm)	0	3390	3362	0	3288	1532
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			35			56
Link Speed (k/h)		80	80		60	
Link Distance (m)		1052.5	358.0		426.8	
Travel Time (s)		47.4	16.1		25.6	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	2%	1%	1%	2%	1%
Adj. Flow (vph)	0	882	1128	151	213	302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	882	1279	0	213	302
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		7.4	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.9	4.9		4.9	
Two way Left Turn Lane						
Headway Factor	1.06	1.06	1.06	1.06	1.06	1.06
Turning Speed (k/h)	24			14	24	14
Number of Detectors		2	2		1	1
Detector Template		Thru	Thru		Left	Right
Leading Detector (m)		30.5	30.5		6.1	6.1
Trailing Detector (m)		0.0	0.0		0.0	0.0
Detector 1 Position(m)		0.0	0.0		0.0	0.0
Detector 1 Size(m)		1.8	1.8		6.1	6.1
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	0.0
Detector 1 Queue (s)		0.0	0.0		0.0	0.0
Detector 1 Delay (s)		0.0	0.0		0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Detector Phase		4	8		6	6
Switch Phase						

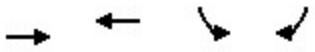


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Initial (s)		5.0	5.0		5.0	5.0
Minimum Split (s)		22.5	22.5		22.5	22.5
Total Split (s)		35.0	35.0		25.0	25.0
Total Split (%)		58.3%	58.3%		41.7%	41.7%
Maximum Green (s)		30.5	30.5		20.5	20.5
Yellow Time (s)		3.5	3.5		3.5	3.5
All-Red Time (s)		1.0	1.0		1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Recall Mode		Max	Max		C-Min	C-Min
Walk Time (s)		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0
Act Effct Green (s)		36.1	36.1		14.9	14.9
Actuated g/C Ratio		0.60	0.60		0.25	0.25
v/c Ratio		0.43	0.63		0.26	0.72
Control Delay (s/veh)		8.1	7.4		17.7	25.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay (s/veh)		8.1	7.4		17.7	25.9
LOS		A	A		B	C
Approach Delay (s/veh)		8.1	7.4		22.5	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			

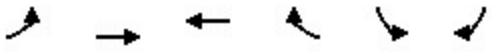
Splits and Phases: 8: Derry Rd E & Hwy 407 SB Ramp Terminal





Lane Group	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	882	1279	213	302
v/c Ratio	0.43	0.63	0.26	0.72
Control Delay (s/veh)	8.1	7.4	17.7	25.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.1	7.4	17.7	25.9
Queue Length 50th (m)	24.5	22.2	9.7	24.5
Queue Length 95th (m)	45.2	43.5	14.9	41.8
Internal Link Dist (m)	1028.5	334.0	402.8	
Turn Bay Length (m)				
Base Capacity (vph)	2041	2039	1123	560
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.43	0.63	0.19	0.54

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰↰	↱
Traffic Volume (veh/h)	0	864	1105	148	209	296
Future Volume (veh/h)	0	864	1105	148	209	296
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1772	1786	1786	1772	1786
Adj Flow Rate, veh/h	0	882	1128	151	213	302
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	2	1	1	2	1
Cap, veh/h	0	1711	1529	204	1119	517
Arrive On Green	0.00	0.51	0.51	0.51	0.34	0.34
Sat Flow, veh/h	0	3544	3098	402	3274	1514
Grp Volume(v), veh/h	0	882	635	644	213	302
Grp Sat Flow(s),veh/h/ln	0	1683	1697	1714	1637	1514
Q Serve(g_s), s	0.0	10.5	17.6	17.8	2.7	9.8
Cycle Q Clear(g_c), s	0.0	10.5	17.6	17.8	2.7	9.8
Prop In Lane	0.00			0.23	1.00	1.00
Lane Grp Cap(c), veh/h	0	1711	862	871	1119	517
V/C Ratio(X)	0.00	0.52	0.74	0.74	0.19	0.58
Avail Cap(c_a), veh/h	0	1711	862	871	1119	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.8	11.6	11.6	13.9	16.2
Incr Delay (d2), s/veh	0.0	1.1	5.6	5.6	0.4	4.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.3	1.4	0.3	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	10.9	17.2	17.2	14.3	21.0
LnGrp LOS		B	B	B	B	C
Approach Vol, veh/h		882	1279		515	
Approach Delay, s/veh		10.9	17.2		18.2	
Approach LOS		B	B		B	

Timer - Assigned Phs			4		6	8
Phs Duration (G+Y+Rc), s			35.0		25.0	35.0
Change Period (Y+Rc), s			4.5		4.5	4.5
Max Green Setting (Gmax), s			30.5		20.5	30.5
Max Q Clear Time (g_c+I1), s			12.5		11.8	19.8
Green Ext Time (p_c), s			11.7		2.1	9.4

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		15.3
HCM 6th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	73	28	6	13	0
Future Volume (vph)	0	73	28	6	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.961		
Satd. Flow (prot)	1629	0	0	1810	1883	0
Flt Permitted				0.961		
Satd. Flow (perm)	1629	0	0	1810	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	117.6			479.2	92.6	
Travel Time (s)	8.8			34.5	6.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	79	30	7	14	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	79	0	0	37	14	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	73	28	6	13	0
Future Vol, veh/h	0	73	28	6	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	79	30	7	14	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	81	14	14	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	921	1066	1604	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	904	1066	1604	-	-	-
Mov Cap-2 Maneuver	904	-	-	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.6	6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1066	-	-
HCM Lane V/C Ratio	0.019	-	0.074	-	-
HCM Ctrl Dly (s/v)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.2	-	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	9	2	0	0	0
Future Volume (vph)	0	9	2	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	908	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	908	1883	0
Link Speed (k/h)	48			50	50	
Link Distance (m)	124.9			92.6	104.9	
Travel Time (s)	9.4			6.7	7.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	101%	2%	2%	2%
Adj. Flow (vph)	0	10	2	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	0	2	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.3%		ICU Level of Service A	
Analysis Period (min) 15			

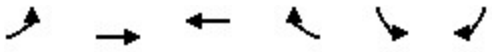
Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	2	0	0	0
Future Vol, veh/h	0	9	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	101	2	2	2
Mvmt Flow	0	10	2	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	5	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.42	6.22	5.11	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	3.109	-	-	-
Pot Cap-1 Maneuver	1017	1084	1157	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1015	1084	1157	-	-	-
Mov Cap-2 Maneuver	1015	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1019	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.4	8.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1157	-	1084	-	-
HCM Lane V/C Ratio	0.002	-	0.009	-	-
HCM Ctrl Dly (s/v)	8.1	0	8.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	10	269	1133	16	45	23
Future Volume (vph)	10	269	1133	16	45	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.998		0.954	
Flt Protected		0.998			0.968	
Satd. Flow (prot)	0	3571	3571	0	1739	0
Flt Permitted		0.998			0.968	
Satd. Flow (perm)	0	3571	3571	0	1739	0
Link Speed (k/h)		60	60		48	
Link Distance (m)		746.3	577.3		446.6	
Travel Time (s)		44.8	34.6		33.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	292	1232	17	49	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	303	1249	0	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	269	1133	16	45	23
Future Vol, veh/h	10	269	1133	16	45	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	292	1232	17	49	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1249	0	-	0	1409	625
Stage 1	-	-	-	-	1241	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	553	-	-	-	130	428
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	553	-	-	-	127	428
Mov Cap-2 Maneuver	-	-	-	-	127	-
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	844	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.5	0	42.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	553	-	-	-	167
HCM Lane V/C Ratio	0.02	-	-	-	0.443
HCM Ctrl Dly (s/v)	11.6	0.1	-	-	42.6
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q (veh)	0.1	-	-	-	2

Appendix F:
Parking Justification – September 14, 2026

September 14, 2026

PLD 7564 Tenth Line Investment LP
185 the West Mall, Suite 700
Toronto, ON M9C 5L5
c/o Mainline Planning Services Inc.

Attention: Mr. Tony Nguyen

Re: Parking Justification Study
Proposed Industrial Development
7564 Tenth Line West, City of Mississauga

CGE Consulting was retained to prepare a Parking Justification Study in support of an industrial development located at 7564 Tenth Line West in the City of Mississauga.

This study was undertaken to evaluate the adequacy of the on-site parking supply for a proposed data center. Our assessment included a comprehensive review of the City of Mississauga's parking by-law requirements, on-site parking utilization surveys carried out at a comparable proxy site recorded over two weeks (6 days in total), and recommendations for several applicable Transportation Demand Management (TDM) strategies to further reduce the site's parking demand.

Overall, our findings conclude that the current By-law requirement of 163 parking spaces for the subject site is excessive and overstates the anticipated demand for this type of development. The proposed parking supply of 45 spaces is seen as reasonable and is well supported by empirical evidence gathered from the proxy site (7445 Tranmere Drive). Accordingly, it is the opinion of CGE Transportation Consulting that the proposed parking supply will adequately support the unique operational demands of the proposed development.

Should you have any questions regarding this study, please do not hesitate to contact the undersigned.

Yours truly,
CGE TRANSPORTATION CONSULTING

Casey Ge, P.Eng.
President

Mahdi Gabaire, M.ASc., EIT
Traffic Engineer

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Appendix A: City Correspondences

1.0 INTRODUCTION

CGE Consulting was retained to prepare a Parking Justification Study for the proposed development located at 7564 Tenth line in the City of Mississauga, the Regional Municipality of Peel.

1.1 Site Description:

The subject property is currently occupied by a vacant lot and is located on the north-west corner of the Tenth Line West and Argentia Road intersection, towards the end of the cul-du-sac of Tenth Line West. Vehicular access to the property is provided through one driveway connection along Tenth Line West. **Figure 1** provides a satellite view of the project location.

