

Traffic Impact Study

1200 King Road, Mixed-Use Development, City of Burlington

March 2026 | Project # 100860

Alinea Land Corporation

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TYLin

EXECUTIVE SUMMARY

T.Y. Lin International Canada Inc. (TYLin) has been retained by Alinea Land Corporation to prepare a new Transportation Impact Study (TIS) in support of the proposed mixed-use development at 1200 King Road, located within the Aldershot neighborhood of the City of Burlington and the Region of Halton.

The subject lands are bounded by King Road to the east, Highway 403 to the north, Aldershot GO Station to the west, and Canadian National Railway (CNR) lands to the south. The site is located directly adjacent to the Aldershot Major Transit Station Area (MTSA), identified by the City of Burlington as a key focus area for intensification and redevelopment.

A defining transportation element of the concept is the Proposed Parkway Link Road (Street A), which will provide a new multimodal east–west connection between King Road and Alayne Bryk Way. This corridor will enhance access to the Aldershot GO Station and support a complete streets approach by integrating active transportation, transit, and vehicular movements. Also, the Proposed Parkway Link Road represents a segment of the South Service Road. The alignment of the Parkway Link Road is anticipated to align 300 metress south of the Hydro Line and King Road Intersection. The proposed alignment of the Parkway Link Road was designed to improve overall traffic flow and operations within the site, create additional space between the CN rail line to development, reduce impacts to the natural heritage system, improve transit operations and proposed BRT, and improve safety to residents and vulnerable users.

The site is located within the Ministry of Transportation's (MTO) Permit Control Area as per the Public Transportation and Highway Improvement Act (PTHIA) due to its proximity to Highway 403. As such, this Transportation Impact Study (TIS) has been completed in accordance with Halton Region's Transportation Impact Study Guidelines (2015) and MTO TIS guidelines (2023). The TIS Guidelines require the TIS to undertake traffic analysis for proposed buildout year (2031), 5-year post buildout horizon (2036) and 10-year post buildout horizon (2041).

The transit infrastructure in the surrounding area is comprehensive and well-integrated, with Burlington Transit, GO Transit, Hamilton Street Railway, and VIA Rail providing a wide range of local, regional, interprovincial, and international services and connections. As the site is directly adjacent to the Aldershot GO Station which acts as an MTSA and a central hub in the study area, offering accessible platforms, a well-organized bus loop, and abundant parking facilities. This strong transit network, coupled with the connectivity of cycling and pedestrian pathways, ensures residents have convenient and versatile transportation options, supporting the study area's transit-oriented development and overall accessibility.

Several roadway capital projects are planned in this area, including the South Service Road extension, King Road reconstruction, expansion of Highway 403 from six to eight lanes,

Highway 407 Transitway, and the replacement of the King Road overpass structure spanning Highway 403. In addition to the proposed roadway improvements there are several Transit oriented improvements planned within the study area, with potential to integrate the site network within the planned improvements, including but not limited to additional transit routes and stops and a potential BRT route.

The proposed development is made up of the following land uses and GFAs:

Land Area by Use	Summary	ITE Land Use Code (LUC)
Residential (Blocks 9, 10, 11, 12, 13, 14)	5,912 Residential Units	LUC 220/LUC 222
Mixed-Use Residential (Blocks 1, 2, 3, 4)	2,608 Residential Units	LUC 221/LUC 222
Campus Mixed-Use (Block 6, 7)	302 Residential Units Up to 300 Students 386 m^2 Retail GFA	LUC 222/LUC 540/LUC 821
Campus/Satellite (Block 8)	Up to 300 Students	LUC 540
Visitor (Travel) Centre	409 m^2 GFA	LUC 955
Arena (Block 5)	16,275 m^2 Retail GFA	LUC 465
Hotel (Block 5)	440 Hotel Units	LUC 540
Community Centre (Block 5)	12,830 m^2 GFA	LUC 495
Day Care (Block 1)	369 m^2 GFA	LUC 565
Office Building (Block 9)	13,120 m^2 GFA	LUC 710

A total of 4,055 gross person site trips, consisting of 1,543 inbound and 2,512 outbound trips, are predicted to be generated by the subject site during the AM peak hour. During the PM peak hour, 2,891 inbound and 2,640 outbound gross person site trips are predicted, totaling 5,531 trips. During Saturday peak hour, 2,604 inbound and 2,290 outbound gross person site trips are predicted, totaling 4,894 trips. Multi-use trip and mode share reductions were applied to the above noted site generated trips.

The results of the capacity analysis for the study area intersections indicate that certain study intersections have critical movements that are currently operating at capacity and/or experiencing operational concerns. This only worsens through background growth of the existing volumes. Site generated traffic is not expected to cause any significant strain to the network or necessitate major transportation infrastructure improvements to the overall

transportation network. Site accesses will have to be upgraded to accommodate vehicle movements entering and exiting the site. A list of proposed mitigations for both background and total traffic scenarios are as follows:

Intersection	Geometric Improvements
Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	- Dual NB right turn lane - Dual SB - Dual EB left turn lane
Waterdown Road & Plains Road East	- EB dual left turn lane
King Road & Plains Road East	- Designated WB right turn lane, - Dual SB left turn lane
Fairview Street & QEW NB Off-Ramp/Plains Road East	- Dual SB right turn lane
Waterdown Road & North Service Road/Hwy 403 On-Ramp	- Dual NB left lane
Alayne Bryk Way & East Access to Aldershot GO Station/ Hwy 403 On-Ramp	- EB update lane configuration to include Left turn Lane, 1 through-right turn lane. - WB Shared through left turn lane, right turn lane
King Road at Parkway Link	- Dual Left turn lane

The proposed improvements represent a significant investment in the corridor and are expected to provide the broader network benefits in helping address existing capacity conditions, independent of the proposed development. Site-specific improvements, specifically King Road site access and Alayne Bryk Way extension will be required.

Roundabout feasibility was reviewed for Parkway Link Road (Street A) and Multi Modal Local Street (Street B) and Multi Modal Local Street (B) and Residential Access to the Northwest of Central Park. However, as the 1200 King Road plan aims to create connected and walkable communities with convenient bicycle infrastructure throughout Burlington, the implementation of roundabouts are not deemed appropriate at these locations. The concerns with municipal services and, safety to vulnerable users does not coincide with the goal of a more family-friendly transportation network that links residents to schools, parks, and other community areas.

The proposed development is intended to function as a transit-oriented, complete mixed-use community. In support of this vision, a reduced parking rate is proposed for all land uses within the proposed development. For all residential uses a proposed parking rate of 0.8 spaces per unit, comprised of 0.75 residential spaces and 0.05 visitor spaces per unit are proposed. For all non-residential uses it is proposed that they follow the rates presented within the Draft Burlington Major Transit Station Areas (MTSA) Community Planning Permit

By-Law. The proposed parking rates reflect the site's location to nearby high-order and local transit, and planned active transportation connectivity, all of which are anticipated to reduce reliance on private vehicles.

A robust Transportation Demand Management (TDM) section was prepared to promote transportation through sustainable and non-auto-oriented travel. This includes, but is not limited to, promoting environmental sustainability, enhancing public health, mitigating traffic congestion, and contributing to a higher quality of life for residents. Mitigation measures were broken down into pedestrian, cyclist, micro-mobility, transit, and auto considerations as outlines below.

TDM Measures	Applicable Block
Sidewalk connectivity and accessibility	All Blocks
Establish an active and safe routes to school	1, 6 - 13
Offer cycling courses for students/daycare	1, 6, 7, 8
Cycling network connectivity and safety	All Blocks
Bicycle parking and repair station	All Blocks
Provide valet bicycle parking at special events	5
New shared mobility pilot program	All Blocks
transit information centre	All Blocks
Transit incentives	1, 2, 3, 4, 6, 7, 9 - 14
Coordination with Burlington Transit and Metrolinx	All Blocks
Unbundled resident parking	1-4,6,7,9-14
Car share facilities	All Blocks

Overall, while some intersections in the study area currently experience capacity constraints due to existing and future background growth, the traffic generated by the proposed development is not expected to create significant concerns on the overall transportation network. With its proximity to the Aldershot GO Station, and the City's vision for intensification in key mobility hubs, the proposed development represents an opportunity for the City to support a complete and multi-modal community that integrates residential, commercial, educational, and recreational uses.

Prepared by:



Jennifer Huynh
Transportation Planner
e-mail: jennifer.huynh@tylin.com

Reviewed by:



William Sherwin P.Eng
Project manager
e-mail: William.sherwin@tylin

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1 INTRODUCTION

1.1 Scope and Objective

T.Y. Lin International Canada Inc. (TYLin) has been retained by Alinea Land Corporation to prepare a new Transportation Impact Study (TIS) in support of the proposed mixed-use redevelopment at 1200 King Road, located within the Aldershot neighborhood of the City of Burlington and the Region of Halton.

The subject lands are bounded by King Road to the east, Highway 403 to the north, Aldershot GO Station to the west, and Canadian National Railway (CNR) lands to the south. The site is located directly adjacent to the Aldershot GO Station.

The proposed development envisions a mixed-use community comprising:

- High-density residential uses;
- A retail and commercial district;
- A daycare;
- A post-secondary campus with supporting residential and plaza space; and
- An entertainment district featuring an arena and hotel.

A defining transportation element of the concept is the Proposed Parkway Link (Street A), which will provide a new multimodal east–west connection between King Road and Alayne Bryk Way. This corridor will enhance access to the Aldershot GO Station and support a complete streets approach by integrating active transportation, transit, and vehicular movements. Coordination with the City of Burlington and the Ministry of Transportation Ontario (MTO) will be required to confirm the alignment, design, and intersection connections of this corridor.

The purpose of this study is to:

- Quantify the traffic volumes anticipated to be generated by the proposed development during the AM, PM, and Saturday peak hours;
- Evaluate the capacity and operational impacts on the surrounding road network under existing (2026) and future (2031, 2036 and 2041) conditions;
- Recommend roadway, intersection, and signal timing improvements in accordance with MTO and City of Burlington requirements;
- Review intersection spacing, corner clearance and sightline compliance; and
- Develop a comprehensive TDM Plan to promote sustainable travel choices and reduce reliance on single-occupant vehicle trips.

2 SITE CHARACTERISTICS

2.1 Study Environment

The subject site is located at 1200 King Road within the Aldershot neighbourhood of the City of Burlington, in the Region of Halton. The lands are situated immediately east of the Aldershot GO Station, north of the Canadian National Railway (CNR) corridor, and south of Highway 403. The site is generally bounded by King Road to the east, Highway 403 to the north, Aldershot GO Station and Alayne Bryk Way to the west, and the CNR lands to the south.

The site lies adjacent to the Aldershot GO Station, a designated growth area identified by the City for high-density, mixed-use, and transit-oriented redevelopment. This area has been identified as a strategic location for intensification, leveraging its proximity to higher-order transit and regional transportation infrastructure. The surrounding environment includes a mix of industrial and employment uses to the north and east, the Highway 403 corridor and CN rail operations providing key regional transportation links, and a blend of institutional and residential uses associated with the established Aldershot community to the south and west.

The proposed development will benefit from its proximity to major transportation corridors and transit facilities, making it well-positioned to support a complete and multimodal community that integrates residential, commercial, educational, and recreational uses. The location also provides convenient access to the Aldershot GO Station, which serves as a regional transit hub offering rail and bus connections across the Greater Toronto and Hamilton Area (GTHA).

The subject site and its surrounding transportation network are illustrated in **Figure 2-1**.

Figure 2-1 Site Location



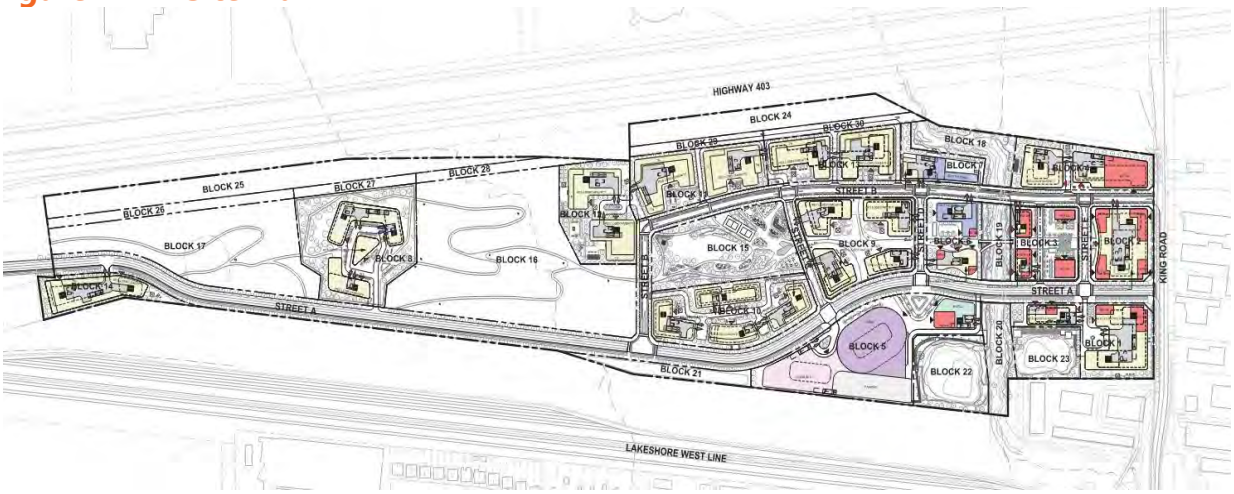
2.2 Development Context

The proposed development located at 1200 King Road envisions a comprehensive, mixed-use community that will transform the existing underutilized industrial lands into a vibrant, transit-oriented neighbourhood. The development concept includes high-density residential towers, a retail and commercial district, a post-secondary campus with associated residential and plaza space, and an entertainment district featuring an arena and hotel. Together, these elements are designed to create a complete community that supports a balance of living, learning, working, and recreation within walking distance of the Aldershot GO Station.

A defining feature of the development is the planned Proposed Parkway Link, which will provide a new multimodal east–west connection between King Road and Alayne Bryk Way, aligning with the City of Burlington's Integrated Mobility Plan (IMP) and Complete Streets principles. The corridor will serve as the main access route through the site, facilitating the movement of vehicles, pedestrians, cyclists, and transit users, while also enhancing connectivity to the Aldershot GO Station. Internal roadways will connect the various development blocks and provide access to the external road network.

Vehicular access to the site is proposed via a full-moves, signalized intersection on King Road and the Parkway Link which will be approximately 175 metress south of the King Road and Hydro Lane intersection. This access will be aligned with the opposite existing private driveways. A secondary full-moves, signalized intersection is proposed further north along King Road opposite Hydro Lane, forming the east terminus Street B. The west terminus of the Proposed Parkway Link will connect to Alayne Bryk Way, providing direct access to the Aldershot GO Station and the MTO on-ramp to Highway 403. The site plan and concept layout illustrating the proposed road connections and internal circulation are presented in **Figure 2-2** and included in full in **Appendix A**.

Figure 2-2 Site Plan



2.3 Study Area Intersections

The study area has been defined in consultation with the City of Burlington, Halton Region, and the MTO to capture all intersections expected to experience notable changes in traffic volumes and operations as a result of the proposed development. The selected intersections encompass major corridors providing access to the site and key regional routes that interface with Highway 403, Queen Elizabeth Way (QEW) and the Aldershot GO Station.

The existing intersections included in the study area are:

- Waterdown Road and North Service Road (signalized)
- Waterdown Road and Highway 403 Westbound Off-Ramp / Panin Road (signalized)
- Waterdown Road and Highway 403 Eastbound Off-Ramp / Alayne Bryk Way (signalized)
- Waterdown Road and Plains Road East (signalized)
- Alayne Bryk Way and Aldershot GO Station West Access (signalized)
- Alayne Bryk Way and Aldershot GO Station Central Access (unsignalized)
- Alayne Bryk Way and Aldershot GO Station East Access (signalized)
- King Road & North Service Road (signalized)
- King Road & Hydro Lane (unsignalized)
- King Road & Plains Road East (signalized)
- Fairview Street & Southbound On-Ramp & Off-Ramp of QEW (signalized)
- Fairview Street & Northbound Off-Ramp of QEW & Plains Road East (signalized)
- Brant Street & Hwy 403 Off-Ramp / Access to Brant Power Centre (signalized)
- Brant Street & Eastbound Off-Ramp of Hwy 403 (signalized)

Under future conditions, the following proposed site access intersections will also be analyzed:

- King Road and Proposed Parkway Link (signalized, full moves);
- King Road and Secondary Access/Hydro Line Road (signalized, full moves);
- Internal connector to connector and connector to local roadway intersections.

These intersections collectively define the network within which the transportation impacts of the proposed development will be evaluated for existing (2026) and future (2031, 2036 and 2041) horizon years.

3 EXISTING CONDITIONS

3.1 Road Network

The road network surrounding the subject site comprises a mix of municipal and provincial corridors that provide regional and local access within the Aldershot area of the City of Burlington. The primary north–south and east–west routes include King Road, Waterdown Road, Plains Road East, Fairview Street, North Service Road, and Highway 403.

King Road is a City arterial roadway providing north–south connectivity between Plains Road East and North Service Road. Near the site, King Road has a three-lane urban cross-section consisting of one lane per direction with a continuous centre left-turn lane and on-street bike lanes. The posted speed limit is 50 km/h. King Road connects directly to Highway 403 via the North Service Road and forms the eastern boundary of the subject lands.

Waterdown Road is a Multi-Purpose Arterial under City jurisdiction and functions as a major north–south route connecting Highway 403 and Plains Road East. Within the study area, the cross-section varies between four and five lanes with a posted speed limit of 50 km/h. The corridor accommodates significant commuter and transit activity, with access ramps to Highway 403 and connections to the Aldershot GO Station via Alayne Bryk Way.

Plains Road East is a Frequent Transit Corridor and Multi-Purpose Arterial providing east–west access through the Aldershot community. The corridor features a five-lane cross-section (two lanes per direction plus a centre two-way left-turn lane) with multi-use paths provided on both sides of the roadway and a posted speed limit of 60 km/h. It supports both local and regional bus routes operated by Burlington Transit and GO Transit. Plains Road is planned for a future Bus Rapid Transit (BRT) route with dedicated transit lanes and more reliable and frequent service compared to a conventional bus route.

Fairview Street operates as a major east–west arterial running parallel to the QEW and Highway 403 corridors. The roadway provides six travel lanes and serves as a key commuter route connecting Brant Street to the QEW/403 ramps. Multi-use paths are provided on both sides of the corridor, accommodating pedestrians and cyclists, and the posted speed limit is 50 km/h. This corridor functions as one of Burlington's principal east–west routes, facilitating access to adjacent commercial, residential, and employment areas.

Brant Street (Regional Road 18) is a north-south regional road under the jurisdiction of Halton. It operates with six lanes and serves as a commuter route connecting Fairview Street and Queen Elizabeth Way. The posted speed limit is 60 km/hr and is surrounded by mixed use development including residential, institutional and commercial areas.

North Service Road functions primarily as an Industrial Connector, providing access to employment and commercial properties located north of Highway 403. The corridor

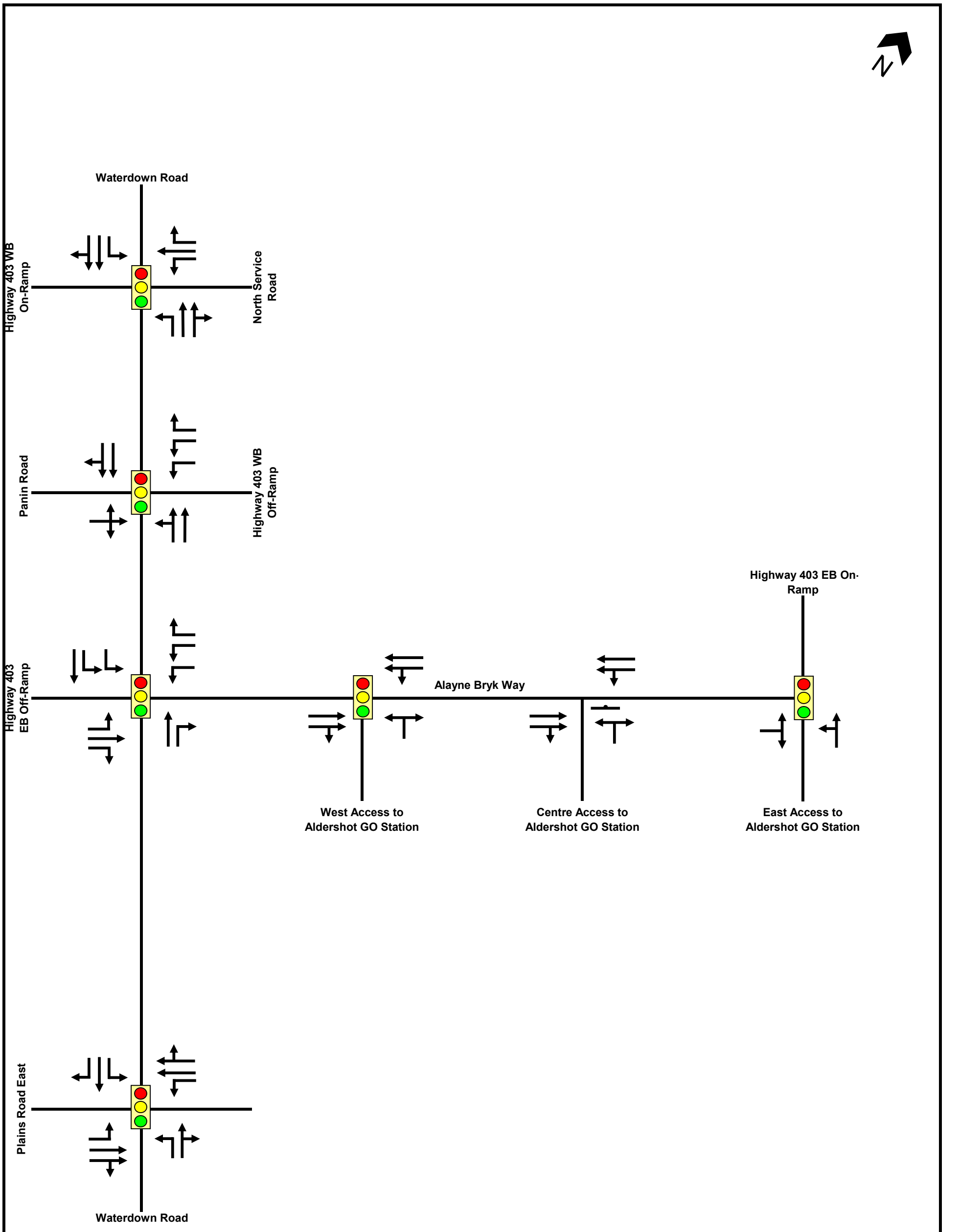
generally has a two-lane cross-section (one lane per direction) with a posted speed limit of 60 km/h and paved shoulders. Near the intersection with Waterdown Road, the cross-section includes a multi-use path (MUP) on the north side and two narrow on-street bike lanes on both sides of the roadway. The corridor supports local industrial traffic and provides an alternative east–west connection parallel to Highway 403, linking Waterdown Road to King Road and beyond.

Alayne Bryk Way, under the jurisdiction of MTO and Metrolinx, provides a connection between Waterdown Road, Aldershot GO Station and Highway 403. The City's Integrated Mobility Plan (IMP) proposed a new Parkway Link Road connecting the Aldershot GO Station and Highway 403 eastbound on-ramp to King Road.

Highway 403, under MTO jurisdiction, is a six-lane 400-series freeway forming the northern boundary of the study area. It connects Burlington to Hamilton and the broader GTHA, with access ramps at Waterdown Road, King Road, and Brant Street. Overall, the road network provides strong regional connectivity and multiple access opportunities to the site.

Queen Elizabeth Way (QEW) is a 400-series freeway linking Toronto with the Niagara Peninsula and Buffalo, New York. QEW turns to the east close to North Service Road and travels concurrently with Highway 403. It has access ramps at Fairview Street/ Plains Road and Brant Street in the study area.

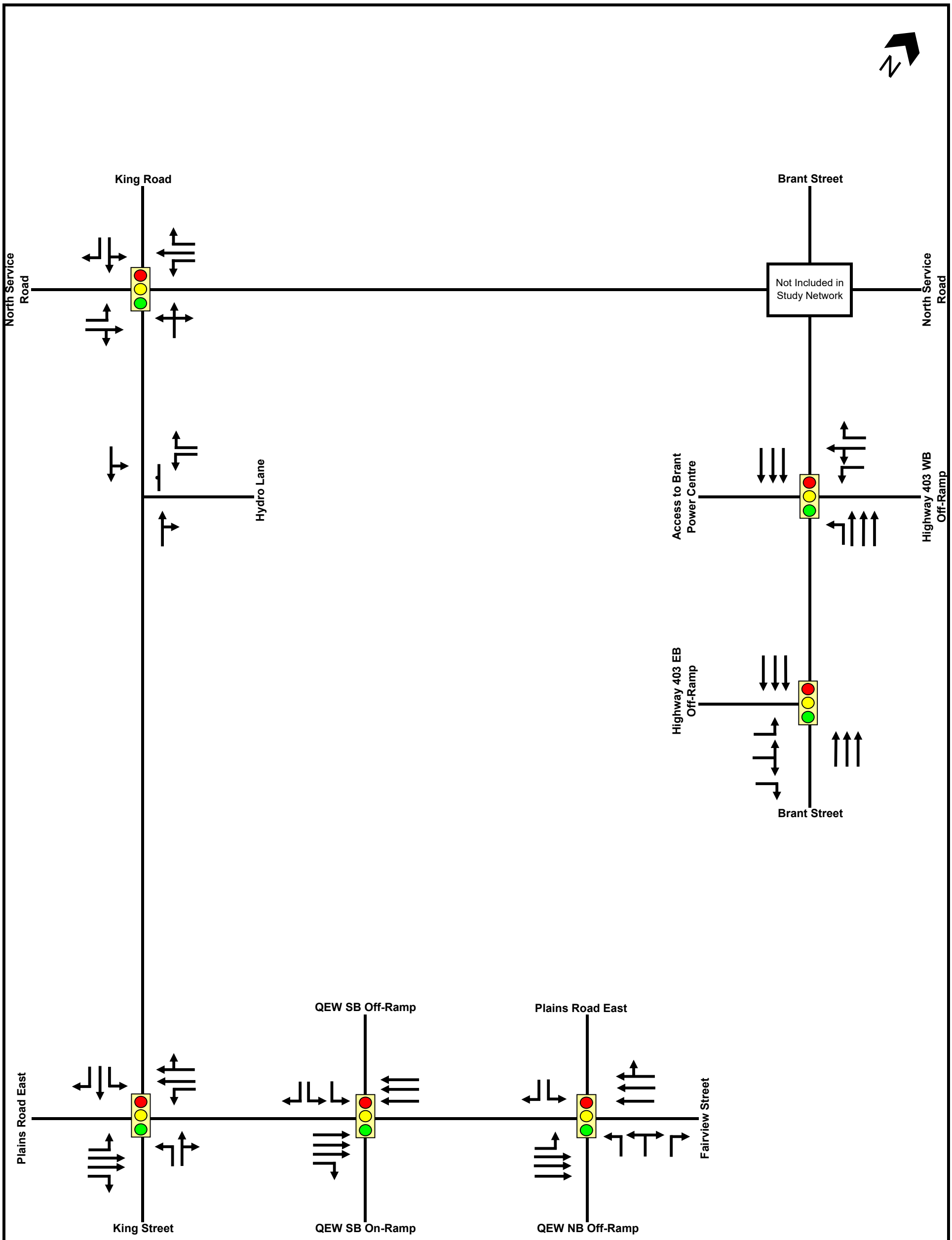
A lane configuration diagram is provided in **Figure 3-1.**



Legend	
	Signalized Intersection
	Stop-Control Intersection

Figure 3-1a

Western Study Area (External Intersections)
Existing Lane Configurations



Legend	
	Signalized Intersection
	Stop-Control Intersection

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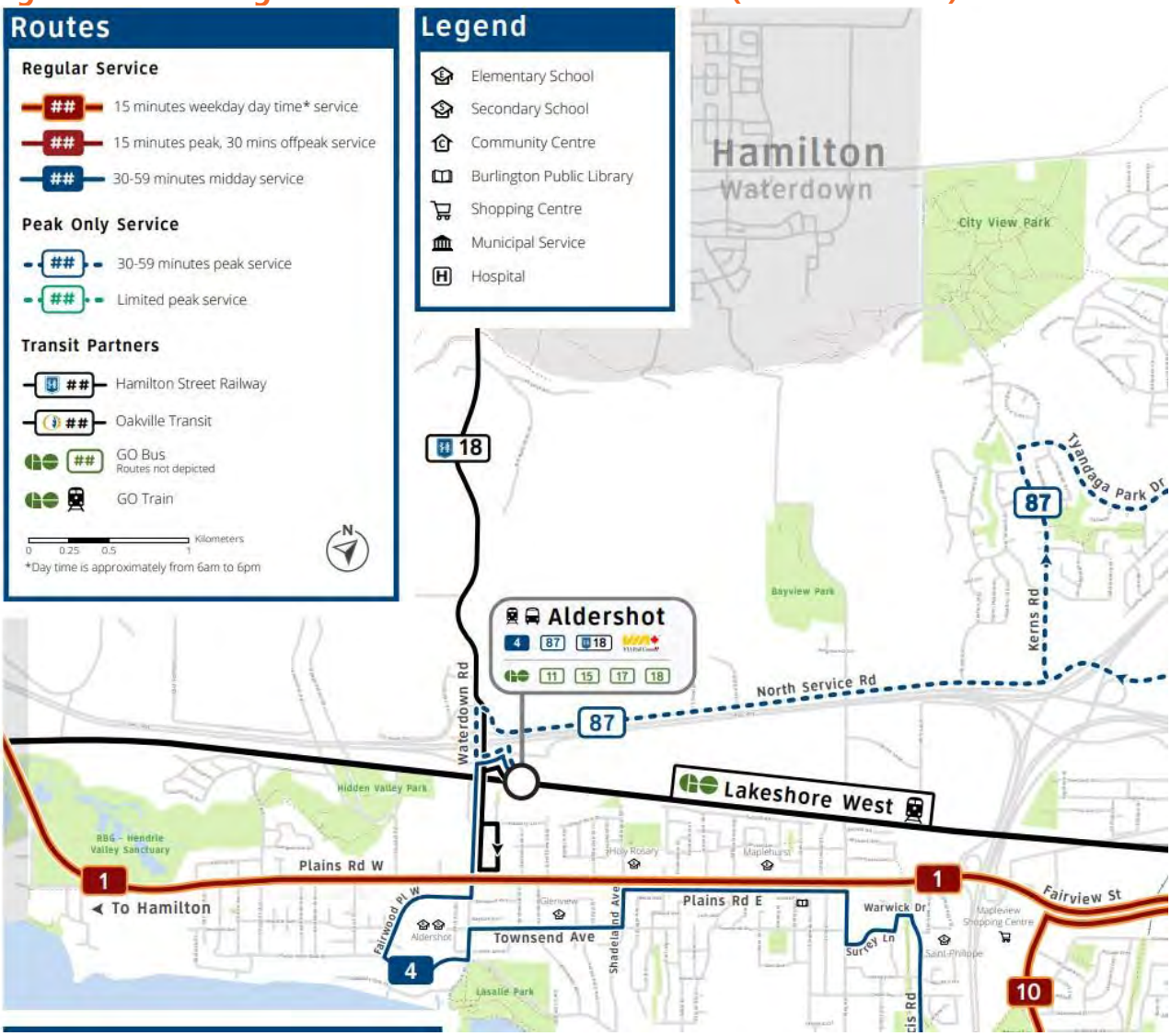
Figure 3-1b

Eastern Study Area (External Intersections)
Existing Lane Configurations

3.2 Transit Network

Within the study area, the subject site is currently served by Burlington Transit local bus routes, Hamilton Street Railway (HSR) Route 18 Waterdown, and GO Transit's Lakeshore West rail line. Additional GO bus services are also available nearby, providing multimodal connections between the subject site, Aldershot GO Station, and the surrounding Burlington and Hamilton communities. The existing transit network serving the area is illustrated in **Figure 3-2**, which illustrates Burlington Transit routes (1, 4, 11, 17 and 87), HSR Route 18 Waterdown, and the GO Transit Lakeshore West rail line serving the Aldershot GO Station and surrounding area.

Figure 3-2 Burlington Transit and Partner Network (Aldershot Area)



Source: Burlington Transit, 2025

3.2.1 GO Regional Transit & Other Rail Services

The proposed development is located within reasonable walking distance from Aldershot GO Station, depending on the final internal site layout and pedestrian access. The station provides access to the GO Transit Lakeshore West rail line, offering two-way, all-day regional service between Hamilton GO Centre / West Harbour and Toronto Union Station, with connections across the Greater Toronto and Hamilton Area (GTHA).

During weekday AM and PM peak periods, trains operate at headways of approximately 20 minutes, and every 30 minutes during off-peak periods in both directions. The station also accommodates VIA Rail's Québec City–Windsor corridor, providing inter-regional travel opportunities. The existing GO Transit Regional Rail Network serving the area is illustrated in **Figure 3-3**.

Figure 3-3 GO Transit Regional Rail Network (Lakeshore West Line)



Source: GO Transit, 2025

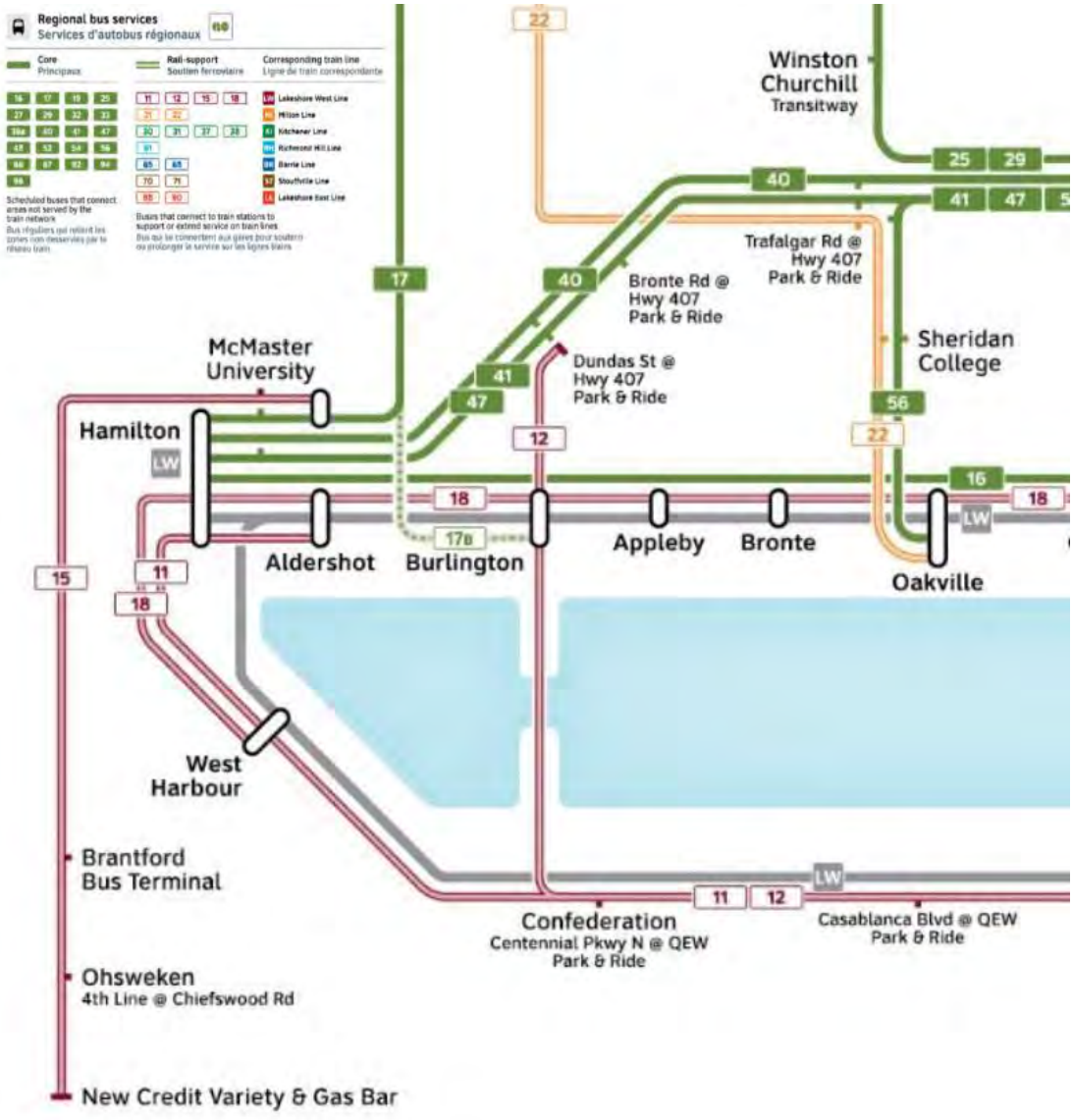
In addition to rail service, GO Bus Route 18 (Lakeshore West / Hamilton – Toronto) supplements the rail corridor, linking Aldershot GO Station with Hamilton, Burlington GO Station, and other regional destinations along the QEW / 403 corridor. These combined rail and bus services provide frequent, reliable access to major employment and population centres within the GTHA. The existing GO Transit Regional Rail Network serving the area is illustrated in **Figure 3-3**.

3.2.1.1 Aldershot GO

Aldershot GO is intended to serve as a mobility hub accompanied by transit-oriented land uses. This includes, but is not limited to, higher-density residential and mixed-use development. While the site does not fall within the MTSA, the proximity and direct access are taken into account and are reflected in the proposed recommendations. This policy change will support the vision of Aldershot GO and the proposed development as a vibrant, transit-supportive community.

The station includes multiple features which further contribute to the study area's transit-oriented environment. Dedicated pick-up and drop-off zones, multiple bus bays servicing GO, Burlington Transit and HSR Railway buses, alongside infrastructure which supports cyclists and pedestrians, offer individuals various options for navigating to the station. Furthermore, the GO train platforms are connected through sheltered, underground paths, allowing users to navigate the station with safety and ease. Together, the land-use vision, transit servicing and mobility options, in addition to station design at Aldershot GO, are well-suited to support the proposed development. The GO Transit Bus Network is illustrated in **Figure 3-4.**

Figure 3-4 GO Transit Bus Network (Route 18 and Regional Connections)



Source: GO Transit, 2025

3.2.2 Burlington Transit and Local Bus Services

Within the City of Burlington, several Burlington Transit routes serve the Aldershot area and provide direct connections to Aldershot GO Station, nearby neighbourhoods, and major destinations throughout the city. Key routes operating within and adjacent to the study area include:

- **Route 1 – Plains / Fairview:** Operates along Plains Road East and Fairview Street, providing frequent east–west service across Burlington and direct connections to Aldershot GO Station, Burlington GO Station, and Appleby GO Station. Typical headways are approximately 20–30 minutes during weekday peak periods and 30–45 minutes off-peak.
- **Route 4 – Central:** Connects Appleby GO Station and Aldershot GO Station, primarily via Fairview Street and Waterdown Road, serving residential and employment areas east and south of the site.
- **Route 87 – North Service / Aldershot:** Provides weekday service between Burlington GO Station and Aldershot GO Station, operating along North Service Road immediately north of the subject site, with headways of approximately 45–75 minutes.
- **Route 11 – Sutton / Maple:** Connects Aldershot GO Station to Downtown Burlington via Maple Avenue and Plains Road East, serving local retail and residential destinations south of the site.
- **Route 17 – North Burlington / Fairview:** Provides additional east–west connectivity across Burlington, linking Fairview Street, Burlington GO Station, and adjacent residential and employment areas.
- **HSR Route 18 – Waterdown:** Operated by the Hamilton Street Railway (HSR), this inter-municipal route connects Waterdown and Flamborough Centre to Aldershot GO Station, operating along Waterdown Road with peak-period headways of approximately 30–40 minutes.

Collectively, these Burlington Transit, HSR, and GO Transit services provide convenient, multimodal connections between the subject site, Aldershot GO Station, and the broader Burlington and Hamilton communities. This level of existing transit service ensures that the site is well integrated into the regional transportation network and supports local and regional travel by transit.

3.3 Pedestrian & Cycling Network

3.3.1 Pedestrian Network

The pedestrian network within the study area is moderately developed, reflecting the area's transition from industrial and employment uses to a mixed-use, transit-oriented context. Continuous sidewalks are provided along Plains Road East and King Road, offering direct pedestrian access to adjacent residential and commercial areas, as well as the Aldershot GO Station.

Pedestrian crossings are signalized at major intersections, including Plains Road East / King Road and Waterdown Road / Plains Road East, ensuring safe pedestrian movement across arterial corridors. Within the Aldershot GO Station precinct, a defined network of walkways, crosswalks, and ramps connects the rail platforms, bus bays, and passenger drop-off areas.

Sidewalks are discontinuous in some segments along King Road north of the CN Rail corridor and along North Service Road, where pedestrian facilities transition to narrow boulevards or paved shoulders. Additional pedestrian improvements will be required along internal streets and within the planned Proposed Parkway Link to achieve full network connectivity.

Overall, the existing pedestrian infrastructure provides basic accessibility to surrounding roads and transit services, but opportunities remain to improve walkability and enhance direct connections between development blocks, transit stops, and the Aldershot GO Station.

3.3.2 Cycling Network

Cycling infrastructure within the study area primarily consists of multi-use paths and on-street facilities located along the major corridors in the Aldershot community.

- **Plains Road East** is designated as a Multi-Purpose Arterial and a Frequent Transit Corridor, providing well-developed cycling and pedestrian facilities along its length. From the intersection with Waterdown Road / LaSalle Park Road to Filman Road, multi-use paths (MUPs) are provided on both sides of the street, complemented by narrow on-street bike lanes with painted bicycle symbols. Between Long Drive and Fairview Street, MUPs are maintained on both sides of the corridor, and the on-street bike lanes include green pavement markings and painted bicycle symbols, particularly at intersections on the south side. Overall, Plains Road East provides continuous on-street bike lanes and off-street MUPs on both sides, offering high-quality east–west cycling connectivity through the Aldershot community.
- **North Service Road** includes two narrow on-street bike lanes near its intersection with Waterdown Road, along with a multi-use path on the north side, providing

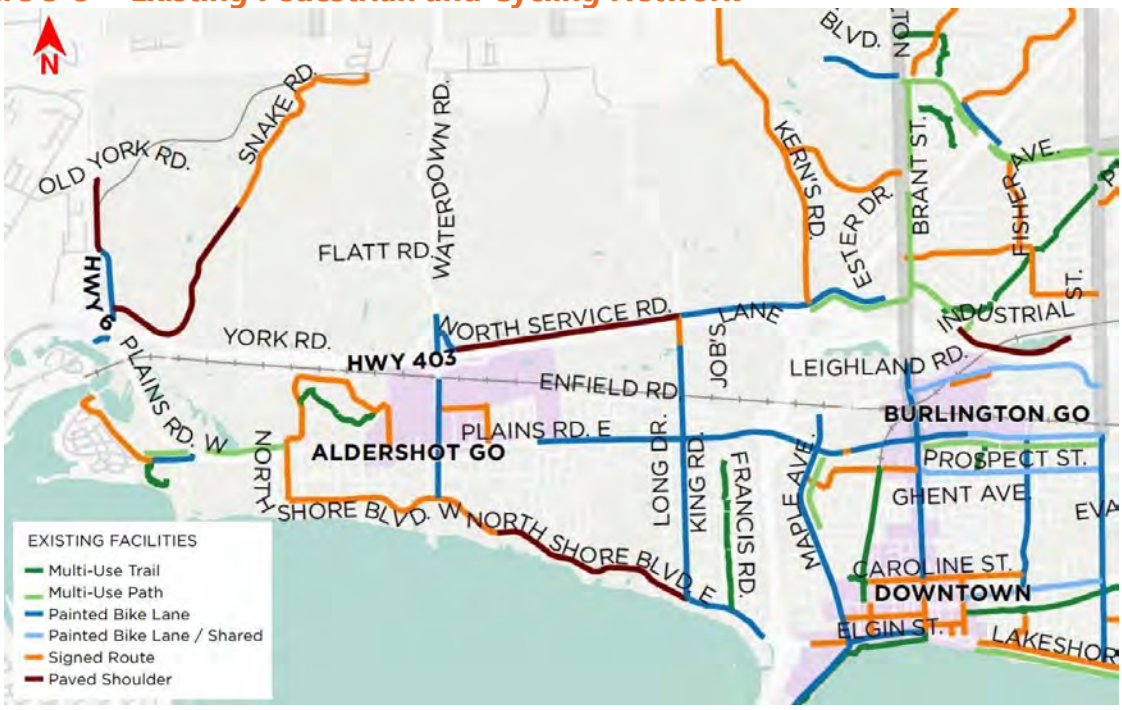
partial east–west connectivity north of Highway 403 and access to adjacent employment and commercial lands.

- **King Road** features a combination of on-street and off-street cycling facilities. South of Highway 403, painted bicycle symbols are provided on the roadway, though no dedicated lane is marked north of Hydro Lane. Between Hydro Lane and Wickens Avenue (south of the CN Rail corridor near Aldershot GO Station), an on-street bike lane with pavement markings is provided on the east side of the road, accompanied by a multi-use path. Further south of the CN Rail corridor, King Road includes multi-use paths on both sides and on-street bike lanes with painted bicycle symbols in both directions, forming a continuous active-transportation link between residential, commercial, and transit uses.
- **Waterdown Road** provides a well-developed combination of on-street and off-street cycling facilities. From North Service Road to Masonry Court, on-street bike lanes are provided on both sides of the roadway, along with a multi-use path (MUP) on the west side. South of Masonry Court to Plains Road East, MUPs are provided on both sides of the roadway, while on-street bike lanes with pavement markings continue on both sides, offering strong north–south cycling connectivity through the Aldershot community.

Within the broader City of Burlington, several connecting routes link to the study area, including segments of the Centennial Trail, Francis Road Trail, and other local pathways identified in the City's Trails and Bikeways Network (2025). These facilities contribute to the overall cycling and pedestrian connectivity within Burlington and provide potential linkages to the proposed development through future connections.

Overall, the existing cycling network in the Aldershot area provides a relatively high level of connectivity for both commuter and recreational trips. The multi-use paths along Plains Road East, combined with the continuous facilities along King Road and Waterdown Road, represent the most significant active-transportation infrastructure directly serving the site. The existing pedestrian and cycling network is provided in **Figure 3-5.**

Figure 3-5 Existing Pedestrian and Cycling Network



Source: City of Burlington Master Plan, 2018

3.4 Existing Traffic Volumes

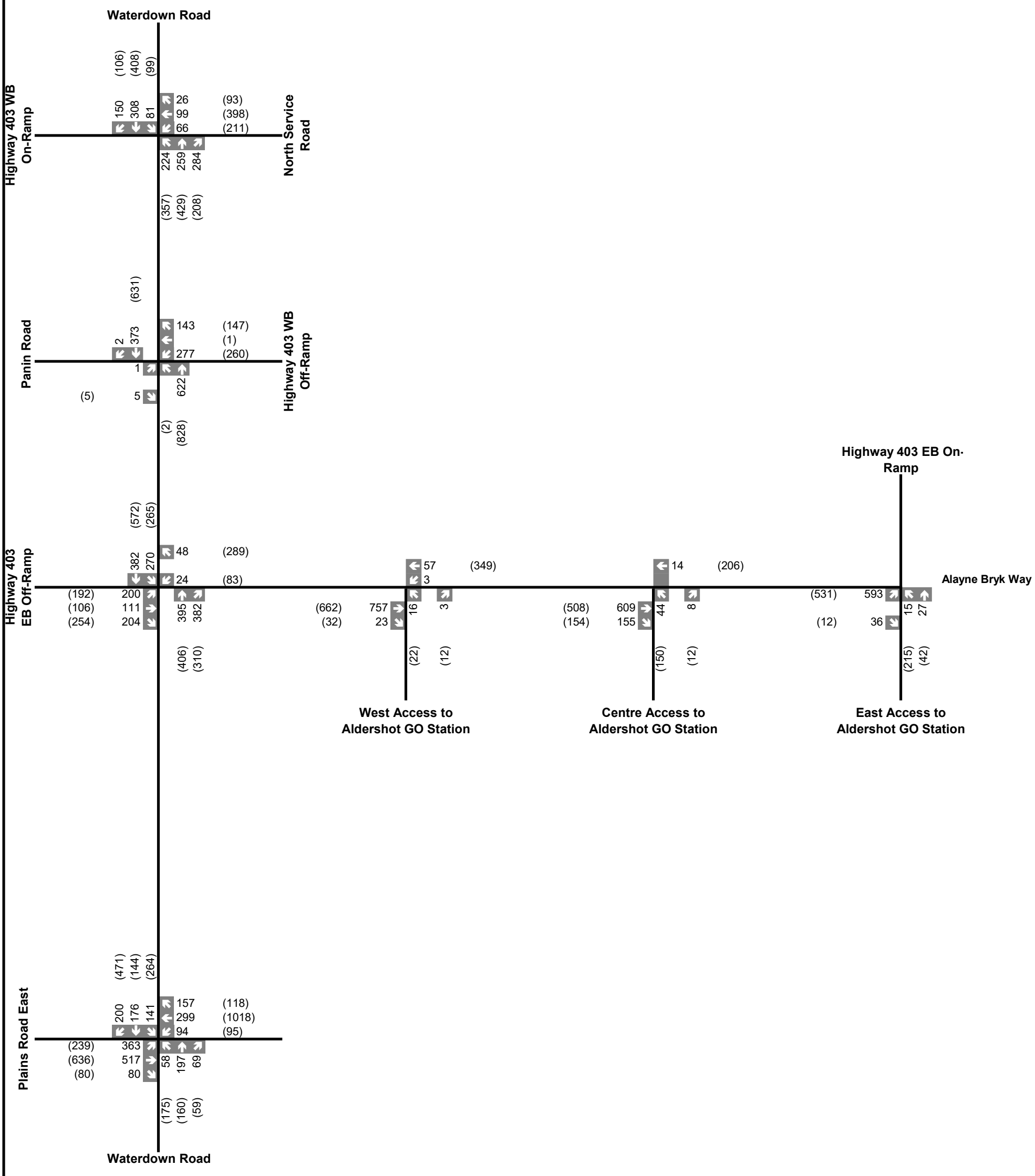
Existing intersection traffic data were prepared by TYLin in October 2025 for all intersections within the study area. The Turning Movement Counts (TMCs) were collected by a RAQs certified sub-consultant specializing in data collection. TMCs were collected during the weekday AM (7:00–11:00 AM) and PM (2:00–6:00 PM) periods on October 23, 2025, as well as the Saturday mid-day period (11:00 AM–3:00 PM) on October 25, 2025 to capture weekend traffic conditions. It was noted during the count date that a vehicular collision occurred at the intersection of Brant Street and Highway 403 Off-ramp/Access to Brant Power Centre at 4:30 pm. As such data that was collected on October 22, 2025 was utilized for the intersection instead. The counts at the intersections of Brant Street and Highway 403 Off-ramp/Access to Brant Power Centre were then balanced with the adjacent counts for the Thursday.

All counts were conducted under normal operating conditions, in accordance with the requirements of the City of Burlington and the MTO.

Signal timing plans were obtained from the City of Burlington. However, signal timing plans at MTO ramp terminals were not provided. As such, TYLin developed signal timing plans at all ramp terminals in accordance with MTO Traffic Signal Operating & Timing Policy and OTM Book 12.

The existing (2026) baseline traffic volumes are illustrated in **Figure 3-6,** representing average weekday AM, PM, and Saturday mid-day peak-hour conditions. These volumes form the foundation for assessing future background and future total traffic operations in subsequent analysis sections.

Turning Movement Count (TMC) data and signal timing information are provided in **Appendices B** and **Appendix C**, respectively.



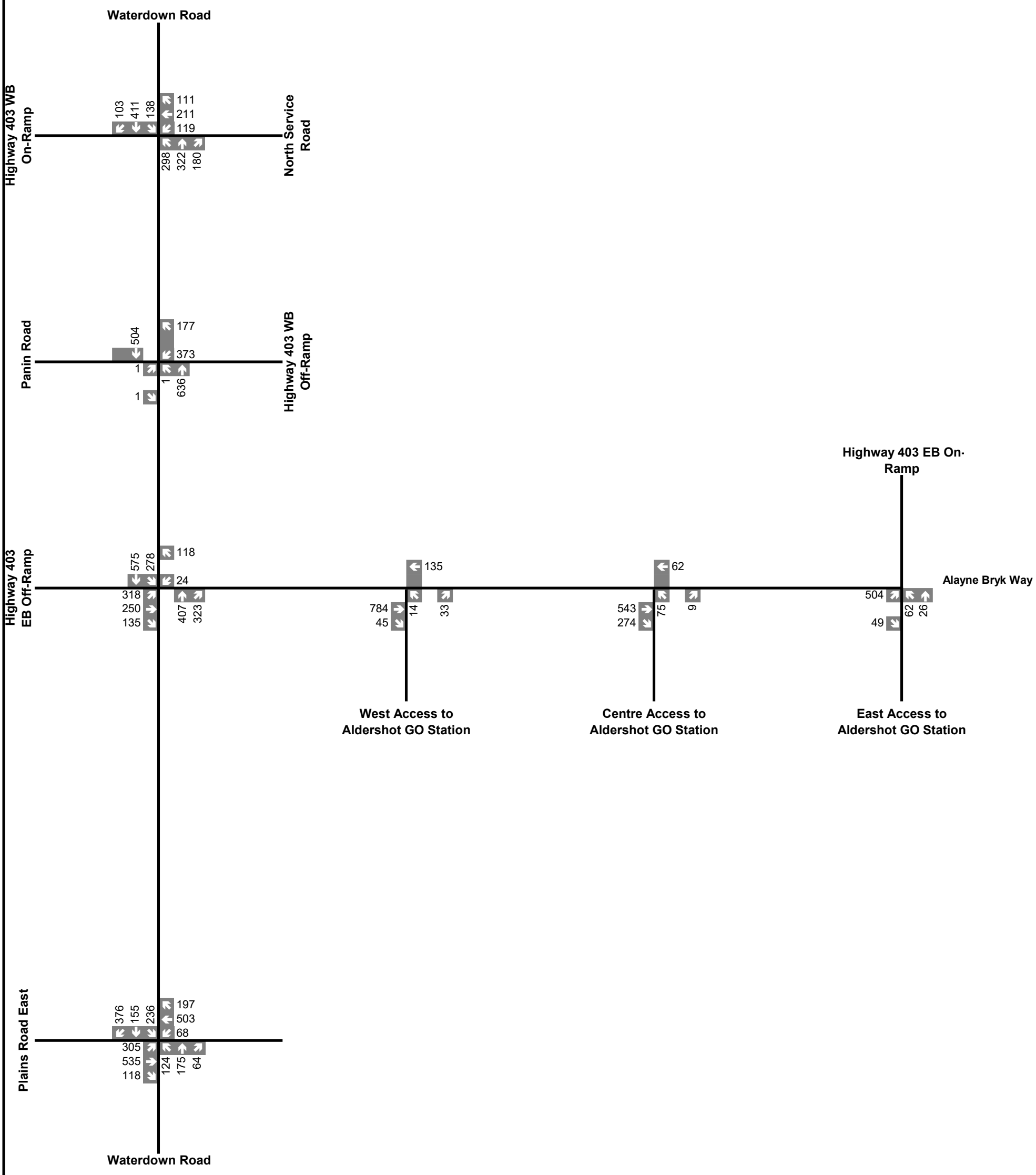
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

TYLin

Figure 3-6a

Western Study Area (External Intersections)
2026 Existing AM & PM Peak Hour Traffic Volumes



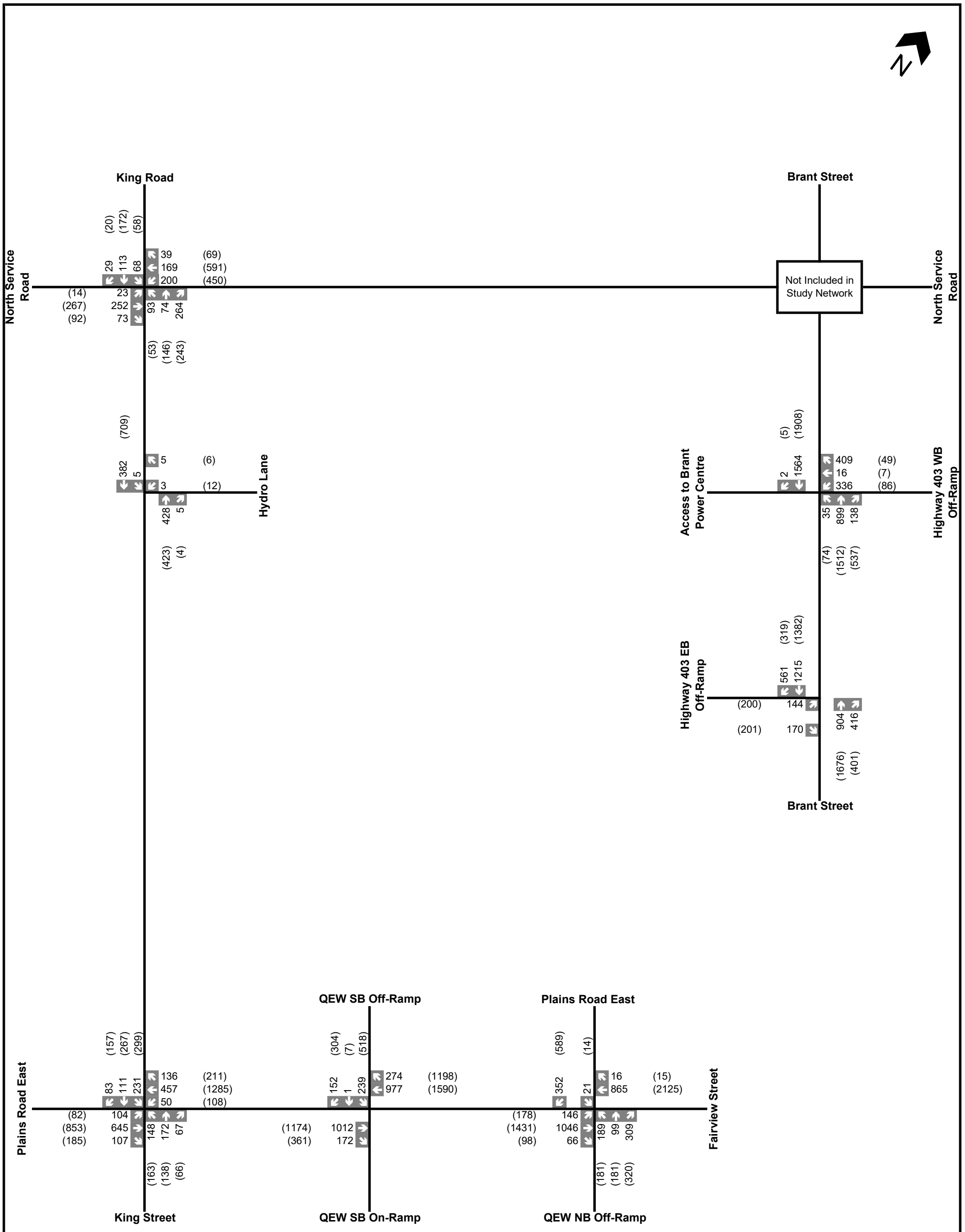
Legend

xx Weekend Peak Hour Traffic Volumes

Figure 3-6b

Western Study Area (External Intersections)
2026 Existing Saturday Peak Hour Traffic Volumes

TYLin

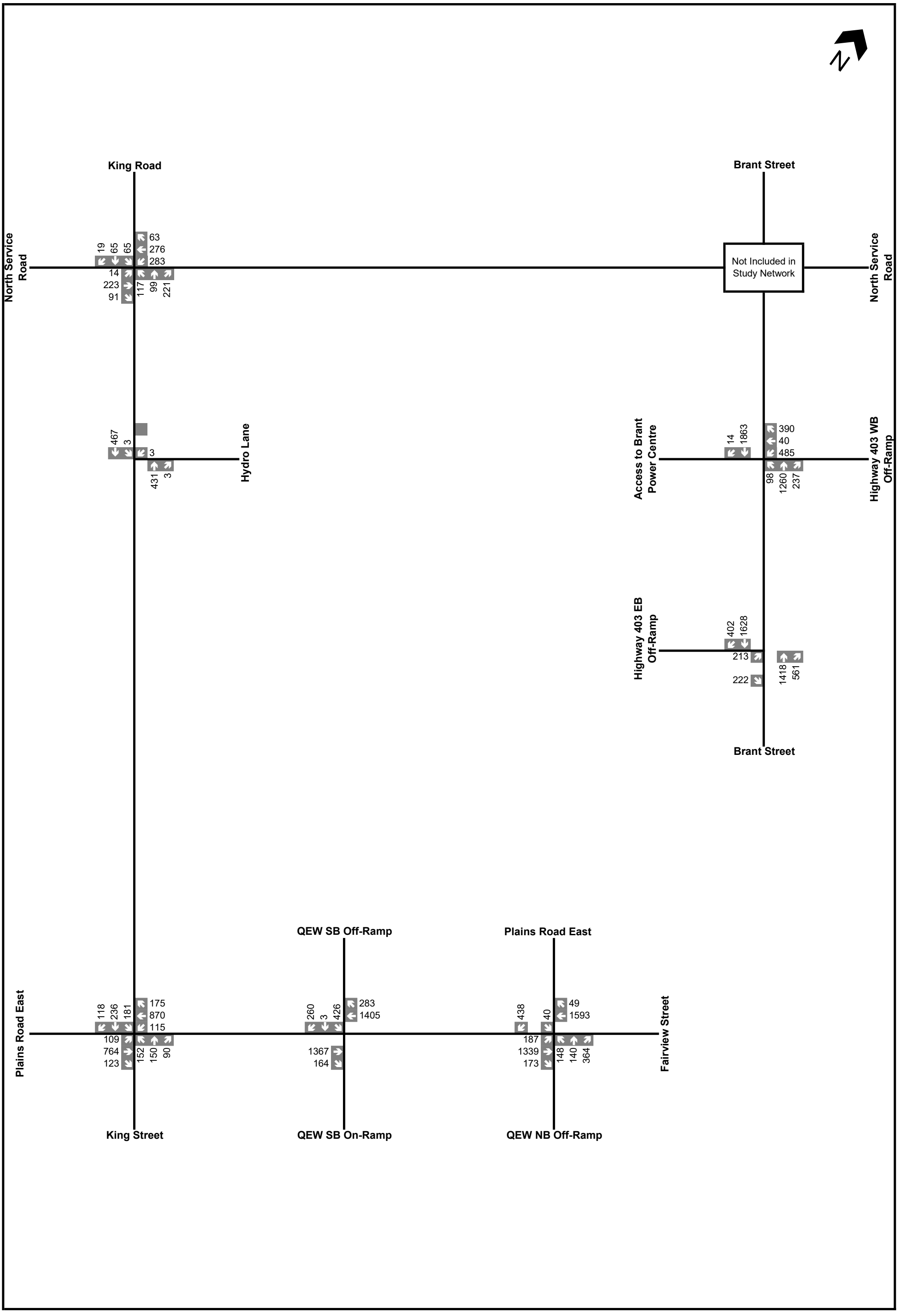


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 3-6c

Eastern Study Area (External Intersections) 2026
Existing AM & PM Peak Hour Traffic Volumes



Legend

xx Weekend Peak Hour Traffic Volumes

Figure 3-6d

Eastern Study Area (External Intersections)
2026 Existing Saturday Peak Hour Traffic Volumes

TYLin

4 FUTURE CONDITIONS

4.1 Horizon Years

For the analysis of future and total conditions, the following horizons have been established for this study:

- Existing / Baseline (2026): Represents current traffic conditions based on the Turning Movement Counts (TMCs) collected by TYLin in October 2025. This scenario serves as the baseline condition for all subsequent analyses.
- Build-Out (2031): Represents traffic conditions approximately at the full build-out and occupancy of the proposed development. This horizon aligns with MTO's short-term operational assessment requirements.
- 5-Year Post-Build-Out (2036): Represents traffic conditions approximately five years after the full build-out and occupancy of the proposed development. This horizon aligns with MTO's short-term operational assessment requirements.
- 10-Year Post-Build-Out (2041): Represents the long-term horizon, ten years beyond full build-out, in accordance with MTO and Halton Region guidelines. This scenario captures the cumulative impacts of regional growth, planned infrastructure improvements, and travel demand changes, applying the 2021 Provincial Growth Rates as directed by MTO.

These analysis horizons ensure that the study reflects both near-term operational conditions and long-term strategic network performance, providing a comprehensive understanding of the proposed development's transportation impacts within the Aldershot community.

4.2 Background Growth

A 1% per annum growth rate (compounded annually) was applied to the existing volumes to derive future background corridor growth volumes at all intersections and movements, except for MTO highway ramps. Background growth rates for all MTO ramp terminals were obtained from the 2021 Provincial Report, the growth rates were as follows: QEW/Fairview (3.8%), Highway 403/Waterdown Road (6.8%), and QEW/Brant Street (2.8%). All growth rates have been applied to existing traffic volumes to project future horizons.

4.3 Background Developments

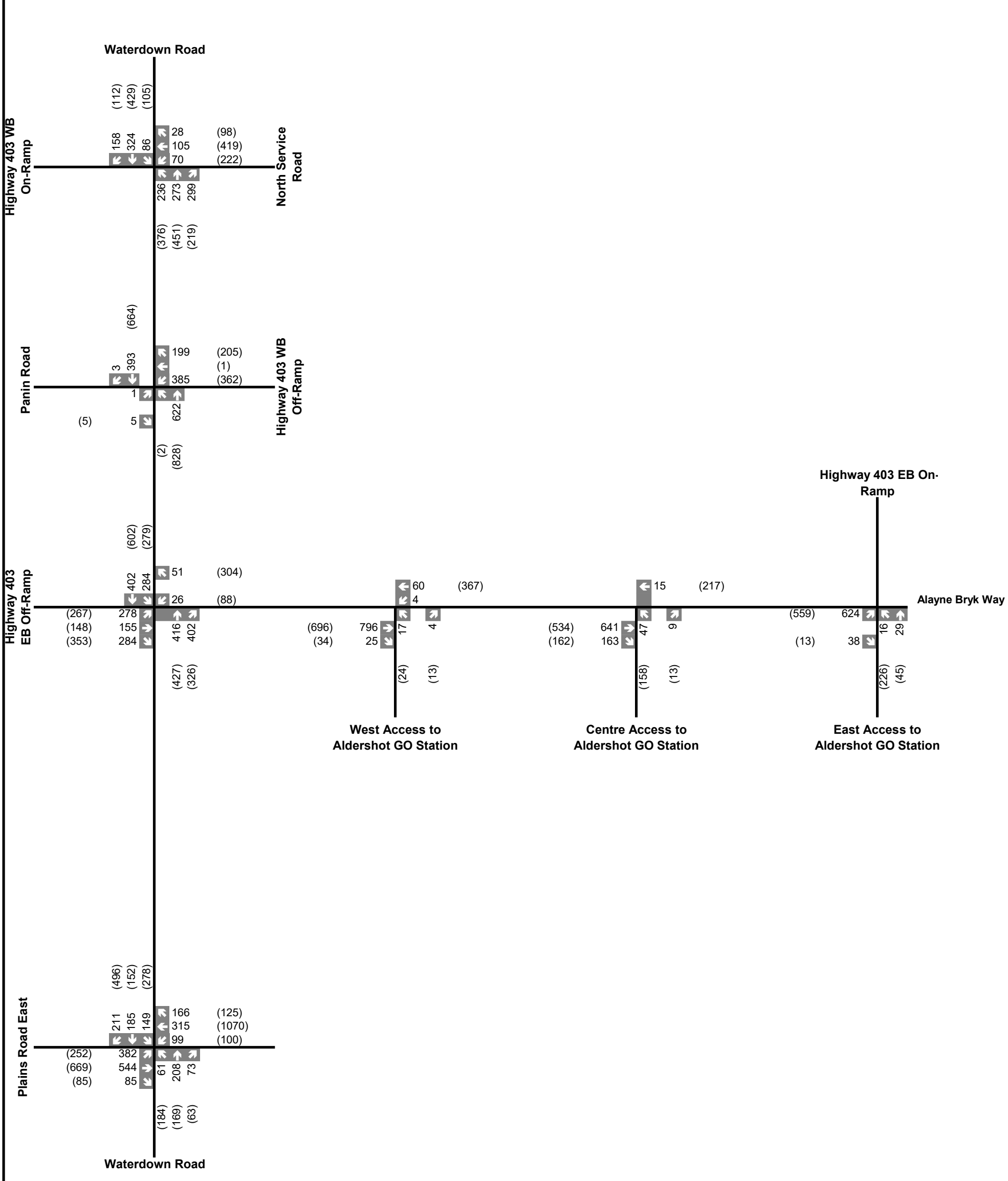
A review of the City of Burlington's Development Applications Map demonstrates that there are no background developments in proximity to the subject site. Typical growth rates have been applied to the TIS model, per Halton Region and MTO's direction. The growth rate applied accounts for future background developments across Burlington, acknowledging

that projects constructed in other parts of the municipality will still generate traffic near and around the subject site. To note, any upgrades to the overall MTSA were not reflected in this report.

4.4 Future Background Traffic Volumes

The projected 2031, 2036, and 2041 background traffic volumes were derived from the 2025 baseline traffic counts, adjusted to 2026 conditions, and then forecasted using the applicable background growth rates. Growth rates were considered in accordance with the approved rates that reflect coordination with the City of Burlington, Region of Halton, and MTO requirements.

The 2031, 2036 and 2041 future background weekday AM, PM and Saturday peak-hour traffic volumes are illustrated in **Figure 4-1**, **Figure 4-2**, and **Figure 4-3** respectively.

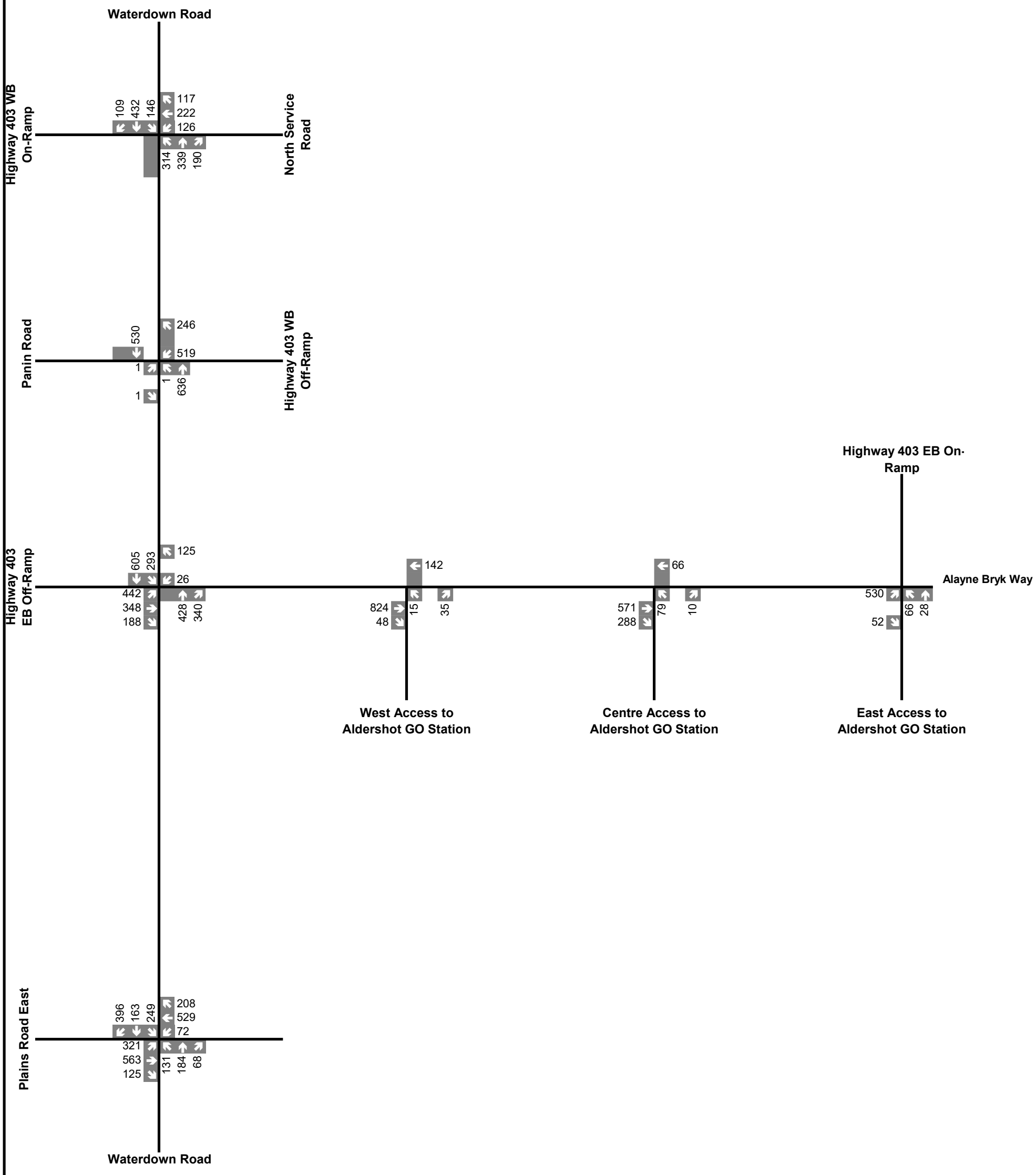


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-1a

Western Study Area (External Intersections)
2031 Future Background AM & PM Peak Hour Traffic Volumes

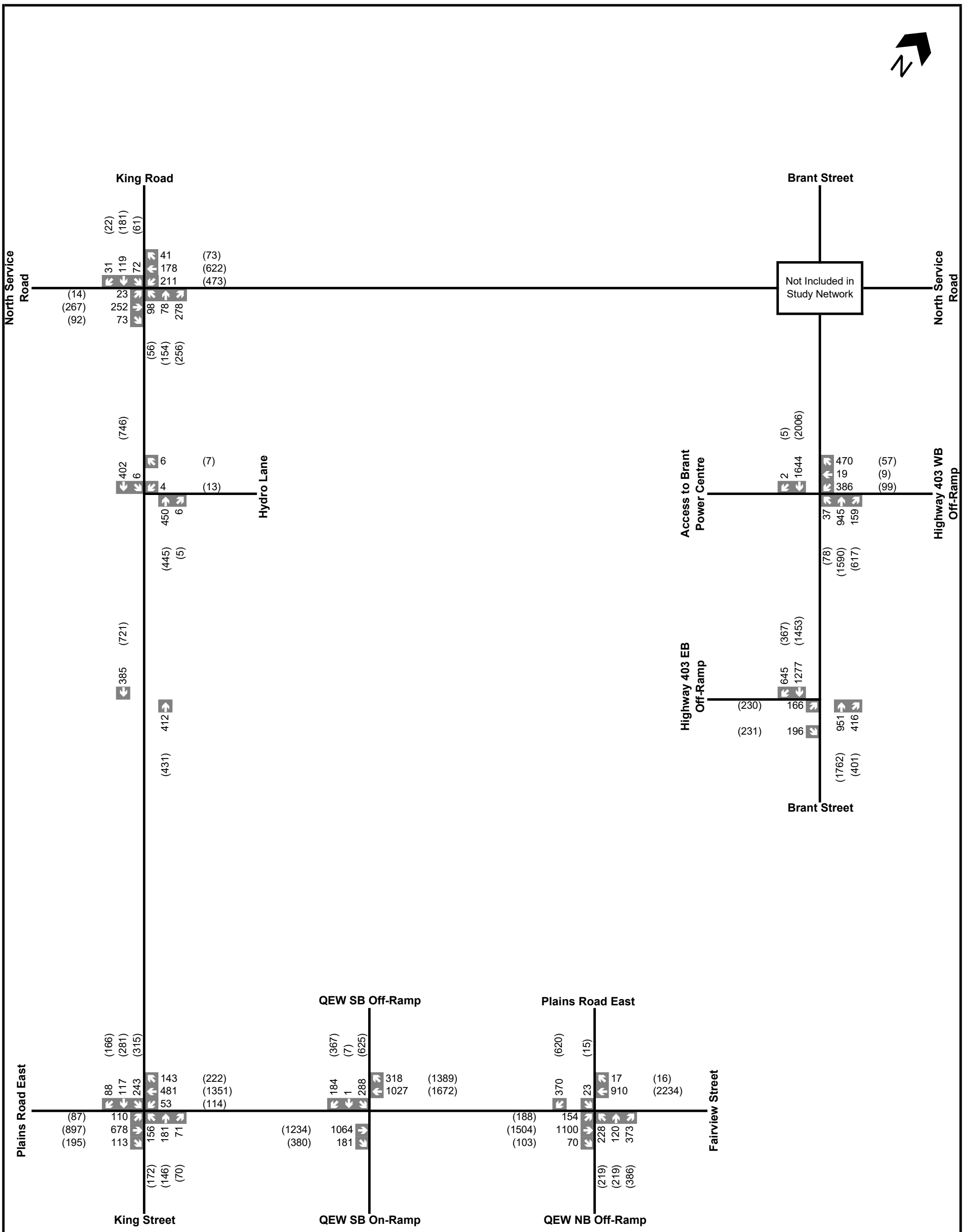


Legend

xx Saturday Peak Hour Traffic

Figure 4-1b

Western Study Area (External Intersections)
2031 Future Background Saturday Peak Hour Traffic Volumes

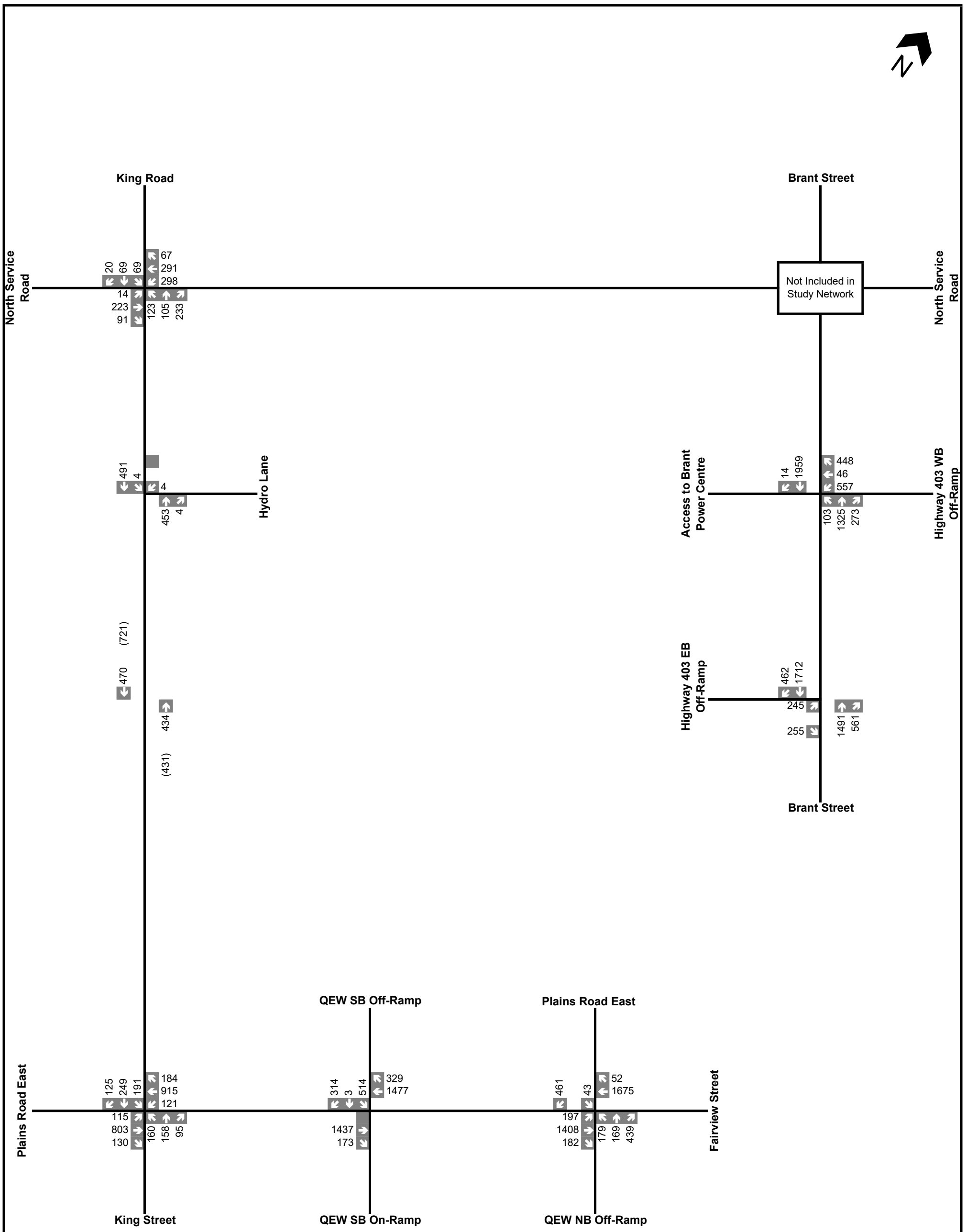


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xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-1c

Eastern Study Area (External Intersections) 2031 Future Background AM & PM Peak Hour Traffic Volumes



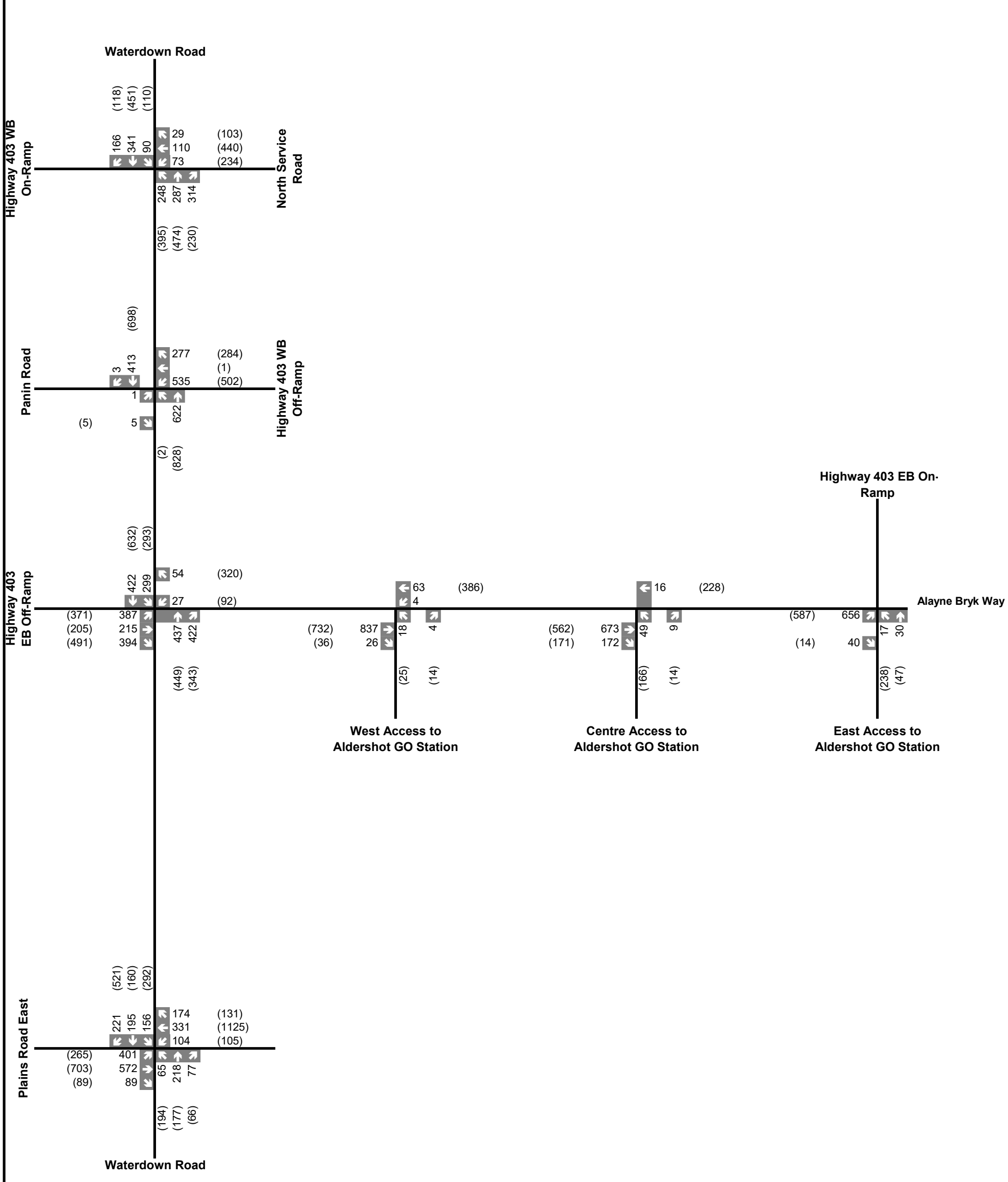
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xx Saturday Peak Hour Traffic Volumes

Figure 4-1d

Eastern Study Area (External Intersections) 2031 Future Background Saturday Peak Hour Traffic Volumes

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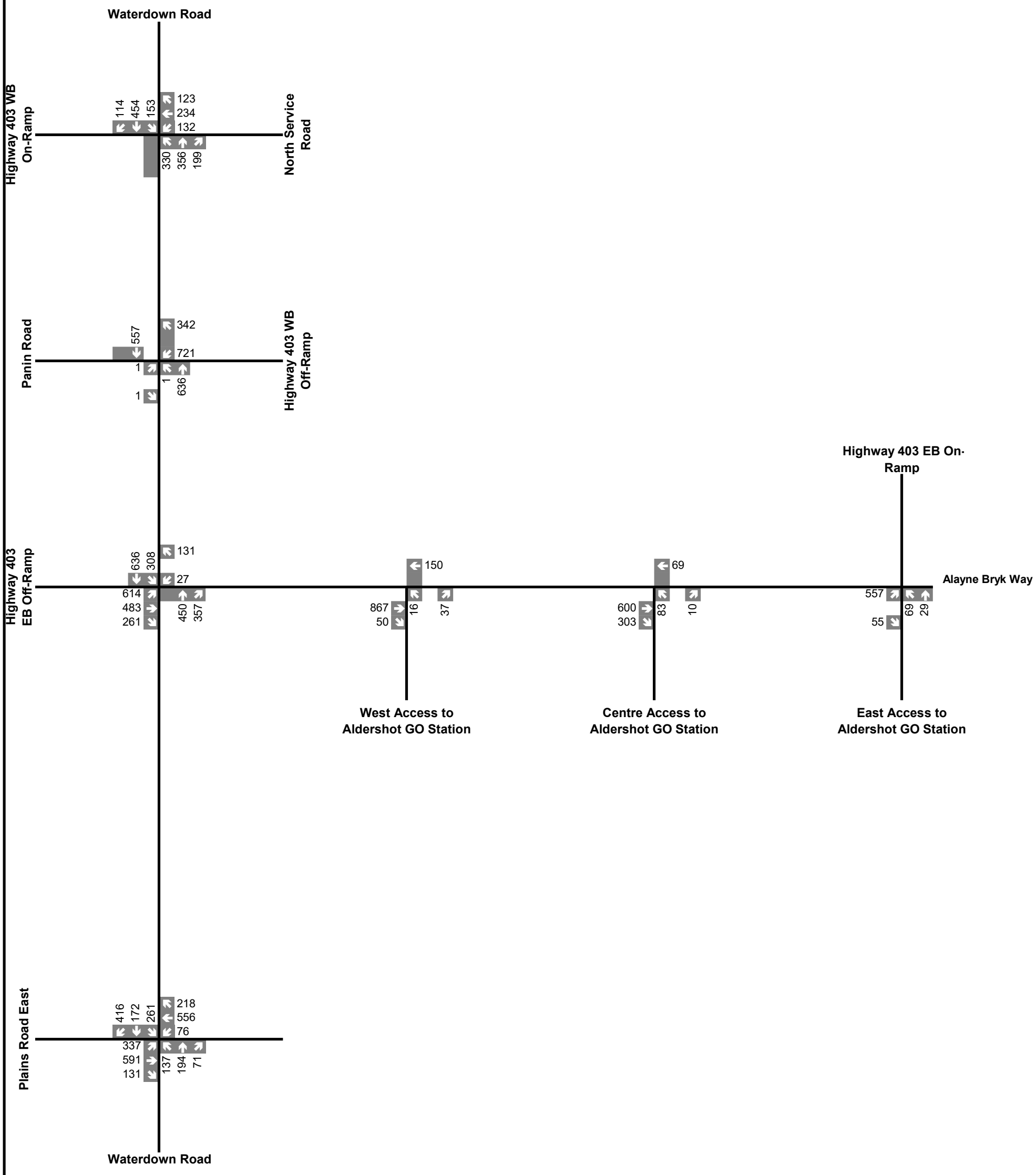


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xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-2a

Western Study Area (External Intersections)
2036 Future Background AM & PM Peak Hour Traffic Volumes

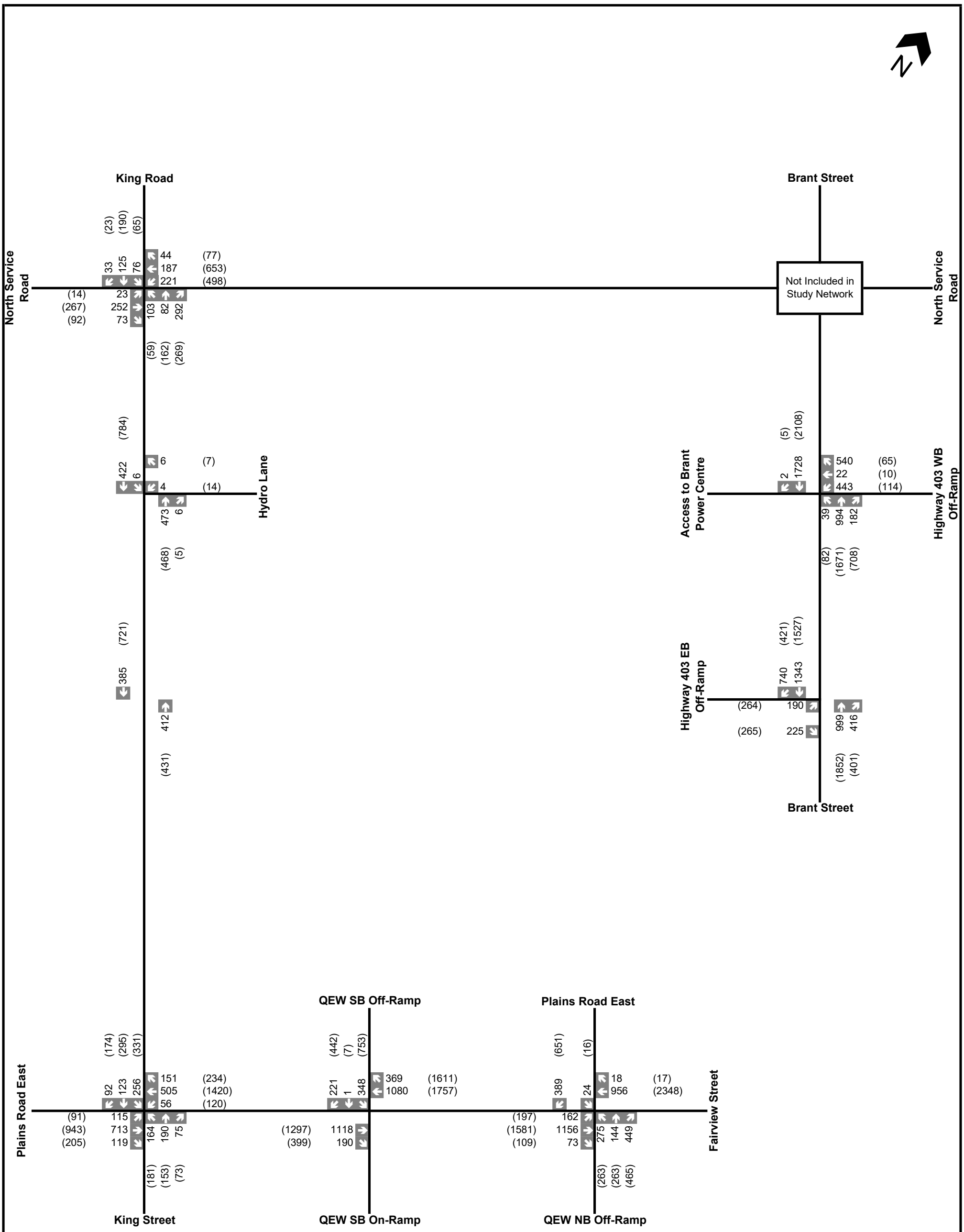


Legend

xx Saturday Peak Hour Traffic

Figure 4-2b

Western Study Area (External Intersections)
2036 Future Background Saturday Peak Hour Traffic Volumes

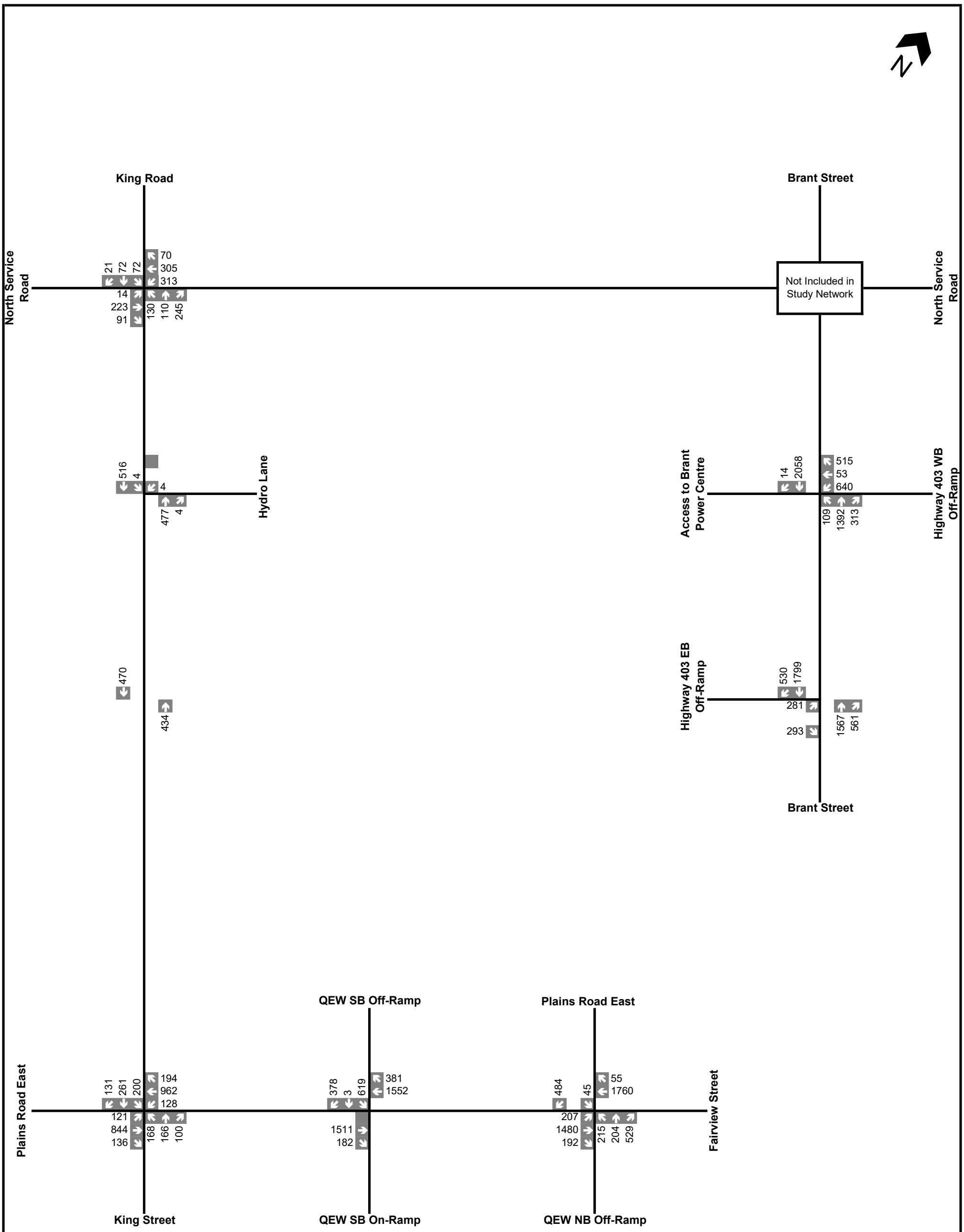


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xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-2c

Eastern Study Area (External Intersections) 2036 Future Background AM & PM Peak Hour Traffic Volumes



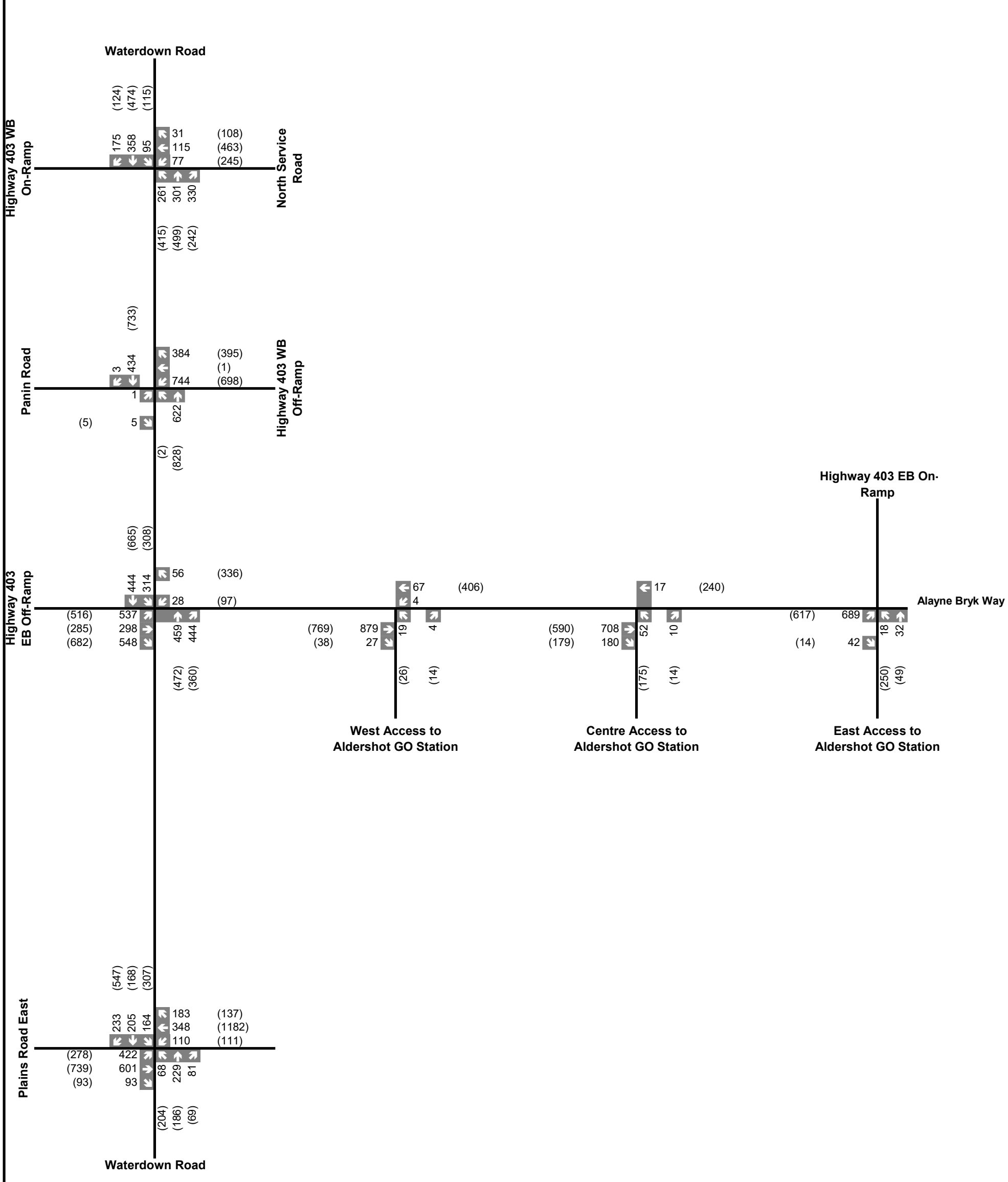
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xx Saturday Peak Hour Traffic Volumes

Figure 4-2d

Eastern Study Area (External Intersections) 2036 Future Background Saturday Peak Hour Traffic Volumes

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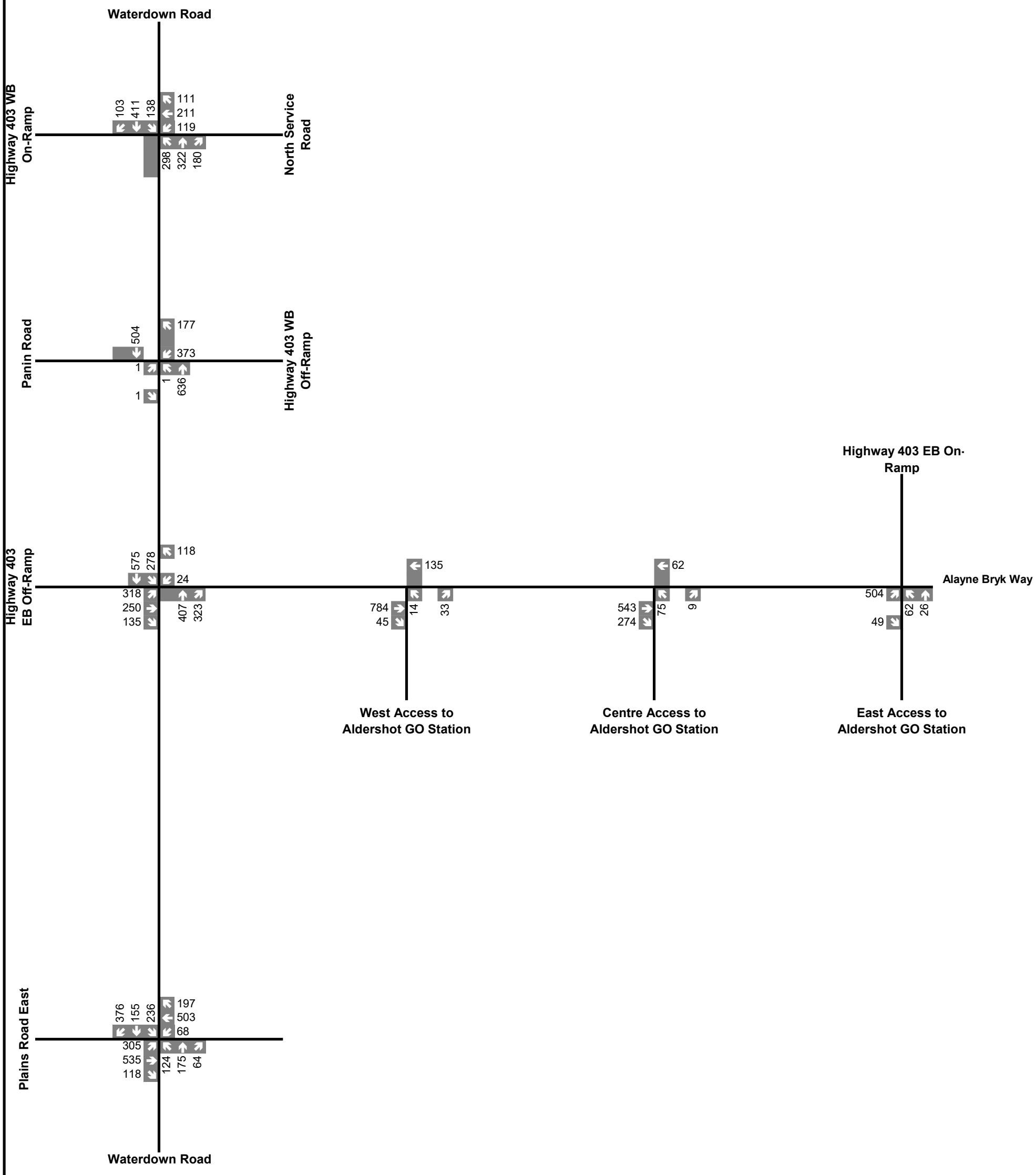


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xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-3a

Western Study Area (External Intersections)
2041 Future Background AM & PM Peak Hour Traffic Volumes

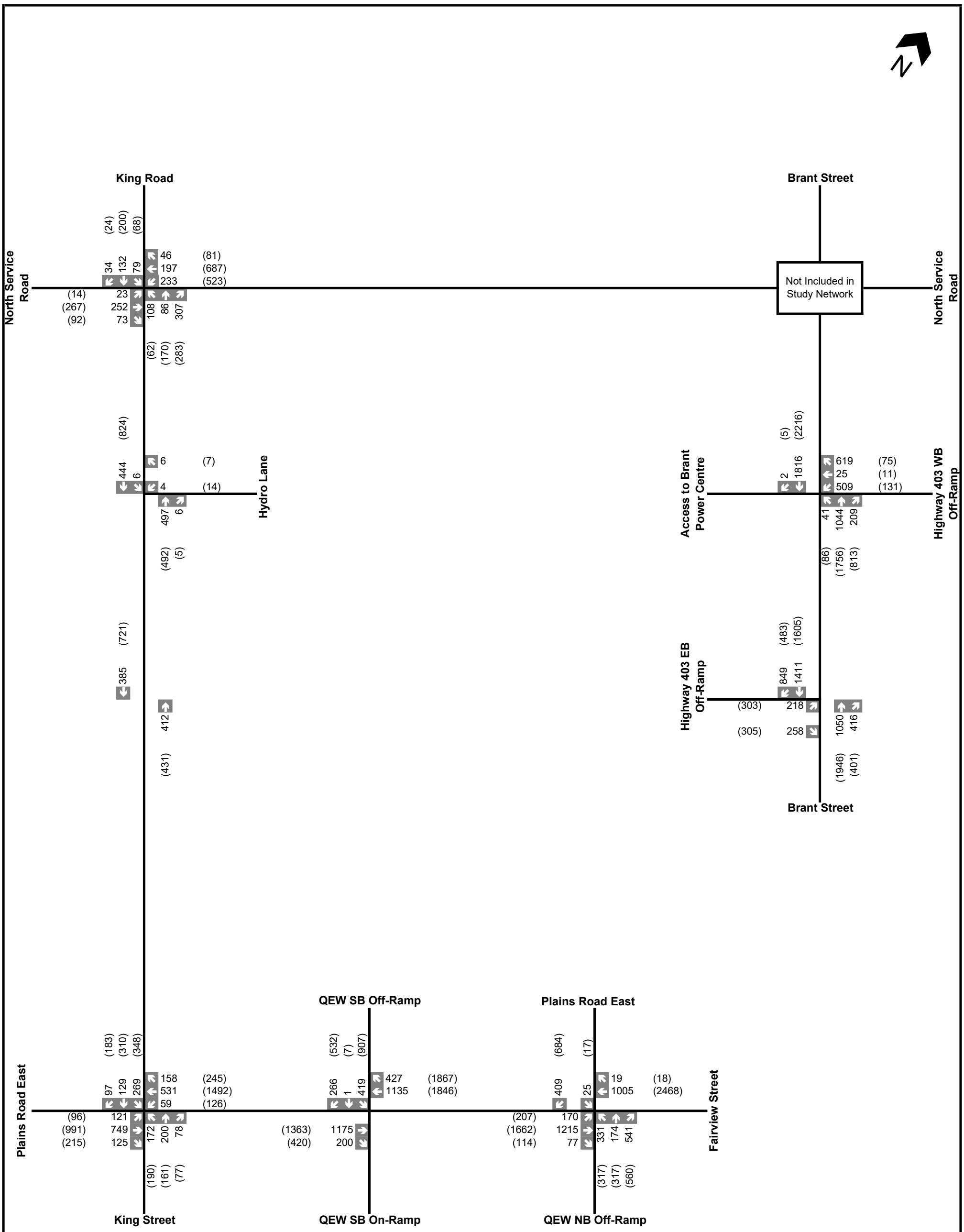


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xx Saturday Peak Hour Traffic

Figure 4-3b

Western Study Area (External Intersections)
2041 Future Background Saturday Peak Hour Traffic Volumes

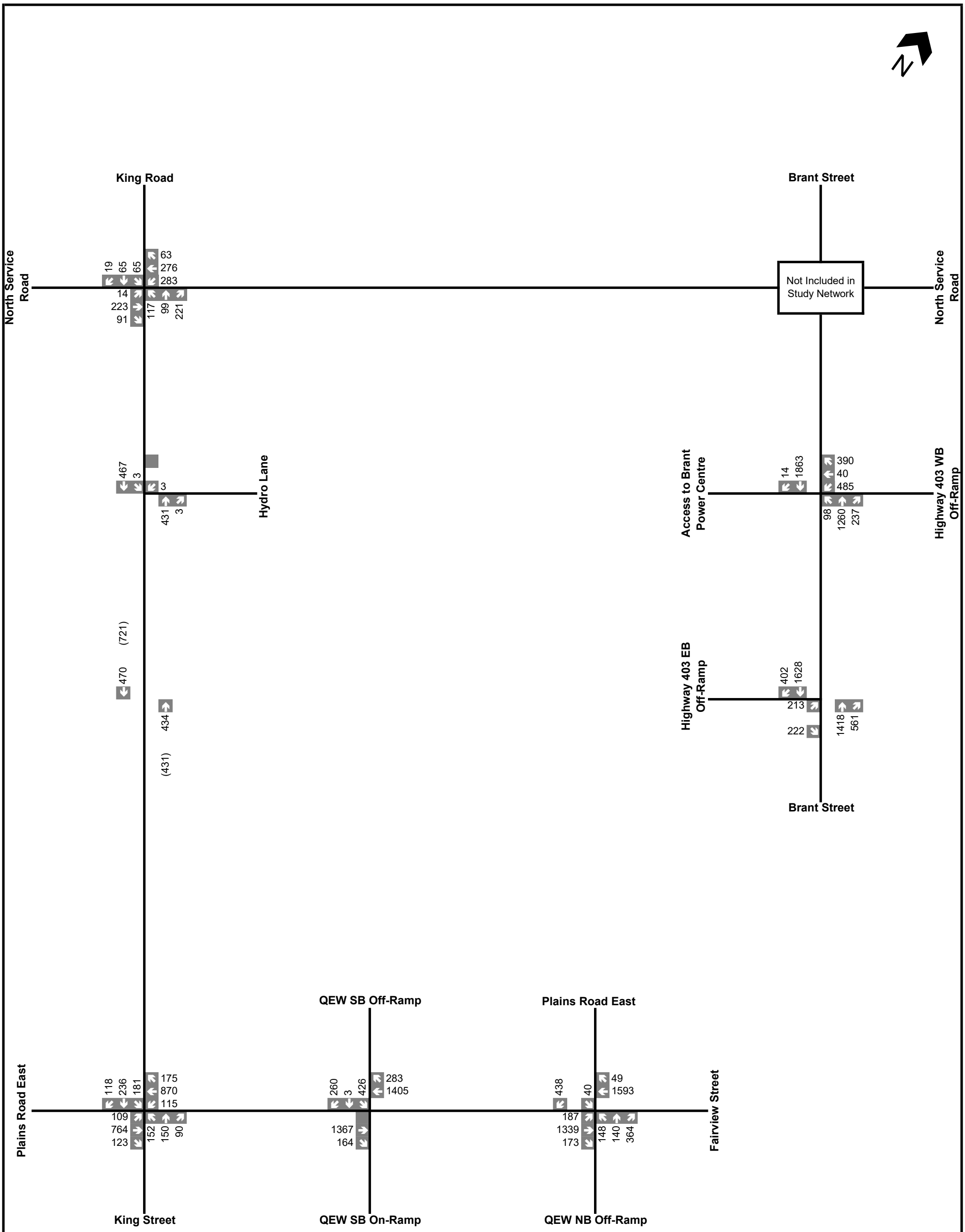


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xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 4-3c

Eastern Study Area (External Intersections) 2041 Future Background AM & PM Peak Hour Traffic Volumes



Legend

xx Saturday Peak Hour Traffic Volumes

Figure 4-3d

Eastern Study Area (External Intersections) 2041 Future Background Saturday Peak Hour Traffic Volumes

TYLin

4.5 Future Transportation Infrastructure Improvements

Future transportation infrastructure improvements were identified from the following documents:

- City of Burlington Integrated Mobility Plan: The Road to Change 2033 (IMP)
- City of Burlington 2024 Operating and Capital Budgets & 2025 – 2033 Capital Forecast
- Halton Region Integrated Master Plan (Halton Region IMP) – Water, Wastewater and Transportation PIC #1 & #2 Materials
- City of Burlington Cycling Plan (2020)
- Accompanying and relevant agency materials from Burlington Transit, Metrolinx, HSR and Halton Region
- Nak Design Strategies – Urban Design Brief (2026)

4.5.1 Road Network Improvement

Multiple roadway projects have been identified within and surrounding the study area that will enhance overall connectivity, capacity, and multimodal access to the Aldershot GO Station. These are described in greater detail below.

South Service Road Extension (Aldershot GO Station to King Road):

A new east–west multimodal corridor is planned to extend the South Service Road from Alayne Bryk Way at Aldershot GO Station to King Road. The extension will form a key connection between the GO Station precinct and the broader Aldershot community, providing access for vehicles, pedestrians, and cyclists, and supporting future mixed-use redevelopment within and adjacent to the Aldershot GO Station. According to the City's 2024 Approved Budget (Project RD-RA-964), design and construction of the South Service Road across the GO Station lands and the City's share of the Falcon Creek bridge are scheduled between 2028 and 2033. The remaining section east of King Road will be implemented through development in coordination with the City. The proposed development is anticipated to include the South Service Road Extension; however, per the draft plan and this report, the South Service Road is referred to as the Proposed Parkway Link

King Road Improvements (Future South Service Road (Proposed Parkway link) to North Service Road):

King Road is identified as a strategic north–south arterial connecting the Proposed Parkway Link and North Service Road. Planned works include reconstruction, intersection widening at King Road / North Service Road, and eventual bridge twinning over Highway 403. The City's Capital Budget (Project RD-RA-776) allocates design and land acquisition in 2031, with

construction expected beyond the current ten-year forecast period. These upgrades will accommodate projected traffic growth and improve access to the Aldershot employment area.

Highway 403 Corridor (MTO Corridor Works):

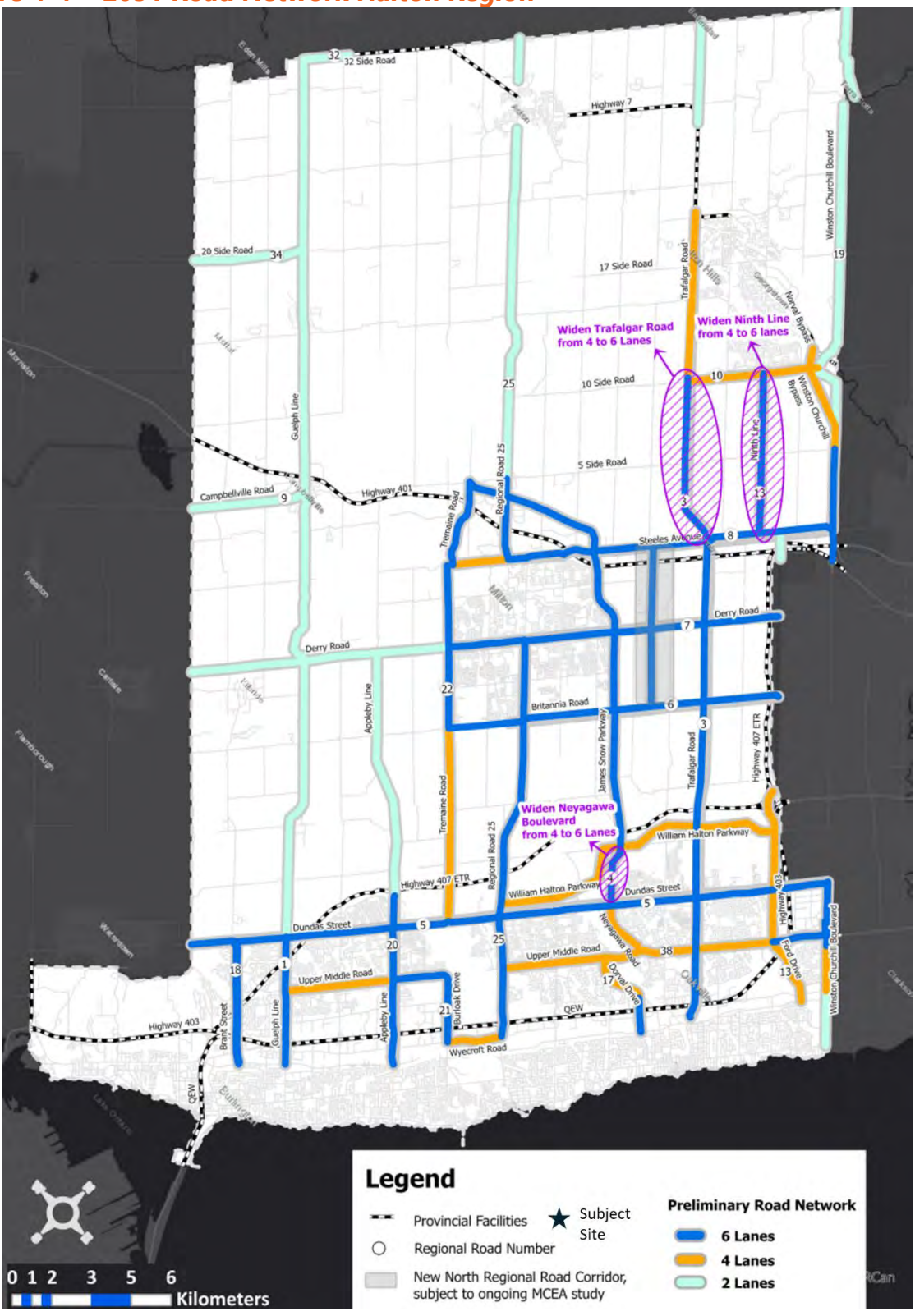
The MTO has identified the Highway 403 corridor between Waterdown Road and the QEW/403/407 Interchange for long-term widening from six to eight lanes. The King Road bridge will require replacement as part of this future expansion and potential Highway 407 Transitway integration. Timing remains subject to provincial planning and design completion.

For the TIS, the 2031, 2036 and 2041 horizon networks incorporate:

- The **South Service Road Extension** (Proposed Parkway Link) between Aldershot GO Station and King Road;
- Functional **King Road upgrades** between the South Service Road and North Service Road; and
- Recognition of **MTO Corridor Works** (Highway 403 widening and 407 Transitway) as background context, with no direct operational impacts assumed until formal commitments are in place.

Note that **Figure 4-4** provides insight into the Halton Region's broader roadway network and improvements to be integrated by 2051. No major roadway improvements in proximity to the subject site are shown.

Figure 4-4 2051 Road Network Halton Region



Source: Halton Region IMP (PIC #2), 2025

4.5.2 Transit Improvements

Planned transit enhancements within the Aldershot GO Station and the broader Burlington–Hamilton corridor support increased regional rail capacity, stronger station access, and higher-frequency local bus service along key corridors (Plains/Fairview, North Service Road, Waterdown Road). These initiatives align with the City's Integrated Mobility Plan and Metrolinx's GO Expansion program.

GO Transit – Lakeshore West (Regional Rail):

Metrolinx's GO Expansion program targets more frequent, two-way, all-day service on core corridors, including the Lakeshore West corridor. At present, two-way all-day service already operates between Union and Aldershot, with hourly service continuing to West Harbour. Expansion of GO services commits to more trips all day, alongside faster journeys on the Lakeshore West line (context for future frequency increases affecting Aldershot GO).

Aldershot GO Station Access and Amenities:

Metrolinx continues a station-access program across the GO network, adding/improving walk/bike routes, wayfinding, and secure bike parking at many stations (Burlington has been included in recent cycles). These upgrades improve first/last-mile connectivity feeding Aldershot GO and support active-mode access to rail.

Burlington Transit – Frequent Transit & Corridor Priority:

The Halton Region IMP advances a preferred integrated network with frequent transit corridors on major arterials (e.g., Plains/Fairview), supported by service growth and potential transit-priority measures (signal coordination, queue-jumps) as the network matures. Burlington's business planning also targets a progression toward a 15-minute high-frequency grid on primary routes, which directly benefits the Plains/Fairview spine serving Aldershot GO.

Burlington/HSR Coordination (Waterdown – Aldershot):

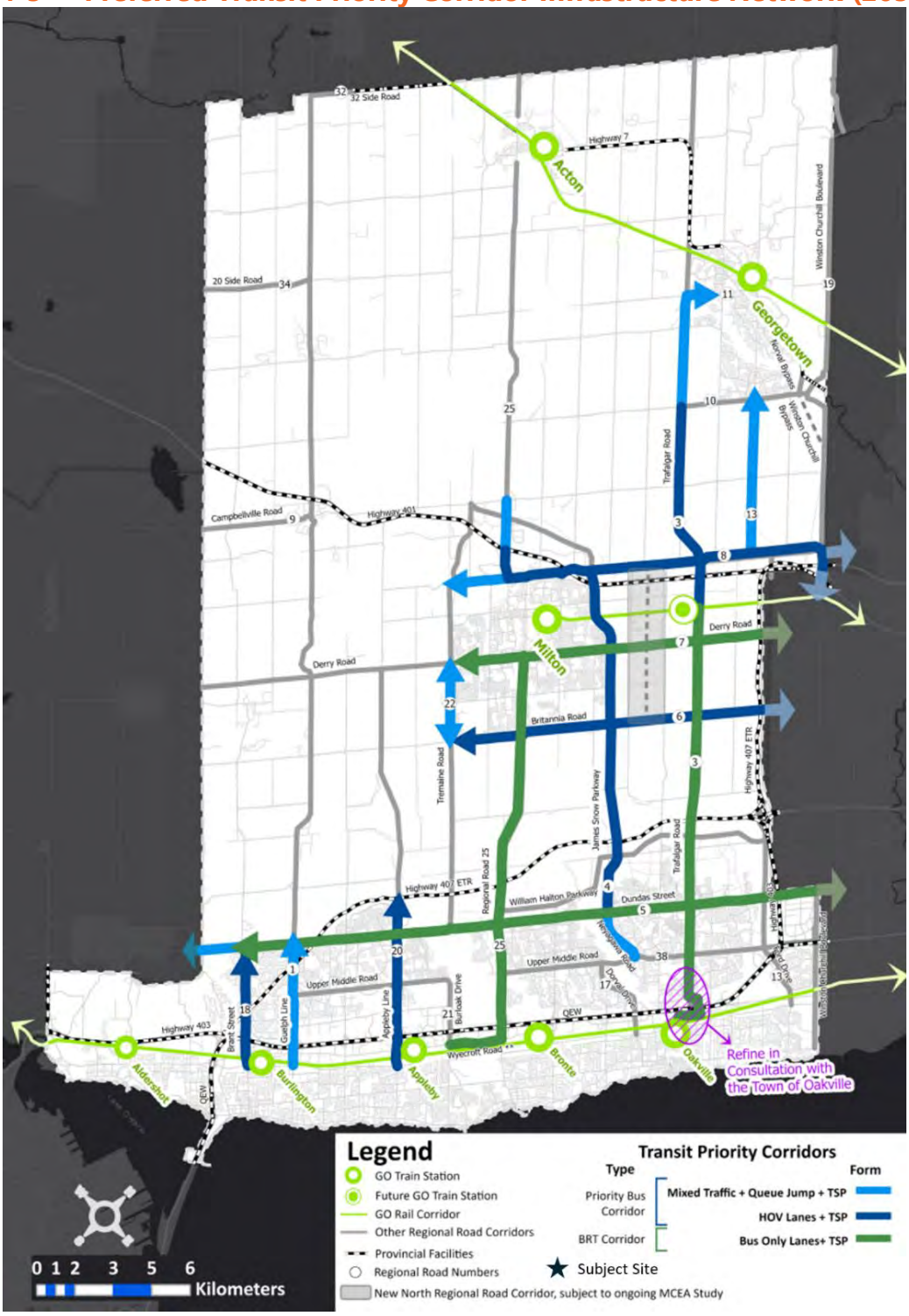
The HSR Route 18 Waterdown corridor continues to see incremental improvements (e.g., expansion to 7-day service, with ongoing service hour increases highlighted in 2024–2025 service bulletins). These changes strengthen inter-municipal connectivity between Waterdown and Aldershot GO, improving transfer opportunities to Burlington Transit and GO Rail.

Regional Network Planning (Halton/Metrolinx):

At the regional level, Halton applies higher-order/priority transit corridor overlays in its Official Plan and TMP, while Metrolinx plans longer-term rapid-transit initiatives (e.g., 407 Transitway corridor concept). For this TIS, these are noted as planning context only; no direct operational effects are assumed without firm commitments and opening years.

The recommended 2051 preliminary and preferred transit priority corridor network, per the Halton Region's Integrated Mobility Plan (IMP), is highlighted in **Figure 4-5.**

Figure 4-5 Preferred Transit Priority Corridor Infrastructure Network (2051)



Source: Halton Region IMP (PIC #2), 2025

4.5.2.1 Potential Local Transit Integration Opportunities

In support of the City's Integrated Mobility Plan objectives, there is potential to improve local transit coverage in and to the Aldershot GO Station through future service extensions or routing adjustments on Burlington Transit Routes 4 (Central) and 87 (North Service–Aldershot).

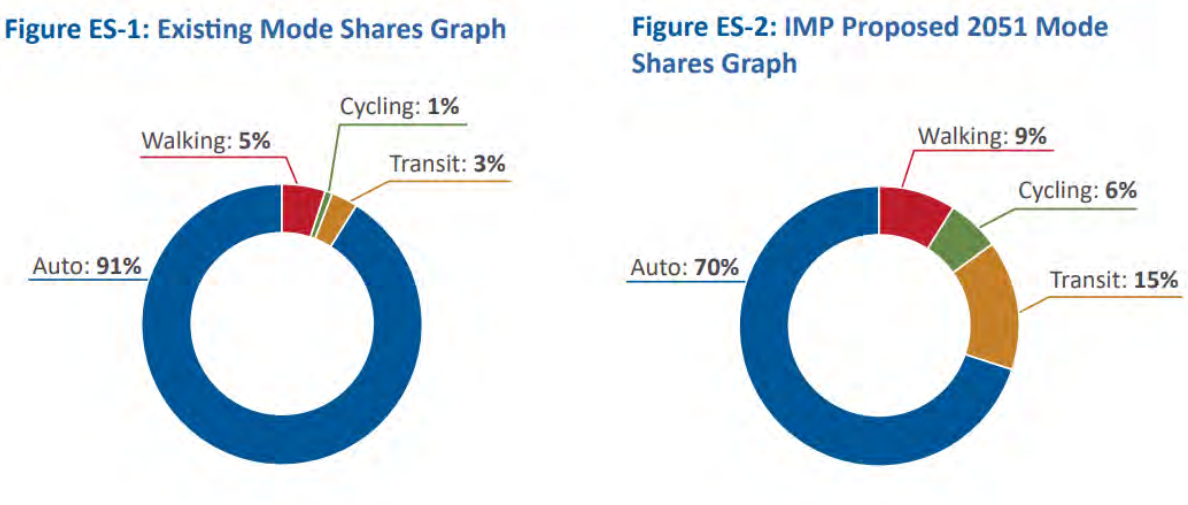
Both routes currently operate near the study area and could be extended or looped through the future Parkway Link corridor and King Road, providing direct service to the mixed-use community and improving first/last-mile access to Plains Road East and Aldershot GO Station. These potential service enhancements would align with the City's goal of expanding frequent-transit access within new growth areas.

Specific routing and stop placement would be determined by Burlington Transit during future service planning phases, however at this time it is recommended that transit stops be places along the Parkway Link Corridor with stops at Block 8 (satellite campus), the proposed Multi Modal Local Street (Street B) connection, in front of the proposed arena and entertainment (block 5), and in proximity to the south side of Block 3. This will allow all areas of the proposed development to be easily accessed via transit with a stop within 400 m of all destinations.

4.5.3 Active Transportation Improvements

The City of Burlington's Integrated Mobility Plan (IMP) establishes mode-share targets for 2051, characterized by a 4% increase in the share of trips completed by walking, in addition to a 5% increase in the share of trips made by cycling. This is highlighted in **Figure 4-6**.

Figure 4-6 City of Burlington Mode Share Targets



Source: City of Burlington IMP, 2023

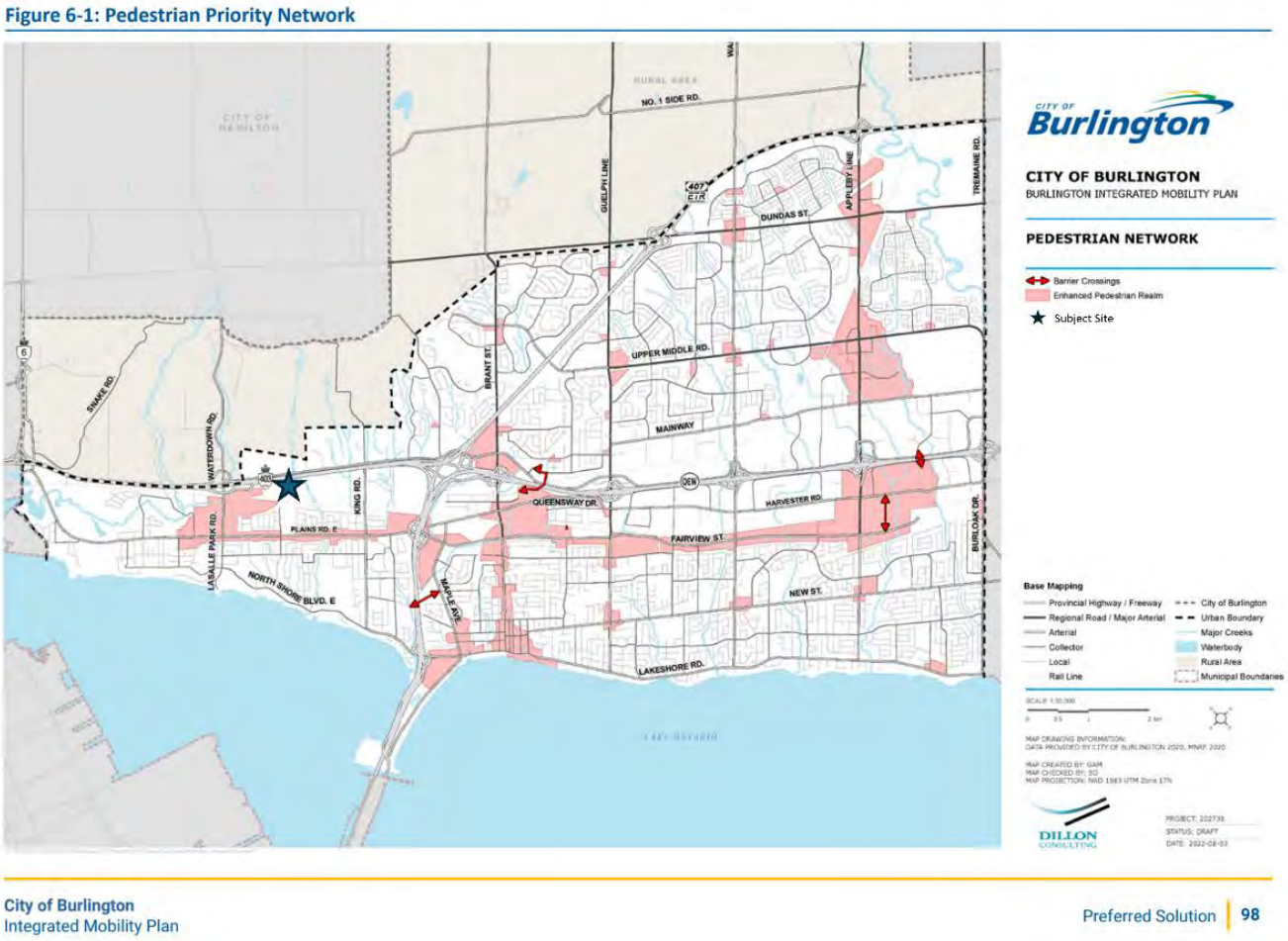
To shift away from automobile orientation and encourage mode shift, improvements to active transportation infrastructure are being pursued. Per the City's IMP, **Figure 4-7** highlights the Priority Pedestrian Network (PPN), where significant investments will be made to pedestrianize spaces. The map highlights the area in proximity to Aldershot as being a critical location for the implementation of wider sidewalks, maximizing the achievement of higher levels of pedestrian service (Level of Service A).

In addition, limited block sizes, midblock crossings, buffers between pedestrian walkways and roads, street furniture, lighting and trees will be implemented. Worth noting, the IMP does not identify improvements specific to the Aldershot GO area. Rather, the list provided comprises general improvements for the PPN in primary growth areas and MTSA's, including Aldershot GO.

Alongside proposed improvements to the pedestrian network, the City of Burlington's Cycling Plan identifies new infrastructure for bicycle users. In **Figure 4-8**, the area near Aldershot GO is proposed to receive the following spine network and connector route improvements:

- **Waterdown Road**
  - Spine Network: Multi-use trail and highway interchange crossing north of Enfield Road. Protected bikeway near Aldershot GO, in addition to a painted bike lane down to North Shore Boulevard West.
- **Local Roads (Masonry County, Clearview Avenue, St. Matthews Avenue and Gallagher Road)**
  - Spine Network: Local street bikeway travelling north up St. Matthews toward the Aldershot GO south parking lot. Another local street bikeway is to be implemented along Gallagher Road travelling north.
  - Connector Routes: Along Masonry Court and Clearview Avenue, a shared-use lane will be provided. In addition, a multi-use trail will be provided at the end of Gallagher Road, travelling west.

Figure 4-7 PPN Map from City of Burlington IMP



Source: City of Burlington IMP, 2023

Figure 4-8 Proposed Cycling Network Map



Source: City of Burlington Cycling Plan, 2020

4.5.3.1 Internal Site Pedestrian and Cyclist Facilities

A comprehensive Active Transportation Infrastructure plan has been incorporated within the proposed development. A well-connected active transportation network is a key component to achieving a fully accessible and more sustainable community. This includes sidewalks along all roadways such as the Proposed Parkway Link Road (2.5 metress), Street B Proposed Roadway (2.1 metress), Street B Proposed Multi-Modal Local Street (2.1 metress) and all local streets (2.1 metress).

Bidirectional cycle tracks will be included along the south side of the proposed Parkway Link (Street A) and the south side of Street B along the Multi-Modal Local Roadway segment of Street B along the park. This continues until Street D, where the bidirectional cycle track transitions to the northern side of Street B, where Street B is anticipated to transition into on-street parking along the roadway.

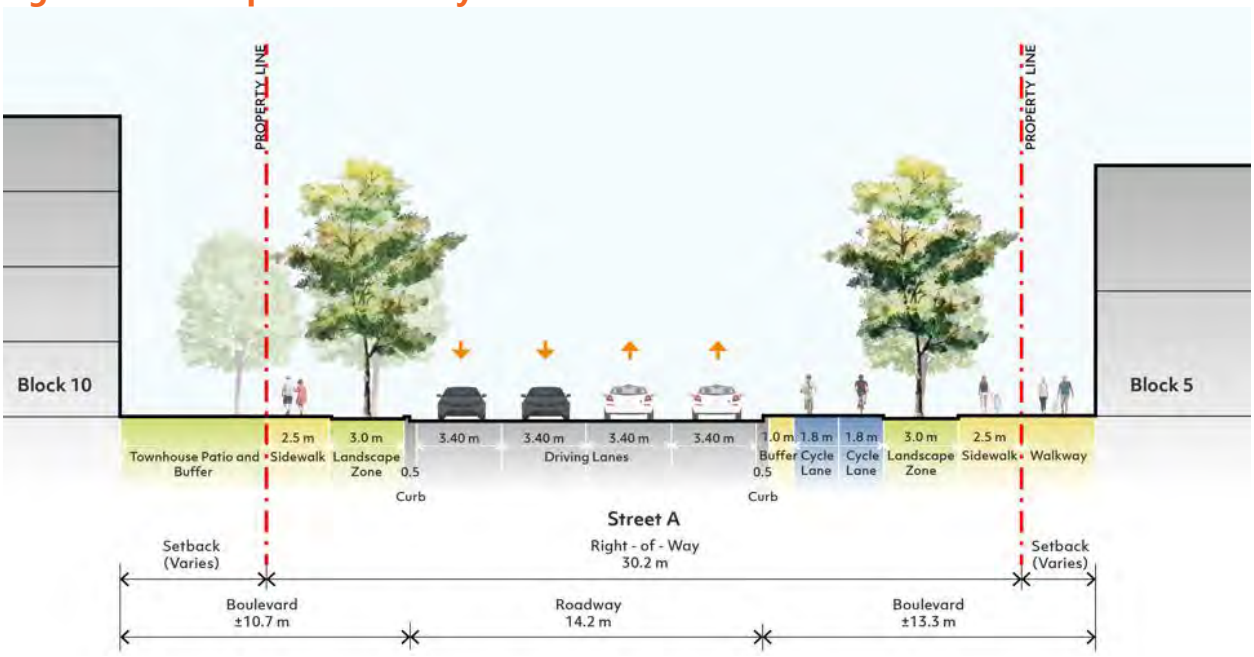
In addition to the proposed sidewalks and cycle tracks, a large trail network is anticipated to be present within the Natural Heritage portions of the proposed development, the park green space, around the SWM ponds and throughout the retail portion of the site. For more information, please refer to the Urban Design Brief included within the overall package submission.

4.5.4 Proposed Cross-Sections

Proposed Parkway Link

The Parkway Link Road (or South Service Road Extension) is planned to be the main spine travel route that connects Waterdown Road and King Road. The cross-section of the proposed roadway is planned to include four 3.4 metres general-purpose lanes (two through lanes in each direction), 2.5 metres sidewalks on both sides and a bidirectional cycle track on the south side of the road. Street A is planned to have intersections at the proposed Municipal Multi-Modal local street, multiple local roads, and a private road providing vehicular access to various other residential and non-residential land uses. **Figure 4-9** illustrates the proposed cross-section of the roadway. Worth noting, depending on the adjacent land use, additional walkway areas may be integrated into the setback between the sidewalk and building.

Figure 4-9 Proposed Parkway Link Road Cross-Section



Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

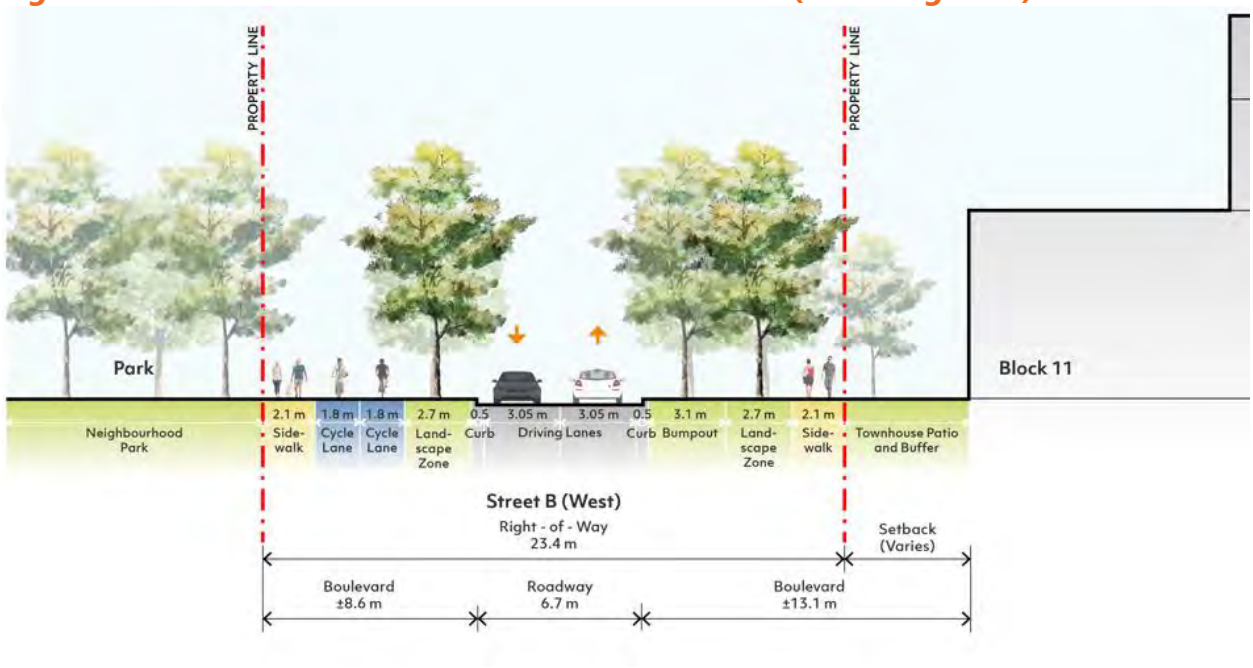
The planned cycle track along the south side of the proposed Parkway Link will provide connections to the existing on-street bicycle lanes on King Road. It is anticipated that the City of Burlington may extend this facility further west along the south side of Alayne Bryk Way to create a direct cycling connection to the existing on-street bicycle lanes on Waterdown Road. Together, this east-west corridor would establish a continuous cycling network between King Road and Waterdown Road corridors, further enhancing connectivity for cyclists to Aldershot GO Station alongside the planned land uses within the subject area.

The City has also expressed interest in the inclusion of a Bus Rapid Transit (BRT) lane on the Parkway Link Road. Although a dedicated lane is not warranted at this time, sufficient space will be maintained within the proposed right-of-way to accommodate a future BRT lane. This approach considers discussions with City staff and ensures flexibility to support long-term transit initiatives.

Proposed Municipal Multi-Modal Local Street

The Multi-Modal Local Street (Street B) runs east-west and connects with Parkway Link Road at the west edge of the subject development. As the Multi-Modal Local Street extends westward, the profile transitions to deter through traffic while optimizing the streetscape. The west segment of the roadway is planned to include two 3.05 metres general-purpose lanes (one through lane in each direction), 2.1 metres sidewalks on both sides, and a bidirectional cycle track on the south side of the road. **Figure 4-10** illustrates the proposed cross-section for the roadway.

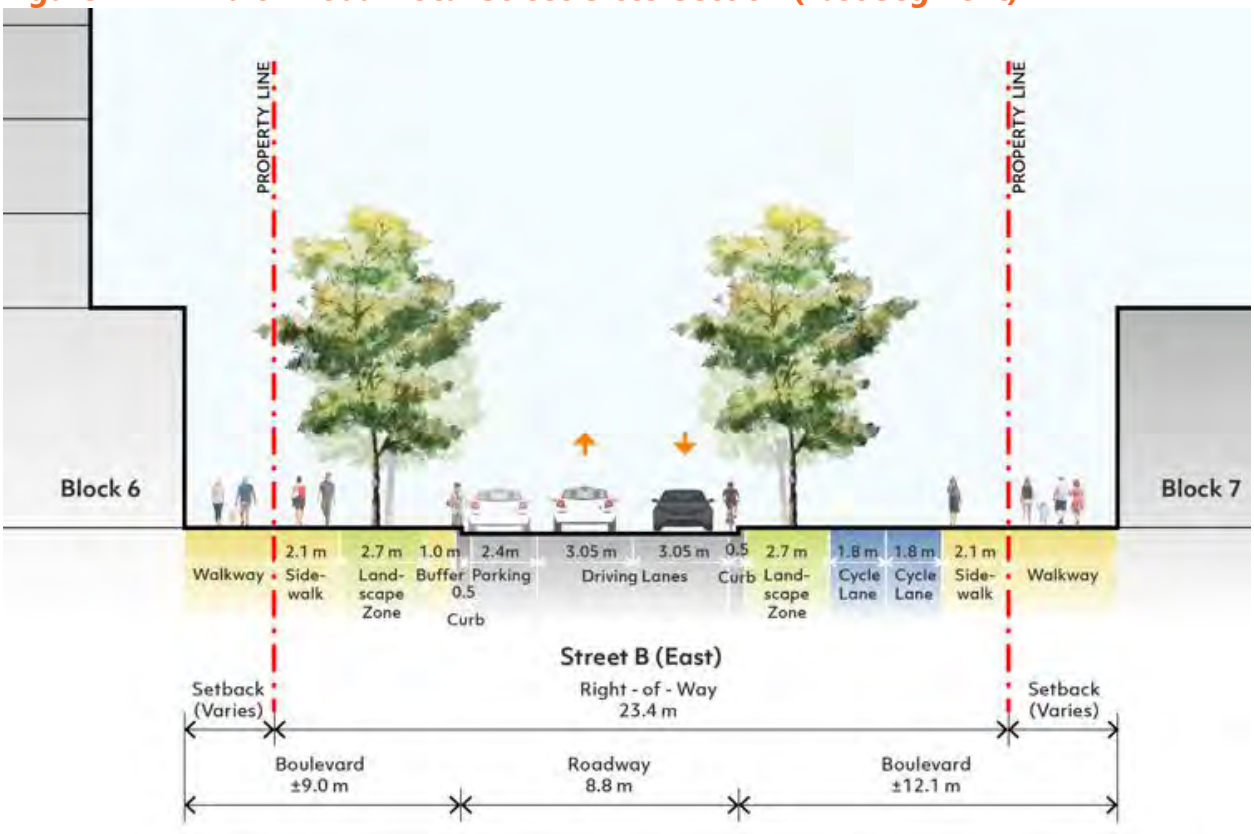
Figure 4-10 Multi-Modal Local Street Cross-Section (West Segment)



Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

As the multimodal local street extends eastward, the profile shifts to support a vibrant public realm. The east segment of the roadway is planned to include two 3.05 metres general-purpose lanes (one through lane in each direction), 2.1 metres sidewalks on both sides, a bidirectional cycle track on the north side of the road, and on-street parking on the south side of the road. **Figure 4-11** illustrates the proposed cross-section for the roadway.

Figure 4-11 Multi-Modal Local Street Cross-Section (East Segment)

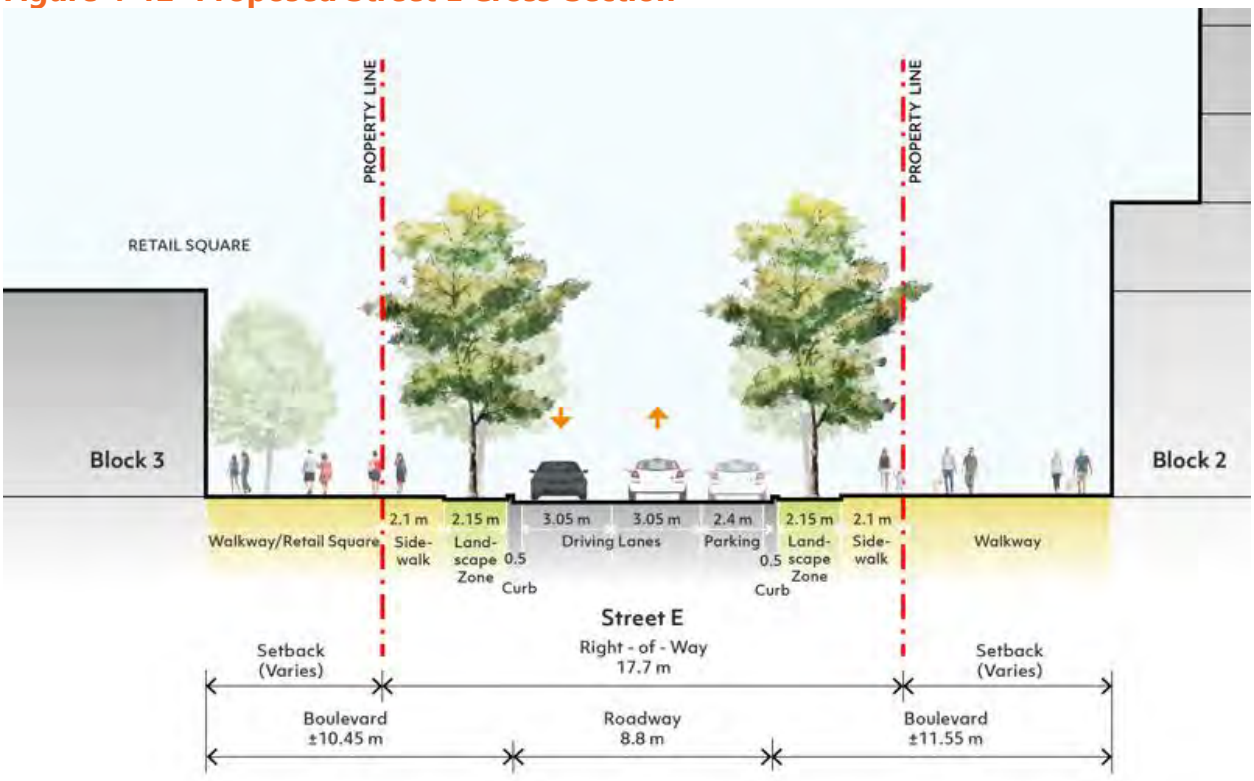


Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

Proposed Street E

The proposed Street E is planned to include two 3.05 metres general-purpose lanes (one through lane in each direction), 2.1 metres sidewalks on both sides, and on-street parking on one side of the roadway. Depending on the adjacent built land use, additional walkway areas may be integrated into the setback between the sidewalk and building. **Figure 4-12** illustrates the proposed cross-section for the roadway.

Figure 4-12 Proposed Street E Cross-Section

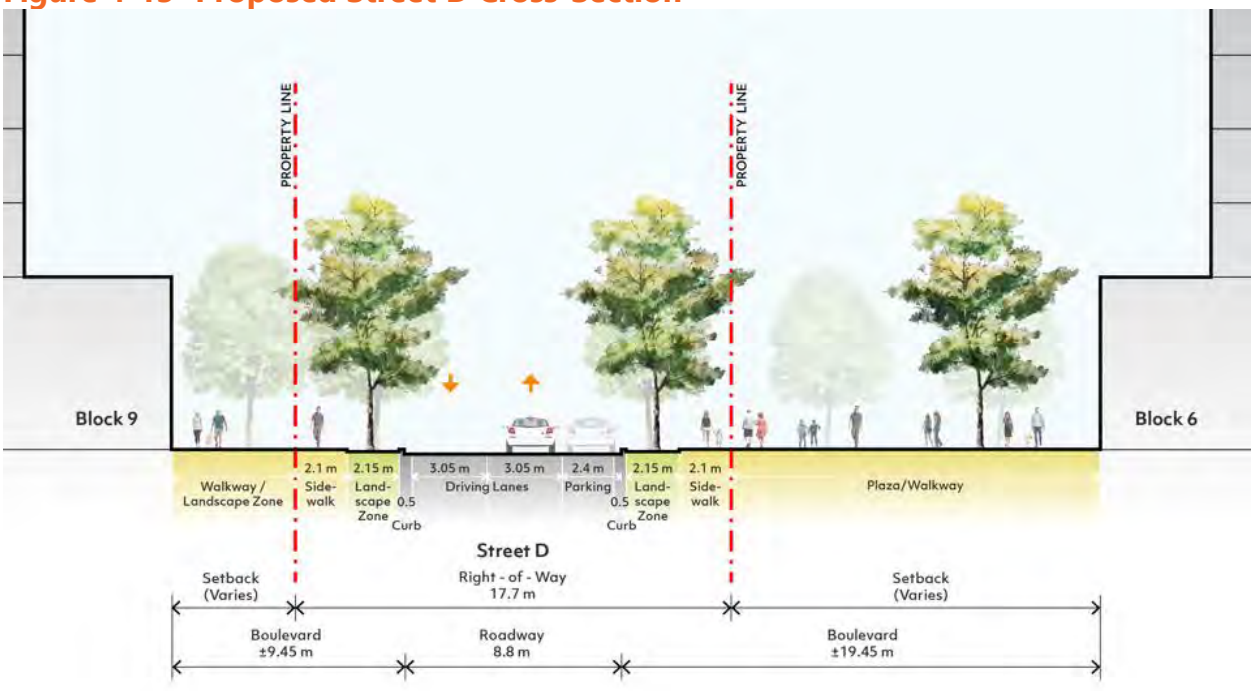


Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

Proposed Street D

The proposed Street D is planned to include two 3.05 metres general-purpose lanes (one through lane in each direction), 2.1 metres sidewalks on both sides, and on-street parking on one side of the roadway. Depending on the adjacent built land use, additional walkway areas may be integrated into the setback between the sidewalk and building. **Figure 4-13** illustrates the proposed cross-section for the roadway.

Figure 4-13 Proposed Street D Cross-Section

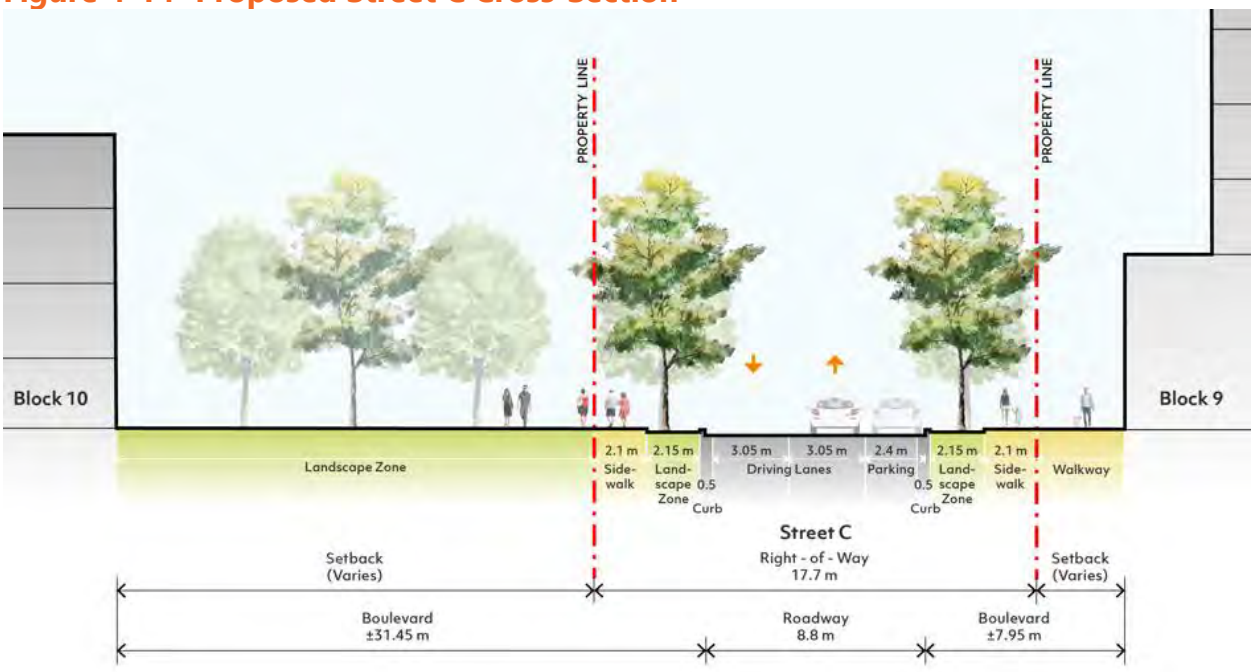


Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

Proposed Street C

The proposed Street C is planned to include two 3.05 metres general-purpose lanes (one through lane in each direction), 2.1 metres sidewalks on both sides, and on-street parking on one side of the roadway. Depending on the adjacent built land use, additional walkway areas may be integrated into the setback between the sidewalk and building. **Figure 4-14** illustrates the proposed cross-section for the roadway.

Figure 4-14 Proposed Street C Cross-Section

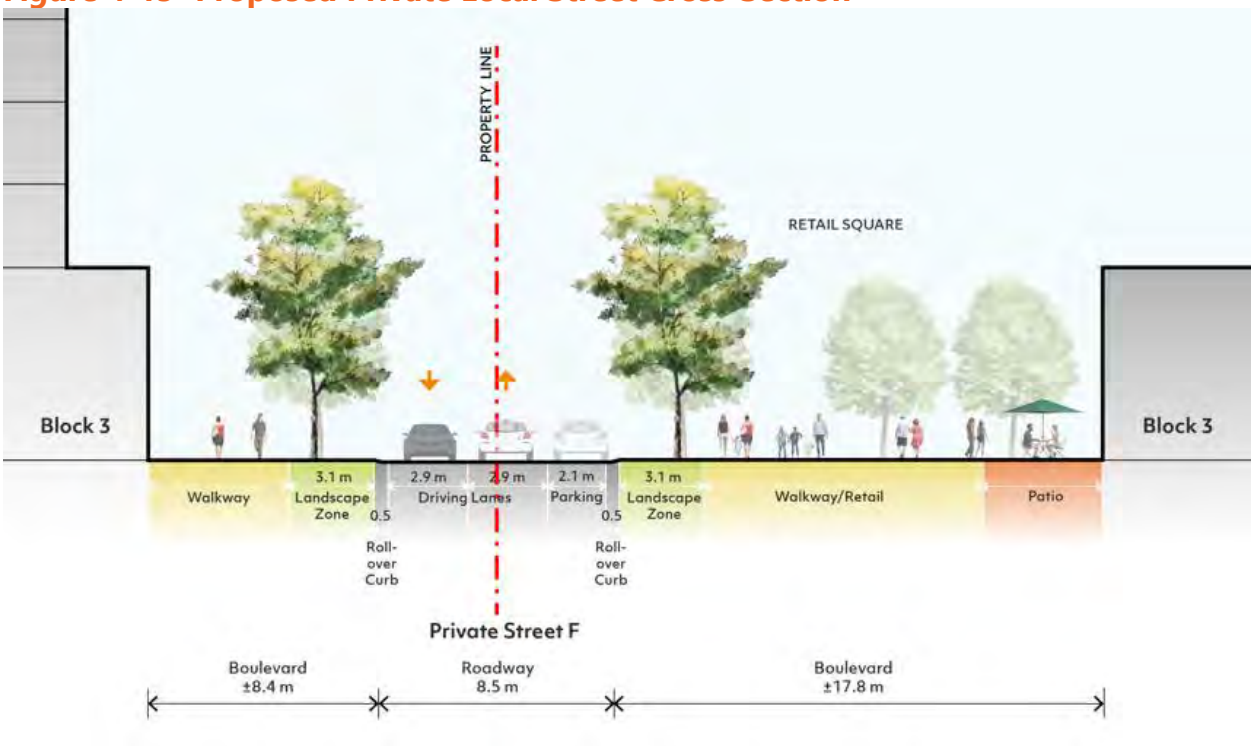


Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

Proposed Private Local Street (Condominium Street)

A private local street is planned to be located within the mixed-use hub. The proposed condominium street is planned to include two 2.9 metres general-purpose lanes (one through lane in each direction), walkways on both sides, and on-street parking on one side of the roadway. **Figure 4-15** illustrates the proposed cross-section for the roadway.

Figure 4-15 Proposed Private Local Street Cross-Section



Source: Alinea 1200 King Road Draft Urban Design Brief, 2026

4.5.5 Justification for Proposed R.O.W. Reductions

The street cross-sections and associated right-of-way (ROW) widths within the 1200 King Road development have been deliberately designed to create a safe, multi-modal, and sustainable internal road network. The layout directs higher-volume traffic to the primary spine route (Parkway Link / Street A), while narrower local streets prioritize active transportation, reduce vehicle speeds through natural traffic calming, and enhance separation between modes. This approach fully aligns with the City of Burlington's Integrated Mobility Plan (complete streets principles), the TAC Geometric Design Guide for Canadian Roads, and comparable precedents in recently approved MTSA frameworks. As per **Section 4.5.4**, seven cross-sections are proposed within the 1200 King Street Development lands. Within the lands, four (4) separate ROWs are proposed, all with their own street component design. This includes:

Proposed Parkway Link (Street A) is designed to be the main spine route through the development. This is further supported by the proposed roadway components and sizing. The Parkway Link proposed a 30.2 metress right-of-way. This includes four (4) 3.4 metress drive lanes, 2.1 metress sidewalks, 3.1 metress landscaped areas on both sides of the roadway, a 1 metress buffer and a 1.8 metress cycle track on one side of the roadway. This results in an overall roadway width of 14.2 metress. The larger lane widths promote this route as the preferred travel option when compared to other cross sections.

All components of the roadway are aligned with design principles include TAC Geometric Design Guide for Canadian Roads. This includes:

- Lane widths –The Parkway Link is anticipated to include bus traffic as well as be the main delivery route through the development. The 3.4 metres lane widths are deemed acceptable when compared to TAC guidelines, which propose a minimum of 3.3 metres lane widths where there is anticipated bus and larger truck traffic.
- Sidewalk widths - Similarly, the 2.1 metres sidewalks fall within the acceptable limits for sidewalks through TAC and City of Burlington Guidelines. As a general guideline, a 1.8 metres minimum sidewalk is desired to remain AODA compliant. Additionally, the proposed sidewalks include a 3.0 metres buffer from both the drive lane and proposed cycle track, providing additional separation of travel modes. The 2.1 metres proposed sidewalks are thus deemed appropriate along the Parkway Link from both a design and AODA standpoint.
- Cycle Track widths – The Parkway Link proposes a bidirectional 1.8 metres (3.6 metres total) protected cycle track. The proposed width of the cycle tracks meets the minimum requirement of 1.5 metress. Additionally, the cycle track includes a 1 metres buffer from the road surface, which meets the minimum requirement of 0.3 metress from a travel lane and 0.6 metress from an on-street parking lane. As such, the overall cycle facilities are deemed to be acceptable widths.

The various street components are all shown to meet or exceed minimum requirements set out in the TAC Geometric Design Guide for Canadian Roads, providing sufficient spacing between modes while improving safety, all within the 30.2 metres ROW. As such, the proposed 30.2 metres ROW for the Parkway Link is deemed appropriate.

Multimodal Local Street (Street B) services the northern portion of the site, including the majority of residential blocks, the central park, institutional and mixed-use commercial blocks. Street B will connect to King Road opposite Hydro Lane, connect directly to Street A, as well as connections through local roads C, D and E. The proposed multimodal street as discussed above, is split into two separate cross-section designs, east and west of Street D, however, both cross sections will be under the same ROW of 23.4 metress.

The Multi-Modal Street to the east is designed to support a vibrant public realm, prioritizing retail continuity and on-street convenience. The Multi-Modal Local Street B to the west is designed to provide direct access to residences, with a key goal entailing the preservation of the residential street character from Street D to the Parkway Link. As such, the Multi-Modal Local Street B east and west were designed in such a way to ensure minimum standards for cross-section elements were met, traffic calming measures were implemented, while still maintaining each segment's goal.

- Multi-Modal Local Street East includes two 3.05 metres lanes, a 2.4 metres parking lane, 1.8 metres bidirectional cycle tracks, and a 2.1 metres sidewalk on both sides of the roadway. Cycle tracks and sidewalks are separated from the vehicular travel lanes and parking lanes by a 2.7 metres landscaped area and a 2.7 metres landscape area and 1 metres additional buffer, respectively.
- Multi-Modal Local Street West, like the east portion, will have two 3.05 metres lanes, 1.8 metres bidirectional cycle tracks, and a 2.1 metres sidewalk on both sides of the roadway.
    - As Street B acts as the only other E-W roadway within the development, appropriate traffic calming measures will be required to aid in reducing the amount of cut-through traffic on the Multi-Modal Local Street B West, while reinforcing that the majority of vehicle users should use Street A. Including a reduced ROW along Street B assists by giving Street B a different operational and visual feel as compared to Street A.
    - Reduced drive aisles and pavement widths are in accordance with the latest best practices in the industry, while maintaining sufficient clearance in accordance with minimum design standards
    - The narrower lane widths along Street B will have a positive impact on safety along the corridor. They both reduce travel speeds and act as a natural traffic calming measure.
    - The proposed ROW and cross sections also result in a positive environmental impact by reducing overall paved area and promoting alternative modes of travel such as walking, cycling, etc. Additionally, the reduction of pavement surfaces results in a reduction of the overall stormwater runoff, thus reducing overall impacts to SWM infrastructure.

The various street components are all shown to meet or exceed minimum requirements set out in the TAC Geometric Design Guide for Canadian Roads, providing sufficient spacing between modes, improving safety all within the 23.4 metres ROW. The reduced proposed ROW acts as a natural traffic calming measure, aiding in the reduction of the overall operating speed, improving safety while promoting AT as a viable option. As such, the proposed 23.4 metres ROW for the Parkway Link is deemed appropriate.

Local Streets (C, D & E) all propose a similar ROW of 17.7 metress, with two 3.05 metres lanes, a 2.4 metres on-street parking lane, 2.15 metres landscaping and 2.1 metres sidewalks on both sides of the roadway. Like both Street A and Street B, the various components that make up the ROW all fall within TAC standards and design guidelines. The reduced ROW and narrow lanes will act as a natural traffic calming measure similar Street B's operations, however, all the local roads are anticipated to have less traffic along each roadway than Street B. Akin to Street A and Street B, the proposed ROW are deemed appropriate for all

local roads within the development giving the same benefits of safety, natural traffic calming and environmental impacts as Street B.

Appleby's MTSA

In October 2025, the City developed the Appleby GO MTSA Mobility Framework. The Appleby GO MTSA Mobility Framework builds from the OPA 2 to inform how the network will function in practice. This work will support the City's future considerations of reductions to public right-of-way allowances where the design meets the City's objectives to achieve all mobility needs. Through discussions with municipal staff indicated that the recently approved Appleby's MTSA Framework should be used as a reference for design principles of the 1200 King ROW and cross-section requirements.

A review of Appleby's MTSA Framework revealed that the majority of secondary (lower order roads) within the MTSA are shown to include 3.05 metres drive lanes, a 2.4 metres parking lane on one side of the street, 1 metres utility buffers, landscape areas and a 2 metres sidewalk on both sides of the roadway. This serves as a direct comparison to the local roads proposed within the 1200 King Road development. All three local roads will include almost identical facilities within the ROW, with the 1200 King Street development providing a larger sidewalk.

Both Street B east and west segments directly relate to the Appleby's MTSA Framework for secondary streets. This includes the 3.05 metres lanes, sidewalks, and landscape buffers. Where differences are observed, Street B for 1200 King Street will include a cycle track.

All proposed ROW for the 1200 King Street Development are shown to include similar components and widths to the recently approved Appleby's MTSA Framework, including drive lanes, sidewalks, on-street parking lanes, landscaped areas, applicable utility buffers and cycle tracks. The various components of each proposed cross-section are shown to meet the minimum requirement set out in TAC Geometric Design Guide for Canadian Roads, providing sufficient spacing for all modes.

The narrow lanes proposed on all local streets and the Multi-Modal Local Street help in providing a natural traffic calming measure along the roadways. The narrow lanes reduce operating speed, enhancing safety for all users. Narrow lanes also add to a positive environmental impact with reduced paving required, and a shift to sustainable modes of transportation such as walking or cycling.

As such, it is our professional opinion that the proposed ROWs and cross-sections (as detailed in **Section 4.5.4**) are appropriate, defensible, and strongly aligned with the design principles of the Appleby GO MTSA Framework.

4.5.6 Justification for Proposed Alignment - Parkway Link

The future Parkway Link Extension to King Road is planned to be located approximately 170 metress south of the Hydro Lane intersection on King Road, and just over 300 metress north of the existing CNR overpass. The proposed alignment of the South Service Road Extension is generally along the southern boundary of the site, keeping most of the proposed development uses on the north side of the new arterial road (excluding the arena and hotel uses). The southern alignment of the arterial road within the site offers several benefits to the existing transportation network compared to a northern alignment including:

- **Overall Traffic Flow** through the site will be improved with the alignment being the most southerly access point to the site. It is anticipated that the majority of site generated traffic entering and exiting the site will be travelling to and from the south on King Road towards destinations such as, but not limited to, the QEW, Highway 403, Industrial areas of the City of Burlington, and the City of Hamilton. Additionally, for any traffic utilizing the site as a cut-through to either the Aldershot Station, Highway 403 access, or to access King Road, the arterial will be utilized. If the arterial were to be located to the north on King Road, it is likely that a large proportion of traffic approaching the site from the south would enter the site via another, more southern connection on King Road using a lower-order road that may not be designed to handle high volumes of traffic as efficiently as an arterial roadway. As such, the proposed placement of the arterial promotes greater use of the arterial road to access the site and the Aldershot GO Station.
- **Bus Rapid Transit (BRT) Implementation** would be improved with the current proposed alignment of the Parkway Link. When a BRT is deemed required and utilizes the Parkway Link, it is assumed that stops will be included along the Parkway Link within the site boundaries. As such, having the Parkway Link along the southern boundary of the site allows more direct access to land uses such as the arena, hotel, institutional campuses, retail, daycare and other non-residential trip-generating land uses. The inclusion of transit along the Parkway Link south adjacent to non-residential uses allows visitors to the site reliable non-vehicular access, reinforces TDM and reduces vehicular traffic on site. The proposed development will benefit from this greatly when special events are ongoing at the arena or hotel.
- **Additional space from CN Rail** to development will occur with a southern alignment of Parkway Link Road. This additional space will help mitigate potential land use conflicts with the rail corridor and yard and improve the experience of residents an users, increasing pedestrian distance from the CN Rail.
- **Reduced Natural Heritage System Impacts** occurs due to a southern alignment of the Parkway Link Road. The alignment of the Parkway Link to the southern boundary reduces the overall footprint of the roadway through the natural heritage areas. For additional information on the environmental benefits, please refer to the Environmental Impact Assessment prepared by NRSI, which concludes that the

proposed alignment is the only alignment that adequately protects natural heritage features for the long term, minimizes negative impacts on wetlands, Significant Woodlands, potential SAR habitat and Falcon Creek, and maintains ecological function and connectivity.

- **Vulnerable User Safety** will increase as the majority of residential land uses, the central park, retail, and institutional campuses, are all located to the north of the proposed alignment of the Parkway Link. This allows for a significant portion of traffic to flow south of said land uses and the general operations of the site. If the proposed Parkway Link were to align with Hydro Lane, high volumes of traffic would be routed in front of the residential uses, through the designated pedestrian and cycle crossings, and would therefore catalyze the potential for a vehicular/vulnerable user collision. This is in direct conflict with the vision and goal of the 1200 King Street development which aims to provide safe and appealing living to residents, in addition to accessibility for visitors and vehicles.

In our professional opinion, the proposed southern alignment of the Parkway Link is the optimal configuration for the 1200 King Road development. By positioning the arterial along the southern boundary, it maximizes multi-modal efficiency, supports future transit priority, reduces environmental and rail-related impacts, and prioritizes vulnerable-user safety through complete streets principles. This approach fully aligns with Burlington's Integrated Mobility Plan vision for safe, accessible, sustainable, balanced, and liveable mobility emphasizing people.

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5 SITE GENERATED TRAFFIC

5.1 Site Trip Generation

Site trip generation are estimated using the Institute of Transportation Engineers (ITE) 12th Edition Trip Generation manual. According to the latest concept plan, the development envisions a mixed-use development concept, including high-density residential, a retail district, a post-secondary campus, including a mixed-use campus plaza with high-density residential for students, and an entertainment district, including an arena and hotel. ITE Land Use Codes (LUCs) and site statistics are summarized in **Table 5-1**.

Table 5-1 ITE Land Use Codes and Summary of Site Statistics

Land Area by Use	Summary	ITE Land Use Code (LUC)
Residential (Blocks 9, 10, 11, 12, 13, 14)	5,912 Residential Units	LUC 220/LUC 222
Mixed-Use Residential (Blocks 1, 2, 3, 4)	2,608 Residential Units	LUC 221/LUC 222
Campus Mixed-Use (Block 6, 7)	302 Residential Units Up to 300 Students 386 m^2 Retail GFA	LUC 222/LUC 540/LUC 821
Campus/Satellite (Block 8)	Up to 300 Students	LUC 540
Visitor (Travel) Centre	409 m^2 GFA	LUC 955
Arena (Block 5)	16,275 m^2 Retail GFA	LUC 465
Hotel (Block 5)	440 Hotel Units	LUC 540
Community Centre (Block 5)	12,830 m^2 GFA	LUC 495
Day Care (Block 1)	369 m^2 GFA	LUC 565
Office Building (Block 9)	13,120 m^2 GFA	LUC 710

Worth noting, where person-trip data were not provided in the ITE Trip Generation manual, vehicle trips were converted to person trips using a rate of 1.25 person trips per vehicle trips. This was derived from existing traffic patterns within the City of Burlington that include an average vehicular occupancy of 1.16 people per vehicle, and the existing 9% AT mode share as discussed in **Section 4.5.3**, totalling 1.25 person trips per vehicle trip.

The described methodology is consistent with guidance in the ITE Trip Generation Handbook 3rd Edition. PM trip generation rates were applied to estimate Saturday peak-hour trip generation, specifically for LUC 222 Multi-Family Housing (High-Rise) and LUC 955 Travel (Visitor) Centre.

For the Arena (LUC 465), only a single data point was available within ITE's database. Therefore, trip rates from the Recreational Community Centre (LUC 495) were applied to estimate trips generated for the Arena located in Block 5. Additionally, PM trip generation rates were applied to estimate Saturday peak-hour trip generation as a conservative approach.

Table 5-2 summarizes the estimated total trip generation of the development.

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Table 5-2 Site Trip Generation

Land Use	Parameters	Peak Hour Trip Generation								
		Weekday AM			Weekday PM			Saturday Midday		
		In	Out	Total	In	Out	Total	In	Out	Total
LUC 220 Multi-Family Housing (Low rise)	Fitted Curve Equation	T = 0.31 X + 21.81			T = 0.42 X + 29.86			Average Rate Used		
	Trip Distribution (	22%	78%	100%	63%	37%	100%	38%	62%	100%
	Gross Auto Trips	21	75	96	83	48	131	45	73	118
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	21	75	96	83	48	131	45	73	118
LUC 221 Multi-Family (Mid-Rise):	Fitted Curve Equation	T = 0.58 X - 16.32			T = 0.49 X + 5.76			Average Rate Used		
	Trip Distribution	35%	65%	100%	60%	40%	100%	51%	49%	100%
	Gross Auto Trips	18	34	52	38	25	63	21	21	42
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	18	34	52	38	25	63	21	21	42
LUC 222 Multi-Family (High-Rise):	Fitted Curve Equation	Average Rate Used			Average Rate Used			Average Rate Used		
	Trip Distribution	28%	72%	100%	54%	46%	100%	54%	46%	100%
	Gross Auto Trips	806	2072	2878	2103	1791	3894	2103	1791	2103
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	806	2072	2878	2103	1791	3894	2103	1791	2103
LUC 822 Strip Retail Plaza (<40,000 ft^2)	Fitted Curve Equation	Average Rate Used			Average Rate Used			Average Rate Used		
	Trip Distribution	55%	45%	100%	50%	50%	100%	51%	49%	100%
	Gross Auto Trips	83	68	151	121	121	242	130	125	255
	Person Trip Conversion Rate	1.25			1.25			1.25		
	Gross Person Trips	104	85	189	152	151	303	163	156	319

Land Use	Parameters	Peak Hour Trip Generation								
		Weekday AM			Weekday PM			Saturday Midday		
		In	Out	Total	In	Out	Total	In	Out	Total
LUC 310 Hotel	Fitted Curve Equation	T = 0.49 X - 18.48			T = 0.85 X - 55.22			Average Rate Used		
	Trip Distribution	52%	48%	100%	51%	49%	100%	51%	49%	100%
	Gross Auto Trips	102	95	197	163	156	319	106	101	207
	Person Trip Conversion Rate	1.25			1.25			1.25		
	Gross Person Trips	128	118	246	203	196	399	132	127	259
LUC 540 Institutional/ Campus (Post-Secondary Institution)	Fitted Curve Equation	Ln(T) = 0.52 Ln(X) + 2.34			Ln(T) = 0.68 Ln(X) + 0.81			-		
	Trip Distribution	81%	19%	100%	56%	44%	100%	-	-	-
	Gross Auto Trips	234	55	289	97	77	174	-	-	-
	Person Trip Conversion Rate	1.25			1.25			-		
	Gross Person Trips	292	69	181	122	96	218	-	-	-
LUC 710 General Office Building	Fitted Curve Equation	T = 1.24 X + 35.45			T = 1.25 X + 45.35			-		
	Trip Distribution	88%	12%	100%	15%	85%	100%	-	-	-
	Gross Auto Trips	78	11	89	15	84	99	-	-	-
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	78	11	89	15	84	99	-	-	-
LUC 495 Recreational Community Centre (Used for Arena in Block 5)	Fitted Curve Equation	Average Rate Used			Average Rate Used			Average Rate Used		
	Trip Distribution	74%	26%	100%	40%	60%	100%	54%	46%	100%
	Gross Auto Trips	73	25	98	65	97	162	53	45	98
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	73	25	98	65	97	162	53	45	98
	Fitted Curve Equation	Average Rate Used			Average Rate Used			-		

Land Use	Parameters	Peak Hour Trip Generation								
		Weekday AM			Weekday PM			Saturday Midday		
		In	Out	Total	In	Out	Total	In	Out	Total
LUC 565 Daycare	Trip Distribution	53%	47%	100%	47%	53%	100%	-	-	-
	Gross Auto Trips	7	6	13	7	6	13	-	-	-
	Person Trip Conversion Rate	1.25			1.25			-		
	Gross Person Trips	8	8	16	8	8	16	-	-	-
LUC 955 Travel (Visitor Centre)	Fitted Curve Equation	Average Rate Used			Average Rate Used			Average Rate Used		
	Trip Distribution	51%	49%	100%	49%	41%	100%	51%	49%	100%
	Gross Auto Trips	12	12	24	16	16	32	16	16	32
	Person Trip Conversion Rate	1.25			1.25			1.25		
	Gross Person Trips	15	15	30	20	20	40	20	20	40
LUC 495 Recreational Community Centre (Used for Arena in Block 5)	Fitted Curve Equation	-			Average Rate Used			Average Rate Used		
	Trip Distribution	-	-	-	40%	60%	100%	40%	60%	100%
	Gross Auto Trips	-	-	-	82	124	206	82	124	206
	Person Trip Conversion Rate	-			-			-		
	Gross Person Trips	-	-	-	82	124	206	82	124	206
Total Gross Auto Trips		1434	2453	3887	2789	2546	5335	2556	2296	4852
Total Gross Person Trips		1543	2512	4055	2891	2640	5531	2604	2290	4894

A total of 4,055 gross person site trips, consisting of 1,543 inbound and 2,512 outbound trips, are predicted to be generated by the subject site during the AM peak hour. During the PM peak hour, 2,891 inbound and 2,640 outbound gross person site trips are predicted, totaling 5,531 trips. During Saturday peak hour, 2,604 inbound and 2,290 outbound gross person site trips are predicted, totaling 4,894 trips.

5.2 Multi-Use Site Synergy and Pass-by Interactions

The proposed development is anticipated to include a mixture of residential, hotel, campus, retail, arena, office, daycare and community centre. Based on the complementary nature of the on-site uses, there is the potential for interaction among the on-site uses, where one trip can include multiple destinations within the site. This will result in the total trip generation of external trips, trips entering and exiting the site, translating to less than the sum of each single use trip generation. As such, on-site synergy is applicable.

ITE Trip Generation Handbook, 3rd Edition, provides internal trip capture rates for land use pairs (i.e. Residential and Restaurant) to account for the on-site synergies. As such, internal capture trips were calculated and subtracted from the forecasted site trips in order to estimate the net external site traffic to be used in the analysis. **Table 5-3** summarizes the on-site synergy rates from ITE Trip Generation Handbook 3rd Edition.

Table 5-3 On-Site Synergy Reduction Percentages

Trip Origins						
AM Peak Hour		**To**				
		Office	**Retail**	**Entertainment**	**Residential**	**Hotel**
From	**Office**	-	28%	0%	1%	0%
	Retail	29%	-	0%	14%	0%
	Entertainment	0%	0%	-	0%	0%
	Residential	2%	1%	0%	-	0%
	Hotel	75%	14%	0%	0%	-
PM Peak Hour		**To**				
		Office	**Retail**	**Entertainment**	**Residential**	**Hotel**
From	**Office**	-	20%	0%	2%	0%
	Retail	2%	-	4%	26%	5%
	Entertainment	2%	21%	-	8%	2%
	Residential	4%	42%	0%	-	3%
	Hotel	0%	16%	0%	2%	-
Trip Destinations						
AM Peak Hour		**From**				
		Office	**Retail**	**Entertainment**	**Residential**	**Hotel**
To	**Office**	-	4%	0%	3%	3%
	Retail	32%	-	0%	17%	4%
	Entertainment	0%	0%	-	0%	0%
	Residential	0%	2%	0%	-	0%
	Hotel	0%	0%	0%	0%	-
PM Peak Hour		From				

		Office	Retail	Entertainment	Residential	Hotel
To	**Office**	-	31%	6%	57%	0%
	Retail	8%	-	4%	10%	2%
	Entertainment	1%	26%	-	0%	0%
	Residential	4%	46%	4%	-	0%
	Hotel	0%	17%	1%	12%	-

The proposed site includes a high density of retail, daycare, hotel, residential, arena and office land uses. As such Pass-by interactions were deemed not relevant to the site, as the majority of land uses are classified as destination land uses (Residential, Arena, Campus, Daycare, etc.). This reduces the convenience stops from users along the surrounding street network.

See **Appendix D** for detailed multi-use site synergy and pass-by reduction calculations and subsequent site-generated traffic volumes.

5.3 Mode Split

The City of Burlington's IMP, as discussed in **Section 4.5.3** summarizes existing (2023) mode share percentages. This includes a total non-auto mode share of 9%. The City of Burlington IMP also includes proposed 2051 Mode Share Targets, which result in a non-auto mode share of 30%. The increase of non-auto modes is a result of the planned infrastructure upgrades and awareness that the City is anticipated to complete to promote an increase in walking, cycling and transit riders compared to auto drivers.

TYLin interpolated the values to obtain mode share percentages, which were applied to the 2031 total buildout, 2036 5-year horizon and 2041 10-year horizon site-generated traffic. These values were applied to both the AM and PM peak-hour site-generated traffic. It should be noted that as a conservative approach, further mode share reductions were not applied to background traffic or growth. Mode split percentages are summarized in **Table 5-4** below.

Table 5-4 Mode Split Percentages

Mode	2023	2031	2036	2041	2051
Auto	91%	85.0%	81.2%	77.5%	70%
Walking	5%	6.1%	6.9%	7.6%	9%
Cycling	1%	2.5%	3.3%	4.2%	6%
Transit	3%	6.4%	8.6%	10.7%	15%
Total	100%	100%	100%	100%	100%

See **Appendix D** for detailed Mode Split calculations and subsequent site generated traffic volumes.

5.4 Site Trip Distribution and Assignment

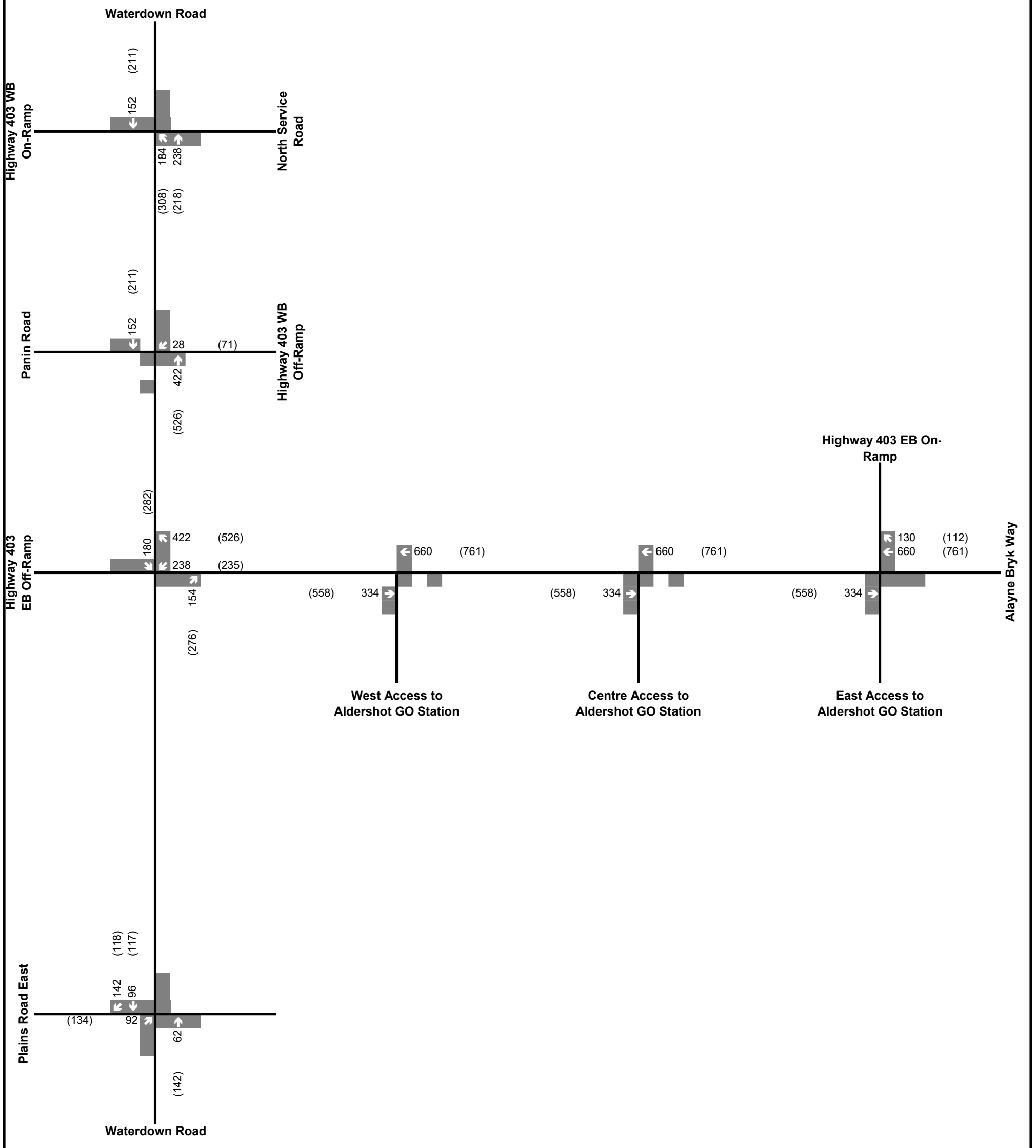
The distribution of site traffic was derived from 2016 Transportation Tomorrow Survey (TTS) summary data for the Traffic Analysis Zones (TAZ) 4051, 4052, 4053 (subject site zone), 4054, 4055, 4057, 4458, 4088, and 4091 and assigned to the road network accordingly. TTS data can be found in **Appendix E**.

Figure 5-1, Figure 5-2 and **Figure 5-3** illustrates the total site traffic assigned to the local road network for the future horizons, with the model splits discussed in **Section 5.3**.

Table 5-5 summarized the directional distribution of site traffic for the residential and for all other land uses. Residential land uses were reviewed separately from all other land uses as residential uses generally have a different trip distribution when compared to retail, office, arena, hotel etc.

Table 5-5 Site Trip Distribution

Direction	A.M. Inbound	A.M. Outbound	P.M. Inbound	P.M. Outbound
Northwest	8%	6%	4%	4%
North	3%	3%	2%	3%
Northeast	21%	20%	19%	19%
East	18%	34%	28%	25%
Southeast	14%	11%	16%	13%
South	7%	6%	9%	9%
Southwest	15%	12%	11%	14%
West	15%	10%	10%	12%
Total	**100%**	**100%**	**100%**	**100%**



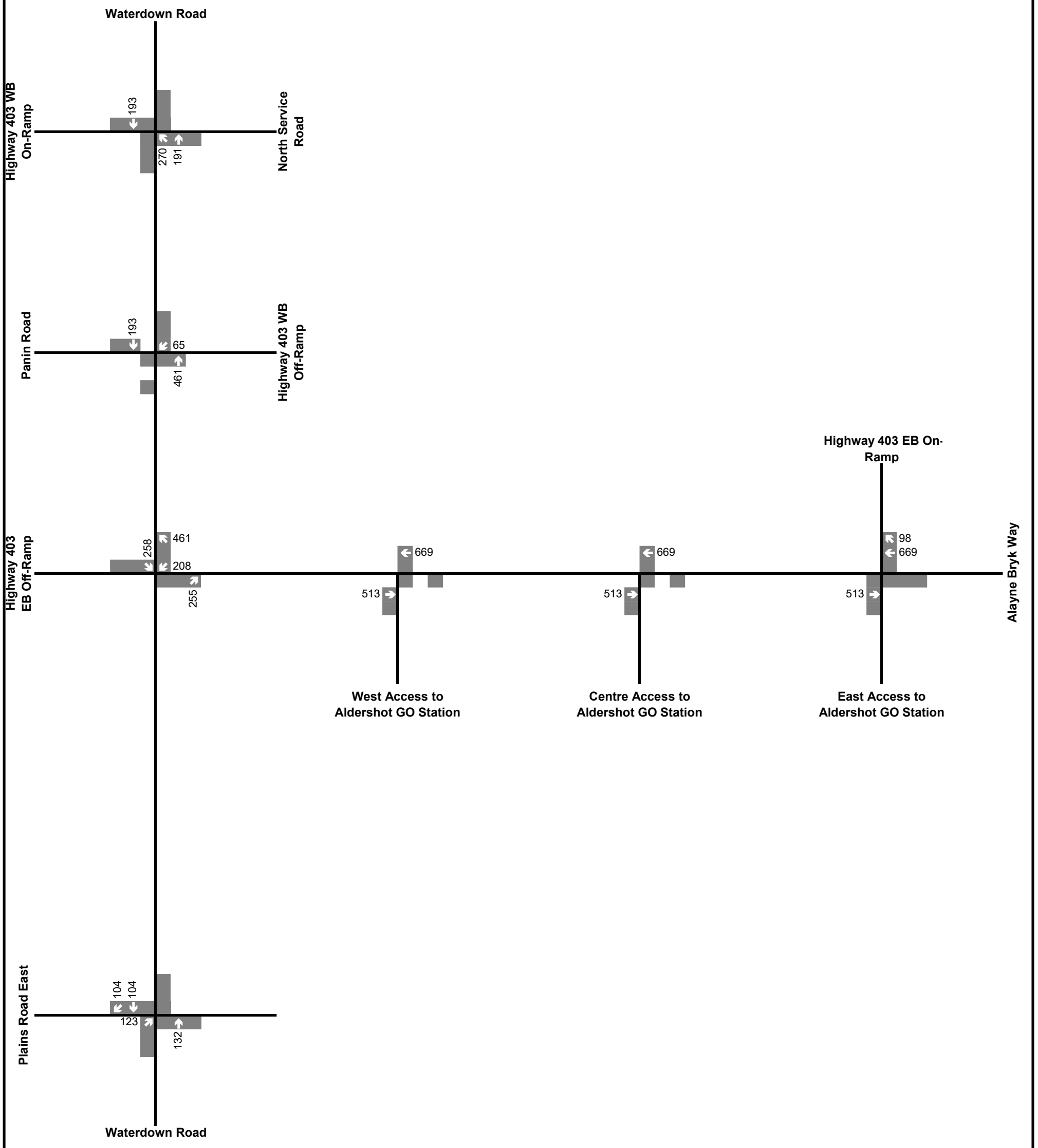
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-1a

Western Study Area (External Intersections)
2031 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin

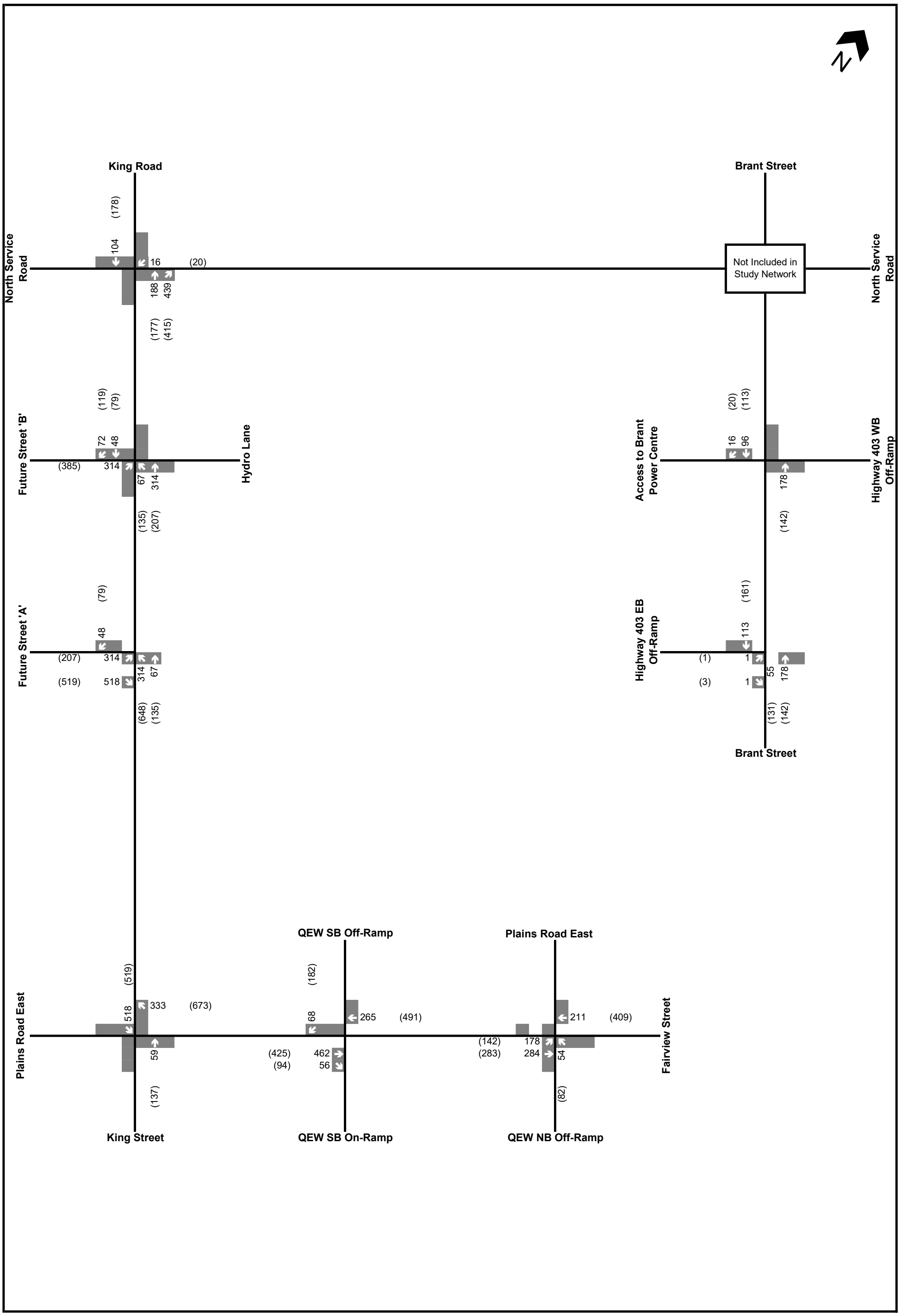


Legend

xx Saturday Peak Hour Traffic

Figure 5-1b

Western Study Area (External Intersections)
2031 Site Trips Saturday Peak Hour Traffic Volumes

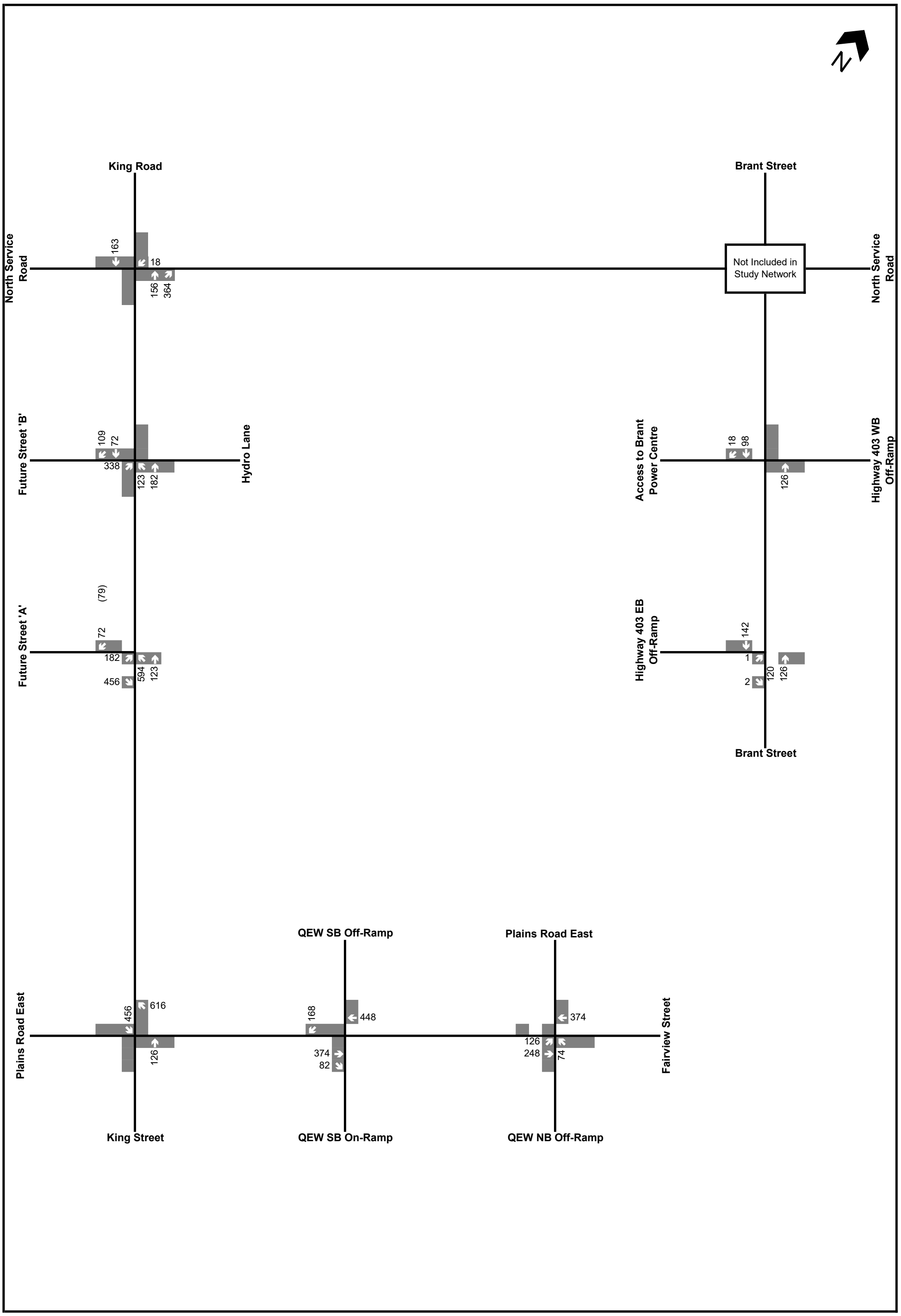


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-1c

Eastern Study Area (External Intersections)
2031 Site Trips AM&PM Peak Hour Traffic Volumes



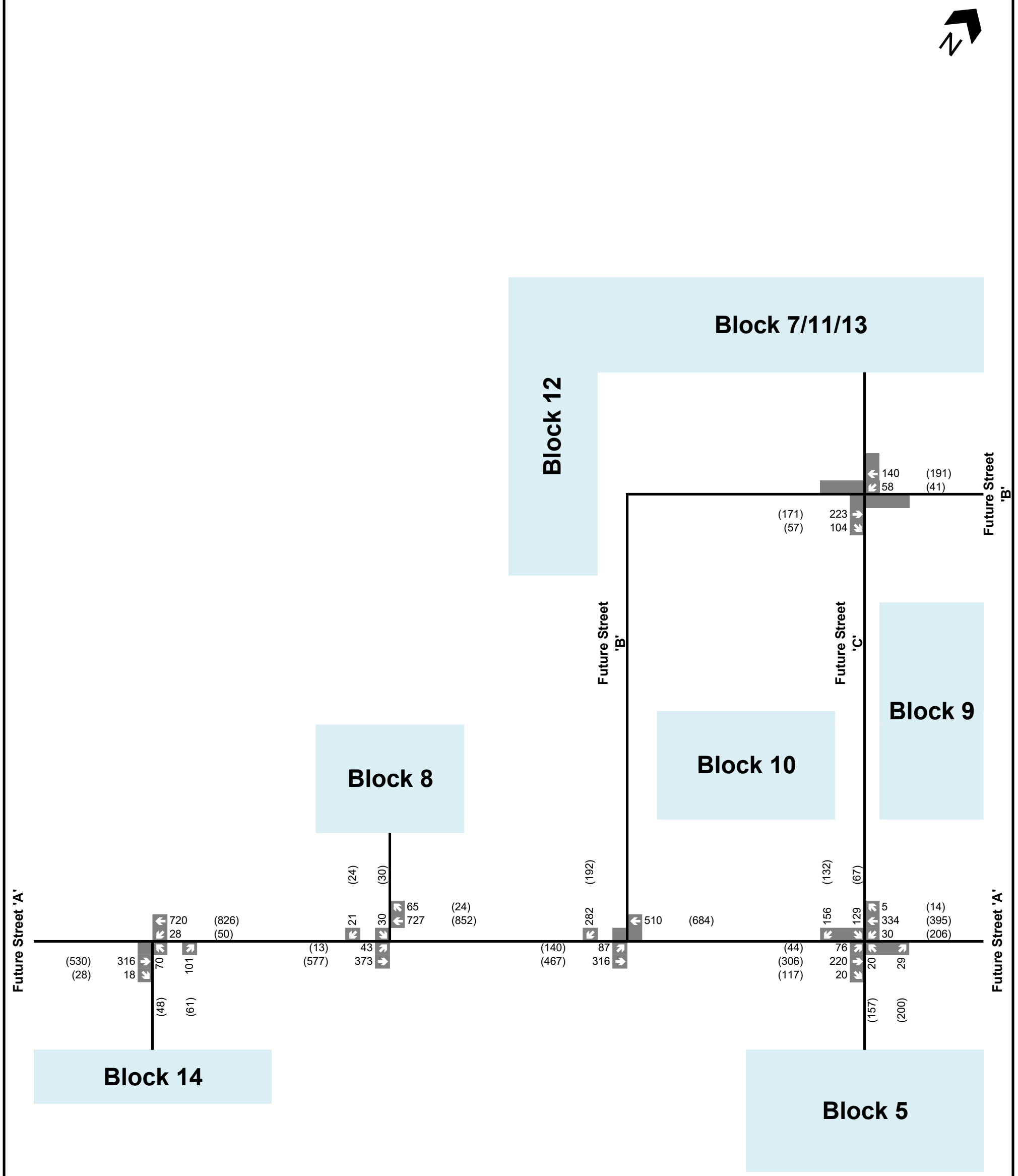
Legend

xx Saturday Peak Hour Traffic Volumes

Figure 5-1d

Eastern Study Area (External Intersections)
2031 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