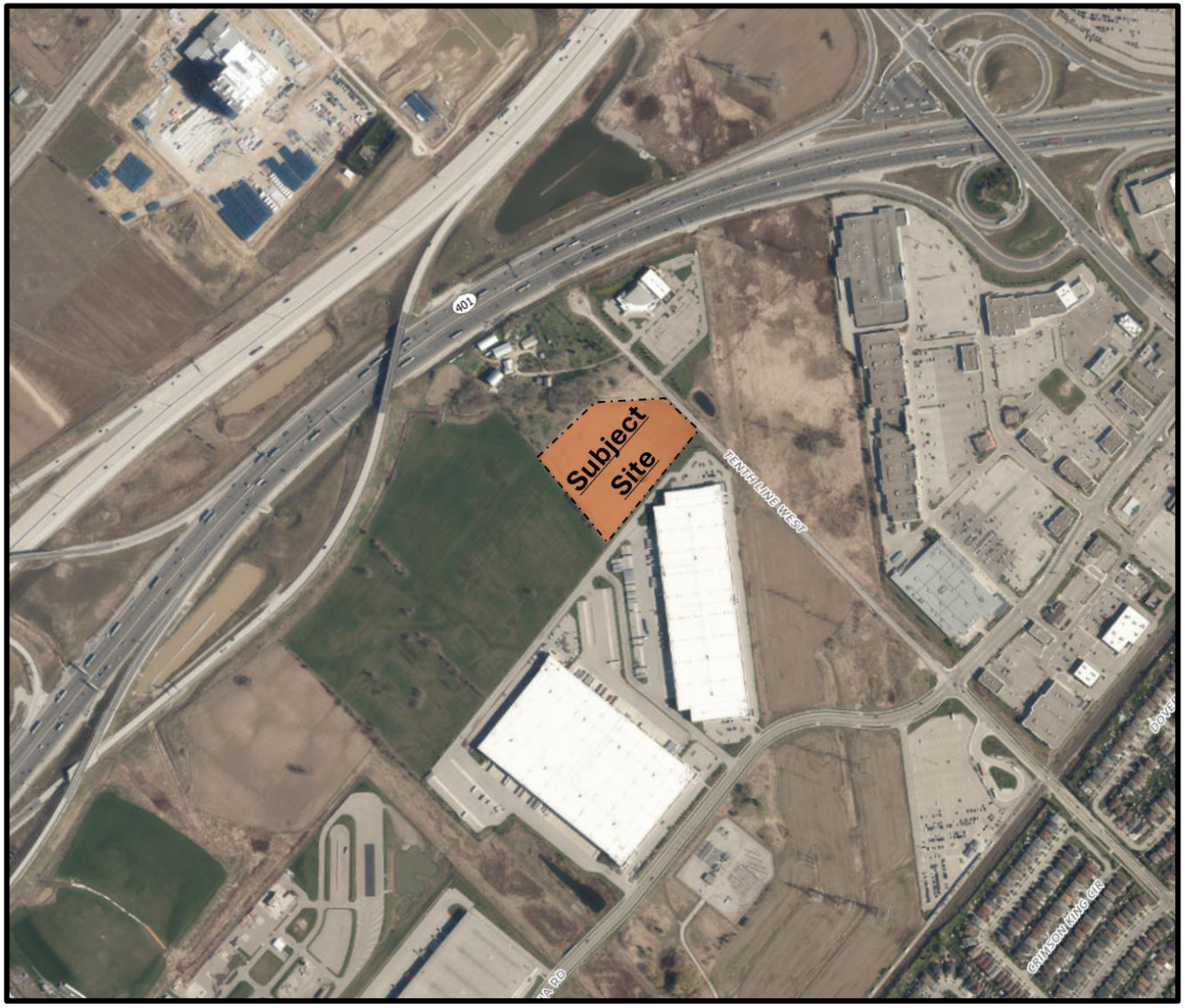
The subject property is zoned as 'Development Zone 8 (D8)' under the City of Mississauga Zoning By-laws. This designation is a short-term classification applied to lands where the intended zoning is yet to be confirmed and is to be determined through future development applications.

1.2 Development Description:

The proposed development consists of a data center anticipated to operate continuously, 24 hours per day across all seven days of the week. The facility is anticipated to employ approximately 30 staff members on-site across rotating shifts. The primary working hours are from 8:00 a.m. to 5:00 p.m. Staff members are expected to consist of 1-2 security personnel, critical operations tech teams as well as managers and engineers. It is important to note that external visitors are not anticipated as part of the facilities' day-to-day operations.

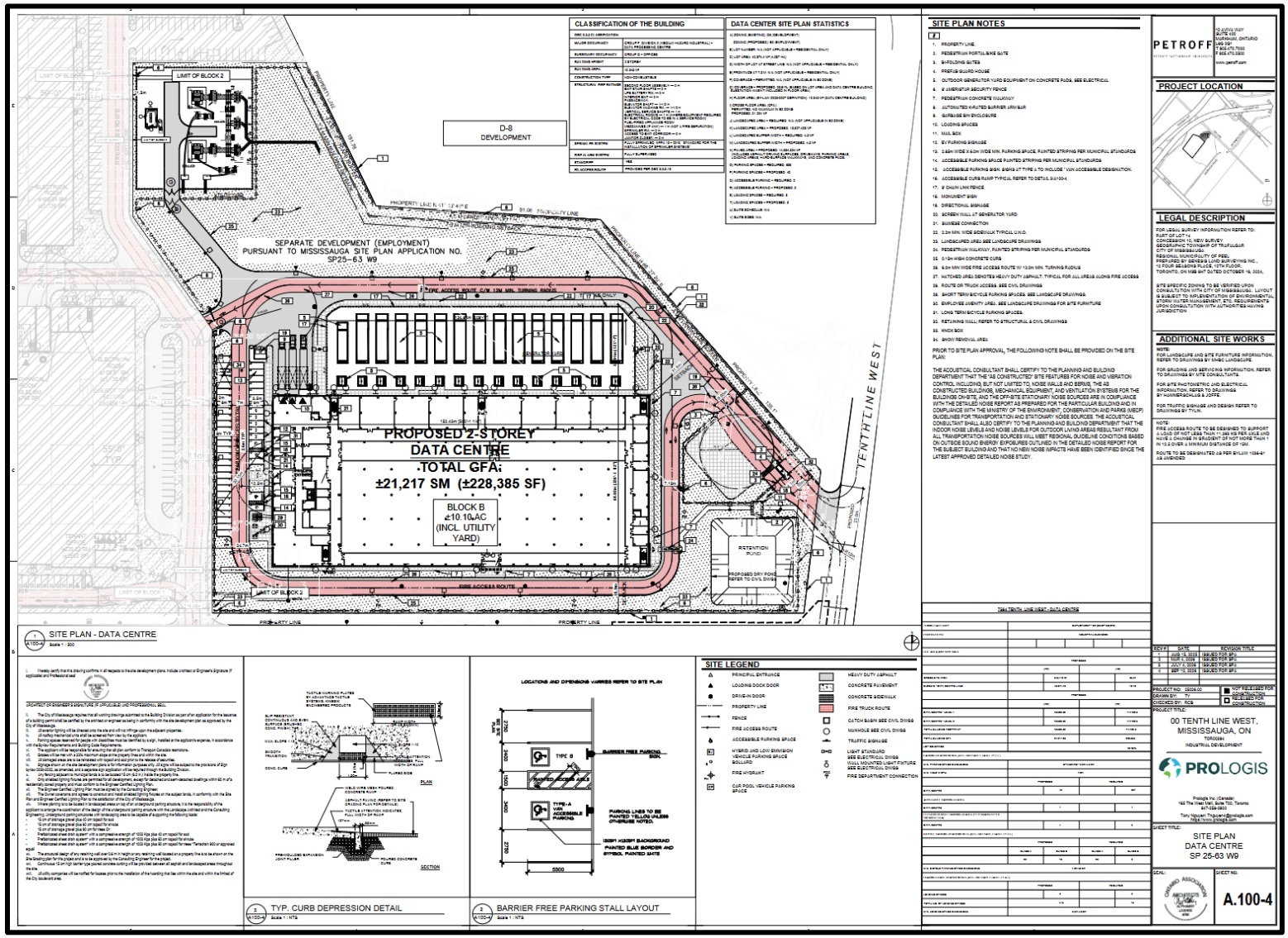
According to the latest site plan (published August 12, 2025), the layout of the building has a total Gross Floor Area (GFA) of approximately 21,217 m^2 (228,378 ft^2) and a total on-site parking supply of 45 spaces, including 2 barrier-free accessible parking spaces. **Figure 2** shows the most recent site plan.

Figure 1: Site Location – 7564 Tenth Line West, City of Mississauga



Source: City of Mississauga Interactive Zoning Maps

Figure 2: Site Plan – 7564 Tenth Line West, City of Mississauga



2.0 CITY OF MISSISSAUGA ZONING BY-LAW

2.1 Vehicle Parking By-Laws

Zoning By-law 0225-2007 (Part 3 – Table 3.1.2.2.) establishes minimum vehicle parking requirements for various land uses within the City of Mississauga.

In the case of the subject property, the primary land use present is the data center. The total GFA is approximately 21,217 m^2 (228,378 ft^2). Functionally, the closes land use area that would describe the operational characteristics of the proposed development would be "Warehouse and Distribution Facility". According to the guidelines presented within the Zoning By-law, the required parking rate for Warehouse and Distribution Facility uses (Single-Occupancy Building) is 1.1 parking spaces for each 100 m^2 for the first 6,975 m^2 of GFA. For any remaining GFA, the recommended parking rate is 0.6 parking space per 100m^2.

Table 1 summarizes the minimum vehicle parking requirement calculations.

Table 1: Minimum Vehicle Parking Requirements

Land Use	Required Number of Vehicle Parking Spaces			Number of Provided Parking Spaces
	Zoning By-law 0225-2007			
	Rate	GFA (m^2)	Total	
Warehouse and Distribution Facility **(21,2**17 **m^2)**	For the first 6975 m^2: 1.1 spaces / 100 m^2	6,975	77	45
	For the remaining GFA: 0.6 spaces / 100 m^2	14,242	86	
Total		**21,217**	**163**	**45**

Currently, the parking spaces provided on-site are 45. Ultimately, this represents a 118-space shortfall. To ensure that the existing parking supply is adequate to accommodate the demands of the property, a comprehensive parking reduction justification was conducted. The parking reduction justification included the following methodologies:

- Comprehensive On-Site Parking Utilization Surveys from a pre-approved proxy site.

- Assessment of non-auto/ Transportation Demand Management (TDM) opportunities within and in the vicinity of the site.

2.2 Bicycle Parking By-Laws

Section 3.1.6 of the **City of Mississauga Zoning By-law 0225-2007** (Table 3.1.6,6) establishes the minimum bicycle parking requirements for various land uses within the City of Mississauga.

For "Warehouse and Distribution Facility" land use, the recommended bicycle parking rates are the following:

- For the long term (Class A) supply, the bicycle parking rate is 0.1 spaces per 100 m^2.
- For the short term (Class B) supply, the bicycle parking rate is 2 spaces per 100 m^2.

Table 2 summarizes the minimum Bicycle parking requirement calculations.

Table 2: Minimum Bicycle Parking Requirements

Land Use	Required Number of Bicycle Parking Spaces			Proposed Number of Bicycle Parking Spaces
	Zoning By-law 0225-2007			
	Rate	GFA (m^2)	Total	
Warehouse and Distribution Facility **(21,217 m^2)**	Class A: 0.1 spaces per 100 m² GFA	**21,217**	21	22
	Class B: 2 spaces per 100 m² GFA		2	10
Total		**21,217**	**430**	**10**

Based on the most recent site plan, the proposed development is expected to provide a total of 22 Class A (long-term) and 10 Class B (short-term) bicycle parking spaces. Overall, the proposed parking supply satisfies and exceeds the minimum bicycle parking requirements outlined by the City's Zoning By-law 0225-2007.

3.0 PROXY SITE PARKING UTILIZATION SURVEYS

3.1 Proxy Site Description:

Following consultations with City Staff, the proxy site selected for the parking utilization surveys was the “CentriLogic” data center located at 7445 Tranmere Drive, Mississauga. The facility is a single-story structure with an approximate gross floor area of 2,496 m^2 (26,867 ft^2). The site was selected as a proxy based on its comparable operational characteristics and land uses profile to the proposed data center located at 7564 Tenth Line West.

Both facilities provide cloud computing and IT services throughout the Greater Toronto Area (GTA) and operate 24-hours during all seven days of the week with minimal staff on-site employed. As such, with the approval of City Staff, the parking demand patterns observed at 7445 Tranmere Drive was a suitable benchmark for establishing the unique parking demands of the proposed development.

3.2 First week Parking Survey Methodology and Results:

To assess the adequacy of the proposed parking supply, parking utilization surveys were conducted at 7445 Tranmere Drive (Mississauga) over the course of two weeks. During the first week, the following days were selected for surveying:

- Monday, June 8, 2026
- Tuesday, June 9, 2026
- Saturday, June 13, 2026
- Sunday, June 14, 2026

Data collected between 7:00 a.m. to 12:00 a.m. on both weekdays and weekends, in accordance with the survey parameters outlined by City Staff. The detailed study proposal and other relevant correspondence with City Staff is available in **Appendix A**.

Table 3 summarizes the parking survey from Week #1.

Table 3: 7445 Tranmere Drive, Mississauga – Parking Utilization Surveys (Week #1)

Time	08-Jun-26		09-Jun-26		13-Jun-26		14-Jun-26	
	Parked Vehicles		Parked Vehicles		Parked Vehicles		Parked Vehicles	
	Regular	Accessible	Regular	Accessible	Regular	Accessible	Regular	Accessible
07:00 to 07:30	1	0	1	0	1	0	1	0
07:30 to 08:00	1	0	1	0	1	0	1	0
08:00 to 08:30	1	0	1	0	1	0	1	0
08:30 to 09:00	2	0	1	0	1	0	1	0
09:00 to 09:30	2	0	1	0	1	0	1	0
09:30 to 10:00	4	0	1	0	1	0	3	0
10:00 to 10:30	5	0	2	0	1	0	4	0
10:30 to 11:00	5	0	2	0	1	0	4	0
11:00 to 11:30	5	0	2	0	1	0	4	0
11:30 to 12:00	6	0	4	0	1	0	4	0
12:00 to 12:30	6	0	4	0	1	0	3	0
12:30 to 13:00	6	0	4	0	1	0	1	0
13:00 to 13:30	5	0	4	0	1	0	1	0
13:30 to 14:00	5	0	4	0	1	0	1	0
14:00 to 14:30	5	0	5	0	1	0	1	0
14:30 to 15:00	5	0	5	0	1	0	1	0
15:00 to 15:30	5	0	5	0	1	0	1	0
15:30 to 16:00	5	0	5	0	1	0	1	0
16:00 to 16:30	5	0	5	0	1	0	1	0
16:30 to 17:00	5	0	6	0	1	0	1	0
17:00 to 17:30	2	0	4	0	1	0	1	0
17:30 to 18:00	1	0	3	0	1	0	1	0
18:00 to 18:30	1	0	2	0	1	0	1	0
18:30 to 19:00	1	0	1	0	1	0	1	0
19:00 to 19:30	1	0	1	0	1	0	1	0
19:30 to 20:00	1	0	1	0	1	0	1	0
20:00 to 20:30	1	0	1	0	1	0	1	0
20:30 to 21:00	1	0	1	0	1	0	1	0
21:00 to 21:30	1	0	1	0	1	0	1	0
21:30 to 22:00	1	0	1	0	1	0	1	0
22:00 to 22:30	1	0	1	0	1	0	1	0
22:30 to 23:00	1	0	1	0	1	0	1	0
23:00 to 23:30	1	0	1	0	1	0	1	0
23:30 to 00:00	1	0	1	0	1	0	1	0
Available Spaces	**50**	**2**	**50**	**2**	**50**	**2**	**50**	**2**

Based on the first week of survey data, below is a summary of the observed parking demand:

- **Total occupied GFA** – 2496 m^2 (26,867 ft^2).
- **Total available parking supply** – 50 spaces
- **Peak parking demand observed** – 6 spaces (12% Utilization)
- **Surplus parking** – 44 spaces

The results of the parking survey indicate a peak parking demand of 6 cars or a parking demand ratio of **0.24 cars per 100 m^2** (or **1 car per 416 m^2**) occurring at 11:30 a.m. on **Monday, June 8, 2026**. These findings confirm that the site's actual parking demand is significantly lower than the City's minimum by-law requirement and strongly support the conclusion that the existing parking supply is sufficient to meet current needs.

3.4 Second week Parking Survey Methodology and Results:

For the second week of parking utilization surveys, the two days demonstrating the highest parking demand were identified as critical days and researched to ensure consistent and accurate results. Based on the first week results, Monday (June 8) and Tuesday (June 9) were found to contain the highest parking demand. **Table 4** summarizes the parking survey from Week #2. The same survey parameters and methodology were utilized as presented in the first week.

Based on the second week of survey data, below is a summary of the observed parking demand:

- **Total occupied GFA** – 2496 m^2 (26,867 ft^2).
- **Total available parking supply** – 50 spaces
- **Peak parking demand observed** – 6 spaces (12% Utilization)
- **Surplus parking** – 44 spaces

Similar to the first week, the second week parking survey results recorded a peak parking demand of 6 cars occurring at 14:00 p.m. on **Monday, June 15, 2026**. This low demand is consistent with this type of development. Furthermore, the similarity of the recorded parking demand across week 1 and 2 confirm the overall reliability of the survey and ensure no irregular utilization rates were used to draw our final conclusions.

Table 4: 7445 Tranmere Drive, Mississauga – Parking Utilization Surveys (Week #2)

Time			15 June 26		16 June 26	
			Parked Vehicles		Parked Vehicles	
			Regular	Accessible	Regular	Accessible
07:00	to	07:30	1	0	1	0
07:30	to	08:00	1	0	1	0
08:00	to	08:30	1	0	2	0
08:30	to	09:00	2	0	2	0
09:00	to	09:30	2	0	2	0
09:30	to	10:00	3	0	2	0
10:00	to	10:30	3	0	3	0
10:30	to	11:00	3	0	4	0
11:00	to	11:30	3	0	4	0
11:30	to	12:00	4	0	4	0
12:00	to	12:30	5	0	4	0
12:30	to	13:00	5	0	3	0
13:00	to	13:30	5	0	4	0
13:30	to	14:00	5	0	3	0
14:00	to	14:30	6	0	3	0
14:30	to	15:00	5	0	3	0
15:00	to	15:30	5	0	2	0
15:30	to	16:00	5	0	3	0
16:00	to	16:30	4	0	3	0
16:30	to	17:00	3	0	3	0
17:00	to	17:30	3	0	3	0
17:30	to	18:00	3	0	2	0
18:00	to	18:30	2	0	1	0
18:30	to	19:00	2	0	1	0
19:00	to	19:30	1	0	2	0
19:30	to	20:00	1	0	2	0
20:00	to	20:30	1	0	1	0
20:30	to	21:00	1	0	1	0
21:00	to	21:30	1	0	1	0
21:30	to	22:00	1	0	1	0
22:00	to	22:30	1	0	1	0
22:30	to	23:00	1	0	1	0
23:00	to	23:30	1	0	0	0
23:30	to	00:00	0	0	0	0
Available Spaces			**50**	**2**	**50**	**2**

3.5 Discussion and Findings:

Based on the parking utilization surveys conducted over the study period, 7445 Tranmere Drive was found to experience significantly lower parking demand than would be traditionally predicted under the City Zoning by-law parking requirements.

During the 17-hour survey period, the proxy site demonstrated low vehicle activity, with most of the weekday and weekend recording a parking demand of 1 or 2. An interesting distinction to note between weekday and weekend parking patterns was the lack of morning parking demand during the weekends. While during the weekdays, the parking demand gradually increases throughout the morning, remains consistent during the afternoon and tapers off towards the evening.