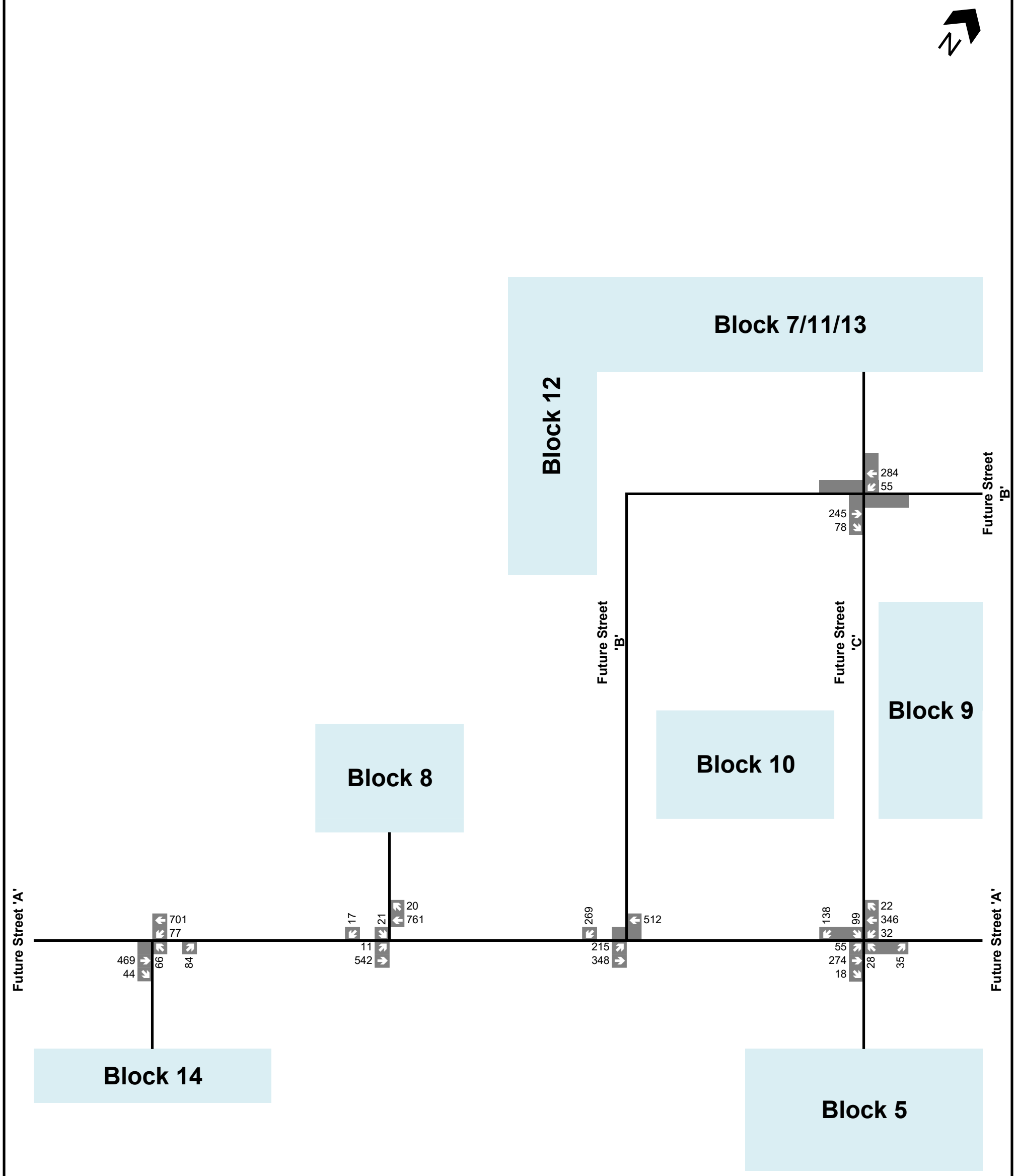
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-1e

Western Study Area (Internal Intersections)
2031 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



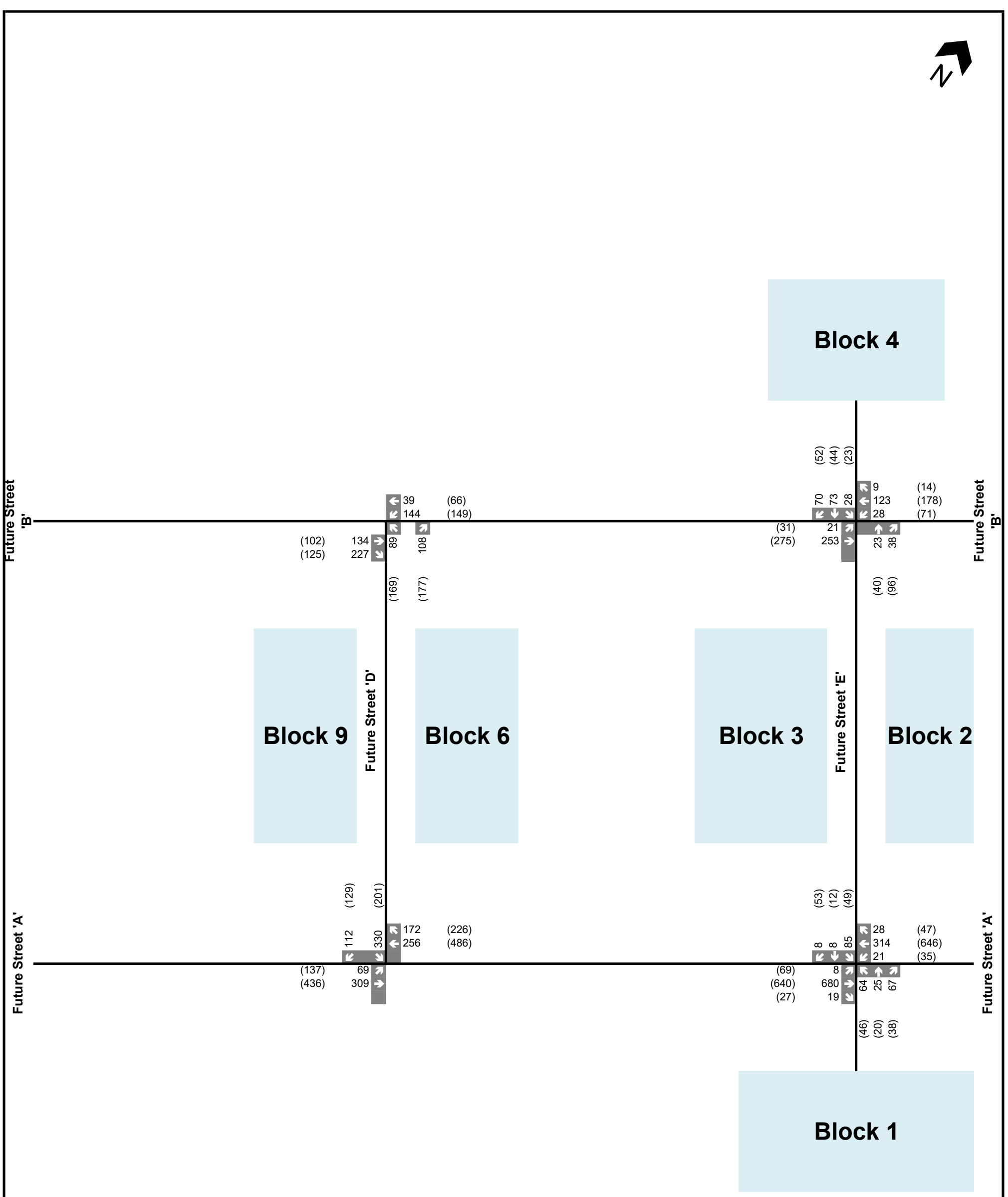
Legend

xx Saturday Peak Hour Traffic

Figure 5-1f

TYLin

Western Study Area (Internal Intersections)
2031 Site Trips Saturday Peak Hour Traffic Volumes



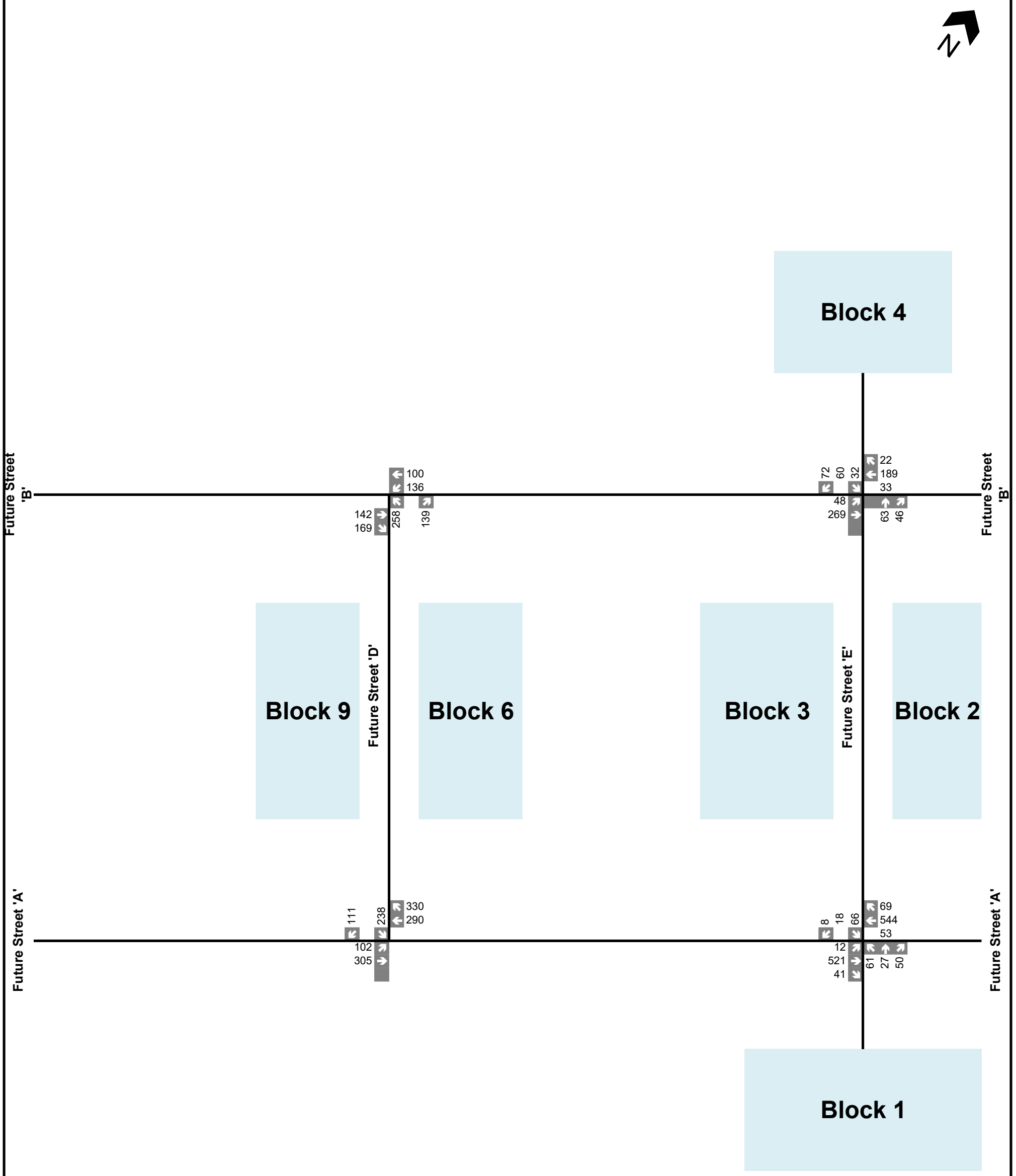
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-1g

Eastern Study Area (Internal Intersections)
2031 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



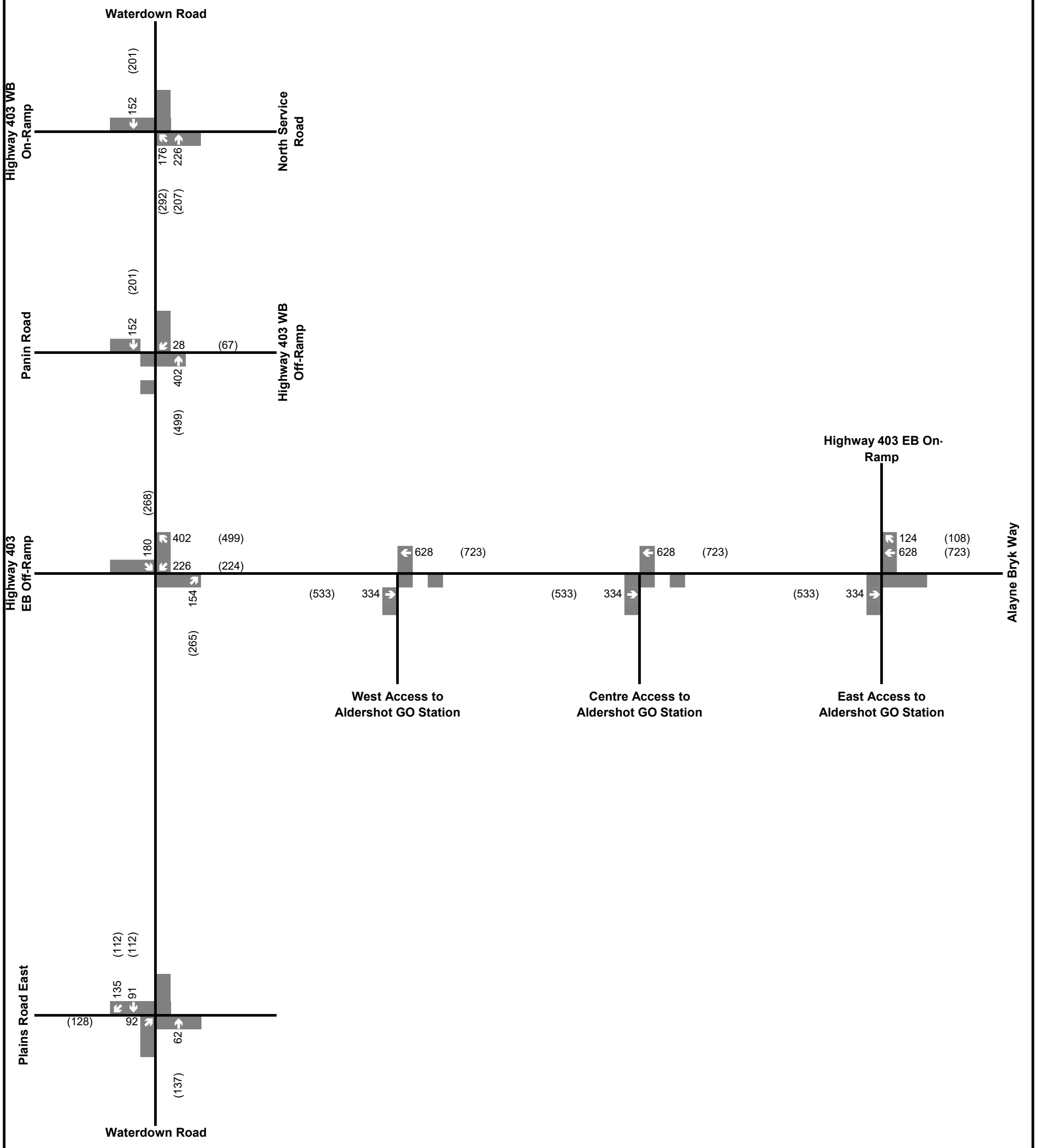
Legend

xx Saturday Peak Hour Traffic

Figure 5-1h

Eastern Study Area (Internal Intersections)
2031 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



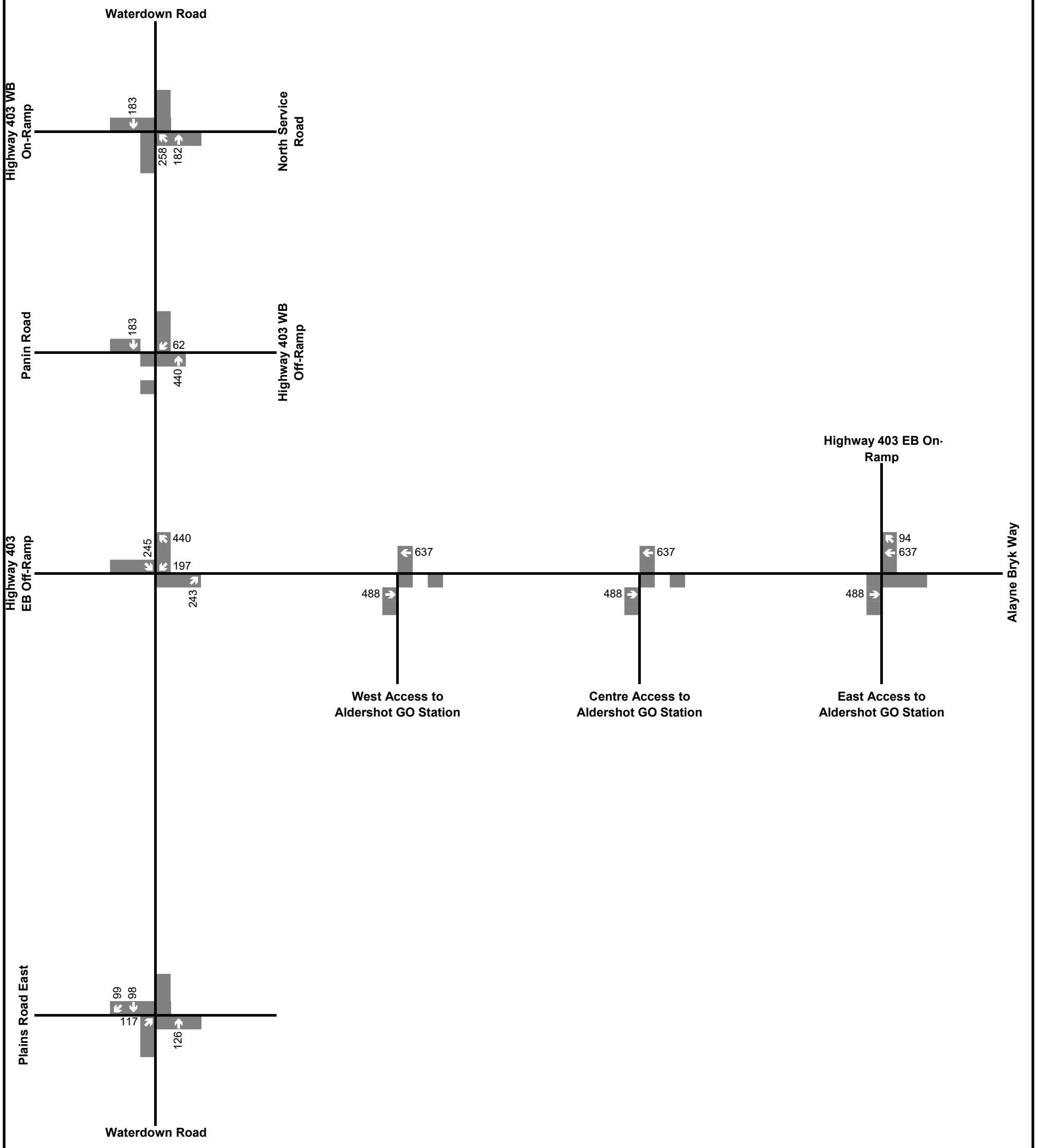
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-2a

Western Study Area (External Intersections)
2036 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



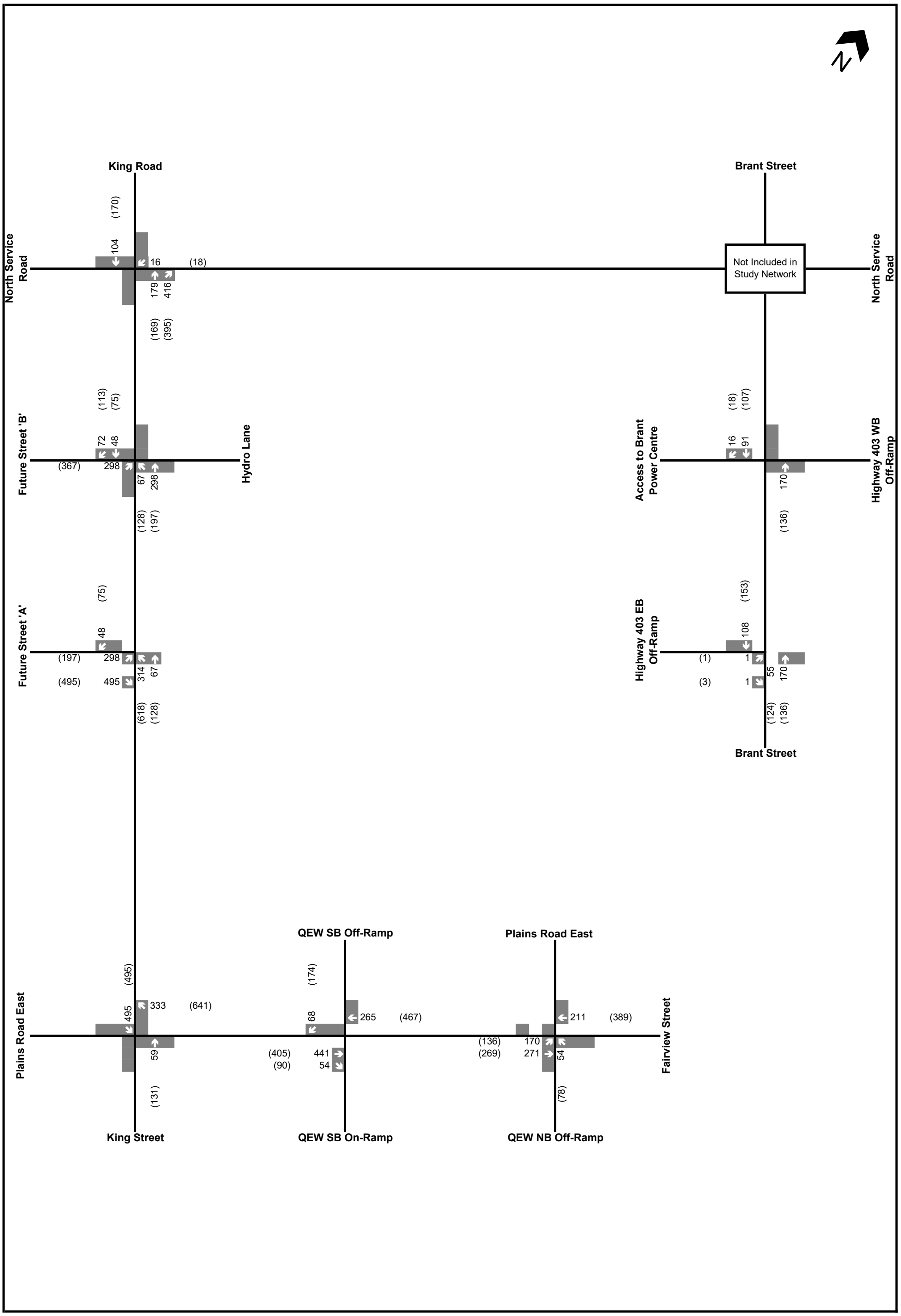
Legend

xx Saturday Peak Hour Traffic

Figure 5-2b

Western Study Area (External Intersections)
2036 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



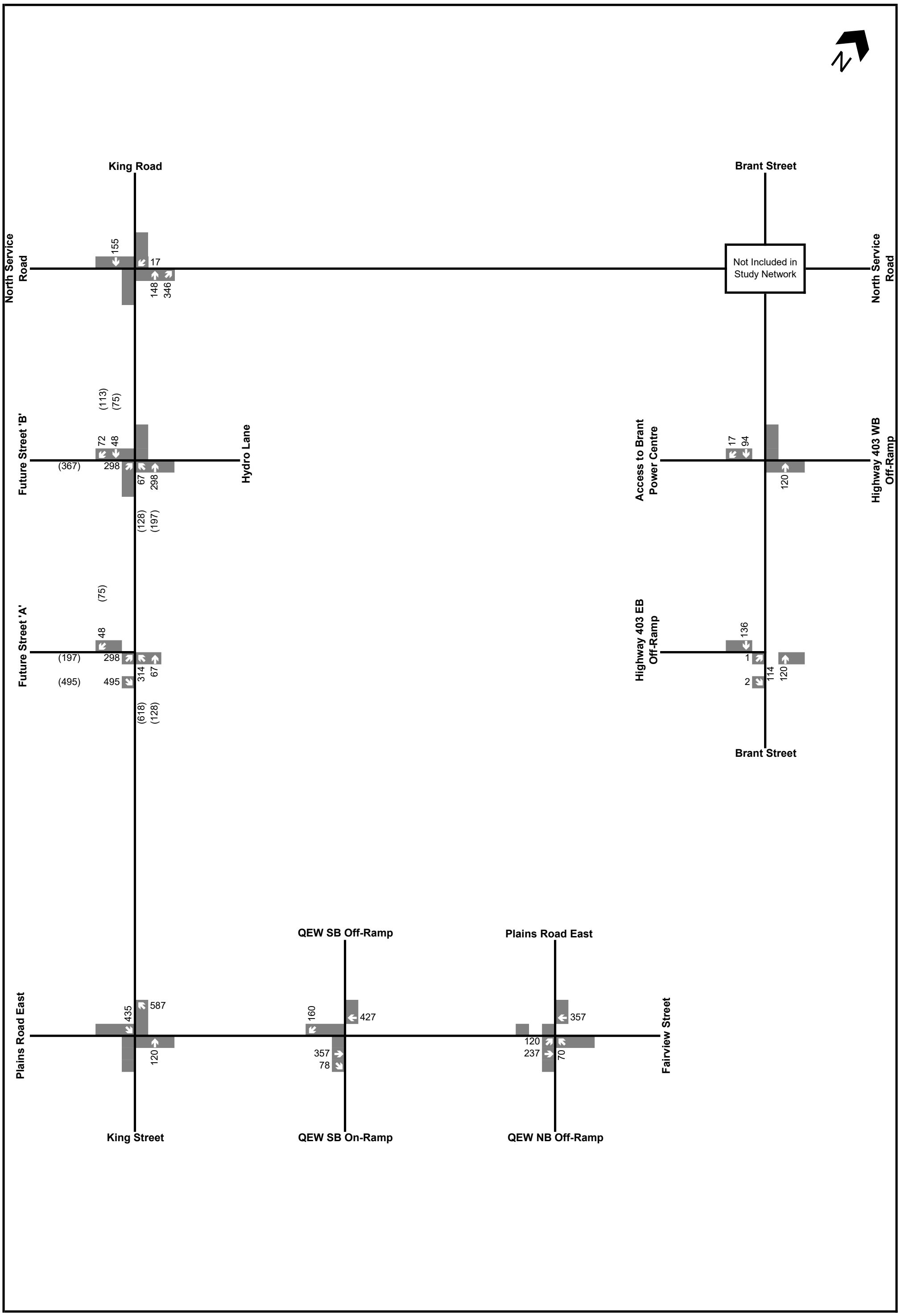
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-2c

Eastern Study Area (External Intersections)
2036 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



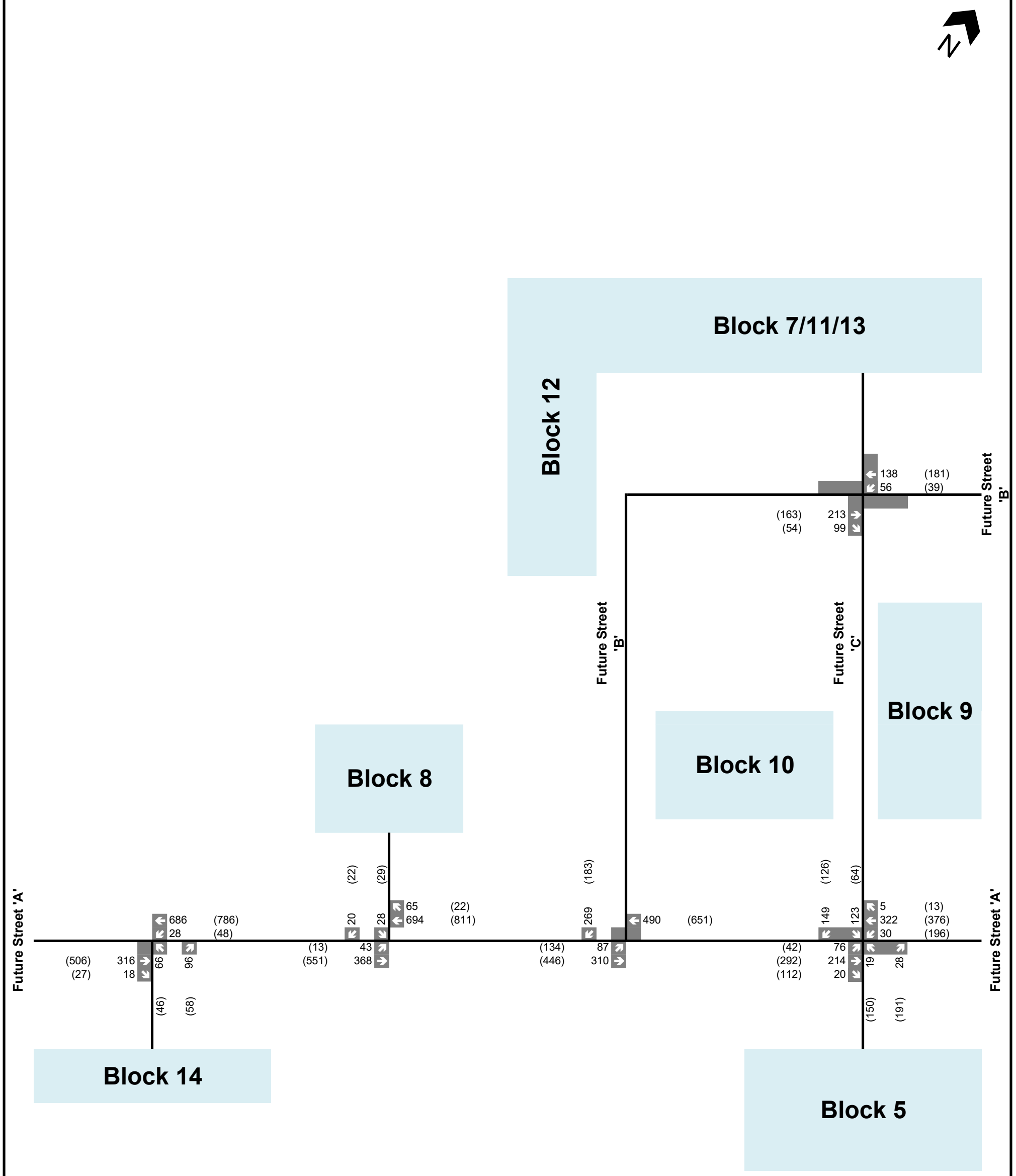
Legend

xx Saturday Peak Hour Traffic Volumes

Figure 5-2d

Eastern Study Area (External Intersections)
2036 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



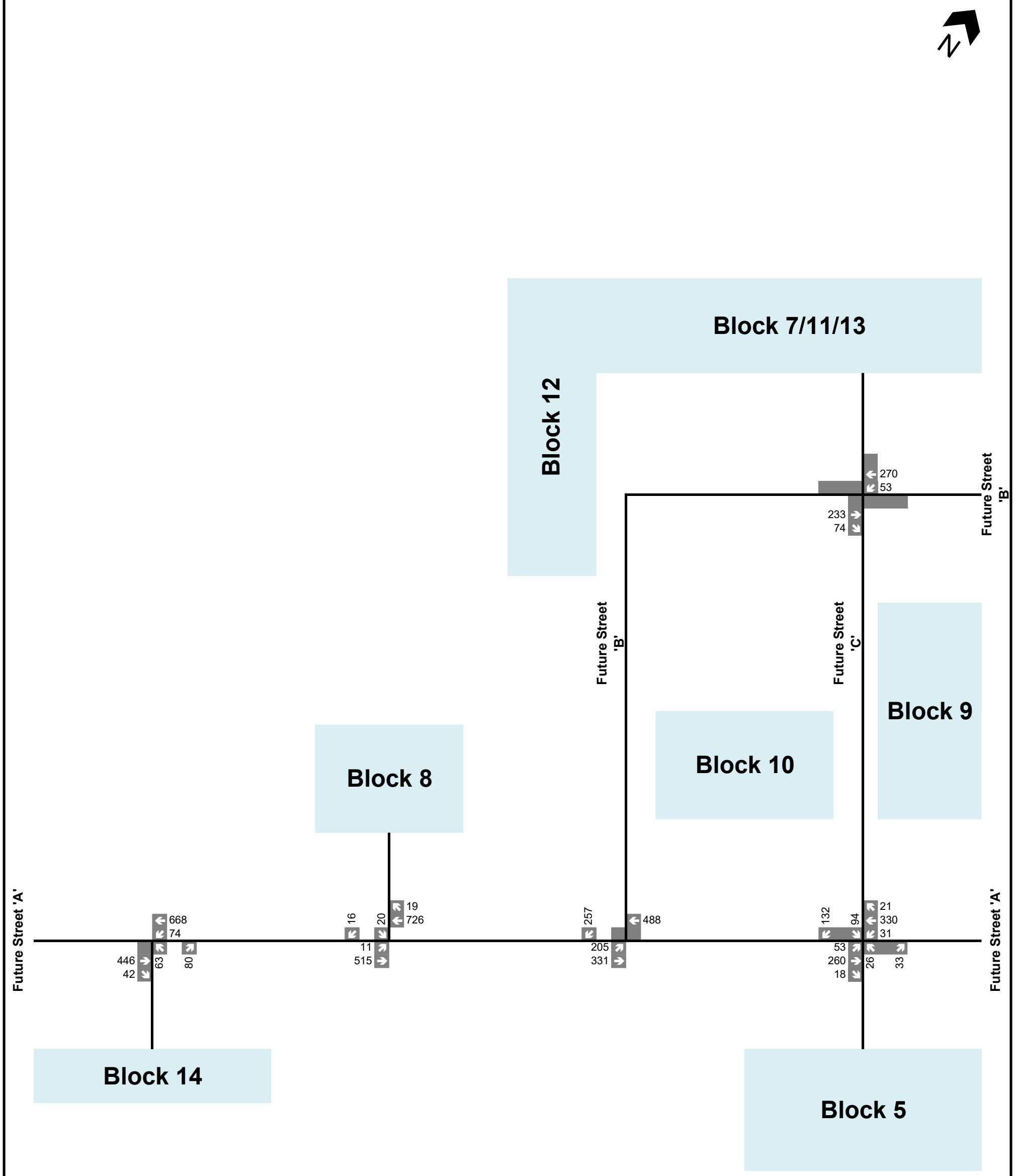
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-2e

Western Study Area (Internal Intersections)
2036 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



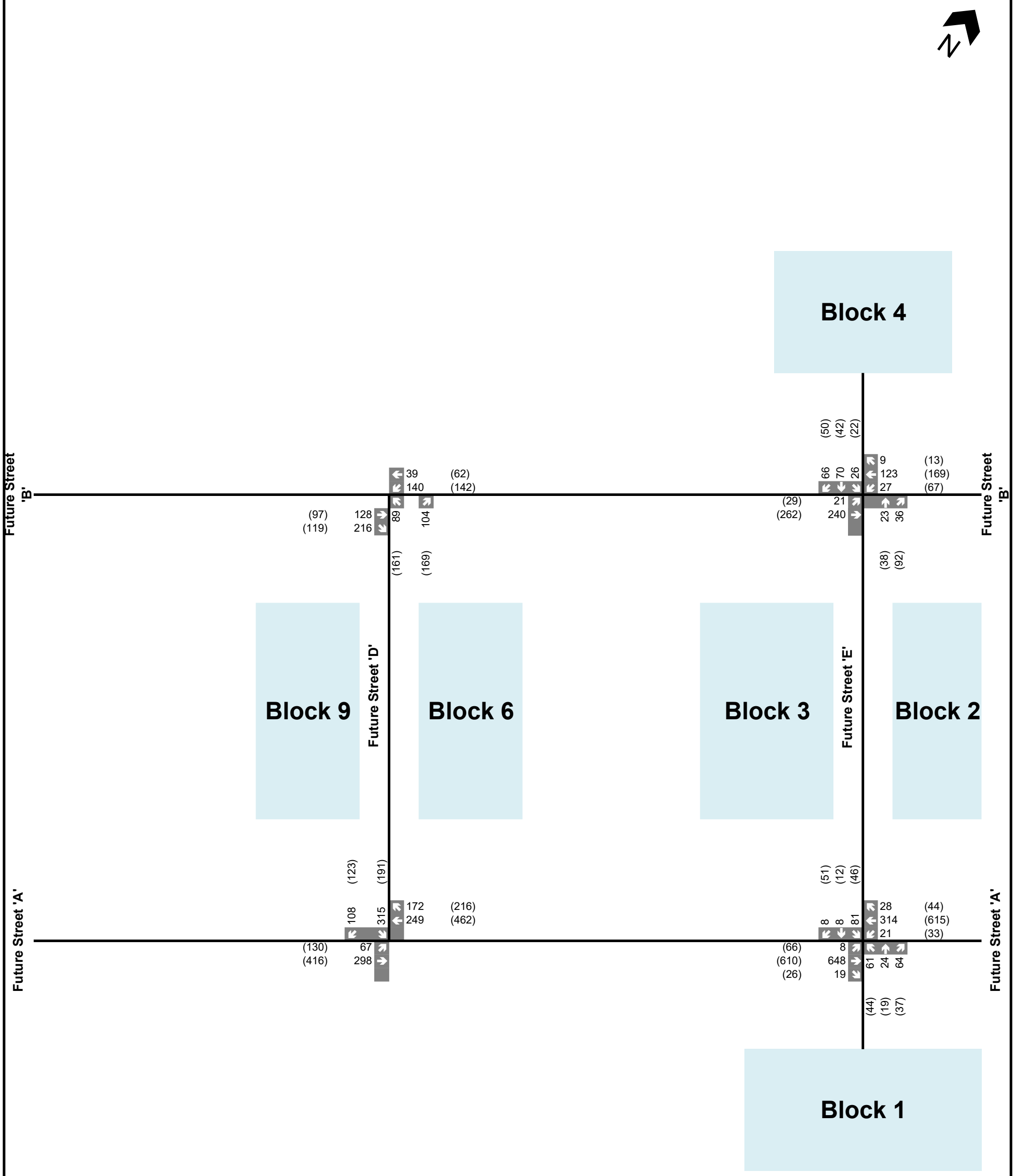
Legend

xx Saturday Peak Hour Traffic

Figure 5-2f

TYLin

Western Study Area (Internal Intersections)
2036 Site Trips Saturday Peak Hour Traffic Volumes



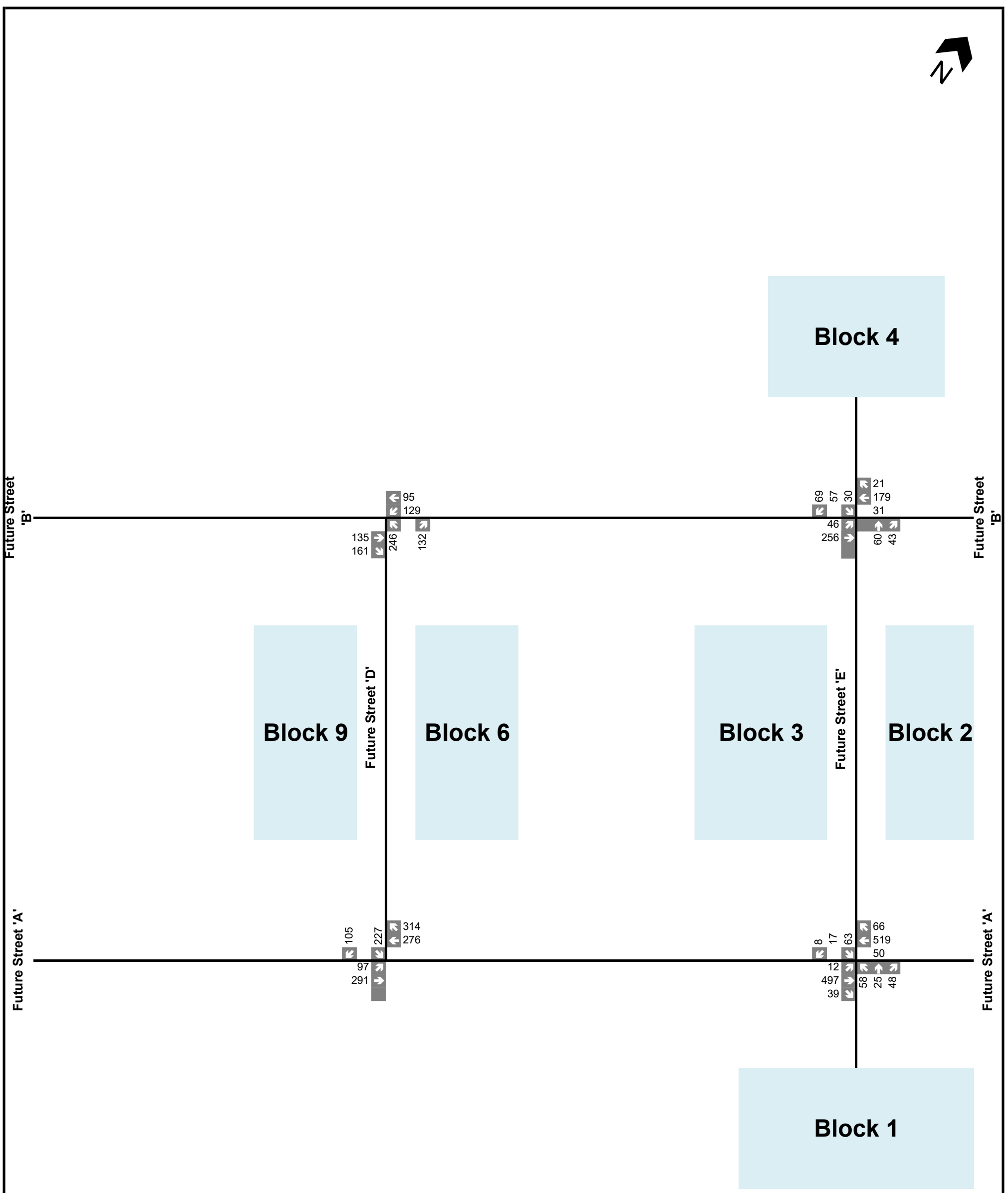
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-2g

Eastern Study Area (Internal Intersections)
2036 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



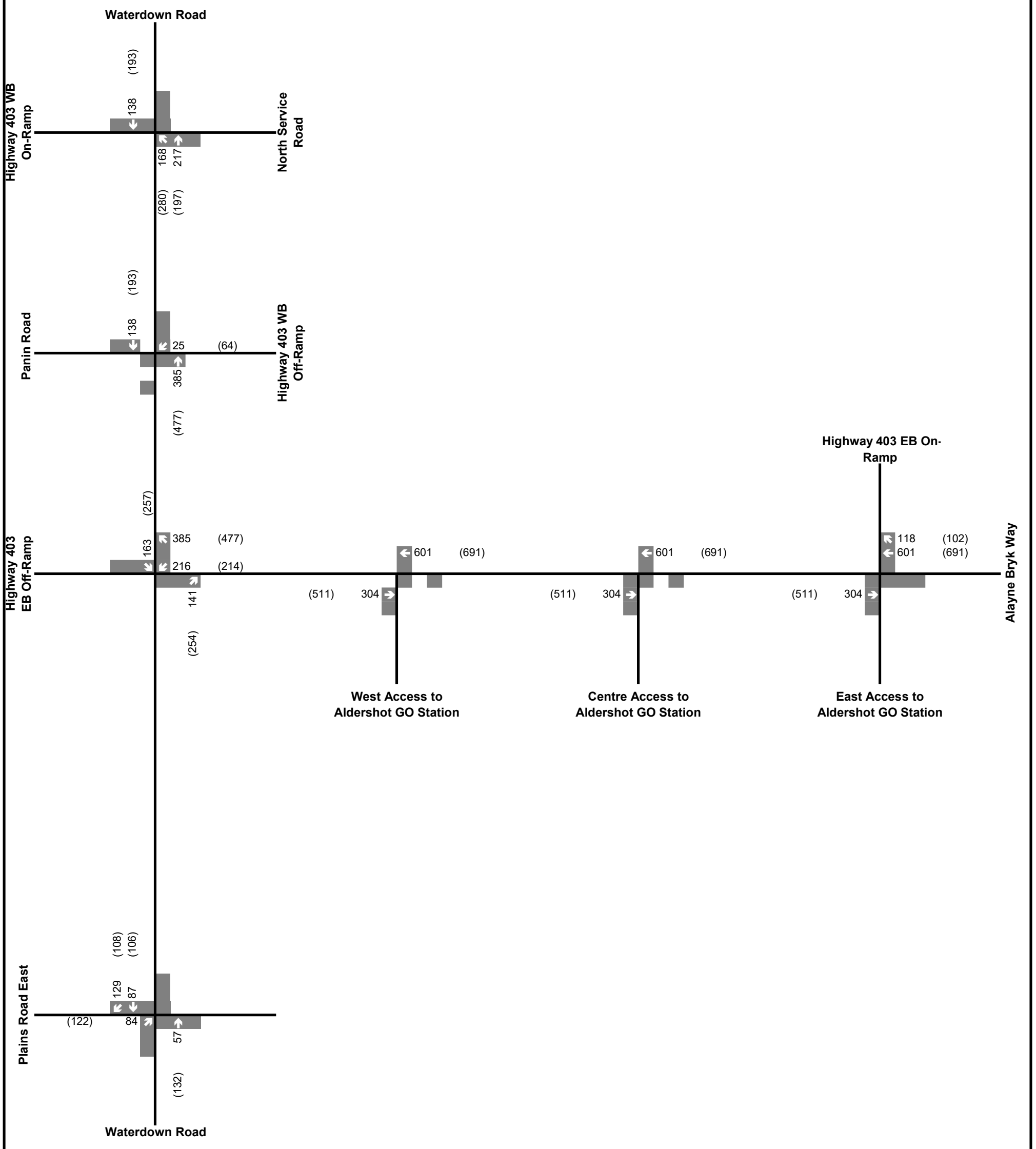
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xx Saturday Peak Hour Traffic

Figure 5-2h

Eastern Study Area (Internal Intersections)
2036 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



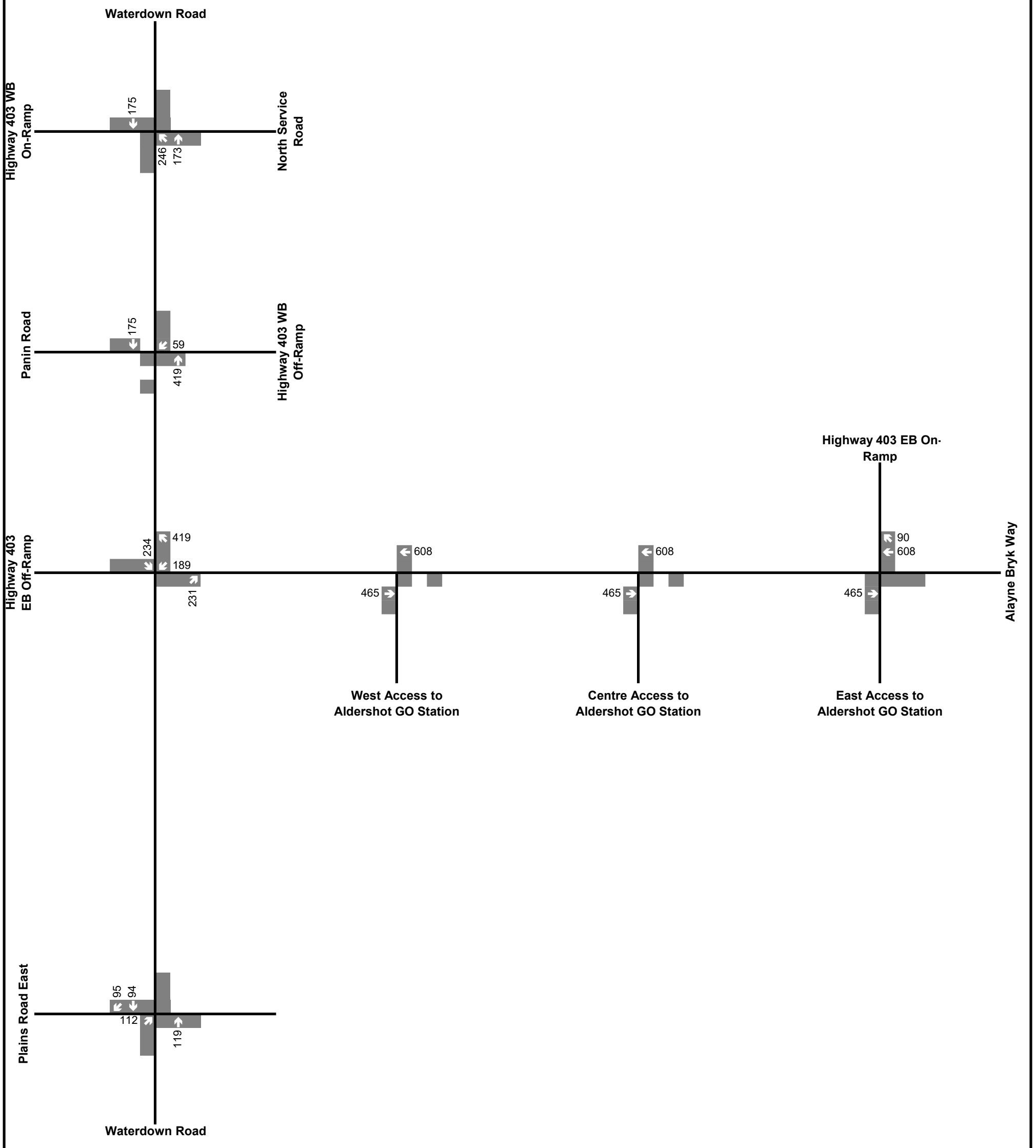
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-3a

Western Study Area (External Intersections)
2041 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



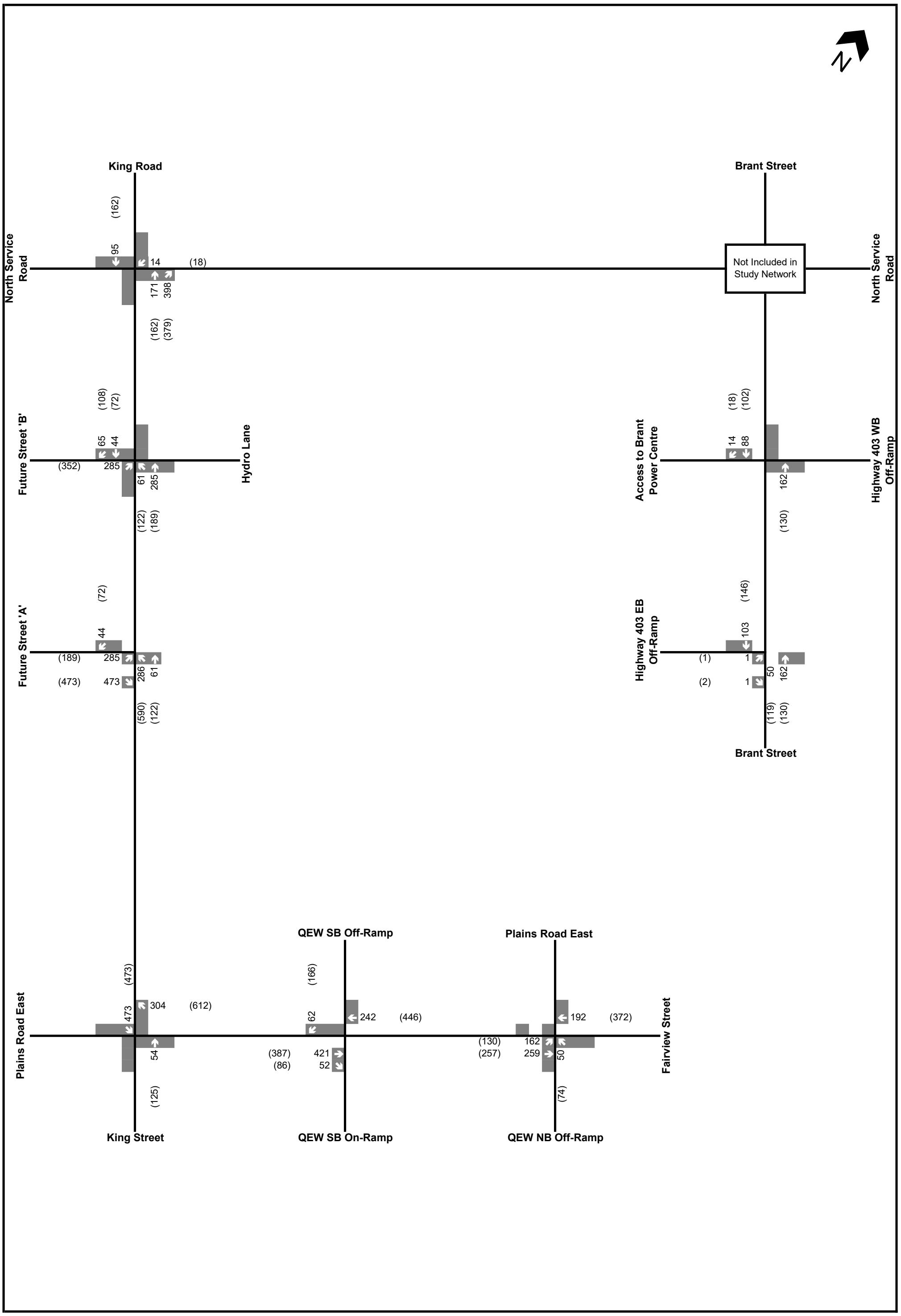
Legend

xx Saturday Peak Hour Traffic

Figure 5-3b

TYLin

Western Study Area (External Intersections)
2041 Site Trips Saturday Peak Hour Traffic Volumes



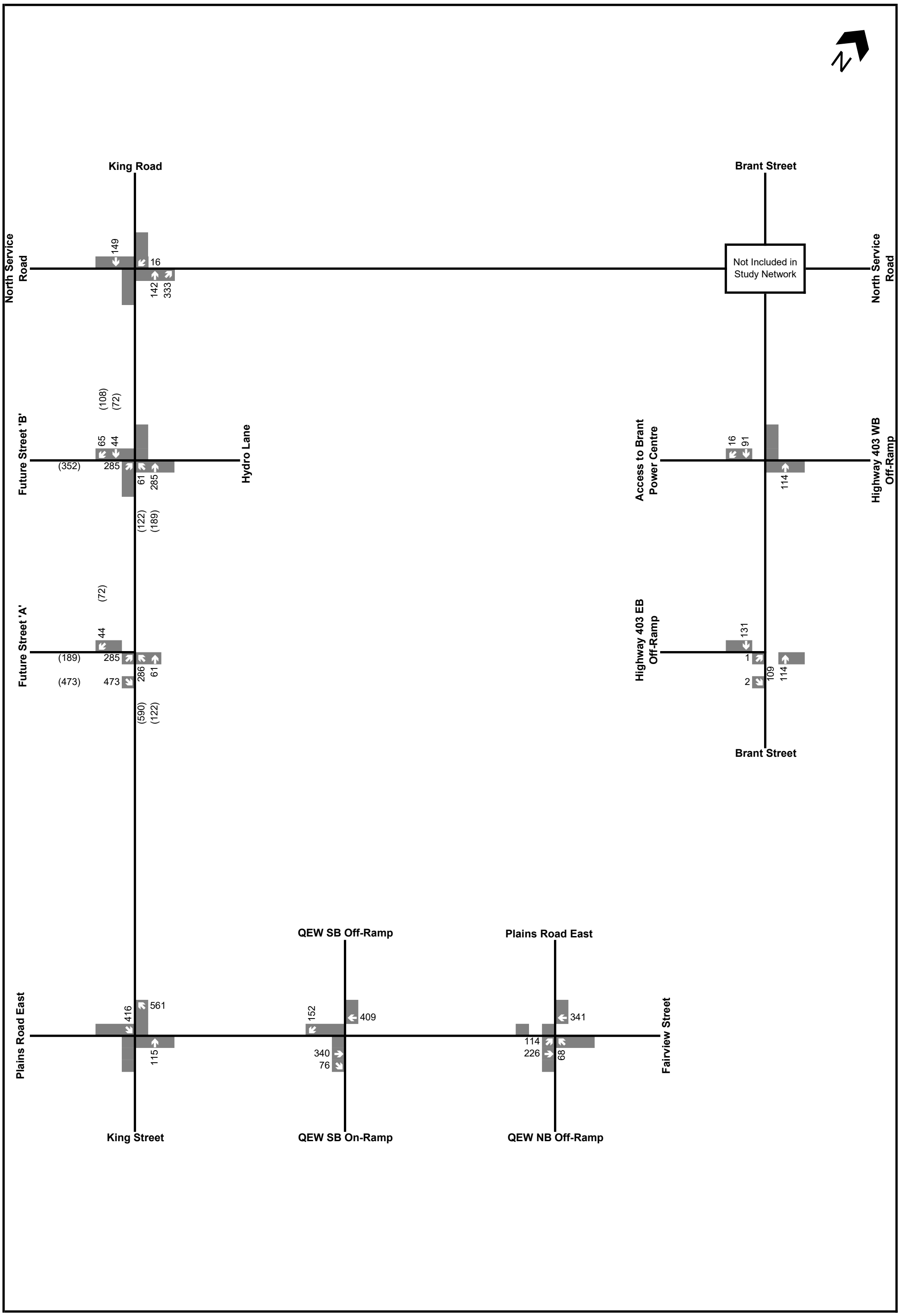
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-3c

Eastern Study Area (External Intersections)
2041 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



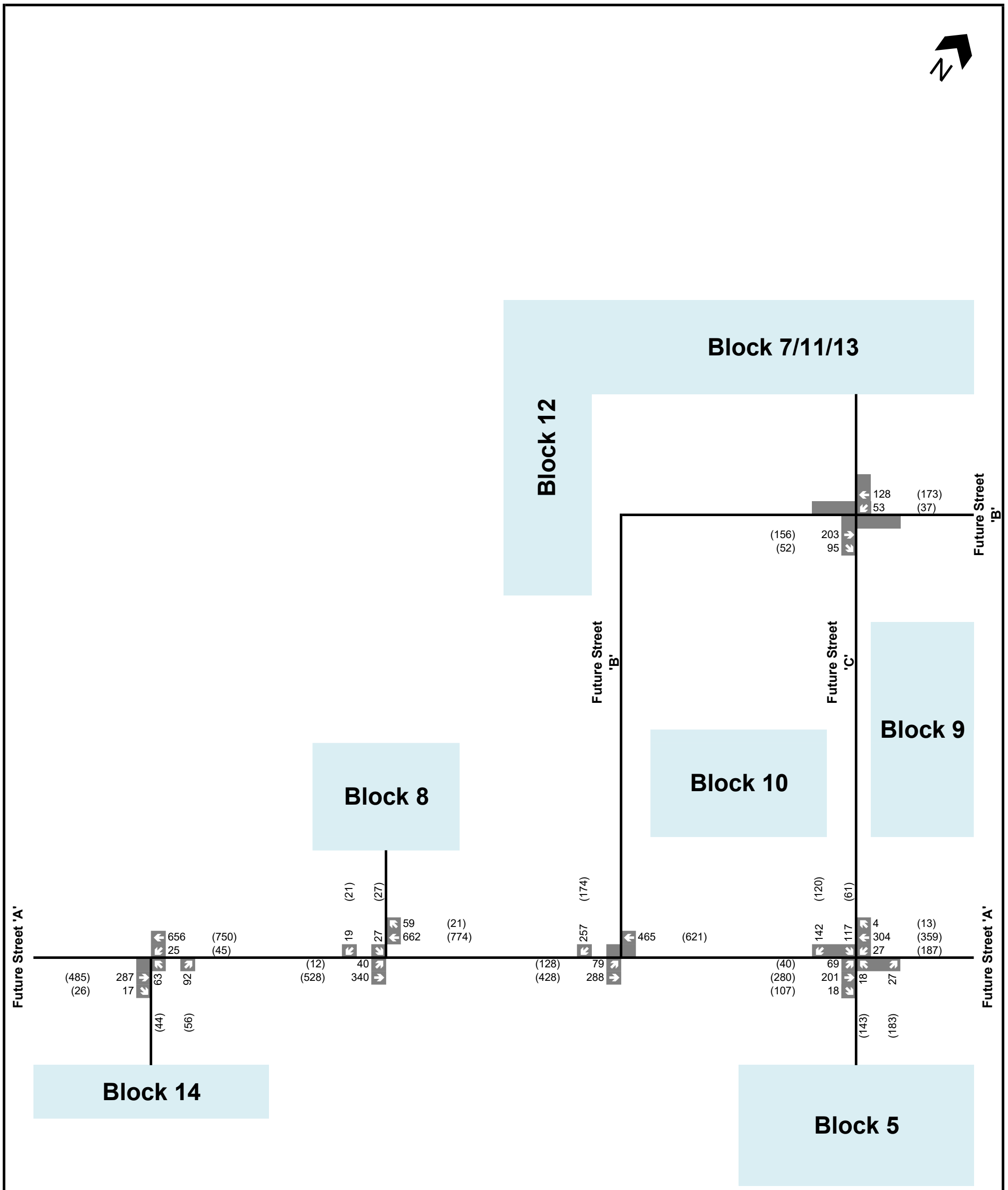
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xx Saturday Peak Hour Traffic Volumes

Figure 5-3d

Eastern Study Area (External Intersections)
2041 Site Trips Saturday Peak Hour Traffic Volumes

TYLin



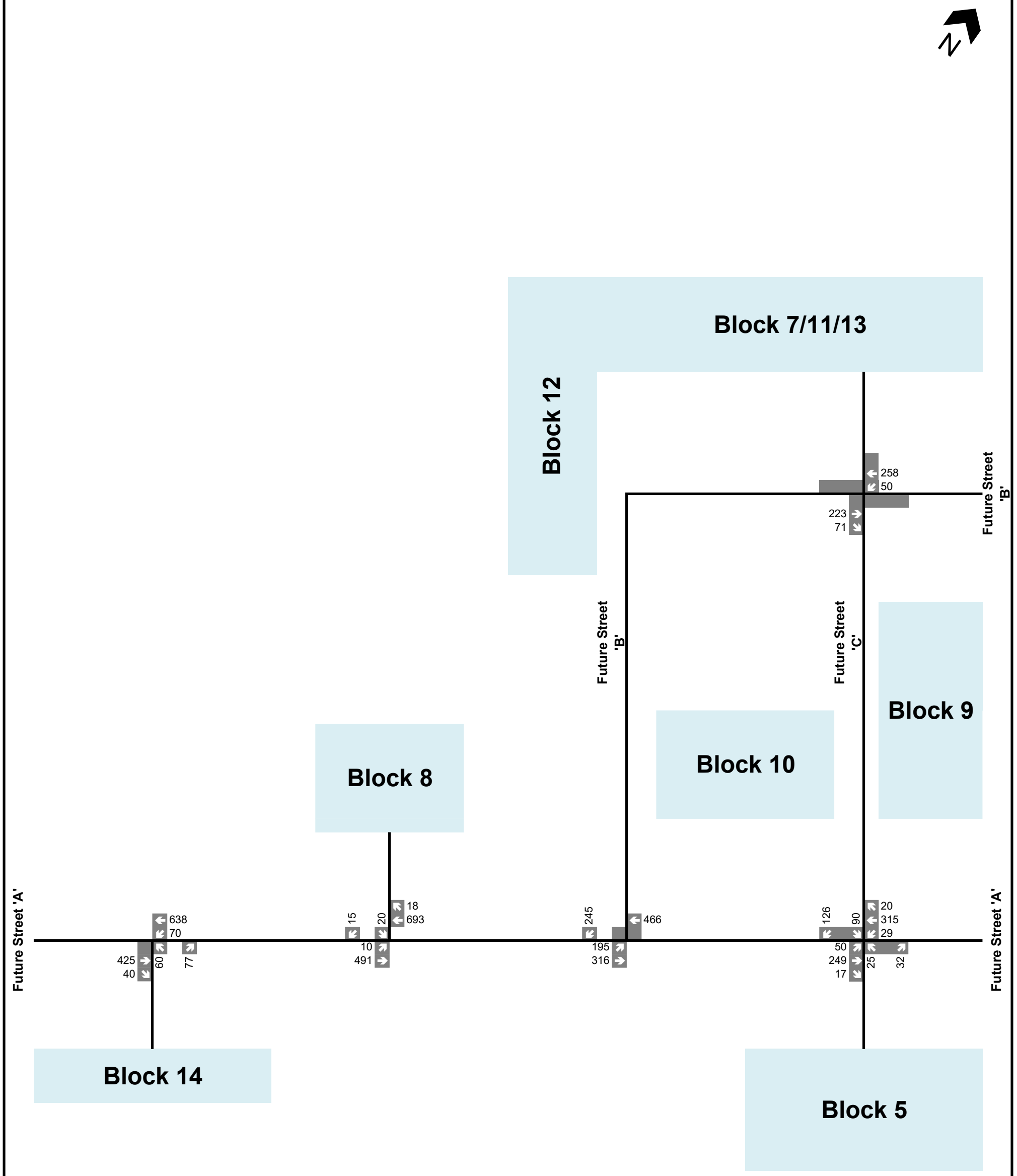
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-3e

Western Study Area (Internal Intersections)
2041 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



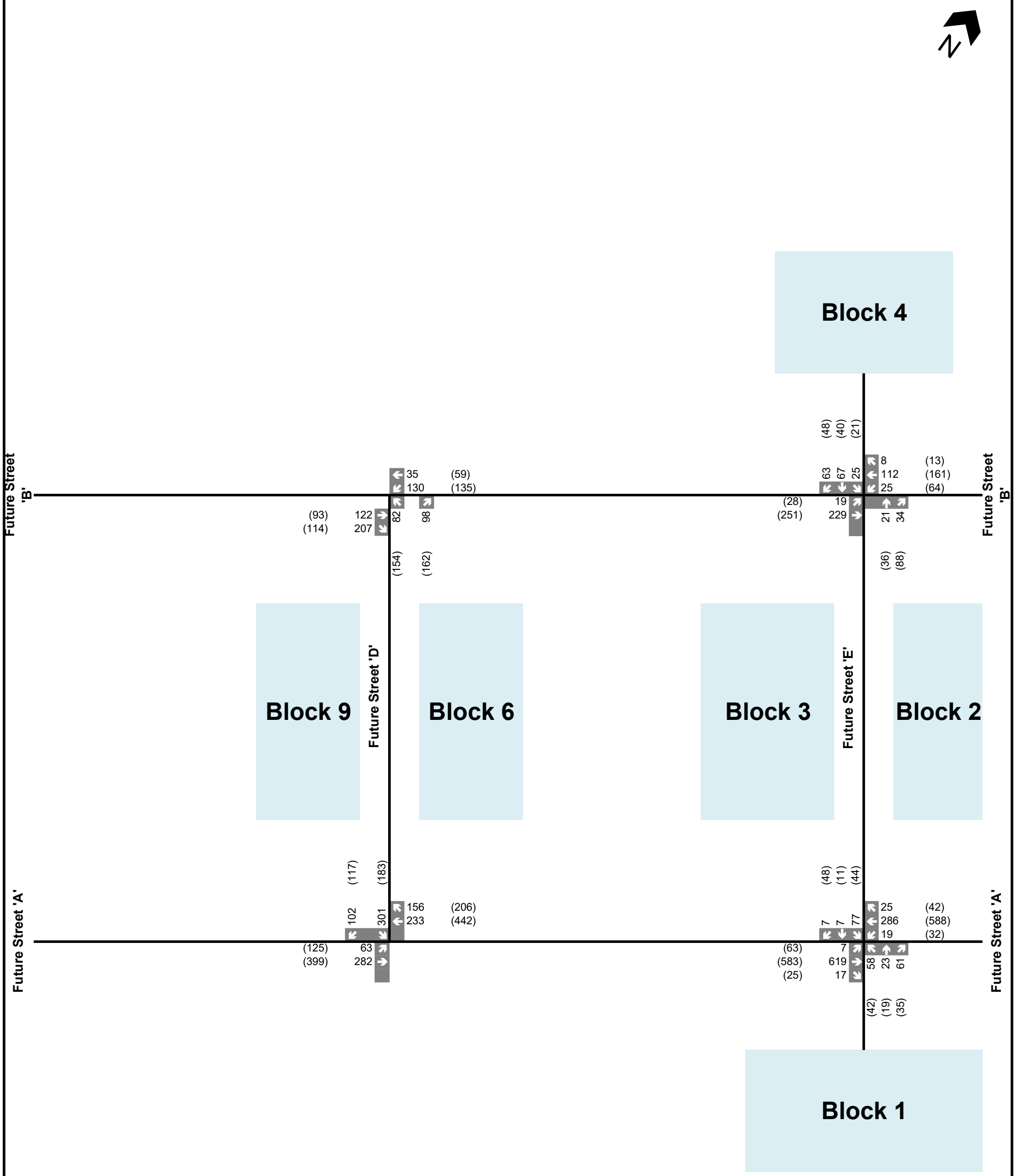
Legend

xx Saturday Peak Hour Traffic

Figure 5-3f

TYLin

Western Study Area (Internal Intersections)
2041 Site Trips Saturday Peak Hour Traffic Volumes



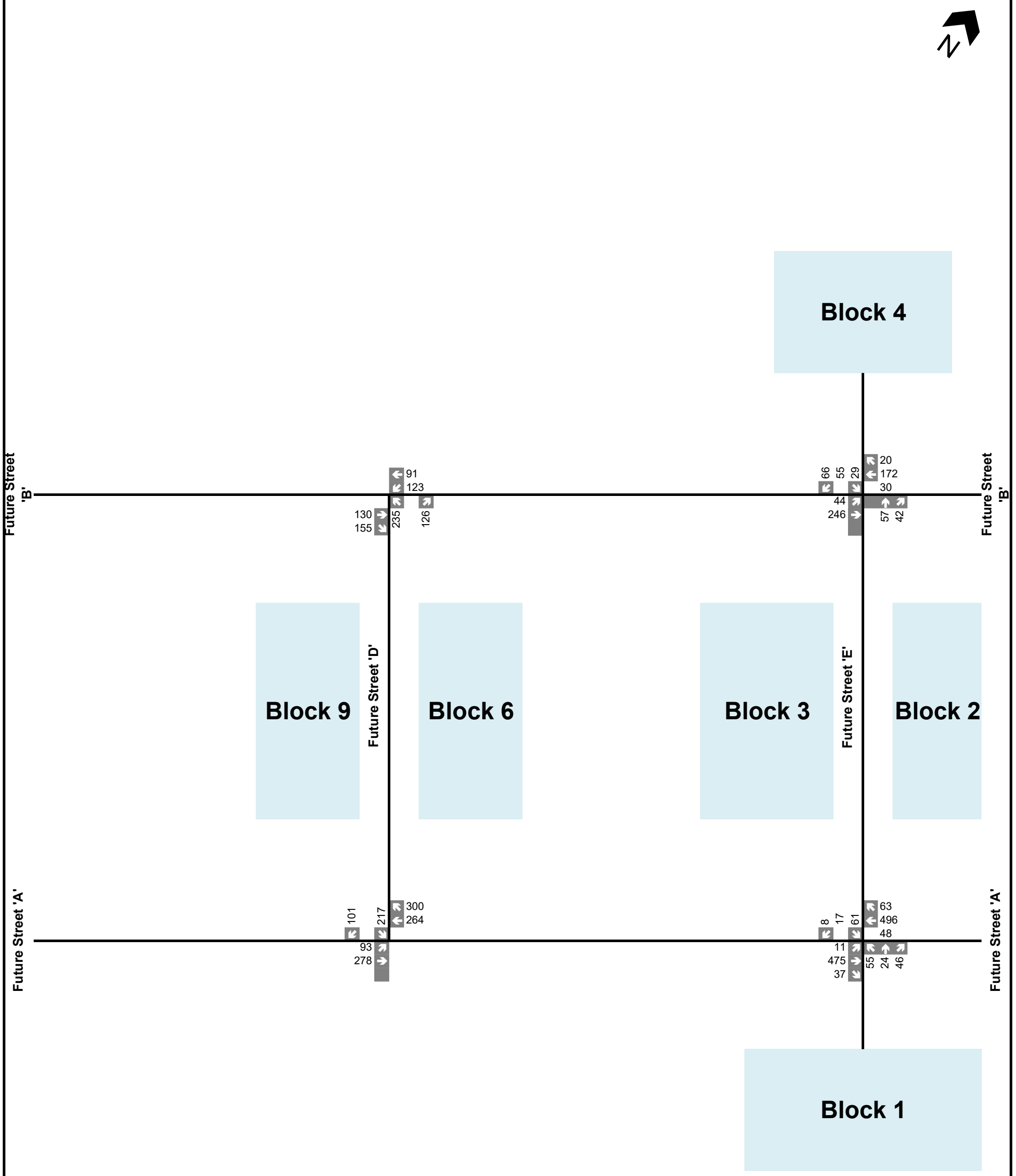
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-3g

Eastern Study Area (Internal Intersections)
2041 Site Trips AM&PM Peak Hour Traffic Volumes

TYLin



Legend

xx Saturday Peak Hour Traffic

Figure 5-3h

Eastern Study Area (Internal Intersections)
2041 Site Trips Saturday Peak Hour Traffic Volumes

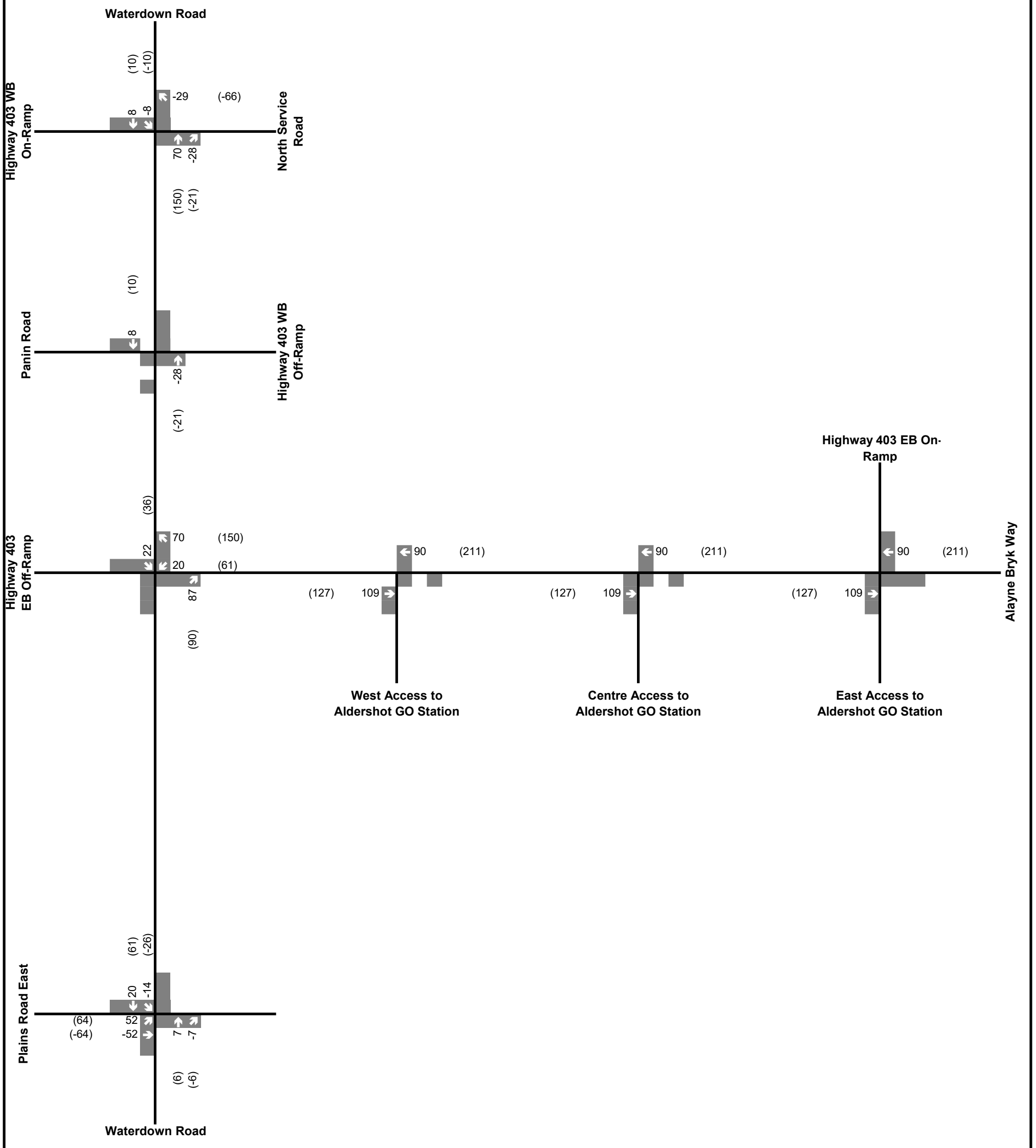
TYLin

5.5 Traffic Diversion

The inclusion of an E-W connection as part of the developments is expected to provide more additional travel routes and capacity compared to the Plains Road/North Service Road corridor for the segment between Waterdown Road and King Road, especially in relation to accessing the Aldershot GO Station. In response to this new east-west capacity added to the surrounding transportation network, it is anticipated that there will be a minor diversion of existing traffic volume in the area utilizing the Parkway Link.

For this study, a diversion rate of 10% of traffic volumes have been diverted onto the Parkway Link from other E-W corridors (Plains Road/North Service Road). Total diverted traffic have been included in **Figure 5-4**.

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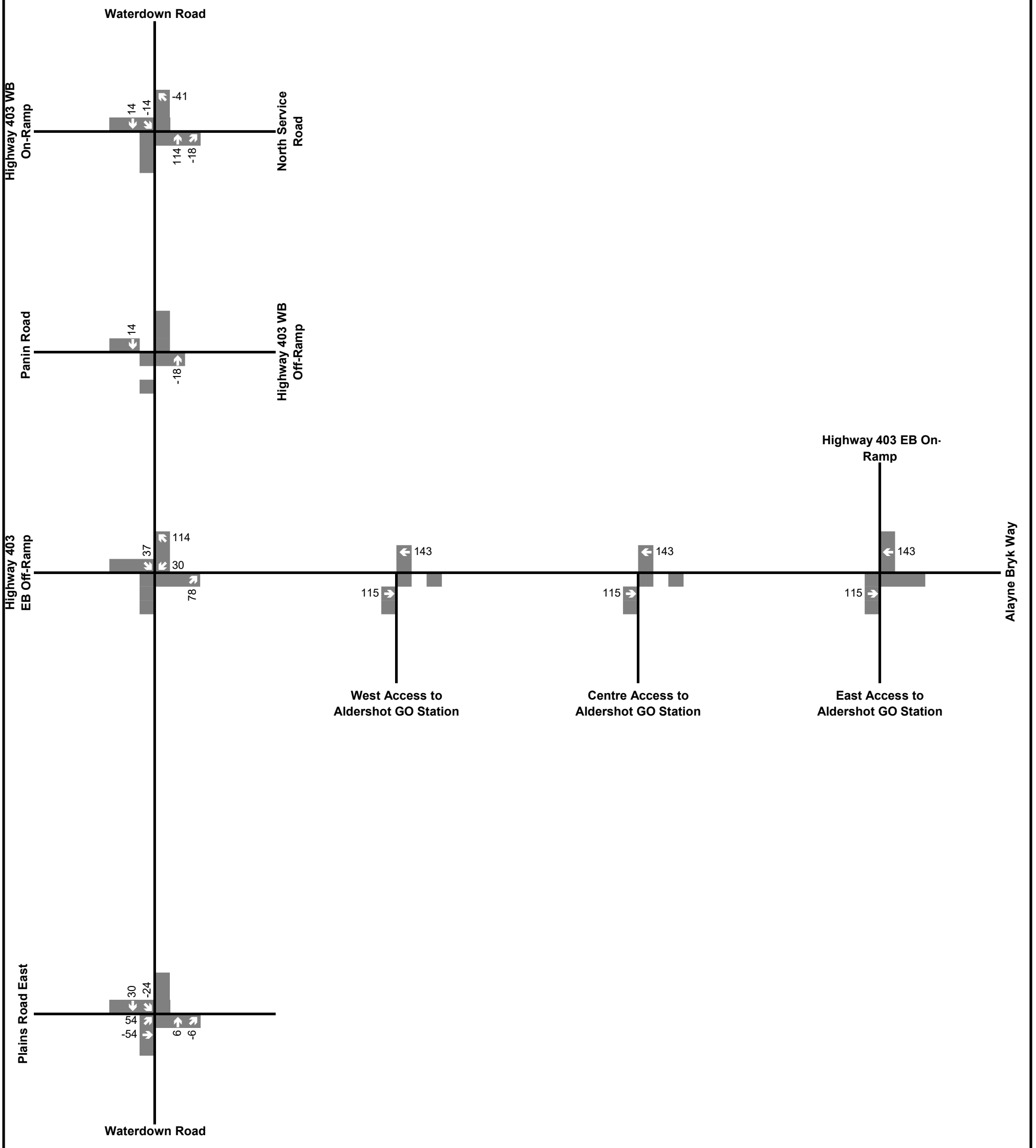
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-4a

Traffic Diversion Volumes- Western Study Area (External Intersections)

TYLin

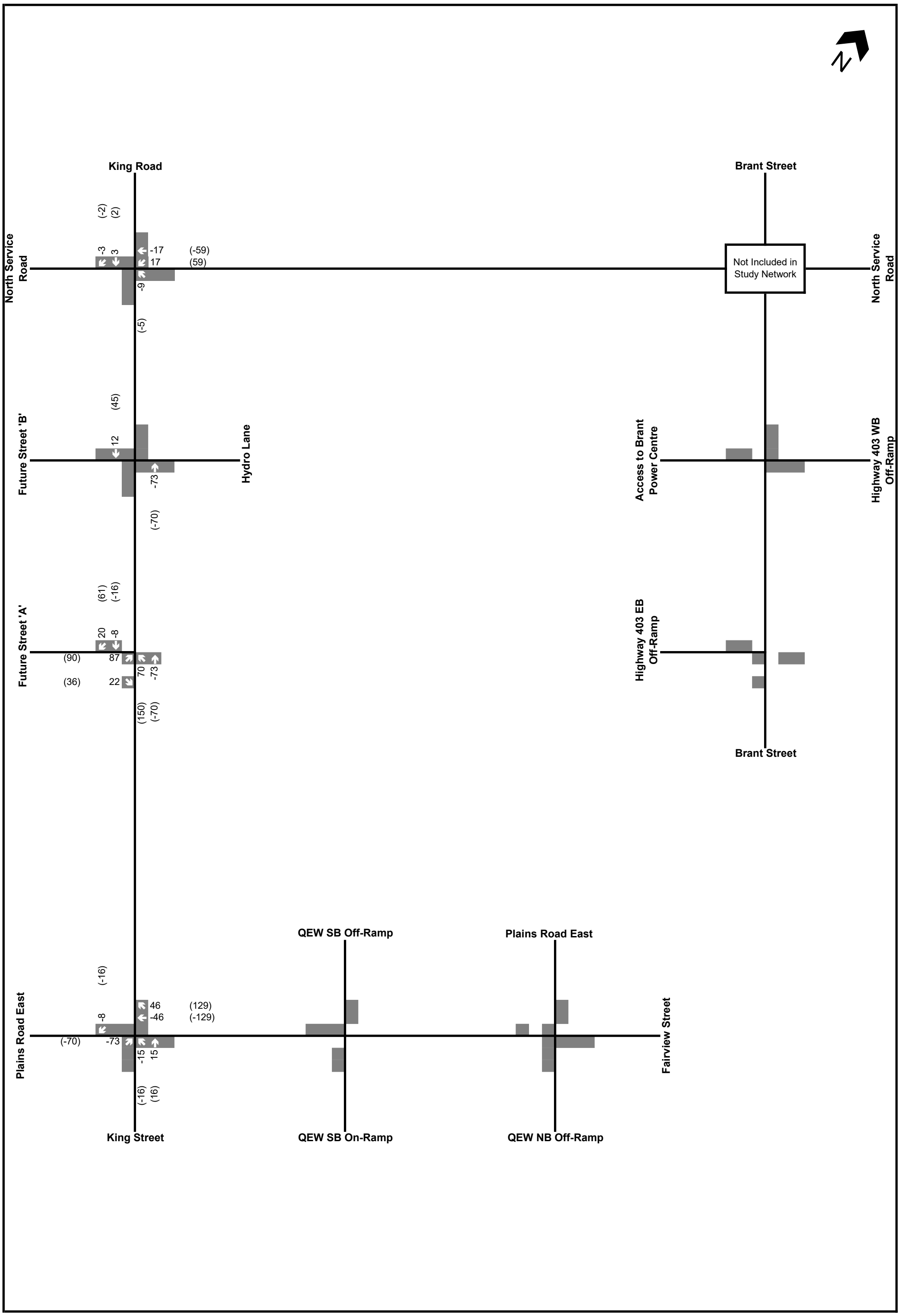


Legend

xx Saturday Peak Hour Traffic

Figure 5-4b

Traffic Diversion Volumes- Western Study Area (External Intersections)



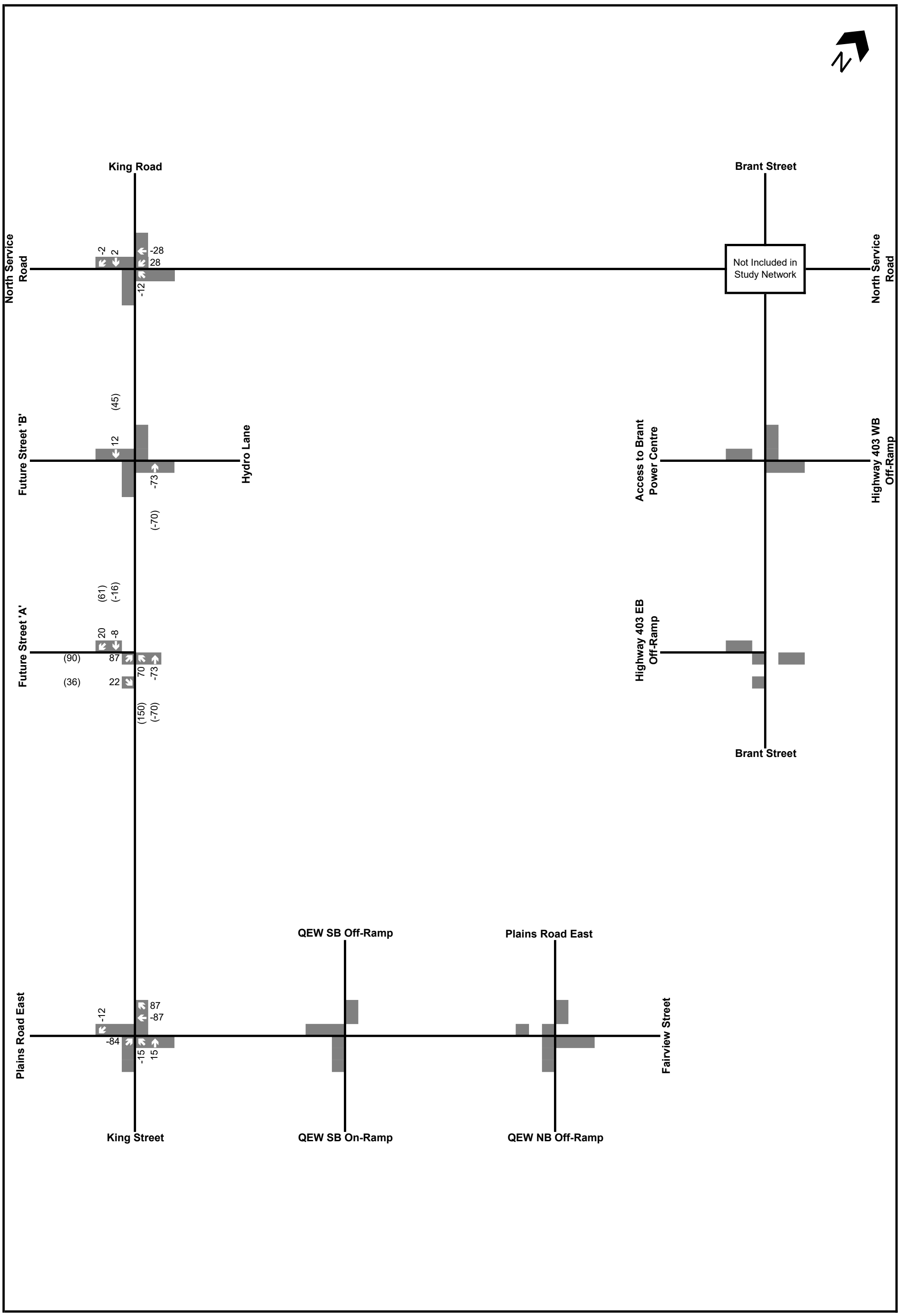
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 5-4c

Traffic Diversion Volumes- Eastern Study Area (External Intersections)

TYLin



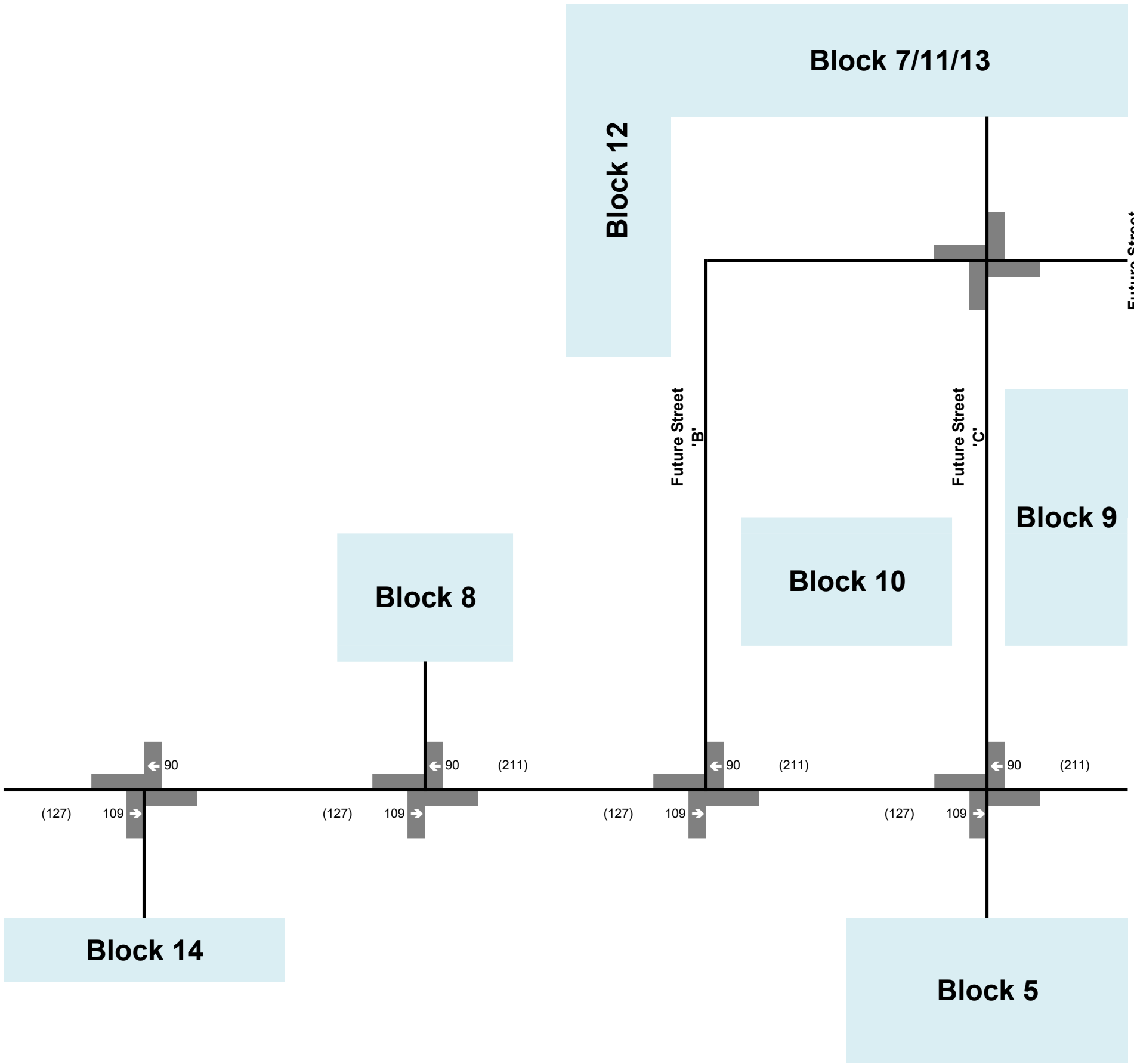
Legend

xx Saturday Peak Hour Traffic Volumes

Figure 5-4d

Traffic Diversion Volumes- Eastern Study Area (External Intersections)

TYLin



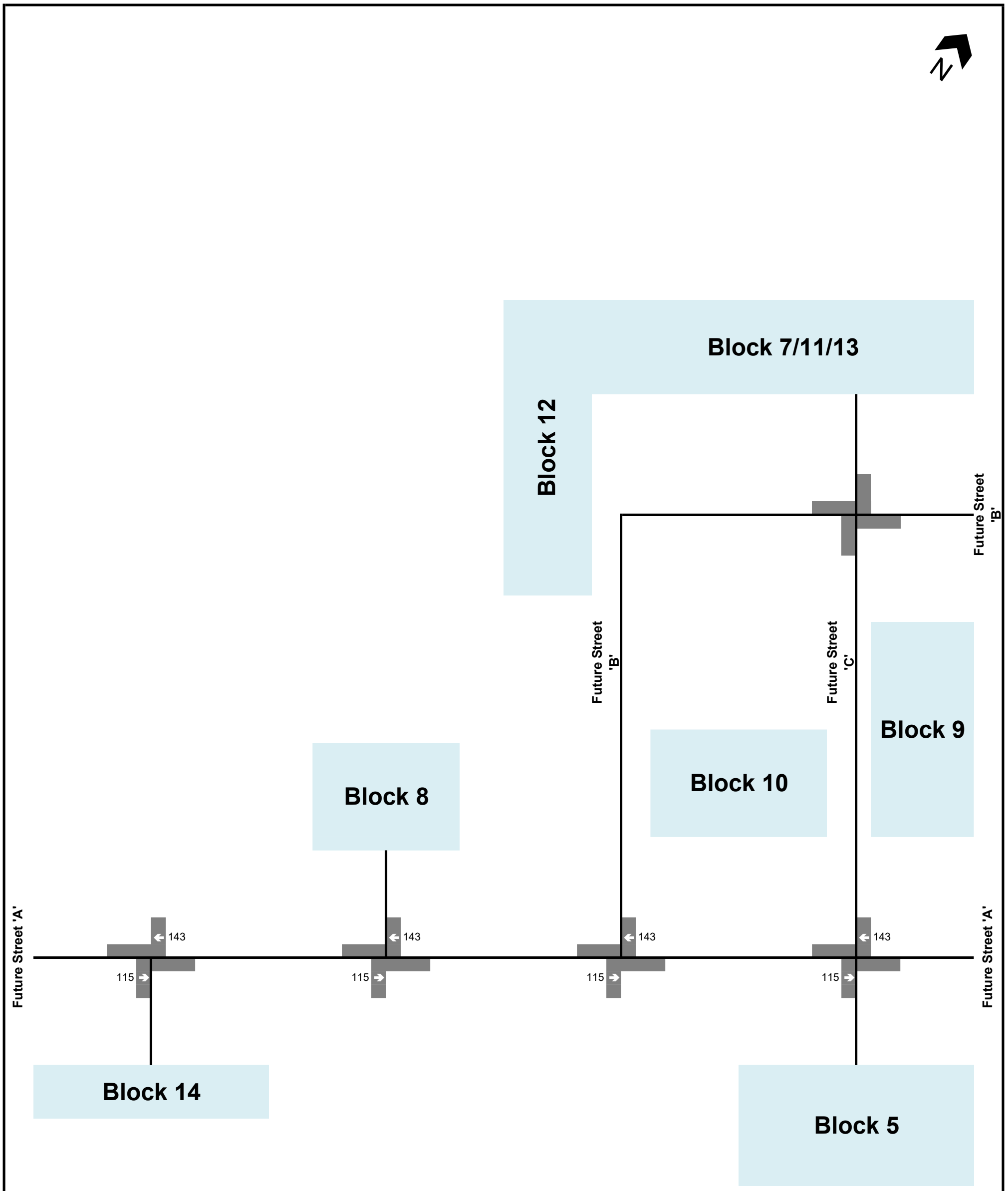
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-4e

Traffic Diversion Volumes- Western Study Area (Internal Intersections)

TYLin



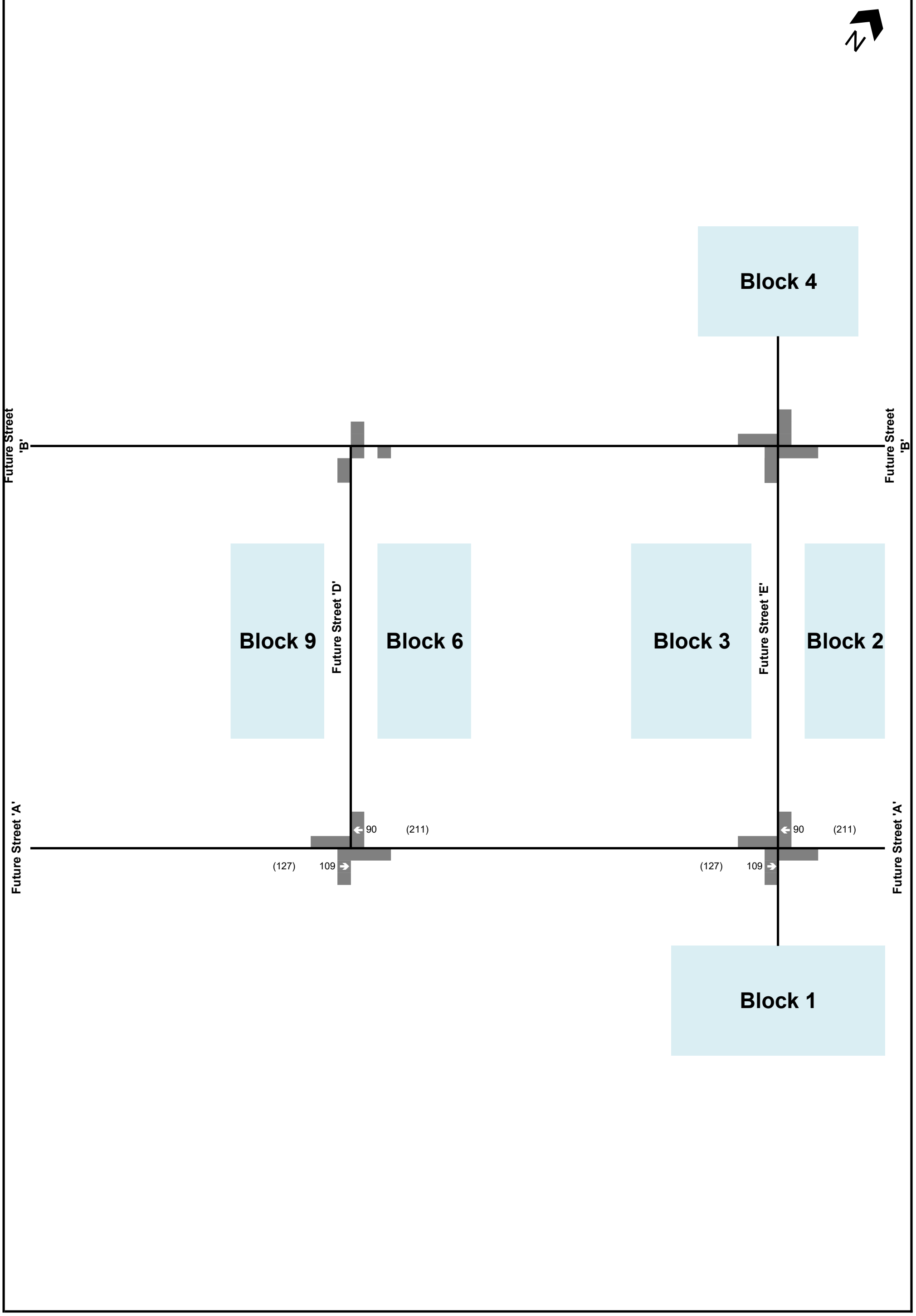
Legend

xx Saturday Peak Hour Traffic

Figure 5-4f

Traffic Diversion Volumes- Western Study Area (Internal Intersections)

TYLin



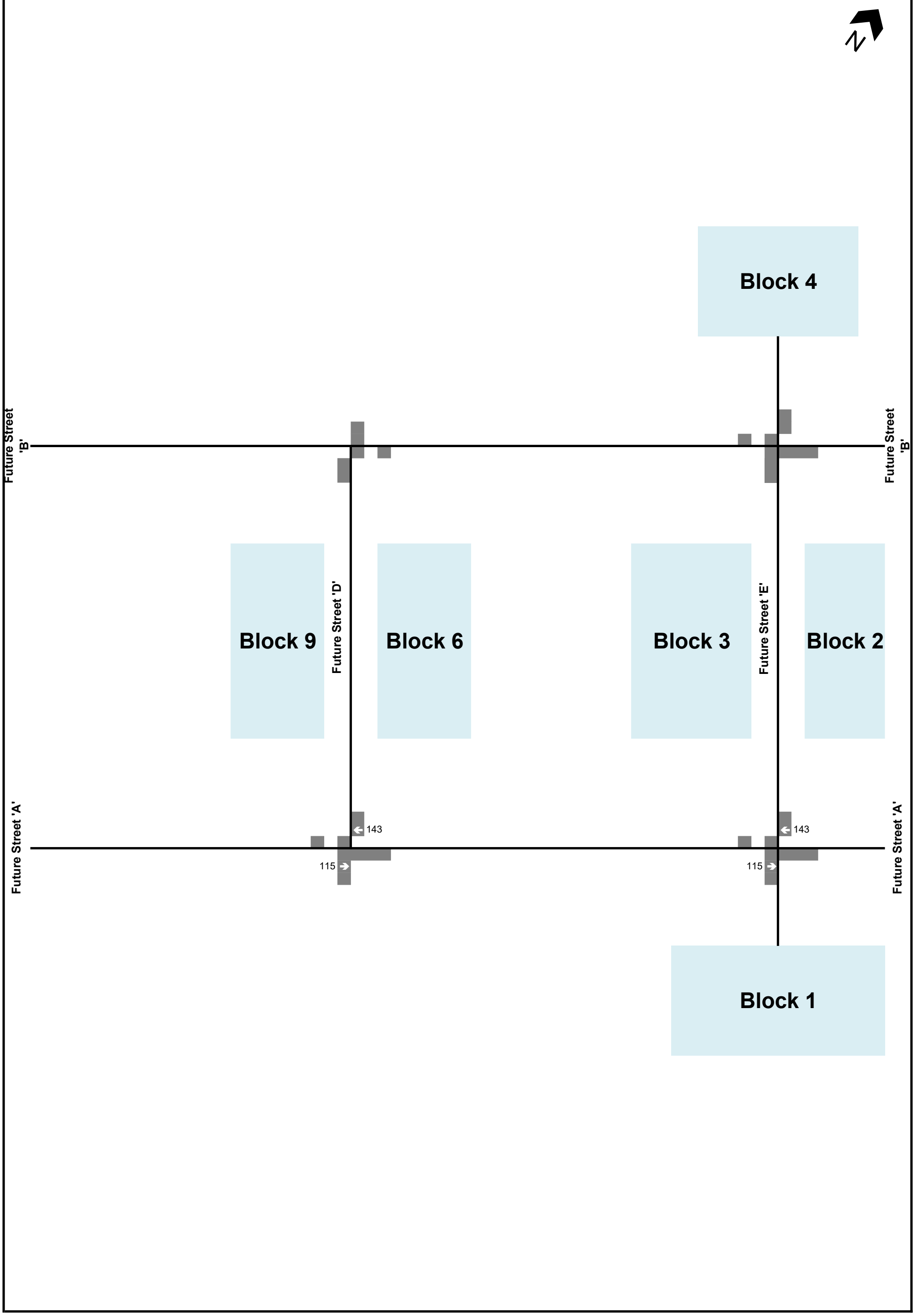
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-4g

Traffic Diversion Volumes- Eastern Study Area (Internal Intersections)

TYLin



Legend

xx Saturday Peak Hour Traffic

Figure 5-4h

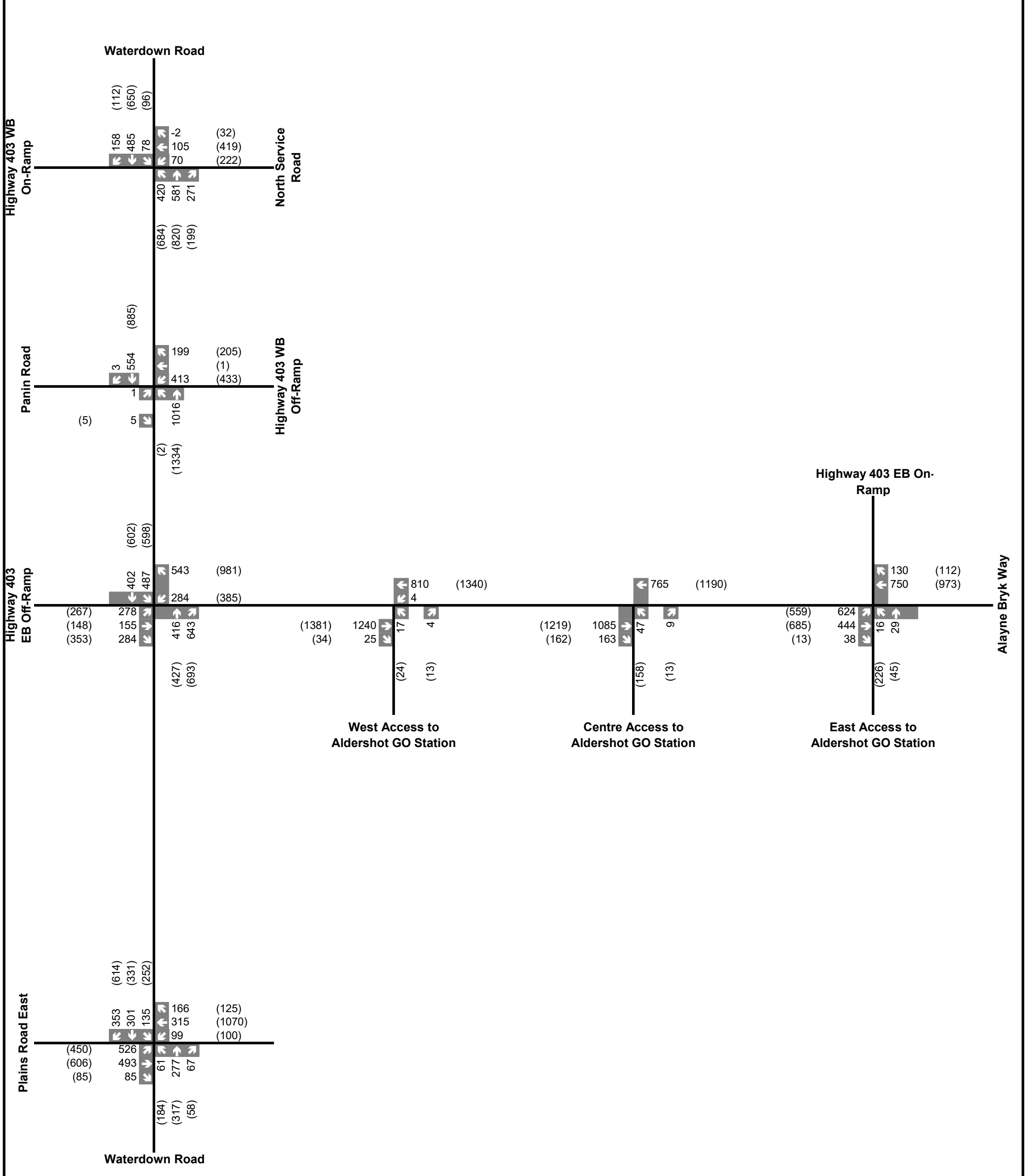
Traffic Diversion Volumes- Eastern Study Area (Internal Intersections)

TYLin

6 FUTURE TOTAL TRAFFIC VOLUMES

The future total traffic volumes during the weekday AM, PM and Saturday peak hours for the 2031, 2036, and 2041 planning horizon was derived by combining the projected future background traffic with the corresponding estimate of the site generated traffic. **Figure 6-1, Figure 6-2 and Figure 6-3** summarizes the future total traffic volumes at the 2031, 2036, and 2041 planning horizon during the weekday AM, PM and Saturday midday peak hours, respectively.

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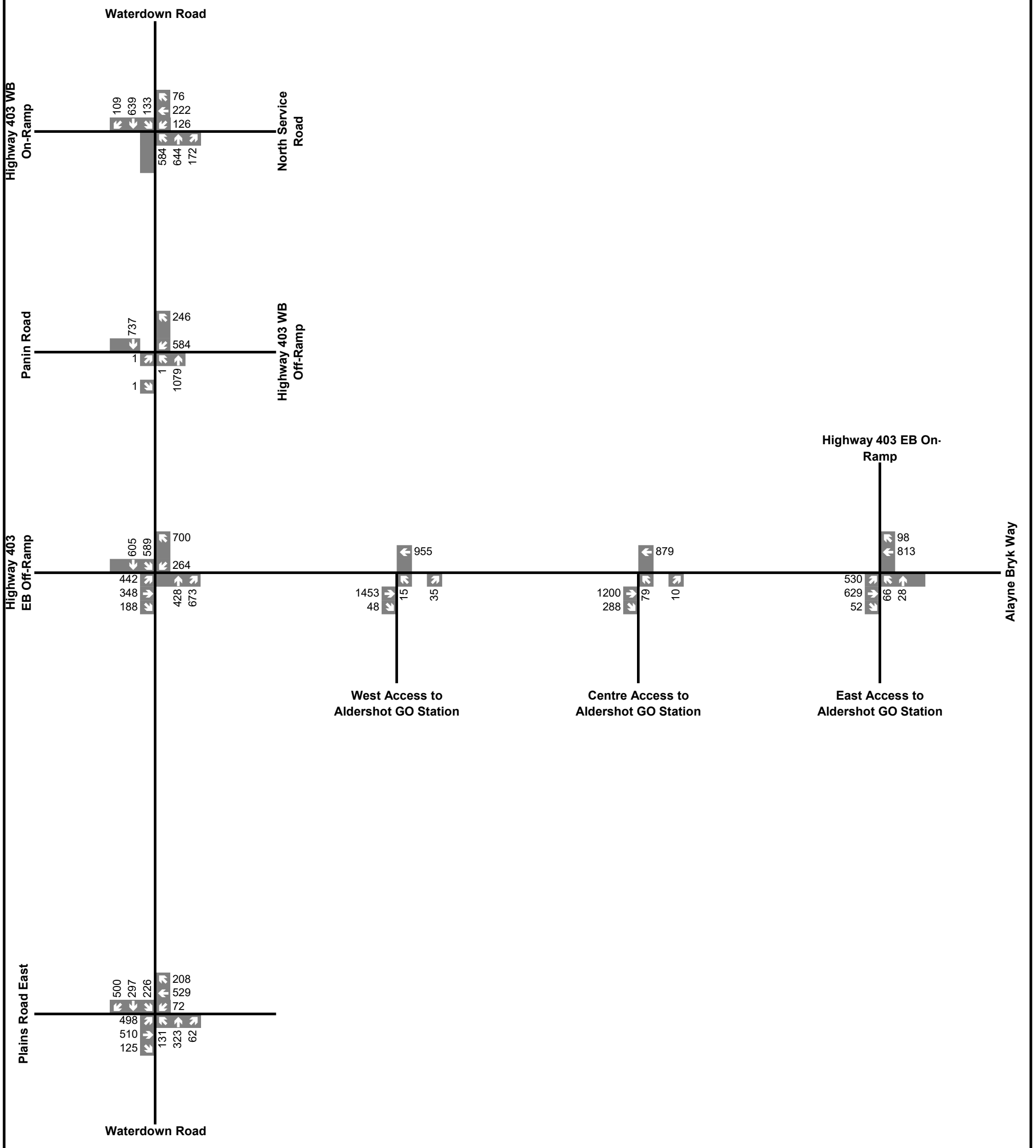


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-1a

Western Study Area (External Intersections)
2031 Future Total AM & PM Peak Hour Traffic Volumes

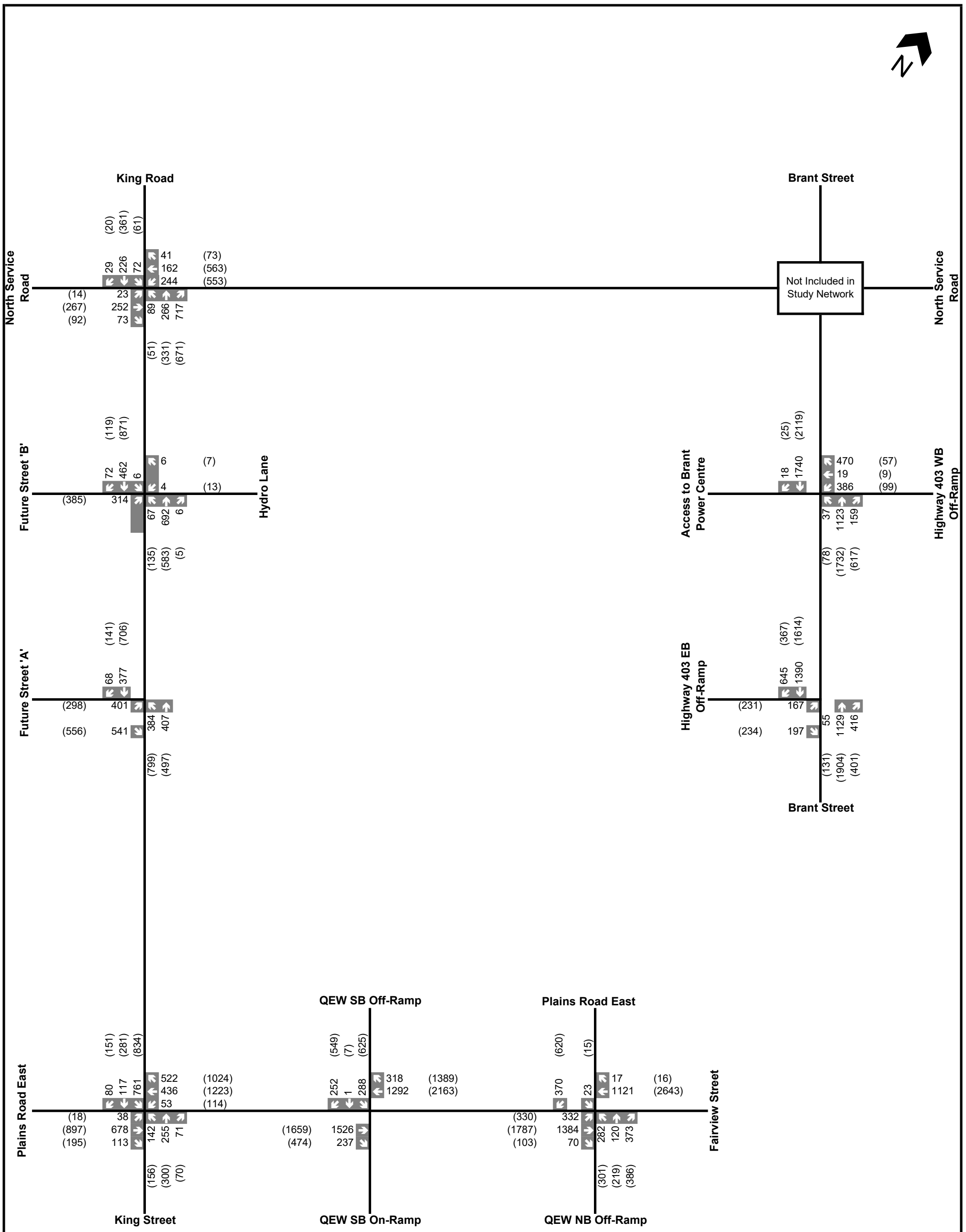


Legend

xx Saturday Peak Hour Traffic

Figure 6-1b

Western Study Area (External Intersections)
2031 Future Total Saturday Peak Hour Traffic Volumes



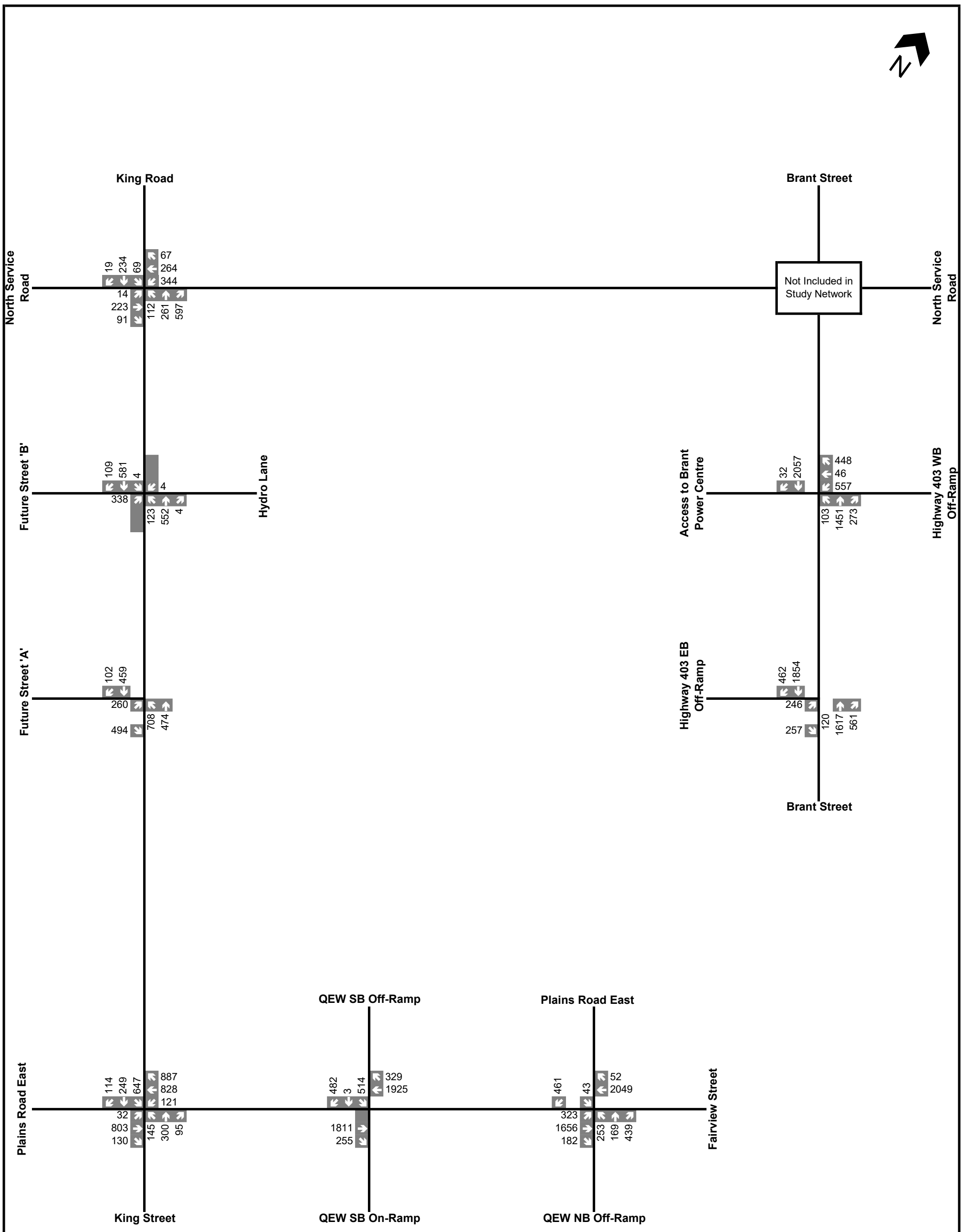
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-1c

Eastern Study Area (External Intersections) 2031 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



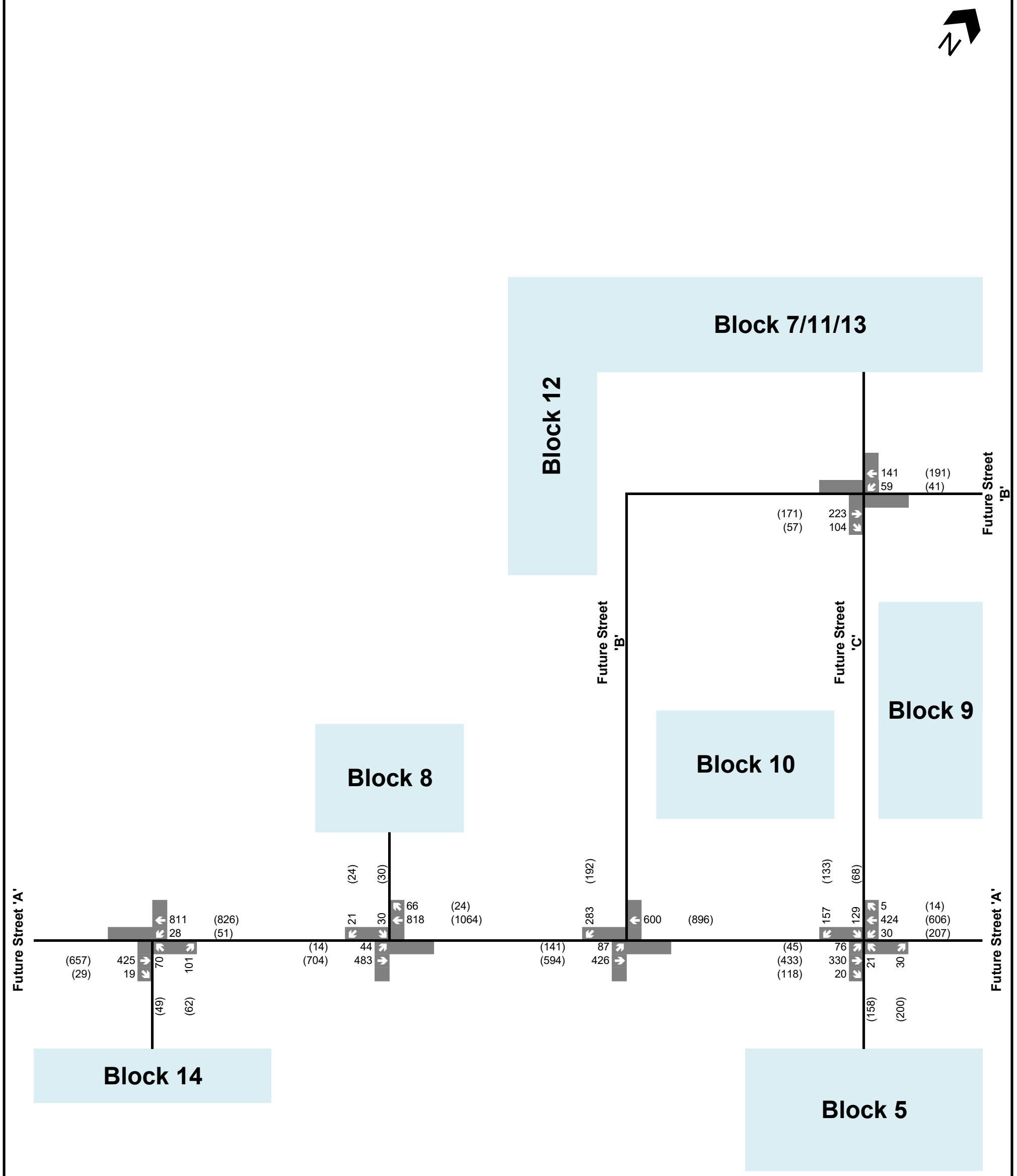
Legend

xx Saturday Peak Hour Traffic Volumes

Figure 6-1d

Eastern Study Area (External Intersections) 2031 Future Total Saturday Peak Hour Traffic Volumes

TYLin



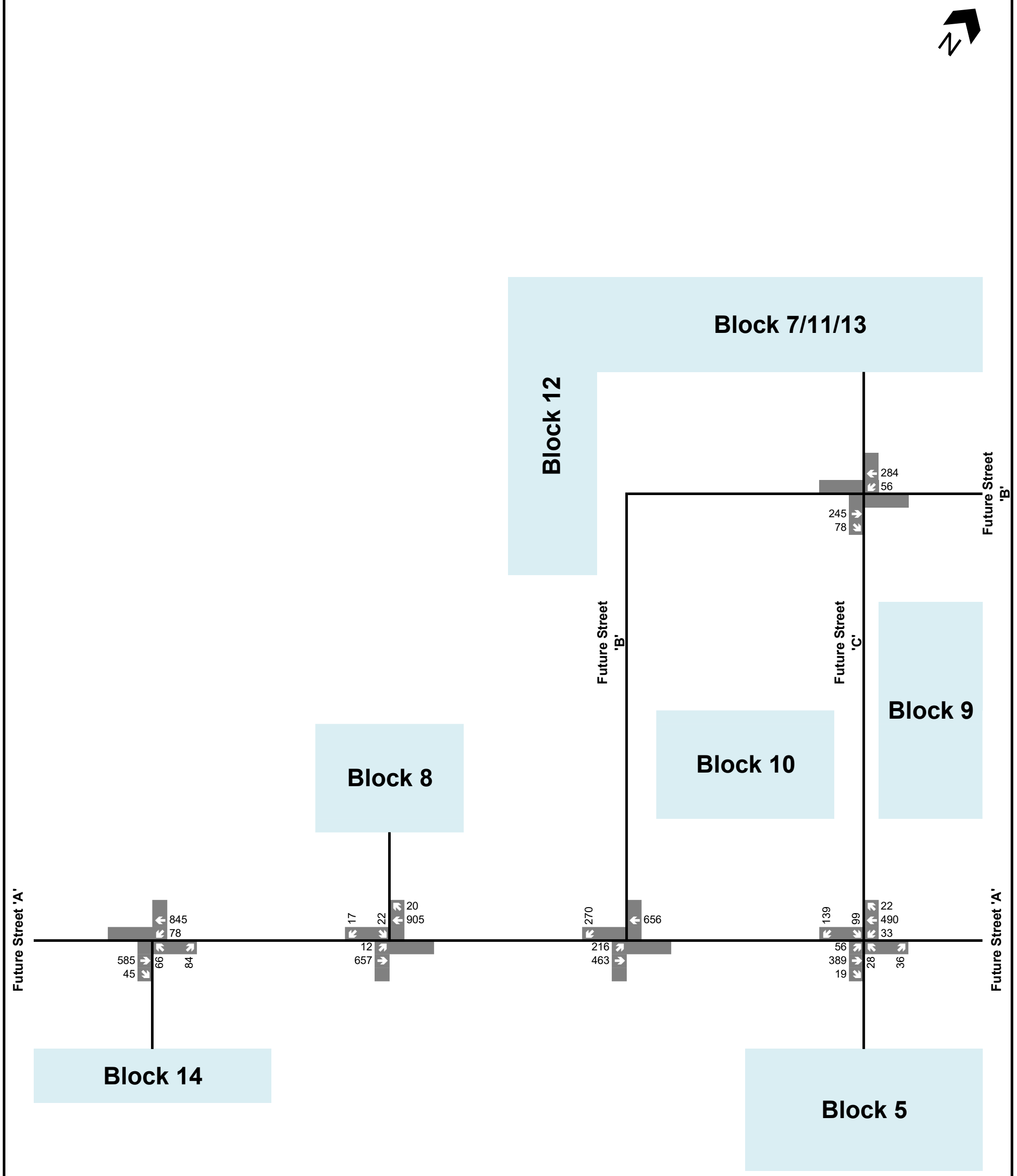
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-1e

Western Study Area (Internal Intersections)
2031 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



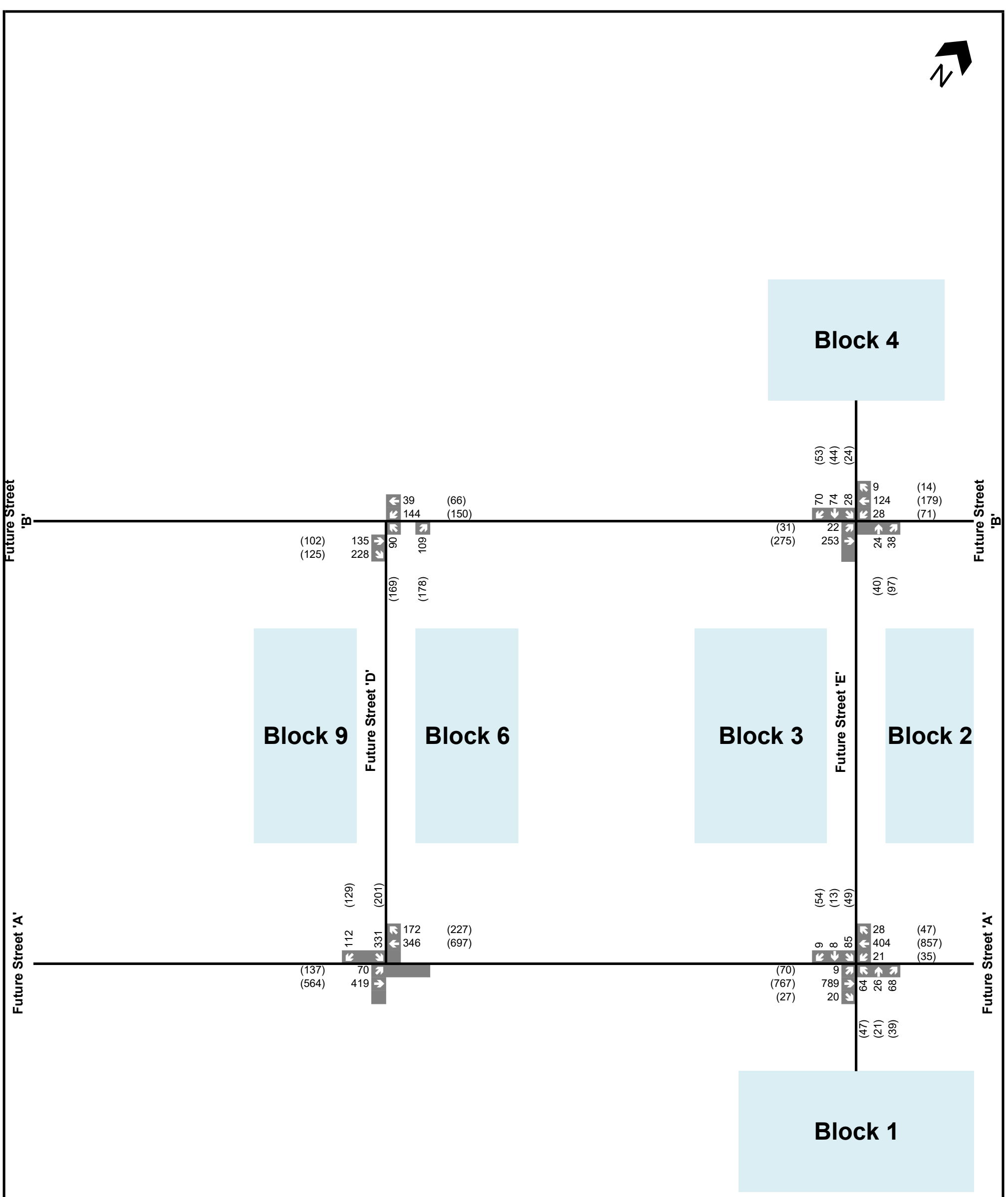
Legend

xx Saturday Peak Hour Traffic

Figure 6-1f

TYLin

Western Study Area (Internal Intersections)
2031 Future Total Saturday Peak Hour Traffic Volumes



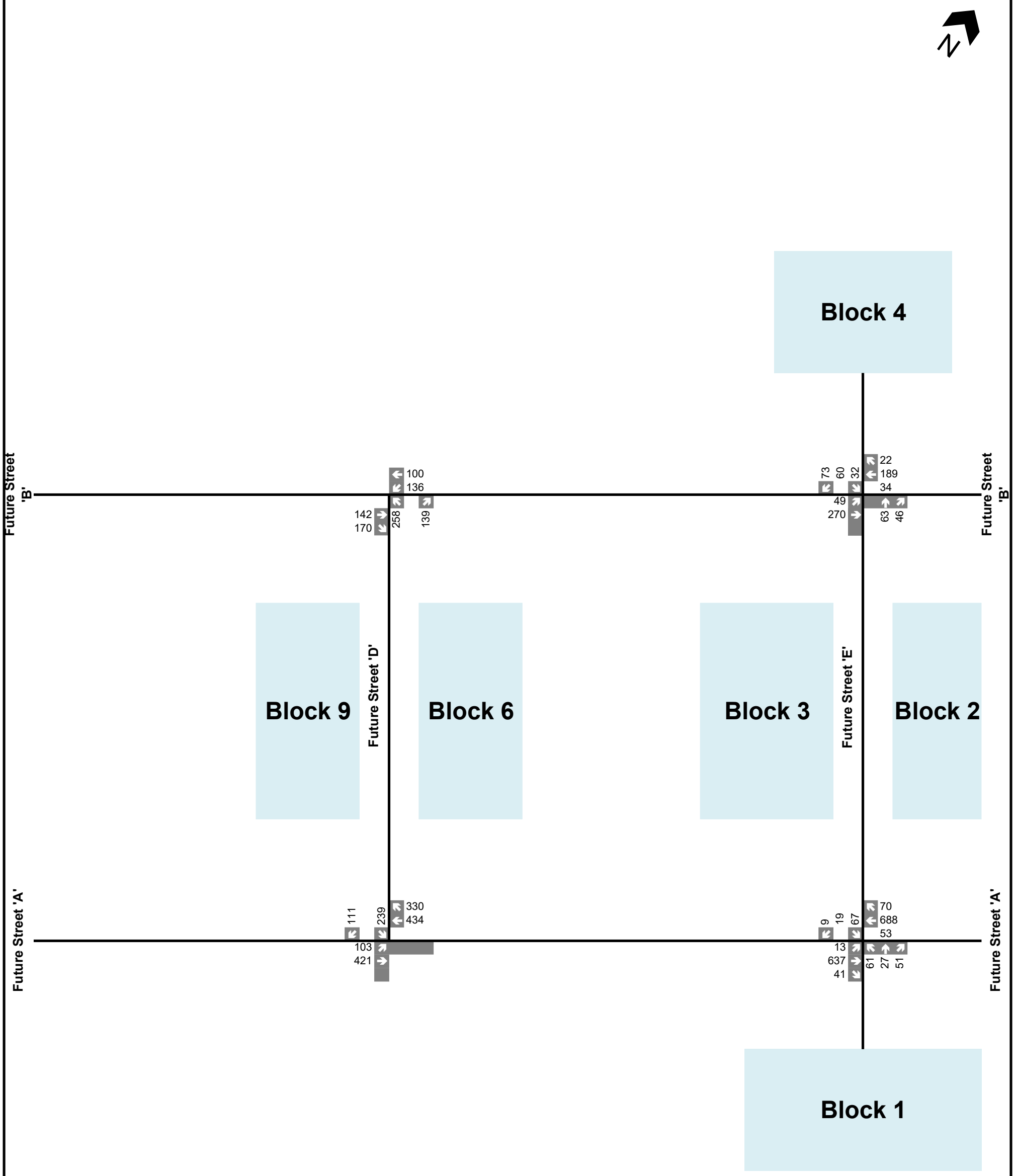
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-1g

Eastern Study Area (Internal Intersections)
2031 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



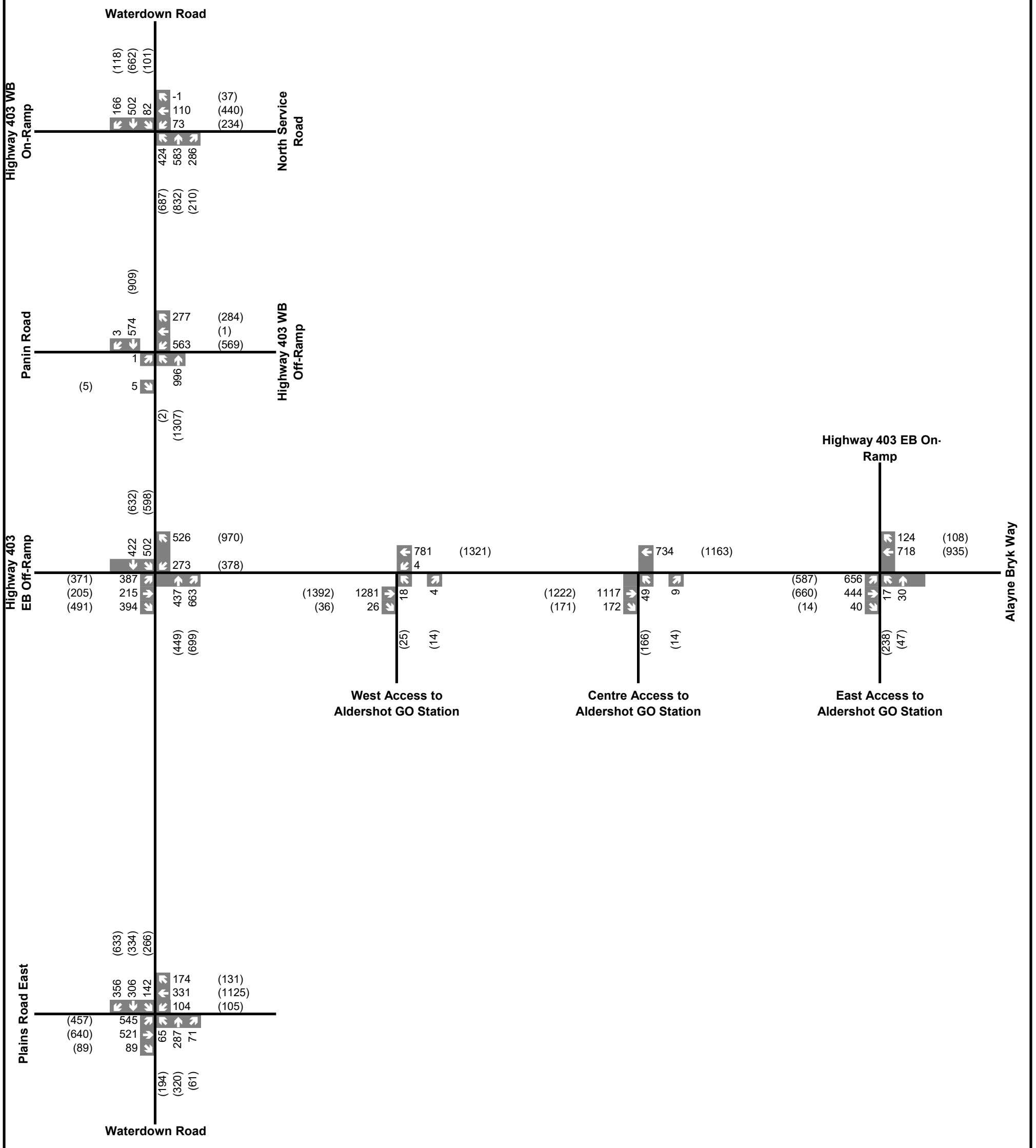
Legend

xx Saturday Peak Hour Traffic

Figure 6-1h

TYLin

Eastern Study Area (Internal Intersections)
2031 Future Total Saturday Peak Hour Traffic Volumes

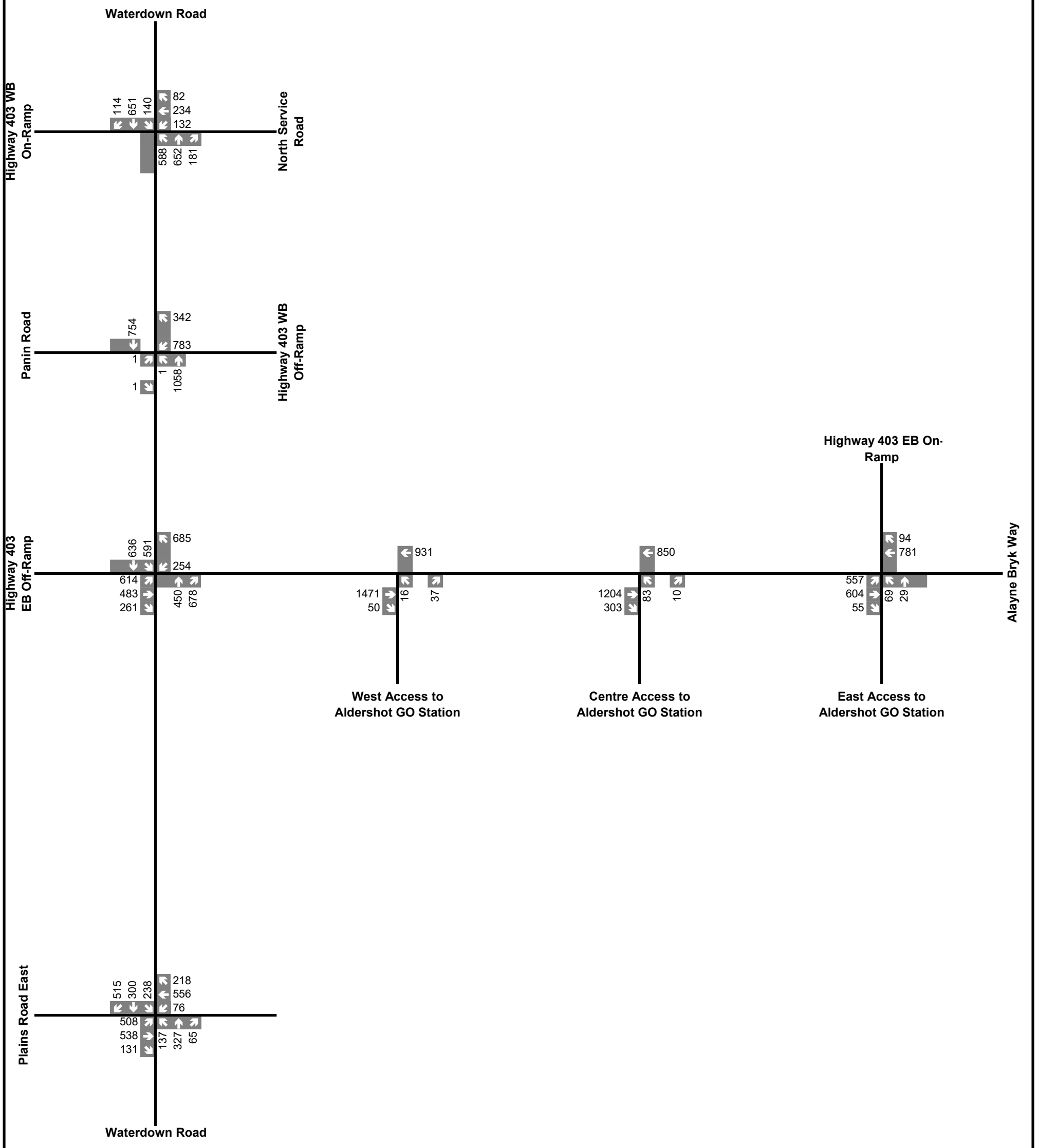


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-2a

Western Study Area (External Intersections)
2036 Future Total AM & PM Peak Hour Traffic Volumes

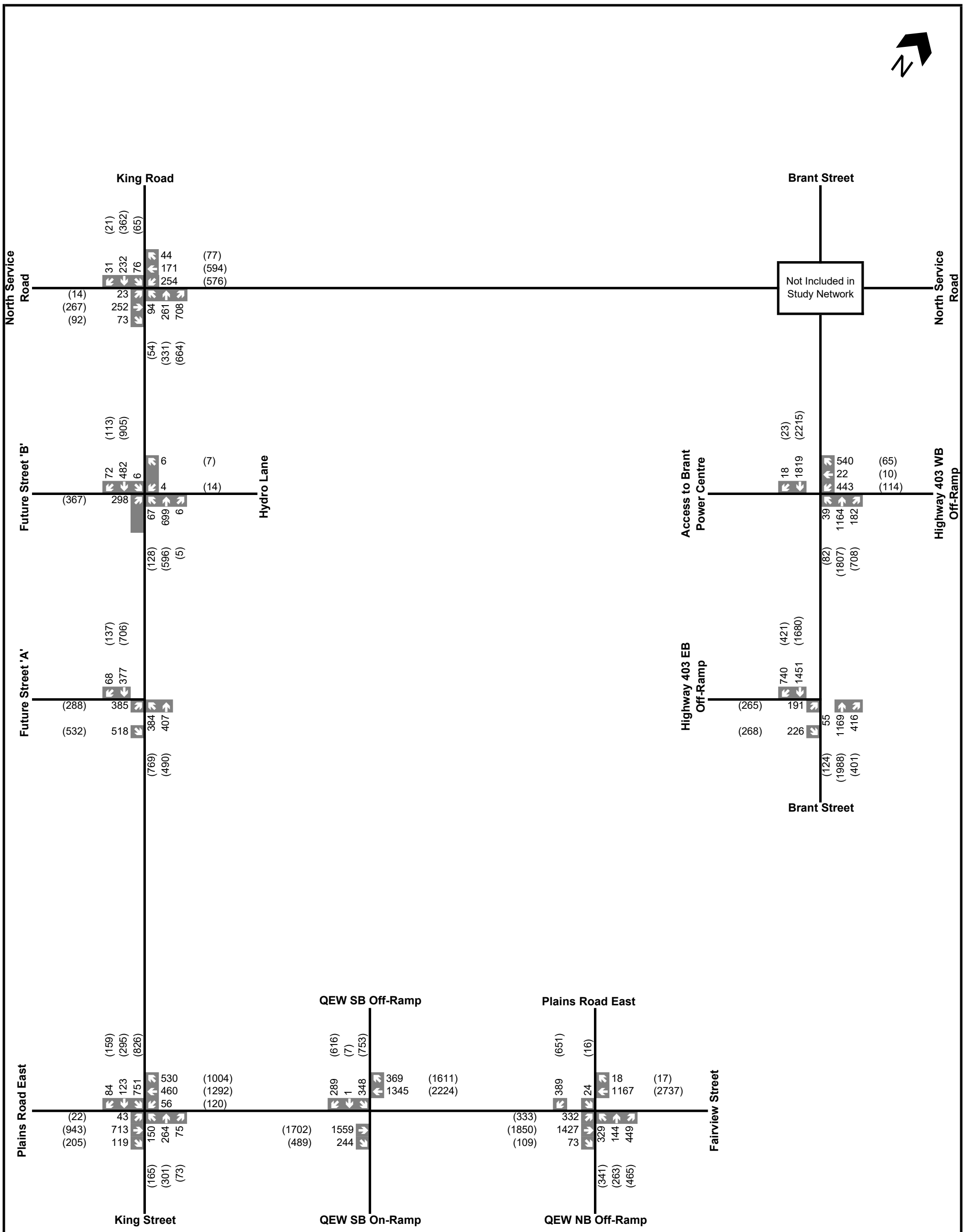


Legend

xx Saturday Peak Hour Traffic

Figure 6-2b

Western Study Area (External Intersections)
2036 Future Total Saturday Peak Hour Traffic Volumes



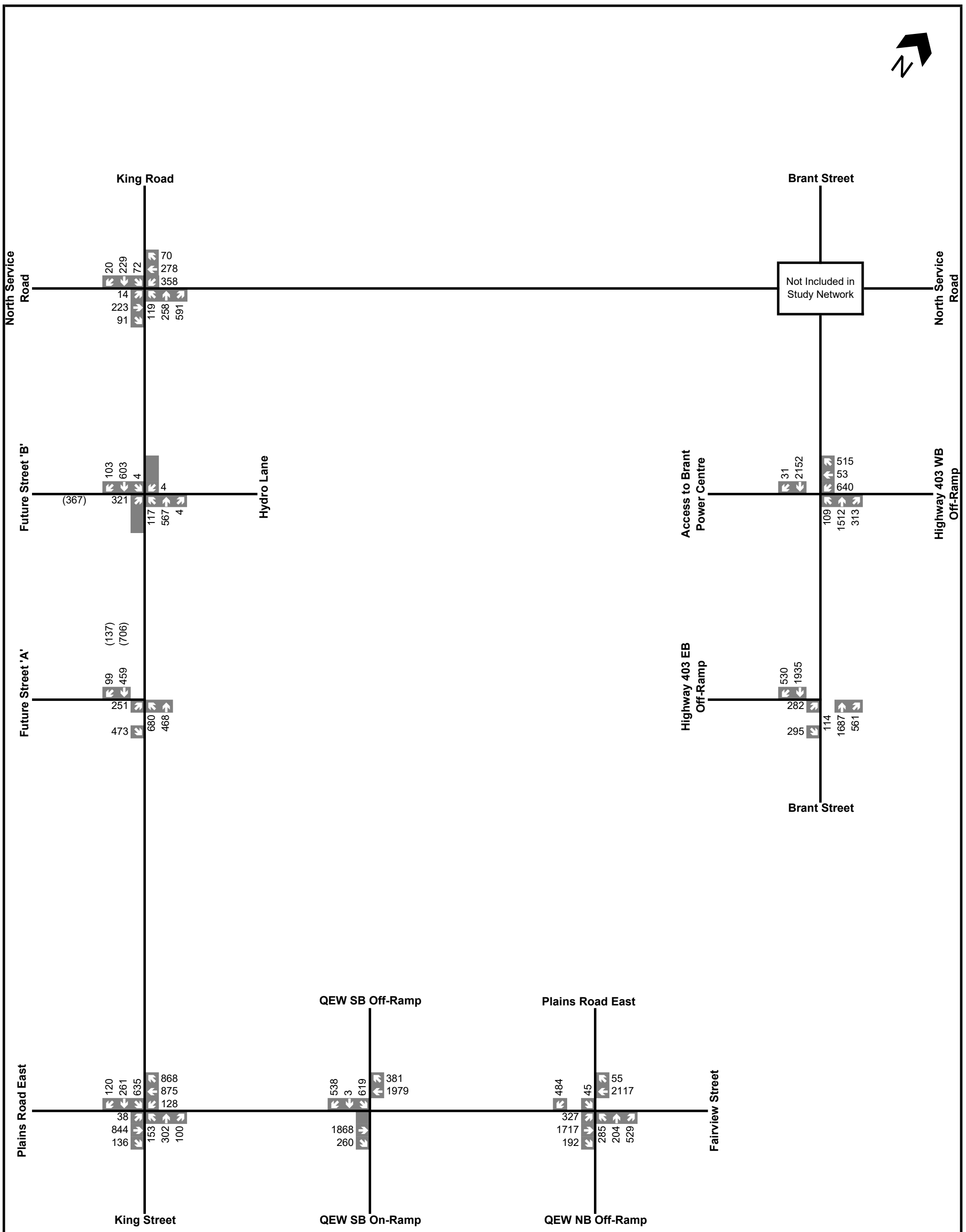
Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-2c

Eastern Study Area (External Intersections) 2036 Future Total
AM & PM Peak Hour Traffic Volumes

TYLin



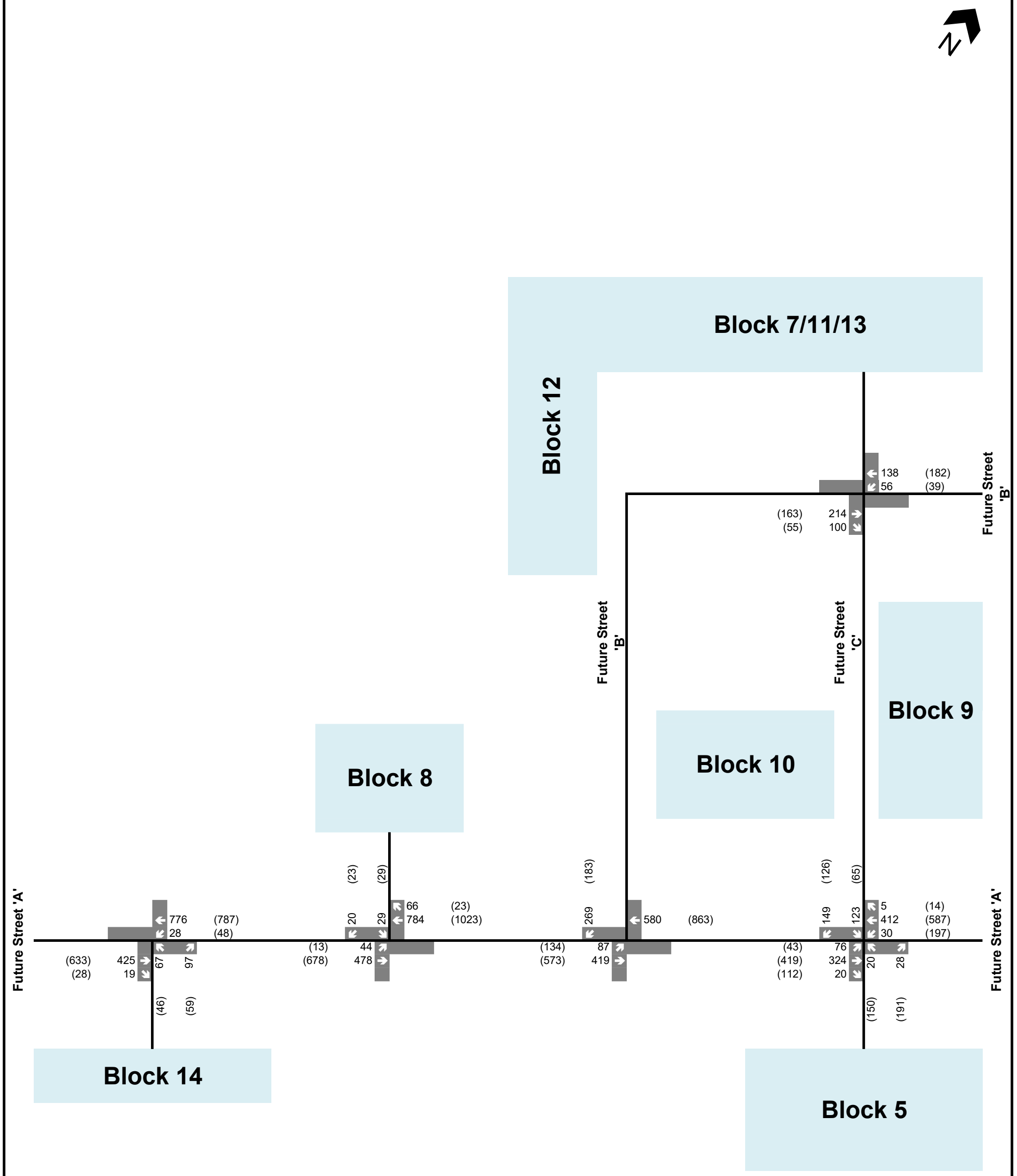
Legend

xx Saturday Peak Hour Traffic Volumes

Figure 6-2d

Eastern Study Area (External Intersections) 2036 Future Total Saturday Peak Hour Traffic Volumes

TYLin



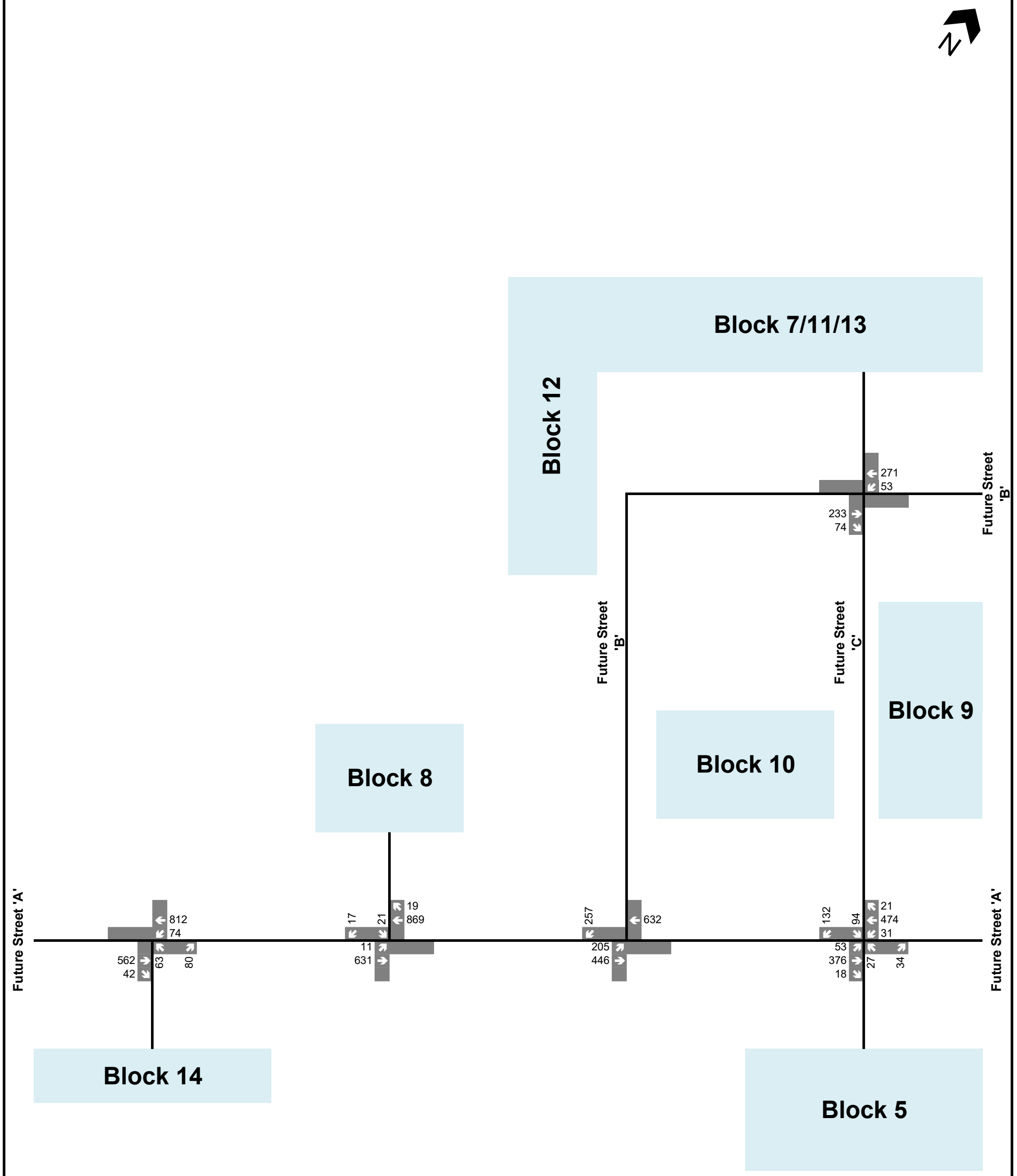
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-2e

Western Study Area (Internal Intersections)
2036 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



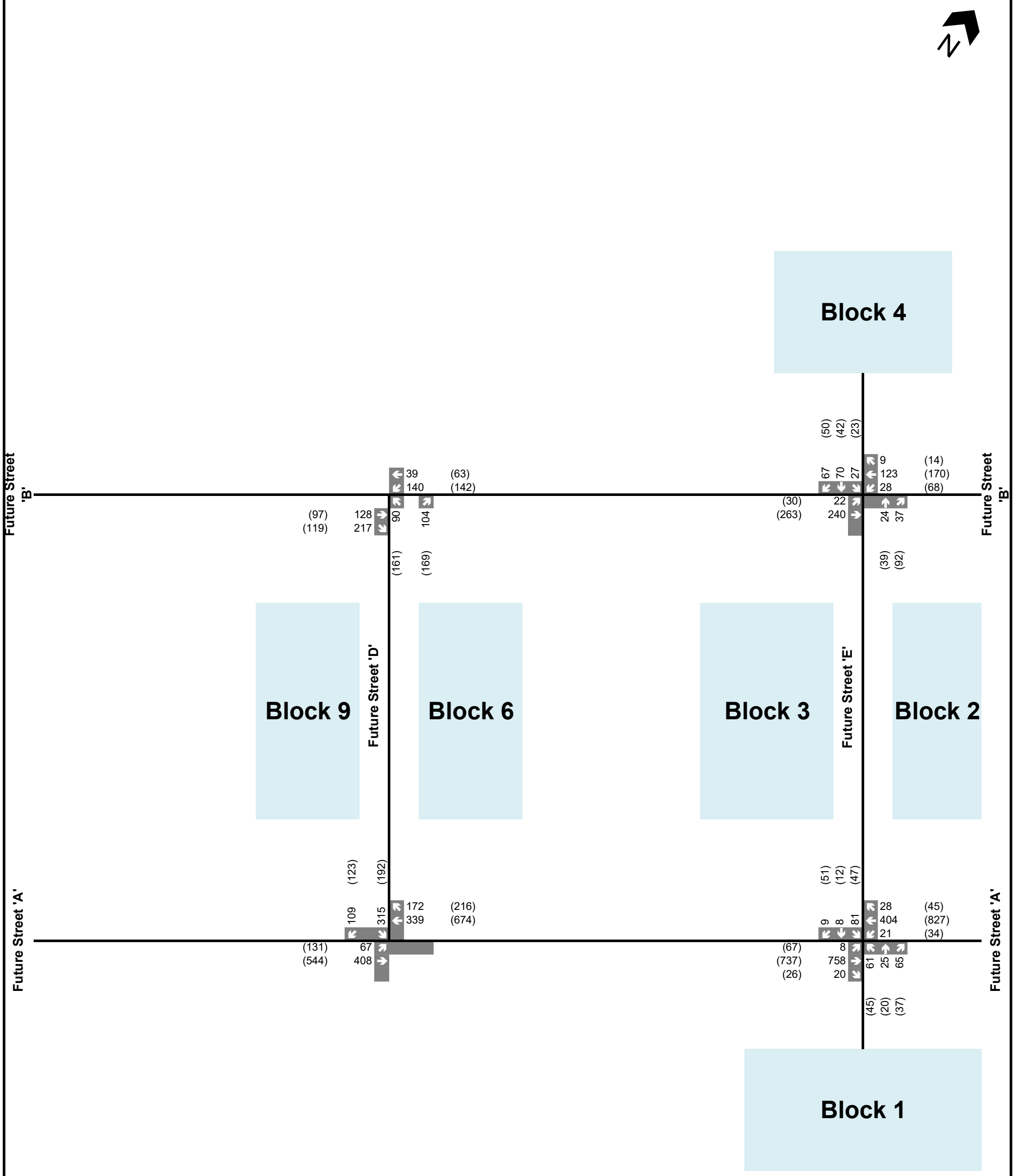
Legend

xx Saturday Peak Hour Traffic

Figure 6-2f

TYLin

Western Study Area (Internal Intersections)
2036 Future Total Saturday Peak Hour Traffic Volumes



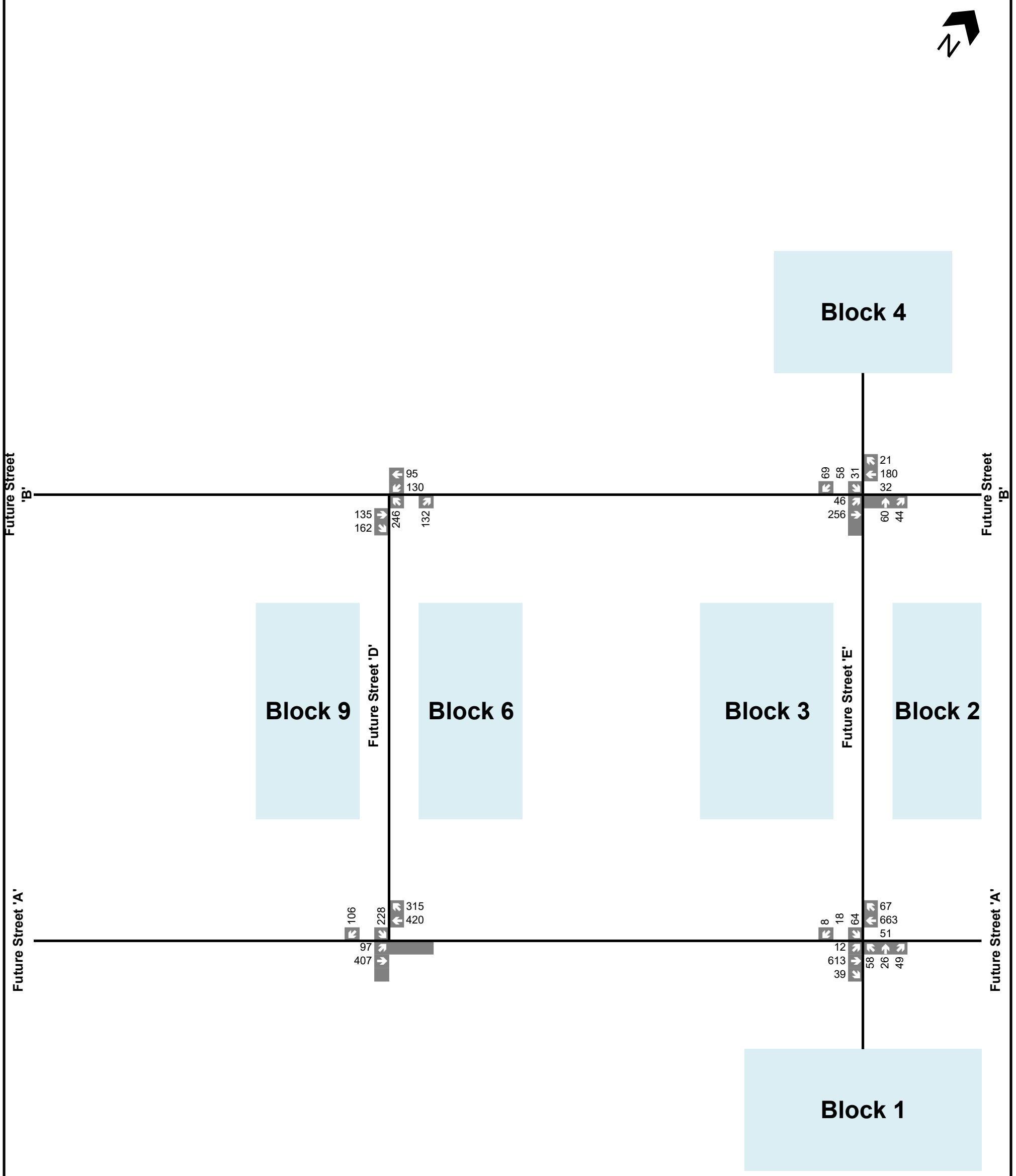
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-2g

Eastern Study Area (Internal Intersections)
2036 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



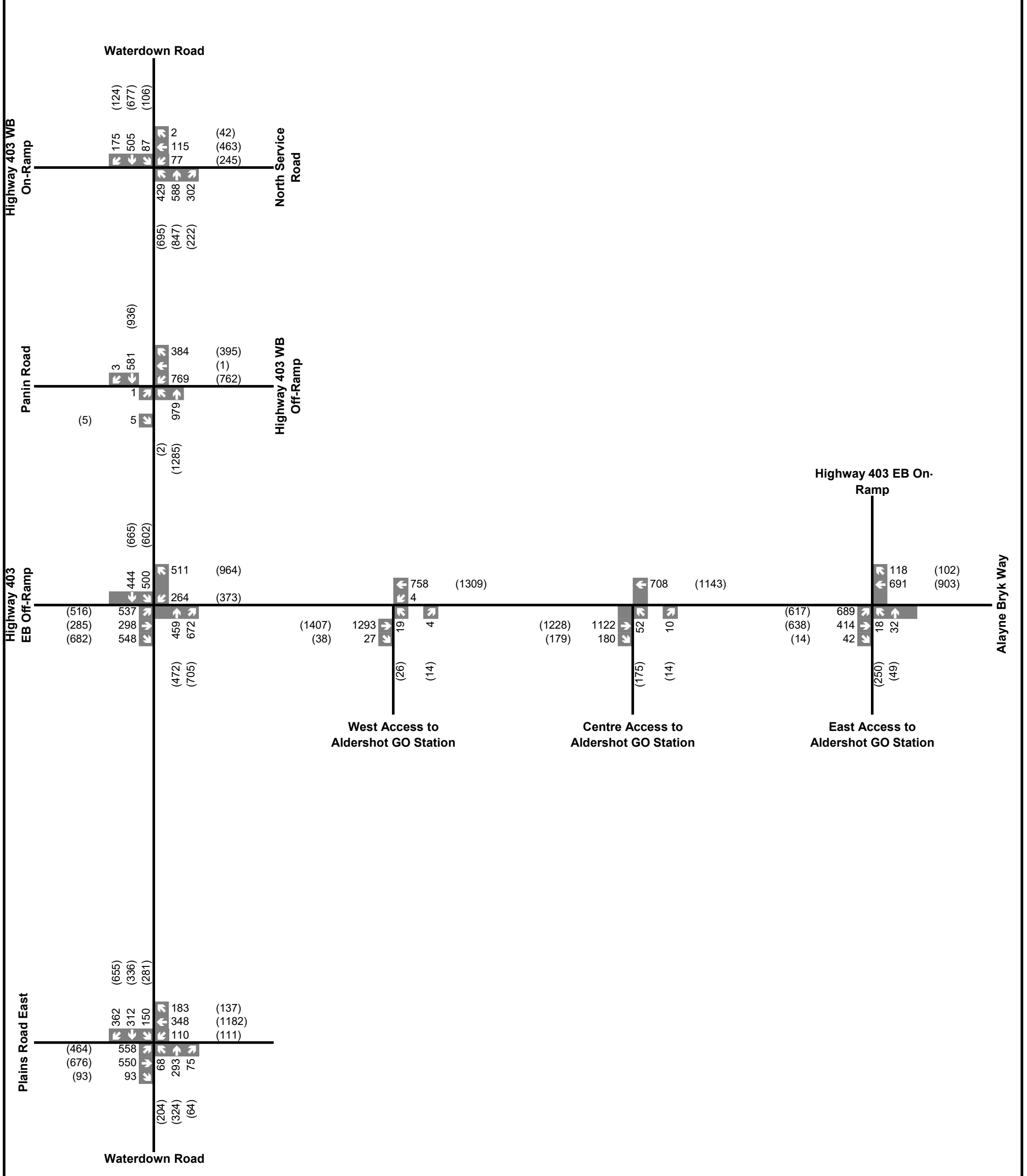
Legend

xx Saturday Peak Hour Traffic

Figure 6-2h

TYLin

Eastern Study Area (Internal Intersections)
2036 Future Total Saturday Peak Hour Traffic Volumes

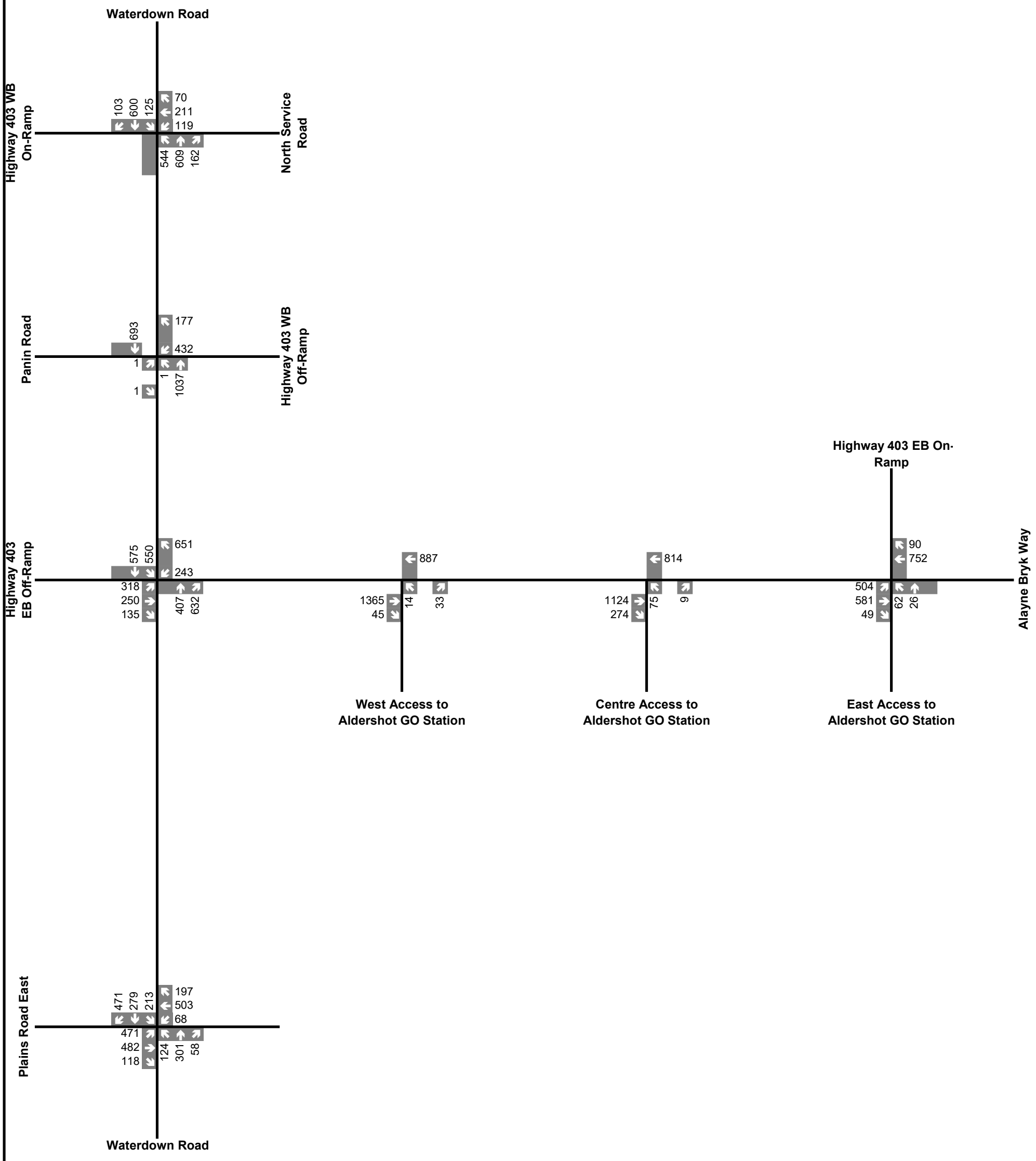


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-3a

Western Study Area (External Intersections)
2041 Future Total AM & PM Peak Hour Traffic Volumes

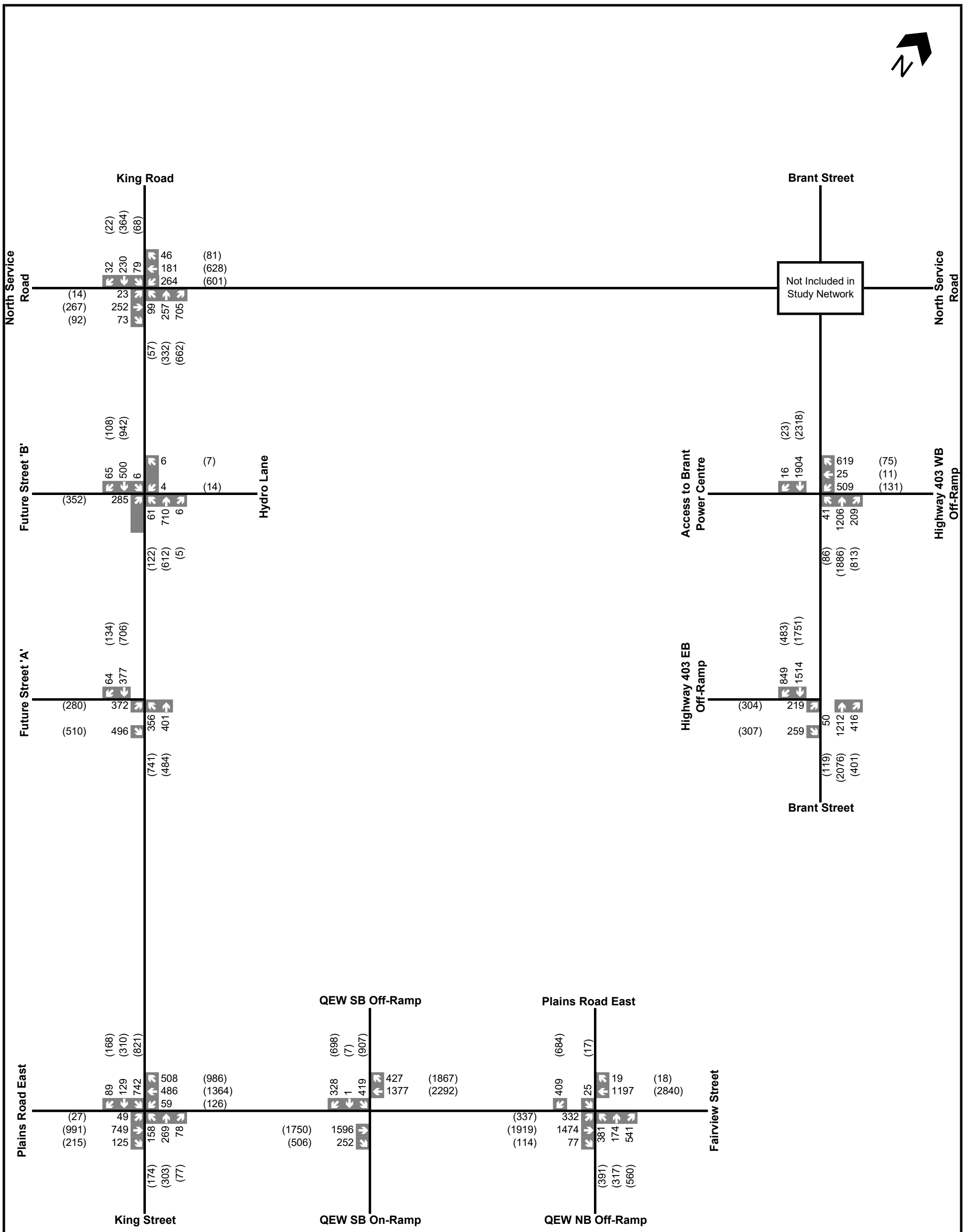


Legend

xx Saturday Peak Hour Traffic

Figure 6-3b

Western Study Area (External Intersections)
2041 Future Total Saturday Peak Hour Traffic Volumes

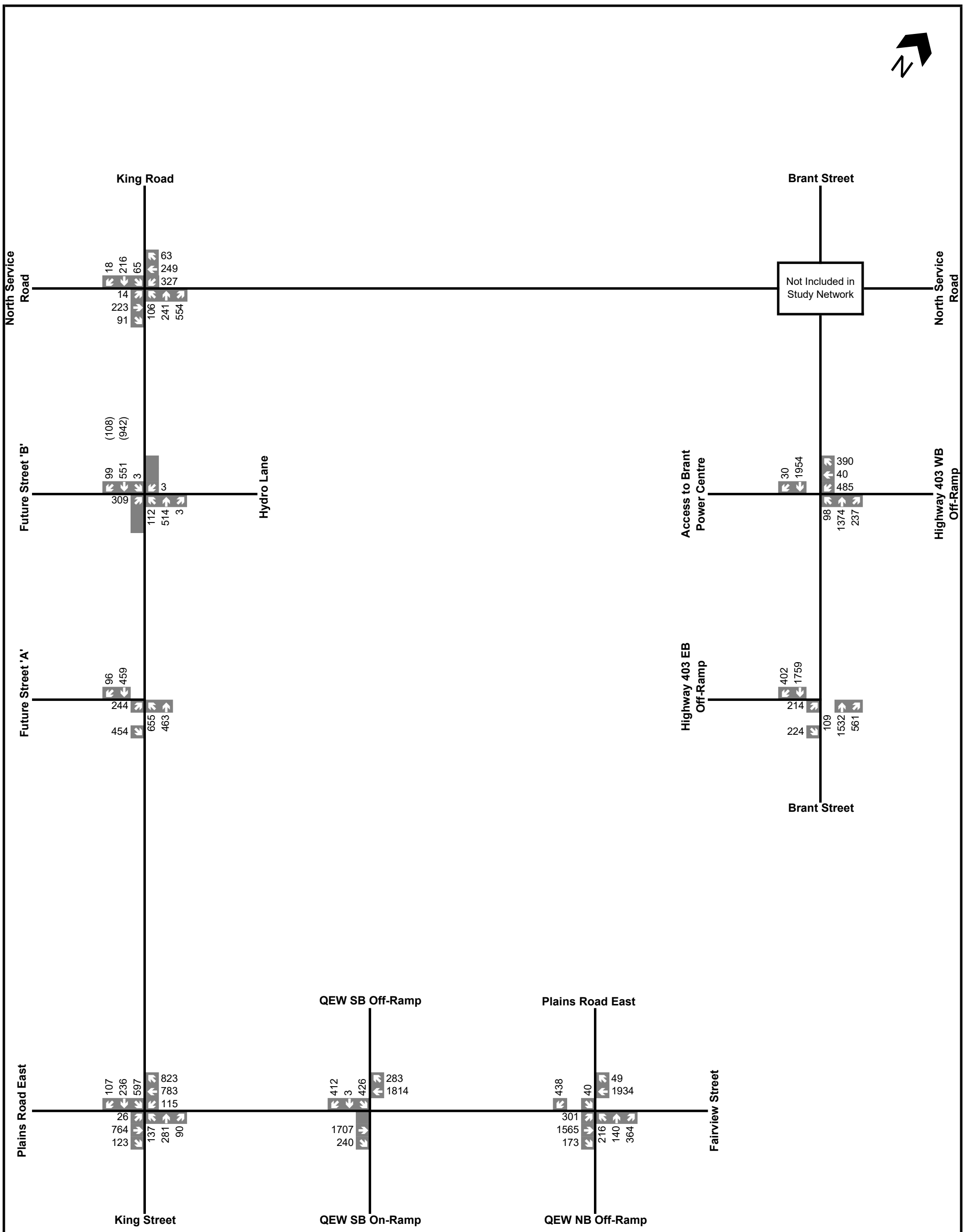


Legend

xx A.M. Peak Hour Traffic Volumes
(xx) P.M. Peak Hour Traffic Volumes

Figure 6-3c

Eastern Study Area (External Intersections) 2041 Future Total
AM & PM Peak Hour Traffic Volumes

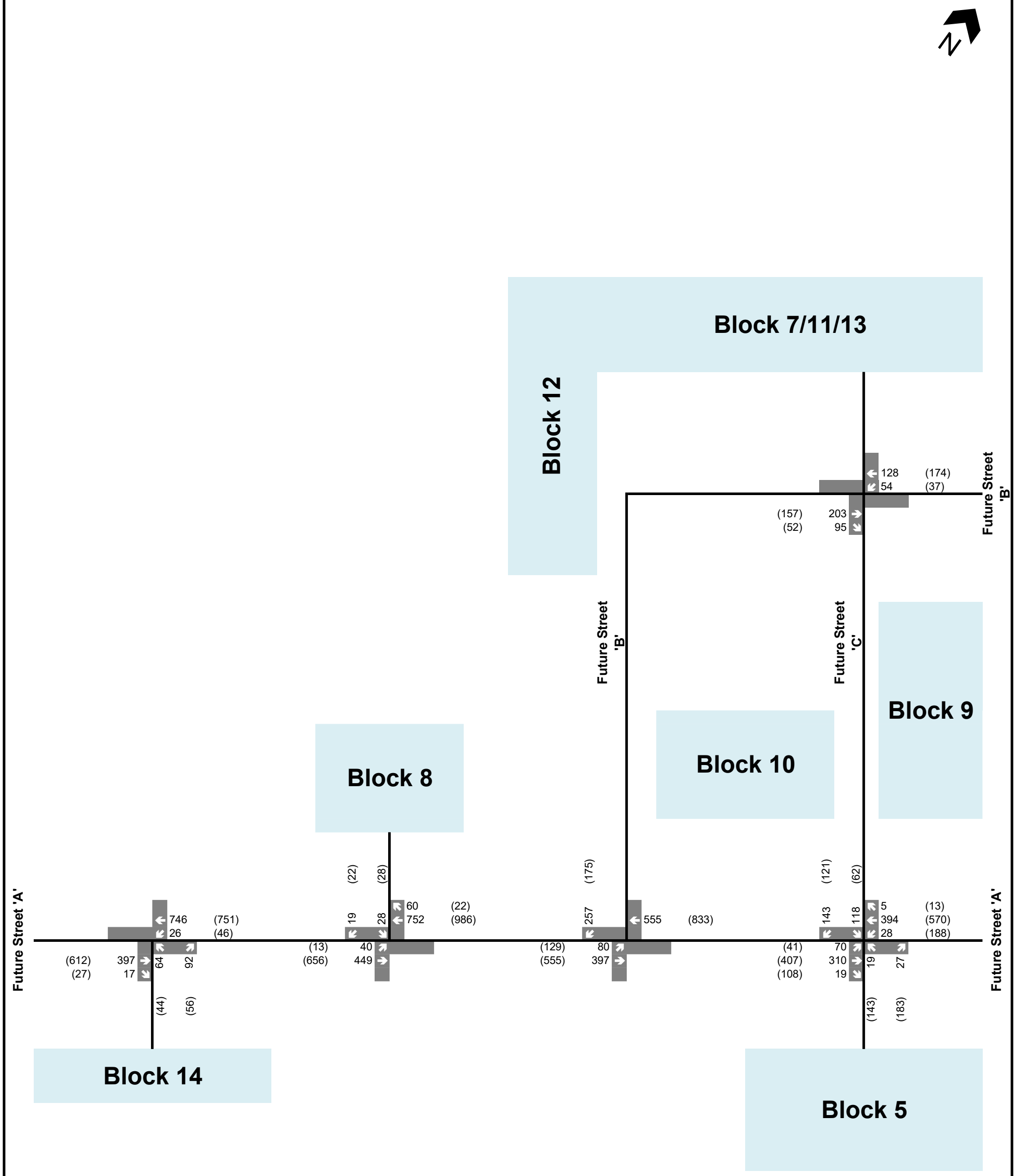


Legend

xx Saturday Peak Hour Traffic Volumes

Figure 6-3d

Eastern Study Area (External Intersections) 2041 Future Total Saturday Peak Hour Traffic Volumes



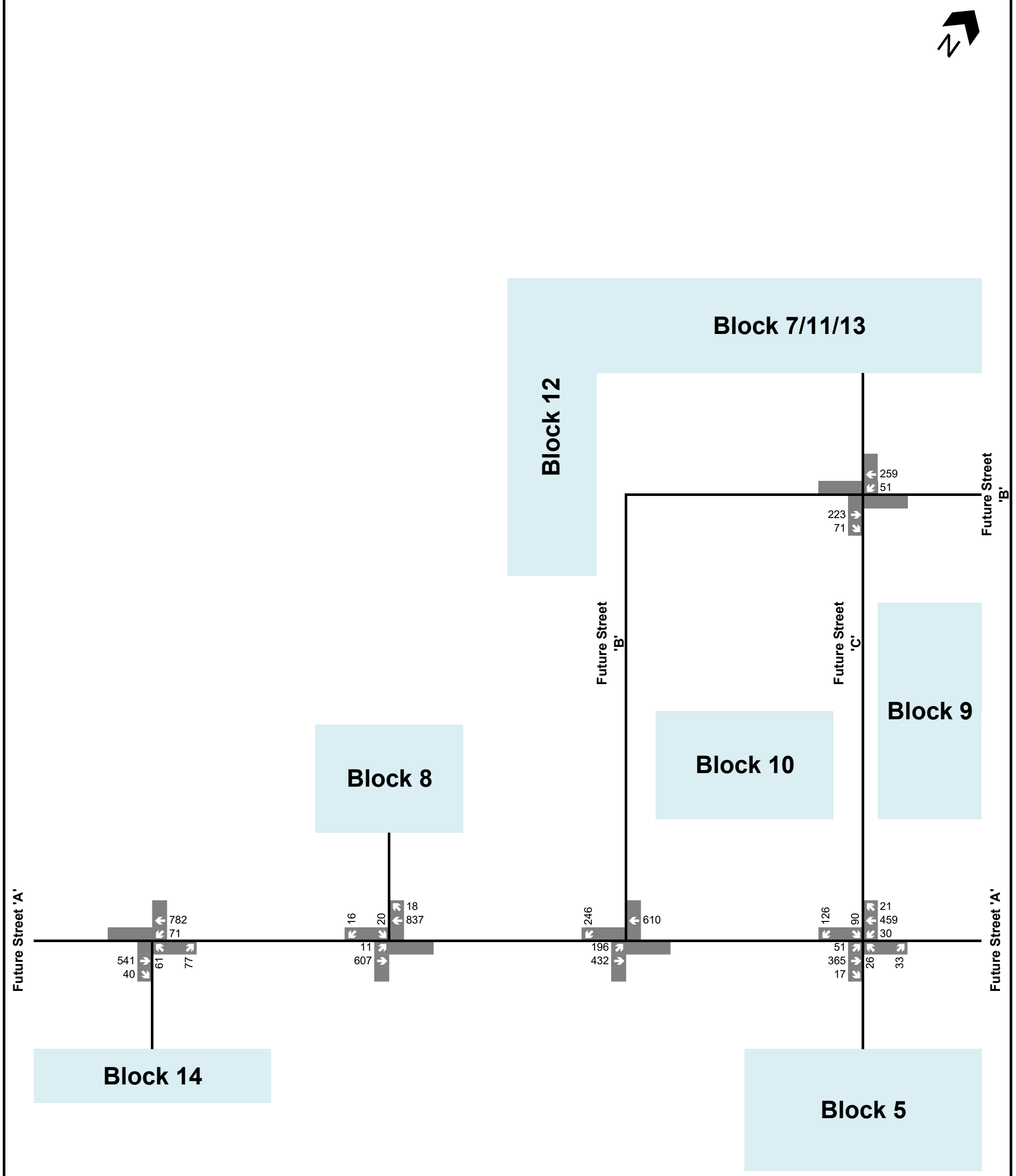
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-3e

Western Study Area (Internal Intersections)
2041 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



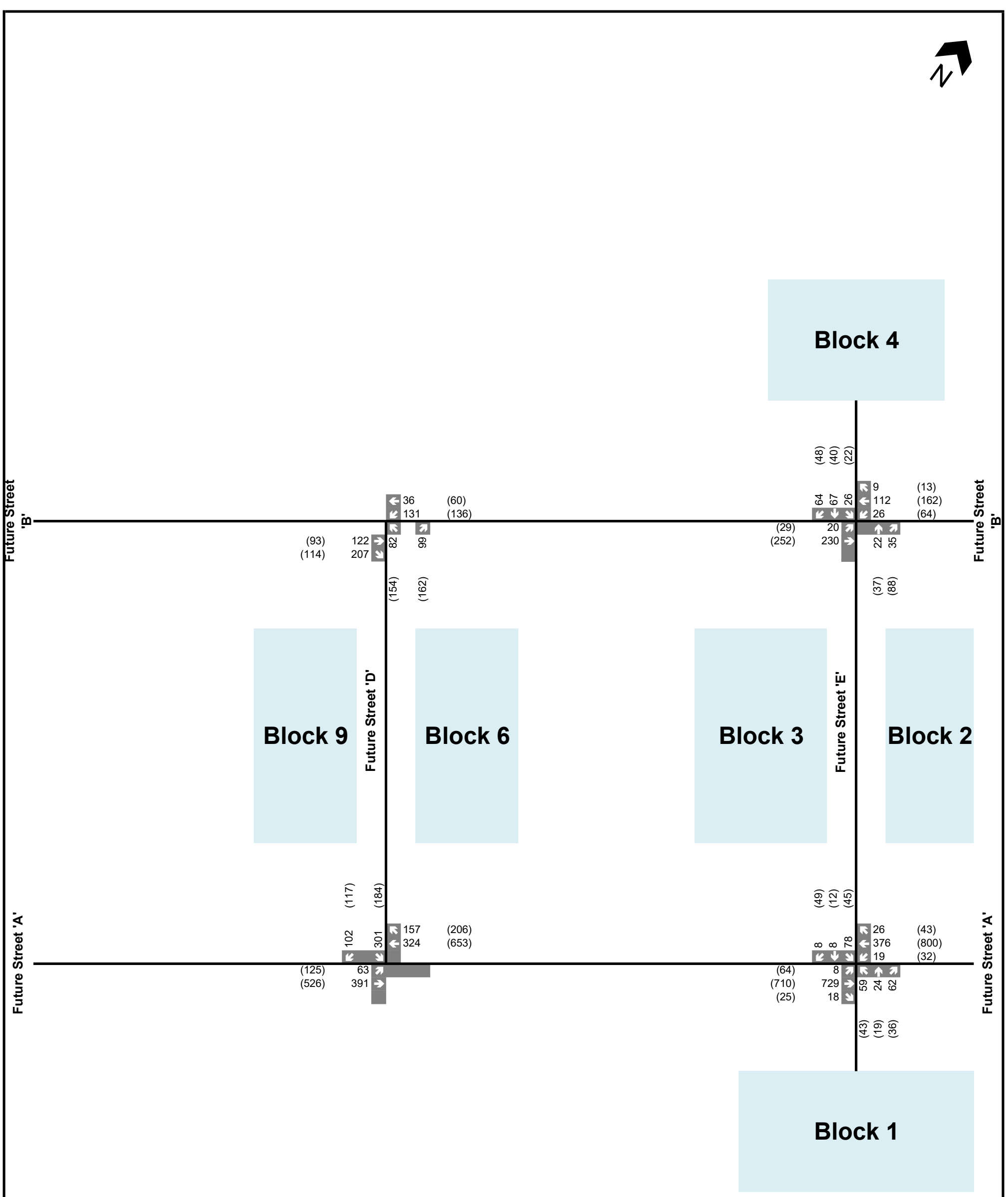
Legend

xx Saturday Peak Hour Traffic

Figure 6-3f

TYLin

Western Study Area (Internal Intersections)
2041 Future Total Saturday Peak Hour Traffic Volumes



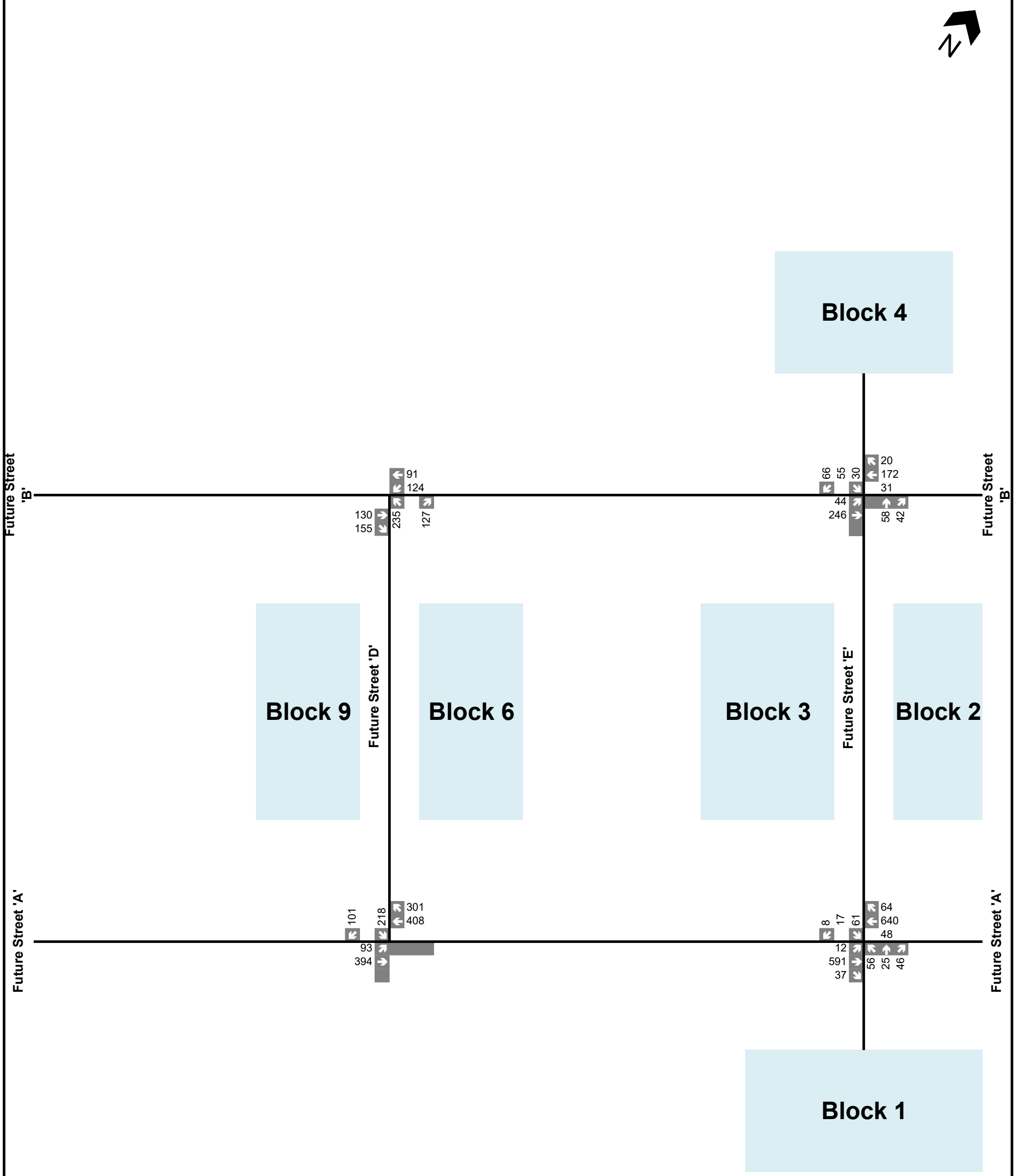
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 6-3g

Eastern Study Area (Internal Intersections)
2041 Future Total AM & PM Peak Hour Traffic Volumes

TYLin



Legend

xx Saturday Peak Hour Traffic

Figure 6-3h

TYLin

Eastern Study Area (Internal Intersections)
2041 Future Total Saturday Peak Hour Traffic Volumes

7 TRAFFIC CAPACITY ANALYSIS

The traffic capacity analysis assesses how well the intersections and access driveways perform and how they are expected to perform in the future. The analysis contained in this report utilized the Highway Capacity Manual (HCM) methodology within the Synchro 12 Software package.

As part of the capacity analysis, TYLin detailed the traffic operation at all turning movements at the study intersections. Critical turning movements were bolded in the summary table, identified as per Halton Region guidelines:

- Volume/capacity (V/C) ratios for overall intersection operations, through movements, exclusive movements or shared through/turning movements increased to 0.85 or above
- V/C ratios for MTO Ramp Terminal movements increased to 0.75 or above; or
- Queues for an individual movement are projected to exceed available turning lane storage.

In addition, the analysis is also to include unsignalized intersections:

- Level of service (LOS), based on average delay per vehicle, on individual movements exceeds LOS "D", or
- The estimated 95th percentile queue length for an individual movement exceeds the available queue storage.

The following tables summarize the Synchro/HCM capacity and queuing results for the study intersections during the weekday AM, PM and Saturday peak hours under existing (2026), future background (2031, 2031, 2036) and future total (2031, 2031, 2036) traffic conditions. Detailed Synchro reports are attached in **Appendix F**. Further, **Table 7-1** shows the control delay thresholds (seconds of delay per vehicle) for each LOS based on HCM methodology.

Table 7-1 LOS Operations

Level of Service	Signalized Intersection	Unsignalized Intersection
A	< 10 seconds	< 10 seconds
B	> 10 to 20 seconds	> 10 to 15 seconds
C	> 20 to 35 seconds	> 15 to 25 seconds
D	> 35 to 55 seconds	> 25 to 35 seconds
E	> 55 to 80 seconds	> 35 to 50 seconds
F	> 80 seconds	> 50 seconds

Intersection Organization – Internal and External

The study intersections have been grouped relative to their location. This entails intersections which are internal and external to the site. The categorization of the intersections and their respective roadway names is provided below:

External Intersections:

- North Service Road & Waterdown Road
- Highway 403 West Off-Ramp at Panin Road & Waterdown Road
- Waterdown Road & Alayne Bryk Way
- Waterdown Road & Plains Road East
- Alayne Bryk Way & GO Carpool Lot Entrance 1
- Alayne Bryk Way & GO Carpool Lot Entrance 2
- Alayne Bryk Way & GO Carpool Lot Entrance 3
- North Service Road & King Road
- King Road & Hydro Lane
- King Road & Plains Road East
- Highway 407 South On-Ramp & Fairview Street
- Fairview Street & Highway 407 North Off-Ramp

Internal Intersections:

- Street A & Street B
- Street B & Street C
- Street C & Street A
- Street B & Street D
- Street A & Street D
- Street A & Street E
- Street B & Street E
- King Road & Street A
- King Road & Street B

Note that intersections internal to the development are analyzed for future conditions per **Sections 7.2 Future Background Conditions** and **Section 7.3 Future Total Conditions** of the TIS.

7.1 Existing Conditions

The traffic capacity analysis results for the intersections in the study area are summarized in **Table 7-2** for both the weekday AM/PM and Saturday midday peak hours under existing traffic conditions. The existing signal timing plans were obtained from the City of Burlington or developed signal timing plans at all ramp terminals in accordance with MTO Traffic Signal Operating & Timing Policy and OTM Book 12. The existing traffic model will serve as a baseline for the remaining analysis there after.

Table 7-2 Existing 2026 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.22	18	B	0.45	25	C	0.32	23	C
		WBT	0.29	19	B	0.80	36	D	0.53	27	C
		WBR	0.08	1	A	0.19	4	A	0.25	5	A
		NBL	0.44	8	A	0.74	23	C	0.50	9	A
		NBTR	0.44	7	A	0.54	19	B	0.38	10	A
		SBL	0.18	6	A	0.32	14	B	0.30	9	A
		SBTR	0.61	17	B	0.78	36	D	0.63	23	C
2	Waterdown Road & Panin Road/Hwy 403 Off-Ramp	EBLR	0.02	1	A	0.01	>0.01	A	0.01	>0.01	A
		WBL	0.26	10	A	0.29	14	B	0.31	10	A
		WBR	0.32	5	A	0.39	10	B	0.32	4	A
		NBLR	0.62	14	B	0.72	15	B	0.62	14	B
		SBTR	0.38	11	B	0.52	11	B	0.47	12	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.50	27	C	0.47	26	C	0.69	31	C
		EBT	0.26	23	C	0.25	23	C	0.51	26	C
		EBR	0.64	33	C	0.69	33	C	0.34	24	C
		WBL	0.07	19	B	0.13	19	B	0.05	18	B
		WBR	0.18	3	A	0.47	5	A	0.22	5	A
		NBTR	0.78	20	B	0.78	24	C	0.77	23	C
		SBL	0.75	27	C	0.72	24	C	0.70	22	C
		SBT	0.26	11	B	0.38	12	B	0.37	12	B
4	Waterdown Road & Plains Road East	EBL	0.98	64	E	0.88	57	E	0.78	30	C
		EBTR	0.66	36	D	0.54	26	C	0.46	23	C
		WBL	0.35	21	C	0.28	14	B	0.18	14	B
		WBTR	0.73	40	D	0.99	58	E	0.62	30	C
		NBL	0.12	17	B	0.51	32	C	0.37	26	C
		NBTR	0.56	36	D	0.72	54	D	0.81	61	E
		SBL	0.38	20	B	0.69	35	C	0.66	33	C
		SBT	0.31	28	C	0.33	35	C	0.39	37	D
		SBR	0.35	6	A	0.82	29	C	0.77	19	B

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBTR	0.27	1	A	0.28	3	A	0.30	3	A
		WBT	0.05	2	A	0.13	2	A	0.05	3	A
		NBLR	0.09	18	B	0.15	14	B	0.15	10	A
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBLR	0.47	4	A	0.80	20	C	0.47	6	A
		NBT	0.09	19	B	0.60	20	C	0.20	16	B
8	King Road & North Service Road	EBL	0.05	17	B	0.05	20	C	0.03	17	B
		EBT	0.42	19	B	0.55	25	C	0.40	18	B
		WBL	0.33	9	A	0.70	17	B	0.44	9	A
		WBT	0.16	9	A	0..59	15	B	0.25	9	A
		WBR	0.04	2	A	0.08	4	A	0.07	2	A
		NBLTR	0.51	24	C	0.49	23	C	0.57	28	C
		SBLT	0.71	44	D	0.72	41	D	0.58	39	D
		SBR	0.1	1	A	0.05	1	A	0.05	1	A
10	King Road & Plains Road East	EBL	0.4	25	C	0.56	31	C	0.49	22	C
		EBT	0.5	33	C	0.51	22	C	0.49	25	C
		EBR	0.2	8	A	0.25	8	A	0.17	7	A
		WBL	0.2	22	C	0.35	14	B	0.36	17	B
		WBT	0.6	33	C	0.91	38	D	0.68	29	C
		NBL	0.4	25	C	0.68	48	D	0.48	34	C
		NBT	0.7	59	E	0.69	58	E	0.76	61	E
		SBL	0.6	50	D	1.30	205	F	0.68	65	E
		SBT	0.2	32	C	0.69	56	E	0.57	50	D
		SBR	0.16	6	A	0.43	24	C	0.31	15	B
11	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBT	0.58	11	B	0.52	14	B	0.64	14	B
		EBR	0.29	3	A	0.41	3	A	0.22	3	A
		WBT	0.56	11	B	0.70	17	B	0.66	14	B
		WBR	0.21	1	A	0.83	6	A	0.20	1	A
		SBL	0.31	16	B	0.55	26	C	0.49	22	C
		SBT	0.31	16	B	0.54	26	C	0.49	22	C
		SBR	0.38	14	B	0.66	27	C	0.60	22	D
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.39	16	B	0.93	85	F	0.60	43	D
		EBT	0.46	11	B	0.52	18	B	0.46	12	B
		EBR	0.05	1	A	0.07	1	A	0.12	1	A
		WBT	0.62	21	C	0.96	46	D	0.82	32	C
		NBL	0.43	23	C	0.33	39	D	0.34	37	D
		NBT	0.57	23	C	0.56	43	D	0.69	44	D

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		NBR	0.50	17	B	0.53	35	C	0.60	31	C
		SBL	0.08	19	B	0.06	34	C	0.23	39	D
		SBR	0.64	14	B	0.97	64	E	0.76	25	C
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.36	25	C	0.22	39	D	0.59	39	D
		WBT	0.37	25	C	0.22	39	D	0.59	39	D
		WBR	0.80	33	C	0.21	13	B	0.85	47	D
		NBL	0.44	36	D	0.70	48	D	0.59	28	D
		NBT	0.42	15	B	0.43	5	A	0.47	15	B
		NBR	0.10	1	A	0.38	1	A	0.17	1	A
		SBT	0.73	20	B	0.54	6	A	0.85	29	C
14	Brant Street & Hwy 403 EB Off-Ramp	EBL	0.30	12	B	0.39	17	B	0.43	17	B
		EBR	0.32	13	B	0.40	19	B	0.45	20	B
		NBL	0.42	7	A	0.66	9	A	0.55	8	A
		NBT	0.56	8	A	0.55	8	A	0.64	9	A
		NBR	0.39	1	A	0.23	1	A	0.28	1	A
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.13	16	C	0.50	25	D	0.24	18	C
9	King Road & Hydro Lane/Street B (Future Signalized)	WBL	0.01	13	B	0.01	14	B	0.01	14	B
		SBT	0.01	8	A	0.01	8	A	0.01	8	A

Under existing conditions, all movements at all study intersections are shown to operate well with a v/c under 1.0, LOS of E or better, and reasonable delays. The only exception is the intersection of King Road and Plains Road East during the PM peak hour which the SBL movements are anticipated to operate at a v/c of 1.3, delay over 200s and an LOF of F.