The peak parking demand observed at the proxy site was found to be 6 spaces, representing 12% utilization of the total parking supply. Based on the estimated floor area of the building, this translates to a parking rate of approximately one car per 416 m^2. The proxy site also provides two accessible parking spaces for visitors and employees. Throughout the survey period, no accessible spaces were observed to be occupied.

Overall, the observed parking demand and vehicle traffic on-site provides a realistic representation of the operational characteristics of the proxy site (and by extension the subject site). The findings from the survey establish clear disconnect between the City's current parking requirements and the actual parking demand generated by this land use type.

Given the unique operational characteristics of data centers, CGE Transportation Consulting concludes that the current By-law requirement of 163 spaces is overly excessive and is not reflective of real-world conditions for this type of development. The parking survey identified a peak parking demand of 6 spaces or a demand rate of 0.24 cars per 100 m^2. Accordingly, the proposed parking supply of 45 spaces, equivalent to 0.21 per 100 m^2, is seen as reasonable and adequate to support future operations of the proposed development.

4.0 TRANSPORTATION DEMAND MANAGEMENT (TDM)

Transportation Demand Management (TDM) refers to a comprehensive framework of strategies aimed at reducing congestion by minimizing the number of single-occupant vehicles as much as possible. Rather than increasing the capacity of the city's transportation infrastructure, TDM measures seek to reduce traffic demand by promoting positive changes in how, when, where and why people travel.

Ultimately, a well-designed TDM framework has the potential to encourage transportation efficiency and reduce negative environmental effects, all while supporting and enhancing mobility options for residents.

The City of Mississauga Traffic Impact Study Guidelines (Appendix E) and TDM Strategy and Implementation Plan (2023) are documents that provide a framework of proven and verified TDM strategies for proposed development applications within the city. Based on a comprehensive review of the checklists, the following section identifies several strategies that are applicable given the characteristics of the subject site:

4.1 Recommended TDM Strategies:

4.1.1 Promote Transit Usage

Given the site's proximity to Lisgar GO Station, as illustrated in **Figure 3**, through targeted awareness campaigns and incentives, both employees and clients of the proposed development can be encouraged to use public transportation.

4.1.2 Encourage More Carpooling and Vanpooling

The nature of the site's industrial characteristics support opportunities for employee carpooling, particularly given the constant work schedule from Monday to Friday. Facilitating ride-matching among employees/staff and prioritizing parking for carpooling can further promote this practice. Not only would this minimize the peak traffic demand experienced by the transportation network but also increase the system's efficiency through lowering the overall number of single occupancy vehicle trips.

4.1.3 Electric Vehicle Support

With the goal of promoting environmentally friendly commuting, the development is on track to provide four reserved and designated parking spaces for hybrid and electric vehicles. This would overall encourage the adoption of low-emission vehicles which would be in alignment with the City's sustainability objectives.

4.1.4 Active Transportation and Pedestrian Connectivity

Given that the development is located within an 800-meter walking distance from a future rapid transit station (Lisgar GO Station), the site was designed with pedestrian convenience and accessibility in mind. The following are key pedestrian and cycling facilities that are being explored and anticipated to be provided:

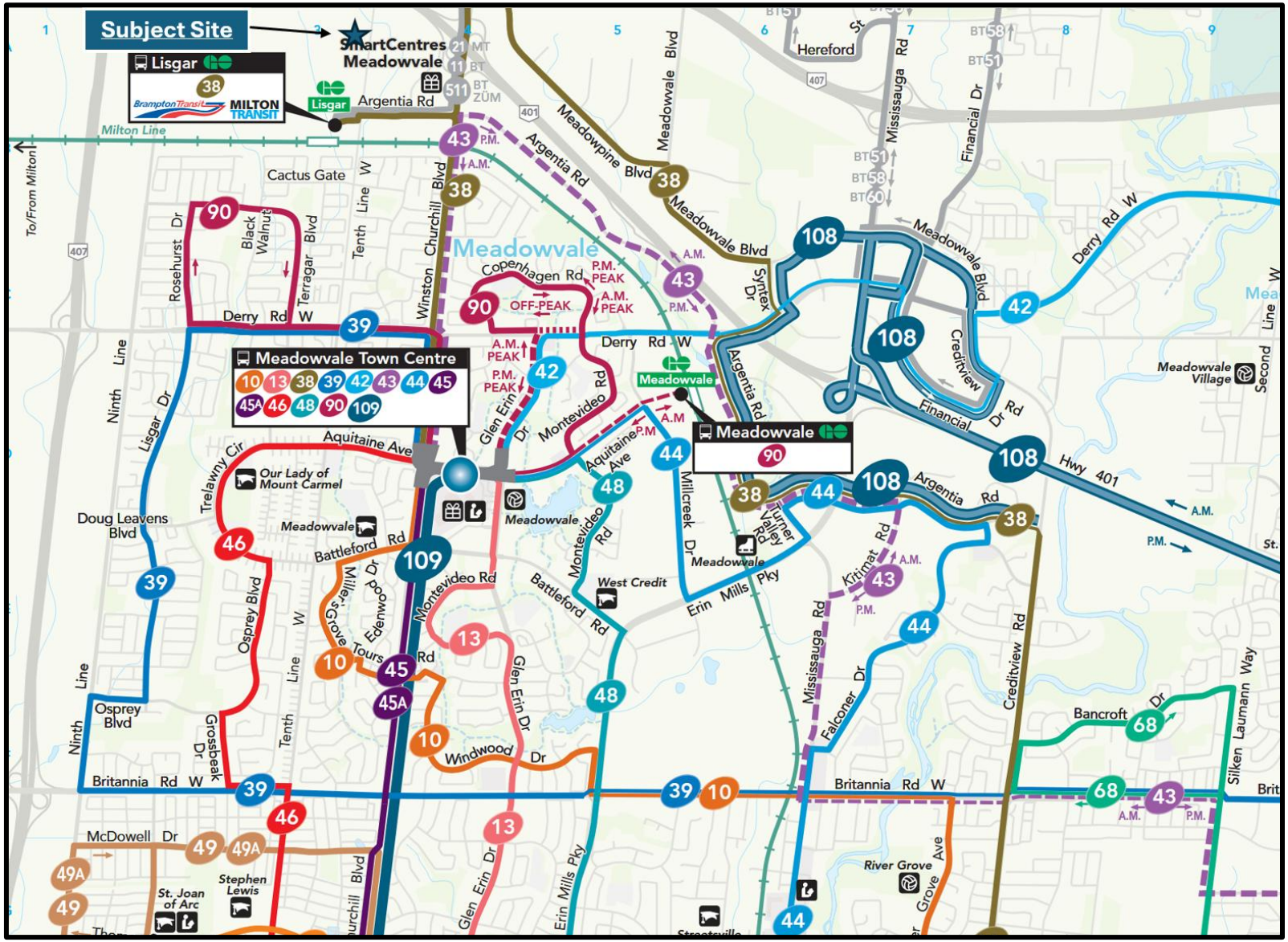
- Accessible on-site pedestrian routes that provide direct connections to surrounding network and transit.
- Vehicle parking areas located away from street and pedestrian routes
- On-site cycling routes that provide convenient connections to the surrounding network.
- Class A (long-term) and Class B (short-term) bicycle parking spaces provided by City of Mississauga Zoning By-law (discussed in detail in Section 2.2).
- Bicycle repair station is located at-grade and near long-term bicycle parking.

Below is a summary of the potential TDM strategies that are applicable to the site along with their associated costs.

Table 5: TDM Recommendations

TDM Measure	Unit Price	Quantity	Total Cost	Cost Borne By
Working with Smart Commute (Mississauga) to serve the site and provide materials for information sessions.	–	–	–	Region of Peel
Supporting Active Transportation and pedestrian Connectivity	TBD	–	TBD	Developer
EV/Hybrid Priority Parking Support	TBD	–	TBD	Developer
Bike Repair Station	TBD	1 Station	TBD	At the site plan stage, it is recommended a bike repair station be considered
Evaluation and Monitoring of TDM Strategies	TBD	–	TBD	Developer
Total Cost to the Applicant			TBD	

Figure 3: Mississauga Transit Routes



5.0 CONCLUSIONS & RECOMMENDATIONS

The key findings are summarized below:

- CGE Consulting was retained to prepare a Parking Justification Study for the proposed development located at 7564 Tenth line in the City of Mississauga, the Regional Municipality of Peel. The subject property is currently occupied by a vacant lot and is located on the north-west corner of the Tenth Line West and Argentia Road intersection, towards the end of the cul-du-sac of Tenth Line West.
- **Zoning By-law 0225-2007 (Part 3 – Table 3.1.2.2.)** establishes minimum vehicle parking requirements for various land uses within the City of Mississauga. In the case of the subject property, the primary land use present is the data center. The total GFA is approximately 21,217 m^2 (228,378 ft^2).
- Currently, the parking spaces provided on-site are 45. Ultimately, this represents a 118-space shortfall. To ensure that the existing parking supply is adequate to accommodate the demands of the property, a comprehensive parking reduction justification was conducted, including parking utilization surveys from a pre-approved proxy site and an assessment of non-auto/Transportation Demand Management opportunities within and in the vicinity of the site.
- Following consultations with City Staff, the proxy site selected for the parking utilization surveys was the “CentriLogic” data center located at 7445 Tranmere Drive, Mississauga. The results from the first week of parking utilization surveys indicate a peak parking demand of 6 cars or a parking demand ratio of **0.24 cars per 100 m^2** (or **1 car per 416 m^2**) occurring at 11:30 a.m. on **Monday, June 8, 2026**.
- Results from the second week of parking surveys recorded a peak parking demand of 6 cars occurring at 14:00 p.m. on **Monday, June 15, 2026**. This low demand is consistent with this type of development. Furthermore, the similarity of the recorded parking demand across week 1 and 2 confirm the overall reliability of the survey and ensure no irregular utilization rates were used to draw our final conclusions.
- Based on the survey results, the proposed parking supply of 45 spaces, equivalent to **0.21 per 100 m^2**, is seen as reasonable and adequate to support future operations of the proposed development.
- Several strategies have been suggested that could lower the number of single occupancy vehicles, such as encouraging more transit use among employees, carpooling, supporting active transportation and EV/Hybrid Vehicle Priority Parking Support. Ultimately, the Transportation Demand Management (TDM) plan outlined in this study aims to complement the City’s vision for sustainability and growth.