7.2 Future Background Conditions

All future background horizon analysis includes signal timing optimization and geometric improvements to the network. All intersections underwent signal timing optimization to improve intersection operations. **Table 7-3** summarizes the proposed geometric improvements recommended to facilitate future background volumes.

Table 7-3 Future Background Proposed Geometric Improvements

Intersection	Geometric Improvements
Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way	- Dual NB right turn lane - Dual SB - Dual EB left turn lane
Waterdown Road & Plains Road East	- EB dual left turn lane
King Road & Plains Road East	- Designated WB right turn lane, - Dual SB left turn lane
Fairview Street & QEW NB Off-Ramp/Plains Road East	- Dual SB right turn lane

7.2.1 Future Background 2031

The traffic capacity analysis results for the study area intersections under the 2031 future background conditions are summarized in **Table 7-4** for both the weekday AM, PM and Saturday peak hours for external intersections. Future background analysis includes upgrades to existing signal timing plans, any background developments within the area, background growth rates and will serve as a scenario where the development does not get built. This will be reviewed as a direct comparison to future total traffic conditions.

Table 7-4 Future Background 2031 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.24	22	C	0.47	31.4	C	0.34	24.3	C
		WBT	0.32	22.7	C	0.83	45.9	D	0.56	28.3	C
		WBR	0.08	0.4	A	0.20	6.2	A	0.27	5.7	A
		NBL	0.45	7.6	A	0.76	26.8	C	0.53	9.8	A
		NBTR	0.43	6.7	A	0.57	21.5	C	0.39	10	A
		SBL	0.19	6.2	A	0.35	17.2	B	0.32	9.2	A
		SBTR	0.62	17.4	B	0.78	43	D	0.65	23.6	C

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
2	Waterdown Road & Panin Road/Hwy 403 Off-Ramp	EBLR	0.02	0.2	A	0.01	0	A	0.00	0	A
		WBL	0.36	10.4	B	0.37	14.6	B	0.41	10.3	B
		WBR	0.42	7	A	0.00	0	0	0.48	11.2	B
		NBLR	0.63	15	B	0.74	16.9	B	0.62	15.6	B
		SBTR	0.40	12.3	B	0.56	13.5	B	0.49	13.8	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.29	19.9	B	0.26	17	B	0.44	20.1	C
		EBT	0.29	21	C	0.27	18	B	0.64	26	C
		EBR	0.72	33.2	C	0.73	29.2	C	0.42	22.1	C
		WBL	0.07	17.3	B	0.11	14.3	B	0.06	15.7	B
		WBR	0.17	5.4	A	0.43	4.3	A	0.22	4.4	A
		NBTR	0.69	27.3	C	0.70	29	C	0.64	26	C
		SBL	0.40	12.2	B	0.43	13.9	B	0.37	11.1	B
		SBT	0.30	13.9	B	0.47	17	B	0.42	14.2	B
4	Waterdown Road & Plains Road East	EBL	0.49	17.6	B	0.73	32.5	C	0.52	18.8	B
		EBTR	0.52	28.7	C	0.52	28.8	C	0.49	26.8	C
		WBL	0.31	18.1	B	0.33	18.5	B	0.22	17.8	B
		WBTR	0.45	26.5	C	0.86	33.9	C	0.61	31	C
		NBL	0.17	21.4	C	0.48	36.7	D	0.38	25.9	C
		NBTR	0.82	58.2	E	0.64	53.5	D	0.71	51	D
		SBL	0.55	29.6	C	0.75	43.7	D	0.66	32.2	C
		SBT	0.42	35.9	D	0.33	39.9	D	0.35	34.5	C
		SBR	0.42	5.9	A	0.95	59.2	E	0.89	39.9	D
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBTR	0.28	1.7	A	0.29	3.1	A	0.32	3.2	A
		WBT	0.02	1.6	A	0.14	2.7	A	0.05	2.8	A
		NBLR	0.10	16.1	B	0.16	13.6	B	0.15	9.3	A
7	Alayne Bryk Way & East Access to Aldershot GO Station	NBLT	0.09	18.5	B	0.64	26.2	C	0.23	16.4	B
8	King Road & North Service Road	EBL	0.05	17.5	B	0.05	26.9	C	0.03	18.3	B
		EBT	0.42	19.2	B	0.51	29.9	C	0.42	19.3	B
		WBL	0.34	8.8	A	0.69	16.2	B	0.46	9.4	A
		WBT	0.17	8.9	A	0.58	16.3	B	0.27	9	A
		WBR	0.04	2.6	A	0.08	5.6	A	0.07	2.2	A
		NBLTR	0.54	23.6	C	0.55	34.2	C	0.58	27.8	C
		SBLT	0.77	49.3	D	0.91	77	E	0.62	40.2	D
		SBR	0.1	1	A	0.05	0.7	A	0.05	0.3	A
10		EBL	0.3	13.5	B	0.54	31.5	C	0.42	15.6	B

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	King Road & Plains Road East	EBT	0.5	21.7	C	0.53	21.9	C	0.57	23.5	C
		EBR	0.2	3.8	A	0.26	8.1	A	0.19	4.5	A
		WBL	0.2	12.9	B	0.37	15.7	B	0.38	14.3	B
		WBT	0.4	21.5	C	0.77	30.5	C	0.64	24.7	C
		NBL	0.4	24.2	C	0.76	56.1	E	0.58	31.8	C
		NBT	0.7	38	D	0.60	52.4	D	0.62	34.2	C
		SBL	0.4	22.3	C	0.54	37.9	D	0.33	22	C
		SBT	0.3	32.4	C	0.79	68.9	E	0.64	40.2	D
		SBR	0.25	4	A	0.50	29.3	C	0.33	7.9	A
11	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBT	0.57	11.3	B	0.58	14.6	B	0.72	15.1	B
		EBR	0.29	3	A	0.44	3.3	A	0.24	3.2	A
		WBT	0.55	11.1	B	0.77	18.1	B	0.73	15.4	B
		WBR	0.25	0.4	A	0.97	20.3	C	0.23	0.4	A
		SBL	0.38	18.3	B	0.65	26.3	C	0.56	21.2	C
		SBT	0.38	18.3	B	0.64	25.9	C	0.57	21.3	C
		SBR	0.46	15.2	B	0.75	27.7	C	0.67	20.3	C
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.44	20.7	C	1.03	130.5	F	0.73	52.7	D
		EBT	0.57	14.5	B	0.50	14.7	B	0.51	14.1	B
		EBR	0.05	0.1	A	0.07	0.1	A	0.13	0.2	A
		WBT	0.69	23	C	0.96	44.7	D	0.85	31.9	C
		NBL	0.44	19.3	B	0.49	44.9	D	0.38	33.5	C
		NBT	0.61	22.4	C	0.82	60	E	0.77	44	D
		NBR	0.48	10.3	B	0.74	48.3	D	0.66	30.2	C
		SBL	0.08	14.7	B	0.12	38.5	D	0.28	35.6	D
		SBR	0.36	5.2	A	0.63	20.3	C	0.47	12.4	B
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.38	26.8	C	0.31	42.4	D	0.62	42.4	D
		WBT	0.38	26.8	C	0.31	42.4	D	0.62	42.3	D
		WBR	0.87	42.5	D	0.28	17.3	B	0.91	58.3	E
		NBL	0.53	50.4	D	0.82	71.7	E	0.62	34.8	C
		NBT	0.44	17.4	B	0.45	4.8	A	0.50	17.3	B
		NBR	0.12	0.2	A	0.44	0.9	A	0.19	0.3	A
		SBT	0.76	23.4	C	0.56	5.7	A	0.91	37.4	D
14	Brant Street & Hwy 403 EB Off-Ramp	EBL	0.35	11.3	B	0.47	18.3	B	0.47	19.4	B
		EBR	0.35	10.9	B	0.46	19.5	B	0.51	22.8	C
		NBL	0.43	6.6	A	0.66	8.8	A	0.57	8.3	A
		NBT	0.57	7.7	A	0.55	7.6	A	0.66	9.3	A
		NBR	0.45	1	A	0.26	0.4	A	0.33	0.6	A
Unsignalized											

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.15	16	C	0.56	29	D	0.27	19	C
9	King Road & Hydro Lane/Street B (Future Signalized)	WBL	0.02	13	B	0.05	14	B	0.01	14	B
		SBT	0.01	9	A	0.00	<0.01	A	0.01	8	A

With the geometric improvements listed in **Table 7-3,** and signal timing adjustments, it is assumed that under the Future Background 2031 scenario all intersection will operate well. All movements at all intersections operate under a v/c of 1.0 with reasonable delay.

7.2.2 Future Background 2036

The traffic capacity analysis results for the study area intersections under the 2036 future background conditions are summarized in **Table 7-5** for both the weekday AM, PM and Saturday peak hours for external intersections. Similar to 2031, signal timings optimization has been performed for background 2036 conditions. No other improvements have been included at this time.

Table 7-5 Future Background 2036 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.26	23.3	C	0.49	33.1	C	0.49	33.1	C
		WBT	0.33	23.9	C	0.87	50.5	D	0.87	50.5	D
		WBR	0.08	0.4	A	0.21	6.2	A	0.21	6.2	A
		NBL	0.48	8	A	0.80	32.2	C	0.80	32.2	C
		NBTR	0.47	7.1	A	0.58	22.2	C	0.58	22.2	C
		SBL	0.21	6.8	A	0.39	18.3	B	0.39	18.3	B
		SBTR	0.64	18.5	B	0.82	46.3	D	0.82	46.3	D
2	Waterdown Road & Panin Road/Hwy 403 Off-Ramp	EBLR	0.02	0.2	A	0.02	0	A	0.02	0	A
		WBL	0.46	11.3	B	0.49	16	B	0.49	16	B
		WBR	0.60	15.4	B	0.00	0	0	0.00	0	0
		NBLR	0.64	17.2	B	0.75	18.7	B	0.75	18.7	B
		SBTR	0.43	14.4	B	0.59	15.3	B	0.59	15.3	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.33	20.5	C	0.29	15.9	B	0.29	15.9	B
		EBT	0.34	21.6	C	0.30	16.8	B	0.30	16.8	B
		EBR	0.82	40.2	D	0.82	32.6	C	0.82	32.6	C
		WBL	0.06	17.3	B	0.11	12.9	B	0.11	12.9	B
		WBR	0.16	5.1	A	0.41	4	A	0.41	4	A
		NBTR	0.77	37.5	D	0.79	40.8	D	0.79	40.8	D
		SBL	0.49	17.7	B	0.59	24.2	C	0.59	24.2	C
		SBT	0.34	19	B	0.55	25.9	C	0.55	25.9	C
4	Waterdown Road & Plains Road East	EBL	0.53	18.5	B	0.88	56.6	E	0.88	56.6	E
		EBTR	0.55	30	C	0.56	29.7	C	0.56	29.7	C
		WBL	0.35	19	B	0.37	19.6	B	0.37	19.6	B
		WBTR	0.49	28.6	C	0.91	37.4	D	0.91	37.4	D
		NBL	0.18	21.3	C	0.53	40.4	D	0.53	40.4	D
		NBTR	0.83	59	E	0.66	55.5	E	0.66	55.5	E
		SBL	0.58	30.4	C	0.78	45.8	D	0.78	45.8	D
		SBT	0.42	35.2	D	0.32	38.8	D	0.32	38.8	D
		SBR	0.43	5.7	A	0.97	64.4	E	0.97	64.4	E
5		EBTR	0.30	1.8	A	0.31	3.3	A	0.31	3.3	A

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	Alayne Bryk Way & West Access to Aldershot GO Station	WBT	0.02	1.7	A	0.15	2.8	A	0.15	2.8	A
		NBLR	0.10	16	B	0.16	13.4	B	0.16	13.4	B
7	Alayne Bryk Way & East Access to Aldershot GO Station	NBLT	0.11	20.3	C	0.67	28.3	C	0.67	28.3	C
8	King Road & North Service Road	EBL	0.05	17.8	B	0.05	28.7	C	0.05	28.7	C
		EBT	0.43	19.6	B	0.54	32.6	C	0.54	32.6	C
		WBL	0.37	9.5	A	0.73	18.2	B	0.73	18.2	B
		WBT	0.19	9.5	A	0.62	18.2	B	0.62	18.2	B
		WBR	0.05	2.9	A	0.08	6.2	A	0.08	6.2	A
		NBLTR	0.54	23.3	C	0.56	33.5	C	0.56	33.5	C
		SBLT	0.78	49.4	D	0.92	76.4	E	0.92	76.4	E
		SBR	0.1	1.2	A	0.05	0.9	A	0.05	0.9	A
10	King Road & Plains Road East	EBL	0.3	14.1	B	0.60	43.9	D	0.60	43.9	D
		EBT	0.5	22.6	C	0.57	23.6	C	0.57	23.6	C
		EBR	0.2	4.2	A	0.27	9.2	A	0.27	9.2	A
		WBL	0.2	13.4	B	0.41	16.8	B	0.41	16.8	B
		WBT	0.4	22.1	C	0.83	33.7	C	0.83	33.7	C
		NBL	0.4	24.2	C	0.82	63.7	E	0.82	63.7	E
		NBT	0.7	37.9	D	0.61	51.9	D	0.61	51.9	D
		SBL	0.4	22.2	C	0.58	38.5	D	0.58	38.5	D
		SBT	0.3	31.6	C	0.80	68.5	E	0.80	68.5	E
		SBR	0.25	4.3	A	0.51	30.2	C	0.51	30.2	C
11	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBT	0.60	12.4	B	0.62	16.8	B	0.62	16.8	B
		EBR	0.30	3.2	A	0.47	3.5	A	0.47	3.5	A
		WBT	0.58	12.2	B	0.84	21.9	C	0.84	21.9	C
		WBR	0.29	0.5	A	1.12	71.9	E	1.12	71.9	E
		SBL	0.43	19.4	B	0.69	27.2	C	0.69	27.2	C
		SBT	0.43	19.4	B	0.70	27.6	C	0.70	27.6	C
		SBR	0.53	17.7	B	0.83	33.1	C	0.83	33.1	C
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.54	27.3	C	1.12	156.1	F	1.12	156.1	F
		EBT	0.58	16.1	B	0.55	17	B	0.55	17	B
		EBR	0.05	0.1	A	0.08	0.1	A	0.08	0.1	A
		WBT	0.78	27.9	C	1.05	69.2	E	1.05	69.2	E
		NBL	0.50	20	B	0.53	45.4	D	0.53	45.4	D
		NBT	0.70	25.5	C	0.89	67.9	E	0.89	67.9	E

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		NBR	0.55	12.3	B	0.82	55	D	0.82	55	D
		SBL	0.09	14.5	B	0.16	40.6	D	0.16	40.6	D
		SBR	0.37	5.5	A	0.62	21	C	0.62	21	C
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.38	25.5	C	0.37	44	D	0.37	44	D
		WBT	0.39	25.5	C	0.37	43.9	D	0.37	43.9	D
		WBR	0.92	49.7	D	0.32	20	B	0.32	20	B
		NBL	0.63	70.1	E	1.01	125.1	F	1.01	125.1	F
		NBT	0.49	21.9	C	0.47	5	A	0.47	5	A
		NBR	0.14	0.2	A	0.50	1.2	A	0.50	1.2	A
		SBT	0.85	31.1	C	0.59	6	A	0.59	6	A
14	Brant Street & Hwy 403 EB Off-Ramp	EBL	0.39	13.5	B	0.52	21	C	0.52	21	C
		EBR	0.40	14.2	B	0.52	23.2	C	0.52	23.2	C
		NBL	0.45	7.1	A	0.68	9.7	A	0.68	9.7	A
		NBT	0.60	8.3	A	0.57	8.3	A	0.57	8.3	A
		NBR	0.52	1.3	A	0.30	0.5	A	0.30	0.5	A
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.17	17	C	0.63	40	D	0.30	21	C
9	King Road & Hydro Lane/Street B (Future Signalized)	WBL	0.02	13	B	0.06	15	C	0.01	14	B
		SBT	0.01	9	A	0.01	<0.01	A	0.01	8	A

With the geometric improvements listed in **Table 7-3,** and signal timing adjustments, it is assumed that under the Future Background 2036 scenario all intersection will operate well. All movements at all intersections operate under a v/c of 1.0 with reasonable delay, with the exception of the NBL movement at the intersection of Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre and the EBL of Fairview Street & QEW NB Off-Ramp/Plains Road East. both of which are anticipated to begin to see failures during pm peak and Saturday midday peak hours.

7.2.3 Future Background 2041

The traffic capacity analysis results for the study area intersections under the 2041 future background conditions are summarized in **Table 7-6** for both the weekday AM, PM and Saturday peak hours for external intersections. Signal timing improvements and the proposed construction work along King Road have been included in the analysis. This will serve as a direct comparison for the 2041 future horizon assessing the scenario where the development is not built.

Table 7-6 Future Background 2041 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.27	24.1	C	0.51	33.9	C	0.32	23.3	C
		WBT	0.35	24.8	C	0.89	54.3	D	0.54	27	C
		WBR	0.09	0.5	A	0.21	5.9	A	0.25	5.1	A
		NBL	0.51	8.4	A	0.86	40.8	D	0.50	9.2	A
		NBTR	0.48	7	A	0.59	23.7	C	0.38	9.7	A
		SBL	0.23	7	A	0.43	19.9	B	0.30	8.7	A
		SBTR	0.66	19.2	B	0.85	50.7	D	0.63	22.8	C
2	Waterdown Road & Panin Road/Hwy 403 Off-Ramp	EBLR	0.03	0.2	A	0.02	0.2	A	0.00	0	A
		WBL	0.60	13.1	B	0.62	18.2	B	0.30	9.5	A
		WBR	0.74	20.8	C	0.00	0	0	0.35	8.7	A
		NBLR	0.66	20.3	C	0.78	23.3	C	0.62	14.8	B
		SBTR	0.47	17.3	B	0.65	19.7	B	0.47	12.8	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.39	21.4	C	0.34	15.5	B	0.36	18.7	B
		EBT	0.40	22.6	C	0.35	16.4	B	0.52	22.7	C
		EBR	0.98	62.4	E	0.95	48.2	D	0.34	20.5	C
		WBL	0.07	17.6	B	0.11	12	B	0.04	15	B
		WBR	0.15	5.1	A	0.39	4.1	A	0.22	4.5	A
		NBTR	0.85	48.7	D	0.90	58.6	E	0.62	23.3	C
		SBL	0.62	24.5	C	0.87	50.4	D	0.32	9.4	A
		SBT	0.38	23.9	C	0.67	36.8	D	0.39	12.4	B
4	Waterdown Road & Plains Road East	EBL	0.59	19.7	B	0.94	68	E	0.46	17.2	B
		EBTR	0.59	31.4	C	0.59	31.1	C	0.45	25.1	C
		WBL	0.39	20.3	C	0.41	20	B	0.19	16.7	B
		WBTR	0.53	30.2	C	0.96	43.4	D	0.55	28.5	C
		NBL	0.19	21.1	C	0.59	44.6	D	0.37	26.1	C
		NBTR	0.85	59.9	E	0.72	60.9	E	0.70	50.7	D
		SBL	0.61	31.2	C	0.83	50.6	D	0.64	32.5	C
		SBT	0.43	34.7	C	0.33	38.9	D	0.35	35.9	D
		SBR	0.44	5.6	A	1.00	70.4	E	0.86	34.8	C

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBTR	0.31	1.9	A	0.33	3.4	A	0.30	3.1	A
		WBT	0.03	1.7	A	0.15	2.8	A	0.05	2.8	A
		NBLR	0.10	15.9	B	0.17	13.4	B	0.14	9.4	A
7	Alayne Bryk Way & East Access to Aldershot GO Station	NBLT	0.12	22.8	C	0.71	30.7	C	0.20	14.9	B
8	King Road & North Service Road	EBL	0.05	18.3	B	0.06	30	C	0.03	17.1	B
		EBT	0.44	20.5	C	0.58	35.6	D	0.40	18	B
		WBL	0.39	10.3	B	0.77	21.3	C	0.44	8.7	A
		WBT	0.20	10.1	B	0.68	20.9	C	0.25	8.5	A
		WBR	0.05	3.2	A	0.09	6.7	A	0.07	2.2	A
		NBLTR	0.55	23.1	C	0.55	32.3	C	0.57	27.9	C
		SBLT	0.79	48.7	D	0.90	70.8	E	0.58	39.4	D
		SBR	0.1	1.4	A	0.05	1.3	A	0.05	0.3	A
10	King Road & Plains Road East	EBL	0.3	14.9	B	0.72	59.4	E	0.37	14.4	B
		EBT	0.6	23.5	C	0.61	24.6	C	0.54	22.7	C
		EBR	0.2	4.6	A	0.29	9.7	A	0.18	4.1	A
		WBL	0.2	14.1	B	0.47	18.6	B	0.34	13.5	B
		WBT	0.4	22.9	C	0.87	36.7	D	0.60	23.9	C
		NBL	0.5	24.2	C	0.86	67.8	E	0.54	29.9	C
		NBT	0.7	37.9	D	0.63	53	D	0.60	33.8	C
		SBL	0.4	22	C	0.59	38	D	0.32	22.1	C
		SBT	0.3	31.1	C	0.83	71.1	E	0.63	40.4	D
		SBR	0.25	4.8	A	0.53	32	C	0.31	7.2	A
11	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBT	0.63	13.9	B	0.66	18.3	B	0.67	13.1	B
		EBR	0.31	3.3	A	0.49	3.6	A	0.23	2.9	A
		WBT	0.60	13.6	B	0.89	25.9	C	0.68	13.3	B
		WBR	0.33	0.7	A	1.30	151.3	F	0.20	0.3	A
		SBL	0.48	20.8	C	0.78	32.2	C	0.51	21	C
		SBT	0.49	20.8	C	0.79	32.8	C	0.51	21.1	C
		SBR	0.60	20.2	C	0.94	48.7	D	0.59	18.2	B
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.64	35.4	D	1.20	182.9	F	0.64	42.3	D
		EBT	0.64	18.5	B	0.57	16.8	B	0.47	11.9	B
		EBR	0.05	0.1	A	0.08	0.1	A	0.12	0.2	A
		WBT	0.85	32.7	C	1.08	79.7	E	0.81	27.7	C
		NBL	0.54	20.4	C	0.65	51.9	D	0.35	32.8	C
		NBT	0.77	28.6	C	1.09	115.9	F	0.70	38.9	D

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Weekend Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		NBR	0.62	14.5	B	1.01	89	F	0.59	25.8	C
		SBL	0.11	14.4	B	0.33	60.5	E	0.23	33.3	C
		SBR	0.36	5.7	A	0.67	24.9	C	0.48	11.7	B
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.41	25	C	0.43	45.5	D	0.59	40.2	D
		WBT	0.41	25	C	0.42	45.2	D	0.58	40.1	D
		WBR	0.98	62.8	E	0.37	22.7	C	0.85	48.5	D
		NBL	0.74	93	F	1.14	169.3	F	0.54	25.9	C
		NBT	0.54	26	C	0.49	5.2	A	0.47	15.3	B
		NBR	0.15	0.2	A	0.58	1.7	A	0.17	0.2	A
		SBT	0.93	41.5	D	0.62	6.4	A	0.86	32.3	C
14	Brant Street & Hwy 403 EB Off-Ramp	EBL	0.44	15.1	B	0.57	23.9	C	0.43	17.4	B
		EBR	0.45	16.7	B	0.58	27.2	C	0.45	19.7	B
		NBL	0.47	7.5	A	0.71	10.7	B	0.55	7.7	A
		NBT	0.62	8.9	A	0.59	9.1	A	0.64	8.6	A
		NBR	0.60	1.8	A	0.34	0.6	A	0.28	0.5	A
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.19	18	C	0.71	41	E	0.24	18	C
9	King Road & Hydro Lane/Street B (Future Signalized)	WBL	0.02	13	B	0.01	15	C	0.01	14	B
		SBT	0.01	9	A	0.01	<0.01	A	0.01	8	A

With the geometric improvements listed in **Table 7-3,** and signal timing adjustments, it is assumed that under the Future Background 2036 scenario all intersection will operate well. All movements at all intersections operate under a v/c of 1.0 with reasonable delay. The failures seen in the 2036 background are carried through to the 2041 background scenario. In addition it is anticipated that Fairview Street & QEW NB Off-Ramp/Plains Road East will continue to experience additional failures at the intersection during the pm peak hour. As the majority of failures are localized only to 1 movement during the pm peak hour, it can be said that the overall network operates at reasonable levels. For the intersection of Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre, it is recommend to be monitored by the City/MTO and additional mitigation measures be implemented as required.

7.3 Future Total Conditions

The future total road network is made up of the future background traffic combined with the subject site traffic.

All future total intersection underwent signal timing optimization, in addition to geometric improvements to facilitate the background traffic and site generated trips. All improvements proposed in future background **Table 7-3** were carried forward into the future total scenarios, as well as additional improvements as required. **Table 7-7** summarizes the proposed geometric improvements recommended to facilitate future background volumes.

Table 7-7 Future Total Proposed Geometric Improvements

Intersection	Geometric Improvements
Waterdown Road & North Service Road/Hwy 403 On-Ramp	- Dual NB left lane
Alayne Bryk Way & East Access to Aldershot GO Station/ Hwy 403 On-Ramp	- EB update lane configuration to include Left turn Lane, 1 through-right turn lane. - WB Shared through left turn lane, right turn lane
King Road at Parkway Link	- Dual Left turn lane

7.3.1 Future Total 2031

The modifications made to the existing weekday AM, PM and Saturday peak hour signal timing plans in the future background 2031 scenario were carried forward to the future total 2031 synchro analysis.

The traffic capacity analysis results for the study area intersections under the 2031 future total conditions are summarized in **Table 7-8** for both the weekday AM, PM and Saturday peak hours.

Table 7-8 Future Total 2031 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.26	25	C	0.49	39	D	0.35	29	C
		WBT	0.34	26	C	0.86	57	E	0.59	34	C
		WBR	0.00	0	0	0.07	0	A	0.20	7	A
		NBL	0.47	6	A	0.83	35	D	0.59	9	A
		NBTR	0.67	15	B	0.76	30	C	0.61	18	B

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		SBL	0.20	6	A	0.42	20	B	0.31	9	A
		SBTR	0.68	20	B	0.85	48	D	0.72	26	C
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	SBLTR	0.03	0	A	0.02	0	A	0.01	0	A
		WBL	0.47	18	B	0.56	32	C	0.51	18	B
		WBR	0.57	20	C	0.64	38	D	0.55	22	C
		NBLT	0.75	16	B	0.86	23	C	0.77	19	B
		SBTR	0.41	11	B	0.54	13	B	0.50	14	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.31	15	B	0.33	18	B	0.57	23	C
		EBT	0.16	13	B	0.18	16	B	0.46	22	C
		EBR	0.40	17	B	0.48	21	C	0.30	20	C
		WBL	0.44	16	B	0.35	17	B	1.57	314	F
		WBR	0.99	50	D	1.02	59	E	1.51	259	F
		NBTR	0.88	76	E	0.89	76	E	0.65	43	D
		SBL	1.02	83	F	1.05	86	F	0.74	26	C
		SBT	0.47	41	D	0.59	41	D	0.48	24	C
4	Waterdown Road & Plains Road East	EBL	0.67	22	C	1.00	80	F	0.87	72	E
		EBTR	0.49	29	C	0.47	27	C	0.45	27	C
		WBL	0.31	20	B	0.32	19	B	0.23	23	C
		WBTR	0.52	32	C	0.98	62	E	0.76	57	E
		NBL	0.20	21	C	0.67	47	D	0.47	34	C
		NBTR	0.86	59	E	0.87	69	E	0.89	70	E
		SBL	0.56	29	C	0.98	84	F	0.88	60	E
		SBT	0.63	40	D	0.64	47	D	0.56	44	D
		SBR	0.61	10	B	1.03	75	E	0.87	26	C
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBTR	0.43	2	A	0.54	4	A	0.53	4	A
		WBT	0.27	2	A	0.49	4	A	0.33	3	A
		NBLR	0.10	18	B	0.17	19	B	0.16	13	B
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBTR	0.18	2	A	0.36	9	A	0.28	4	A
		WBLT	0.61	20	B	0.88	44	D	0.65	21	C
		WBR	0.21	5	A	0.21	9	A	0.16	5	A
		NBLT	0.14	31	C	0.82	64	E	0.32	33	C
		NBR	0.00	0	0.00	0.00	0	0	0.00	0	0
8	King Road & North Service Road	EBL	0.09	23	C	0.09	29	C	0.06	23	C
		EBTR	0.75	39	D	0.97	73	E	0.76	40	D
		WBL	0.51	18	B	0.95	46	D	0.71	24	C
		WBT	0.23	16	B	0.72	25	C	0.37	18	B
		WBR	0.06	3	A	0.10	6	A	0.10	3	A

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		NBLTR	0.77	24	C	0.82	26	C	0.69	22	C
		SBLT	0.70	33	C	0.99	68	E	0.62	27	C
		SBR	0.04	0	A	0.03	0	A	0.03	0	A
9	King Road & Plains Road East	EBL	0.98	80	E	1.08	122	F	0.42	21	C
		EBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		WBL	0.03	29	C	0.11	51	D	0.01	23	C
		WBTR	0.03	0	A	0.02	0	A	0.00	0	0
		WBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		NBL	0.17	8	A	0.55	20	C	0.52	19	B
		NBT	0.66	14	B	0.45	9	A	0.64	14	B
		SBL	0.02	8	A	0.00	0	0	0.00	0	0
		SBT	0.51	9	A	0.76	16	B	0.68	14	B
10	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBL	0.13	21	C	0.10	14	B	0.24	23	C
		EBT	0.69	34	C	0.59	28	C	0.57	37	D
		EBR	0.22	4	A	0.28	9	A	0.20	13	B
		WBL	0.26	23	C	0.42	18	B	0.45	23	C
		WBT	0.42	28	C	0.70	26	C	0.81	36	D
		NBL	0.33	18	B	0.59	42	D	0.40	31	C
		NBTR	0.72	42	D	0.94	82	F	0.88	70	E
		SBL	0.74	21	C	1.12	107	F	0.77	36	D
		SBT	0.19	22	C	0.57	48	D	0.44	40	D
		SBR	0.15	4	A	0.35	21	C	0.23	12	B
11	Fairview Street/Plains Road East & QEW SB On-Ramp	EBT	0.67	13	B	0.67	20	C	0.74	21	C
		EBR	0.31	2	A	0.49	4	A	0.31	5	A
		WBT	0.57	11	B	0.87	27	C	0.78	22	C
		WBR	0.25	0	A	0.97	19	B	0.23	0	A
		SBL	0.54	28	C	0.79	45	D	0.70	39	D
		SBLTR	0.52	24	C	0.83	49	D	0.73	41	D
		SBR	0.49	22	C	0.78	42	D	0.70	37	D
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.76	40	D	1.23	166	F	1.03	105	F
		EBT	0.52	12	B	0.58	14	B	0.55	15	B
		EBR	0.05	0	A	0.07	0	A	0.13	0	A
		WBTR	0.78	35	C	1.14	102	F	0.99	55	D
		NBL	0.68	44	D	0.72	56	E	0.56	47	D
		NBLTR	0.74	43	D	0.90	72	E	0.83	60	E
		NBR	0.63	29	C	0.80	54	D	0.71	42	D
		SBL	0.13	34	C	0.16	43	D	0.36	48	D
		SBR	0.39	5	A	0.64	18	B	0.44	6	A
		WBL	0.37	31	C	0.26	46	D	0.61	44	D

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBLT	0.38	31	C	0.26	46	D	0.61	44	D
		WBR	0.87	48	D	0.23	12	B	0.91	60	E
		NBL	0.29	21	C	0.31	9	A	0.79	59	E
		NBT	0.50	21	C	0.48	5	A	0.55	19	B
		NBR	0.12	0	A	0.44	1	A	0.19	0	A
		SBTR	0.88	37	D	0.70	14	B	0.91	38	D
14	Brant Street & Hwy 403 EB Off-Ramp	EBLR	0.37	13	B	0.55	27	C	0.62	35	C
		EBR	0.37	13	B	0.58	32	C	0.66	41	D
		NBT	0.64	9	A	1.00	35	C	1.93	440	F
		SBT	0.59	8	A	0.54	7	A	0.57	8	A
		SBR	0.45	1	A	0.26	0	A	0.33	1	A
101	Parkway Link (Street A) & Street B	EBLT	0.48	9	A	0.58	8	A	0.63	9	A
		WBTR	0.44	8	A	0.48	6	A	0.39	6	A
		SBLR	0.52	7	A	0.49	10	A	0.53	6	A
102	Parkway Link (Street A) & Street C/Proposed Site Access	EBLTR	0.38	9	A	0.49	12	B	0.35	7	A
		WBL	0.09	8	A	0.73	31	C	0.09	7	A
		WBTR	0.59	13	B	0.79	22	C	0.63	12	B
		NBLTR	0.12	7	A	0.76	26	C	0.16	8	A
		SBLTR	0.60	14	B	0.39	10	A	0.58	15	B
103	Parkway Link (Street A) & Street D	EBLT	0.55	14	B	0.71	15	B	0.61	14	B
		WBTR	0.47	11	B	0.58	10	B	0.56	7	A
		SBLR	0.65	14	B	0.66	23	C	0.57	14	B
104	Parkway Link Road (Street A) & Proposed Site Access	EBLTR	0.62	16	B	0.60	15	B	0.44	13	B
		WBLTR	0.36	13	B	0.57	15	B	0.56	15	B
		NBLTR	0.52	25	C	0.54	33	C	0.49	27	C
		SBLTR	0.37	27	C	0.43	26	C	0.34	28	C
105	Parkway Link Road (Street A) & King Road	EBL	0.65	20	B	0.90	73	E	0.74	53	D
		EBR	0.73	12	B	0.92	35	C	0.71	9	A
		NBL	0.68	20	C	1.04	76	E	0.80	43	D
		NBT	0.58	16	B	0.43	8	A	0.42	9	A
		NBT	0.54	16	B	0.95	65	E	0.81	44	D
		NBR	0.11	5	A	0.21	13	B	0.20	18	B
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.49	63	F	4.00	1505	F	1.35	334	F
106	Street C/Proposed	EBLTR	0.39	9	A	0.28	9	A	0.40	10	A

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	Site Access & Street B	WBLTR	0.26	9	A	0.29	9	A	0.44	11	B
107	Street D & Street B	EBTR	0.30	10	B	0.52	13	B	0.66	18	C
		WBLT	0.48	11	B	0.34	11	B	0.50	14	B
		NBLR	0.28	10	B	0.36	11	B	0.42	13	B
108	Street E/Proposed Site Access & Street B	EBLTR	0.09	9	A	0.23	10	A	0.19	10	A
		WBLTR	0..40	11	B	0.48	13	B	0.50	14	B
		NBLTR	0.24	10	A	0.42	12	B	0.39	12	B
		SBLTR	0.26	10	A	0.21	10	B	0.27	11	B
201	Parkway Link Road & Proposed Site Access	WBLT	0.41	22	C	0.07	10	A	0.09	9	A
		NBLR	0.03	8	A	0.50	34	D	0.72	53	F
202	Parkway Link Road & Proposed Site Access	EBTR	0.07	10	B	0.03	11	B	0.12	10	B
		SBLR	0.27	29	D	0.40	45	E	0.22	29	D

The Future Total 2031 conditions are anticipated to operate similarly to the 2031 background scenario. The overall network is anticipated to operate under acceptable conditions with the exception of a few movements throughout the network localized to the PM peak hour. Most notably the intersection of Alayne Bryk Way & Central Access to Aldershot GO Station is anticipated to experience high v/c, and delay. Due to the proximity to the signalized intersection on either side signalization of the intersection is not a feasible option. However this is one of three accesses for the Aldershot GO station, it is assumed that if the unsignalized intersection experiences high levels of delay drivers will naturally begin to utilize one of the other entrances. It is recommended that the intersection be monitored by the City and the Aldershot GO authorities. All site accesses are anticipated to operate at acceptable levels.

7.3.2 Future Total 2036

The modifications made to the existing weekday AM, PM and Saturday peak hour signal timing plans in the future background 2031 scenario were carried forward to the future total 2036 synchro analysis.

The traffic capacity analysis results for the study area intersections are summarized in **Table 7-9** for both the weekday AM, PM and Saturday peak hours under the 2036 future total traffic conditions.

Table 7-9 Future Total 2036 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.27	25	C	0.50	39	D	0.36	29	C
		WBT	0.36	26	C	0.87	58	E	0.61	34	C
		WBR	0.00	0	0	0.08	2	A	0.21	8	A
		NBL	0.48	6	A	0.86	41	D	0.60	10	A
		NBTR	0.67	15	B	0.75	31	C	0.61	18	B
		SBL	0.21	6	A	0.49	24	C	0.34	9	A
		SBTR	0.69	20	C	0.87	51	D	0.73	27	C
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	SBLTR	0.03	0	A	0.03	0	A	0.01	0	A
		WBL	0.55	18	B	0.65	35	C	0.63	20	C
		WBR	0.68	25	C	0.76	45	D	0.66	25	C
		NBLT	0.79	21	C	0.89	28	C	0.79	23	C
		SBTR	0.46	14	B	0.58	17	B	0.54	17	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.45	19	B	0.46	21	C	0.77	34	C
		EBT	0.23	15	B	0.25	17	B	0.61	29	C
		EBR	0.57	23	C	0.67	27	C	0.40	25	C
		WBL	0.48	19	B	0.38	17	B	2.09	542	F
		WBR	0.99	51	D	1.01	56	E	1.74	361	F
		NBTR	0.82	67	E	0.92	81	F	0.62	45	D
		SBL	1.00	76	E	1.08	96	F	0.79	32	C
		SBT	0.46	39	D	0.62	41	D	0.50	28	C
4	Waterdown Road & Plains Road East	EBL	0.71	23	C	1.06	99	F	0.88	73	E
		EBTR	0.53	30	C	0.52	29	C	0.48	29	C
		WBL	0.34	20	B	0.35	20	B	0.26	26	C
		WBTR	0.57	34	C	1.03	74	E	0.83	62	E
		NBL	0.21	21	C	0.69	48	D	0.49	34	C
		NBTR	0.88	61	E	0.91	75	E	0.90	72	E
		SBL	0.60	32	C	1.00	86	F	0.89	60	E
		SBT	0.62	40	D	0.63	46	D	0.54	42	D

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		SBR	0.61	11	B	1.07	86	F	0.87	25	C
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBTR	0.44	2	A	0.56	5	A	0.55	5	A
		WBT	0.26	2	A	0.50	4	A	0.33	3	A
		NBLR	0.10	18	B	0.17	14	B	0.16	10	B
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBTR	0.18	2	A	0.35	9	A	0.27	4	A
		WBLT	0.60	20	C	0.88	45	D	0.65	22	C
		WBR	0.20	5	A	0.21	10	A	0.16	5	A
		NBLT	0.15	31	C	0.83	64	E	0.33	34	C
		NBR	0.00	0	0.00	0.00	0	0	0.00	0	0
8	King Road & North Service Road	EBL	0.08	25	C	0.09	29	C	0.06	23	C
		EBTR	0.67	35	C	0.94	66	E	0.76	40	D
		WBL	0.53	20	B	1.05	72	E	0.74	26	C
		WBT	0.23	17	B	0.78	29	C	0.39	19	B
		WBR	0.06	4	A	0.11	7	A	0.11	3	A
		NBLTR	0.78	23	C	0.79	24	C	0.69	22	C
		SBLT	0.78	36	D	0.96	60	E	0.62	27	C
		SBR	0.05	1	A	0.03	0	A	0.03	0	A
9	King Road & Plains Road East	EBL	0.93	69	E	1.22	171	F	0.42	21	C
		EBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		WBL	0.03	29	C	0.11	51	D	0.01	23	C
		WBTR	0.03	0	A	0.02	0	A	0.00	0	0
		WBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		NBL	0.18	8	A	0.52	18	B	0.51	18	B
		NBT	0.67	14	B	0.45	8	A	0.65	14	B
		SBL	0.02	8	A	0.00	0	0	0.00	0	0
		SBT	0.53	10	A	0.76	16	B	0.69	14	B
10	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBL	0.14	21	C	0.14	16	B	0.28	21	C
		EBT	0.71	35	C	0.63	30	C	0.59	37	D
		EBR	0.23	5	A	0.30	11	B	0.20	11	B
		WBL	0.29	23	C	0.47	20	C	0.47	22	C
		WBT	0.43	28	C	0.77	31	C	0.82	36	D
		NBL	0.35	19	B	0.62	43	D	0.46	33	C
		NBTR	0.75	45	D	0.96	88	F	0.85	63	E
		SBL	0.73	21	C	1.06	84	F	0.90	56	E
		SBT	0.20	23	C	0.59	48	D	0.52	47	D
		SBR	0.15	5	A	0.36	22	C	0.24	5	A
11		EBT	0.70	14	B	0.71	24	C	0.77	24	C

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	Fairview Street/Plains Road East & QEW SB On-Ramp	EBR	0.33	4	A	0.52	5	A	0.32	6	A
		WBT	0.61	13	B	0.92	33	C	0.81	26	C
		WBR	0.29	1	A	1.12	72	E	0.27	1	A
		SBL	0.60	26	C	0.84	48	D	0.75	43	D
		SBLTR	0.62	27	C	0.89	56	E	0.80	47	D
		SBR	0.53	19	B	0.85	48	D	0.75	41	D
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.82	51	D	1.26	177	F	1.08	121	F
		EBT	0.55	16	B	0.61	15	B	0.59	18	B
		EBR	0.05	0	A	0.08	0	A	0.13	0	A
		WBTR	0.84	41	D	1.20	126	F	1.07	79	E
		NBL	0.69	42	D	0.79	61	E	0.57	47	D
		NBLTR	0.78	45	D	1.04	103	F	0.90	69	E
		NBR	0.67	31	C	0.92	70	E	0.79	48	D
		SBL	0.14	31	C	0.29	56	E	0.46	56	E
		SBR	0.37	4	A	0.66	20	B	0.44	7	A
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.40	32	C	0.37	51	D	0.64	43	D
		WBLT	0.40	32	C	0.37	51	D	0.64	43	D
		WBR	0.93	58	E	0.30	15	B	0.95	66	E
		NBL	0.34	24	C	0.39	14	B	0.88	77	E
		NBT	0.53	24	C	0.54	6	A	0.60	23	C
		NBR	0.14	0	A	0.50	1	A	0.22	0	A
		SBTR	0.93	45	D	0.78	16	B	1.00	56	E
14	Brant Street & Hwy 403 EB Off-Ramp	EBLR	0.37	13	B	0.55	27	C	0.62	35	C
		EBR	0.37	13	B	0.58	32	C	0.66	41	D
		NBT	0.64	9	A	1.00	35	C	1.93	440	F
		SBT	0.59	8	A	0.54	7	A	0.57	8	A
		SBR	0.45	1	A	0.26	0	A	0.33	1	A
101	Parkway Link (Street A) & Street B	EBLT	0.46	8	A	0.55	8	A	0.60	9	A
		WBTR	0.42	8	A	0.47	6	A	0.38	6	A
		SBLR	0.50	6	A	0.46	8	A	0.49	5	A
102	Parkway Link (Street A) & Street C/Proposed Site Access	EBLTR	0.37	9	A	0.46	11	B	0.33	7	A
		WBL	0.09	8	A	0.66	25	C	0.08	7	A
		WBTR	0.57	12	B	0.77	21	C	0.60	11	B
		NBLTR	0.11	7	A	0.72	23	C	0.16	8	A
		SBLTR	0.58	13	B	0.37	9	A	0.56	14	B
103	Parkway Link (Street A) & Street D	EBLT	0.53	13	B	0.67	14	B	0.55	12	B
		WBTR	0.46	10	A	0.57	10	A	0.54	7	A
		SBLR	0.63	13	B	0.63	21	C	0.57	14	B
		EBLTR	0.60	16	B	0.58	15	B	0.43	13	B

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
104	Parkway Link Road (Street A) & Proposed Site Access	WBLTR	0.37	13	B	0.56	14	B	0.54	15	B
		NBLTR	0.50	23	C	0.49	29	C	0.47	26	C
		SBLTR	0.35	25	C	0.39	23	C	0.32	26	C
105	Parkway Link Road (Street A) & King Road	EBL	0.64	20	C	0.88	71	E	0.71	51	D
		EBR	0.70	11	B	0.89	29	C	0.69	9	A
		NBL	0.66	19	B	0.99	63	E	0.78	42	D
		NBT	0.57	15	B	0.42	8	A	0.42	9	A
		NBT	0.53	15	B	0.95	63	E	0.80	43	D
		NBR	0.11	4	A	0.21	12	B	0.19	18	B
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.53	70	F	4.01	1557	F	1.42	357	F
106	Street C/Proposed Site Access & Street B	EBLTR	0.37	9	A	0.26	8	A	0.38	10	A
		WBLTR	0.25	9	A	0.28	9	A	0.42	10	B
107	Street D & Street B	EBTR	0.29	10	B	0.49	12	B	0.61	17	C
		WBLT	0.46	11	B	0.32	10	B	0.47	12	B
		NBLR	0.28	10	A	0.33	11	B	0.39	12	B
108	Street E/Proposed Site Access & Street B	EBLTR	0.09	9	A	0.21	10	A	0.17	10	A
		WBLTR	0.38	11	B	0.45	12	B	0.47	13	B
		NBLTR	0.24	10	A	0.39	12	B	0.37	11	B
		SBLTR	0.25	10	A	0.20	10	A	0.26	10	B
201	Parkway Link Road & Proposed Site Access	WBLT	0.03	8	A	0.06	10	A	0.09	9	A
		NBLR	0.44	21	C	0.43	29	D	0.62	41	E
202	Parkway Link Road & Proposed Site Access	EBTR	0.07	10	B	0.23	11	B	0.02	10	B
		SBLR	0.25	27	D	0.36	39	E	0.20	26	D

The Future Total 2036 conditions are anticipated to operate similarly to the 2036 background scenario and Future Total 2031 conditions. The overall network is anticipated to operate under acceptable conditions with the exception of a few movements throughout the network localized to the PM peak hour. Similarly, It is recommended that the intersection be monitored by the City and the Aldershot GO authorities.

7.3.3 Future Total 2041

The traffic capacity analysis results for the study area intersections are summarized in **Table 7-10** for both the weekday AM, PM and Saturday peak hours under the 2041 future total traffic conditions.

Table 7-10 Future Total 2041 Capacity Analysis

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Signalized											
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	0.29	26	C	0.51	39.6	D	0.33	27	C
		WBT	0.37	27	C	0.90	61.8	E	0.56	31	C
		WBR	0.01	0	A	0.09	2.5	A	0.18	6	A
		NBL	0.50	7	A	0.89	46.2	D	0.54	8	A
		NBTR	0.68	15	B	0.77	35.1	D	0.60	17	B
		SBL	0.22	6	A	0.55	27	C	0.29	8	A
		SBTR	0.69	20	B	0.89	54.2	D	0.70	24	C
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	SBLTR	0.03	0	A	0.03	0.4	A	0.01	0	A
		WBL	0.69	21	C	0.77	40.4	D	0.41	16	B
		WBR	0.82	33	C	0.91	60.1	E	0.43	18	B
		NBLT	0.81	24	C	0.91	37.7	D	0.74	17	B
		SBTR	0.48	17	B	0.63	22.9	C	0.47	12	B
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	0.00	0	0.00	0.00	0	0	0.43	20	B
		EBT	0.34	17	B	0.35	18.4	B	0.35	20	C
		EBR	0.82	35	D	0.93	47.3	D	0.23	19	B
		WBL	0.55	22	C	0.43	18.2	B	0.47	30	C
		WBR	0.98	47	D	1.01	55	D	0.90	25	C
		NBTR	0.84	66	E	0.97	90.1	F	0.61	41	D
		SBL	0.96	65	E	1.12	108.8	F	0.64	23	C
		SBT	0.46	37	D	0.65	42.1	D	0.44	23	C
4	Waterdown Road & Plains Road East	EBL	0.00	0	0.00	0.00	0	0	0.00	0	0
		EBTR	0.58	32	C	0.56	31.2	C	0.40	25	C
		WBL	0.38	21	C	0.39	20.3	C	0.20	22	C
		WBTR	0.61	35	D	1.09	93.4	F	0.69	54	D
		NBL	0.22	21	C	0.72	50.3	D	0.44	33	C
		NBTR	0.88	61	E	0.94	81.5	F	0.85	67	E
		SBL	0.63	32	C	1.05	98.6	F	0.82	54	D
		SBT	0.62	39	D	0.63	45.8	D	0.57	45	D
		SBR	0.61	11	B	1.10	97.7	F	0.83	21	C
5	Alayne Bryk Way & West Access to	EBTR	0.45	2	A	0.55	4.4	A	0.50	4	A
		WBT	0.26	2	A	0.48	3.6	A	0.31	3	A

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	Aldershot GO Station	NBLR	0.11	18	B	0.18	18.7	B	0.15	11	B
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBTR	0.17	2	A	0.35	9.4	A	0.26	4	A
		WBLT	0.60	21	C	0.88	47.3	D	0.63	20	C
		WBR	0.20	5	A	0.20	10.1	B	0.15	5	A
		NBLT	0.16	32	C	0.84	64	E	0.29	31	C
		NBR	0.00	0	0.00	0.00	0	0	0.00	0	0
8	King Road & North Service Road	EBL	0.00	0	0.00	0.00	0	0	0.00	0	0
		EBTR	0.67	35	C	0.94	65.5	E	0.61	31	C
		WBL	0.55	20	B	1.06	74.7	E	0.60	18	B
		WBT	0.25	17	B	0.81	30.3	C	0.30	15	B
		WBR	0.07	5	A	0.12	6.9	A	0.08	4	A
		NBLTR	0.77	23	C	0.81	25.9	C	0.75	24	C
		SBLT	0.80	38	D	1.05	85.4	F	0.72	34	C
		SBR	0.05	1	A	0.04	0.1	A	0.03	0	A
9	King Road & Plains Road East	EBL	0.00	0	0.00	0.00	0	0	0.00	0	0
		EBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		WBL	0.03	29	C	0.11	51.2	D	0.01	21	C
		WBTR	0.03	0	A	0.02	0.1	A	0.00	0	0
		WBR	0.00	0	0.00	0.00	0	0	0.00	0	0
		NBL	0.17	8	A	0.54	19.6	B	0.43	15	B
		NBT	0.68	15	B	0.46	8.3	A	0.60	13	B
		SBL	0.02	8	A	0.00	0	0	0.00	0	0
		SBT	0.54	10	A	0.78	16.7	B	0.65	14	B
10	Fairview Street/Plains Road East & QEW SB On-Ramp/Off-Ramp	EBL	0.00	0	0.00	0.00	0	0	0.00	0	0
		EBT	0.74	36	D	0.66	30.9	C	0.53	36	D
		EBR	0.24	5	A	0.30	8.4	A	0.18	13	B
		WBL	0.32	25	C	0.50	20.9	C	0.40	21	C
		WBT	0.49	30	C	0.80	31.8	C	0.75	33	C
		NBL	0.36	19	B	0.70	48.2	D	0.38	30	C
		NBTR	0.75	44	D	0.98	92.6	F	0.85	66	E
		SBL	0.73	21	C	1.09	94.3	F	0.72	35	D
		SBT	0.20	23	C	0.65	52.4	D	0.43	40	D
		SBR	0.16	5	A	0.38	17.6	B	0.22	12	B
11	Fairview Street/Plains Road East & QEW SB On-Ramp	EBT	0.72	16	B	0.76	27	C	0.70	17	B
		EBR	0.34	3	A	0.55	5.6	A	0.29	4	A
		WBT	0.62	14	B	0.98	44.1	D	0.74	18	B
		WBR	0.33	1	A	1.30	151.3	F	0.20	0	A
		SBL	0.65	31	C	0.93	57.9	E	0.64	34	C

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
		SBLTR	0.65	29	C	0.98	70.8	E	0.67	35	C
		SBR	0.59	25	C	0.92	55.9	E	0.64	31	C
12	Fairview Street & QEW NB Off-Ramp/Plains Road East	EBL	0.00	0	0.00	0.00	0	0	0.00	0	0
		EBT	0.59	18	B	0.63	15.3	B	0.50	13	B
		EBR	0.05	0	A	0.08	0.1	A	0.12	0	A
		WBTR	0.88	45	D	1.25	145.3	F	0.90	39	D
		NBL	0.73	44	D	0.90	74.1	E	0.54	48	D
		NBLTR	0.87	55	D	1.25	171.8	F	0.77	55	D
		NBR	0.75	36	D	1.11	118	F	0.66	37	D
		SBL	0.18	32	C	0.31	56.9	E	0.31	46	D
		SBR	0.37	4	A	0.69	21.6	C	0.45	5	A
13	Brant Street & Hwy 403 Off-Ramp/Access to Brant Power Centre	WBL	0.43	32	C	0.43	56.7	E	0.57	40	D
		WBLT	0.44	32	C	0.43	56.4	E	0.57	40	D
		WBR	1.02	76	E	0.35	20	C	0.83	48	D
		NBL	0.39	28	C	0.42	17.8	B	0.67	39	D
		NBT	0.57	27	C	0.56	6.1	A	0.51	17	B
		NBR	0.15	0	A	0.58	1.7	A	0.17	0	A
		SBTR	1.01	62	E	0.80	16.5	B	0.88	33	C
14	Brant Street & Hwy 403 EB Off-Ramp	EBLR	0.00	0	0	0.00	0	0	0.00	0	0
		EBR	0.46	21	C	0.65	33.5	C	0.55	31	C
		NBT	0.69	11	B	1.13	84.5	F	0.98	11	B
		SBT	0.65	10	A	0.61	9.6	A	0.58	7	A
		SBR	0.60	2	A	0.34	0.6	A	0.28	1	A
101	Parkway Link (Street A) & Street B	EBLT	0.43	8	A	0.53	7.4	A	0.58	8	A
		WBTR	0.40	7	A	0.46	6.1	A	0.37	6	A
		SBLR	0.47	5	A	0.43	6.9	A	0.46	4	A
102	Parkway Link (Street A) & Street C/Proposed Site Access	EBLTR	0.35	8	A	0.44	10.4	B	0.32	7	A
		WBL	0.08	8	A	0.61	21.8	C	0.08	7	A
		WBTR	0.55	12	B	0.75	19.3	B	0.58	11	B
		NBLTR	0.11	7	A	0.69	20.9	C	0.16	8	A
		SBLTR	0.56	12	B	0.36	8.3	A	0.55	14	B
103	Parkway Link (Street A) & Street D	EBLT	0.50	13	B	0.63	12.2	B	0.51	11	B
		WBTR	0.44	9	A	0.56	9.3	A	0.51	6	A
		SBLR	0.61	12	B	0.61	18.9	B	0.57	13	B
104	Parkway Link Road (Street A) & Proposed Site Access	EBLTR	0.51	15	B	0.56	14.5	B	0.42	13	B
		WBLTR	0.30	13	B	0.55	14.1	B	0.53	15	B
		NBLTR	0.46	22	C	0.47	27.6	C	0.45	24	C
		SBLTR	0.32	24	C	0.37	21.9	C	0.30	25	C
105		EBL	0.00	0	0	0.00	0	0	0.00	0	0

ID	Intersection	Lane Group	Weekday AM			Weekday PM			Saturday Midday		
			v/c	Delay (s)	LOS	v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	Parkway Link Road (Street A) & King Road	EBR	0.67	10	A	0.87	28.4	C	0.68	9	A
		NBL	0.62	17	B	0.99	62.5	E	0.77	41	D
		NBT	0.57	15	B	0.42	8	A	0.42	8	A
		NBT	0.54	14	B	0.93	50.2	D	0.79	41	D
		NBR	0.10	4	A	0.20	11.5	B	0.19	17	B
Unsignalized											
6	Alayne Bryk Way & Central Access to Aldershot GO Station	NBLR	0.56	71	F	4.29	1647	F	1.07	208	F
106	Street C/Proposed Site Access & Street B	EBLTR	0.35	9	A	0.25	8	A	0.36	9	A
		WBLTR	0.24	9	A	0.27	9	A	0.40	10	A
107	Street D & Street B	EBTR	0.27	10	A	0.46	12	B	0.57	15	C
		WBLT	0.43	11	B	0.30	10	A	0.44	12	B
		NBLR	0.25	10	A	0.31	11	B	0..37	12	B
108	Street E/Proposed Site Access & Street B	EBLTR	0.08	8	A	0.20	9	A	0.16	10	A
		WBLTR	0.36	10	B	0.43	12	B	0.44	12	B
		NBLTR	0.22	9	A	0.37	11	B	0.34	11	B
		SBLTR	0.23	9	A	0.18	10	A	0.24	10	B
201	Parkway Link Road & Proposed Site Access	WBLT	0.03	19	A	0.06	9	A	0.08	9	A
		NBLR	0.39	8	C	0.39	26	D	0.56	34	D
202	Parkway Link Road & Proposed Site Access	EBTR	0.06	10	B	0.02	35	B	0.02	10	B
		SBLR	0.22	24	C	0.32	35	E	0.17	24	C

The Future Total 2041 conditions are anticipated to operate similarly to the 2041 background scenario and Future Total 2031/2036 conditions. The overall network is anticipated to operate under acceptable conditions with the exception of a few movements throughout the network localized to the PM peak hour. Similarly, the intersection of Alayne Bryk Way & Central Access to Aldershot GO Station will continue to operate at high levels of delay and v/c for the pm and Saturday mid day peak hours and should continue to be monitored. All site accesses are anticipated to operate at acceptable levels.

It should be noted that as the horizon years continue to become further away the overall impact of the development is anticipated to lessen. This is due to the increase in alternative modes of transport form vehicle. As the City continues to implement and promote

alternative modes of transit reducing vehicular on the network. This pair with the planned roadway improvements not included in the TIS, upgrades to transit systems and constantly changing traffic patterns, it is anticipated that the overall network will continue to operate at reasonable levels of service and capacity.

It is recommended that the City prepare and implement a monitoring program to track the implementation of the proposed development. As traffic patterns continuously change and the implementations of the ongoing capital improvements to the surrounding municipal, provincial transportation systems this will be a key initiative to ensure overall traffic operations within the City of Burlington continue to operate at acceptable levels both near the development and on a wider lens. Given the changes to occur adjacent to the Aldershot GO MTSA lands over the long term, ongoing and scheduled reporting will help City staff more accurately identify targeted infrastructure needs to maintain an acceptable level of service on the transportation system, as well as update implementation schedules for planned transportation infrastructure improvements.

The monitoring program could provide scheduled reporting on:

- Traffic volumes on key routes and intersections;
- Travel characteristics and modal split (trends in volume and active transportation travel patterns);
- Population and employment generated by existing development and projected for approval but not yet occupied;
- Evaluation of traffic volumes and transit ridership in relation to available capacity;
- The effectiveness of proposed Travel Demand Management strategies;

It should be noted that the operational concerns and proposed monitoring program should be implemented regardless if the construction of the proposed development is carried forward. Both the background total and future total transportation networks are anticipated to experience similar operating concerns related to the growth of background traffic.

8 QUEUING ANALYSIS

8.1 Existing Conditions Queuing Results

Existing Conditions (2026) queuing analysis results are summarized in **Table 8-1**. Complete SimTraffic queueing reports can be found in **Appendix G**.

Table 8-1 Existing Conditions (2026) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Existing 2026 (m) 95th Percentile Queue		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	28	48	29
		WBT	-	25	71	39
		WBR	134	13	20	18
		NBL	89	43	65	47
		NBT	-	30	45	27
		NBTR	-	49	66	42
		SBL	71	19	24	26
		SBT	-	42	54	43
		SBTR	-	36	53	41
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	11	7	4
		WBL	84	23	22	25
		WBL	-	28	26	32
		WBR	91	24	25	22
		NBLT	-	44	48	40
		NBT	-	45	43	34
		SBT	-	35	49	41
		SBTR	-	26	40	34
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	47	51	67
		EBT	-	29	36	50
		EBR	248	56	59	34
		WBL	58	10	15	6
		WBL	-	26	23	13
		WBR	-	27	36	22
		NBT	-	71	61	62
		NBTR	-	87	73	76
		SBL	30	46	48	48
		SBT	-	38	43	38
		SBT	-	30	40	42
4	Waterdown Road & Plains Road East	EBL	45	86	74	79
		EBT	-	91	94	107
		EBTR	-	73	83	97
		WBL	33	42	44	43
		WBT	-	69	146	102

ID	Intersection	Movement	Storage (m)	Existing 2026 (m) 95th Percentile Queue		
				AM	PM	Saturday
		WBTR	-	80	151	108
		NBL	25	46	96	95
		NBTR	-	134	254	228
		SBL	-	48	143	108
		SBT	-	62	198	126
		SBR	40	39	83	76
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	20	20	27
		EBTR	-	29	34	41
		WBLT	-	66	13	6
		WBT	-	58	21	13
		NBLR	-	19	25	21
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	11	3	2
		EBTR	-	10	6	8
		NBLR	-	13	26	21
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBLR	-	61	64	51
		NBLT	-	15	33	17
8	King Road & North Service Road	EBL	25	13	36	11
		EBTR	-	70	136	65
		WBL	78	46	109	58
		WBT	-	37	1071	52
		WBR	18	11	42	17
		NBLTR	-	101	152	106
		SBLT	-	46	134	33
		SBR	30	16	38	6
9	King Road & Hydro Lane	WBLR	-	9	28	3
		SBLT	-	6	360	3
10	King Road & Plains Road East	EBL	31	48	52	57
		EBT	-	84	110	95
		EBT	-	87	119	98
		EBR	33	40	73	50
		WBL	53	37	56	58
		WBT	-	76	159	132
		WBTR	-	83	162	141
		NBL	40	50	77	60
		NBTR	-	85	107	84
		SBL	30	61	56	61
		SBT	-	122	1033	237
		SBR	26	29	41	45
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	51	66	71
		EBT	-	42	59	65
		EBT	-	39	54	64

ID	Intersection	Movement	Storage (m)	Existing 2026 (m) 95th Percentile Queue		
				AM	PM	Saturday
		EBR	67	22	34	20
		WBT	-	54	79	83
		WBT	-	62	81	89
		WBT	-	47	67	82
		SBL	56	24	50	1
		SBLT	-	30	56	39
		SBR	-	22	44	47
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	51	60	65
		EBT	-	59	86	97
		EBT	-	60	80	89
		EBT	-	61	76	72
		WBT	-	53	1142	107
		WBT	-	53	1131	110
		WBTR	-	50	1122	103
		NBL	-	35	75	48
		NBLTR	-	57	111	77
		NBR	44	43	92	68
		SBL	48	11	108	31
		SBR	-	50	647	88
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	42	19	63
		WBLT	-	47	19	65
		WBR	65	52	17	59
		NBL	59	18	26	24
		NBT	-	47	45	63
		NBT	-	45	43	59
		NBT	-	34	33	49
		SBT	-	75	55	117
		SBT	-	66	46	103
		SBTR	-	74	46	90
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	20	30	30
		EBLR	-	26	36	37
		EBR	93	16	21	25
		NBT	-	34	49	54
		NBT	-	25	38	38
		NBT	-	21	46	31
		SBT	-	40	43	48
		SBT	-	38	40	49
		SBT	-	30	37	40

8.2 Future Background Conditions Queuing Results

Future background (2031, 2036, and 2041) queuing analysis results are summarized in **Table 8-2**, **Table 8-3** and **Table 8-4**. Complete SimTraffic queueing reports can be found in **Appendix G**.

8.2.1 Future Background 2031

Table 8-2 Future Background (2031) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Background 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	21	60	41
		WBT	-	26	89	48
		WBR	134	15	18	19
		NBL	89	47	65	50
		NBT	-	33	43	31
		NBTR	-	56	68	41
		SBL	71	21	30	25
		SBT	-	42	64	50
		SBTR	-	32	57	47
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	12	8	6
		WBL	84	23	36	31
		WBL	-	32	39	33
		WBR	91	29	34	32
		NBLT	-	47	47	41
		NBT	-	48	47	39
		SBT	-	37	57	44
		SBTR	-	26	43	37
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	36	32	46
		EBT	-	35	44	62
		EBR	248	73	68	53
		WBL	-	16	17	12
		WBR	-	24	32	21
		NBT	-	55	60	48
		NBTR	-	57	58	53
		NBR	-	37	41	-
		SBL	30	32	35	30
		SBT	30	40	58	47

ID	Intersection	Movement	Storage (m)	Future Background 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
4	Waterdown Road & Plains Road East	EBL	45	59	69	53
		EBT	-	61	86	75
		EBTR	-	63	84	72
		WBL	33	32	53	40
		WBT	-	76	154	91
		WBTR	-	86	159	101
		NBL	25	36	62	39
		NBTR	-	86	80	76
		SBL	-	49	116	87
		SBT	-	54	153	67
		SBR	40	29	82	66
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	25	32	30
		EBTR	-	18	23	31
		WBLT	-	12	16	8
		WBT	-	1	23	19
		NBLR	-	18	25	23
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	12	2	-
		EBTR	-	7	-	-
		NBLR	-	17	35	21
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	38	64	54
		EBR	-	8	6	11
		NBLT	-	15	39	18
8	King Road & North Service Road	EBL	25	10	11	9
		EBTR	-	60	108	69
		WBL	78	39	107	53
		WBT	-	45	309	47
		WBR	18	12	47	16
		NBLTR	-	86	110	110
		SBLT	-	38	159	38
		SBR	30	7	33	7
9	King Road & Hydro Lane	WBLR	-	8	9	6
		SBLT	-	5	-	3
10	King Road & Plains Road East	EBL	31	35	54	42
		EBT	-	80	108	88
		EBR	33	20	72	45

ID	Intersection	Movement	Storage (m)	Future Background 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBL	53	22	54	54
		WBT	-	56	114	92
		WBR	-	30	87	71
		NBL	40	41	46	51
		NBTR	-	70	59	52
		SBL	30	42	63	45
		SBT	-	36	241	82
		SBR	26	24	47	41
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	47	68	75
		EBR	67	26	39	27
		WBT	-	48	61	81
		SBL	56	25	47	38
		SBLT	-	32	55	44
		SBR	-	28	54	48
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	37	68	65
		EBT	-	57	103	66
		WBT	-	45	1110	111
		WBTR	-	53	1095	125
		NBL	-	53	465	62
		NBLTR	-	75	459	89
		NBR	44	62	128	82
		SBL	48	13	10	20
		SBR	-	30	71	42
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	47	20	81
		WBLT	-	52	19	82
		WBR	65	59	19	62
		NBL	59	72	39	132
		NBT	-	56	40	67
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	23	36	32
		EBLR	-	29	46	40
		EBR	93	15	27	27
		NBT	-	41	48	58
		SBT	-	52	45	62

8.2.2 Future Background 2036

Table 8-3 Future Background (2036) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Background 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	21	60	41
		WBT	-	28	89	48
		WBR	134	15	18	19
		NBL	89	47	65	50
		NBT	-	32	43	31
		NBTR	-	56	68	41
		SBL	71	21	30	25
		SBT	-	42	64	50
		SBTR	-	32	57	47
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	12	8	6
		WBL	84	23	36	31
		WBL	-	32	39	33
		WBR	91	29	34	32
		NBLT	-	47	47	41
		NBT	-	48	47	39
		SBT	-	37	57	44
		SBTR	-	26	43	37
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	36	32	46
		EBT	-	35	44	62
		EBR	248	73	68	53
		WBL	58	16	17	12
		WBR	-	24	32	21
		NBT	-	55	60	48
		NBTR	-	57	58	53
		NBR	-	37	41	42
		SBL	-	32	35	30
		SBT	30	30	49	43
		SBT	-	40	58	48
4	Waterdown Road & Plains Road East	EBL	45	59	69	53
		EBT	-	61	86	75
		EBTR	-	62	84	72
		WBL	33	32	53	40

ID	Intersection	Movement	Storage (m)	Future Background 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBT	-	76	154	91
		WBTR	-	86	159	101
		NBL	25	36	62	39
		NBTR	-	86	80	76
		SBL	-	49	116	87
		SBT	-	54	153	67
		SBR	40	29	82	66
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	25	32	30
		EBTR	-	18	23	31
		WBLT	-	12	16	8
		WBT	-	3	23	19
		NBLR	-	18	25	23
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	12	-	-
		EBTR	-	7	35	-
		NBLR	-	17	35	21
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	38	64	54
		EBR	-	8	6	11
		NBLT	-	15	39	18
8	King Road & North Service Road	EBL	25	10	11	9
		EBTR	-	60	108	69
		WBL	78	39	107	53
		WBT	-	45	309	47
		WBR	18	12	47	16
		NBLTR	-	86	110	110
		SBLT	-	38	159	38
		SBR	30	7	33	7
9	King Road & Hydro Lane	WBLR	-	8	9	6
		SBLT	-	5	-	3
10	King Road & Plains Road East	EBL	31	35	54	42
		EBT	-	80	108	88
		EBR	33	20	72	45
		WBL	53	22	54	54
		WBT	-	56	114	92
		WBR	-	30	87	71
		NBL	40	41	46	51

ID	Intersection	Movement	Storage (m)	Future Background 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		NBTR	-	70	59	52
		SBL	30	67	63	45
		SBT	-	36	241	82
		SBR	26	24	47	41
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	47	68	75
		EBR	67	26	39	27
		WBT	-	48	61	72
		SBL	56	25	47	38
		SBLT	-	32	55	44
		SBR	-	28	54	48
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	37	68	65
		EBT	-	57	103	66
		EBT	-	57	95	69
		WBT	-	49	1098	119
		WBTR	-	53	1095	125
		NBL	-	53	456	62
		NBLTR	-	75	459	9
		NBR	44	52	127	82
		SBL	48	13	11	20
		SBR	-	30	76	38
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	47	20	80
		WBLT	-	52	19	82
		WBR	65	59	19	62
		NBL	59	17	28	29
		NBT	-	56	40	67
		NBT	-	72	54	132
		SBT		72	42	109
		SBTR	-	80	55	102
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	23	36	32
		EBLR	-	29	46	40
		EBR	93	15	27	27
		NBT	-	41	48	55
		SBT	-	52	44	58

8.2.3 Future Background 2031

Table 8-4 Future Background (2041) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Background 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	28	56	30
		WBT	-	30	94	44
		WBR	134	13	17	17
		NBL	89	44	88	49
		NBT	-	40	73	35
		NBTR	-	56	73	40
		SBL	71	25	27	26
		SBT	-	45	73	50
		SBTR	-	39	73	41
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	4	6	4
		WBL	84	51	53	23
		WBL	-	62	66	28
		WBR	91	52	72	24
		NBLT	-	59	64	39
		NBT	-	54	62	36
		SBT	-	42	66	42
		SBTR	-	39	64	35
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	71	56	42
		EBT	-	56	53	51
		EBR	248	154	125	31
		WBL	58	26	21	86
		WBR	-	21	53	19
		NBT	-	78	73	42
		NBTR	-	79	74	45
		NBR	-	71	52	31
		SBL	30	50	61	24
		SBT	30	86	90	36
4	Waterdown Road & Plains Road East	EBL	45	75	76	57
		EBT	-	87	102	68
		EBTR	-	85	99	73
		WBL	33	42	65	46
		WBT	-	82	171	101

ID	Intersection	Movement	Storage (m)	Future Background 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBTR	-	87	172	101
		NBL	25	46	78	38
		NBTR	-	95	102	58
		SBL	-	57	132	53
		SBT	-	55	220	51
		SBR	40	43	86	61
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	41	41	33
		EBTR	-	37	31	30
		WBLT	-	13	18	6
		WBT	-	-	27	12
		NBLR	-	25	31	19
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	14	-	3
		EBTR	-	5	-	-
		NBLR	-	18	36	18
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	82	70	45
		EBR	-	6	9	8
		NBLT	-	15	50	16
8	King Road & North Service Road	EBL	25	17	12	11
		EBTR	-	70	108	72
		WBL	78	49	98	57
		WBT	-	47	1101	46
		WBR	18	11	40	16
		NBLTR	-	121	238	86
		SBLT	-	47	138	37
		SBR	30	6	46	16
9	King Road & Hydro Lane	WBLR	-	47	10	4
		SBLT	-	71	15	3
10	King Road & Plains Road East	EBL	31	75	51	43
		EBT	-	31	127	76
		EBR	33	61	80	16
		WBL	53	64	54	35
		WBT	-	33	116	85
		WBR	-	65	83	74
		NBL	40	34	64	44
		NBTR	-	38	68	58

ID	Intersection	Movement	Storage (m)	Future Background 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		SBL	30	35	51	22
		SBR	26	26	46	40
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	63	83	63
		EBR	67	23	48	27
		WBT	-	58	71	82
		WBR	-	-	15	-
		SBL	56	37	68	33
		SBLT	-	41	77	40
		SBR	-	51	94	45
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	47	62	66
		EBT	-	63	312	100
		WBT	-	57	992	95
		WBT	-	72	1002	102
		WBTR	-	80	1002	95
		NBL	-	88	460	44
		NBLTR	-	108	461	79
		NBR	44	91	130	74
		SBL	48	13	10	15
		SBR	-	33	107	37
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	78	27	60
		WBLT	-	78	33	65
		WBR	65	100	18	69
		NBL	59	31	44	25
		NBT	-	75	49	59
		SBT		146	59	105
		SBTR	-	178	71	89
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	34	45	31
		EBLR	-	36	55	38
		EBR	93	24	48	30
		NBT	-	45	67	49
		SBT	-	60	62	45

8.3 Future Total Conditions Queuing Results

Future total (2031, 2036, and 2041) queuing analysis results **Table 8-5**, **Table 8-6** and **Table 8-7**. Complete SimTraffic queueing reports can be found in **Appendix G**.

8.3.1 Future Total 2031

Table 8-5 Future Total (2031) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Total 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	33	211	34
		WBT	-	33	247	56
		WBR	134	33	13	16
		NBL	89	52	69	35
		NBT	-	70	96	49
		NBTR	-	17	109	59
		SBL	71	64	146	28
		SBT	-	-	198	72
		SBTR	-	52	178	51
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	11	5	3
		WBL	84	203	236	51
		WBL	-	236	540	43
		WBR	91	187	151	31
		NBLT	-	72	91	51
		NBT	-	68	89	52
		SBT	-	102	146	72
		SBTR	-	74	141	52
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	68	67	154
		EBT	-	67	39	155
		EBR	248	73	83	47
		WBL	58	125	253	258
		WBR	-	135	251	214
		NBT	-	87	87	38
		NBR	-	52	71	70
		SBL	30	53	53	59
		SBT	30	196	179	118
4	Waterdown Road & Plains Road East	EBL	45	87	88	96
		EBT	-	167	101	161

ID	Intersection	Movement	Storage (m)	Future Total 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		EBTR	-	145	95	116
		WBL	33	35	63	63
		WBT	-	68	143	126
		WBTR	-	85	150	122
		NBL	25	68	96	101
		NBTR	-	124	210	164
		SBL	-	62	113	78
		SBT	-	101	197	99
		SBR	40	79	79	79
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	44	61	170
		EBTR	-	62	82	207
		WBT	-	35	84	108
		WBT	-	38	97	106
		NBLR	-	19	28	39
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	20	-	5
		EBTR	-	18	6	15
		WBLT		4	9	129
		WBT	-	3	31	135
		NBLR	-	24	47	45
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	41	55	63
		EBT	-	13	26	24
		EBTR	-	14	31	29
		WBLT	-	43	79	397
		WBT	-	56	87	397
		NBLT	-	16	60	47
8	King Road & North Service Road	EBL	25	14	67	9
		EBTR	-	78	309	89
		WBL	78	71	93	103
		WBT	-	35	1056	958
		WBR	18	10	10	27
		NBLTR	-	116	116	132
		NBR	-	93	92	106
		SBLT	-	77	37	150
		SBR	30	28	48	51
9	King Road & Hydro Lane	EBL	-	45	49	39

ID	Intersection	Movement	Storage (m)	Future Total 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBL	-	3	19	5
		WBTR	-	8	7	-
		NBL	30	20	33	32
		NBTR	-	62	76	74
		SBL	-	27	301	349
		SBTR	30	34	37	45
10	King Road & Plains Road East	EBL	31	46	14	49
		EBT	-	84	113	108
		EBT	-	86	120	113
		EBR	33	38	103	62
		WBL	53	38	65	67
		WBT	-	74	141	150
		WBTR	-	76	148	152
		WBR	-	75	147	152
		NBL	40	54	94	128
		NBTR	-	101	122	206
		SBL	30	51	51	51
		SBT	-	809	675	530
		SBR	26	18	38	37
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	75	82	86
		EBT	-	68	79	81
		EBR	67	25	31	21
		WBT	-	83	77	109
		SBL	56	32	76	72
		SBLTR	-	37	78	75
		SBR	-	21	79	68
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	61	63	56
		EBT	-	142	177	230
		EBR	-	84	1008	391
		WBT	-	87	1012	373
		WBTR	-	84	4460	124
		NBL	-	101	464	152
		NBLTR	-	94	120	103
		NBR	44	9	8	21
		SBL	48	30	73	41

ID	Intersection	Movement	Storage (m)	Future Total 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		SBR	-	27	74	39
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	51	24	46
		WBLT	-	64	18	48
		WBR	65	79	18	32
		NBL	59	17	21	3
		NBT	-	71	36	10
		SBT	-	106	72	86
		SBT		112	65	71
		SBTR	-	114	64	61
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	26	42	42
		EBLR	-	40	47	48
		EBR	93	26	32	32
		NBLT	-	91	187	388
		NBT	-	77	169	389
		SBT	-	48	78	74
101	Parkway Link Road & Street B	EBLTR	-	29	51	40
		EBT	-	25	39	29
		WBT	-	24	22	24
		WBTR	-	28	28	25
		SBLR	-	25	22	24
102	Parkway Link Road & Street C/Proposed Site Access	EBLT	-	34	38	28
		EBTR	-	33	36	25
		WBL	-	18	42	13
		WBTR	-	49	67	36
		NBLTR	-	14	46	18
		SBLTR	-	38	28	29
103	Parkway Link Road & Street D	EBLT	-	44	147	52
		EBT	-	41	148	42
		WBT	-	30	35	25
		WBTR	-	52	51	57
		SBLR	-	62	90	85
104	Parkway Link Road & Street D	EBLT	-	84	90	77
		EBTR	-	92	86	97
		WBLT	-	39	42	78
		WBTR	-	44	50	88

ID	Intersection	Movement	Storage (m)	Future Total 2031		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		NBLTR	-	50	31	36
		SBLR	-	30	41	41
105	Parkway Link Road & King Road	EBL	-	101	119	94
		EBR	-	133	116	133
		NBL	30	45	40	41
		NBL	-	104	43	743
		SBT	-	78	170	191
		SBR	30	34	54	53
106	Street B & Street C/Proposed Site Access	EBLTR	-	17	40	19
		WBLTR	-	19	17	19
107	Street B & Street D	EBTR	-	24	143	91
		WBLT	-	20	130	69
		NBLR	-	13	18	25
108	Street B & Street E/Proposed Site Access	EBLTR	-	16	18	20
		WBLTR	-	17	18	20
		NBLTR	-	13	15	16
		SBLTR	-	19	18	79
201	Parkway Link Road & Proposed Site Access	WBLT	-	10	14	144
		NBLR	-	32	20	65
202	Parkway Link Road & Proposed Site Access	EBLT	-	16	7	11
		SBLR	-	17	15	16

8.3.2 Future Total 2036

Table 8-6 Future Total (2036) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	33	189	38
		WBT	-	33	325	61
		WBR	134	-	13	17
		NBL	89	37	69	32
		NBT	-	45	88	52
		NBTR	-	62	102	61

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		SBL	71	18	158	26
		SBT	-	72	516	86
		SBTR	-	58	415	71
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	14	6	6
		WBL	84	234	213	132
		WBL	-	545	453	108
		WBR	91	145	186	53
		NBLT	-	85	97	69
		NBT	-	74	83	57
		SBT	-	135	150	125
		SBTR	-	130	152	111
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	90	87	154
		EBT	-	51	52	129
		EBR	248	169	101	69
		WBL	58	128	254	255
		WBR	-	145	231	212
		NBT	-	82	75	67
		NBR	-	59	64	79
		SBL	30	53	53	53
		SBT	30	181	179	199
4	Waterdown Road & Plains Road East	EBL	45	71	74	68
		EBL		77	88	93
		EBT	-	70	116	163
		EBTR	-	82	84	125
		WBL	33	43	46	55
		WBT	-	88	124	157
		WBTR	-	104	132	163
		NBL	25	60	104	109
		NBTR	-	103	191	263
		SBL	-	71	256	80
		SBT	-	83	332	89
		SBR	40	74	72	81
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	28	56	166
		EBTR	-	43	77	190
		WBT	-	32	116	104

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBT	-	34	113	95
		NBLR	-	17	27	30
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	15	-	3
		EBTR	-	21	3	13
		WBLT		11	82	122
		WBT	-	12	99	105
		NBLR	-	29	47	38
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	51	65	71
		EBT	-	15	34	23
		EBTR	-	18	38	25
		WBLT	-	53	84	452
		WBT	-	60	82	447
		WBR	-	20	26	123
		NBLT	-	25	71	41
8	King Road & North Service Road	EBL	25	16	13	78
		EBTR	-	79	112	285
		WBL	78	88	93	114
		WBT	-	85	851	1074
		WBR	18	11	34	14
		NBLTR	-	109	132	96
		NBR	-	89	130	79
		SBLT	-	119	330	325
		SBR	30	33	45	39
9	King Road & Hydro Lane	EBL	-	42	48	34
		WBL	-	4	15	5
		WBTR	-	8	4	27
		NBL	30	19	24	63
		NBTR	-	65	64	352
		SBL	-	40	356	-
		SBTR	30	39	41	51
10	King Road & Plains Road East	EBL	31	30	35	49
		EBT	-	101	104	108
		EBR	33	76	66	96
		WBL	53	29	54	71
		WBT	-	74	120	152

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBTR	-	76	184	159
		WBR	-	81	129	158
		NBL	40	49	143	129
		NBTR	-	80	372	277
		SBL	30	51	51	51
		SBT	-	662	819	796
		SBR	26	18	32	26
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	70	84	92
		EBR	67	25	57	25
		WBT	-	81	78	100
		SBL	56	38	82	83
		SBLTR	-	42	96	98
		SBR	-	30	103	105
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	67	67	64
		EBT	-	130	173	147
		WBT	-	92	938	957
		WBT	-	103	937	920
		WBTR	-	113	4901	141
		NBL	-	128	465	162
		NBLTR	-	102	134	110
		NBR	44	16	13	21
		SBL	48	39	87	53
		SBR	-	37	97	51
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	49	28	84
		WBLT	-	57	25	92
		WBR	65	63	18	72
		NBL	59	6	24	10
		NBT	-	16	60	46
		SBT	-	100	74	156
		SBTR	-	138	70	127
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	31	46	47
		EBLR	-	36	47	49
		EBR	93	18	36	39
		NBLT	-	398	190	389
		NBT	-	401	100	391

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		SBT	-	48	61	60
101	Parkway Link Road & Street B	EBLTR	-	31	43	43
		EBT	-	24	38	40
		WBT	-	22	111	22
		WBTR	-	29	25	22
		SBLR	-	28	20	31
102	Parkway Link Road & Street C/Proposed Site Access	EBLT	-	34	40	28
		EBTR	-	26	43	33
		WBL	-	16	42	16
		WBTR	-	38	51	42
		NBLTR	-	16	49	21
		SBLTR	-	34	41	27
103	Parkway Link Road & Street D	EBLT	-	34	214	95
		EBT	-	33	219	100
		WBT	-	25	37	33
		WBTR	-	52	53	60
		SBLR	-	54	89	88
104	Parkway Link Road & Street D	EBLT	-	47	82	76
		EBTR	-	58	94	97
		WBLT	-	32	43	71
		WBTR	-	40	47	85
		NBLTR	-	25	61	44
		SBLR	-	22	44	32
105	Parkway Link Road & King Road	EBL	-	71	114	121
		EBR	-	76	125	133
		NBL	30	79	88	434
		NBT	-	89	77	421
		SBT	-	69	190	199
		SBR	30	35	52	44
106	Street B & Street C/Proposed Site Access	EBLTR	-	19	18	56
		WBLTR	-	19	15	14
107	Street B & Street D	EBTR	-	28	130	175
		WBLT	-	16	54	121
		NBLR	-	20	18	18
108		EBLTR	-	22	17	19

ID	Intersection	Movement	Storage (m)	Future Total 2036		
				95th Percentile Queues (m)		
				AM	PM	Saturday
	Street B & Street E/Proposed Site Access	WBLTR	-	13	18	26
		NBLTR	-	13	18	15
		SBLTR	-	21	16	16
201	Parkway Link Road & Proposed Site Access	WBLT	-	10	13	113
		NBLR	-	26	20	116
202	Parkway Link Road & Proposed Site Access	EBLT	-	16	8	9
		SBLR	-	18	17	15

8.3.3 Future Total 2031

Table 8-7 Future Total (2041) Queuing Analysis

ID	Intersection	Movement	Storage (m)	Future Total 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
1	Waterdown Road & North Service Road/Hwy 403 WB On-Ramp	WBL	146	33	117	39
		WBT	-	34	112	46
		WBR	134	2	13	17
		NBL	89	31	68	42
		NBT	-	63	90	57
		NBTR	-	80	108	68
		SBL	71	26	151	23
		SBT	-	69	304	77
		SBTR	-	59	282	63
2	Waterdown Road & Panin Road/ Hwy 403 Off-Ramp	EBLTR	-	9	9	7
		WBL	84	597	585	70
		WBR	91	210	211	28
		NBLT	-	77	93	81
		NBT	-	74	74	65
		SBT	-	101	151	152
		SBTR	-	88	153	127
3	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	EBL	107	129	223	70
		EBT	-	61	556	62
		EBR	248	157	327	36
		WBL	58	145	246	152

ID	Intersection	Movement	Storage (m)	Future Total 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBR	-	152	212	177
		NBT	-	86	98	66
		NBR	-	53	70	49
		SBL	30	42	53	53
		SBT	30	179	177	191
4	Waterdown Road & Plains Road East	EBL	45	90	95	93
		EBT	-	123	296	118
		EBTR	-	102	280	81
		WBL	33	45	58	69
		WBT	-	85	128	130
		WBTR	-	101	134	143
		NBL	25	69	106	79
		NBTR	-	151	224	126
		SBL	-	60	251	96
		SBT	-	84	342	148
		SBR	40	72	73	81
5	Alayne Bryk Way & West Access to Aldershot GO Station	EBT	-	45	45	77
		EBTR	-	75	72	110
		WBT	-	43	116	48
		WBT	-	43	112	51
		NBLR	-	25	33	17
6	Alayne Bryk Way & Centre Access to Aldershot GO Station	EBT	-	9	-	5
		EBTR	-	18	7	12
		WBLT		7	106	-
		WBT	-	8	121	-
		NBLR	-	27	46	56
7	Alayne Bryk Way & East Access to Aldershot GO Station	EBL	-	44	68	42
		EBT	-	12	33	22
		EBTR	-	15	38	28
		WBLT	-	40	74	57
		WBT	-	49	79	62
		NBLT	-	17	70	26
8	King Road & North Service Road	EBL	25	19	67	6
		EBTR	-	78	359	78
		WBL	78	100	93	89

ID	Intersection	Movement	Storage (m)	Future Total 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBT	-	144	912	58
		WBR	18	13	25	13
		NBLTR	-	107	107	146
		NBR	-	82	102	119
		SBLT	-	112	312	107
		SBR	30	32	36	32
9	King Road & Hydro Lane	EBL	-	39	48	34
		EBL	-	35	43	27
		WBL	-	7	12	6
		WBTR	-	5	8	-
		NBL	30	18	34	34
		NBTR	-	87	69	59
		SBL	-	50	336	252
		SBTR	30	41	38	37
10	King Road & Plains Road East	EBL	31	32	28	42
		EBT	-	95	118	108
		EBR	33	50	104	90
		WBL	53	36	57	66
		WBT	-	83	164	136
		WBTR	-	92	140	149
		WBR	-	88	4	146
		NBL	40	53	133	87
		NBTR	-	97	298	178
		SBL	30	51	51	51
		SBT	-	500	721	777
		SBR	26	14	34	38
11	QEW Niagara On-Ramp/ Off-Ramp & Plains Road East/ Fairview Street	EBT	-	73	95	75
		EBR	67	27	36	20
		WBT	-	86	84	114
		SBL	56	44	105	60
		SBLTR	-	45	155	73
		SBR	-	36	130	71
12	QEW Toronto Off-Ramp/ Plains Road East & Fairview Street	EBL	31	62	63	64
		EBT	-	131	174	142
		EBR	-	-	-	-

ID	Intersection	Movement	Storage (m)	Future Total 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
		WBT	-	90	938	170
		WBT	-	90	940	173
		WBTR	-	101	935	175
		NBL	-	168	459	56
		NBLTR	-	198	462	77
		NBR	44	109	134	76
		SBL	48	12	11	14
		SBR	-	40	83	52
13	Brant Street & Private Driveway/ Highway 403 WB Off-Ramp	WBL	-	69	26	70
		WBLT	-	74	31	74
		WBR	65	100	19	77
		NBL	59	19	24	28
		NBT	-	73	43	74
		NBT	-	70	61	73
		SBT	-	171	92	133
		SBTR	-	231	90	102
14	Brant Street & Highway 403 EB Off-Ramp	EBL	-	34	42	47
		EBLR	-	40	52	49
		EBR	93	29	40	28
		NBLT	-	79	433	147
		NBT	-	67	416	135
		SBT	-	56	86	49
		SBR	-	20	-	-
101	Parkway Link Road & Street B	EBLTR	-	33	42	39
		EBT	-	23	42	32
		WBT	-	24	21	23
		WBTR	-	28	25	25
		SBLR	-	23	23	25
102	Parkway Link Road & Street C/Proposed Site Access	EBLT	-	32	147	34
		EBTR	-	23	150	31
		WBL	-	14	39	16
		WBTR	-	47	50	38
		NBLTR	-	16	44	17
		SBLTR	-	31	44	27
103		EBLT	-	36	230	50

ID	Intersection	Movement	Storage (m)	Future Total 2041		
				95th Percentile Queues (m)		
				AM	PM	Saturday
	Parkway Link Road & Street D	EBT	-	28	227	46
		WBT	-	24	37	38
		WBTR	-	56	56	63
		SBLR	-	55	96	34
104	Parkway Link Road & Street D	EBLT	-	44	85	48
		EBTR	-	49	96	74
		WBLT	-	34	46	74
		WBTR	-	45	45	85
		NBLTR	-	26	40	36
		SBLR	-	24	56	25
105	Parkway Link Road & King Road	EBL	-	84	103	84
		EBR	-	59	130	125
		NBL	30	45	44	43
		NBL	-	89	74	245
		NBT	-	101	59	236
		SBT	-	72	208	184
		SBR	30	33	52	52
106	Street B & Street C/Proposed Site Access	EBLTR	-	22	66	21
		WBLTR	-	17	14	18
107	Street B & Street D	EBTR	-	27	194	26
		WBLT	-	21	121	18
		NBLR	-	17	16	23
108	Street B & Street E/Proposed Site Access	EBLTR	-	21	24	21
		WBLTR	-	16	16	22
		NBLTR	-	15	17	16
		SBLTR	-	20	18	20
201	Parkway Link Road & Proposed Site Access	WBLT	-	6	1	20
		NBLR	-	23	19	23
202	Parkway Link Road & Proposed Site Access	EBLT	-	21	9	4
		SBLR	-	16	14	14

Generally the proposed transportation network is able to accommodate all anticipated 95th percentile queues. Certain movements indicate that the proposed queue lengths will extend past the available storage length. The majority of the movements where queue are anticipated to extent past the available storage, the spill over queues

represent 2-3 vehicles. Generally, these vehicles will be able to be accommodated within the taper length without affecting the through lane operations. The corridors along Waterdown Road and Plains Road East are shown to experience large 95th percentile queueing due to the large amount of through traffic along the corridors, this is seen in both the background and total traffic scenarios indicating that the large queues are a result of background traffic growth regardless if the development is constructed or not. Similarly to the conclusions in section 7 of this TIS, a monitor program is recommended to ensure continued acceptable operations at the study intersections to help time when require road network upgrades will be required.

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9 ROUNDABOUT FEASIBILITY

A feasibility review for the implementation of a roundabout within the proposed development at the following locations was undertaken:

- Parkway Link Road (Street A) and Multi Modal Local Street (Street B)
- Multi Modal Local Street and Residential Access to the Northwest of Central Park

Municipal Services

When screening for a roundabout, impacts to municipal services need to be reviewed. Roundabouts have an increased impact on transit routes and bus stop locations compared to traditional TWSC, AWSC or signalized intersections. When a transit route passes through a roundabout, bus stops cannot be situated directly adjacent to a roundabout and are typically set back from any crosswalks and turning lanes. This results in transit stops being located further away from the intersection and potentially increasing the distance pedestrians have to travel to and from the bus stop. This impact will be felt at both locations.

While buses can navigate safely through a roundabout, a larger inscribed circle radius is required to better accommodate the bus's larger turning radius compared to a typical passenger vehicle. Requiring additional property.

Road maintenance, and in particular winter maintenance, is applicable to all types of intersection types and controls, although roundabouts are unique due to their geometry. Most snow clearing equipment owned by municipalities or contractors are geared towards traditional intersections and roads. Standard snow clearing equipment requires a minimum 4.2 m clear lane when circulating a roundabout to accommodate the blade. The design of the roundabout within the available property will be unable to accommodate a snowplow without damages to the curb and blade of the snowplow

- The Parkway Link Road will eventually include a BRT Lane, this adds an increase complexity to the installation of a roundabout along the Parkway Link Road. Without the BRT the Parkway Link will require a multilane roundabout with two lanes in the Major Direction. The addition of a BRT lane will directly impact the intended operations of the roundabout and as such the intersection of Parkway Link Road and the Multi Modal local Street is not a good candidate for a roundabout based on the proposed future planned geometry and use of Parkway Link Road.
- Due to the available space at the intersection of Multi Modal Local Street and Residential Access to the Northwest of Central Park, is within a constricted space with planned lots directly adjacent, the design of a roundabout will fall within the category of mini roundabout. A mini roundabout is used when the subjected intersection is within a residential area with limited property, operating speeds

less than 55 km/h, and average daily traffic (ADT) less than 15,000. As such transit, EMS and snow plows may have difficulty circulating the roundabout without conflict.

Roundabout and Vulnerable Users

Municipalities often consider roundabouts as an alternative to a typical stop-controlled intersection, as fewer conflict points and larger inscribed circle diameters force motorists to reduce speed. However, a study of 332 roundabouts (constructed between 1995 and 2009) in Denmark found a 65% increase in total bicycle crashes and a 40% increase in bicycle injury crashes after the installation of roundabouts (Jensen, "Safety effects of converting intersections to roundabouts." Transportation Research Record: Journal of the Transportation Research Board 2013). Furthermore, a study of 202 roundabouts in 15 towns across western France found that cyclists experience nearly double the increase in collisions in roundabouts compared to a typical stop-controlled/signalized intersection. At a typical stop-controlled/signalized intersection, cyclists represent 3.7% of the overall collisions and with roundabouts in place cyclists experience 7.3% of overall collisions (U.S. Department of Transportation – Federal Highway Administration, "Roundabout: An Informational Guide").

The increase of vulnerable user collisions can be tied to the concerns with visibility, as vehicles entering a roundabout are required to yield to oncoming traffic to the left reducing the visibility of cyclist as well as the location of pedestrian crossing generally to the right of the vehicle.

- As both the Parkway Link Road (Street A) and the Multi Modal Local Road (Street B) are anticipated to have high pedestrian and cyclist volumes, the concerns with vulnerable user is relevant at both locations.

Conclusion

While roundabouts are often highlighted for their ability to move traffic through an intersection with minimal delays and stoppage of vehicles compared to traditional AWSC intersections, this improvement is not carried forward with vulnerable (pedestrians and cyclists) users.

It is TYLin's understanding that the overall 1200 King Road Plan aims to create connected and walkable communities with convenient bicycle infrastructure throughout Burlington. Even though roundabouts provide a generally safe environment for pedestrians by reducing pedestrian crossing distances (only crossing one lane of traffic at a time) and in-boulevard bicycle facilities, pedestrians and cyclists tend to avoid using roundabouts when possible, due to their atypical design.

Accordingly, planning for roundabouts within the 1200 King Road Concept Plan, are not the best option when aiming for a more family-friendly transportation network that links residents to schools, parks, and other community areas. A reduction in roundabouts assists

in achieving the City's goals of providing compact, walkable communities that promote the use of active transportation. As such the two proposed locations do not make appropriate candidates for the installation of roundabouts.

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10 PARKING ASSESSMENT

10.1 Parking Requirements

10.1.1 Required Residential Parking Requirements

Table 10-2 outlines the minimum residential and visitor parking requirements for the proposed on-site residential developments in accordance with City of Burlington's Zoning By-Law 2020 (Part 1 – General Conditions and Provisions). Applying the required parking ratios for each unit type results in a total parking provision of 12,320 parking spaces, including 12,320 resident parking spaces and 2,206 visitor parking spaces. This equates to an overall parking rate of approximately 1.45 resident parking and 0.25 visitor parking.

Table 10-1 Required Residential Parking Spaces by Unit Type

Unit Type	# of Units	Required Parking Rate	Required Parking Spaces
Townhouse Dwelling	240	2 spaces per unit	480 parking spaces
Bachelor	429	1 resident spaces , plus 0.25 visitor spaces per unit	536 parking spaces (429 resident and 107 visitor)
1-Bedroom	4,721	1.25 resident spaces , plus 0.25 visitor spaces per unit	7,082 parking spaces (5,901 resident and 1,108 visitor)
2-Bedroom	2,815	1.5 resident space , plus 0.25 visitor spaces per unit	4,926 parking spaces (4,223 resident and 704 visitor)
3-Bedroom	858	1.5 resident space , plus 0.25 visitor spaces per unit	1,502 parking spaces (1,287 resident and 215 visitor)
Total	**8,823**	**14,526 required parking spaces** (12,320 resident and 2,206 visitor)	

10.1.2 Non-Residential Parking Requirements

Table 10-2 outlines the minimum required Non-residential required parking ratios. Applying the required parking ratios for land use results in a total parking provision of 3316 parking spaces.

Table 10-2 Required Non-Residential Parking Spaces by Land Use

Land Use	Gross Floor Area/Rooms	Required Parking Rate	Required Parking Spaces
Daycare	369 m^2	1 space per 100 m^2 GFA	4 parking spaces
Retail	11,738 m^2	3.5 spaces per 100 m^2 GFA	411parking spaces
Campus[1]	26,526 m^2	5 spaces per classroom plus 1 space per 6 person capacity of auditoriums	200 parking spaces
Office	13,120 m^2	3 spaces per 100 m^2 GFA	394 parking spaces
Community[2]	13,607 m^2	1 space per 4 person capacity	3,888 parking spaces
Arena	16,275 m^2	5.5 spaces per 100 m^2 GFA	895 parking spaces
Hotel	440	1 space per guest room	440 parking spaces
Total		**6,232**	

Notes:

[1] Assumed 10 classrooms and 2 300-person auditoriums per campus facility (100 stalls per campus)

[2] Community Centre capacity based on Ontario Building Code Table 3.1.17.1 2.8m^2 per person, total capacity (assume 20% of Building GFA for non-community uses)

10.1.3 Accessible Parking Requirements

The number of required accessible parking spaces is determined based on the number of parking spaces provided, a portion must be designated for accessibility purposes. Pursuant to Part 1 - General Conditions and Provisions in Zoning By-law 2020 subsection (9), accessible parking must be supplied in accordance with the required rates set out in **Table 10-3**.

Table 10-3 Required Accessible Parking Rates

Required Parking	Designated Accessible Parking Spaces
5 to 50 spaces	1 designated accessible parking space
51 to 90 spaces	2 designated accessible parking spaces
Over 90 spaces	3% of required parking spaces

Per the table above the development is anticipated to require 100 accessible parking spaces throughout the site.

10.2 Bicycle Parking Requirements

10.2.1 Non-Residential Bicycle Parking Requirements

Bicycle parking requirements are stipulated in Part 1: General Conditions and Provisions in Zoning By-Law 2020. Bicycle parking spaces shall be provided in conjunction with office, retail and service commercial, industrial and institutional developments. Pursuant to Part 1 - General Conditions and Provisions in Zoning By-law 2020 subsection (10), accessible parking must be supplied in accordance with the required rates set out in **Table 10-4**.

Table 10-4 Required Non-Residential Bicycle Parking Rates

Use	Required Bicycle Parking Spaces
Retail, Retail Centre Service Commercial Office, Institutional	2 spaces plus 1 space/1000 m^2 GFA
Post-Secondary School	1 space/20 students

10.2.2 Residential Bicycle Parking Requirements

As of June 2025, a draft Residential Zoning By-law for the City of Burlington has been published, which provides requirements for bicycle parking for residential development. Section 6.1.2 of the document provided identifies the minimum dimensions, design elements and number of bicycle spaces provided based on land uses per Table 3, which is shown in **Table 10-5** below. Similar to vehicular parking, the specific number of bicycle parking spaces provided will be reviewed later in the development application process, with a focus on assessing if the requirements are met.

Table 10-5 Table 3 from City of Burlington Draft Residential Zoning By-law (June 2025)

Table 3: Bicycle Parking Space Requirements

Use	Bicycle parking spaces, long-term – minimum required	Bicycle parking spaces, short term – minimum required
Apartment building	0.1 spaces per **dwelling unit**, 2 spaces minimum	0.5 space per **dwelling unit**, 2 spaces minimum
Commercial multi-unit **building** (includes individual **buildings** on the same **lot** as the multi-unit **building**)	0.2 spaces per 100 m2 GFA, 3 spaces minimum	0.1 spaces per 100 m2 GFA, 2 spaces minimum
Use	**Bicycle parking spaces, long-term – minimum required**	**Bicycle parking spaces, short term – minimum required**
Retail Store	0.2 spaces per 100 m2 GFA, 3 spaces minimum	0.1 spaces per 100 m2 GFA, 2 spaces minimum
Day Care Centre	0.1 spaces per 100 m2 GFA, 2 spaces minimum	0.2 spaces per 100 m2 GFA, 2 spaces minimum
Restaurant	3 spaces plus 1.0 space per 1000 m2 GFA	0.1 spaces per 100 m2 GFA, 2 spaces minimum
Office	0.13 spaces per 100 m2 GFA, 2 spaces minimum	0.2 spaces per 100 m2 GFA, 2 spaces minimum[1]
All other commercial uses not otherwise specified	0.05 spaces per 100 m2 GFA	2 spaces minimum 0.09 spaces per 100 m2 GFA, 2 spaces minimum
Industrial uses	0.03 spaces per 100 m2 GFA, 2 spaces minimum	0.07 spaces per 100 m2 GFA, 2 spaces minimum
All other non-residential uses not otherwise specified	2 spaces minimum	2 spaces minimum
Footnote to Table 3: 1 For every 30 **long-term bicycle parking spaces** required, 2 shower and change facilities shall be provided.		

10.3 Proposed Parking Rates

10.3.1 Proposed Parking Rates

The proposed development is intended to function as a transit-oriented, complete mixed-use community. In support of this vision, a reduced parking rate is proposed for all land uses within the proposed development.

The proposed parking rates reflect the site's location to nearby high-order transit, and planned active transportation connectivity, both of which are anticipated to reduce reliance on private vehicles. The development is planned as a mixed-use community integrating residential, employment, retail, entertainment institutions and community uses with the objective of encouraging walking, cycling, and transit.

For all residential uses a proposed parking by law of 0.8 spaces per unit, comprised of 0.75 residential spaces and 0.05 visitor spaces per unit are proposed due to the functional goal and vision of the development to operate as a transit-oriented complete community.

The proposed development being located adjacent to the Aldershot GO Station, thus providing high order transit within close proximity of the site. The site is anticipated to function and gain the benefits that typically would come from being in close proximity to Aldershot GO Station and having high-order transit nearby. As such for all non-residential uses it is proposed that they follow the rates presented within the Burlington Major Transit Station Areas (MTSA) Community Planning Permit By-Law.

The total parking supply resulting from the reduced rates are summarized in **Table 10-6**.

Table 10-6 Proposed Parking Rates

Unit Type	# of Units/GFA (m^2)	Proposed Parking Rate	Proposed Parking Spaces
Residential	8,823	0.75 resident spaces per unit, plus 0.05 visitor spaces per unit (Total 0.80 spaces per unit)	6,617
Retail	11,738	1.5 spaces per 100 m^2	176
Campus	26,525	3.0 spaces per 100 m^2	796
Community	13,607	4 spaces per 100 m^2	544
Arena	16,275	5 spaces per 100 m^2	651
Hotel	440	0.75 spaces per unit plus 7.5 spaces per 100 m^2 of public area	330
Total	**-**	**-**	**9,114**

The proposed reduced parking rates within the 1200 King Street development will result in a total of 9,114 required parking spaces. Due to the high level of variance a parking justification is provided below.

10.4 Justification for Parking Variance

The following considerations, in combination with the Transportation Demand Management Plan highlighted in Section 13, are deemed to provide reasonable justification for the proposed reduction in required parking rates. Considerations are as follows:

Transit-Oriented Development – the objective of the proposed development is to achieve an attractive, vibrant, and active community structured by a robust public realm and open space network highly connected through walkable compact streets, linked open spaces, extensive trail and cycling networks, and convenient transit. The complete mixed-use composition of the development is achieved through the proposal of high-density residential, a retail district, a post-secondary campus including a mixed-use campus plaza and supporting high-density residential for students, and an entertainment district including an arena and hotel. The transportation network is designed to support and synergistically integrate active transportation, local transit services, and intermunicipal/interregional higher-order transit services. By prioritizing walking, cycling, public transit, and driving options, the community will enhance connectivity and reduce reliance on single-occupancy vehicles. This principle ensures convenient access to transportation, promotes sustainable living, and supports higher density in existing transit corridors to create a well-connected and accessible community.

Section 3.2 provides detailed information on the existing and proposed transit coverage of the area. The transit infrastructure in the study area includes Burlington Transit, GO transit, Hamilton Street Railway, and VIA Rail providing a wide range of local, regional, interprovincial, and international services. Additionally, the Aldershot GO Station as an MTSA acts as a central hub in the study area, offering accessible platforms and a well-organized bus loops. Additionally, Plains Road East is proposed as a future Bus Rapid Transit (BRT) corridor with dedicated transit lanes and more reliable service at a higher frequency compared to a conventional bus route. This strong transit network coupled with the connectivity of cycling and pedestrian pathways ensures residents will have convenient and versatile transportation options that support the study area's transit-oriented development and overall accessibility. Additionally, as the site develops and the potential for a BRT along the Parkway Link will allow additional and more direct routing connecting the proposed development with the Aldershot GO Station for further ease and overall connectivity within the site to surrounding transit services.

Mode Share - The City of Burlington's IMP, as discussed in **Section 4.5.3.** summarizes existing (2023) mode share percentages. This includes a total non-auto mode share of 9%.

The City of Burlington IMP also includes proposed 2051 Mode Share Targets which result in a non auto mode share of 30%. As shown the City of Burlington is committed to reducing vehicular traffic throughout the City. This is further represented by the proposed AT, Transit and Pilot Programs (Discussed below) that the City is implementing. Additionally, the proposed site is designed in a way to promote all kinds of transportation – from a robust pedestrian and cyclist connective infrastructure, proximity to high-order transit, and proposed TDM measures such a e-bikes and e-scooters aids in allowing the site to meet the mode share targets ahead of the proposed 2051 timeline.

City of Burlington No Required Minimum Parking Pilot Program - City Council has recently passed a motion to initiate a pilot program removing minimum parking requirements for proposed development along Plains Road East corridor. Rational behind the reduction is due to the study area (Plains Road East) is significantly transit-oriented and supportive. As the proposed development is anticipated to be a transit-oriented corridor there is a precedent for removal of parking rate minimums along the proposed Parkway Link. There is an expectation that development in proximity to the corridor (i.e., the subject development) would exhibit similar characteristics as development situated immediately along the corridor within the pilot program. Although a "no parking minimums" approach is not being proposed for the subject development, a reduced parking requirement reflecting the site's proximity to the frequent transit corridor is reasonable.

Shared Use Parking – As the site is proposed as a mixed use development including high levels of residential, employment, retail, entertainment institutions and community uses. When a development includes multiple lands uses there will be to some extent shared use parking by default. For example, their will be off-peak periods for the non-residential uses (i.e., campus, hotel, arena, retail, etc.) in which significant surplus free or paid parking supply will be available when other land uses reach on-peak demand. This creates opportunities for shared parking between the various uses, including for visitors to the residential uses.

Low Risk of Parking Infiltration - Given this site location is configured and planned as a "complete" community with no notable residential neighbourhoods or large developments within proximity to the site. As such it is not expected that a significant number of visitors regularly park off-site and walk into the development resulting in low probability of parking demand infiltrating other developments/communities.

MTSA Considerations – The proposed development is located adjacent to the Aldershot GO MTSA, with lands originally slated to be included within the MTSA. However as the lands are still anticipated to be developed as a transit-oriented with high-order transit services within close proximity the MTSA. Recent MTSA framework guidelines and recent legislation (Passed August 2025) reducing non-residential uses as well as eliminating minimum requirements for residential uses are still relevant to the proposed site with has the same goal as a development within a MTSA – providing a well rounded transportation network with a focus on transit and sustainable modes.

11 DRAFT PLAN REVIEW

11.1 Sightline Assessment

A desktop sightline review was completed for the intersections at Street C, D, and E along Street B. The review included intersection site distance (ISD).

Both northbound and southbound left- and right-turn sightlines were reviewed for all intersections along Street B. All sightlines were unobstructed by buildings. Proposed landscaping and trees might obstruct the sightlines for Street C, D, and E depending on their height.

Sight distance requirements were determined based on posted and assumed operating speeds in accordance with the TAC standards. The west segment of Street B (to Street D) has an operating speed limit of 30 km/h in relation to the proposed traffic calming measures and goals of Street B adjacent to the Central . The east segment of Street B (from Street D to King Road) has an operating speed limit of 60 km/h . To remain conservative in the safety analysis of the sightlines at Street B and Street C, an assumed operating speed of 50km/h was used to be consistent of operating speed at Street B east of Street D. The resulting minimum ISD and available ISD requirements are summarized in **Table 11-1.**

Table 11-1 Sight Distance Requirements by Intersection and Movement

Intersection	Direction	Movement	Operating Speed (km/h)	ISD Required (m)	ISD Available (m)
Street C & Street B	Northbound	Right Turn	50	95	126
		Left Turn	50	105	105
	Southbound	Right Turn	50	95	441
		Left Turn	50	105	198
Street D & Street B	Northbound	Right Turn	50	95	234
		Left Turn	60	130	268
	Southbound	Right Turn	60	110	232
		Left Turn	50	105	398
Street E & Street B	Northbound	Right Turn	60	110	485
		Left Turn	60	130	130
	Southbound	Right Turn	60	110	118
		Left Turn	60	130	88

All assessed intersections meet or exceed the minimum ISD required, except the southbound left turn at Street E & Street B due to the proximity of the signalized intersection proposed at Street B & King Road. Detailed sightline drawings are provided in **Appendix I.**

Redline Review

A redline review of the draft plan was prepared and included in **Appendix H.** The redline review included intersections spacing, corner clearance, intersection angles, curb radii and high-level vehicular movement diagrams. All markups will be addressed during future submissions and finalized during each individual block plan site plan application. A further detailed review will be conducted during the SPA process which will evaluate each individual block plan as well as the overall network.

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12 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) involves the strategic use of methods to promote transportation through sustainable and non-auto-oriented travel. Strategic planning of alternative modes of transportation can generate various benefits. This includes, but is not limited to, promoting environmental sustainability, enhancing public health, mitigating traffic congestion, and contributing to a higher quality of life for residents.

TYLin's goal in the development and organization of this chapter is to provide a comprehensive list of TDM strategies and policy areas, paired with an assessment of their effectiveness. In turn, this will assist the developer in selecting best practices to implement, which can shift travel behaviour. This will contribute to better transportation operations, more aptly serving the development within the subject site. Note that for the TDM measures proposed, any given strategy may be placed in multiple categories.

This chapter seeks to encourage the reduction of congestion and subsequent use of single-occupancy vehicles by providing mobility alternatives and countermeasures. The goal of any TDM plan is to reduce the dependency on personal vehicles to make daily trips to and from work/home. The key to the success of these strategies is to have an abundance of alternatives and appropriate infrastructure that will replace the need for a personal vehicle. Education and exposure also play a key role in making commuters aware of the alternative travel options available at the subject site.

12.1 Review of Typical TDM Measures

The list below describes a range of widely applied TDM measures.

- **Transportation Management Associations:** These groups use both public and private funds to encourage more ridesharing and other ways of getting to work or school that can ease traffic and reduce pollution.
- **Attractive Walkways:** Making spaces more pedestrian-friendly by adding short crossings for pedestrians, wide sidewalks, seating and trees along the streets.
- **Supportive Public Transit:** Implementing and optimizing public transit routes within the development. Ensuring the plan supports the smooth and reliable operations of public transit systems with well-spaced stops, transit bays and supportive amenities.
- **Cycling Support:** Creating safer places for utilitarian and recreational cycling, including safe bike lanes, connected trails, protected crossing infrastructure, and secure and weather-protected bicycle storage
- **Information and Wayfinding:** Providing intuitive signage around the development area for pedestrians, cyclists, and drivers, including information on

routing, parking, and proximity to destinations. This can be enhanced with available apps that offer information on finding the best ways to travel without the need for a private automobile.

Site-specific TDM strategies for the proposed development are designed primarily to reduce reliance on single-occupancy vehicles. While the developer has limited influence over external environment conditions, surrounding infrastructure and broader policy frameworks influencing the uptake of alternative modes for travel, there are meaningful opportunities to implement targeted on-site measures.

12.2 Guiding Principles

A review of key documents at the municipal and regional levels provides an understanding of the appropriate TDM measures to recommend for the subject site. Discussed previously in Section 4 Future Conditions, **Burlington's Integrated Mobility Plan (IMP)** aims to accomplish a 30% share of trips being made by way of alternative modes by 2051. This highlights the need for both fulsome and comprehensive TDM measures to reach this target.

Vision 2040 Strategic Plan

In 2016, the City of Burlington published its 2015–2040 Strategic Plan. This long-term, 25-year blueprint for city building serves as a guiding framework for critical decision-making and shaping the city's future. It's vision – "Where people, nature and businesses thrive" – closely aligns with the principles and benefits of TDM strategies and will be used as a guide for this chapter.

The four Key Strategic Directions and Broad Objectives are:

Strategic Direction 1: A City that Grows

> **A City that Grows** envisions Burlington as a community that attracts talent, employment, and economic opportunity while achieving balanced and responsive population growth across all age groups, including youth, families, newcomers, and seniors. The strategy emphasizes focused growth to support a stronger local economy, job creation, fiscal sustainability, and enhanced infrastructure and public transit. It promotes higher-density development in key areas to foster environmentally sustainable, walkable, bikeable, and transit-oriented neighbourhoods, supported by a clear economic development vision to maintain a prosperous and complete city.

Strategic Direction 2: A City that Moves

> **A City that Moves** envisions Burlington as a community where people and goods travel efficiently and safely through a range of convenient, affordable, and environmentally sustainable transportation options that align with regional travel patterns. The strategy prioritizes enhanced mobility choice through improved

public transit, expanded active transportation networks, and growth management practices that support walkable neighbourhoods. Together, these measures enable residents to move throughout the city and region more effectively and sustainably.

Strategic Direction 3: A Healthy and Greener City

A Healthy and Greener City positions Burlington as a leader in environmental stewardship while promoting healthy, active lifestyles. The strategy seeks improved environmental outcomes to address climate change, enhance quality of life, strengthen economic competitiveness, and foster civic pride. It also emphasizes supporting the physical and mental well-being of residents, contributing to greater community resilience and overall quality of life.

Strategic Direction 4: An Engaging City

An Engaging City envisions Burlington as a community where residents are engaged, empowered, and well served through inclusive governance and outstanding community experiences. The strategy promotes active public participation to support informed decision-making and strong civic leadership, while fostering a vibrant cultural and community life that strengthens inclusivity and a sense of place. It also prioritizes accessible municipal programs, facilities, services, and public spaces to ensure they are welcoming and available to people of all abilities.

Burlington Official Plan

As of July 2025, the City of Burlington's Official Plan (2020), herein referred to as the "2020 OP", remains under appeal, implying that a combination of plans applies municipally, informing Burlington's strategic transportation direction. For purposes of recommending TDM measures, the most recent version of the Burlington Official Plan, first drafted in 2020, will be reviewed. Worth prefacing, work is ongoing with respect to the amending of the 2020 OP to appropriately account for objectives identified in the Halton Region's Official Plan, which is no longer in effect.

Delving into the 2020 OP, Section 6: Infrastructure, Transportation and Utilities defines key objectives for transportation infrastructure, capacity and future outcomes. Section 6.2: Multimodal Transportation is of particular importance to TDM measures. Sample objectives from this portion of the OP are as follows:

- Develop an equitable, integrated, multi-modal network that provides safe, convenient and efficient movement of people and goods.
- Identify new and enhanced facilities in addition to considering innovative approaches and new technologies to serve existing and future pedestrians, cyclists, transit riders and automobile users.

- Create urban environments that support multi-modal transportation with an emphasis on pedestrians, cyclists and public transit, connecting people and places.
- Implement a range of transportation demand management strategies to reduce single-occupancy vehicle trips, to encourage more frequent travel by sustainable modes and outside of peak periods.

Integrated Mobility Plan (2023)

Described as a "community-driven" action plan for Burlington, the IMP defines transportation investments within Burlington over a 30-year horizon. Alongside the mode share targets discussed earlier in the report, there are a plethora of key values underscoring the IMP. This includes the following:

- *Safe* – The movement of people and goods in Burlington will be safe for all users, across all modes.
- *Accessible* – Getting around Burlington will be accessible to people of all ages and abilities.
- *Sustainable* – The transportation network will prioritize efforts to encourage transit, cycling, walking, and other non-car modes to encourage their use.
- *Balanced* – We will rebalance the transportation system to incentivize travel by non-car modes.
- *Liveable* – Streets in Burlington will be designed to fit within their surroundings.

Reviewing the values put forth in the IMP, there is a clear effort on the part of the municipality to work toward more sustainable travel and mobility outcomes. This document, paired with the others reviewed in this section and throughout the TIS, gives credence to the implementation of site-specific TDM measures, which are discussed in greater detail within the subsequent section.

12.3 Considered TDM Measures

The TDM approach proposes a mix of hard and soft measures to meet objectives and targets associated with reducing vehicular travel demand whilst simultaneously encouraging passenger-vehicle trips, transit, cycling, and walking as alternative forms of mobility. Each approach identified is paired with an explanation of the measure's applicability to the subject site. It should be noted that all TDM measures at this stage are considerations. Exact TDM measures and implementation will be determined through the SPA process for each individual block plan application.

12.3.1 Considered Pedestrian TDM Measures

Measure 1: Sidewalk Connectivity and Accessibility

A key factor driving decision-making when determining if a trip can be accomplished through an alternative mode is the continuity of infrastructure. Where possible, and over the duration of the site plan review process at the block-plan level, the provision of sidewalk infrastructure must be prioritized. In conjunction with key legislation, including the *Accessibility for Ontarians with Disabilities Act, 2005*, a concerted effort must be made to ensure appropriate sidewalk widths are employed. Minimum standards for sidewalk width typically entail a minimum width of 1.5 metress to allow multiple users to navigate the sidewalk; however, municipalities like the City of Toronto are increasingly striving for paths as wide as 2.1 metress to accommodate wheelchairs, walkers and other micromobility options. In addition to a robust and connected sidewalk infrastructure the integration of midblock pedestrian crossing, PXO's and central pedestrian green spines at key locations will be critical to maintain overall connectivity. The additional of Pedestrian-oriented lighting and amenities (wayfinding, seating, weather protection at bus stops) along key walking routes is another way to help increase the attractiveness of utilizing pedestrian facilities within the development. When appropriate design standards are applied in unison with continuous infrastructure, this can be pivotal in encouraging more active transportation-based trips.

Measure 2: Establish an Active and Safe Routes to School

Active and Safe Routes to School or Active School Travel programs are widely employed across Ontario and Canada to establish a toolkit for encouraging children to travel to school by sustainable means. They typically include actions addressing the five E's (Education, Encouragement, Engineering, Enforcement, and Evaluation) with a particular focus on education and encouragement. Ontario Active School Travel is a network of partners working together to advance programs across the province with a variety of resources available on their website. It is recommended that the future Educational Institutions and Daycare explore these resources and considering joining the network.

Measure 3: Offer Cycling Courses for Students

Teaching children cycling skills from a young age will help ensure they are confident and safe on a bicycle. The City should consider offering free courses for students and can work with the local school board to integrate courses into the school curriculum. CAN-BIKE is a Canadian cycling education program that works with municipalities, community associations, and others to provide training opportunities for people of all ages. It is recommended that the future Educational Institutions and Daycare explore these resources and considering joining the network.

12.3.2 Considered Cycling TDM Measures

Measure 1: Cycling Network Connectivity and Safety

Similar to sidewalk connectivity, the same principles apply to cycling infrastructure and amenities. Within the IMP, a key finding of engagement sessions taking place in 2021 was the need for protected cycling infrastructure to help cyclists feel safer. Approaching the building out of cycling infrastructure across the subject development, a key priority must be the creation of off-road, separated links between key destinations. Examples include the implementation of multi-use paths which can feed into Block 15 'Central Park'. If it is not feasible to integrate separated facilities based on the proposed development's roadway widths, at a minimum, protected, on-street facilities suffice. Again, connectivity is critical; however, connections are more valuable when cyclists understand their trip can be completed with an assurance of safety for the entirety of their trip.

Measure 2: Bicycle Parking and Repair Stations

Alongside network connectivity, amenities can be an important resource for incentivizing the completion of active or cycling-based trips. For each block, depending on the requirements identified within the City's ZBL or draft residential ZBL, appropriate bicycle parking should be provided. To provide for further encouragement, exceeding minimum requirements can also be pursued. Key amenities such as bike repair stations, lockers and means for ensuring individuals can safely secure their bicycles, including the provision of bicycle locks, or, holding workshops focusing on bike maintenance and security, can help foster a culture of mobility at the subject development. These workshops could be offered at the Transit Information Centre described in further detail below.

Measure 3: Provide Valet Bicycle Parking at Special Events

Providing secure valet bicycle parking at a temporary location during special events at Block 5 would encourage attendees to travel by bicycle by ensuring a safe and convenient parking option. This measure would help reduce reliance on the City's permanent bicycle parking infrastructure, which may be insufficient to accommodate demand during large gatherings. Additionally, incorporating multi-modal travel information in event advertising would further support sustainable transportation choices by informing visitors of available transit, cycling, walking, and carpooling options.

12.3.3 Considered Micro-Mobility TDM Measures

Measure 1: New Shared Mobility Pilot Program

In March 2025, City staff released a Request for Proposal to identify a shared micromobility provider for a two-year pilot program focused on introducing and evaluating e-scooter services. Proposals were solicited based on established evaluation criteria, and SCOOTY was selected to operate the pilot by supplying rental e-scooters along a nine-kilometres stretch

of Centennial Trail, between Brant Street and Burloak Drive. Geofencing technology has been implemented to restrict operating speeds within designated zones – up to 20 km/h in "riding zones" and a maximum of 12 km/h in "slow-speed zones." The goals for this pilot program included the safe introduction of shared micromobility, building municipal experience and understanding, reducing emissions, improving connections to transit, and providing residents with additional mobility options in Burlington.

Results from the first year of the pilot program showed that the City of Burlington experienced higher per-capita usage and greater overall utilization of shared e-scooters. Riders in Burlington averaged 2.5 trips each, compared with 2.0 trips per rider in Downtown Markham, where SCOOTY also operates. Consideration should be given that the developer collaborate with the City to review the results and lessons learned from the current pilot program to inform the implementation of a shared mobility network within the subject site.

12.3.4 Considered Transit TDM Measures

Measure 1: Transit Information Centre

Residents and visitors will be more likely to use the sustainable modes of transportation if they understand the network and are confident that they can safely access their destination using the network. The developer can consider providing transit information at the Travel Information Centre located in Block 8. This should include maps with key destinations (tourism, shopping and commerce, and dining / entertainment) and the types of infrastructure to cater to different abilities and ages (separated infrastructure, trails, bicycle lanes on low-speed roads, etc.).

Measure 2: Transit Incentives

Given the location of the site, adjacent to a local transit route and GO Aldershot Station, developers should consider providing each residential dwelling unit with a twenty-five dollar ($25) pre-loaded PRESTO card as an incentive to promote transit usage.

The developer may agree in the Purchase Agreement to advise all potential purchasers of the existing and future introduction of transit services in this development. This includes current and potential transit routes, bus stops and shelter locations. This can be achieved through distribution of information/marketing material (Burlington Transit/GO route maps, future plan maps and providing Burlington Transit/GO website contact information) at the sales office and appropriate notification clauses in purchase agreements.

Measure 3: Coordination with Burlington Transit and Metrolinx

Coordination with Burlington Transit and Metrolinx will be essential to ensure the development is well integrated with local and regional transit services and infrastructure. Early and continued engagement should focus on aligning the proposed development with

current and future transit initiatives, including connection to the nearby Aldershot GO Station and bus connections.

Extension of a local transit route into the community to provide service within the neighbourhood to external areas. Specifics to be coordinated between TYLin, developer, municipality and transit agency. Including stop spacing and locations, route #s and service frequency based on potential ridership generated by development blocks.

This coordination may include reviewing the proposed pedestrian, cycling, and transit facilities. As mentioned in **Section 4.5.4**, the proposed Parkway Link Road will maintain sufficient space within the proposed right-of-way to accommodate a future Bus Rapid Transit (BRT) lane. This approach considers discussions with City staff and ensures flexibility to support long-term transit initiatives. Accordingly, ongoing coordination regarding both planned and potential future transit initiatives will be necessary to ensure the corridor can accommodate evolving transportation demands.

12.3.5 Considered Auto TDM Measures

Measure 1: Unbundled Resident Parking

The developer should consider separate (or unbundled) resident parking to separate the cost of parking from the cost of each residential unit. This will make visible the hidden cost of driving and encourage residents to make more informed active transportation decisions and may create opportunities for the use of more sustainable modes of transportation.

Measure 2: Car Share Facilities

Car-sharing is a sustainable transportation option that allows people to have access to cars when they need one without the associated cost and responsibilities of personal vehicle ownership. In recent years, operational models for car-share vehicles have evolved from fixed location services to also include free-floating (point to point) services. Carshare parking spaces can be provided on-site and be confirmed through the individual block plan approval process. As the proposed development includes many land uses including residential, campus and retail that can all benefit from the impacts of car-sharing, it is recommended that car-sharing be implemented within all blocks.

Measure 3: Smart Commute Program

There is a potential to partner pointA, a not-for-profit organization that envisions sustainable transportation options for everyone. pointA provides services tailored to help connect people and businesses to transportation options that benefit the environment, the economy and the well-being of our communities. The Smart Commute Program offers tools and resources to support and promote cycling, walking, carpooling, and transit as sustainable alternatives for commuting. The Smart Commute Program consists of three annual campaigns: Winter Commute Month (February), Bike Month (June), and Smart Commute

Month (September). These campaigns provide residents and employees with information, resources, and incentives to encourage the use of alternative transportation modes. Participants may take part in commuter challenges, complete surveys to be eligible for prize draws (e.g., gift cards), and attend educational webinars.

12.3.6 Summary of considered measures

Table 12-1 summarizes all considered measures and highlights the blocks that would receive benefits from each measure.

Table 12-1 Considered TDM Measures

TDM Measures	Applicable Block
Sidewalk connectivity and accessibility	All Blocks
Establish an active and safe routes to school	1, 6 - 13
Offer cycling courses for students/daycare	1, 6, 7, 8
Cycling network connectivity and safety	All Blocks
Bicycle parking and repair station	All Blocks
Provide valet bicycle parking at special events	5
New shared mobility pilot program	All Blocks
transit information centre	All Blocks
Transit incentives	1, 2, 3, 4, 6, 7, 9 - 14
Coordination with Burlington Transit and Metrolinx	All Blocks
Unbundled resident parking	1-4,6,7,9-14
Car share facilities	All Blocks

13 CONCLUSIONS AND RECOMMENDATIONS

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

- The proposed development located at 1200 King Road envisions a comprehensive, mixed-use community that will transform the existing underutilized industrial lands into a vibrant, transit-oriented neighbourhood. The development concept includes high-density residential towers, a retail and commercial district, a post-secondary campus with associated residential and plaza space, and an entertainment district featuring an arena and hotel. Together, these elements are designed to create a complete community that supports a balance of living, learning, working, and recreation within walking distance of the Aldershot GO Station.
- The proposed development includes reduced ROW within the development roadways. This is supported as all elements of the roadway including lane width, landscape areas, sidewalks and cycle tracks all are in accordance with the latest best practices in the industry, while maintaining sufficient clearance in accordance with minimum design standards.
- The alignment of the Parkway Link Road is anticipated to align 300 m south of the Hydro Line and King Road Intersection. The proposed alignment of the Parkway Link Road was designed to improve overall traffic flow and operations within the site, create additional space from the CN rail line to development, reduce environmental impacts, improve transit operations and proposed BRT, improve safety to residents and vulnerable users.
- A total of 4,055 gross person site trips, consisting of 1,543 inbound and 2,512 outbound trips, are predicted to be generated by the subject site during the AM peak hour. During the PM peak hour, 2,891 inbound and 2,640 outbound gross person site trips are predicted, totaling 5,531 trips. During Saturday peak hour, 2,604 inbound and 2,290 outbound gross person site trips are predicted, totaling 4,894 trips.
- Additional reductions for multi-use, and mode share were applied to the above numbers prior to analysis.
- The results of the capacity analysis for the study area intersections indicate that certain study intersections have critical movements that are currently operating at capacity and/or experiencing operational concerns. This only worsens through background growth of the existing volumes. Site generated traffic is not expected to cause any significant strain to the network or necessitate major transportation infrastructure improvements, other than site accesses.

- Roundabout feasibility was reviewed for Parkway Link Road (Street A) and Multi Modal Local Street (Street B) and Multi Modal Local Street (B) and Residential Access to the Northwest of Central Park. Indicating that the proposed locations are not recommended to be roundabouts.
- For all residential uses a proposed parking by law of 0.8 spaces per unit, comprised of 0.75 residential spaces and 0.05 visitor spaces per unit are proposed. For all non-residential uses it is proposed that they follow the rates presented within the Burlington Major Transit Station Areas (MTSA) Community Planning Permit By-Law. The proposed parking rates reflect the site's location to nearby high-order transit, and planned active transportation connectivity, both of which are anticipated to reduce reliance on private vehicles.
- A high-level site plan review of accessing sightlines, intersection spacing and corner clearance was prepared. No concerns were highlighted. A more detailed review will be done for each block plan during the SPA process
- A robust Transportation Demand Management (TDM) section was prepared to promote transportation through sustainable and non-auto-oriented travel. This includes, but is not limited to, promoting environmental sustainability, enhancing public health, mitigating traffic congestion, and contributing to a higher quality of life for residents. Mitigation measures were broken down into pedestrian, cyclist, micro-mobility, transit, and auto considerations.

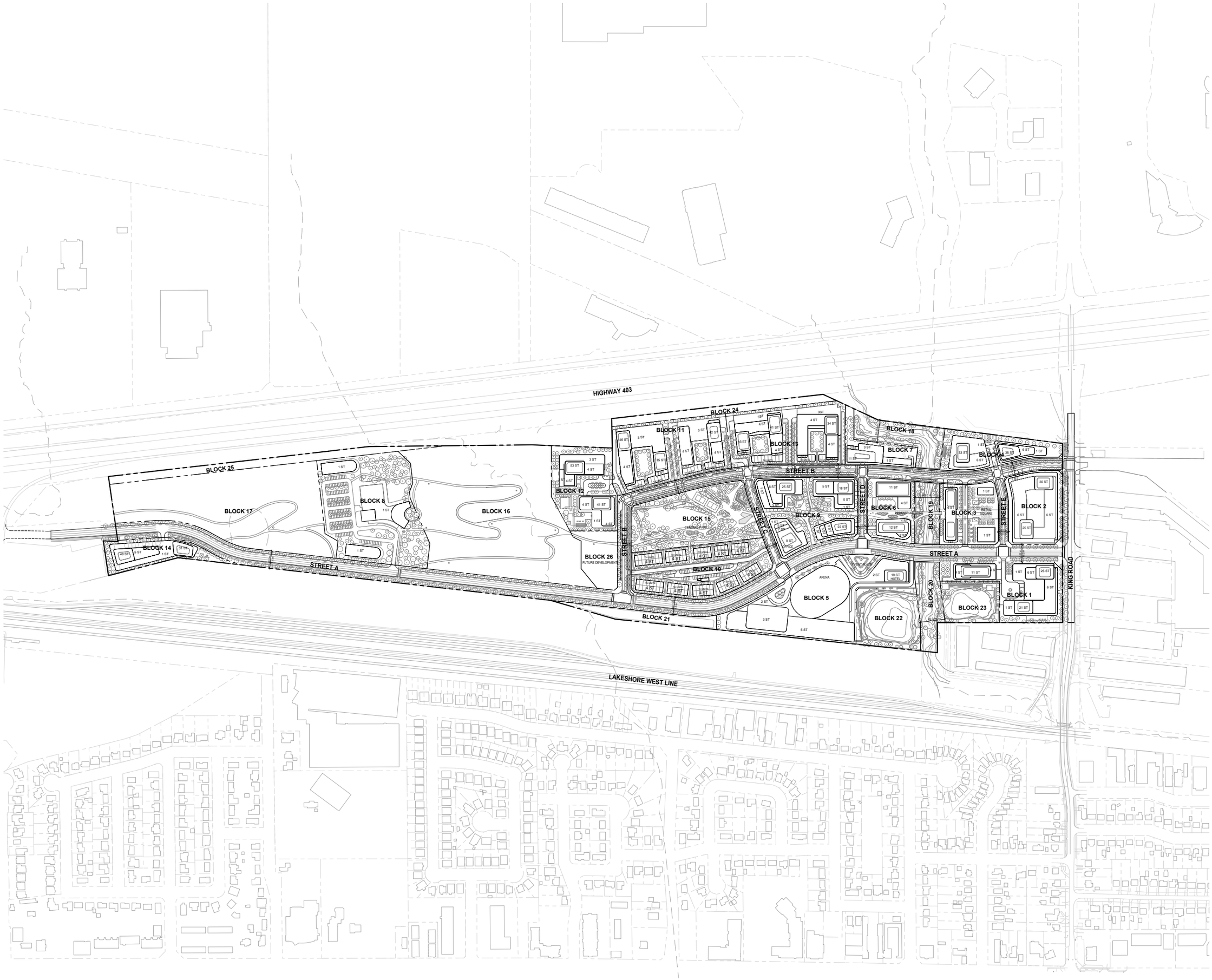
Recommendations can be found in **Table 13-1.**

Table 13-1 Recommendations for Implementation - 1200 King Road

Recommendation No.	Location	Improvement Description
Geometric Improvements		
1	Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Brwk Way	- Dual NB right turn lane - Dual SB - Dual EB left turn lane
2	Waterdown Road & Plains Road East	- EB dual left turn lane
3	King Road & Plains Road East	- Designated WB right turn lane, - Dual SB left turn lane
4	Fairview Street & QEW NB Off-Ramp/Plains Road East	- Dual SB right turn lane
5	Waterdown Road & North Service Road/Hwy 403 On-Ramp	- Dual NB left lane

Recommendation No.	Location	Improvement Description
6	Alayne Bryk Way & East Access to Aldershot GO Station/ Hwy 403 On-Ramp	- EB update lane configuration to include Left turn Lane, 1 through-right turn lane. - WB Shared through left turn lane, right turn lane
7	King Road at Parkway Link	- Dual Left turn lane
TDM Measures		
8	All Blocks	Sidewalk connectivity and accessibility
9	1, 6 - 13	Establish an active and safe routes to school
10	1, 6, 7, 8	Offer cycling courses for students/daycare
11	All Blocks	Cycling network connectivity and safety
12	All Blocks	Bicycle parking and repair station
13	5	Provide valet bicycle parking at special events
14	All Blocks	New shared mobility pilot program
15	All Blocks	transit information centre
16	1, 2, 3, 4, 6, 7, 9 - 14	Transit incentives
17	All Blocks	Coordination with Burlington Transit and Metrolinx
18	1-4,6,7,9-14	Unbundled resident parking
19	All Blocks	Car share facilities
Additional Recommendation		
20	Study Intersections	Monitoring Program

Appendix A:
Site Plan



1 SITE AND LANDSCAPE PLAN
A0.07 1 : 2000

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Revision Date

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ISSUED FOR COORDINATION 26-02-10

Revision	Date
6 ISSUED FOR COORDINATION	2026-02-10
5 ISSUED FOR COORDINATION	2026-02-06
4 ISSUED FOR COORDINATION	2025-12-22
3 ISSUED FOR UDB	2025-02-14
2 ISSUED FOR DRAFT ZBA	2024-09-26
1 ISSUED FOR OPA SETTLEMENT	2024-08-09

giannone petricone associates
Giannone Petricone Associates Inc. Architects
96 Spadina Avenue, Suite 900, Toronto, ON Canada M5V 2J6,
T 416.591.7788 F 416.591.1293 E-mail@gpaia.com

1200 KING ROAD

1200 King Road, Burlington, ON

SHEET TITLE

SITE AND LANDSCAPE PLAN

DRAWN BY:	Author
CHECKED BY:	Checker
PROJECT START DATE:	02/15/24
PROJECT NO.:	23117
SHEET NUMBER	

A0.07

PLOT DATE: 2026-02-10 2:11:19 PM

Site Summary	(m^2)	(sf)	(ha)	(ac)
Gross Site Area	491,018.3	5,285,277	49.10	121.33
NHS (Blocks 16,17)	101,331.8	1,090,726	10.13	25.04
Creek (Blocks 18,19,20)	18,752.3	201,848	1.88	4.63
MTO Buffer (Blocks 24,25)	12,725.4	136,975	1.27	3.14
Net Developable Area (Net Site Area)	358,208.8	3,855,728	35.82	88.52
Net Site Area (Minus Public Road)	277,987.1	2,992,229	27.80	68.69
Net Site Area (Minus Public Road, Storm Pond, Landscape Buffer)	254,711.1	2,741,688	25.47	62.94
Net Site Area (Minus Public Road, Storm Pond, Landscape Buffer,Park)	234,375.2	2,522,793	23.44	57.92

Land Area by District/Use	(m^2)	(sf)	(ha)	(ac)
Residential (Blocks 9,10,11,12,13,14)	105,275.8	1,133,180	10.53	26.01
Mixed-Use Residential (Blocks 1,2,3,4)	48,367.5	520,623	4.84	11.95
Entertainment District (Block 5)	29,296.8	315,348	2.93	7.24
Campus Mixed-Use (Blocks 6,7)	14,515.8	156,247	1.45	3.59
Campus Mixed-Use (Block 8)	30,688.5	330,329	3.07	7.58
Future Development (Block 26)	6,230.7	67,066	0.62	1.54
Park (Block 15)	20,336.0	218,895	2.03	5.03
Landscape Buffer (Block 21)	4,589.6	49,402	0.46	1.13
Creek (Blocks 18,19,20)	18,752.3	201,848	1.88	4.63
Storm Pond (Blocks 22,23)	18,686.4	201,138	1.87	4.62
NHS (Blocks 16,17)	101,331.8	1,090,726	10.13	25.04
MTO Buffer (Blocks 24,25)	12,725.4	136,975	1.27	3.14
Public Roads	80,221.7	863,499	8.02	19.82

GFA Summary	(m^2)	(sf)
Residential GFA	598,360	6,440,698
Retail GFA	11,738	126,342
Institutional (Campus) GFA	26,525	285,518
Community GFA	13,607	146,466
Arena GFA	16,275	175,183
Hotel GFA	16,297	175,423
Total GFA	695,923	7,490,852
Above Grade Parking*	61,049	657,125

*Above Grade Parking not included in GFA

Residential Units	Count
Total Residential Units	8,823

FSI (GFA/Gross)	1.42
FSI (GFA/(Net Developable-Public Roads- Storm Pond-Entertainment District-Park-Landscape Buffer))	3.39

	Height in Storeys		Building Height	Floor Area (m^2)												Unit Count
					TOTAL GCA	TOTAL GFA* (not including Above Grade Parking)	Residential GFA (90% of RES GCA)	NET Res. (90% of RES GFA)	Above Grade Parking*	Retail GFA	Institutional (Campus) GFA	Office GFA	Community GFA	Arena GFA	Hotel GFA	Total
Block 1																Block 1
Total	25		84.4m		59519.0	**52656.1**	51056.2	45950.6	0.0	1231.3	0.0	0.0	368.6	0.0	0.0	**760**
Block 2																Block 2
Total	30		99.9m		69928.3	**62489.9**	60196.1	54176.5	0.0	2293.8	0.0	0.0	0.0	0.0	0.0	**896**
Block 3																Block 3
Total	6		24.4m		11680.4	**10165.8**	7871.8	7084.6	0.0	2294.0	0.0	0.0	0.0	0.0	0.0	**117**
Block 4																Block 4
Total	38		123.9m		65932.0	**58735.3**	56085.3	50476.8	0.0	2650.0	0.0	0.0	0.0	0.0	0.0	**835**
Block 5																Block 5
Total	19		65.4m		75,329.5	**46,104.5**	0.0	0.0	28,825.0	702.7	0.0	0.0	12,829.5	16,275.0	16,297.3	0
Block 6																Block 6
Total	12		48.0m		31385.0	**30108.9**	11485.2	10336.6	0.0	385.8	18238.0	0.0	0.0	0.0	0.0	**171**
Block 7																Block 7
Total	11		41.8m		14700.0	**13719.2**	8827.6	7944.9	0.0	0.0	4891.5	0.0	0.0	0.0	0.0	**131**
Block 8																Block 8
Total	1		30.8m		5985.0	**5985.0**	0.0	0.0	0.0	2180.0	3396.0	0.0	409.0	0.0	0.0	0
Block 9																Block 9
Total	25		83.4m		78065.0	**71570.5**	58450.5	52605.5	0.0	0.0	0.0	13120.0	0.0	0.0	0.0	**870**
Block 10																Block 10
Total	4		12.5m		27360.0	**24624.0**	24624.0	22161.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**240**
Block 11																Block 11
Total	46		146.9m		122377.0	**98174.8**	98174.8	88357.3	13293.9	0.0	0.0	0.0	0.0	0.0	0.0	**1483**
Block 12																Block 12
Total	53		168.4m		85402.0	**70827.3**	70827.3	63744.6	6705.0	0.0	0.0	0.0	0.0	0.0	0.0	**1054**
Block 13																Block 13
Total	41		131.9m		113118.0	**90803.7**	90803.7	81723.3	12225.0	0.0	0.0	0.0	0.0	0.0	0.0	**1372**
Block 14																Block 14
Total	48		152.9m		66620.0	**59958.0**	59958.0	53962.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**893**
Grand Total					827,401.3	**695,922.9**	598,360.4	538,524.4	61,048.9	11,737.6	26,525.5	13,120.0	13,607.1	16,275.0	16,297.3	**8823**

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Revision Date

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ISSUED FOR COORDINATION 26-02-10

Revision	Date
5 ISSUED FOR COORDINATION	2026-02-10
4 ISSUED FOR COORDINATION	2025-12-22
3 ISSUED FOR LJDB	2025-02-14
2 ISSUED FOR DRAFT ZBA	2024-09-26
1 ISSUED FOR OPA SETTLEMENT	2024-08-09

giannone petricone associates
Giannone Petricone Associates Inc. Architects
96 Spadina Avenue, Suite 900, Toronto, ON Canada M5V 2J6
T 416.591.7788 F 416.591.1203 E-mail@gpaa.com

1200 KING ROAD

1200 King Road, Burlington, ON

SHEET TITLE

STATISTICS

DRAWN BY:	Author
CHECKED BY:	Checker
PROJECT START DATE:	02/15/24
PROJECT NO.:	23117

SHEET NUMBER

A0.02

PLOT DATE: 2026-02-10 1:58:39 PM

Appendix B:
Turning Movement Counts

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

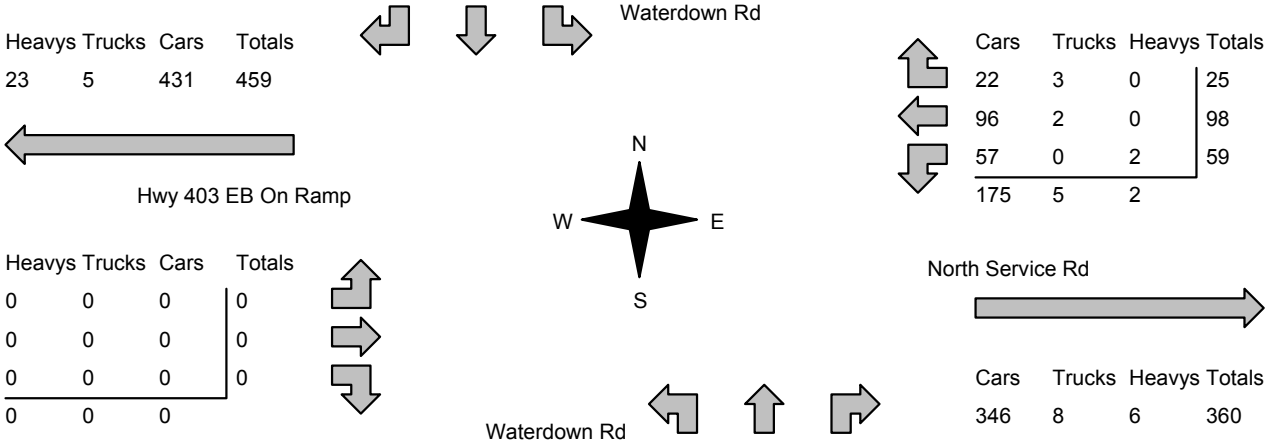
Major Road: Waterdown Rd runs N/S

North Leg Total: 799
North Entering: 523
North Peds: 0
Peds Cross: ⋈

Heavys	2	5	1	8
Trucks	0	5	0	5
Cars	144	287	79	510
Totals	146	297	80	

Heavys	11
Trucks	7
Cars	258
Totals	276

East Leg Total: 542
East Entering: 182
East Peds: 0
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
23	5	431	459

Cars	Trucks	Heavys	Totals
22	3	0	25
96	2	0	98
57	0	2	59
175	5	2	

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

Cars	Trucks	Heavys	Totals
346	8	6	360

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 459

Cars	344
Trucks	5
Heavys	7
Totals	356

Cars	191	236	267	694
Trucks	3	4	8	15
Heavys	21	11	5	37
Totals	215	251	280	

Peds Cross: ⋈
South Peds: 1
South Entering: 746
South Leg Total: 1102

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S

North Leg Total: 1105
North Entering: 595
North Peds: 0
Peds Cross: ⋈

Heavys	0	1	0	1
Trucks	0	4	0	4
Cars	101	391	98	590
Totals	101	396	98	

Heavys	2
Trucks	2
Cars	506
Totals	510

East Leg Total: 988
East Entering: 688
East Peds: 0
Peds Cross: ⧖

Waterdown Rd

Heavys	Trucks	Cars	Totals
2	2	835	839

Hwy 403 EB On Ramp

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

Cars	Trucks	Heavys	Totals
91	0	0	91
390	1	0	391
203	0	3	206
684	1	3	

N
W E
S

North Service Rd

Cars	Trucks	Heavys	Totals
291	3	6	300

Waterdown Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 839

Cars	594			
Trucks	4			
Heavys	4			
Totals	602			

Cars	344	415	193	952
Trucks	1	2	3	6
Heavys	2	2	6	10
Totals	347	419	202	

Peds Cross: ⋈
South Peds: 0
South Entering: 968
South Leg Total: 1570

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

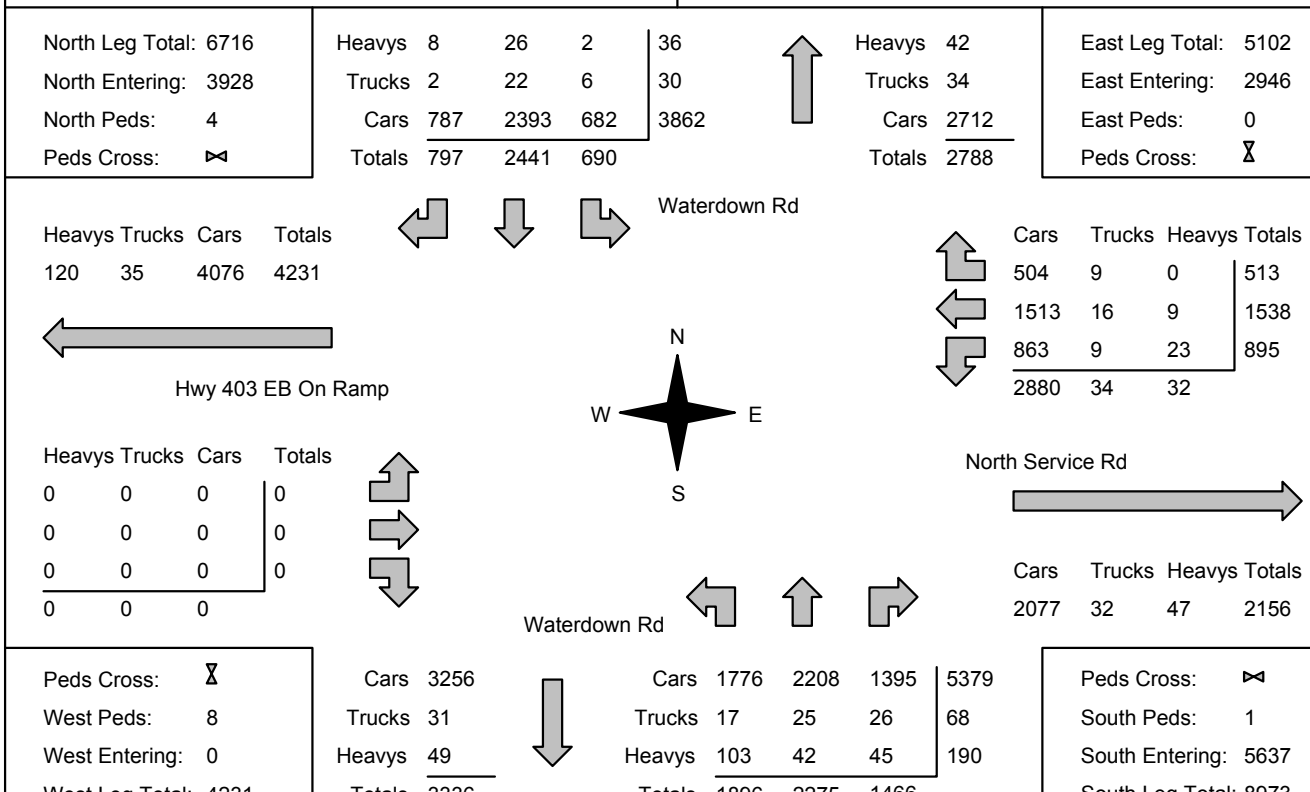
Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

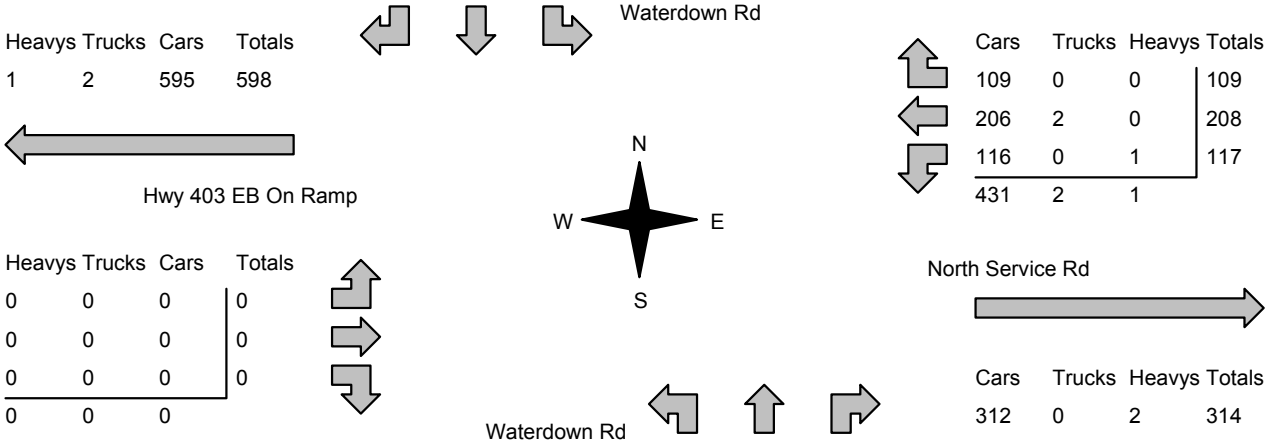
Major Road: Waterdown Rd runs N/S

North Leg Total: 1065
North Entering: 640
North Peds: 0
Peds Cross: ⋈

Heavys	1	0	0	1
Trucks	0	1	0	1
Cars	99	403	136	638
Totals	100	404	136	

Heavys	0
Trucks	1
Cars	424
Totals	425

East Leg Total: 748
East Entering: 434
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 598

Cars	519			
Trucks	1			
Heavys	1			
Totals	521			

Cars	290	315	176	781
Trucks	0	1	0	1
Heavys	0	0	2	2
Totals	290	316	178	

Peds Cross: ⋈
South Peds: 0
South Entering: 784
South Leg Total: 1305

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

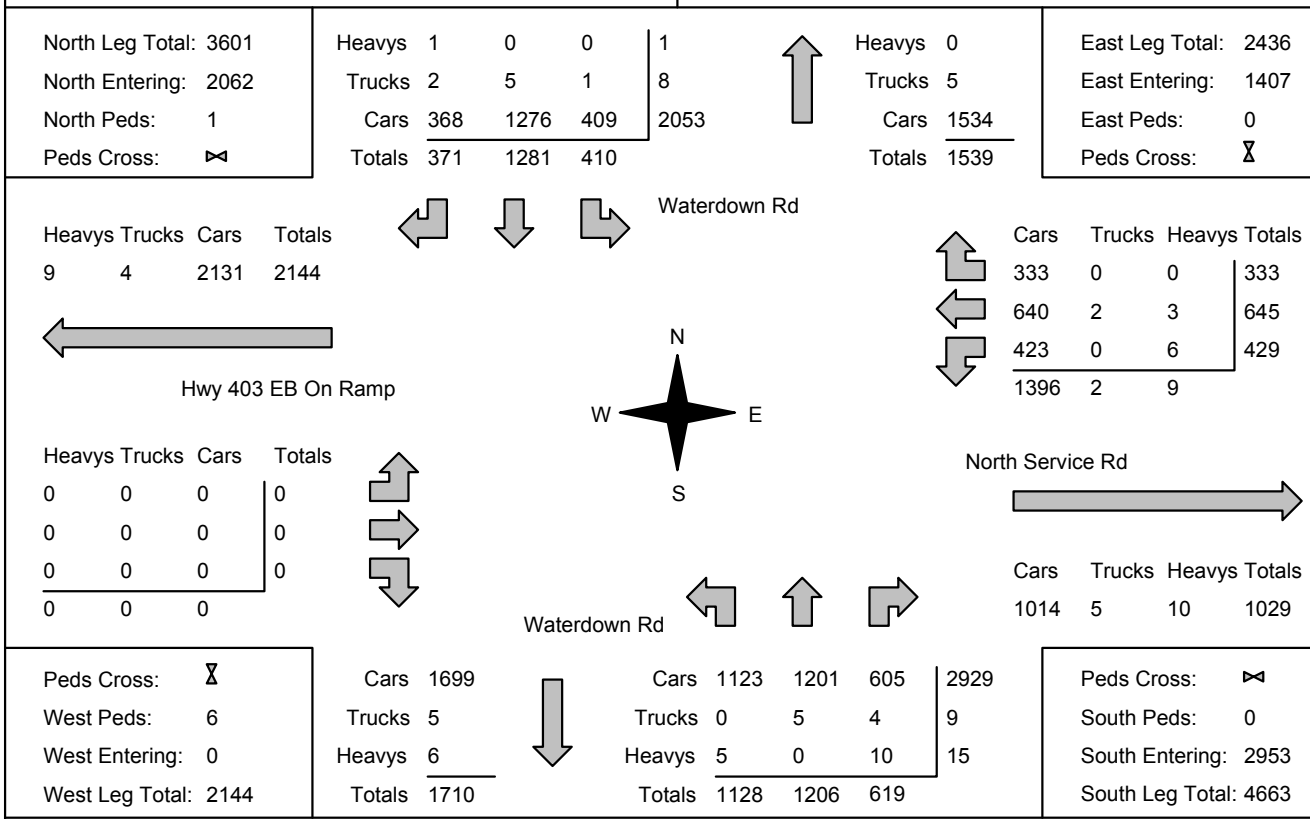
Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

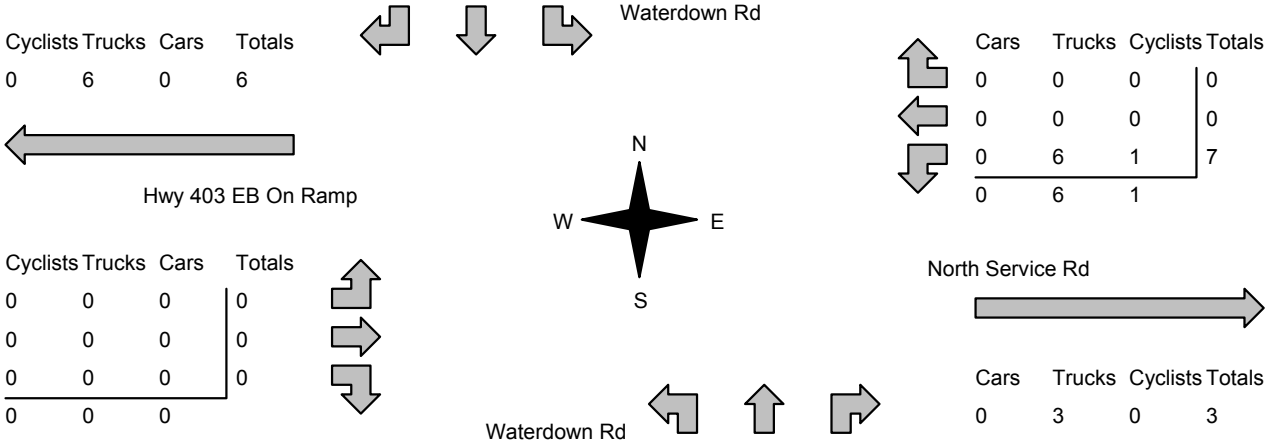
Major Road: Waterdown Rd runs N/S

North Leg Total: 15
North Entering: 10
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	7	2	9
Cars	0	0	0	0
Totals	0	8	2	

Cyclists	0
Trucks	5
Cars	0
Totals	5

East Leg Total: 10
East Entering: 7
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 6

Cars	0	0	0	0
Trucks	13	6	5	1	12
Cyclists	2	0	0	0	0
Totals	15	6	5	1	

Peds Cross: ⋈
South Peds: 0
South Entering: 12
South Leg Total: 27

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S

North Leg Total: 17
North Entering: 10
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	3	7	0	10
Cars	0	0	0	0
Totals	3	7	0	

Cyclists	1
Trucks	6
Cars	0
Totals	7

East Leg Total: 11
East Entering: 8
East Peds: 0
Peds Cross: ⧖

Waterdown Rd

Cyclists	Trucks	Cars	Totals
0	12	0	12

Hwy 403 EB On Ramp

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

Cars	Trucks	Cyclists	Totals
0	1	1	2
0	3	0	3
0	2	1	3
0	6	2	

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North Service Rd

Cars	Trucks	Cyclists	Totals
0	3	0	3

Waterdown Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 12

Cars	0
Trucks	9
Cyclists	1
Totals	10

Cars	0	0	0	0
Trucks	6	5	3	14
Cyclists	0	0	0	0
Totals	6	5	3	

Peds Cross: ⋈
South Peds: 0
South Entering: 14
South Leg Total: 24

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

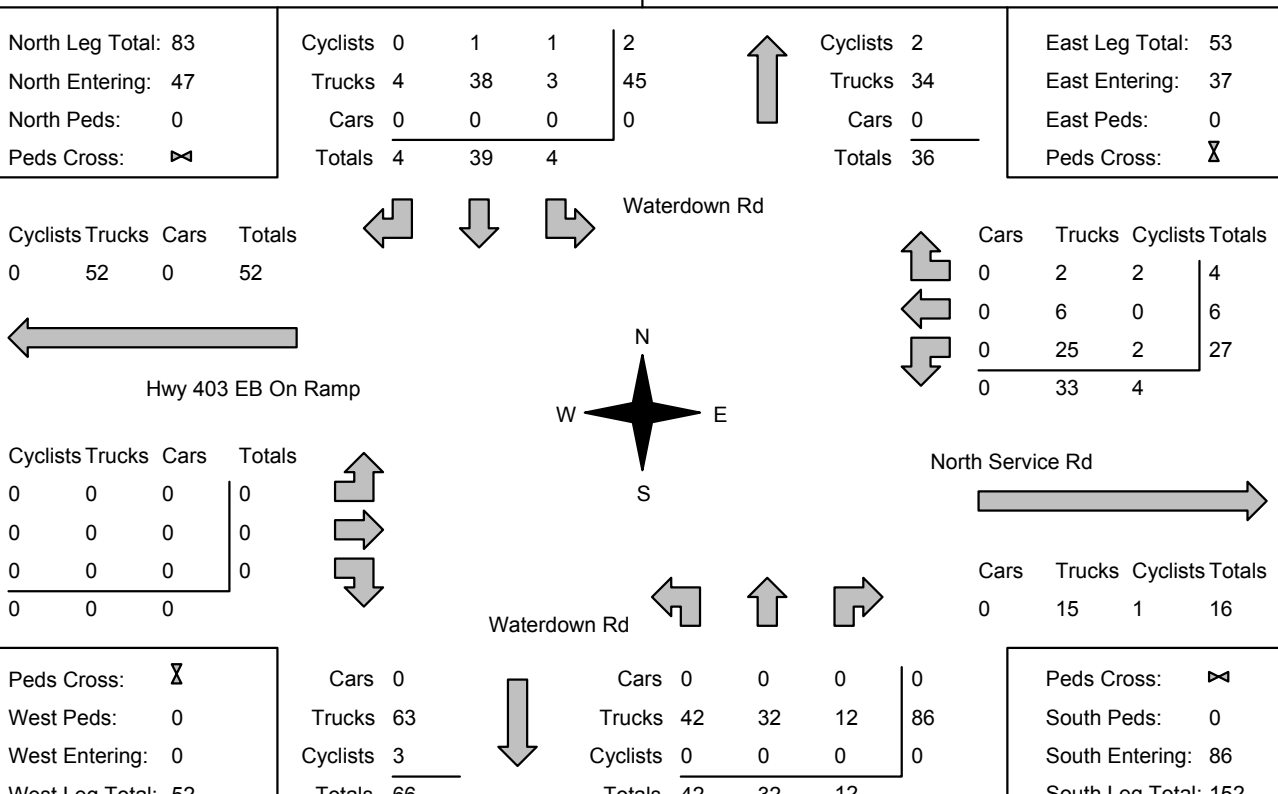
Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

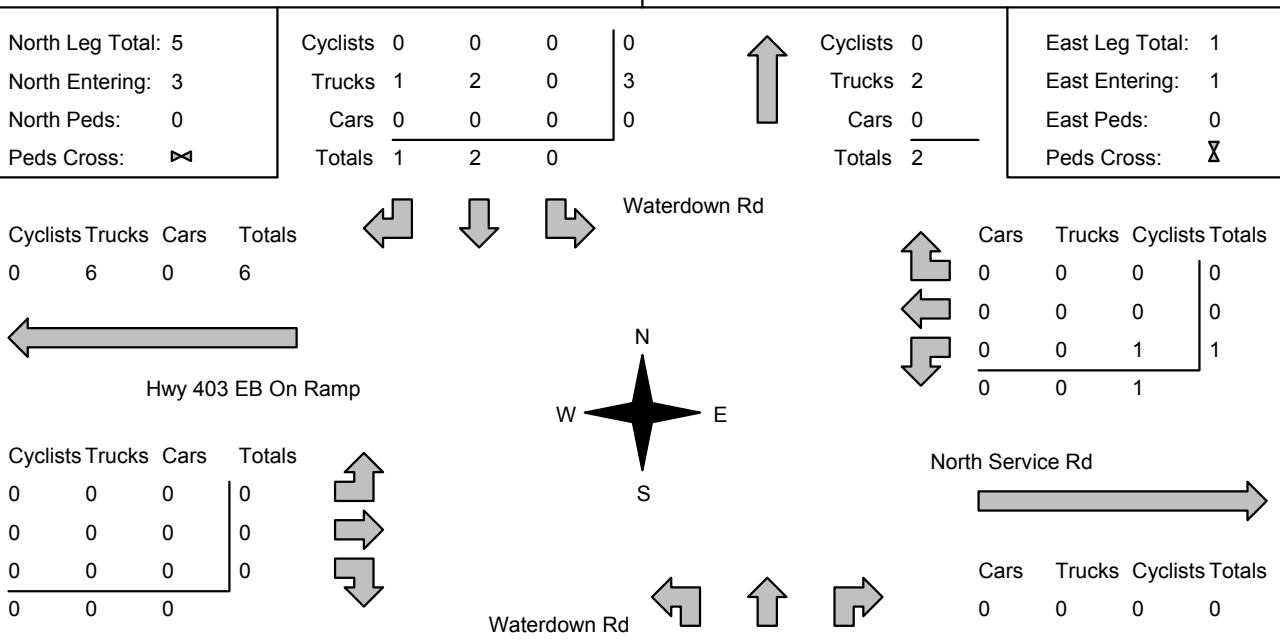
Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

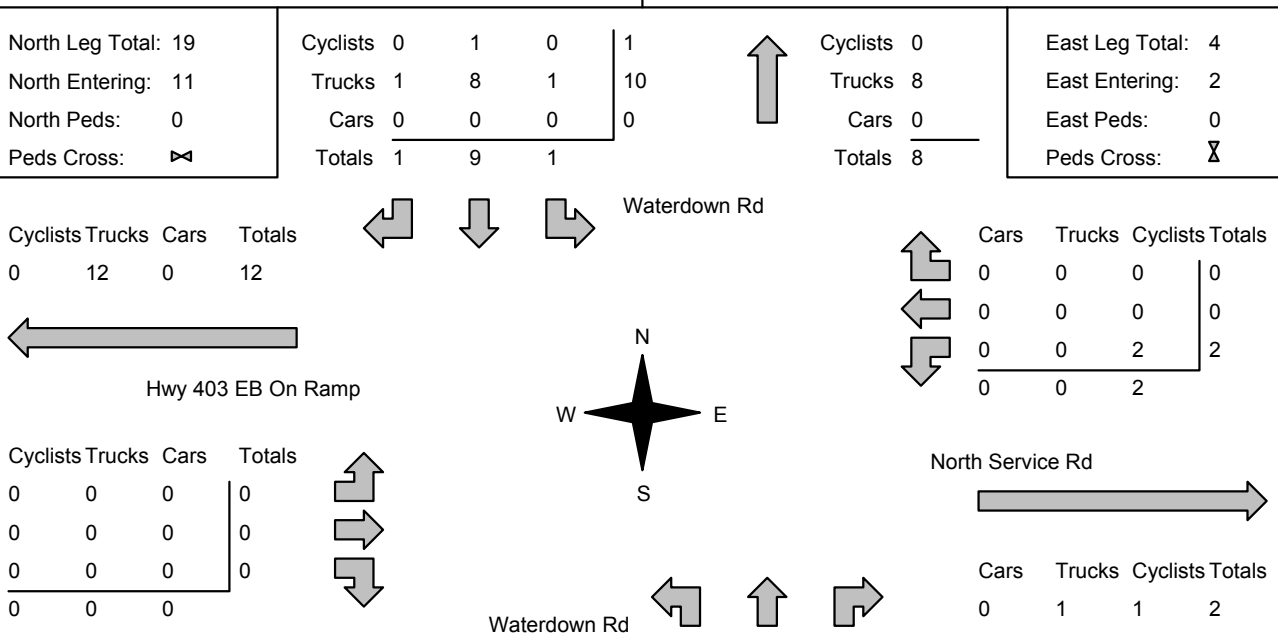
Municipality: Burlington
Site #: 2516600001
Intersection: Waterdown Rd & North Service Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

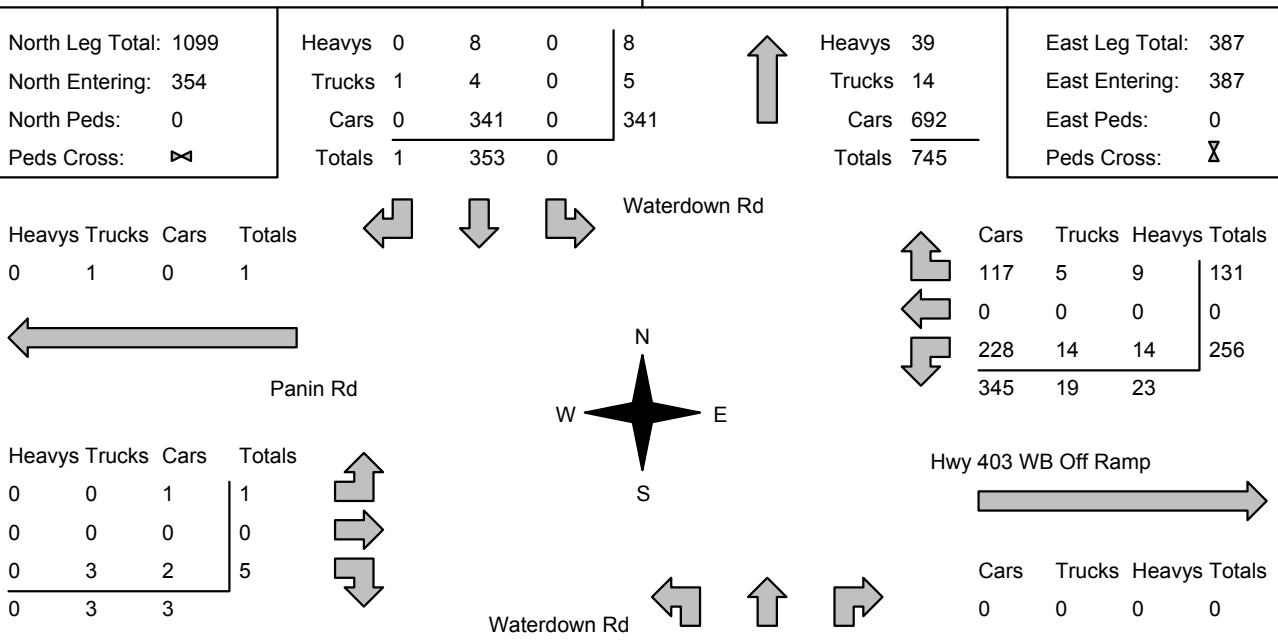
Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

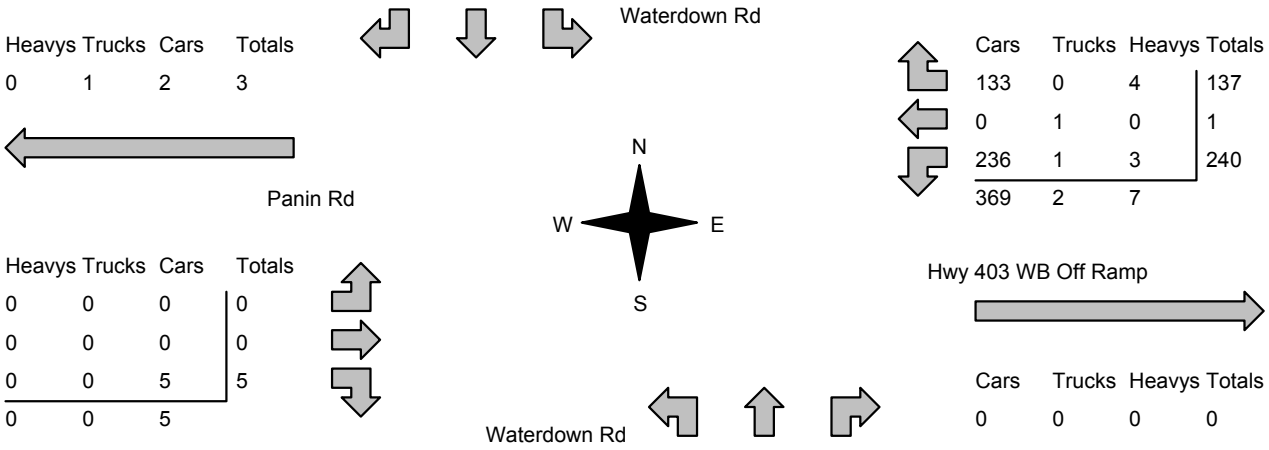
Major Road: Waterdown Rd runs N/S

North Leg Total: 1564
North Entering: 614
North Peds: 0
Peds Cross: ⋈

Heavys	0	4	0	4
Trucks	0	2	0	2
Cars	0	608	0	608
Totals	0	614	0	

Heavys	10
Trucks	6
Cars	934
Totals	950

East Leg Total: 378
East Entering: 378
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 2
West Entering: 5
West Leg Total: 8

Cars	849			
Trucks	3			
Heavys	7			
Totals	859			

Cars	2	801	0	803
Trucks	0	6	0	6
Heavys	0	6	0	6
Totals	2	813	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 815
South Leg Total: 1674

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

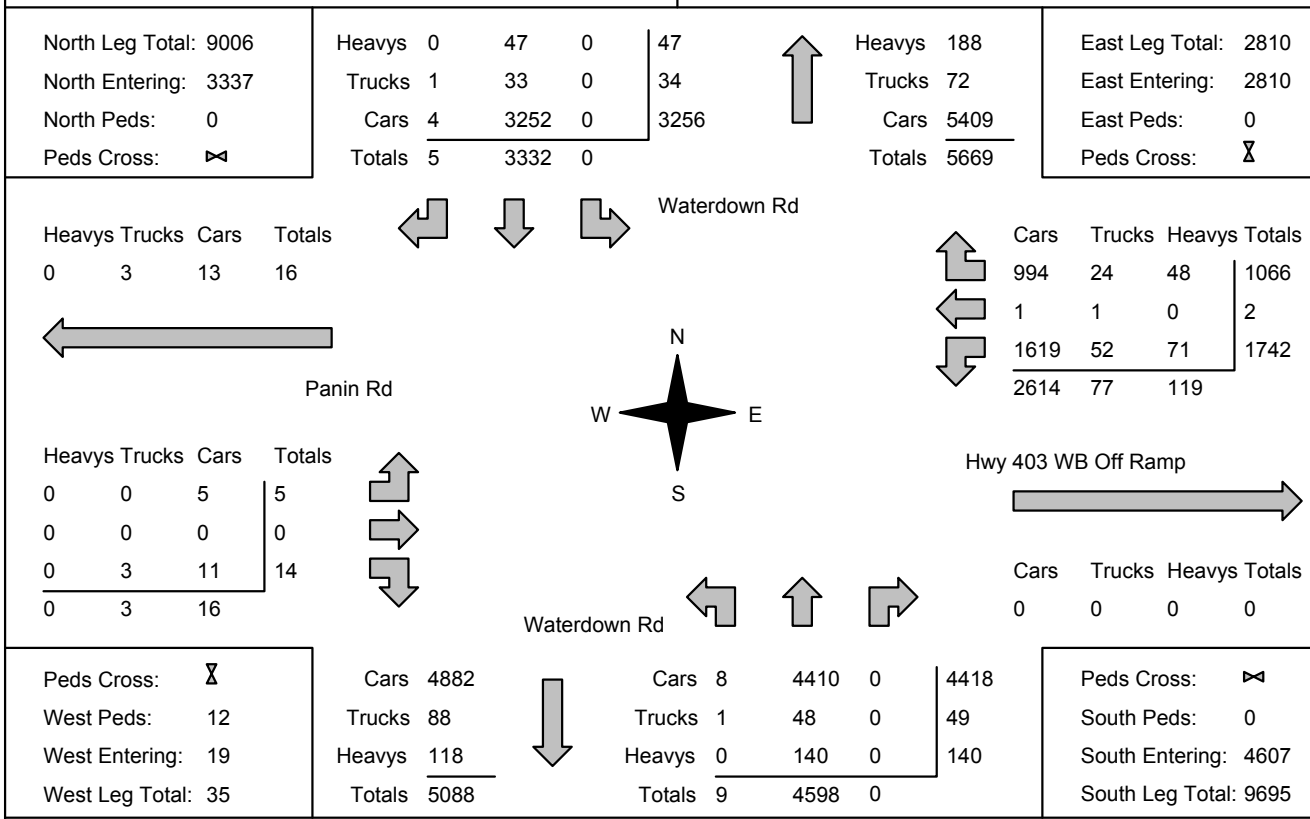
Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

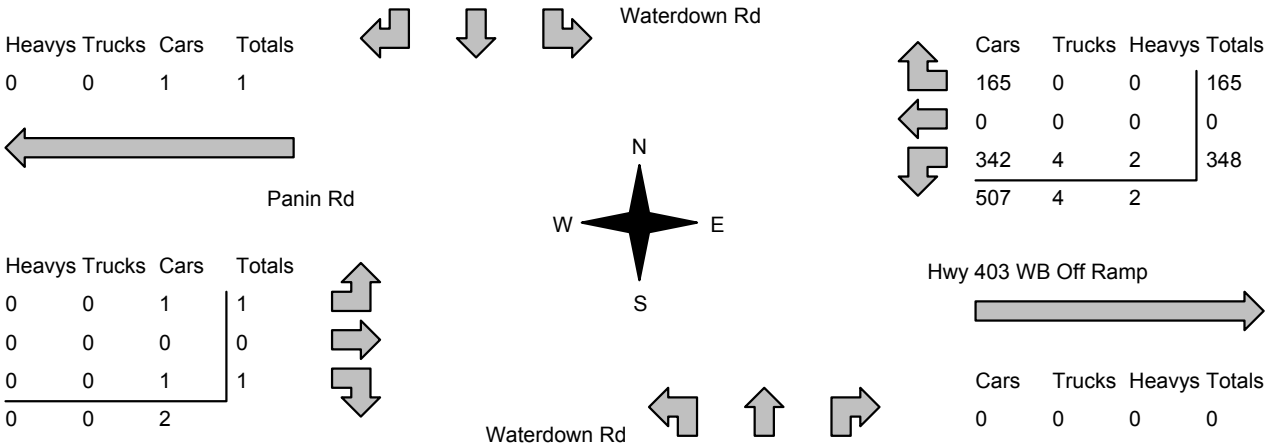
Major Road: Waterdown Rd runs N/S

North Leg Total: 1293
North Entering: 497
North Peds: 0
Peds Cross: ⋈

Heavys	0	2	0	2
Trucks	0	2	0	2
Cars	0	493	0	493
Totals	0	497	0	

Heavys	2
Trucks	1
Cars	793
Totals	796

East Leg Total: 513
East Entering: 513
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 1
West Entering: 2
West Leg Total: 3

Cars	836			
Trucks	6			
Heavys	4			
Totals	846			

Cars	1	627	0	628
Trucks	0	1	0	1
Heavys	0	2	0	2
Totals	1	630	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 631
South Leg Total: 1477

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

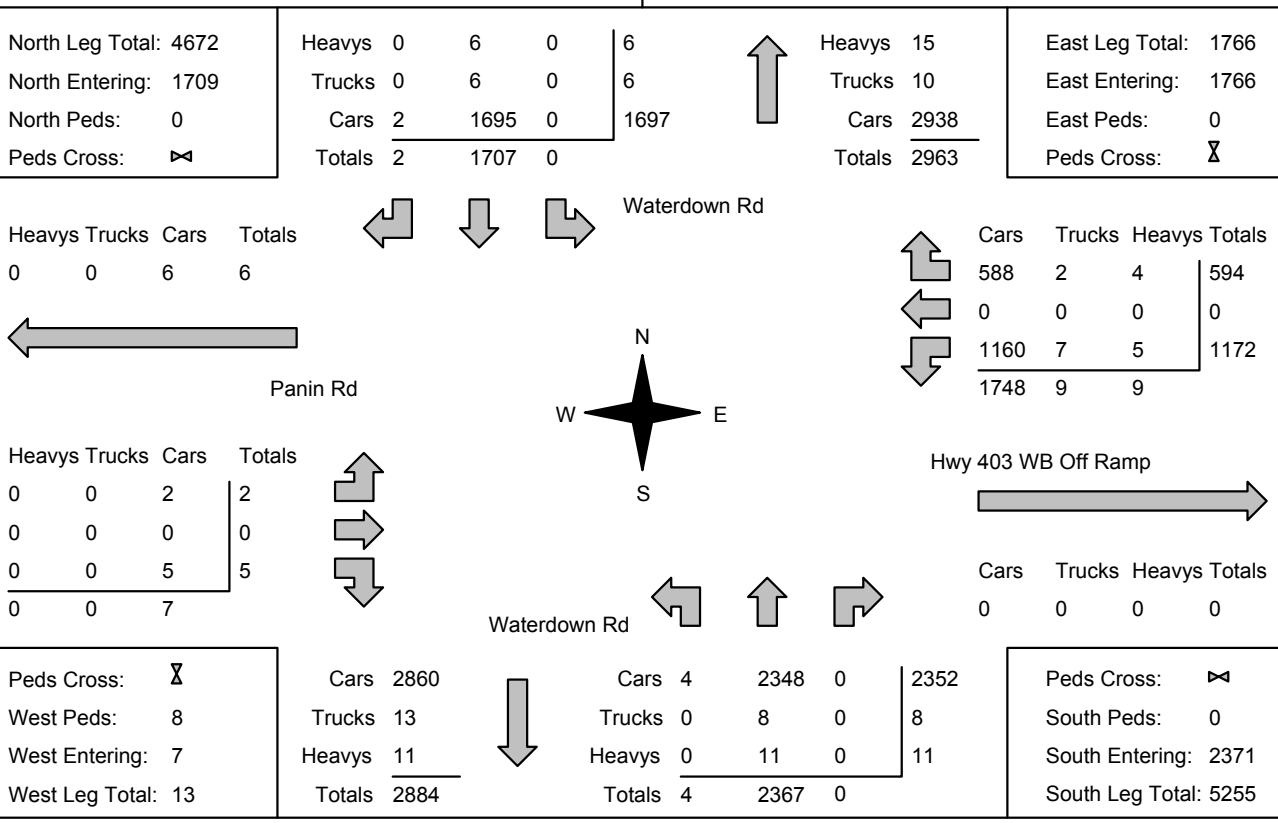
Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

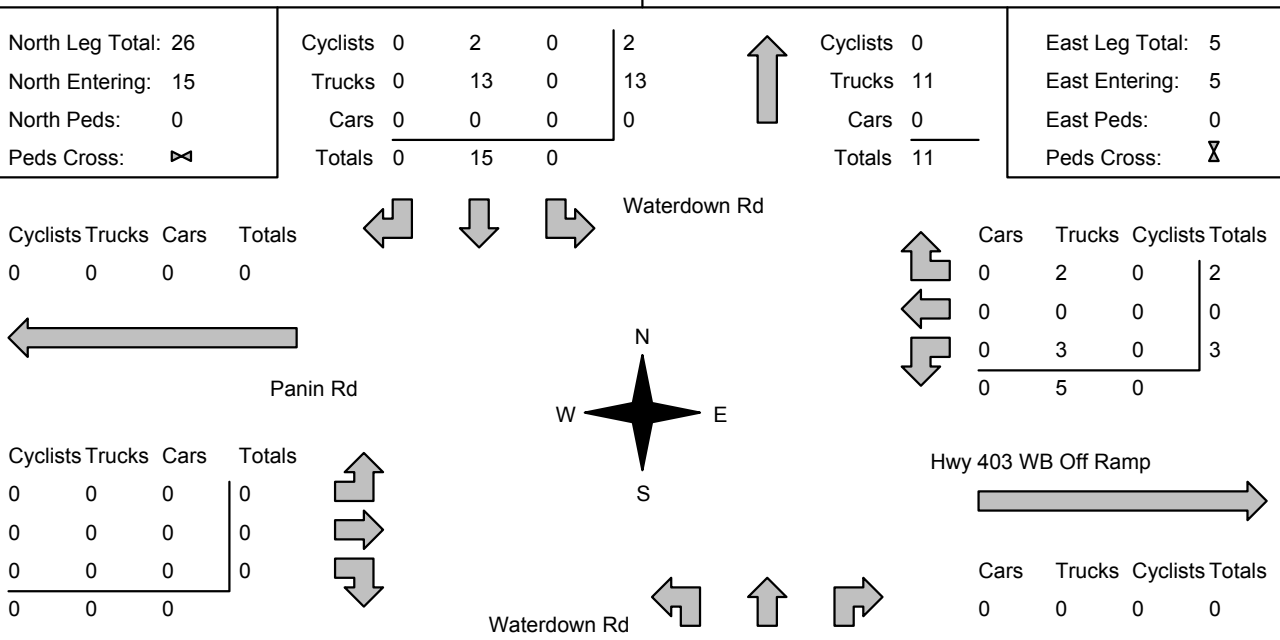
Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:30:00
To: 16:30:00

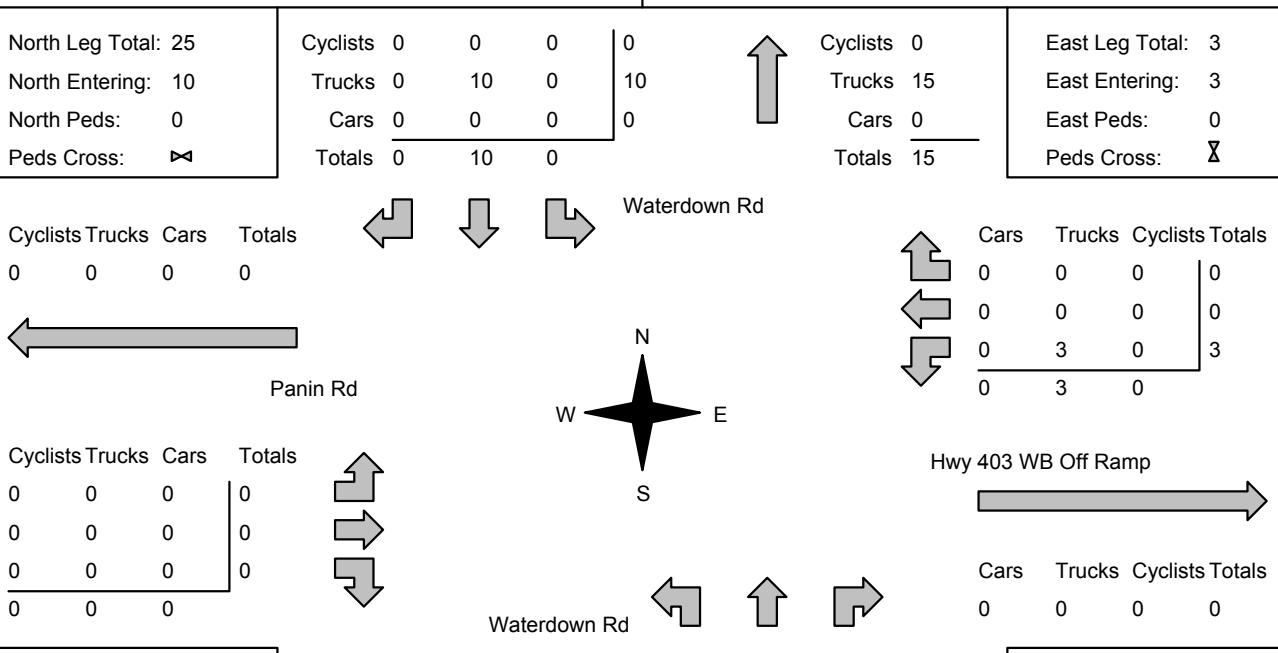
Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S

North Leg Total: 144
North Entering: 57
North Peds: 0
Peds Cross: ⋈

Cyclists	0	3	0	3
Trucks	0	54	0	54
Cars	0	0	0	0
Totals	0	57	0	

Cyclists	0
Trucks	87
Cars	0
Totals	87

East Leg Total: 18
East Entering: 18
East Peds: 0
Peds Cross: ⧖

Cyclists	Trucks	Cars	Totals
0	0	0	0

Panin Rd

Cars	Trucks	Cyclists	Totals
0	2	0	2
0	0	0	0
0	16	0	16
0	18	0	

Waterdown Rd

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Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

Hwy 403 WB Off Ramp

Cars	Trucks	Cyclists	Totals
0	0	0	0

Waterdown Rd

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

Cars	0
Trucks	70
Cyclists	3
Totals	73

Cars	0	0	0	0
Trucks	0	85	0	85
Cyclists	0	0	0	0
Totals	0	85	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 85
South Leg Total: 158

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

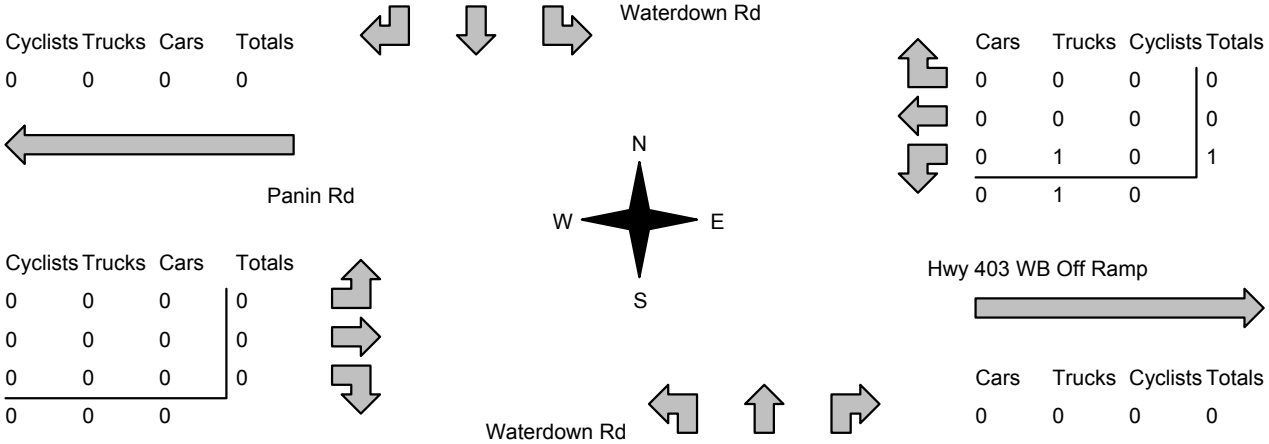
Major Road: Waterdown Rd runs N/S

North Leg Total: 10
North Entering: 3
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	2	0	2
Cars	0	0	0	0
Totals	0	3	0	

Cyclists	1
Trucks	6
Cars	0
Totals	7

East Leg Total: 1
East Entering: 1
East Peds: 0
Peds Cross: ⧖



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

Cars	0
Trucks	3
Cyclists	1
Totals	4

Cars	0	0	0	0
Trucks	0	6	0	6
Cyclists	0	1	0	1
Totals	0	7	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 7
South Leg Total: 11

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600002
Intersection: Waterdown Rd & Hwy 403 WB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

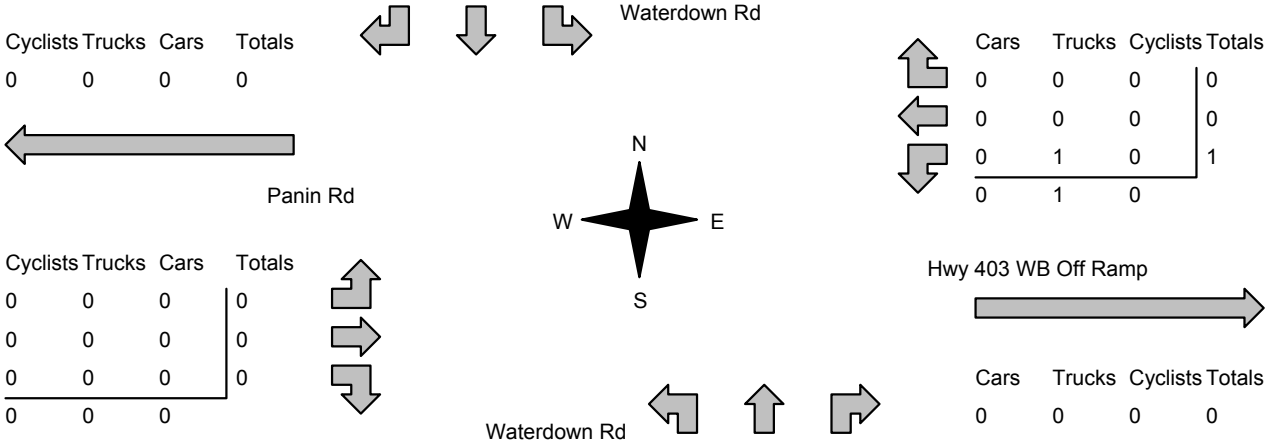
Major Road: Waterdown Rd runs N/S

North Leg Total: 30
North Entering: 10
North Peds: 0
Peds Cross: ⋈

Cyclists	0	2	0	2
Trucks	0	8	0	8
Cars	0	0	0	0
Totals	0	10	0	

Cyclists	1
Trucks	19
Cars	0
Totals	20

East Leg Total: 1
East Entering: 1
East Peds: 0
Peds Cross: ⧖



Cyclists	Trucks	Cars	Totals
0	0	0	0

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	1	0	1
0	1	0	

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

Cars	Trucks	Cyclists	Totals
0	0	0	0

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

Cars	0
Trucks	9
Cyclists	2
Totals	11

Cars	0	0	0	0
Trucks	0	19	0	19
Cyclists	0	1	0	1
Totals	0	20	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 20
South Leg Total: 31

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

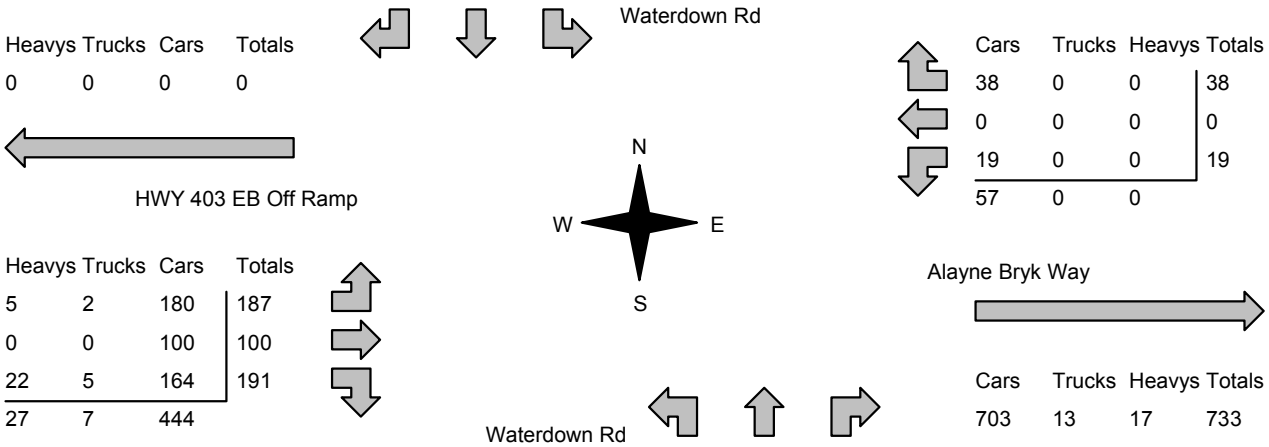
Major Road: Waterdown Rd runs N/S

North Leg Total: 1245
North Entering: 629
North Peds: 0
Peds Cross: ⋈

Heavys	0	15	6	21
Trucks	0	12	9	21
Cars	0	340	247	587
Totals	0	367	262	

Heavys	30
Trucks	9
Cars	577
Totals	616

East Leg Total: 790
East Entering: 57
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 1
West Entering: 478
West Leg Total: 478

Cars	523			
Trucks	17			
Heavys	37			
Totals	577			

Cars	0	359	356	715
Trucks	0	7	4	11
Heavys	0	25	11	36
Totals	0	391	371	

Peds Cross: ⋈
South Peds: 1
South Entering: 762
South Leg Total: 1339

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

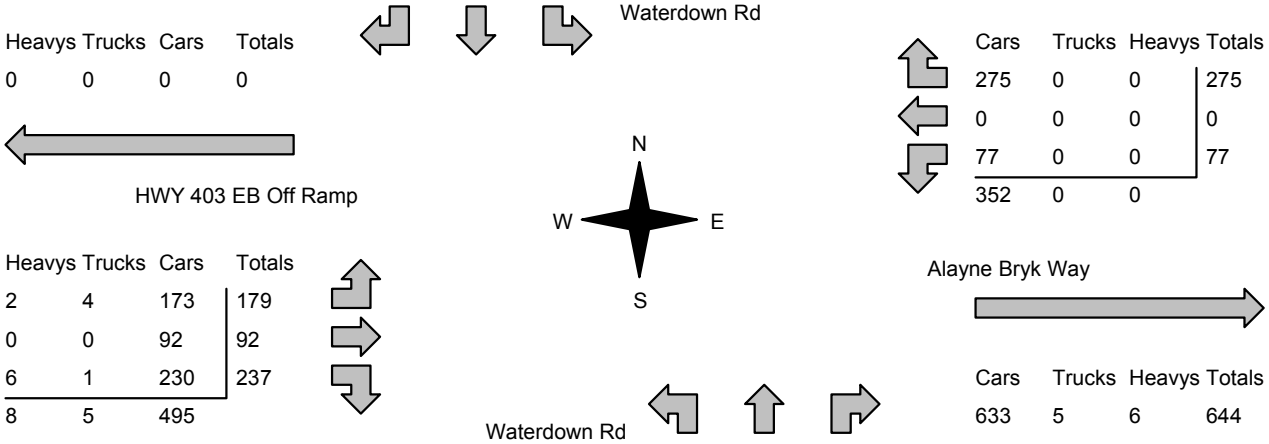
Major Road: Waterdown Rd runs N/S

North Leg Total: 1667
North Entering: 816
North Peds: 0
Peds Cross: ⋈

Heavys	0	3	2	5
Trucks	0	3	2	5
Cars	0	556	250	806
Totals	0	562	254	

Heavys	5
Trucks	8
Cars	838
Totals	851

East Leg Total: 996
East Entering: 352
East Peds: 0
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
0	0	0	0

Cars	Trucks	Heavys	Totals
275	0	0	275
0	0	0	0
77	0	0	77
352	0	0	

Heavys	Trucks	Cars	Totals
2	4	173	179
0	0	92	92
6	1	230	237
8	5	495	

Cars	Trucks	Heavys	Totals
633	5	6	644

Peds Cross: ⧖
West Peds: 2
West Entering: 508
West Leg Total: 508

Cars	863
Trucks	4
Heavys	9
Totals	876

Cars	0	390	291	681
Trucks	0	4	3	7
Heavys	0	3	4	7
Totals	0	397	298	

Peds Cross: ⋈
South Peds: 0
South Entering: 695
South Leg Total: 1571

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

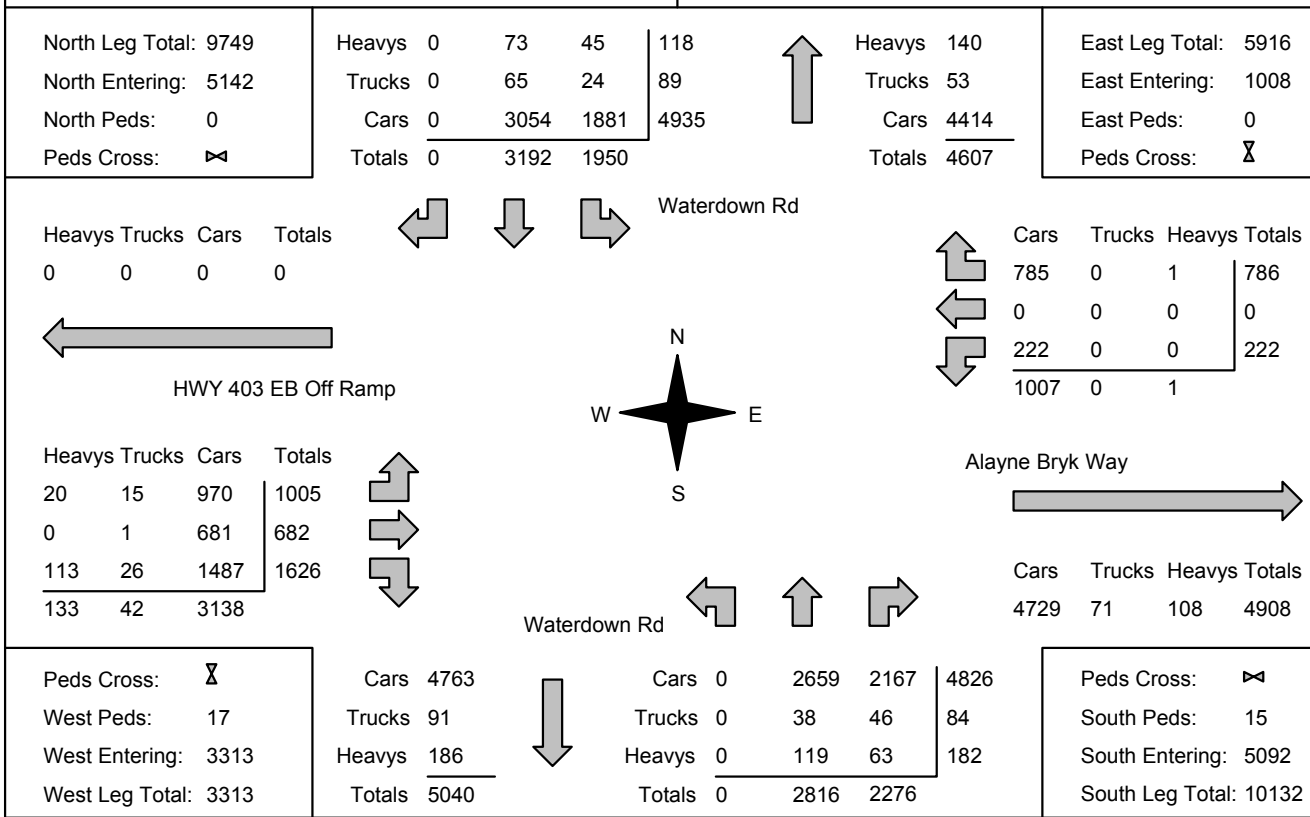
Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S