Based on the findings of this study, it is our opinion that the subject site will have sufficient parking supply to accommodate the unique operational needs and anticipated parking demand associated with the proposed development. Should you have any questions regarding this study, please do not hesitate to contact the undersigned.

Appendix A: City Correspondence

Outlook

RE: 7564 Tenth Line W, Mississauga - Parking Study TOR

From Paulina Armacinski <Paulina.Armacinski@mississauga.ca>
Date Thu 6/4/2026 9:20 AM
To Andy Mok <andymok@mainlineplanning.com>; Alana Zheng <Cen.Zheng@mississauga.ca>; Connor DiPietro <Connor.DiPietro@mississauga.ca>
Cc Casey Ge <casey@cgeconsulting.ca>; Mahdi Gabaire <gabaire@cgeconsulting.ca>; Nicholas Moore <NMoore@mainlineplanning.com>; Parkingstudy Review <Parkingstudy.Review@mississauga.ca>

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Good morning Andy,

Thank you for your continued cooperation, patience, and support in providing staff with the necessary information to formulate appropriate surveying parameters for the proposal at hand.

Patron Count Surveying
Seeing how 7445 Tranmere Drive is gated off with no public access to the site; and the 7564 Tenth Line West development proposal is planned to operate in the same manner, the number of patrons visiting the subject business shall be counted (i.e. vehicle traffic entering the gates to park, as well as pedestrian traffic entering the gates to access the building). Could you kindly confirm that Main Line Planning Services Inc. will be granted access onto the site to count any existing number of cars at the start of surveying at 7 a.m.? And likewise, to double check the remaining number of cars at the end of the surveying at 12 a.m.?

Staff can approve the following surveying parameters to be conducted at the subject site of **7445 Tranmere Drive (Centrilogic), Mississauga**:

- Monday, June 8th: 7:00am – 12:00am Tuesday, June 9th
- Tuesday, June 9th: 7:00am – 12:00am Wednesday, June 10th
- Saturday, June 13th: 7:00am – 12:00am Sunday, June 14th
- Sunday, June 14th: 7:00am – 12:00am Monday, June 15th

Between June 15th through to June 22nd, repeat surveying within the same above outlined parameters on the 2 busiest days observed from the 1st week of surveying.

Please keep in mind surveying must continue until the peak parking demand is captured i.e. (1) if demands do not taper off by the end times stipulated above, surveying must continue until demands evidently decrease/ remain steady for the night, and (2) if a peak parking demand is captured at the start of surveying based on the times as stipulated above, the surveyor must ensure to start surveying earlier on that same day in the consecutive week in order to ensure peak parking demand is captured accurately.

Please ensure to follow the City's Parking Terms of Reference (ToR) for all other requirements while you finalize the Parking Utilization Study (PUS) document. Please ensure that the PUS is finalized as a standalone document for formal submission to the City.

If you have any questions regarding the requirements as laid out within the ToR, please do not hesitate to reach out to us for clarification either during the surveying timeframe or as you draft the final PUS for submission.

Upon organizing and coordinating logistics on your end, kindly confirm whether the above surveying dates can be accommodated? If not, please respond back to staff with alternative consecutive surveying weeks that are not impacted by a holiday.

Thank you in advance. We look forward to hearing back from you with confirmation to our above questions.
Paulina

From: Andy Mok <andymok@mainlineplanning.com>

<andymok@mainlineplanning.com>; Nicholas Moore <nmoore@mainlineplanning.com>
Subject: Re: 7564 Tenth Line W, Mississauga - Parking Study TOR

Hi Paulina,

Please find the completed form below.

The following are the proposed proxy sites:

1. **7445 Tranmere Drive (Preferred Proxy Site)**

- Who are the tenant(s) and what are their use(s)? **Tenant:** Centrilogic Data Center. **Use:** Data Center.
- Are there any vacant unit(s)? - No, vacant units were observed.
- How many number of existing parking spaces are there on-site currently? - Approximate 33 parking spaces.
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)? - Difficult to assess without an on-site visit.

2. **6820 Century Ave (Alternative Proxy Site)**

- Who are the tenant(s) and what are their use(s)? **Tenant:** CGI Mississauga Data Center. **Use:** Data Center
- Are there any vacant unit(s)?- No, vacant units were observed.
- How many number of existing parking spaces are there on-site currently?- Approximate 88 parking spaces.
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)? - Difficult to assess without an on-site visit.

3. **2251 Speakman (Alternative Proxy Site)**

- Who are the tenant(s) and what are their use(s)? **Tenant:** Nuvollo Mississauga Data Center. **Use:** Data Center
- Are there any vacant unit(s)? - No, vacant units were observed.
- How many number of existing parking spaces are there on-site currently? - the site has shared parking between 3 buildings so its difficult to assess without interviews and an on-site visit.
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)? - Difficult to assess without an on-site visit.

Proposal vs. Proxy Sites for consideration

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (7445 Tranmere Drive)?

7700 Tenth Line West	7445 Tranmere Drive
Business Name: TBD **Description of Operations:** Employment use (E2), Science and Technology Facility permitted uses under E2.	**Business Name:** Centrilogic **Description of Operations:** Data Center operations
Proposed Hours of Operation: All seven days all hours. **Number of Shifts:** N/A	**Hours of Operation:** All seven days all hours.

	Number of Shifts: N/A

Precinct: 4

Precinct: 4

Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? - The site isnt serviced by any transit routes.

Distance to Transit Stop(s): i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? None are near the site.

Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? - The site is serviced by Brampton Transit - Bus 15.

Distance to Transit Stop(s): i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? - Is located 900m away from the site or a 12 mins walk.

Number of Units On-Site: 1

Number of Units On-Site: 1

Etc.

Etc.

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (6820 Century Avenue)?

7700 Tenth Line West	6820 Century Avenue
Business Name: TBD **Description of Operations:** Employment use (E2), Science and Technology Facility permitted uses under E2.	**Business Name:** CGI Mississauga Data Center. **Description of Operations:** Data Center operations
Proposed Hours of Operation: All seven days all hours. **Number of Shifts:** N/A	**Hours of Operation:** All seven days all hours. **Number of Shifts:** N/A
Precinct: 4	**Precinct: 4**

Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? - The site isnt serviced by any transit routes. **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? None are near the site.	**Transit Service:** i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? The site is serviced by MiWay Routes 38 and 44. **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? Nearest bus stop is at Argentia Rd and East Century Ave, approximately a 15 min walk.
Number of Units On-Site: 1	**Number of Units On-Site: 1**
Etc.	**Etc.**

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (2251 Speakman Drive)?

7700 Tenth Line West	2251 Speakman Drive
Business Name: **Description of Operations:** Employment use (E2), Science and Technology Facility permitted uses under E2.	**Business Name:** Nuvollo Mississauga Data Center. **Description of Operations:** Data Center operations
Proposed Hours of Operation: All seven days all hours. **Number of Shifts:** N/A	**Hours of Operation:** All seven days all hours. **Number of Shifts:** N/A
Precinct: 4	**Precinct: 4**
Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? - The site isnt serviced by any transit routes. **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? None are near the site.	**Transit Service:** i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? The site is serviced by MiWay Routes 45 and 71. **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/Station, Go Train Station, GO Bus Stop, Other? Nearest bus stop is at Speakman Dr and Hadwen Rd, approximately a 10 min walk.
Number of Units On-Site: 1	**Number of Units On-Site: 1**

Etc.	**Etc.**

- Please fill in the chart below and add to it/revise to include all the necessary information so that staff can understand how the sites differ/compare?

	7700 Tenth Line West **Precinct '4'**				
Zoning By-Law 0225-2007	**Proposed Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**Proposed Spaces**
	E2 Employment	21,224 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	637	40
	Total Required			637	40
	Surplus/Deficit				597
	7445 Tranmere Dr **Precinct '4'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Data Center	2,696 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	81	33
	Total Required			81	33
	Surplus/Deficit = 48 spaces				

	6820 Century Ave **Precinct '4'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**

	Data Center	1,782 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	54	88
	Total Required			54	88
	Surplus/Deficit - 34 spaces				
	2251 Speakman Precinct '4'				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Data Center	3,866 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	116	NA
	Total Required			116	NA
	Surplus/Deficit - Unknown at this time, would require a survey				

Best Regards,

Mahdi Gabaire, M.ASc (Transportation Engineering), EIT (Ontario)

Traffic Engineer

CGE Consulting Ltd.

e: gabaire@cgeconsulting.ca

p: 437-260-1227

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From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> on behalf of Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Sent: Monday, March 30, 2026 2:08 PM
To: Mahdi Gabaire <gabaire@cgeconsulting.ca>
Cc: Casey Ge <casey@cgeconsulting.ca>; Parkingstudy Review <Parkingstudy.Review@mississauga.ca>; Connor DiPietro <Connor.DiPietro@mississauga.ca>
Subject: RE: 7564 Tenth Line W, Mississauga - Parking Study TOR

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Hi Mahdi,

Could you also fill out the following additional details, below:

The following are the proposed proxy sites:

1. **7445 Tranmere Drive (Preferred Proxy Site)**

- Who are the tenant(s) and what are their use(s)? **Tenant:** Centrilogic Data Center. **Use:** Data Center.
- Are there any vacant unit(s)? - No, vacant units were observed.
- How many number of existing parking spaces are there on-site currently? - Approximate 33 parking spaces
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)? - Difficult to assess without an on-site visit

2. **6820 Century Ave (Alternative Proxy Site)**

- Who are the tenant(s) and what are their use(s)?
- Are there any vacant unit(s)?
- How many number of existing parking spaces are there on-site currently?
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)?

3. **2251 Speakman (Alternative Proxy Site)**

- Who are the tenant(s) and what are their use(s)?
- Are there any vacant unit(s)?
- How many number of existing parking spaces are there on-site currently?
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)?

Proposal vs. Proxy Sites for consideration

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (7445 Tranmere Drive)?

7700 Tenth Line West	7445 Tranmere Drive
Business Name: **Description of Operations:**	**Business Name:** **Description of Operations:**
Proposed Hours of Operation: Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**	**Hours of Operation:** Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**
Precinct:	**Precinct:**

Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?	**Transit Service:** i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?
Number of Units On-Site:	**Number of Units On-Site:**
Etc.	**Etc.**

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (6820 Century Avenue)?

7700 Tenth Line West	**6820 Century Avenue**
Business Name: **Description of Operations:**	**Business Name:** **Description of Operations:**
Proposed Hours of Operation: Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**	**Hours of Operation:** Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**
Precinct:	**Precinct:**
Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?	**Transit Service:** i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?

Number of Units On-Site:	**Number of Units On-Site:**
Etc.	**Etc.**

- How do uses and operations differ between the proposal on the subject site (7700 Tenth Line West) and proposed surveying site (2251 Speakman Drive)?

7700 Tenth Line West	**2251 Speakman Drive**
Business Name: **Description of Operations:**	**Business Name:** **Description of Operations:**
Proposed Hours of Operation: Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**	**Hours of Operation:** Sunday Monday Tuesday Wednesday Thursday Friday Saturday **Number of Shifts:**
Precinct:	**Precinct:**
Transit Service: i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?	**Transit Service:** i.e. # of MiWay Routes, Go Train Service (buses and/or trains)?, Other? **Distance to Transit Stop(s)**: i.e. MiWay Bus Stop/ Station, Go Train Station, GO Bus Stop, Other?
Number of Units On-Site:	**Number of Units On-Site:**
Etc.	**Etc.**

- Please fill in the chart below and add to it/revise to include all the necessary information so that staff can

understand how the sites differ/compare?

	7700 Tenth Line West **Precinct '4'**				
Zoning By-Law 0225-2007	**Proposed Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**Proposed Spaces**
	E2 Employment	21,224 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	637	40
	Total Required			637	40
	Surplus/Deficit				597
	7445 Tranmere Dr **Precinct '4'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Data Center	2,696 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	81	33
	Total Required			81	33
	Surplus/Deficit = 48 spaces				
	Century Avenue **Precinct 'x'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Total Required				
	Surplus/Deficit =				

	Speakman Drive **Precinct 'x'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Total Required				
	Surplus/Deficit =				

Please be advised, once staff receive a response with answers to our above questions, we will need time to review. Staff reserve the right to inquire about any other additional questions should we feel we need further clarifications. Kindly provide as much detail and elaboration as possible. Please note, surveying will not be able to commence until staff provide approval of satisfactory surveying parameters.

We look forward to hearing back from you with answers to our above questions so that we can work towards approving satisfactory surveying parameters.

Also, staff advise CGE Consulting Ltd. to thoroughly review the City's Parking Terms of Reference (ToR).

We look forward to hearing back from you so that we can work on surveying parameters and continue to advance the application forward.

Thank you,

Paulina

From: Mahdi Gabaire <gabaire@cgeconsulting.ca>
Sent: Saturday, March 21, 2026 6:29 PM
To: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>; Paulina Armacinski <Paulina.Armacinski@mississauga.ca>
Cc: Casey Ge <casey@cgeconsulting.ca>
Subject: [EXTERNAL] Re: 7564 Tenth Line W, Mississauga - Parking Study TOR

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Paulina,

Please find the completed form below. Can you also advise us on the recommended number of survey days and hours for the proxy site?

7564 Tenth Line W Proposed Future Operations/Uses: (City has assigned new address – 7700 Tenth Line W)

- What are the current uses on site? Vacant
- Are any existing uses remaining on-site? If yes, please elaborate. No. Previously agricultural use ended and the property is zoned for development (D-8).
- What are the proposed uses? Employment use (E2), Science and Technology Facility permitted uses under E2.

• **Tenant(s) / Use(s)** Existing	• **Tenant(s) / Use(s)** Remaining / Unaltered	• **Tenant(s) / Use(s)** Proposed
• Vacant land	• Vacant land	• Employment use, tenants TBD (typically AAA or Fortune 500 corporations

Note: Please revise this table as required to relay appropriate/actual information.

- How will the parking spaces be managed on-site (i.e. will they be first come first service, designated per use by signage…etc.)? A total supply of 40 parking spaces is proposed. Only a maximum of 30 employees daily.

***Insert Mississauga Proxy Site Address* Current Operations/Uses (answer for each of the sites you would need staff to consider):**

The following are the proposed proxy sites:

1. **7445 Tranmere Drive (Preferred Proxy Site)**

- Who are the tenant(s) and what are their use(s)? **Tenant:** Centrilogic Data Center. **Use:** Data Center.
- Are there any vacant unit(s)? - No, vacant units were observed.
- How many number of existing parking spaces are there on-site currently? - Approximate 33 parking spaces
- How are the existing number of parking spaces managed on-site (i.e. are they first come first serve, or designated per use by signage…etc.)? - Difficult to assess without an on-site visit

2. **6820 Century Ave (Alternative Proxy Site)**
3. **2251 Speakman (Alternative Proxy Site)**

Proposal vs. Proxy Sites for consideration

- How do uses and operations differ between the proposal on the subject site (7564 Tenth Line West) and proposed surveying site(s) (7445 Tranmere Drive)? Both the subject and proxy site share similar data processing operations and contain a single building on-site. The subject site has a gross floor area of 21,224 sq.m while the proxy site has a gross floor area of 2,696 sq.m. The subject site is served by a single full movement driveway while the proxy site has two full movement access points. In terms of parking layout, the parking supply for the subject site is concentrated towards the left side of the building while for the proxy site the parking arrangement is more evenly distributed around the building.
- Please fill in the chart below and add to it/revise to include all the necessary information so that staff can understand how the sites differ/compare?

	7564 Tenth Line West Precinct '4'

Zoning By-Law 0225-2007	**Proposed Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**Proposed Spaces**
	E2 Employment	21,224 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	637	40
	Total Required			637	40
	Surplus/Deficit				597
	7445 Tranmere Dr **Precinct '4'**				
Zoning By-Law 0225-2007	**Current Use(s)**	**Units or GFA (m2)**	**Required Parking Ratio**	**Required Spaces**	**# of Actual Spaces**
	Data Center	2,696 sq.m	Precinct 4 = 3.0 spaces per 100 m2 GFA - non-residential	81	33
	Total Required			81	33
	Surplus/Deficit = 48 spaces				

Best Regards,

Mahdi Gabaire, M.ASc (Transportation Engineering), EIT (Ontario)

Traffic Engineer

CGE Consulting Ltd.