North Leg Total: 1477
North Entering: 842
North Peds: 0
Peds Cross: ⋈

Heavys	0	3	1	4
Trucks	0	5	1	6
Cars	0	561	271	832
Totals	0	569	273	

Heavys	2
Trucks	1
Cars	632
Totals	635

East Leg Total: 958
East Entering: 138
East Peds: 0
Peds Cross: ⧖

Waterdown Rd

Heavys	Trucks	Cars	Totals
0	0	0	0

HWY 403 EB Off Ramp

Heavys	Trucks	Cars	Totals
0	1	123	124
0	0	233	233
1	2	294	297
1	3	650	

Cars	Trucks	Heavys	Totals
109	0	0	109
0	0	0	0
29	0	0	29
138	0	0	

N
W E
S

Alayne Bryk Way

Cars	Trucks	Heavys	Totals
818	1	1	820

Waterdown Rd

Peds Cross: ⧖
West Peds: 1
West Entering: 654
West Leg Total: 654

Cars	884
Trucks	7
Heavys	4
Totals	895

Cars	0	400	314	714
Trucks	0	0	0	0
Heavys	0	2	0	2
Totals	0	402	314	

Peds Cross: ⋈
South Peds: 1
South Entering: 716
South Leg Total: 1611

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

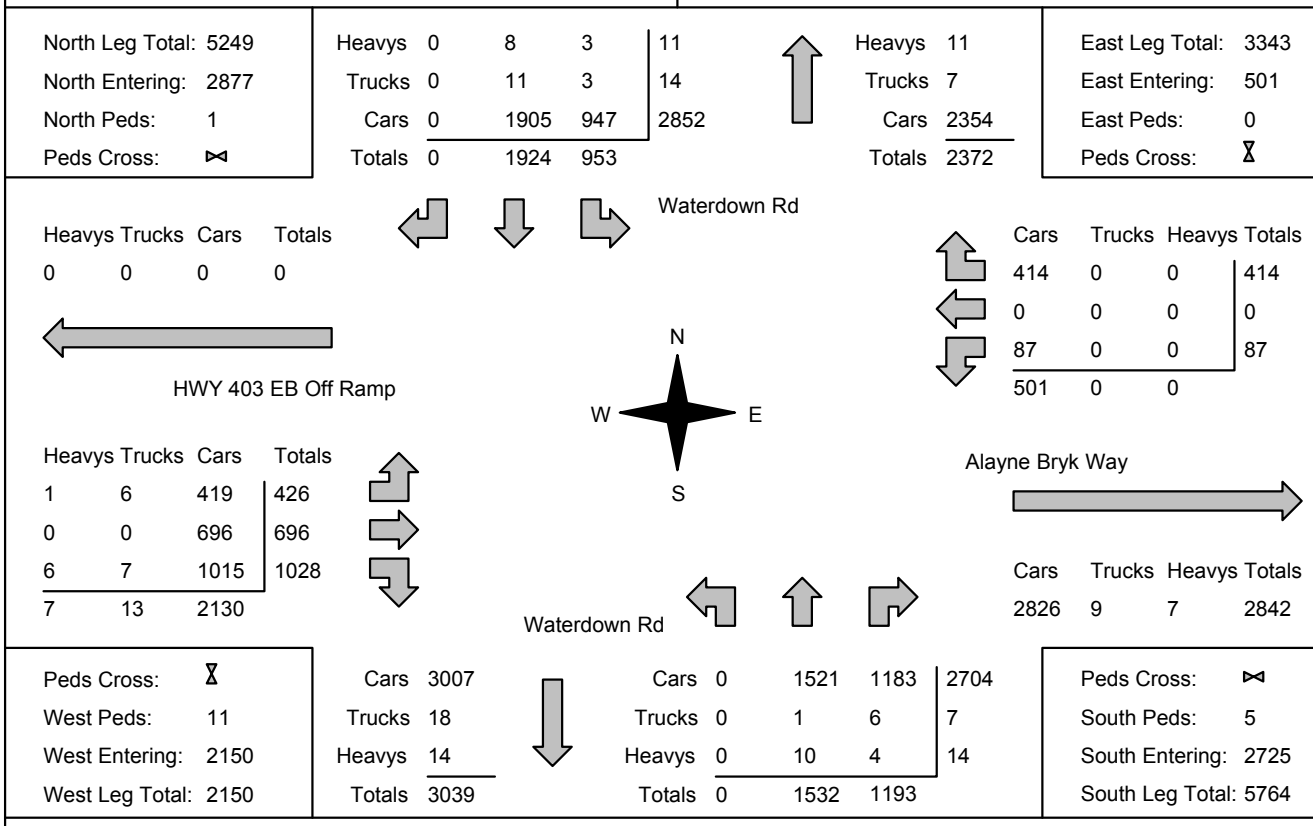
Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

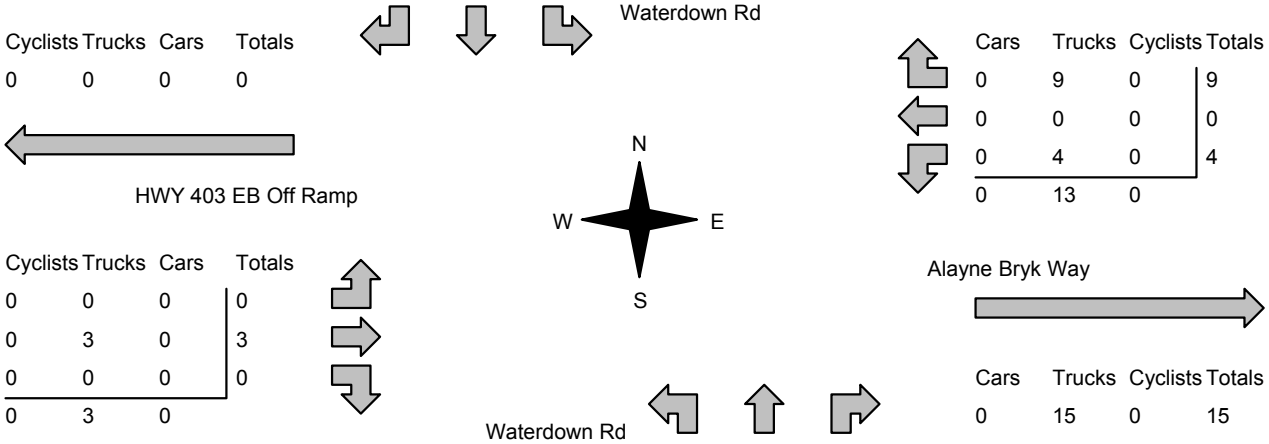
Major Road: Waterdown Rd runs N/S

North Leg Total: 27
North Entering: 18
North Peds: 0
Peds Cross: ⋈

Cyclists	0	2	0	2
Trucks	0	11	5	16
Cars	0	0	0	0
Totals	0	13	5	

Cyclists	0
Trucks	9
Cars	0
Totals	9

East Leg Total: 28
East Entering: 13
East Peds: 0
Peds Cross: ⧖



Cyclists	Trucks	Cars	Totals
0	0	0	0

Cars	Trucks	Cyclists	Totals
0	9	0	9
0	0	0	0
0	4	0	4
0	13	0	

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	3	0	3
0	0	0	0
0	3	0	

Cars	Trucks	Cyclists	Totals
0	15	0	15

Peds Cross: ⧖
West Peds: 0
West Entering: 3
West Leg Total: 3

Cars	0			
Trucks	15			
Cyclists	2			
Totals	17			

Cars	0	0	0	0
Trucks	0	0	7	7
Cyclists	0	0	0	0
Totals	0	0	7	

Peds Cross: ⋈
South Peds: 0
South Entering: 7
South Leg Total: 24

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

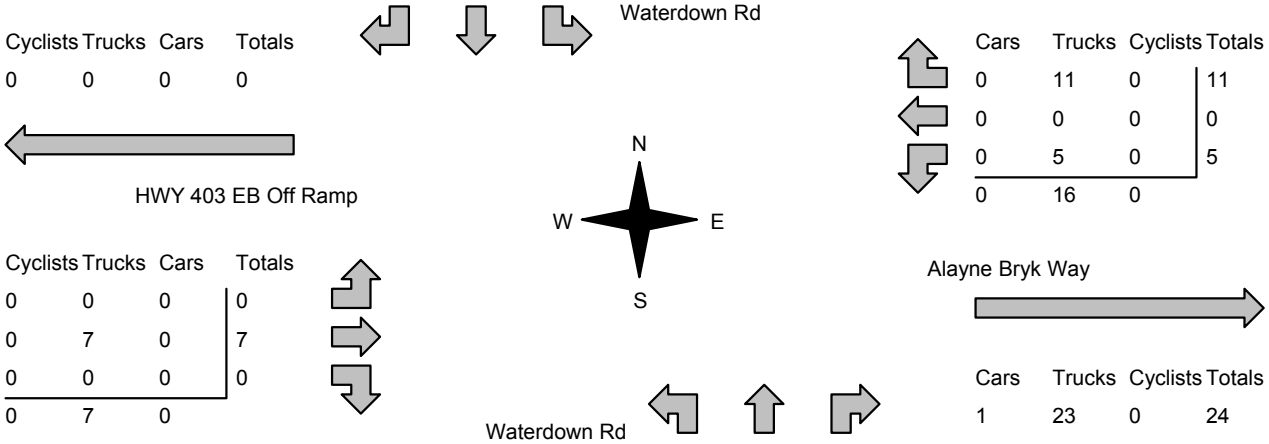
Major Road: Waterdown Rd runs N/S

North Leg Total: 29
North Entering: 14
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	4	8	12
Cars	0	0	1	1
Totals	0	5	9	

Cyclists	0
Trucks	15
Cars	0
Totals	15

East Leg Total: 40
East Entering: 16
East Peds: 0
Peds Cross: ⧖



Cyclists	Trucks	Cars	Totals
0	0	0	0

Cars	Trucks	Cyclists	Totals
0	11	0	11
0	0	0	0
0	5	0	5
0	16	0	

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	7	0	7
0	0	0	0
0	7	0	

Cars	Trucks	Cyclists	Totals
1	23	0	24

Peds Cross: ⧖
West Peds: 0
West Entering: 7
West Leg Total: 7

Cars	0	0	0	0
Trucks	9	4	8	12
Cyclists	1	0	0	0
Totals	10	4	8	

Peds Cross: ⋈
South Peds: 0
South Entering: 12
South Leg Total: 22

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

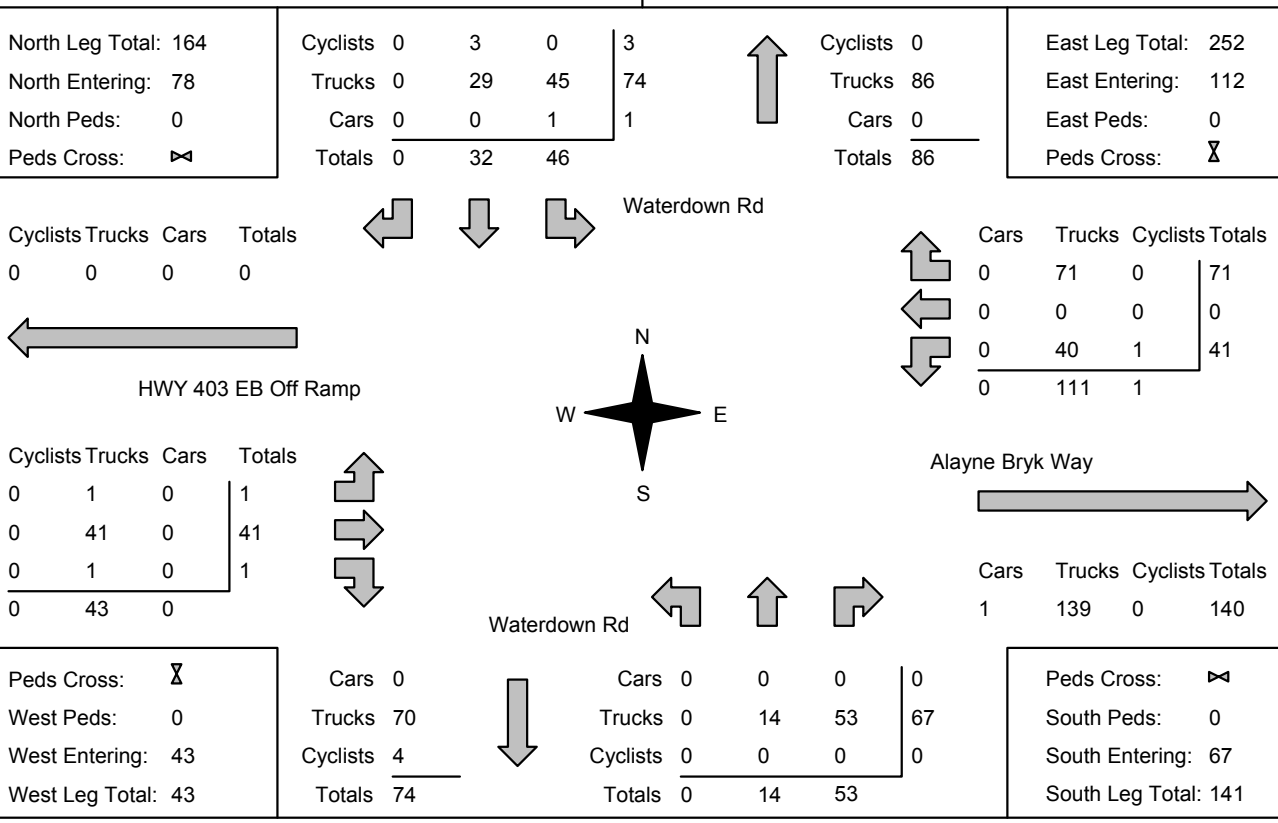
Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

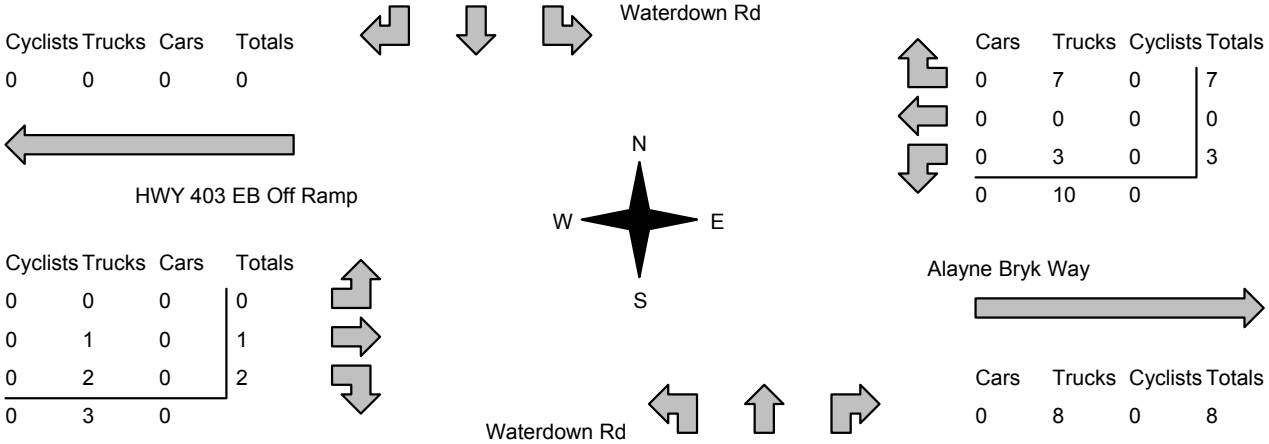
Major Road: Waterdown Rd runs N/S

North Leg Total: 9
North Entering: 2
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	0	2	2
Cars	0	0	0	0
Totals	0	0	2	

Cyclists	0
Trucks	7
Cars	0
Totals	7

East Leg Total: 18
East Entering: 10
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 3
West Leg Total: 3

Cars	0	0	0	0
Trucks	5	0	5	5
Cyclists	0	0	0	0
Totals	5	0	5	

Peds Cross: ⋈
South Peds: 0
South Entering: 5
South Leg Total: 10

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

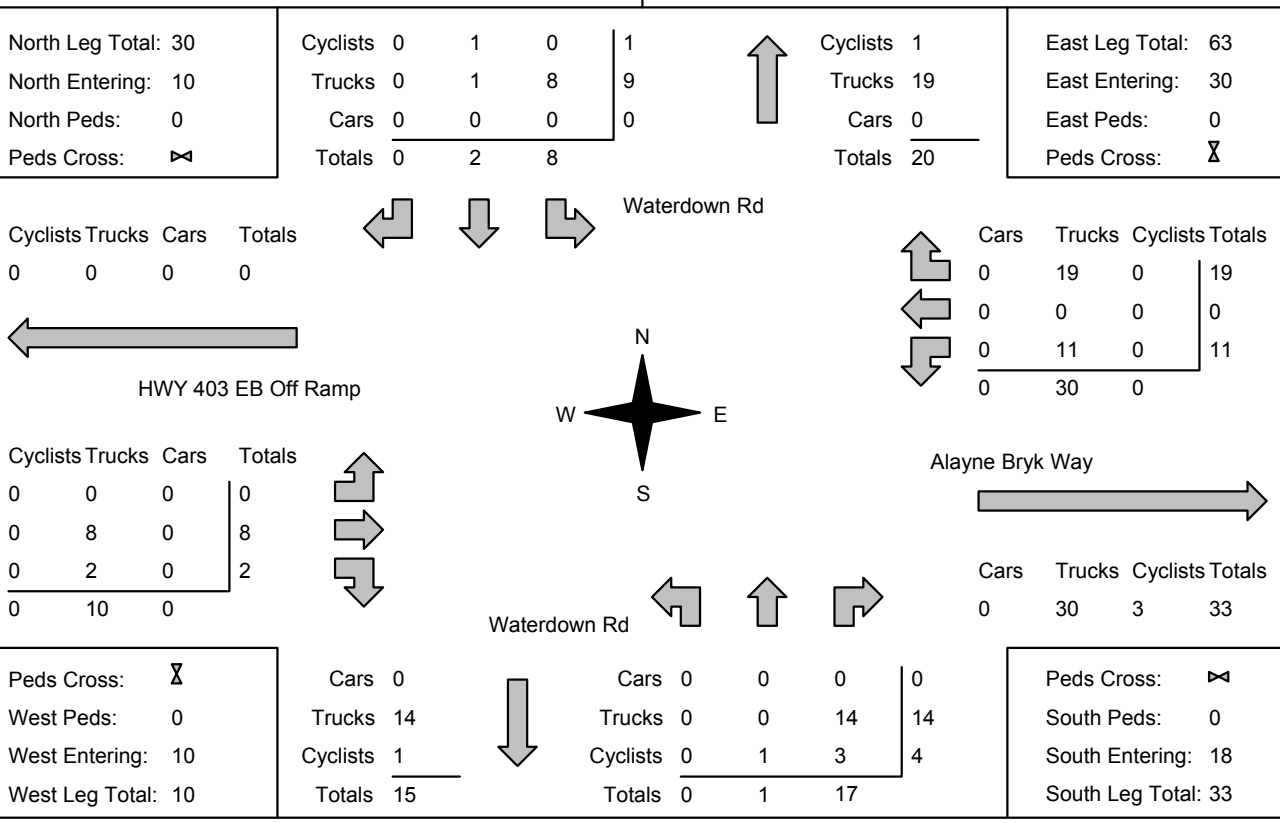
Municipality: Burlington
Site #: 2516600003
Intersection: Waterdown Rd & HWY 403 EB Off
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Waterdown Rd runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

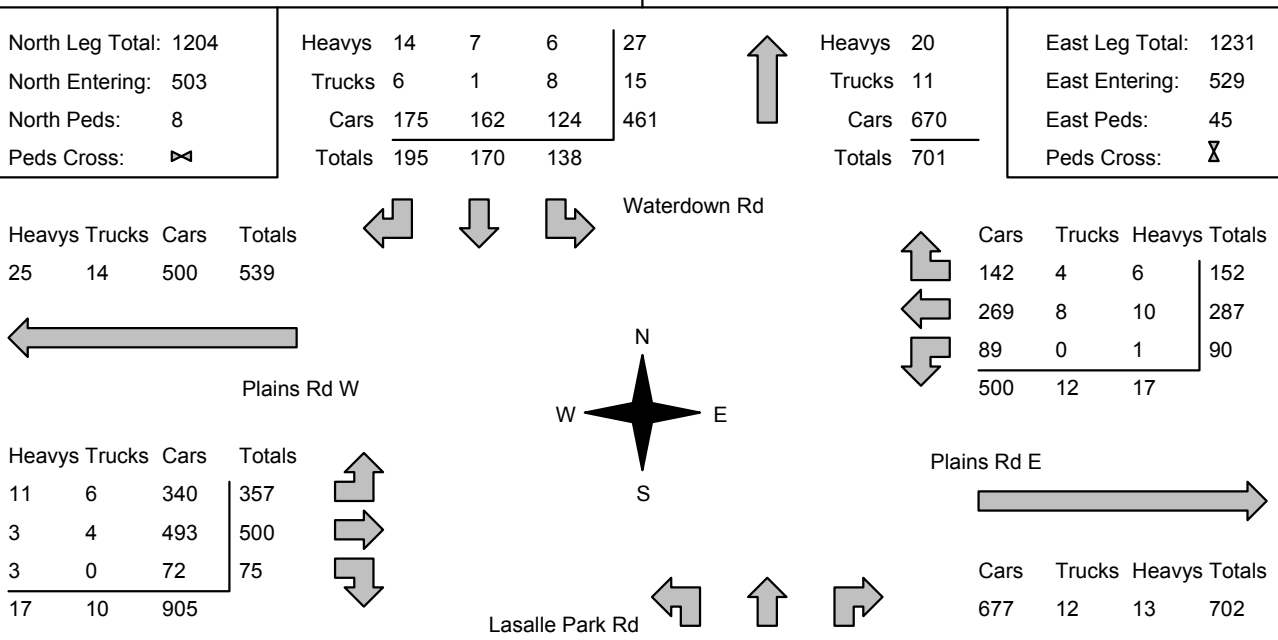
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

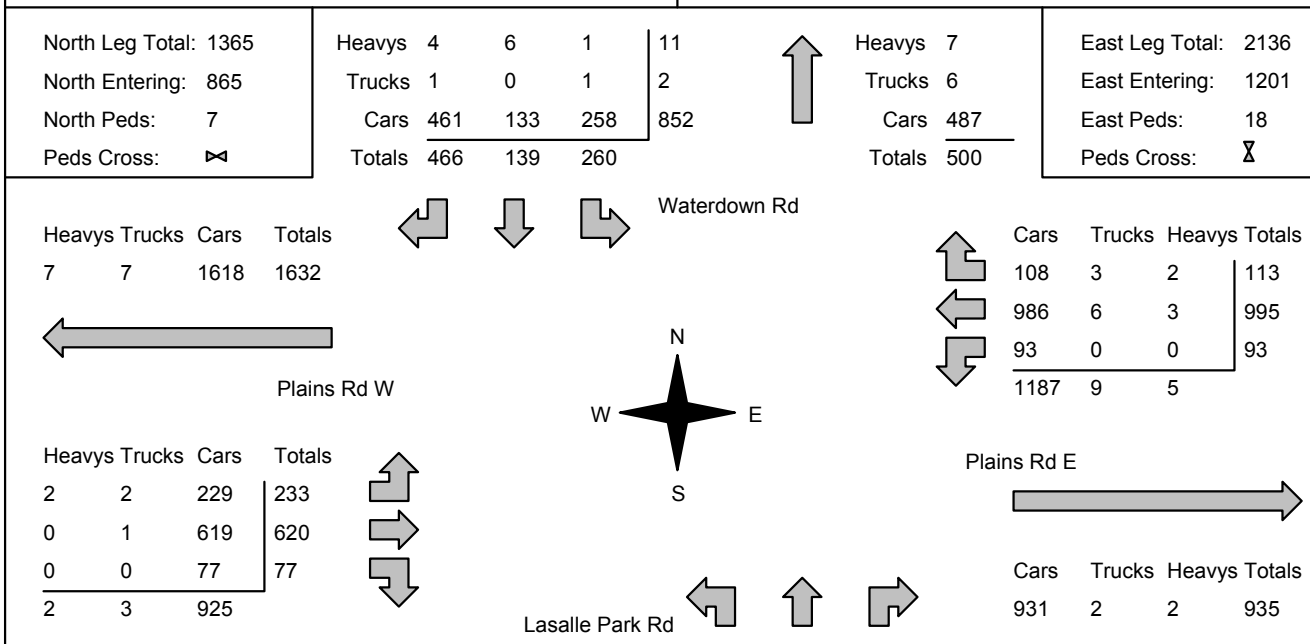
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

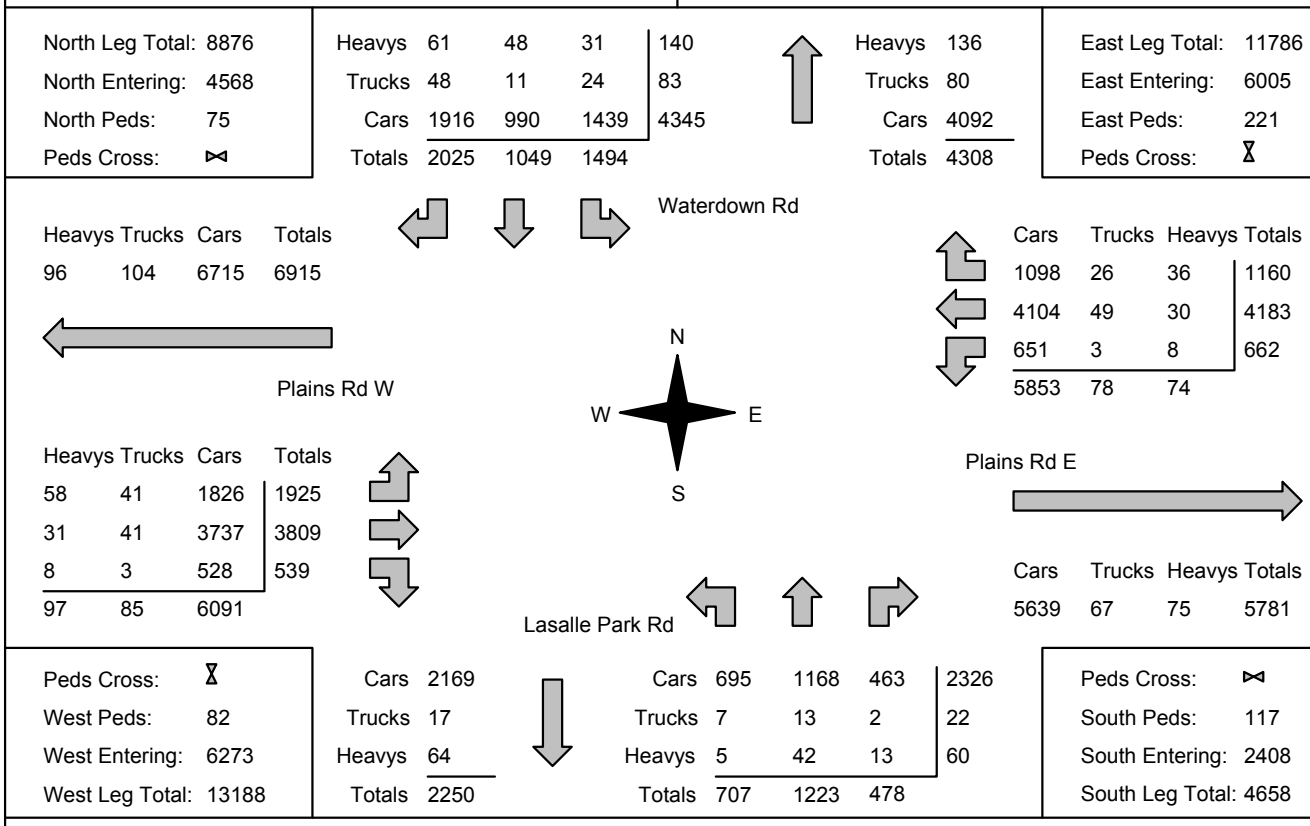
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

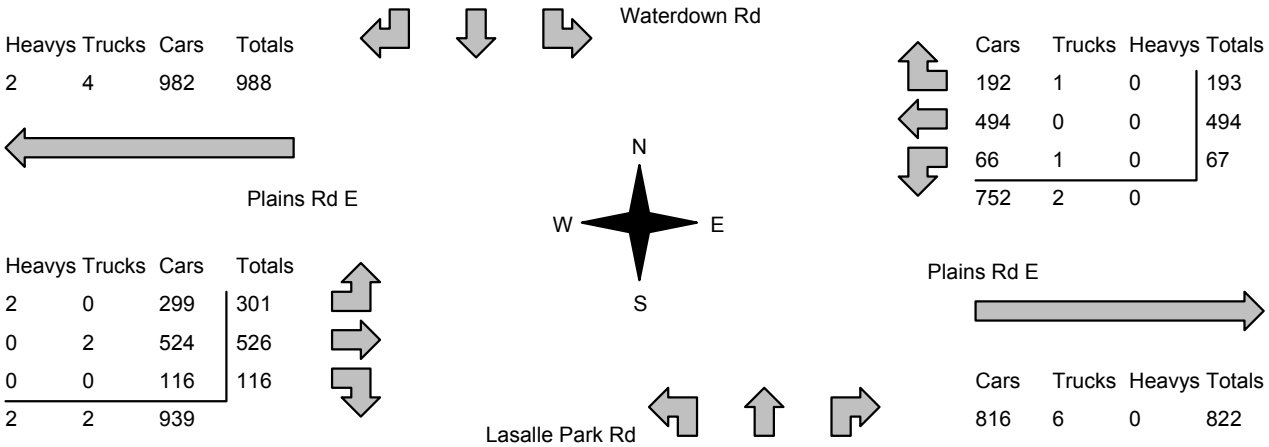
Major Road: Plains Rd E runs W/E

North Leg Total: 1423
North Entering: 757
North Peds: 113
Peds Cross: ⋈

Heavys	2	0	0	2
Trucks	4	1	3	8
Cars	366	151	230	747
Totals	372	152	233	

Heavys	2
Trucks	1
Cars	663
Totals	666

East Leg Total: 1576
East Entering: 754
East Peds: 26
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
2	4	982	988

Cars	Trucks	Heavys	Totals
192	1	0	193
494	0	0	494
66	1	0	67
752	2	0	

Heavys	Trucks	Cars	Totals
2	0	299	301
0	2	524	526
0	0	116	116
2	2	939	

Cars	Trucks	Heavys	Totals
816	6	0	822

Peds Cross: ⧖
West Peds: 197
West Entering: 943
West Leg Total: 1931

Cars	333
Trucks	2
Heavys	0
Totals	335

Cars	122	172	62	356
Trucks	0	0	1	1
Heavys	0	0	0	0
Totals	122	172	63	

Peds Cross: ⋈
South Peds: 15
South Entering: 357
South Leg Total: 692

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

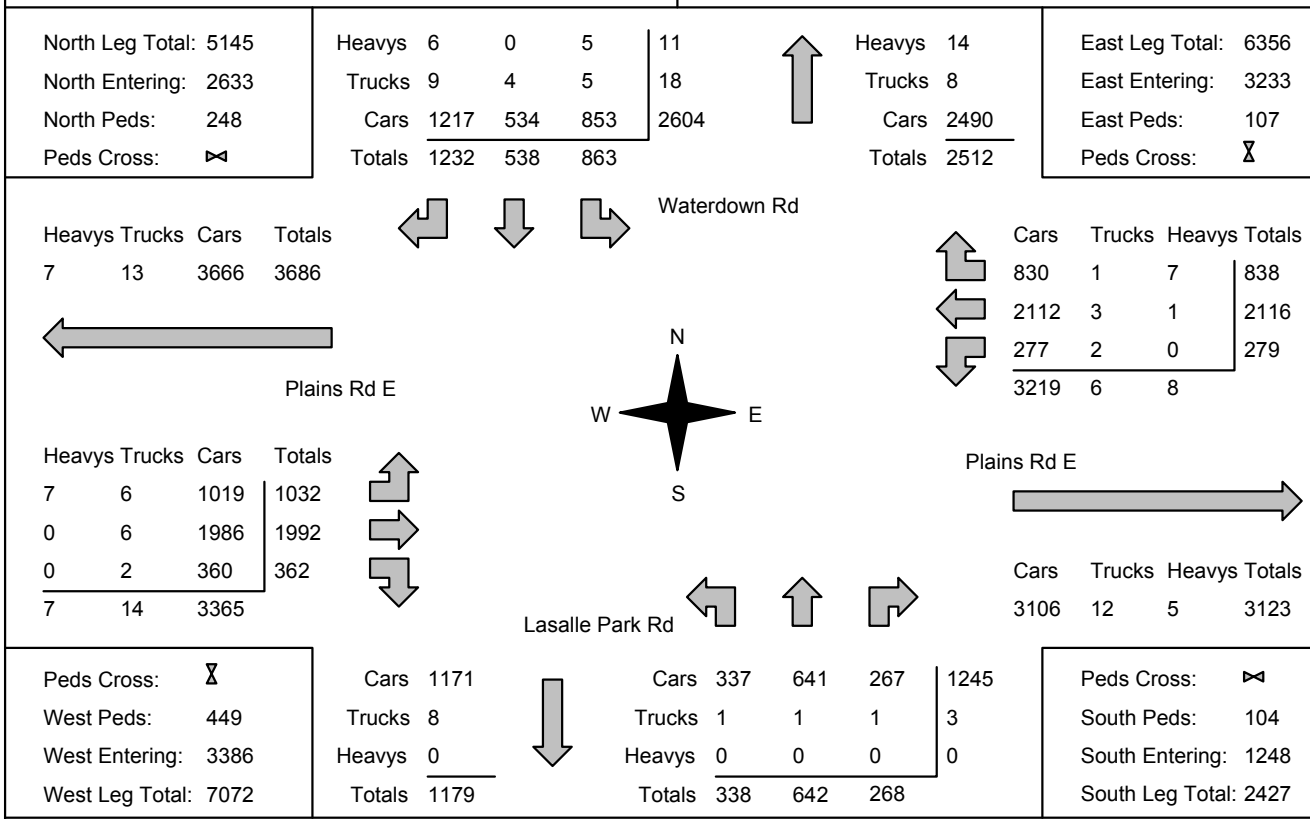
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:15:00
To: 8:15:00

Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

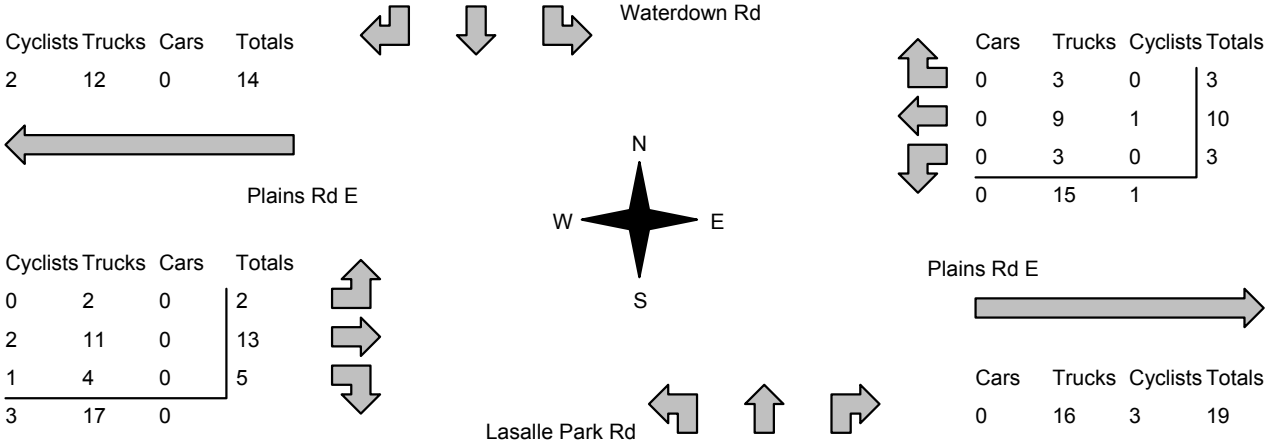
Major Road: Plains Rd E runs W/E

North Leg Total: 17
North Entering: 9
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	1	1
Trucks	3	4	1	8
Cars	0	0	0	0
Totals	3	4	2	

Cyclists	0
Trucks	8
Cars	0
Totals	8

East Leg Total: 35
East Entering: 16
East Peds: 0
Peds Cross: ⧖



Cyclists	Trucks	Cars	Totals
2	12	0	14

Cars	Trucks	Cyclists	Totals
0	3	0	3
0	9	1	10
0	3	0	3
0	15	1	

Cyclists	Trucks	Cars	Totals
0	2	0	2
2	11	0	13
1	4	0	5
3	17	0	

Cars	Trucks	Cyclists	Totals
0	16	3	19

Peds Cross: ⧖
West Peds: 0
West Entering: 20
West Leg Total: 34

Cars	0	0	0	0
Trucks	11	0	3	4	7
Cyclists	1	0	0	1
Totals	12	1	3	4

Peds Cross: ⋈
South Peds: 0
South Entering: 8
South Leg Total: 20

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 14:30:00
To: 15:30:00

Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

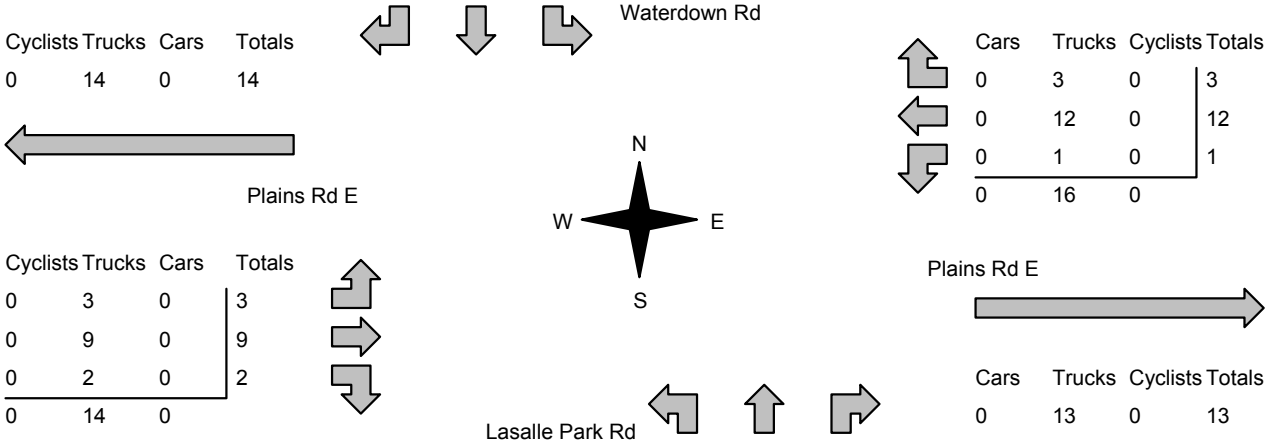
Major Road: Plains Rd E runs W/E

North Leg Total: 14
North Entering: 4
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	3	1	4
Cars	0	0	0	0
Totals	0	3	1	

Cyclists	0
Trucks	10
Cars	0
Totals	10

East Leg Total: 29
East Entering: 16
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 14
West Leg Total: 28

Cars	0			
Trucks	6			
Cyclists	0			
Totals	6			

Cars	0	0	0	0
Trucks	2	4	3	9
Cyclists	0	0	0	0
Totals	2	4	3	

Peds Cross: ⋈
South Peds: 0
South Entering: 9
South Leg Total: 15

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

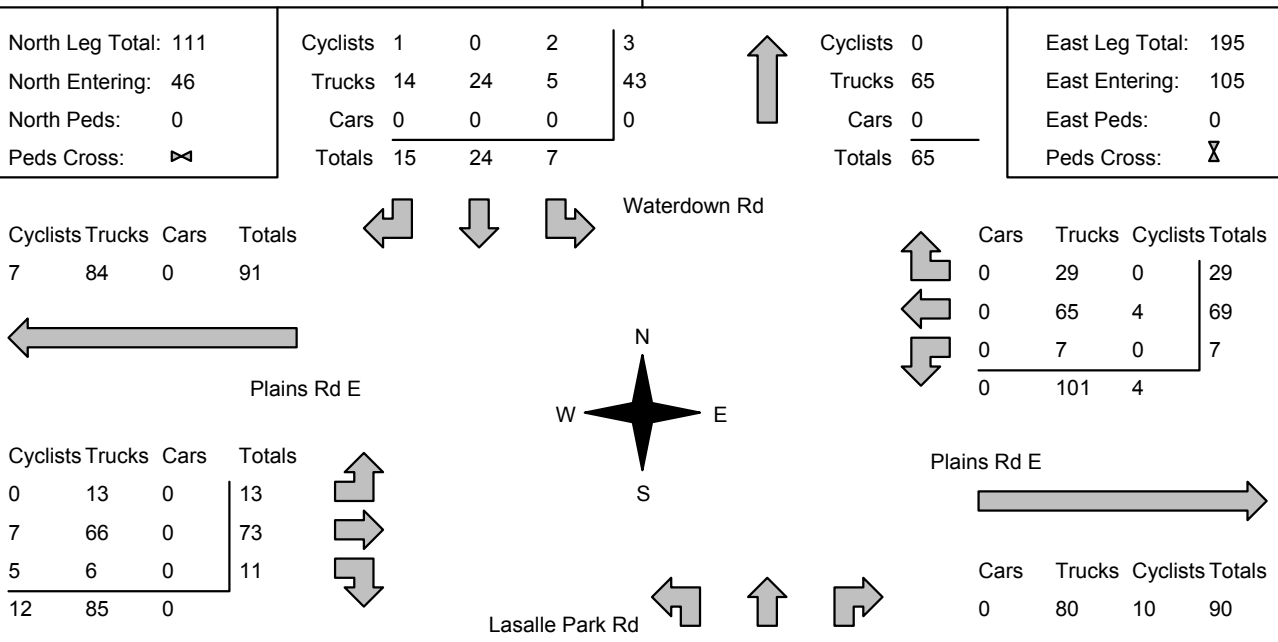
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E

North Leg Total: 5
North Entering: 2
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	1	0	1
Cars	0	0	0	0
Totals	0	2	0	

Cyclists	0
Trucks	3
Cars	0
Totals	3

East Leg Total: 14
East Entering: 8
East Peds: 0
Peds Cross: ⧖

Waterdown Rd

Cyclists	Trucks	Cars	Totals
5	4	0	9

Cars	Trucks	Cyclists	Totals
0	2	0	2
0	4	2	6
0	0	0	0
0	6	2	

Plains Rd E

N
W E
S

Cyclists	Trucks	Cars	Totals
0	0	0	0
3	3	0	6
5	0	0	5
8	3	0	

Plains Rd E

Cars	Trucks	Cyclists	Totals
0	3	3	6

Lasalle Park Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 11
West Leg Total: 20

Cars	0
Trucks	1
Cyclists	6
Totals	7

Cars	0	0	0	0
Trucks	0	1	0	1
Cyclists	3	0	0	3
Totals	3	1	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 4
South Leg Total: 11

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

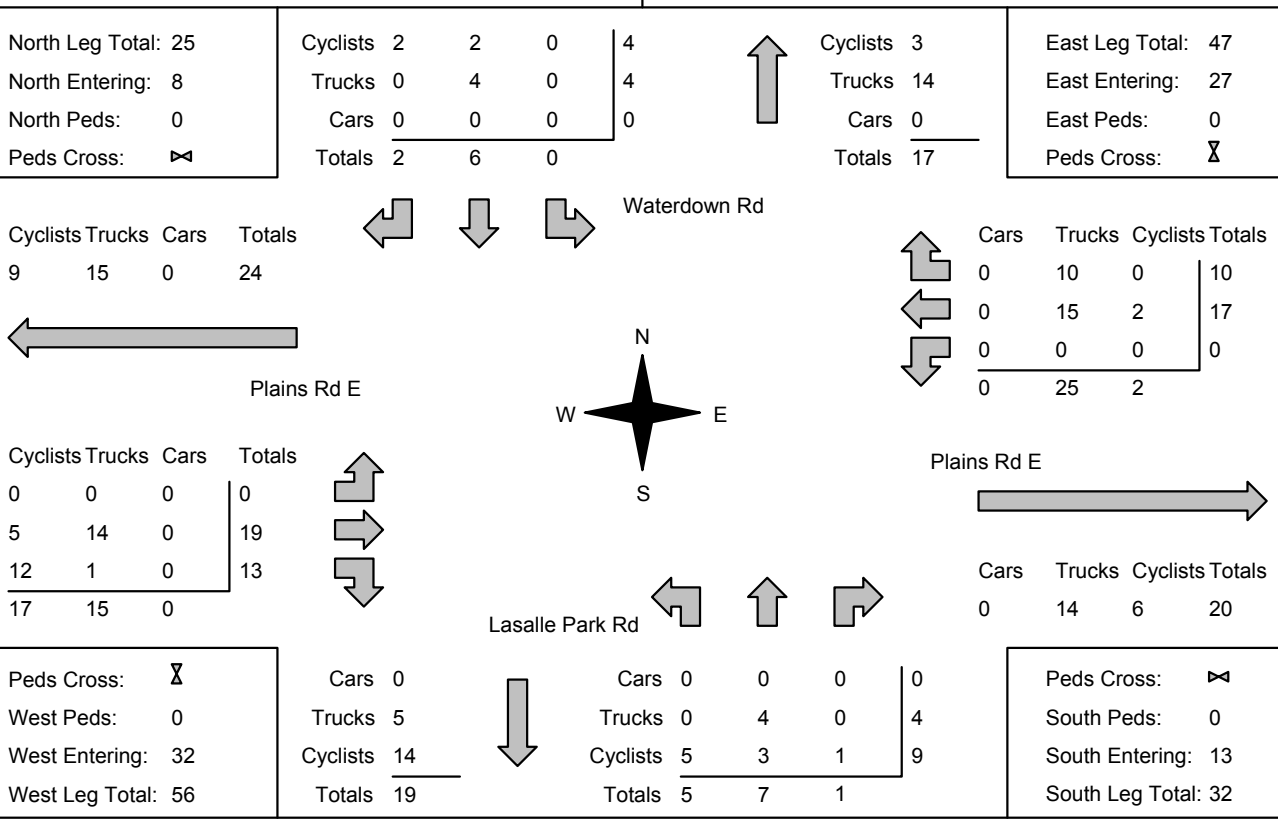
Municipality: Burlington
Site #: 2516600004
Intersection: Plains Rd E & Waterdown Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 23-Oct-25

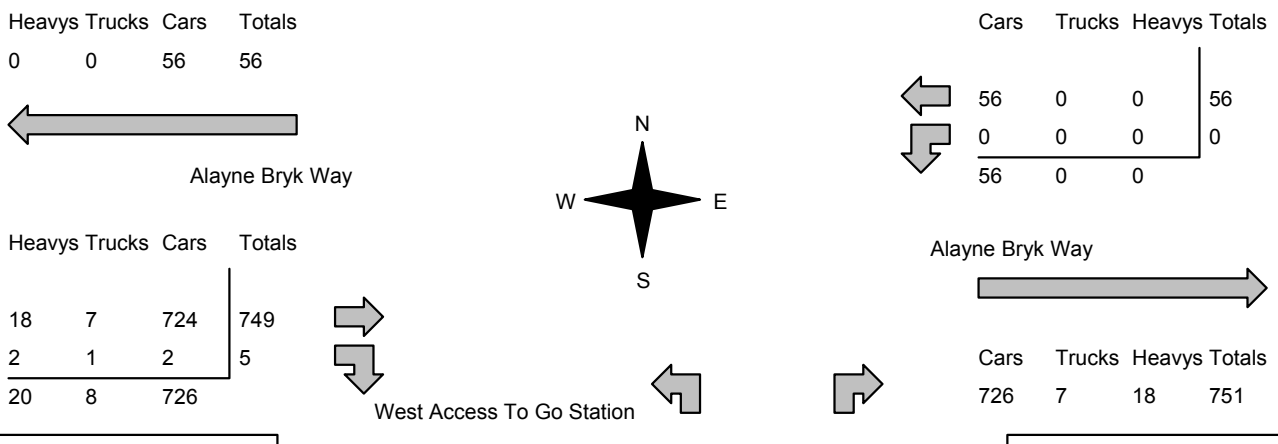
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 807
East Entering: 56
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 754
West Leg Total: 810

Cars 2
Trucks 1
Heavys 2
Totals 5

Cars 0 2 2
Trucks 0 0 0
Heavys 0 0 0
Totals 0 2

Peds Cross: ⋈
South Peds: 1
South Entering: 2
South Leg Total: 7

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 23-Oct-25

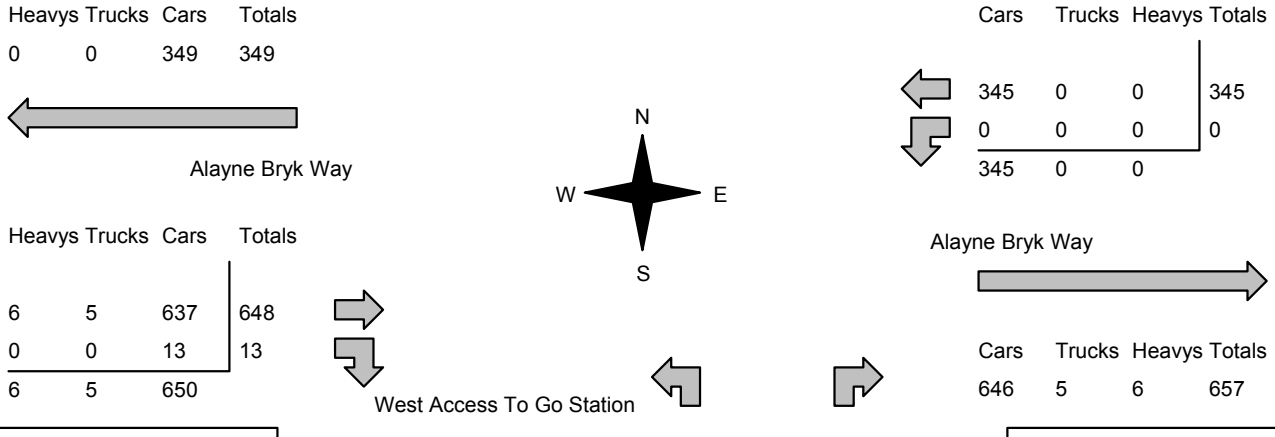
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 1002
East Entering: 345
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 661
West Leg Total: 1010

Cars 13
Trucks 0
Heavys 0
Totals 13

Cars 4 9 13
Trucks 0 0 0
Heavys 0 0 0
Totals 4 9

Peds Cross: ⋈
South Peds: 3
South Entering: 13
South Leg Total: 26

Comments

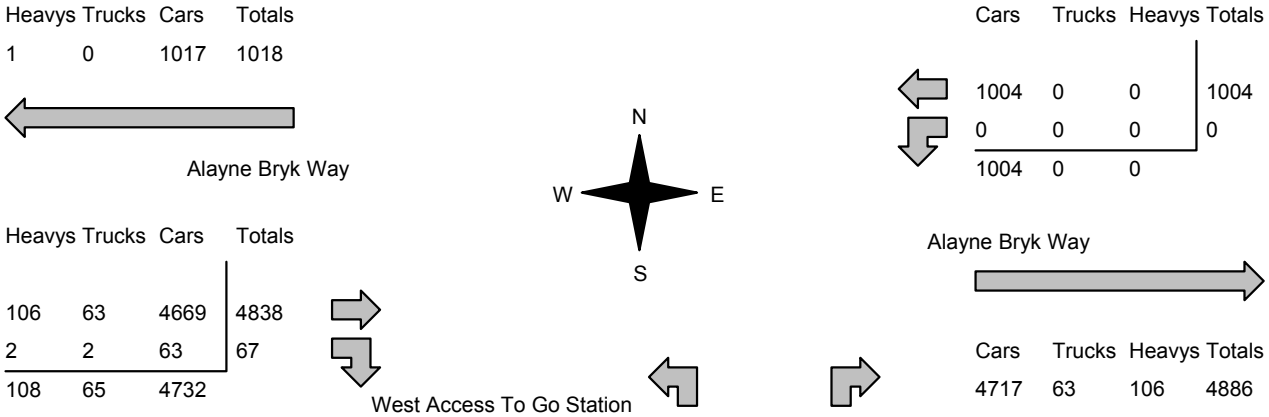
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600005 **Intersection:** Alayne Bryk Way & West Access T **TFR File #:** 1 **Count date:** 23-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 5890
East Entering: 1004
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖		Cars 63		Cars 13	48	61	Peds Cross: ⋈
West Peds: 0		Trucks 2		Trucks 0	0	0	South Peds: 17
West Entering: 4905		Heavys 2		Heavys 1	0	1	South Entering: 62
West Leg Total: 5923		Totals 67		Totals 14	48		South Leg Total: 129

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 25-Oct-25

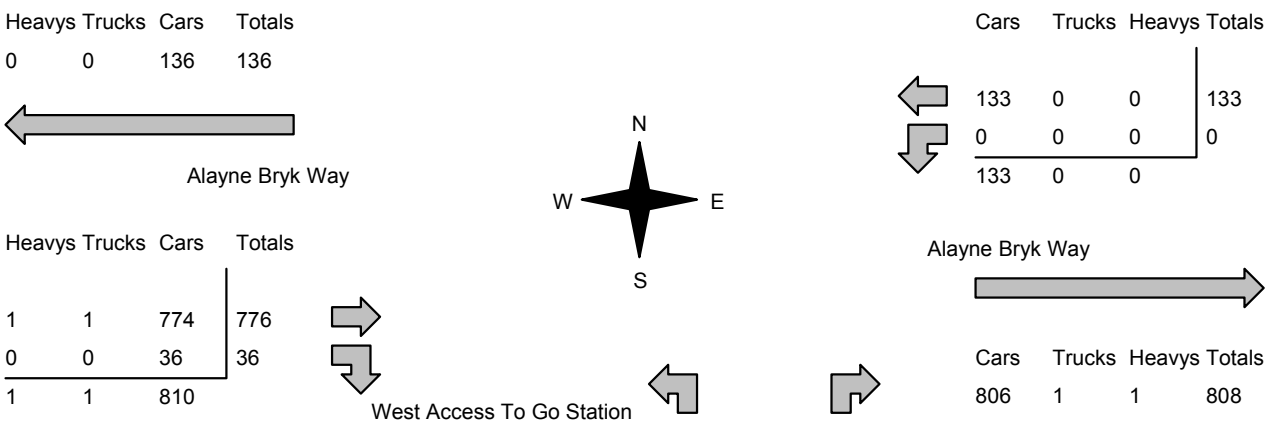
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 941
East Entering: 133
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 812
West Leg Total: 948

Cars 36
Trucks 0
Heavys 0
Totals 36

Cars 3 32 35
Trucks 0 0 0
Heavys 0 0 0
Totals 3 32

Peds Cross: ⋈
South Peds: 1
South Entering: 35
South Leg Total: 71

Comments

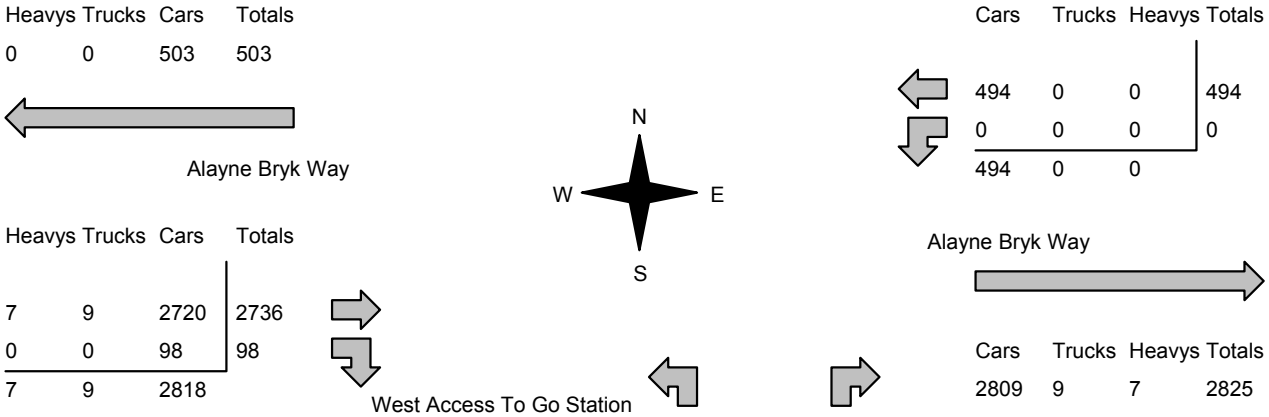
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600005 **Intersection:** Alayne Bryk Way & West Access T **TFR File #:** 1 **Count date:** 25-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 3319
East Entering: 494
East Peds: 0
Peds Cross: ⧖



Peds Cross:	⧖		Cars	98		Cars	9	89	98	Peds Cross:	⋈
West Peds:	0		Trucks	0		Trucks	0	0	0	South Peds:	7
West Entering:	2834		Heavys	0		Heavys	0	0	0	South Entering:	98
West Leg Total:	3337		Totals	98		Totals	9	89		South Leg Total:	196

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 23-Oct-25

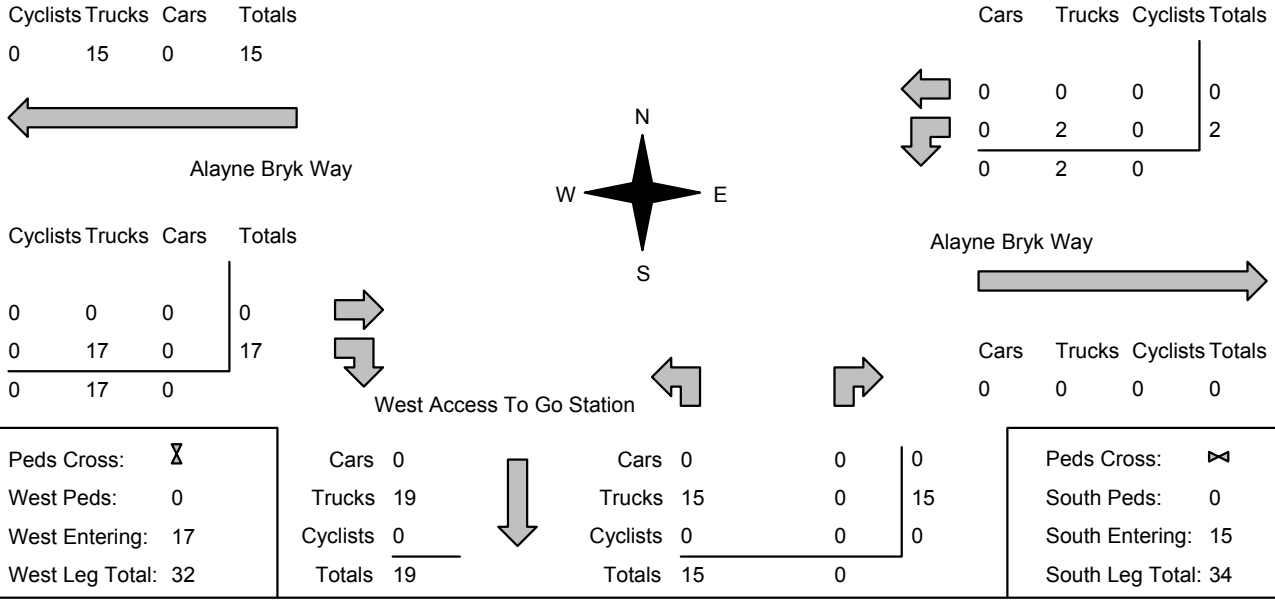
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 2
East Entering: 2
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 17
West Leg Total: 32

Cars 0
Trucks 19
Cyclists 0
Totals 19

Cars 0 0 0
Trucks 15 0 15
Cyclists 0 0 0
Totals 15 0

Peds Cross: ⋈
South Peds: 0
South Entering: 15
South Leg Total: 34

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:30:00
To: 16:30:00

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 23-Oct-25

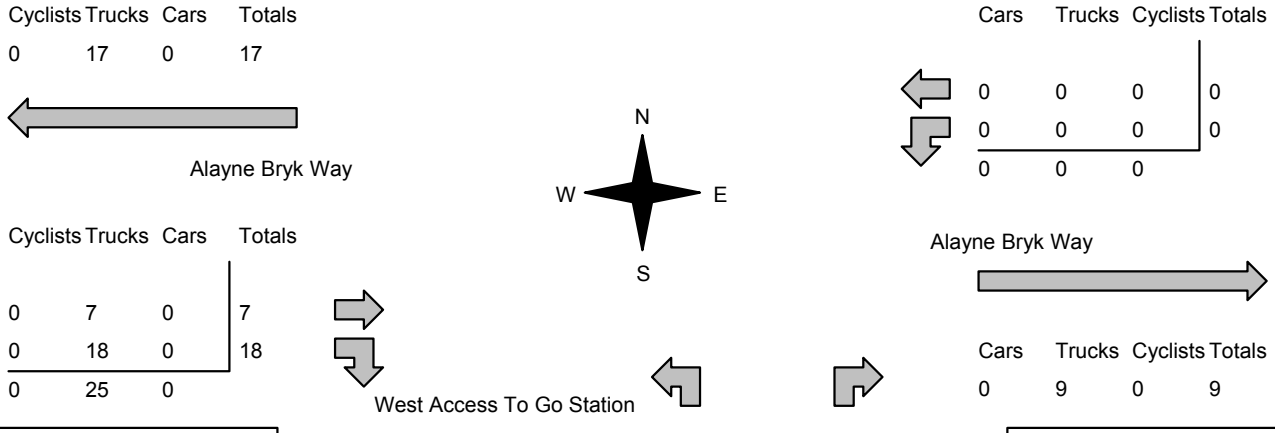
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 9
East Entering: 0
East Peds: 0
Peds Cross: ⧗



Peds Cross: ⧗
West Peds: 0
West Entering: 25
West Leg Total: 42

Cars 0
Trucks 18
Cyclists 0
Totals 18

Cars 0 0 0
Trucks 17 2 19
Cyclists 0 0 0
Totals 17 2

Peds Cross: ⋈
South Peds: 0
South Entering: 19
South Leg Total: 37

Comments

Trucks = Buses

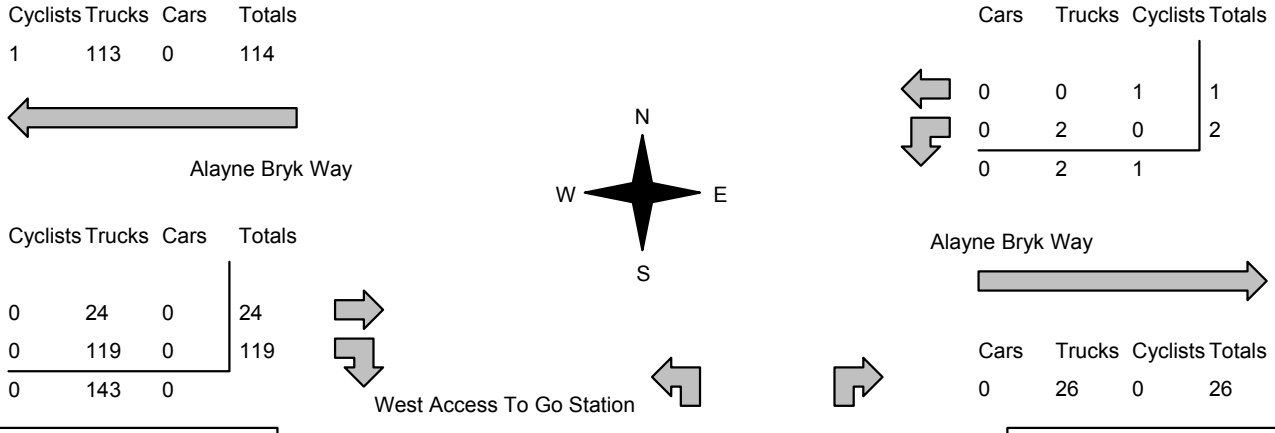
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600005 **Intersection:** Alayne Bryk Way & West Access T **TFR File #:** 1 **Count date:** 23-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 29
East Entering: 3
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖	Cars	0	Cars	0	0	0	Peds Cross: ⋈
West Peds: 0	Trucks	121	Trucks	113	2	115	South Peds: 0
West Entering: 143	Cyclists	0	Cyclists	0	0	0	South Entering: 115
West Leg Total: 257	Totals	121	Totals	113	2		South Leg Total: 236

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 25-Oct-25

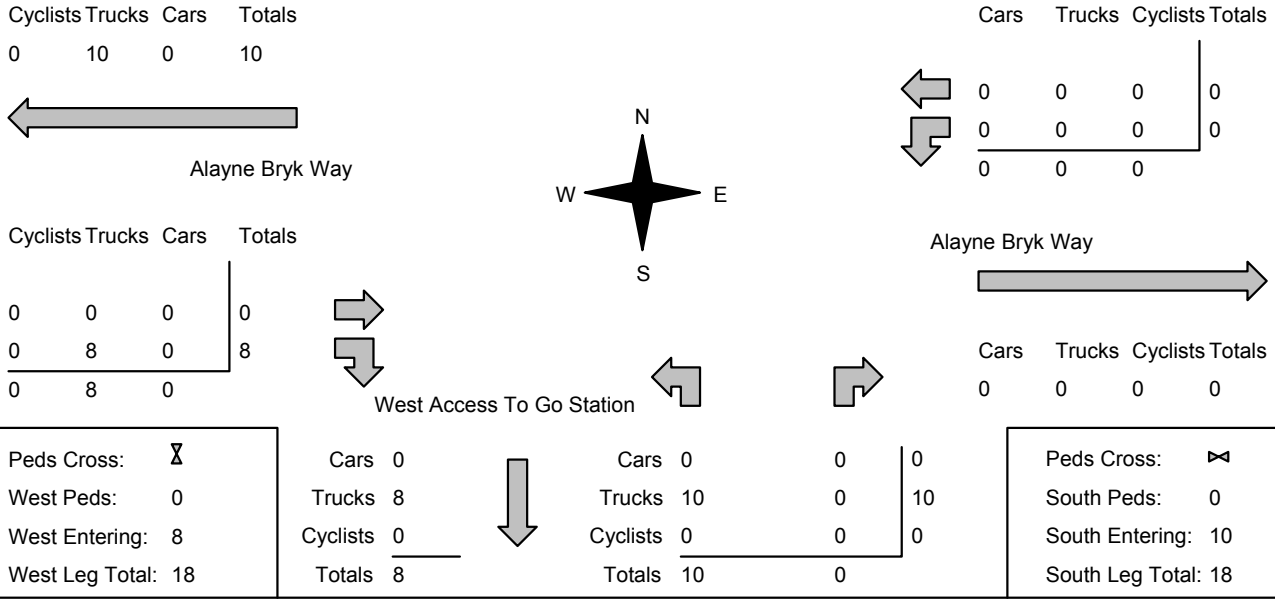
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

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



Peds Cross:
West Peds: 0
West Entering: 8
West Leg Total: 18

Cars 0
Trucks 8
Cyclists 0
Totals 8

Cars 0 0 0
Trucks 10 0 10
Cyclists 0 0 0
Totals 10 0

Peds Cross:
South Peds: 0
South Entering: 10
South Leg Total: 18

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600005
Intersection: Alayne Bryk Way & West Access T
TFR File #: 1
Count date: 25-Oct-25

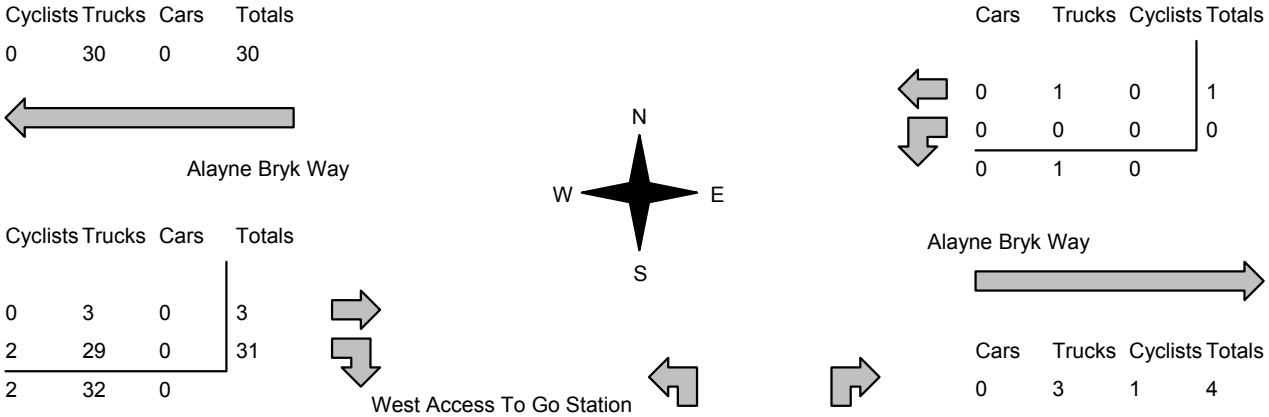
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 5
East Entering: 1
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 34
West Leg Total: 64

Cars 0
Trucks 29
Cyclists 2
Totals 31

Cars 0 0 0
Trucks 29 0 29
Cyclists 0 1 1
Totals 29 1

Peds Cross: ⋈
South Peds: 0
South Entering: 30
South Leg Total: 61

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 23-Oct-25

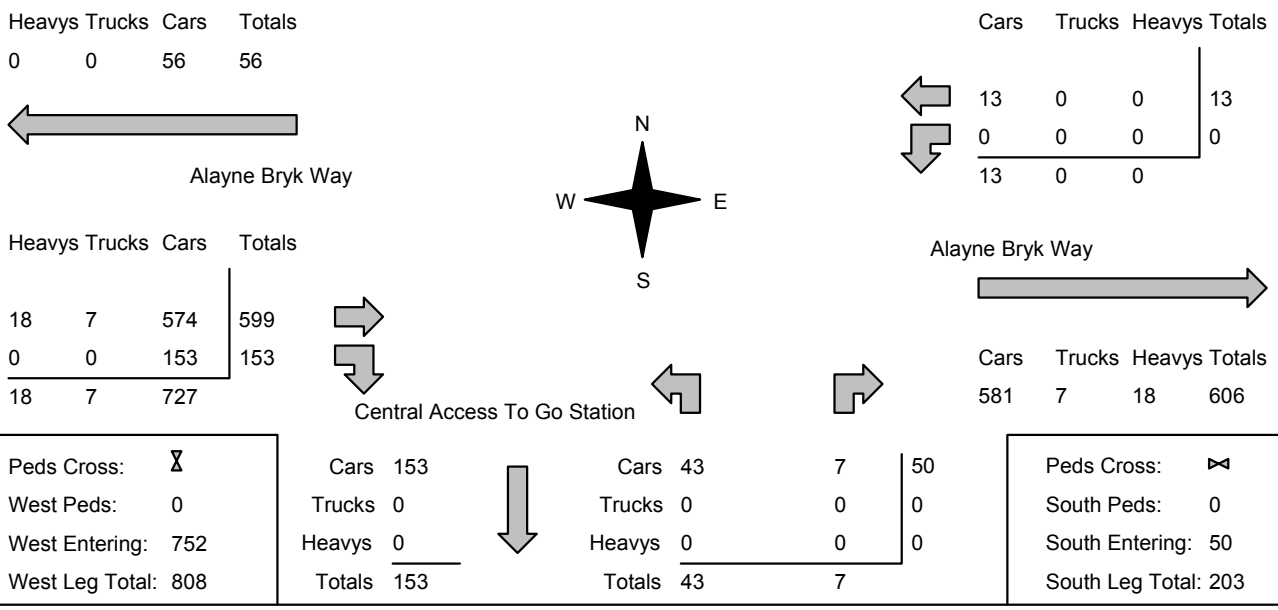
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 619
East Entering: 13
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 752
West Leg Total: 808

Cars 153
Trucks 0
Heavys 0
Totals 153

Cars 43 7 50
Trucks 0 0 0
Heavys 0 0 0
Totals 43 7

Peds Cross: ⋈
South Peds: 0
South Entering: 50
South Leg Total: 203

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 23-Oct-25

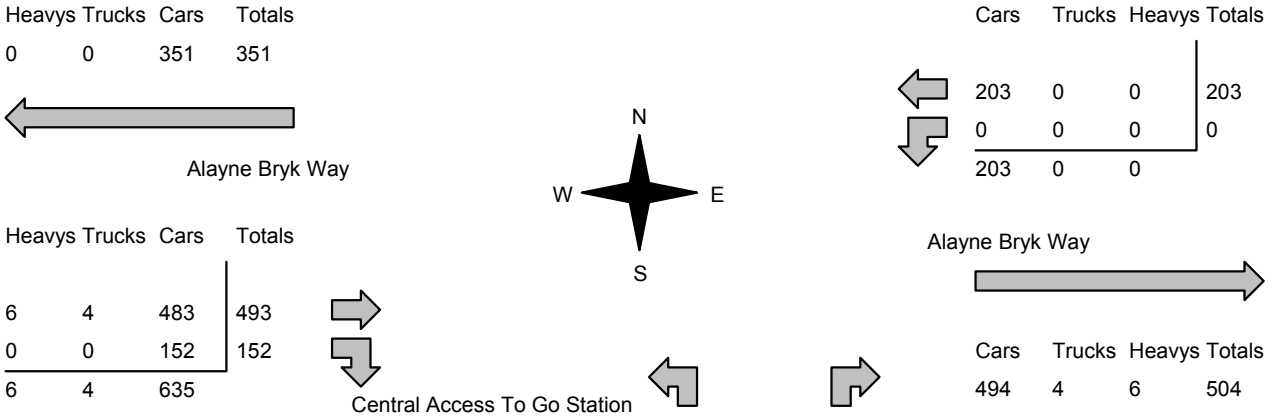
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 707
East Entering: 203
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 645
West Leg Total: 996

Cars 152
Trucks 0
Heavys 0
Totals 152

Cars 148 11 159
Trucks 0 0 0
Heavys 0 0 0
Totals 148 11

Peds Cross: ⋈
South Peds: 0
South Entering: 159
South Leg Total: 311

Comments

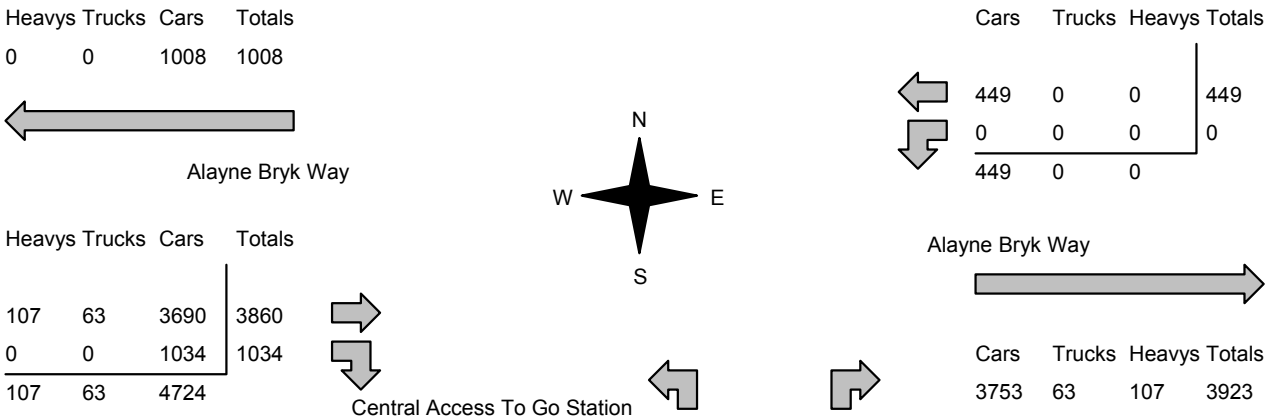
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600006 **Intersection:** Alayne Bryk Way & Central Access **TFR File #:** 1 **Count date:** 23-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Non-Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 4372
East Entering: 449
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 4894
West Leg Total: 5902

Cars 1034
Trucks 0
Heavys 0
Totals 1034

Cars 559 63 622
Trucks 0 0 0
Heavys 0 0 0
Totals 559 63

Peds Cross: ⋈
South Peds: 1
South Entering: 622
South Leg Total: 1656

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 25-Oct-25

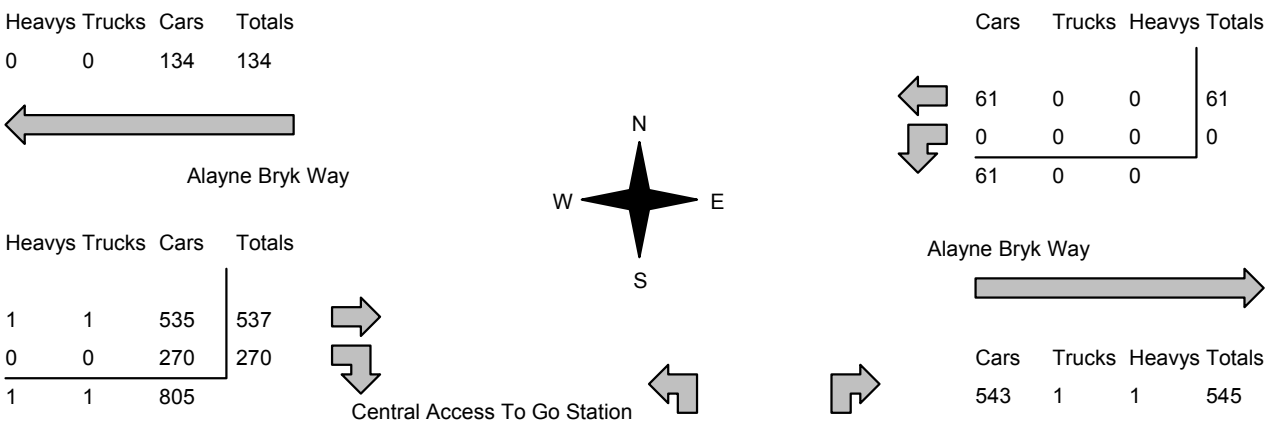
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 606
East Entering: 61
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 807
West Leg Total: 941

Cars 270
Trucks 0
Heavys 0
Totals 270

Cars 73 8 81
Trucks 0 0 0
Heavys 0 0 0
Totals 73 8

Peds Cross: ⋈
South Peds: 0
South Entering: 81
South Leg Total: 351

Comments

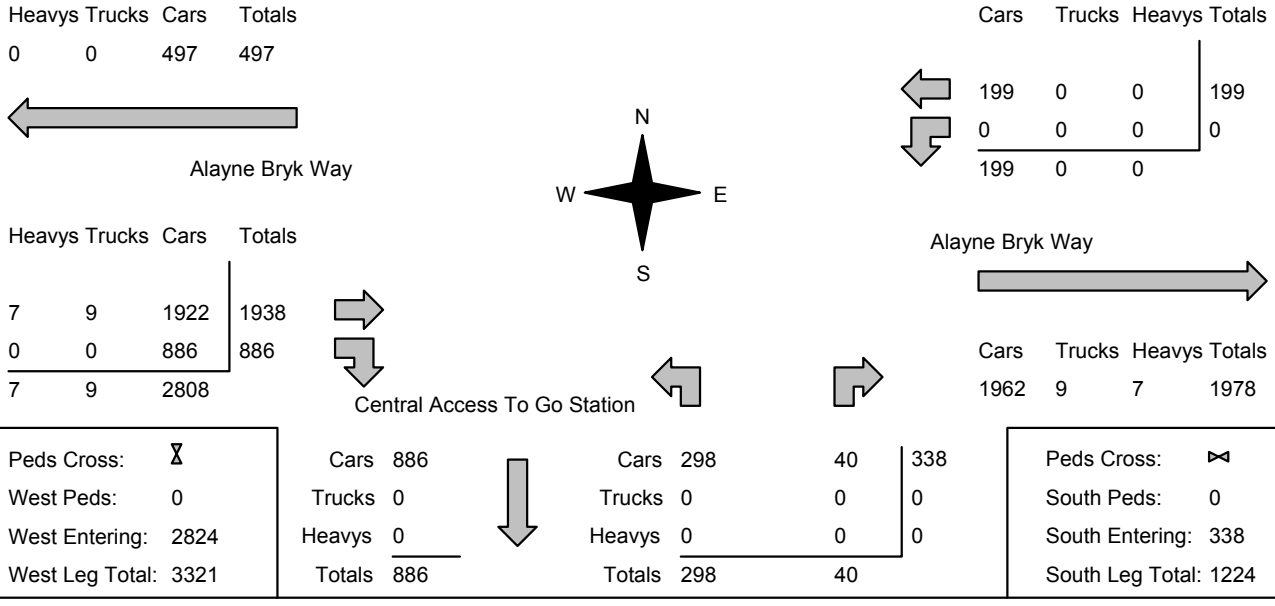
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600006 **Intersection:** Alayne Bryk Way & Central Access **TFR File #:** 1 **Count date:** 25-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Non-Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 2177
East Entering: 199
East Peds: 0
Peds Cross: ⧖



Peds Cross:	⧖		Cars	886		Cars	298	40	338
West Peds:	0		Trucks	0		Trucks	0	0	0
West Entering:	2824		Heavys	0		Heavys	0	0	0
West Leg Total:	3321		Totals	886		Totals	298	40	

Peds Cross: ⋈
South Peds: 0
South Entering: 338
South Leg Total: 1224

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 23-Oct-25

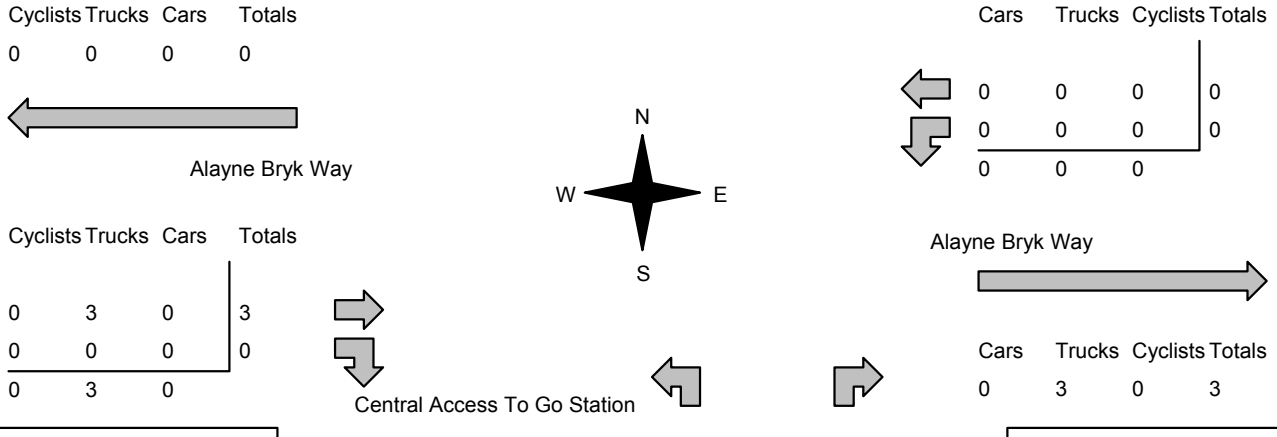
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 3
East Entering: 0
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 3
West Leg Total: 3

Cars 0
Trucks 0
Cyclists 0
Totals 0

Cars 0 0 0
Trucks 0 0 0
Cyclists 0 0 0
Totals 0 0

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

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 23-Oct-25

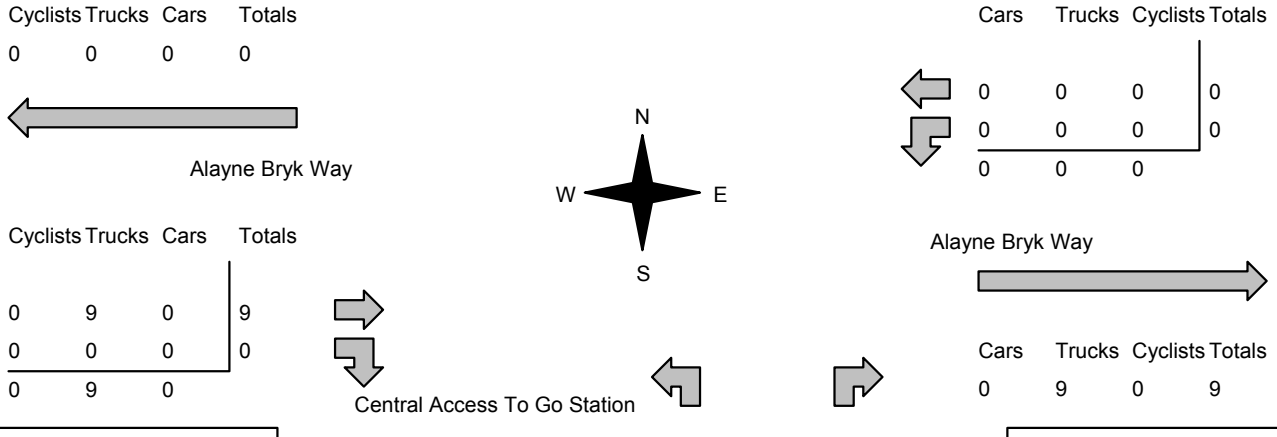
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

East Leg Total: 9
East Entering: 0
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 9
West Leg Total: 9

Cars 0
Trucks 0
Cyclists 0
Totals 0

Cars 0 0 0
Trucks 0 0 0
Cyclists 0 0 0
Totals 0 0

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

Comments

Trucks = Buses

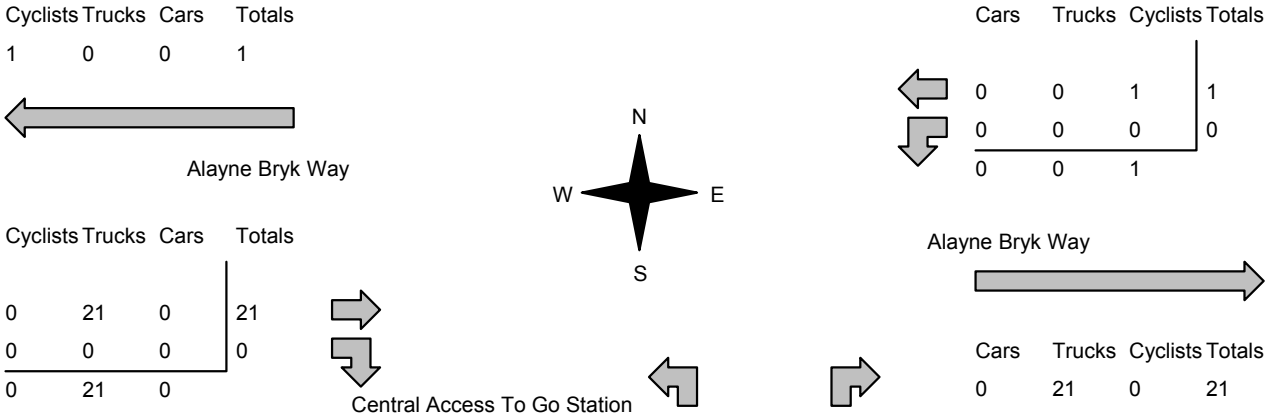
Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600006 **Intersection:** Alayne Bryk Way & Central Access **TFR File #:** 1 **Count date:** 23-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Non-Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

East Leg Total: 22
East Entering: 1
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖		Cars 0		Cars 0	0	0		Peds Cross: ⋈
West Peds: 0		Trucks 0		Trucks 0	0	0		South Peds: 0
West Entering: 21		Cyclists 0		Cyclists 0	0	0		South Entering: 0
West Leg Total: 22		Totals 0		Totals 0	0			South Leg Total: 0

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Burlington
Site #: 2516600006
Intersection: Alayne Bryk Way & Central Access
TFR File #: 1
Count date: 25-Oct-25

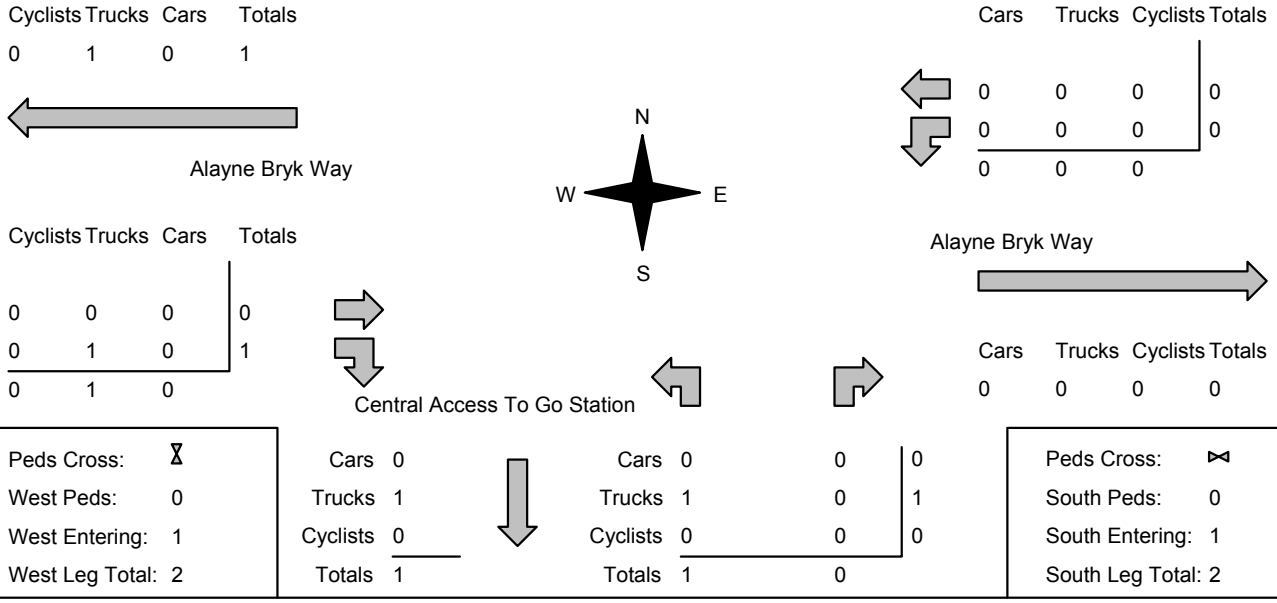
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E

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



Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 2

Cars 0
Trucks 1
Cyclists 0
Totals 1

Cars 0 0 0
Trucks 1 0 1
Cyclists 0 0 0
Totals 1 0

Peds Cross: ⋈
South Peds: 0
South Entering: 1
South Leg Total: 2

Comments

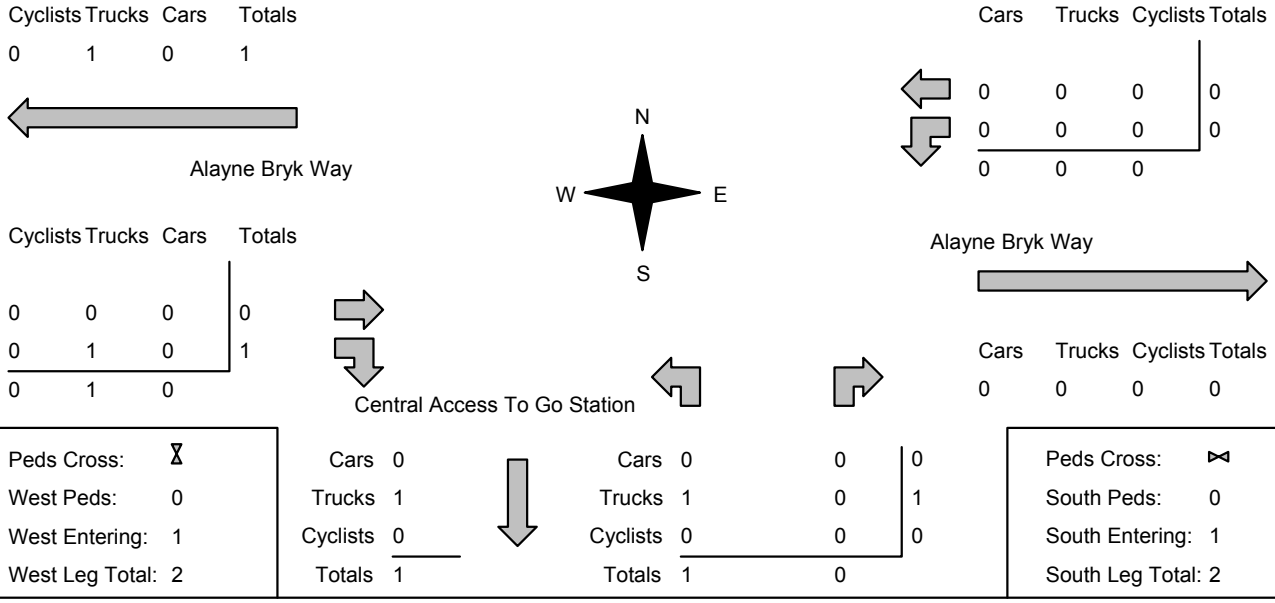
Trucks = Buses

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington **Site #:** 2516600006 **Intersection:** Alayne Bryk Way & Central Access **TFR File #:** 1 **Count date:** 25-Oct-25	**Weather conditions:** **Person counted:** **Person prepared:** **Person checked:**
**** Non-Signalized Intersection ****	**Major Road:** Alayne Bryk Way runs W/E

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



Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 2

Cars 0
Trucks 1
Cyclists 0
Totals 1

Cars 0 0 0
Trucks 1 0 1
Cyclists 0 0 0
Totals 1 0

Peds Cross: ⋈
South Peds: 0
South Entering: 1
South Leg Total: 2

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

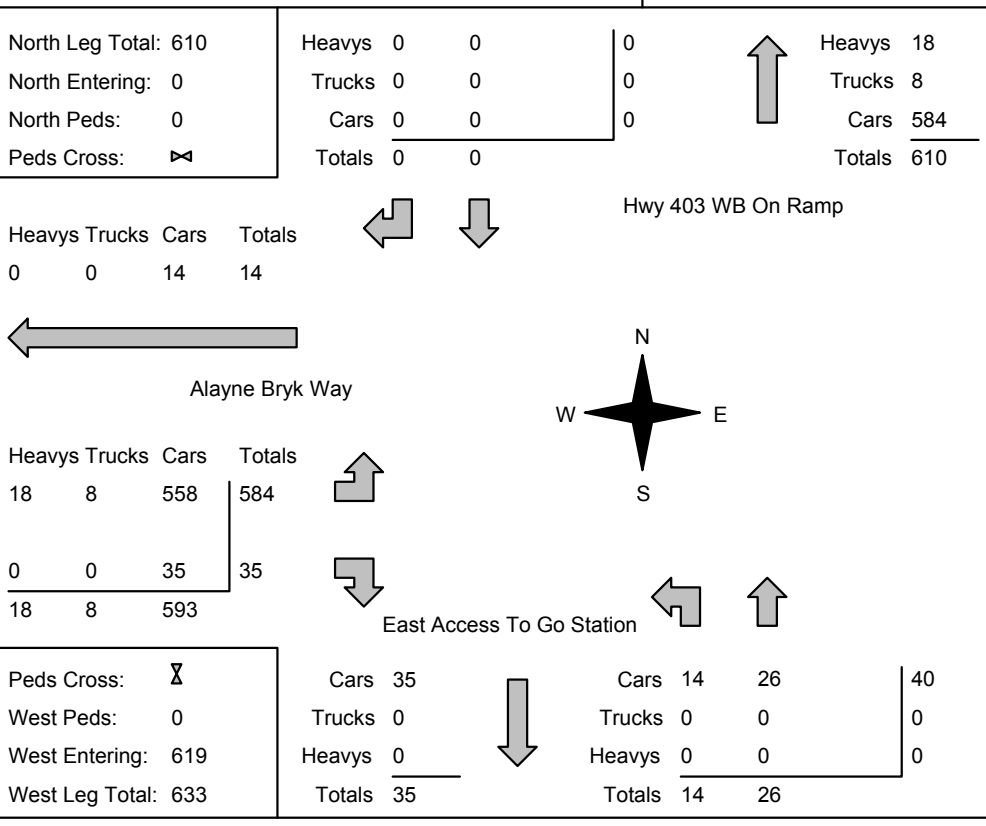
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

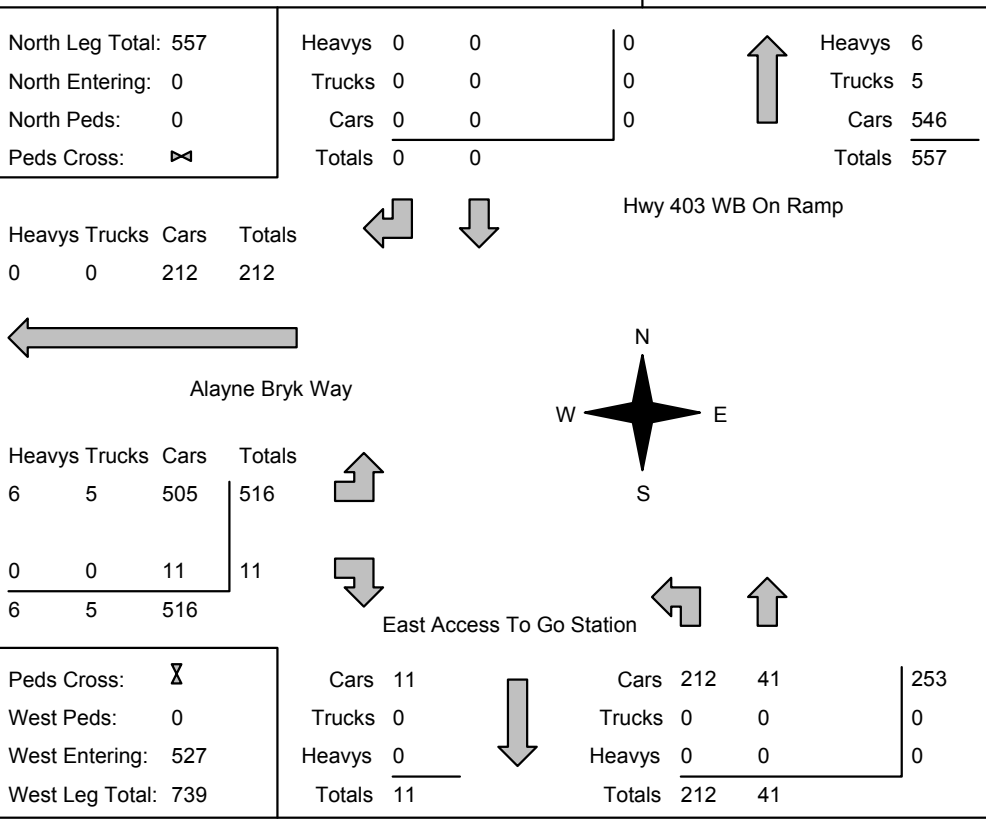
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

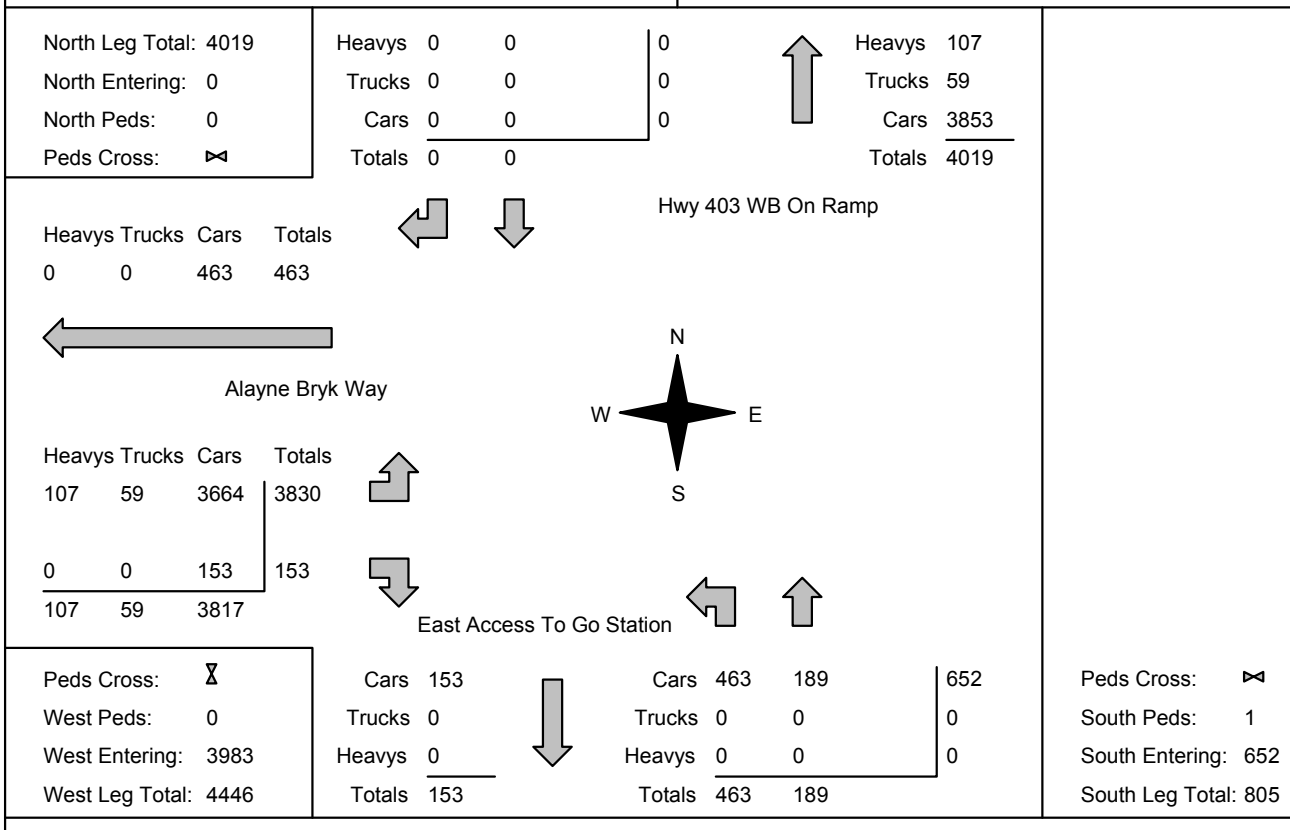
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