e: gabaire@cgeconsulting.ca

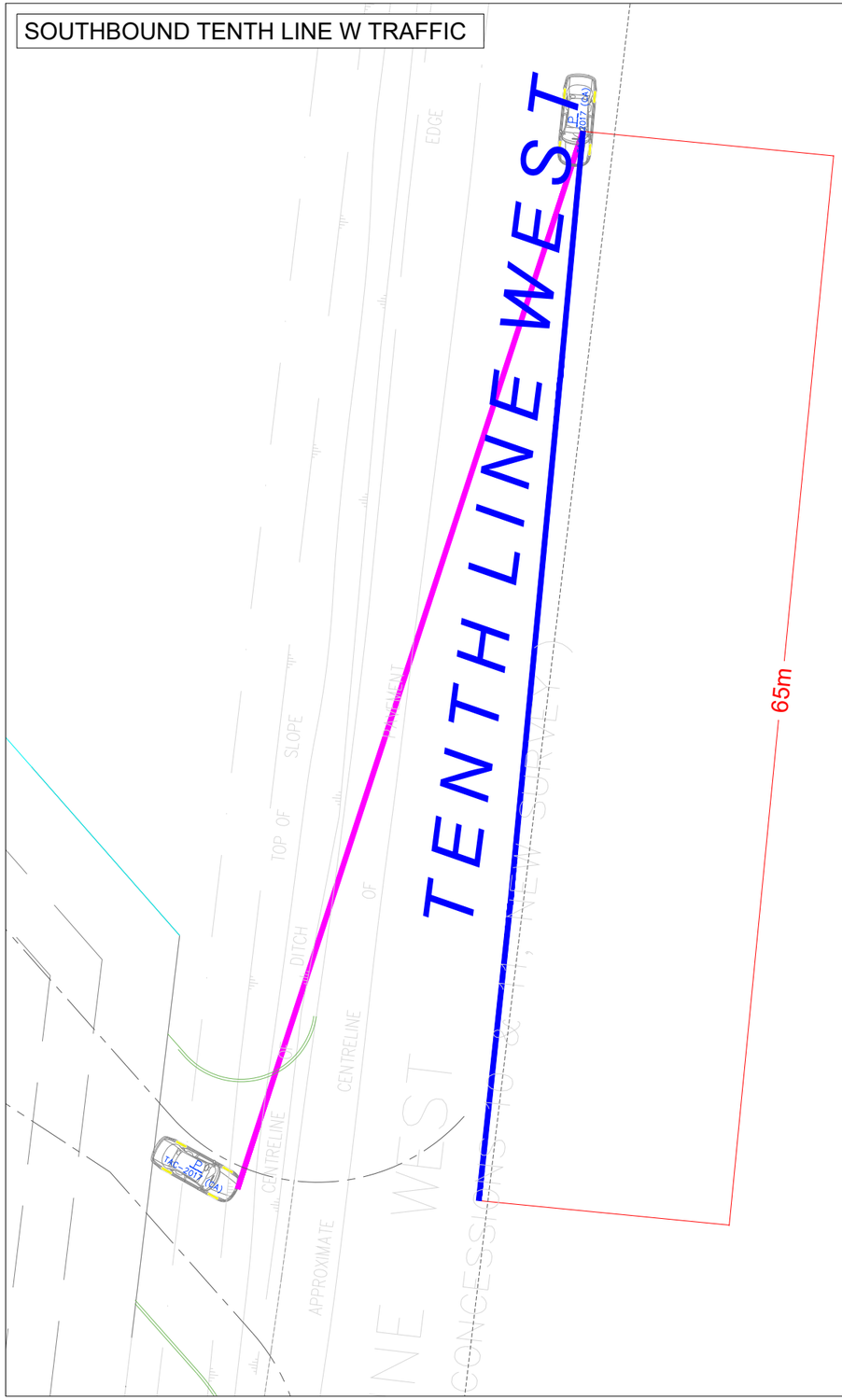
p: 437-260-1227

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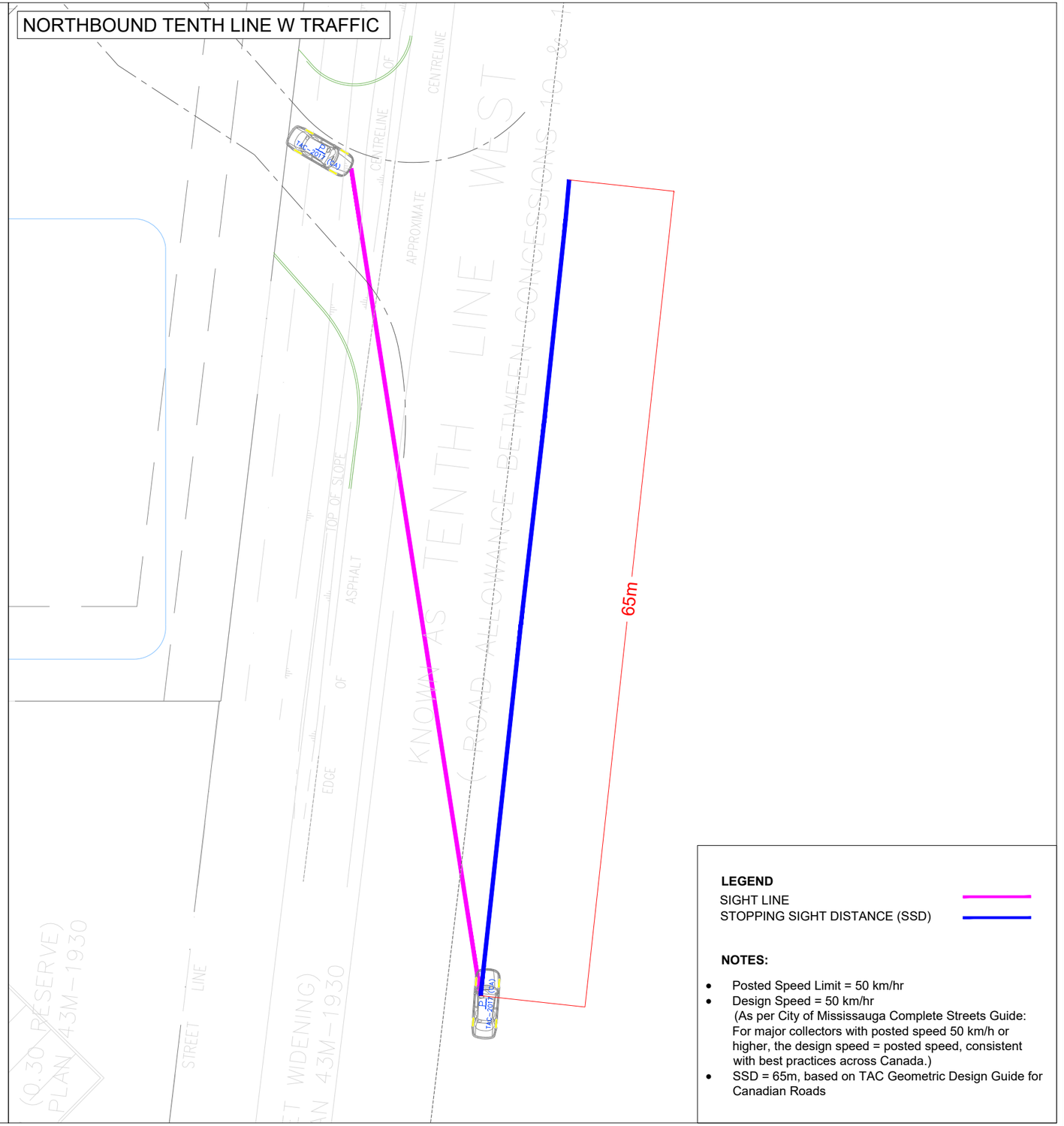
From: Paulina Armacinski <Paulina.Armacinski@mississauga.ca> on behalf of Parkingstudy Review <Parkingstudy.Review@mississauga.ca>
Sent: Monday, March 16, 2026 4:56 PM
To: Mahdi Gabaire <gabaire@cgeconsulting.ca>; Casey Ge <casey@cgeconsulting.ca>
Cc: Parkingstudy Review <Parkingstudy.Review@mississauga.ca>

Appendix G:
Site Access Review

SOUTHBOUND TENTH LINE W TRAFFIC



NORTHBOUND TENTH LINE W TRAFFIC



LEGEND

SIGHT LINE

STOPPING SIGHT DISTANCE (SSD)

NOTES:

- Posted Speed Limit = 50 km/hr
- Design Speed = 50 km/hr
  (As per City of Mississauga Complete Streets Guide: For major collectors with posted speed 50 km/h or higher, the design speed = posted speed, consistent with best practices across Canada.)
- SSD = 65m, based on TAC Geometric Design Guide for Canadian Roads

TYLin
3381 STEELES AVE E,
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

7564 TENTH LINE WEST
STOPPING SIGHT DISTANCE- NORTH ACCESS

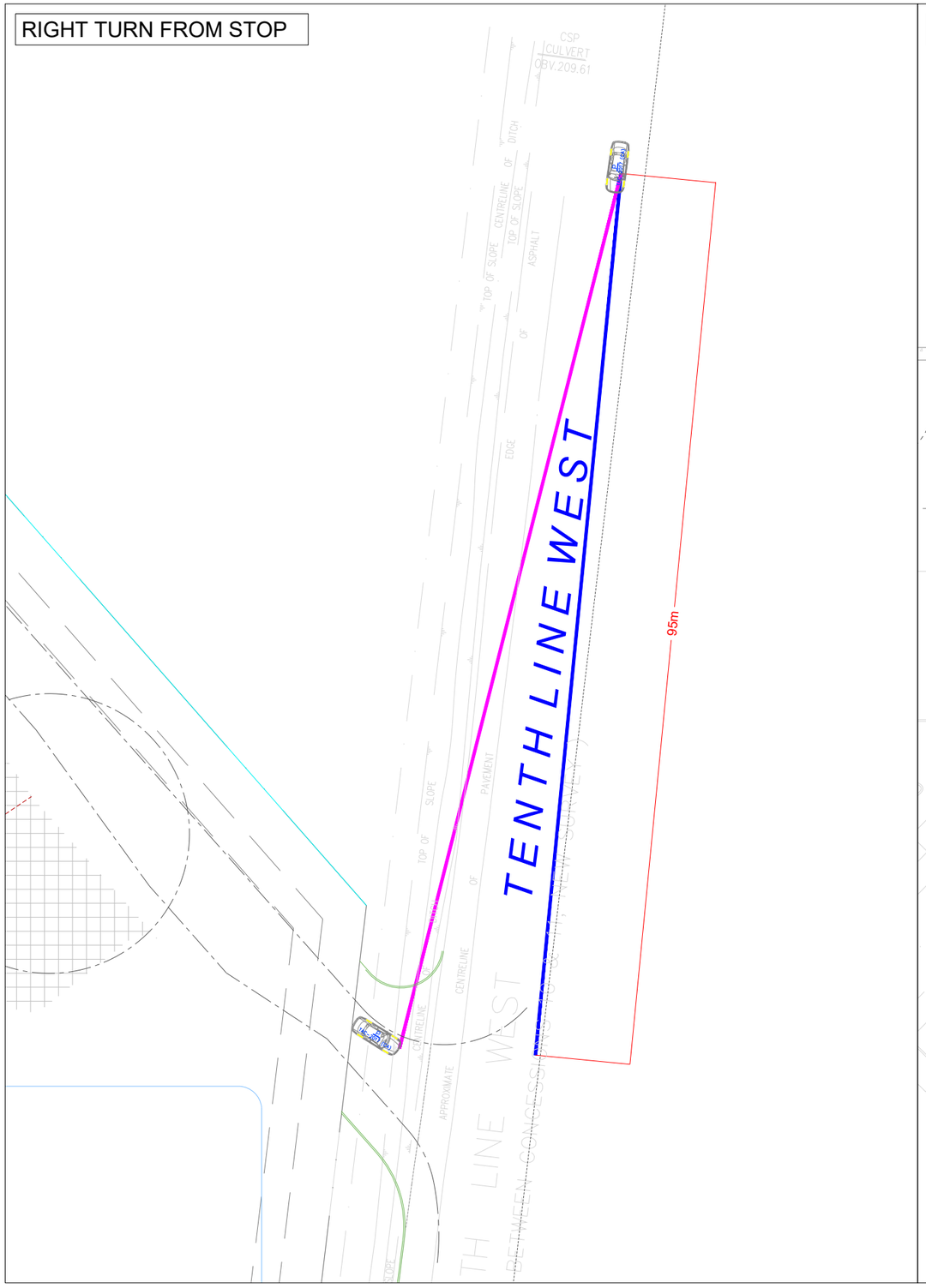
N.T.S

DRAWING No. 01

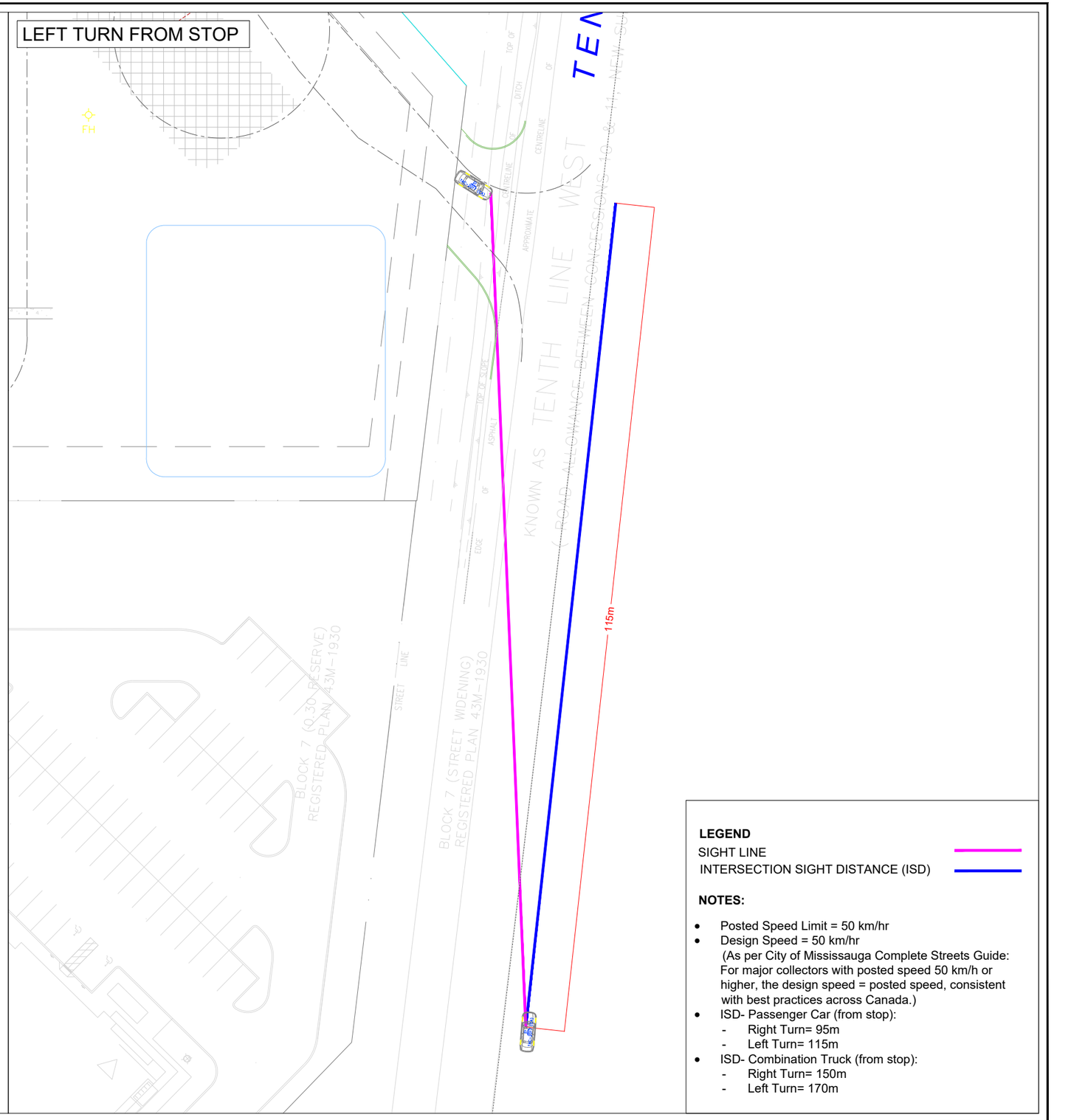
DATE MAR 2026

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RIGHT TURN FROM STOP



LEFT TURN FROM STOP



LEGEND

SIGHT LINE

INTERSECTION SIGHT DISTANCE (ISD)

NOTES:

- Posted Speed Limit = 50 km/hr
- Design Speed = 50 km/hr
  (As per City of Mississauga Complete Streets Guide: For major collectors with posted speed 50 km/h or higher, the design speed = posted speed, consistent with best practices across Canada.)
- ISD- Passenger Car (from stop):
  - Right Turn= 95m
  - Left Turn= 115m
- ISD- Combination Truck (from stop):
  - Right Turn= 150m
  - Left Turn= 170m

TYLin
3381 STEELES AVE E,
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

7564 TENTH LINE WEST
INTERSECTION SIGHT DISTANCE- NORTH ACCESS

N.T.S

DRAWING No. 02

DATE MAR 2026

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Appendix H:
Vehicle Maneuvering Diagrams

RIGHT-IN/RIGHT-OUT AT NORTH ACCESS

P
TAC-2017 (CA)

P
TAC-2017 (CA)

P
TAC-2017 (CA)

P
TAC-2017 (CA)

A

A

5.60

1.10 3.20

P

	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9

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TYLin
3381 STEELES AVE E.
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

7564 TENTH LINE WEST
VEHICLE MANEUVERING DIAGRAMS
PASSENGER VEHICLE CIRCULATION

1:200

DRAWING No.
01

DATE
AUG 2026

ENTRY MANEUVER- PASSENGER PARKING – WEST OF DATA CENTRE & RIGHT OF INDUSTRIAL BUILDING DC 5

EXIT MANEUVER- PASSENGER PARKING – WEST OF DATA CENTRE & RIGHT OF INDUSTRIAL BUILDING DC 5

VEGETATION

VEGETATION

5.60

1.10 3.20

P

	meters
Width	: 2.00
Track	: 2.00
Lock to Lock Time	: 6.0
Steering Angle	: 35.9

G:\Projects\2025\100658- 7564 10th Line West-Industrial-Prologis\03 Analysis\03 Site review & Circulation\02 Vehicle Swepth Path\20250730

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3381 STEELES AVE E,
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

7564 TENTH LINE WEST
VEHICLE MANEUVERING DIAGRAMS
PASSENGER VEHICLE CIRCULATION

1:500

DRAWING No. 02

DATE AUG 2026

PROPOSED 2-STOREY
DATA CENTER
FFE=212.650

TENTH LINE WEST

MH7A
T/G=212.05
NW INV=208.67
SW INV=208.28

CB
RIM 210.46

CB
RIM 210.29

CB
RIM 209.93

CB
RIM 210.56

Mississauga Pumper Fire
meters

Width	: 2.44
Track	: 2.59
Lock to Lock Time	: 6.0
Steering Angle	: 41.8

TYLin
3381 STEELES AVE E,
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

7564 TENTH LINE WEST
VEHICLE MANEUVERING DIAGRAMS
EMERGENCY PUMPER FIRE TRUCK CIRCULATION

1:750

DRAWING No.
03

DATE
AUG 2026

G:\Projects\2025\100658- 7564 10th Line West-Industrial-Prologis\03 Analysis\03 Site review & Circulation\02 Vehicle Swept Path\20250730

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PROPOSED 2-STOREY
DATA CENTER
FFE=212.650

TENTH LINE WEST

MH7A
T/G=212.05
NW.INV=208.67
SW.INV=208.28

CB
RIM 210.29

CB
RIM 210.46

CB RIM
209.93

CB
RIM 210.56

Peel Region Waste

11.93
2.70 5.49
Peel Region Waste
meters
Width :2.77
Track :2.40
Lock to Lock Time :6.0
Steering Angle :25.0

TYLin 3381 STEELES AVE E, Suite 315 Toronto, ON M2H 3S8 P: 905.738.5700	7564 TENTH LINE WEST VEHICLE MANEUVERING DIAGRAMS PEEL REGION WASTE TRUCK CIRCULATION	N	1:750	DRAWING No. 04 DATE AUG 2026

G:\Projects\2025\100658- 7564 10th Line West-Industrial-Prologis\03 Analysis\03 Site review & Circulation\02 Vehicle Swepth Path\20250730

MONITORING WELL

POST POST & WIRE FENCE

VEGETATION

CSP CHILVERT

TENTH LINE WEST

POST POST & WIRE FENCE

PAVEMENT

ASPHALT

CONCRETE

PROPOSED 2-STOREY
DATA CENTER
FFE=212.650

MH7A
T/G=212.05
NW.INV=208.67
SW.INV=208.26

CB RIM 210.29

CB RIM 210.46

CB RIM 209.93

CHAIN LINK FENCE

CONC CURB

GRASS

HEDGE

SIGN

Ex. 200mm Ø FIRE WTM

Ex. 600mm Ø PVC WTM

Ex. 300mm Ø WATER MAIN

Ex. 250mm Ø STORM

Ex. 200mm Ø SAN

Peel Region Waste
meters
Width : 2.77
Track : 2.40
Lock to Lock Time : 6.0
Steering Angle : 25.0

11.93
2.70
5.49

TYLin 3381 STEELES AVE E, Suite 315 Toronto, ON M2H 3S8 P: 905.738.5700	7564 TENTH LINE WEST VEHICLE MANEUVERING DIAGRAMS PEEL REGION WASTE TRUCK CIRCULATION	1:750	DRAWING No. 05 DATE AUG 2026

Appendix I:
Pedestrian Circulation Plan

YARD)

FH

SNOW
STORAGE
AREA

FFE = 211.95

FDC

FH

FH

FH

RETENTION
POND

LEGEND

PEDESTRIAN CIRCULATION & FACILITIES

.. ICV'S

CONCRETE CURB

ZONING SETBACK

LANDSCAPED BUFFER

3° 27' 20" E

G:\Projects\2025\100658- 7564 10th Line West-Industrial-Prologis\03 Analysis\03 Site review & Circulation\03 Intersection Sight Distance

TYLin
3381 STEELES AVE E,
Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

PROLOGIS INC - 7564 TENTH LINE WEST
PEDESTRIAN CIRCULATION PLAN

N.T.S

DRAWING No.
01

DATE
MAR 2026