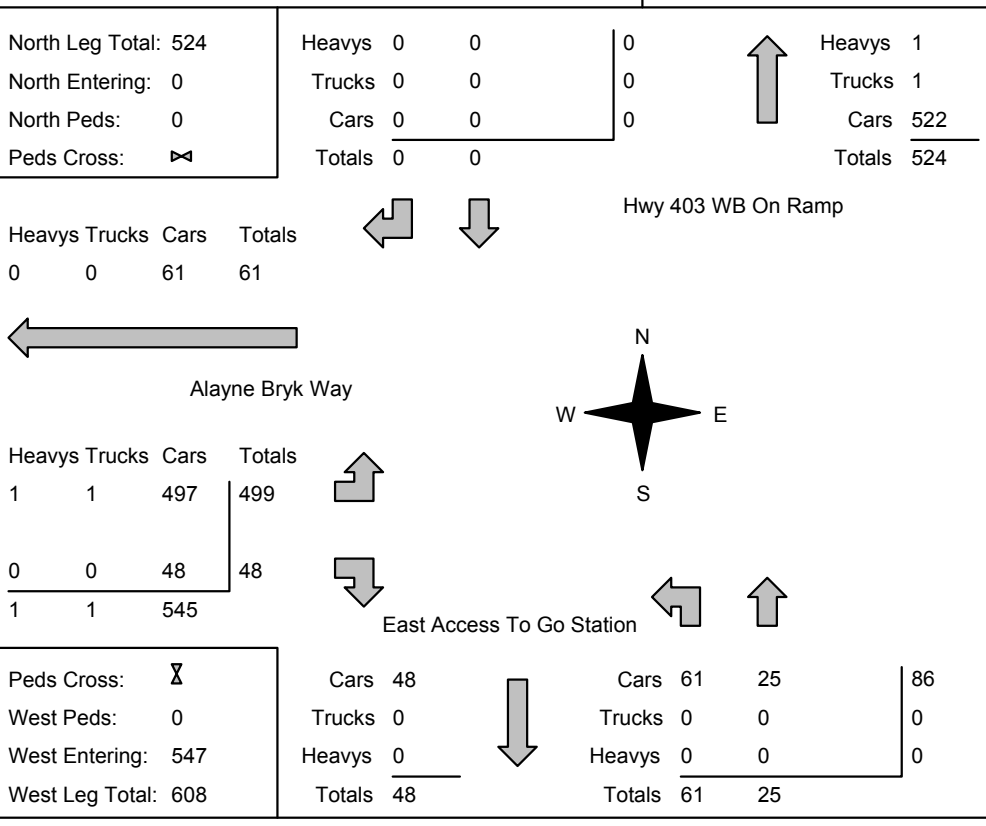
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

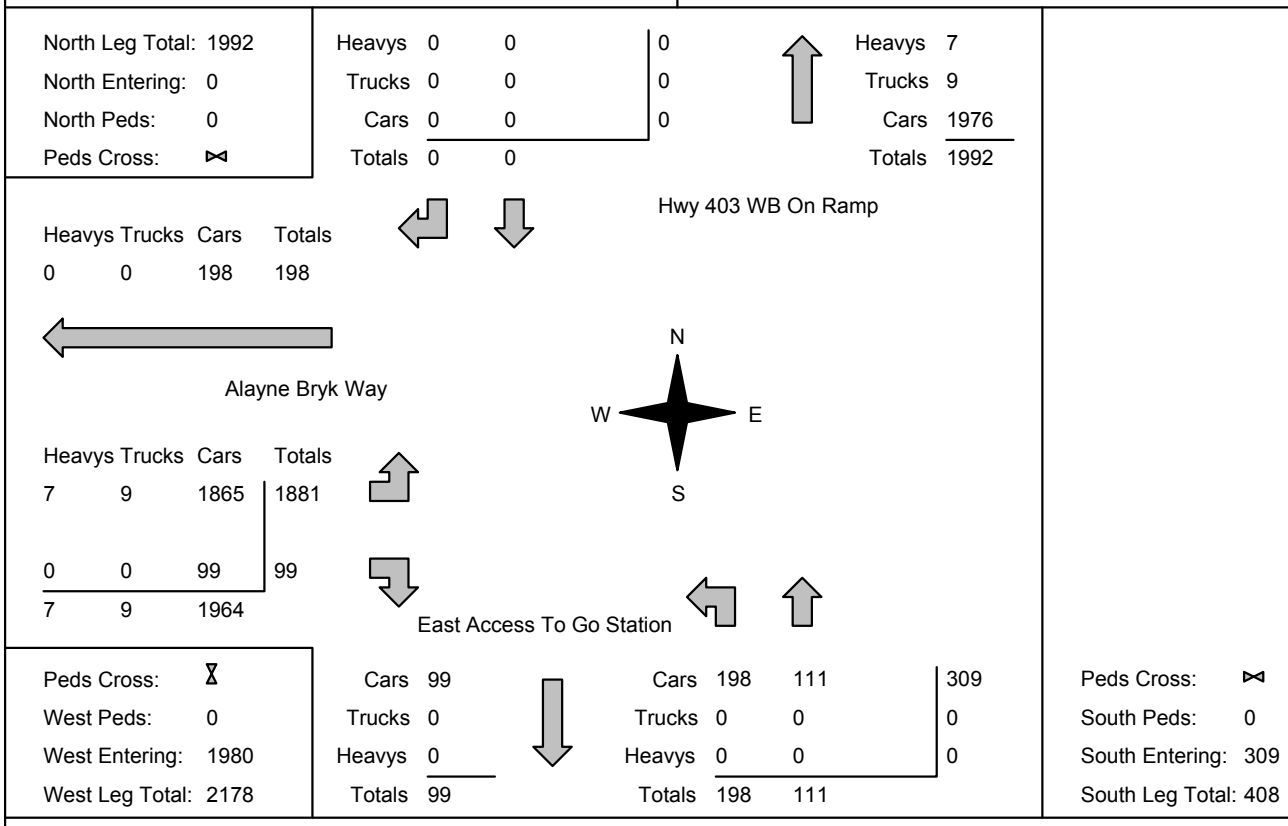
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

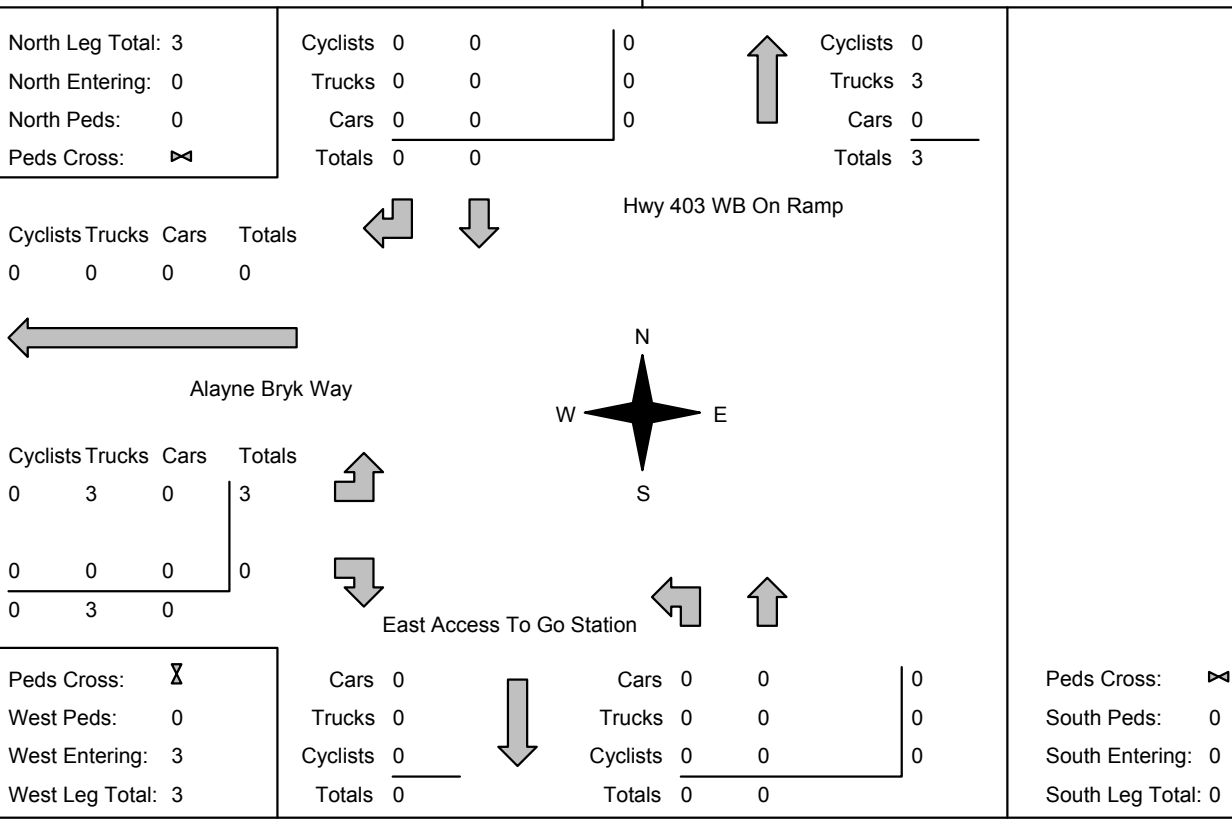
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

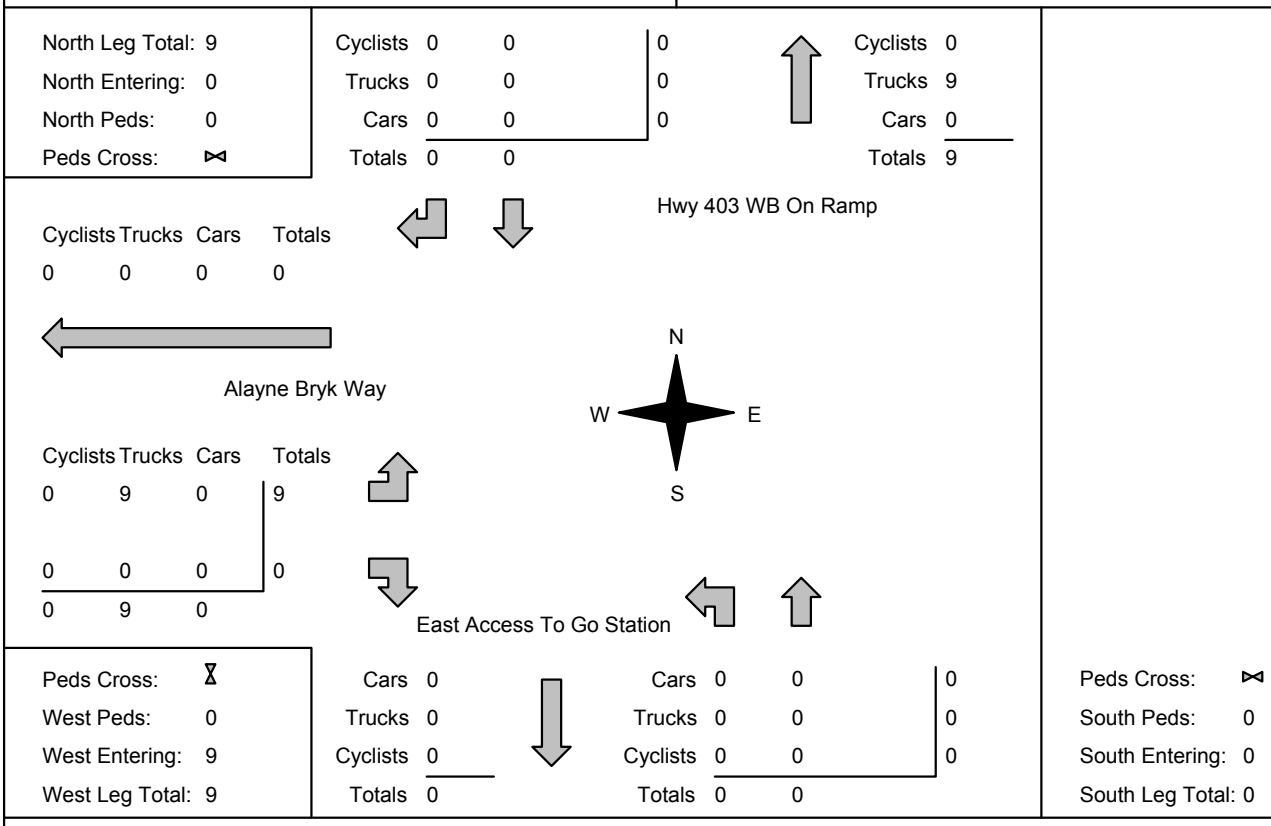
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

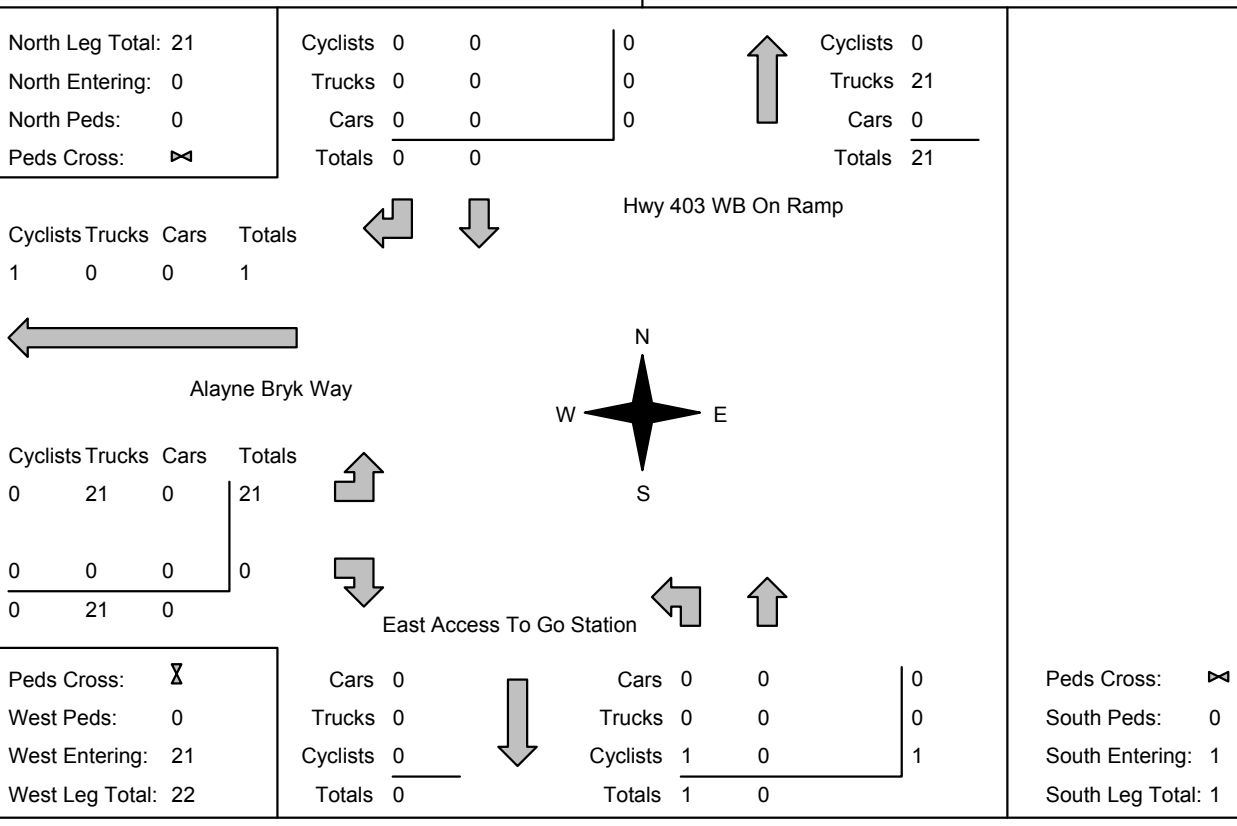
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 10:45:00
To: 11:45:00

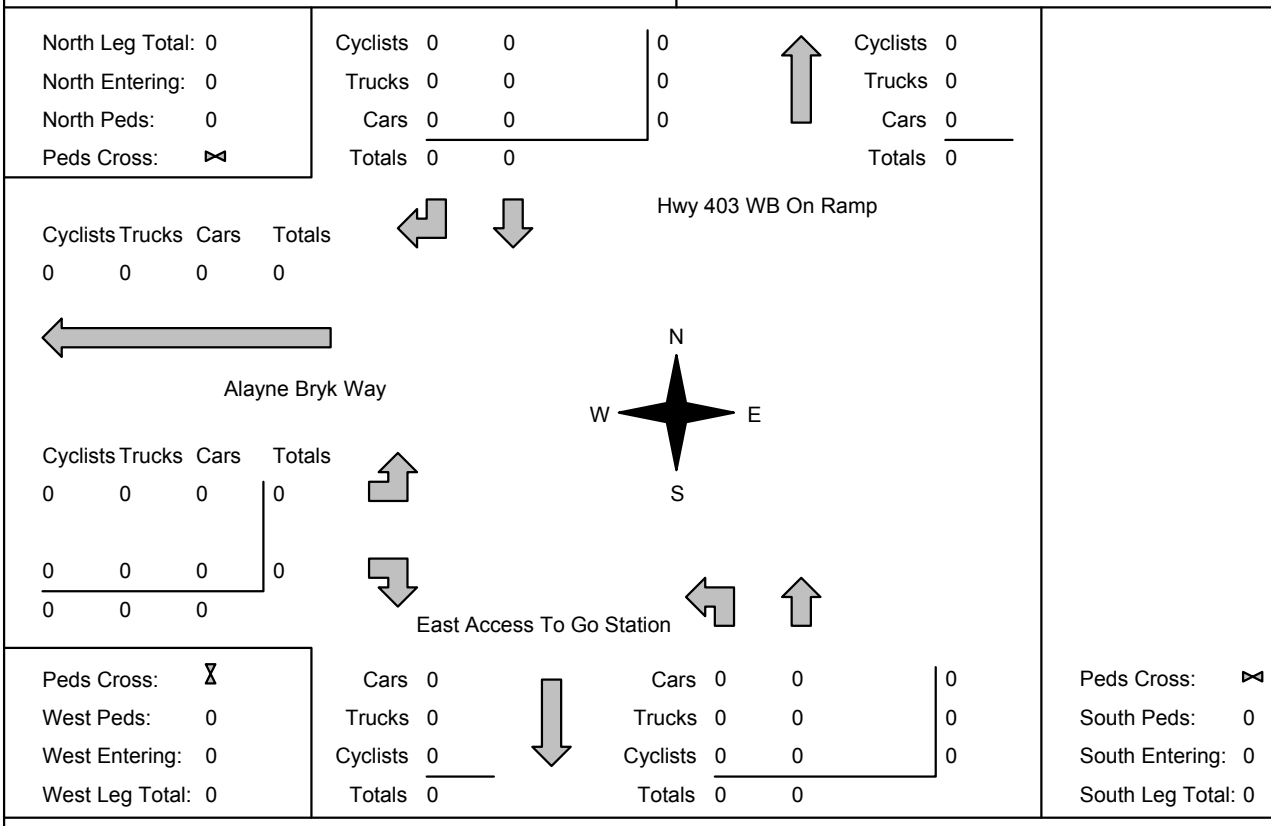
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

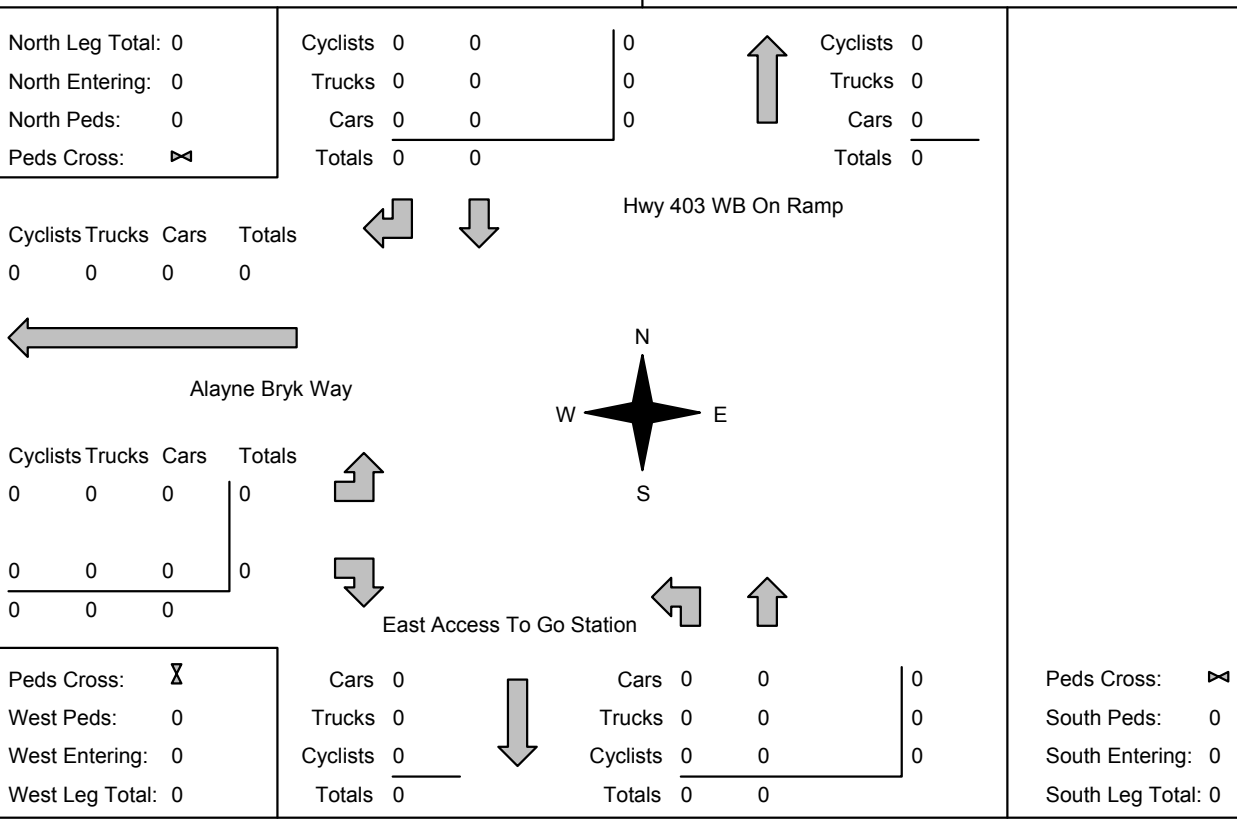
Municipality: Burlington
Site #: 2516600007
Intersection: Alayne Bryk Way & East Access To
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Alayne Bryk Way runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

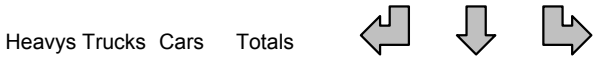
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E

North Leg Total:	339			
North Entering:	206			
North Peds:	0			
Peds Cross:	⋈			
Heavys	0	0	0	0
Trucks	0	0	1	1
Cars	28	111	66	205
Totals	28	111	67	
Heavys	1			
Trucks	2			
Cars	130			
Totals	133			
East Leg Total:	965			
East Entering:	392			
East Peds:	0			
Peds Cross:	⧖			

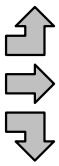


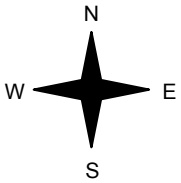
Heavys	Trucks	Cars	Totals
0	2	278	280



North Service Rd

Heavys	Trucks	Cars	Totals
0	0	23	23
8	4	240	252
2	0	70	72
10	4	333	



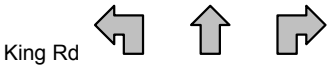


Cars	Trucks	Heavys	Totals
38	0	0	38
159	1	0	160
192	2	0	194
389	3	0	

North Service Rd



Cars	Trucks	Heavys	Totals
557	8	8	573



Peds Cross:	⧖			
West Peds:	1			
West Entering:	347			
West Leg Total:	627			
Cars	373			
Trucks	2			
Heavys	2			
Totals	377			
Cars	91	69	251	411
Trucks	1	2	3	6
Heavys	0	1	0	1
Totals	92	72	254	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	418			
South Leg Total:	795			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E

North Leg Total:	469
North Entering:	244
North Peds:	0
Peds Cross:	⋈

Heavys	0	0	0	0
Trucks	0	0	1	1
Cars	19	168	56	243
Totals	19	168	57	

Heavys	0
Trucks	1
Cars	224
Totals	225

East Leg Total:	1650
East Entering:	1088
East Peds:	0
Peds Cross:	⧖

King Rd

Heavys	Trucks	Cars	Totals
1	2	647	650

Cars	Trucks	Heavys	Totals
67	1	0	68
578	2	1	581
438	0	1	439
1083	3	2	

North Service Rd

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Heavys	Trucks	Cars	Totals
0	0	14	14
1	3	263	267
1	0	91	92
2	3	368	

North Service Rd

Cars	Trucks	Heavys	Totals
556	5	1	562

King Rd

Peds Cross:	⧖
West Peds:	0
West Entering:	373
West Leg Total:	1023

Cars	697
Trucks	0
Heavys	2
Totals	699

Cars	50	143	237	430
Trucks	0	0	1	1
Heavys	0	0	0	0
Totals	50	143	238	

Peds Cross:	⋈
South Peds:	0
South Entering:	431
South Leg Total:	1130

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

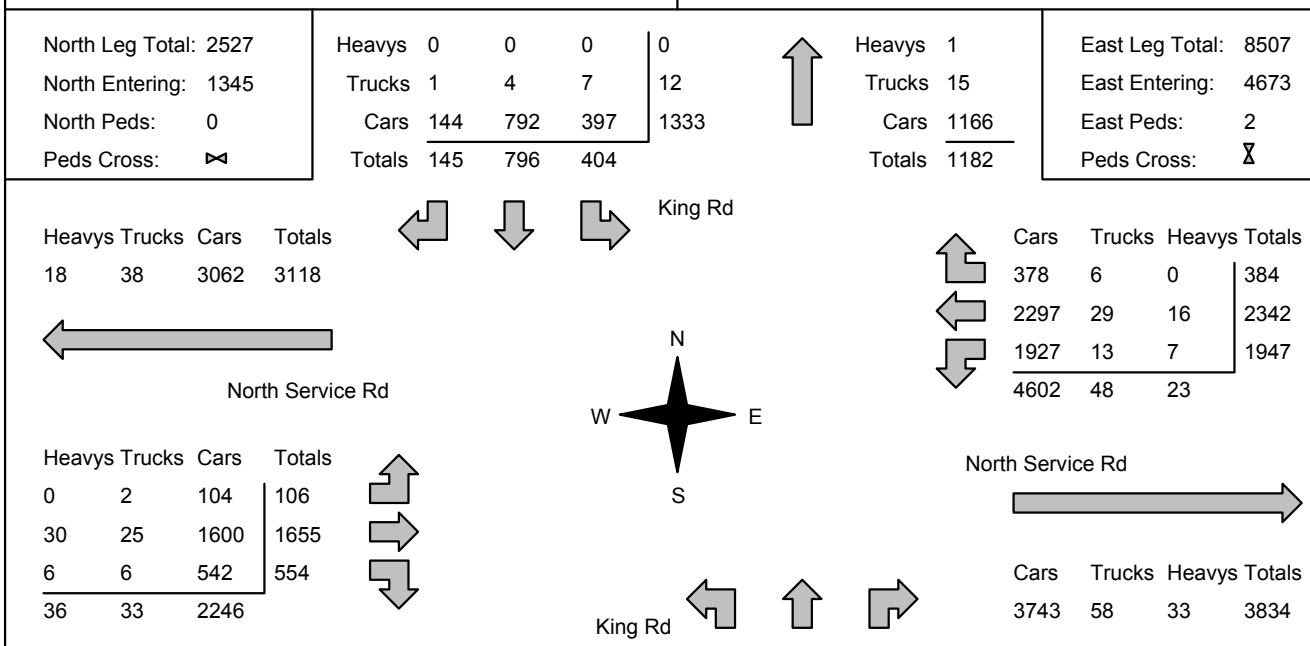
Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

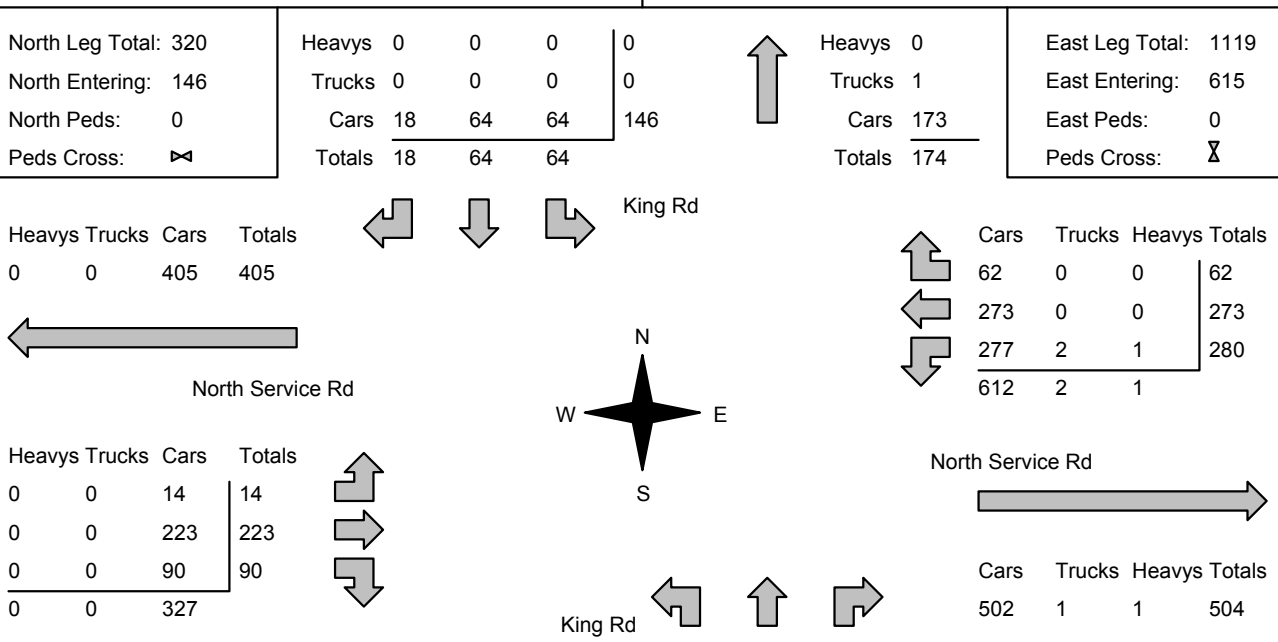
Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

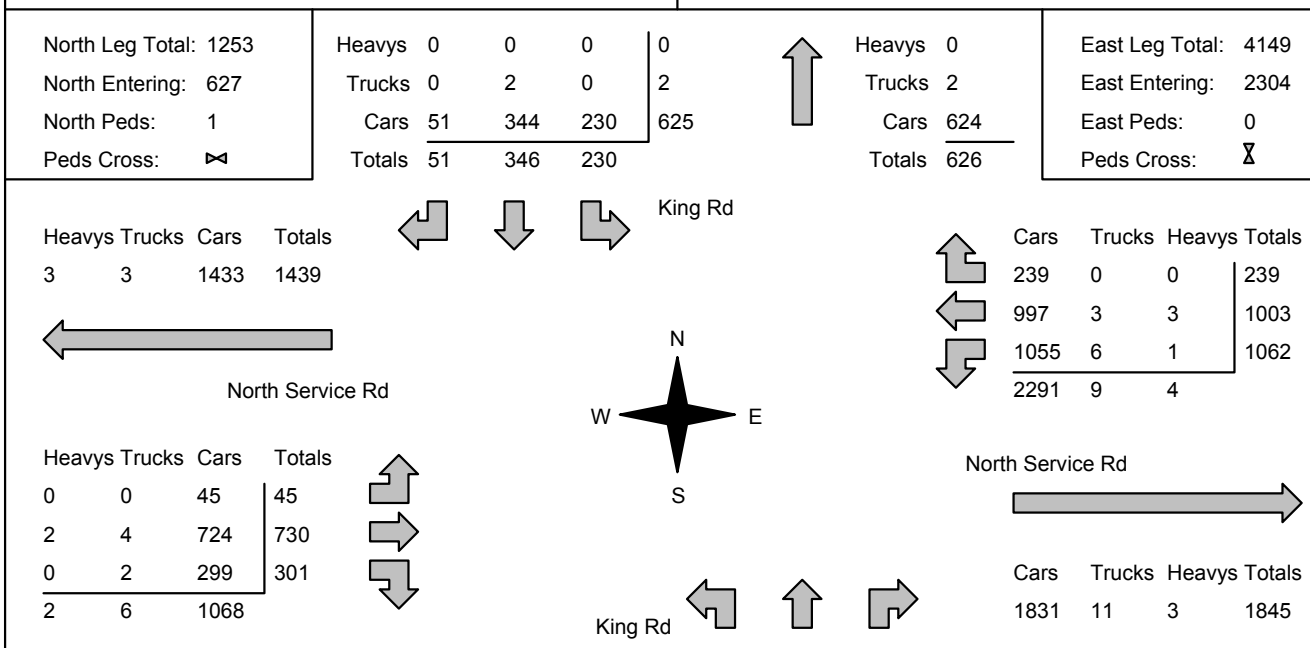
Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E

North Leg Total: 1
North Entering: 0
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	0	0	0
Cars	0	0	0	0
Totals	0	0	0	

Cyclists	0
Trucks	1
Cars	0
Totals	1

East Leg Total: 21
East Entering: 14
East Peds: 0
Peds Cross: ⧖

King Rd

Cyclists	Trucks	Cars	Totals
1	7	0	8

North Service Rd

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	7	1	8
0	4	2	6
0	11	3	

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Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	1	0	1
0	1	0	

North Service Rd

Cars	Trucks	Cyclists	Totals
0	7	0	7

King Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 9

Cars	0
Trucks	5
Cyclists	2
Totals	7

Cars	0	0	0	0
Trucks	0	1	7	8
Cyclists	0	0	0	0
Totals	0	1	7	

Peds Cross: ⋈
South Peds: 0
South Entering: 8
South Leg Total: 15

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E

North Leg Total:	3			
North Entering:	2			
North Peds:	0			
Peds Cross:	⋈			

Cyclists	0	0	0	0
Trucks	0	2	0	2
Cars	0	0	0	0
Totals	0	2	0	

Cyclists	0
Trucks	1
Cars	0
Totals	1

East Leg Total:	13
East Entering:	11
East Peds:	0
Peds Cross:	⧖

King Rd

Cyclists	Trucks	Cars	Totals
2	6	0	8

North Service Rd

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	4	1	5
0	6	0	6
0	10	1	

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Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

North Service Rd

Cars	Trucks	Cyclists	Totals
0	2	0	2

King Rd

Peds Cross:	⧖		
West Peds:	0		
West Entering:	0		
West Leg Total:	8		

Cars	0			
Trucks	8			
Cyclists	0			
Totals	8			

Cars	0	0	0	0
Trucks	2	1	2	5
Cyclists	1	0	0	1
Totals	3	1	2	

Peds Cross:	⋈		
South Peds:	0		
South Entering:	6		
South Leg Total:	14		

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

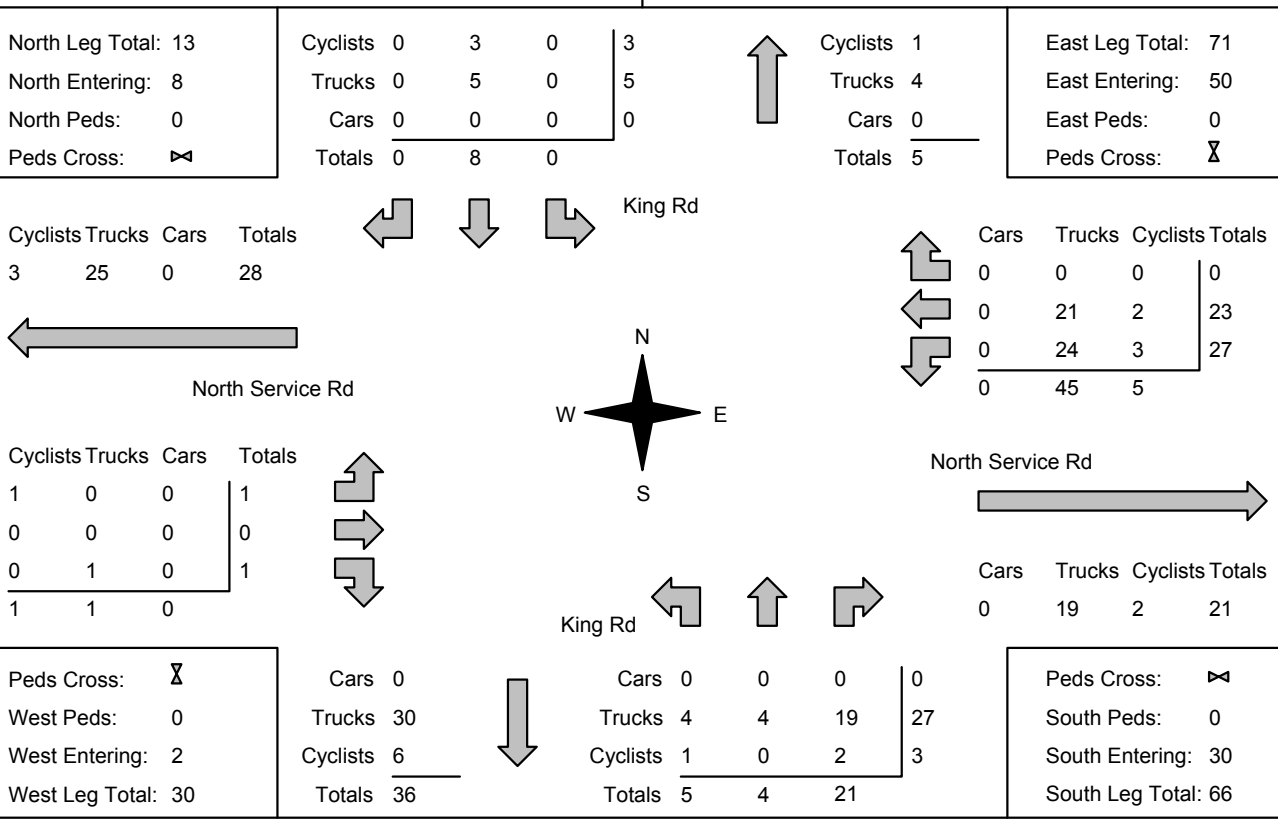
Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

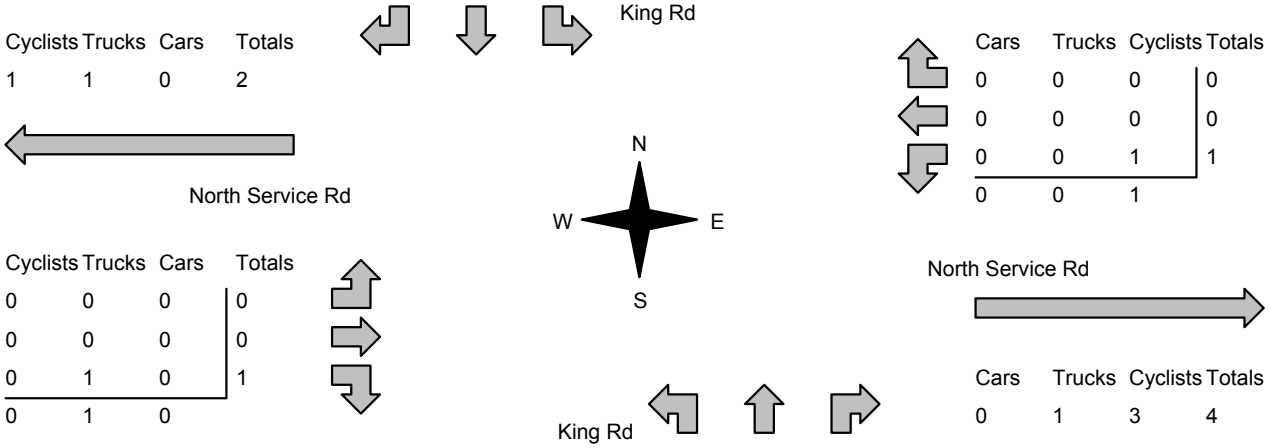
Major Road: North Service Rd runs W/E

North Leg Total: 5
North Entering: 3
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	2	3
Trucks	0	0	0	0
Cars	0	0	0	0
Totals	0	1	2	

Cyclists	2
Trucks	0
Cars	0
Totals	2

East Leg Total: 5
East Entering: 1
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 3

Cars	0			
Trucks	1			
Cyclists	2			
Totals	3			

Cars	0	0	0	0
Trucks	1	0	1	2
Cyclists	1	2	1	4
Totals	2	2	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 6
South Leg Total: 9

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

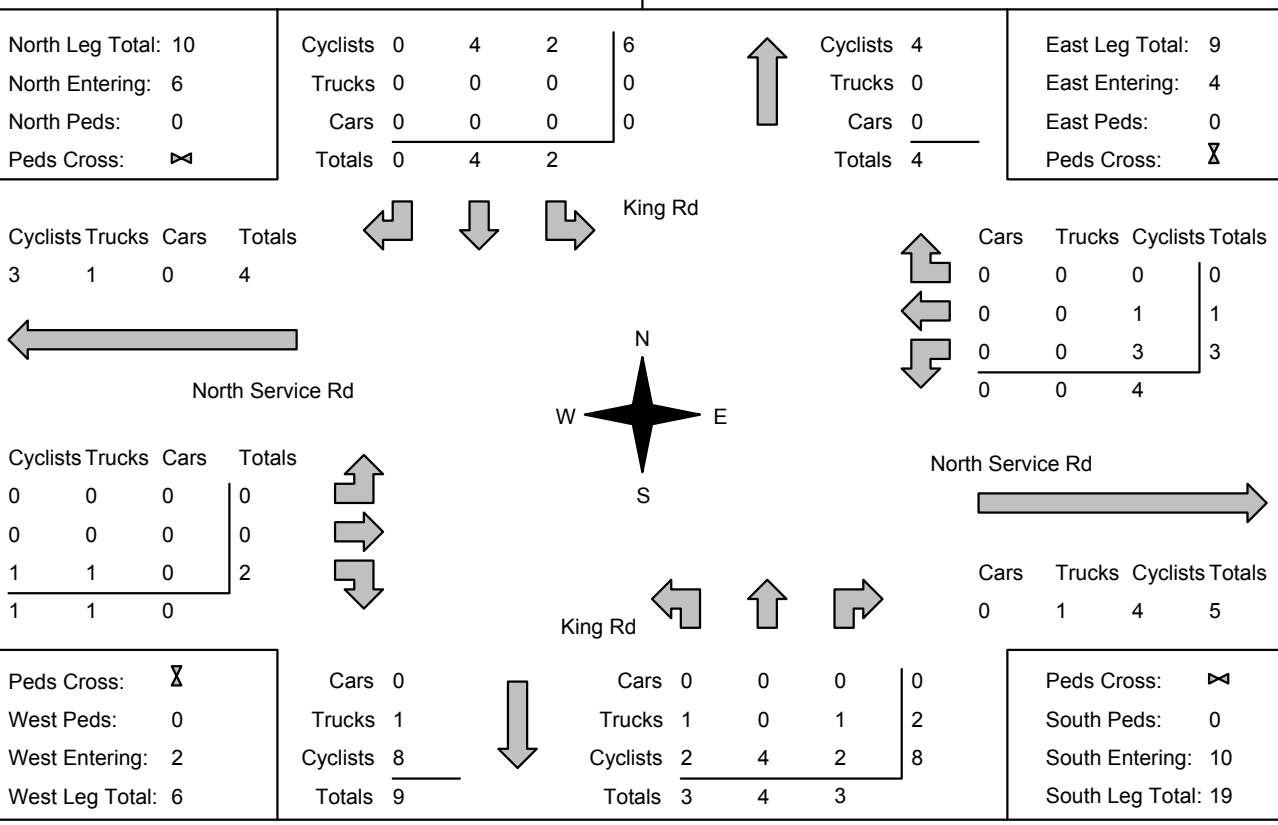
Municipality: Burlington
Site #: 2516600008
Intersection: North Service Rd & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: North Service Rd runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

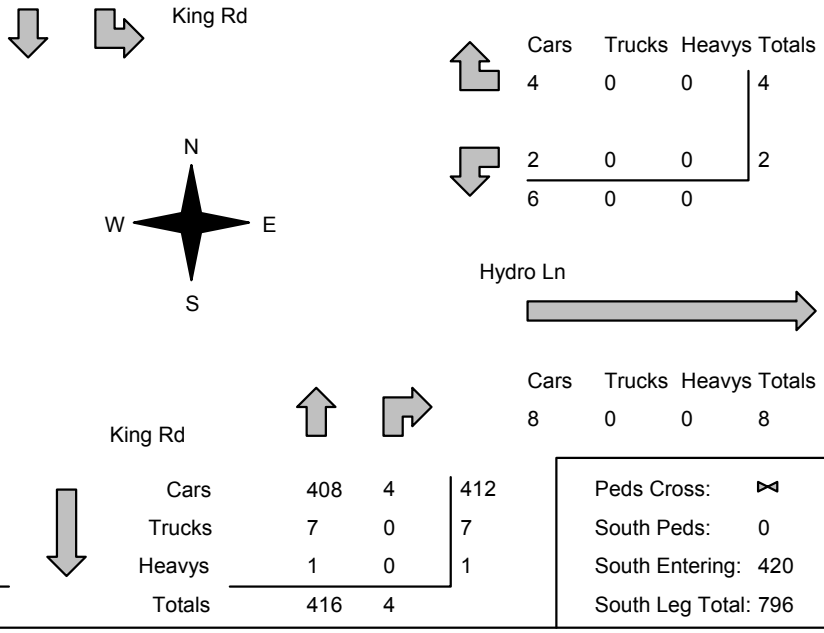
Major Road: King Rd runs N/S

North Leg Total: 798
North Entering: 378
North Peds: 0
Peds Cross: ⋈

Heavys	2	0	2
Trucks	3	0	3
Cars	369	4	373
Totals	374	4	

Heavys	1
Trucks	7
Cars	412
Totals	420

East Leg Total: 14
East Entering: 6
East Peds: 1
Peds Cross: ⋈



Cars	371		
Trucks	3		
Heavys	2		
Totals	376		

Cars	408	4	412
Trucks	7	0	7
Heavys	1	0	1
Totals	416	4	

Peds Cross: ⋈
South Peds: 0
South Entering: 420
South Leg Total: 796

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

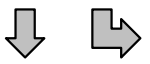
Major Road: King Rd runs N/S

North Leg Total: 1111
North Entering: 695
North Peds: 0
Peds Cross: ⋈

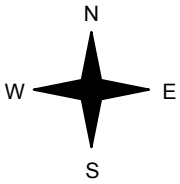
Heavys	1	0	1
Trucks	1	0	1
Cars	693	0	693
Totals	695	0	

Heavys	0
Trucks	1
Cars	415
Totals	416

East Leg Total: 19
East Entering: 16
East Peds: 1
Peds Cross: ⋈



	Cars	Trucks	Heavys	Totals
	5	0	0	5
	11	0	0	11
	16	0	0	





	Cars	Trucks	Heavys	Totals
	3	0	0	3



Cars	704		
Trucks	1		
Heavys	1		
Totals	706		

Cars	410	3	413
Trucks	1	0	1
Heavys	0	0	0
Totals	411	3	

Peds Cross: ⋈
South Peds: 0
South Entering: 414
South Leg Total: 1120

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

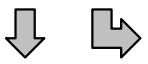
Major Road: King Rd runs N/S

North Leg Total: 6384
North Entering: 3289
North Peds: 0
Peds Cross: ⋈

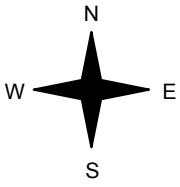
Heavys	10	0	10
Trucks	29	0	29
Cars	3213	37	3250
Totals	3252	37	

Heavys	5	
Trucks	33	
Cars	3057	
Totals	3095	

East Leg Total: 179
East Entering: 105
East Peds: 8
Peds Cross: ⋈



Cars	Trucks	Heavys	Totals
47	1	0	48
55	1	1	57
102	2	1	





Cars	Trucks	Heavys	Totals
73	1	0	74



Cars	3268		
Trucks	30		
Heavys	11		
Totals	3309		

Cars	3010	36	3046
Trucks	32	1	33
Heavys	5	0	5
Totals	3047	37	

Peds Cross: ⋈
South Peds: 0
South Entering: 3084
South Leg Total: 6393

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:45:00
To: 13:45:00

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

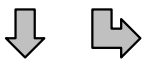
Major Road: King Rd runs N/S

North Leg Total: 888
North Entering: 463
North Peds: 0
Peds Cross: ⋈

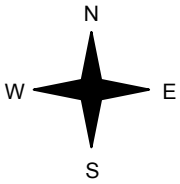
Heavys	0	0	0
Trucks	3	0	3
Cars	458	2	460
Totals	461	2	

Heavys	0
Trucks	2
Cars	423
Totals	425

East Leg Total: 6
East Entering: 2
East Peds: 1
Peds Cross: ⋈

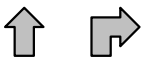


	Cars	Trucks	Heavys	Totals
	0	0	0	0
	2	0	0	2
	2	0	0	





	Cars	Trucks	Heavys	Totals
	4	0	0	4



Cars	460		
Trucks	3		
Heavys	0		
Totals	463		

Cars	423	2	425
Trucks	2	0	2
Heavys	0	0	0
Totals	425	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 427
South Leg Total: 890

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: King Rd runs N/S

North Leg Total: 3326
North Entering: 1709
North Peds: 1
Peds Cross: ⋈

Heavys	1	0	1
Trucks	10	0	10
Cars	1692	6	1698
Totals	1703	6	

Heavys	1
Trucks	8
Cars	1608
Totals	1617

East Leg Total: 20
East Entering: 11
East Peds: 3
Peds Cross: ⋈

King Rd

Cars	Trucks	Heavys	Totals
5	0	0	5
6	0	0	6
11	0	0	

N
W E
S

Hydro Ln

Cars	Trucks	Heavys	Totals
9	0	0	9

King Rd

Cars	1698
Trucks	10
Heavys	1
Totals	1709

Cars	1603	3	1606
Trucks	8	0	8
Heavys	1	0	1
Totals	1612	3	

Peds Cross: ⋈
South Peds: 0
South Entering: 1615
South Leg Total: 3324

Comments

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: King Rd runs N/S

North Leg Total: 12
North Entering: 4
North Peds: 0
Peds Cross: ⋈

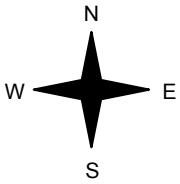
Cyclists	0	0	0
Trucks	4	0	4
Cars	0	0	0
Totals	4	0	

Cyclists	1
Trucks	7
Cars	0
Totals	8

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



	Cars	Trucks	Cyclists	Totals
	0	0	0	0
	0	0	0	0
	0	0	0	





Cars	Trucks	Cyclists	Totals
0	0	0	0



Cars	0	0	0
Trucks	7	0	7
Cyclists	1	0	1
Totals	8	0	

Cars	0
Trucks	4
Cyclists	0
Totals	4

Peds Cross: ⋈
South Peds: 0
South Entering: 8
South Leg Total: 12

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:45:00
To: 16:45:00

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: King Rd runs N/S

North Leg Total: 14
North Entering: 6
North Peds: 0
Peds Cross: ⋈

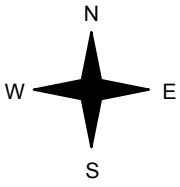
Cyclists	0	0	0
Trucks	6	0	6
Cars	0	0	0
Totals	6	0	

Cyclists	1
Trucks	7
Cars	0
Totals	8

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



	Cars	Trucks	Cyclists	Totals
	0	0	0	0
	0	0	0	0
	0	0	0	





	Cars	Trucks	Cyclists	Totals
	0	0	0	0



Cars	0
Trucks	6
Cyclists	0
Totals	6

Cars	0	0	0
Trucks	7	0	7
Cyclists	1	0	1
Totals	8	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 8
South Leg Total: 14

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: King Rd runs N/S

North Leg Total: 64
North Entering: 35
North Peds: 0
Peds Cross: ⋈

Cyclists	5	0	5
Trucks	30	0	30
Cars	0	0	0
Totals	35	0	

Cyclists	5
Trucks	24
Cars	0
Totals	29

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

King Rd

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

Hydro Ln

Cars	Trucks	Cyclists	Totals
0	0	0	0

King Rd

Cars	0
Trucks	30
Cyclists	5
Totals	35

Cars	0	0	0
Trucks	24	0	24
Cyclists	5	0	5
Totals	29	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 29
South Leg Total: 64

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:45:00
To: 14:45:00

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

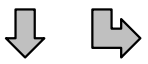
Major Road: King Rd runs N/S

North Leg Total: 8
North Entering: 3
North Peds: 0
Peds Cross: ⋈

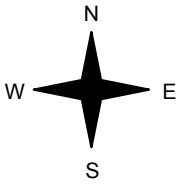
Cyclists	2	0	2
Trucks	1	0	1
Cars	0	0	0
Totals	3	0	

Cyclists	4
Trucks	1
Cars	0
Totals	5

East Leg Total: 1
East Entering: 1
East Peds: 0
Peds Cross: ⋈



	Cars	Trucks	Cyclists	Totals
	0	0	0	0
	0	0	1	1
	0	0	1	





	Cars	Trucks	Cyclists	Totals
	0	0	0	0



Cars	0
Trucks	1
Cyclists	3
Totals	4

Cars	0	0	0
Trucks	1	0	1
Cyclists	4	0	4
Totals	5	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 5
South Leg Total: 9

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600009
Intersection: King Rd & Hydro Ln
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: King Rd runs N/S

North Leg Total: 20
North Entering: 9
North Peds: 0
Peds Cross: ⋈

Cyclists	8	0	8
Trucks	1	0	1
Cars	0	0	0
Totals	9	0	

Cyclists	9
Trucks	2
Cars	0
Totals	11

East Leg Total: 3
East Entering: 2
East Peds: 0
Peds Cross: ⋈



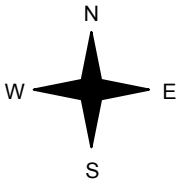
King Rd



Cars	Trucks	Cyclists	Totals
0	0	1	1



0	0	1	1
0	0	2	



Hydro Ln



Cars	Trucks	Cyclists	Totals
0	0	1	1

King Rd



Cars	0
Trucks	1
Cyclists	9
Totals	10



Cars	0	0	0
Trucks	2	0	2
Cyclists	8	1	9
Totals	10	1	

Peds Cross: ⋈
South Peds: 0
South Entering: 11
South Leg Total: 21

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 8:15:00
To: 9:15:00

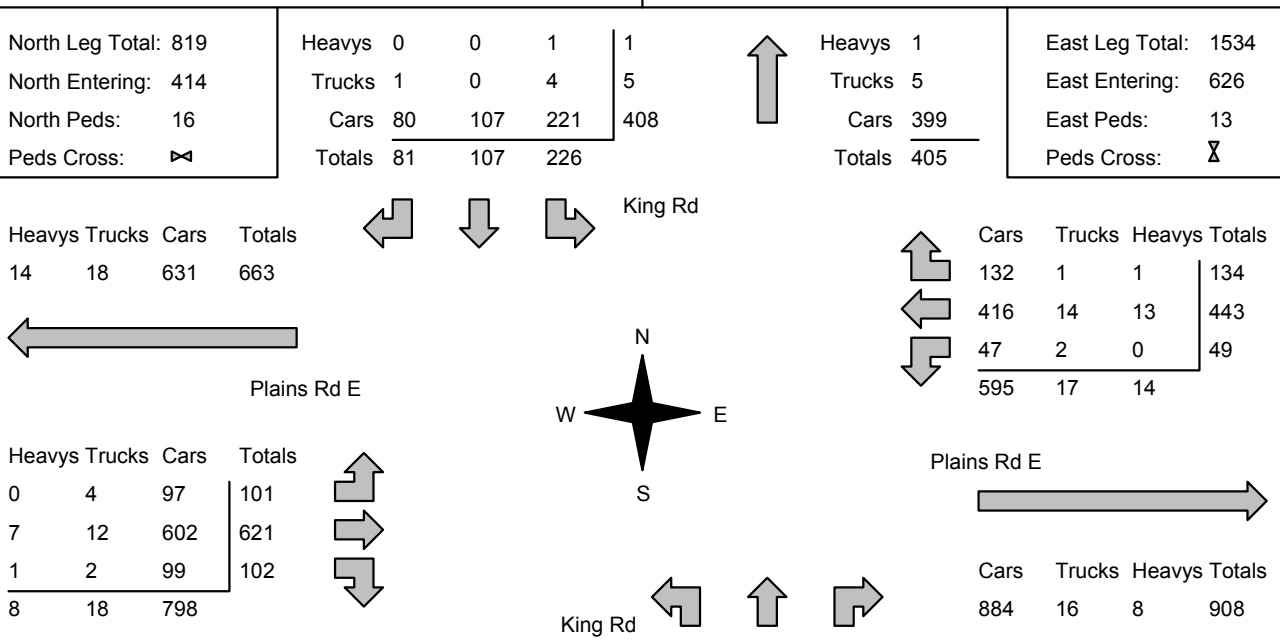
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

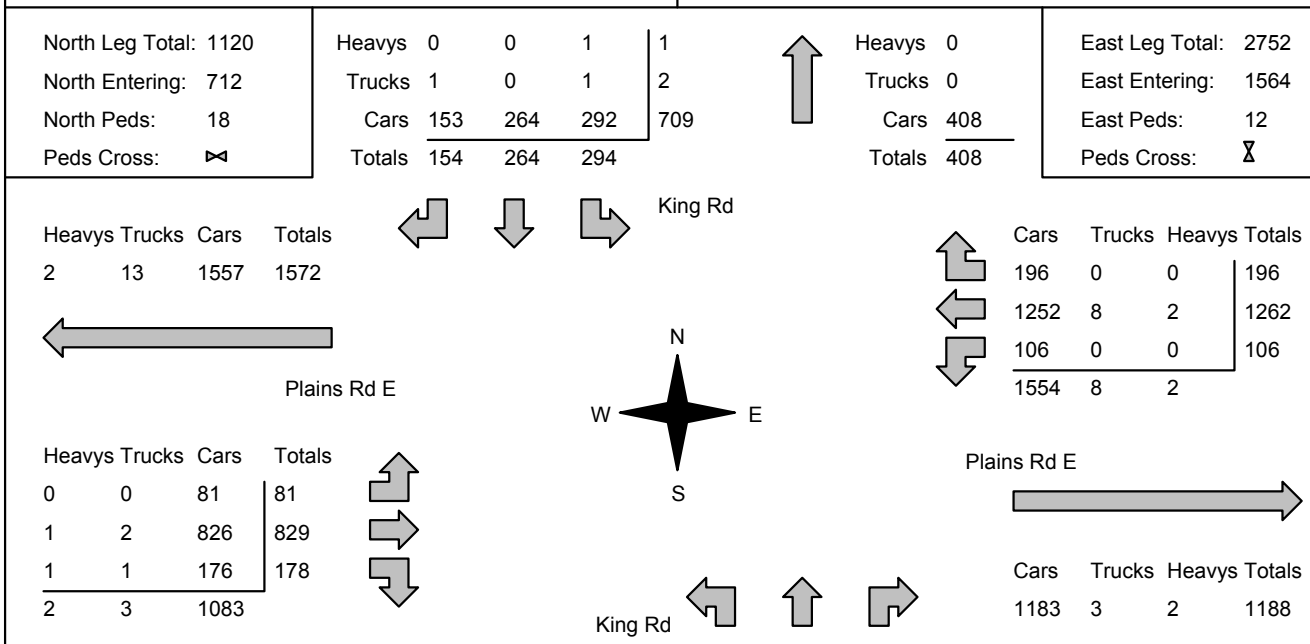
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

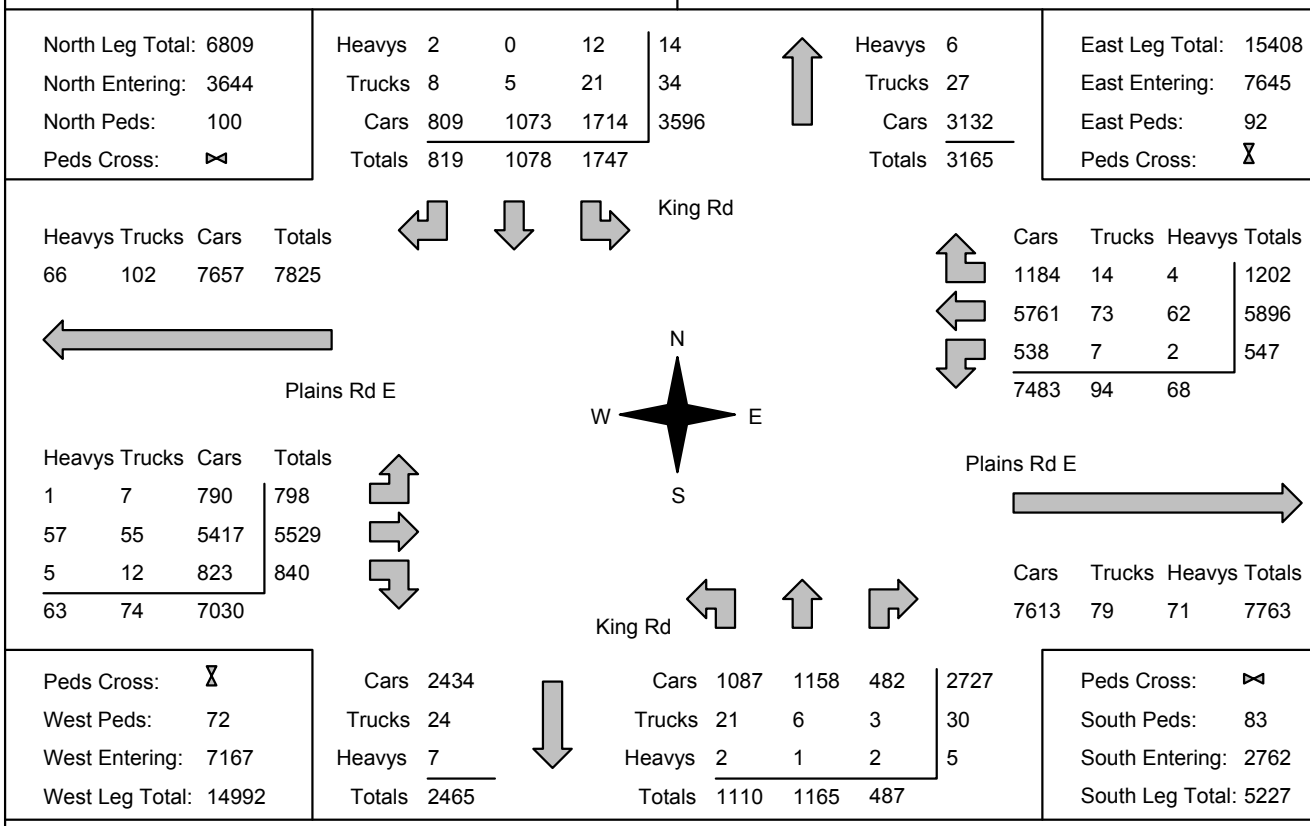
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:00:00
To: 14:00:00

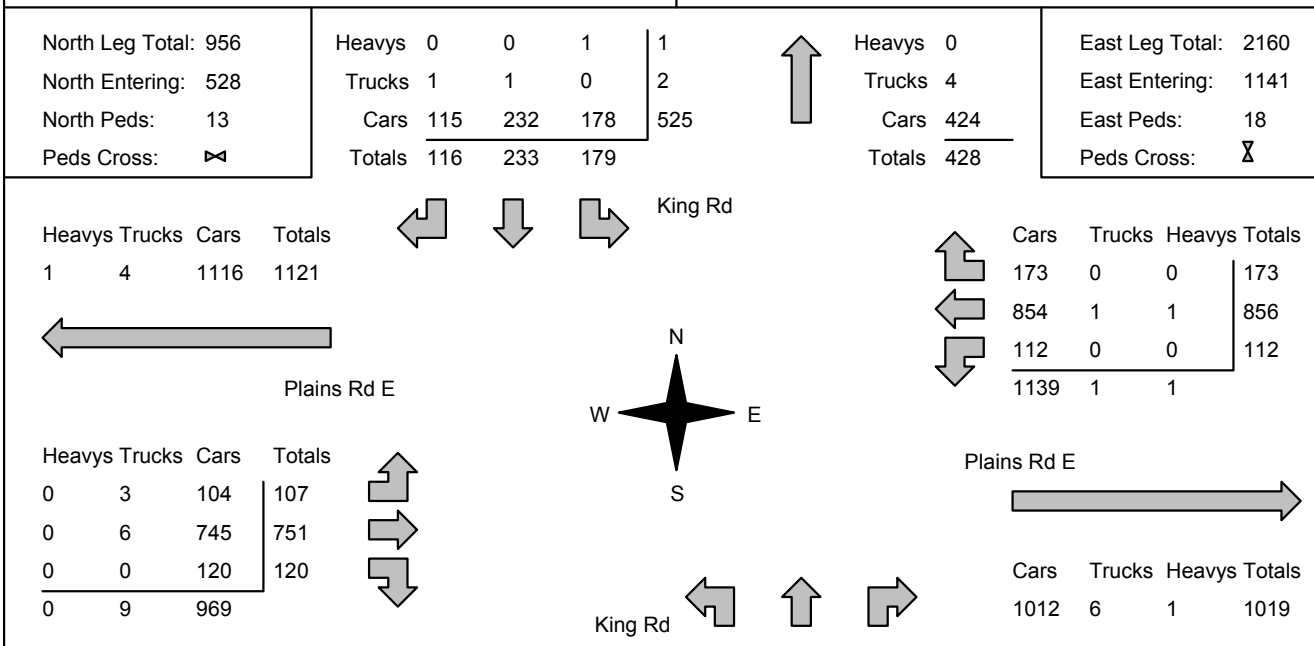
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

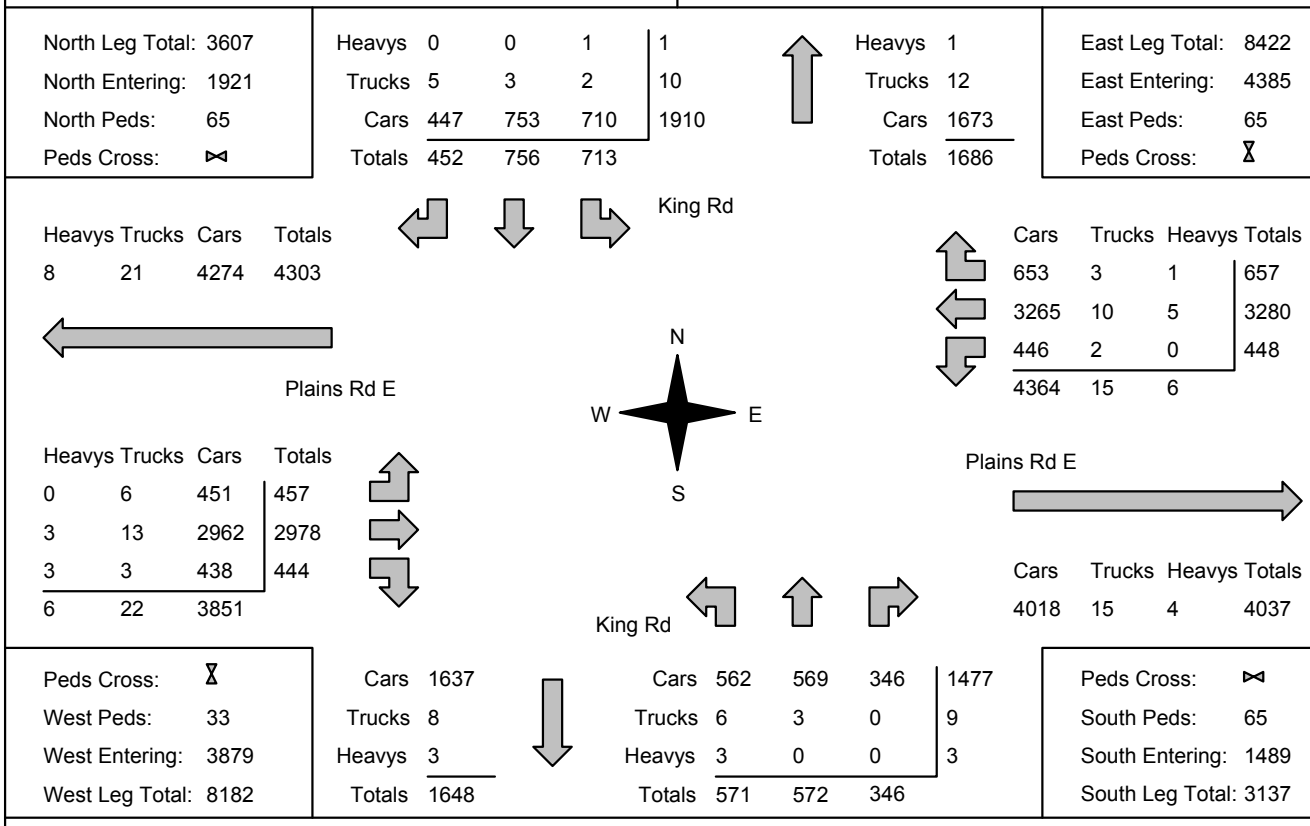
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

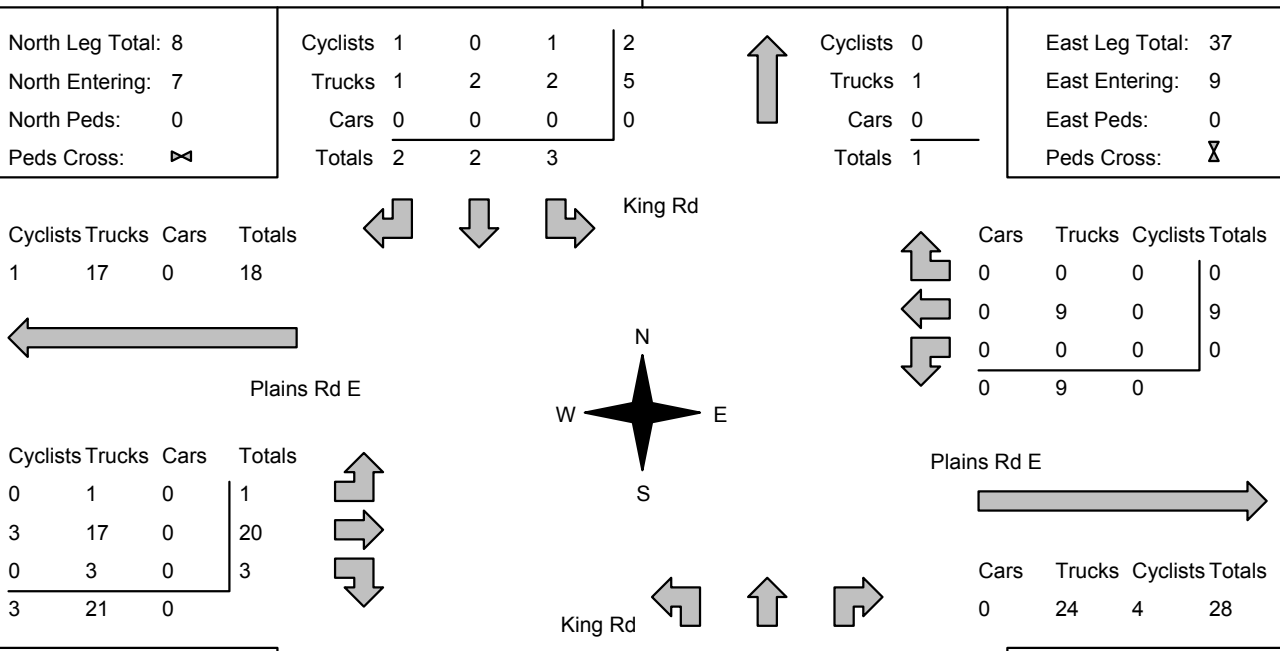
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:00:00
To: 16:00:00

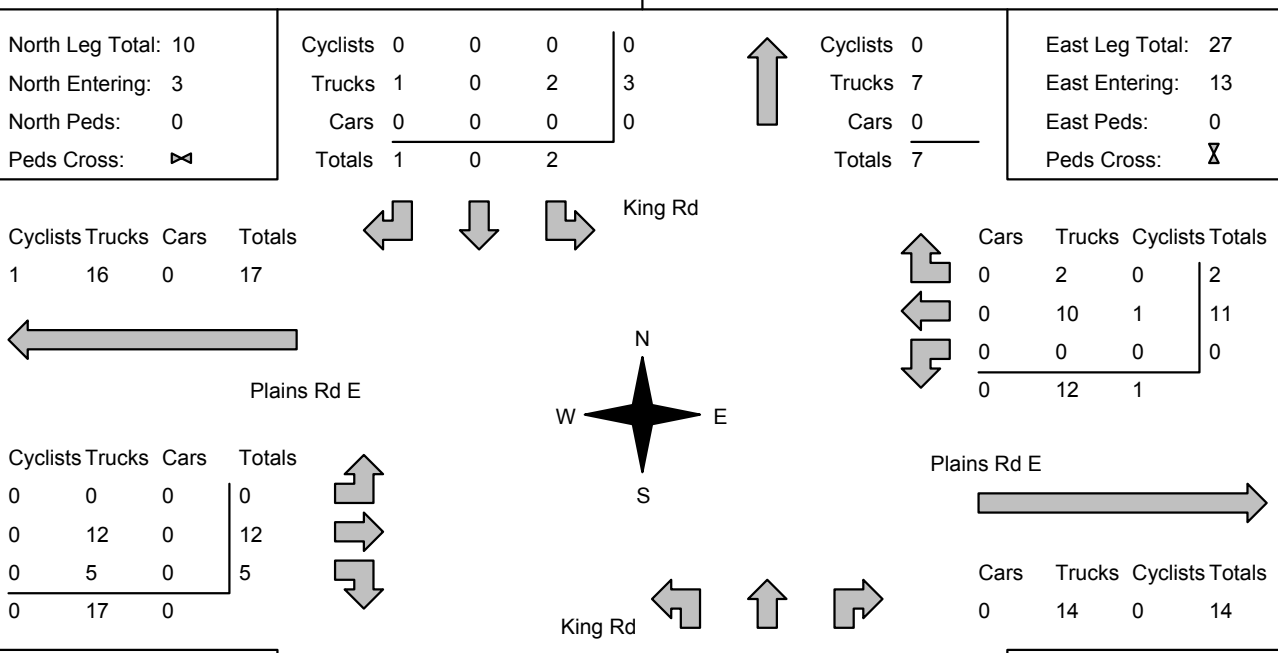
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

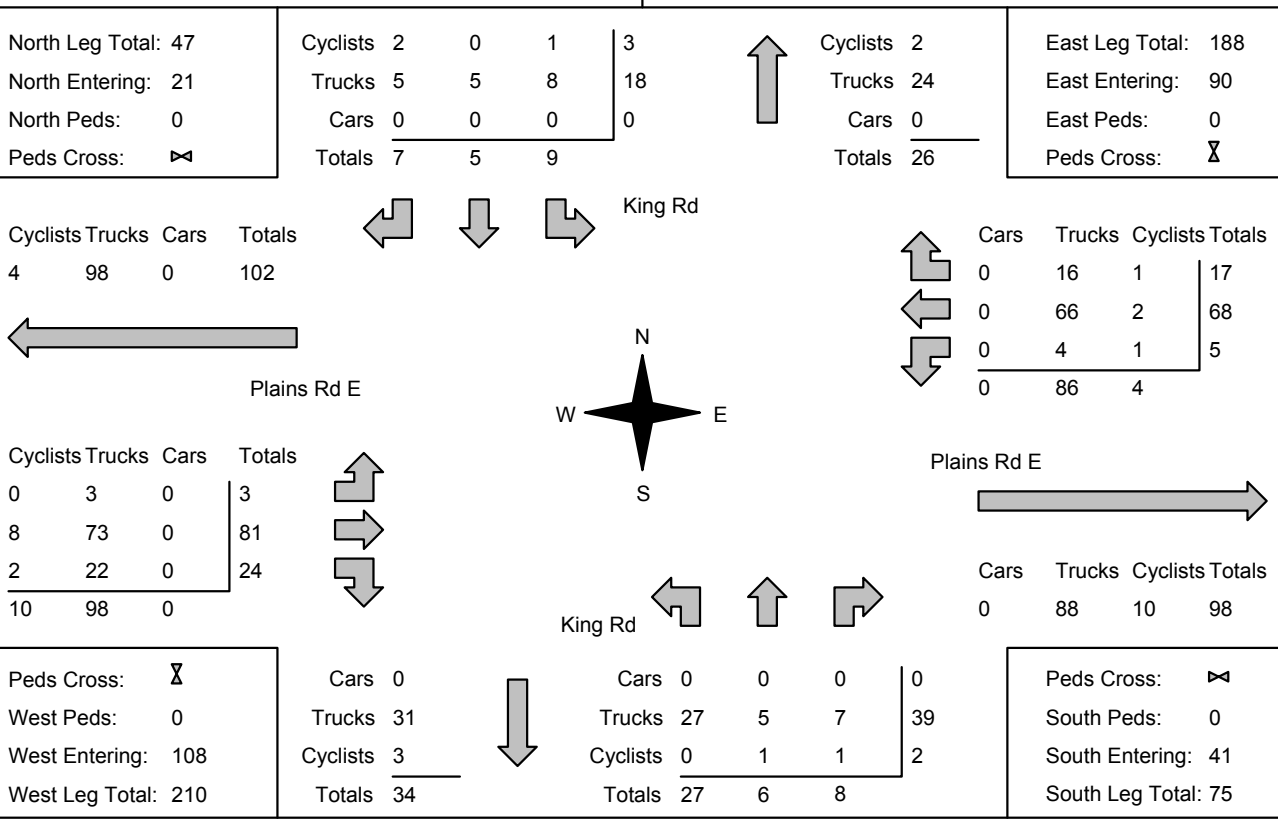
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E

North Leg Total: 4
North Entering: 2
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	1	2
Trucks	0	0	0	0
Cars	0	0	0	0
Totals	0	1	1	

Cyclists	2
Trucks	0
Cars	0
Totals	2

East Leg Total: 15
East Entering: 8
East Peds: 0
Peds Cross: ⧖

King Rd

Cyclists	Trucks	Cars	Totals
1	6	0	7

Cars	Trucks	Cyclists	Totals
0	0	1	1
0	5	1	6
0	1	0	1
0	6	2	

Plains Rd E

N
W E
S

Cyclists	Trucks	Cars	Totals
0	0	0	0
1	5	0	6
0	1	0	1
1	6	0	

Plains Rd E

Cars	Trucks	Cyclists	Totals
0	5	2	7

King Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 7
West Leg Total: 14

Cars	0
Trucks	2
Cyclists	1
Totals	3

Cars	0	0	0	0
Trucks	1	0	0	1
Cyclists	0	1	0	1
Totals	1	1	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 2
South Leg Total: 5

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

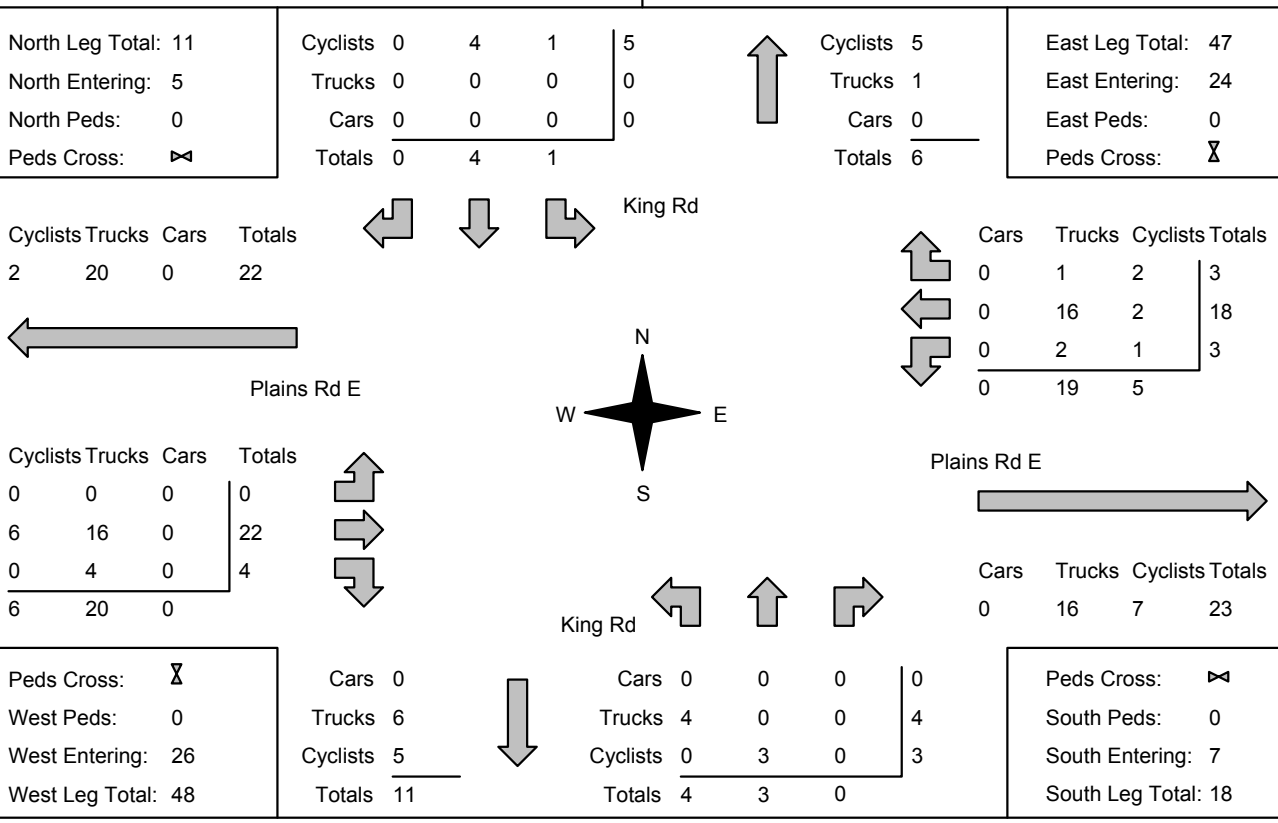
Municipality: Burlington
Site #: 2516600010
Intersection: Plains Rd E & King Rd
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Plains Rd E runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 10:00:00
To: 11:00:00

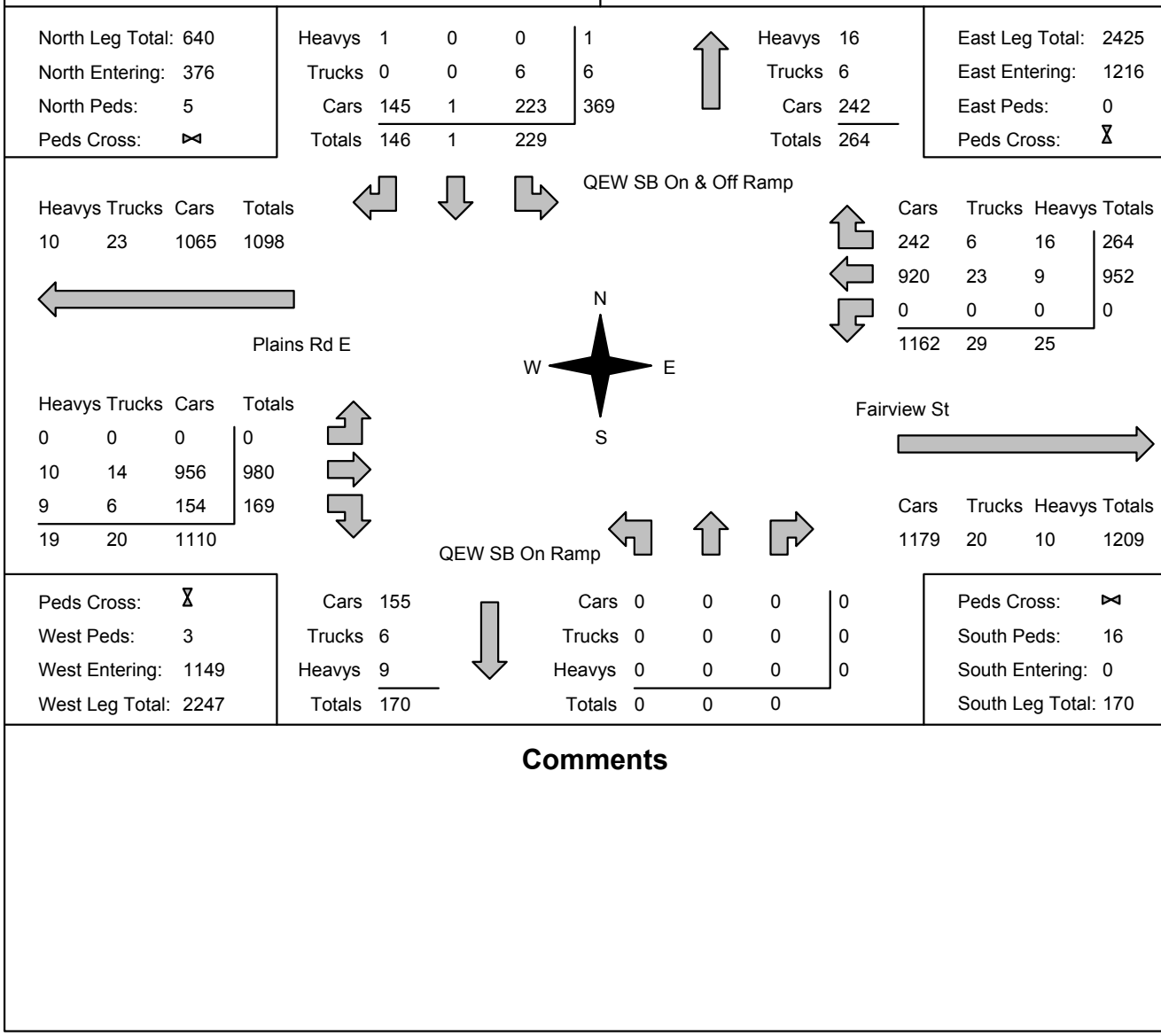
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

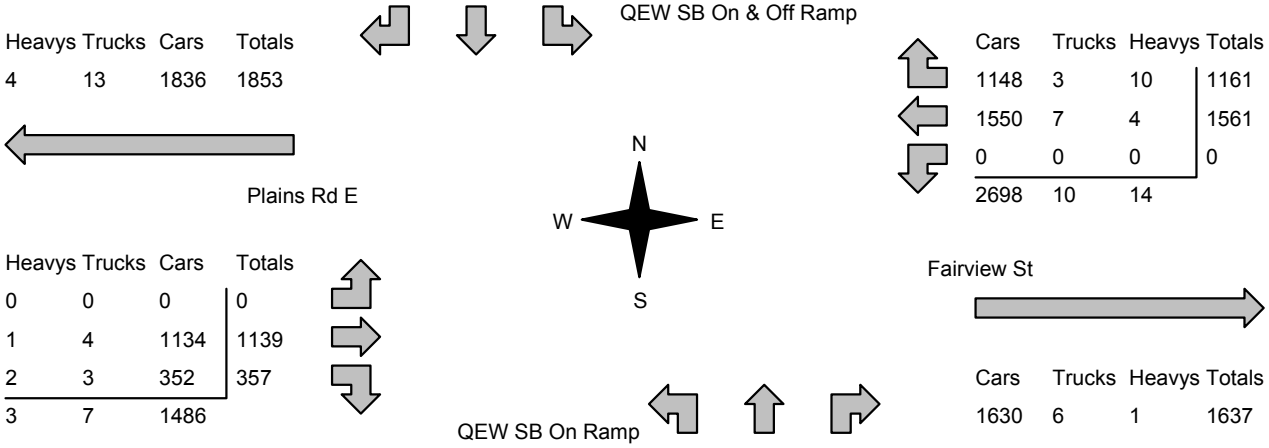
Major Road: Fairview St runs W/E

North Leg Total: 1958
North Entering: 797
North Peds: 6
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	6	0	2	8
Cars	286	7	496	789
Totals	292	7	498	

Heavys	10
Trucks	3
Cars	1148
Totals	1161

East Leg Total: 4359
East Entering: 2722
East Peds: 0
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
4	13	1836	1853

Cars	Trucks	Heavys	Totals
1148	3	10	1161
1550	7	4	1561
0	0	0	0
2698	10	14	

Heavys	Trucks	Cars	Totals
0	0	0	0
1	4	1134	1139
2	3	352	357
3	7	1486	

Cars	Trucks	Heavys	Totals
1630	6	1	1637

Peds Cross: ⧖
West Peds: 1
West Entering: 1496
West Leg Total: 3349

Cars	359			
Trucks	3			
Heavys	2			
Totals	364			

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

Peds Cross: ⋈
South Peds: 5
South Entering: 0
South Leg Total: 364

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

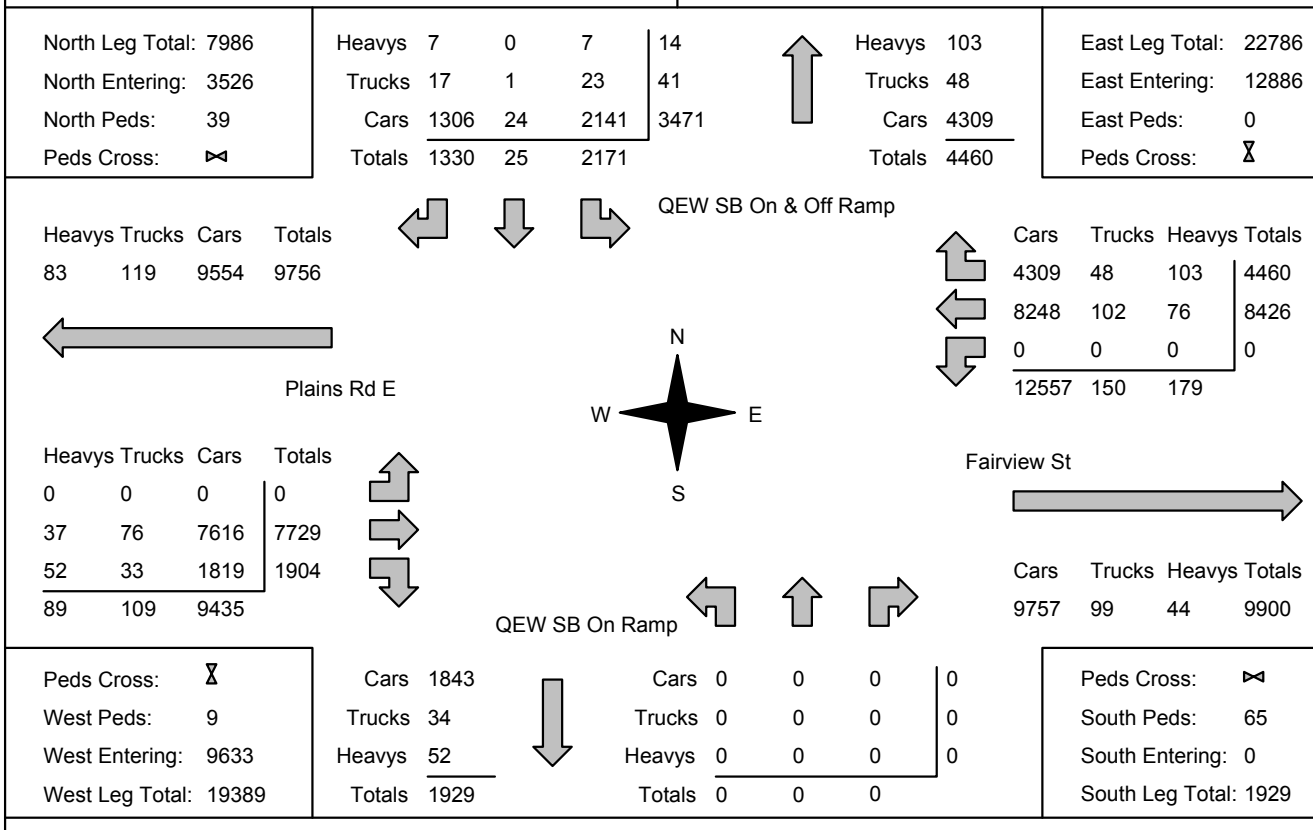
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 13:00:00
To: 14:00:00

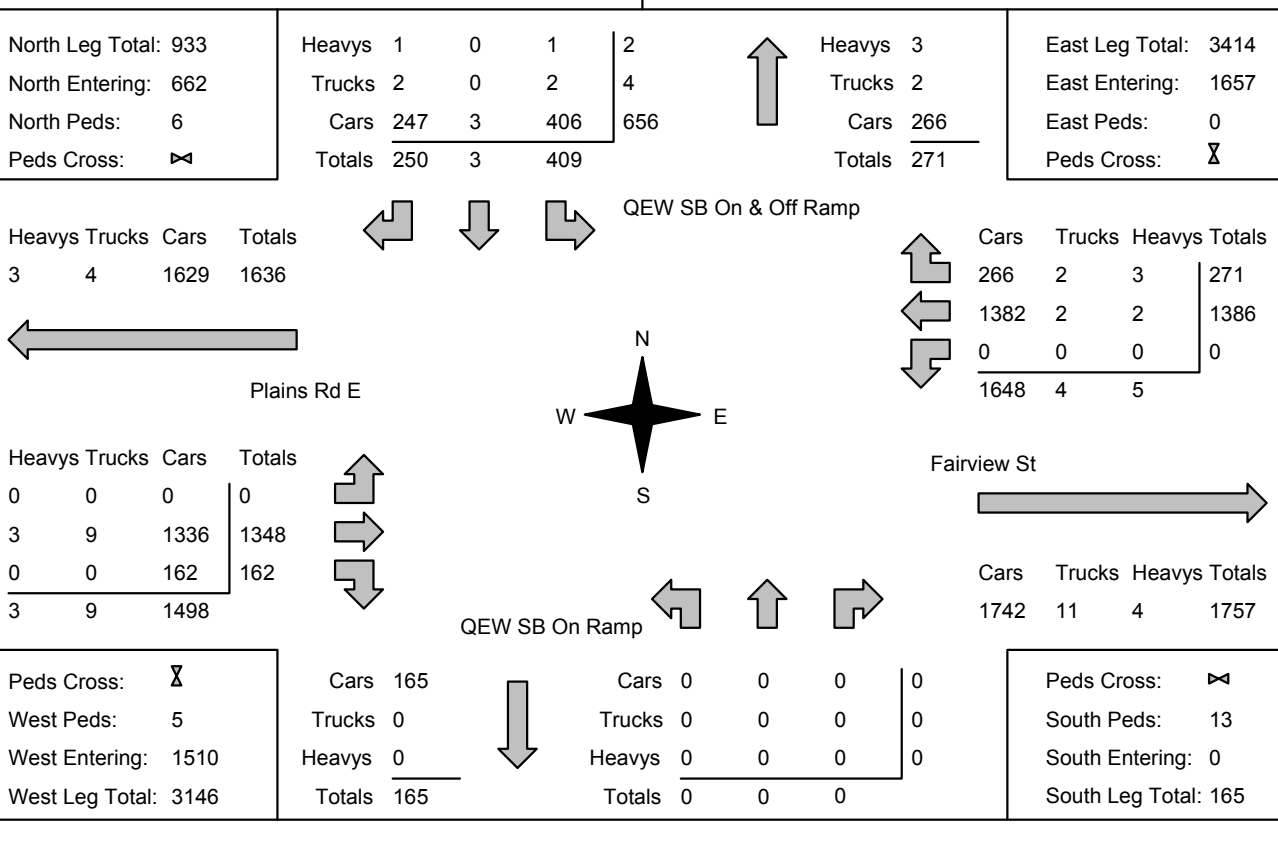
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

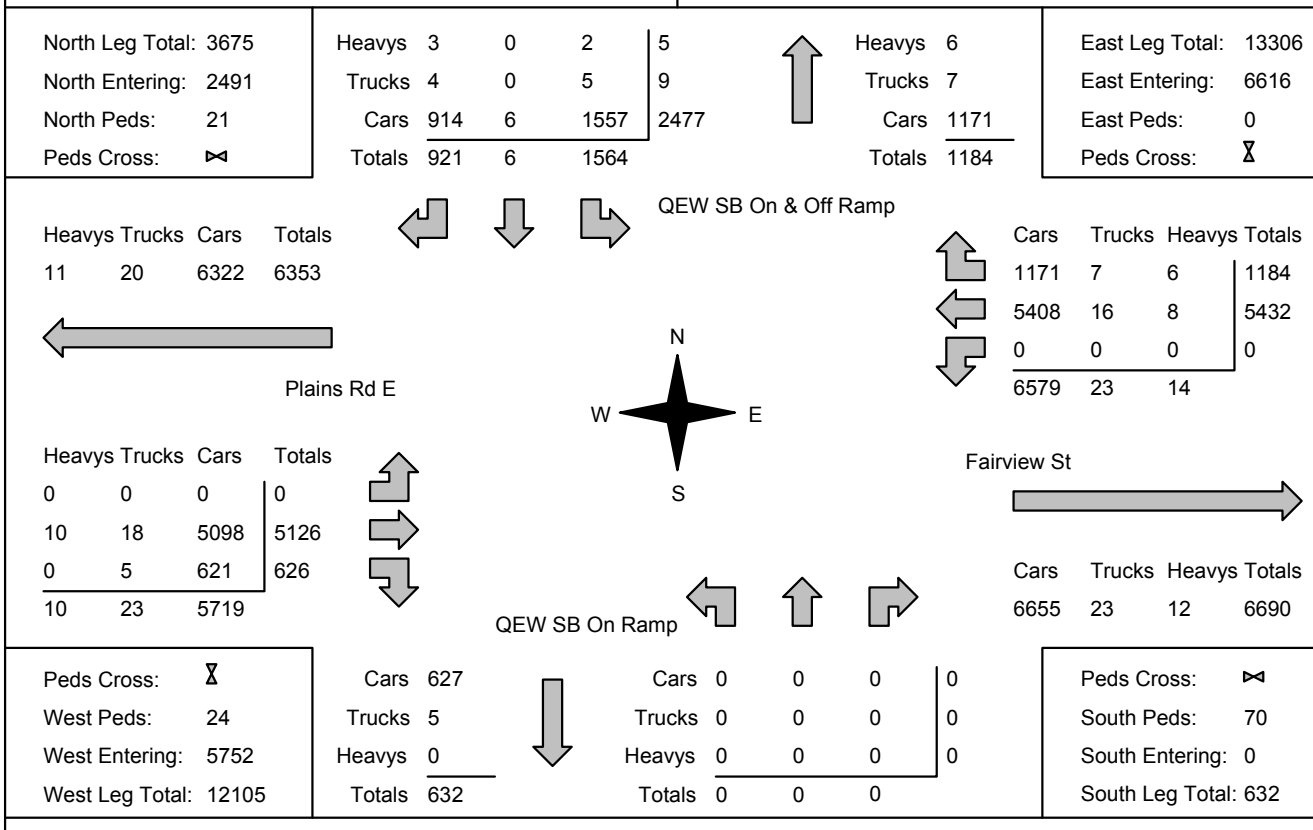
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:15:00
To: 8:15:00

Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E

North Leg Total: 3
North Entering: 1
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	0	1	1
Cars	0	0	0	0
Totals	0	0	1	

Cyclists	0
Trucks	2
Cars	0
Totals	2

East Leg Total: 42
East Entering: 17
East Peds: 0
Peds Cross: ⧖

QEW SB On & Off Ramp

Cyclists	Trucks	Cars	Totals
0	15	0	15

Cars	Trucks	Cyclists	Totals
0	2	0	2
0	15	0	15
0	0	0	0
0	17	0	

Plains Rd E

N
W E
S

Cyclists	Trucks	Cars	Totals
0	0	0	0
3	21	0	24
0	1	0	1
3	22	0	

Fairview St

Cars	Trucks	Cyclists	Totals
0	22	3	25

QEW SB On Ramp

Peds Cross: ⧖
West Peds: 0
West Entering: 25
West Leg Total: 40

Cars	0
Trucks	1
Cyclists	0
Totals	1

Cars	0	0	0	0
Trucks	0	0	0	0
Cyclists	0	0	0	0
Totals	0	0	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 0
South Leg Total: 1

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:00:00
To: 16:00:00

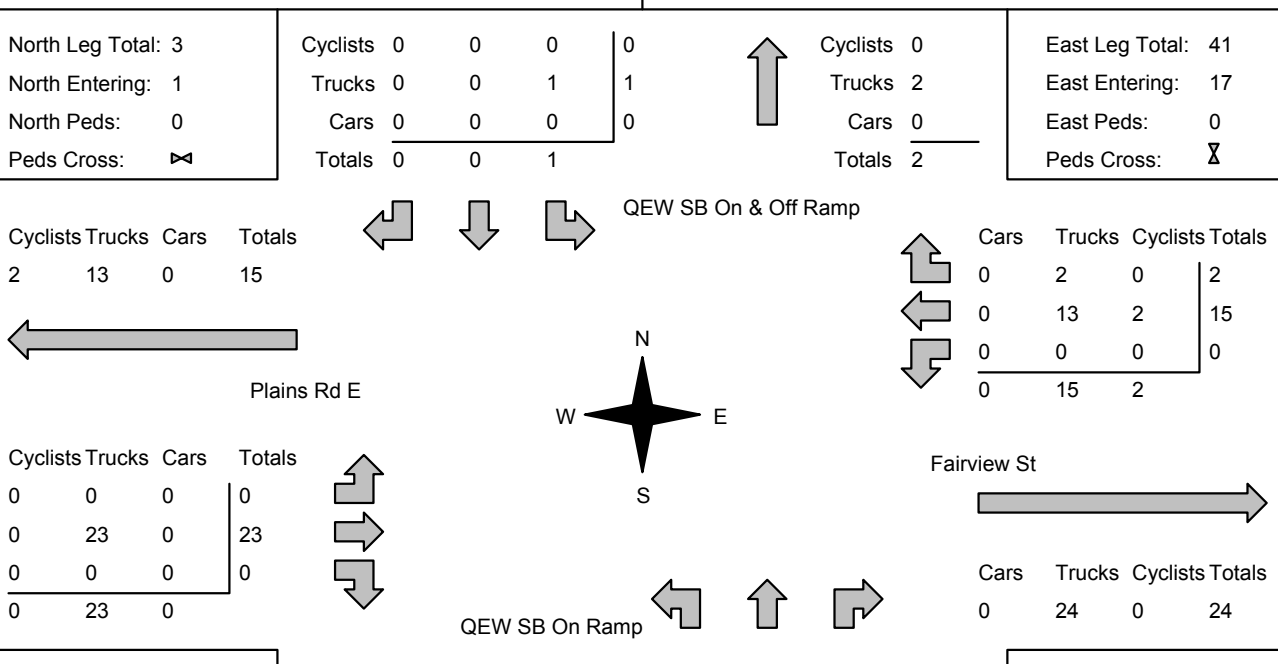
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

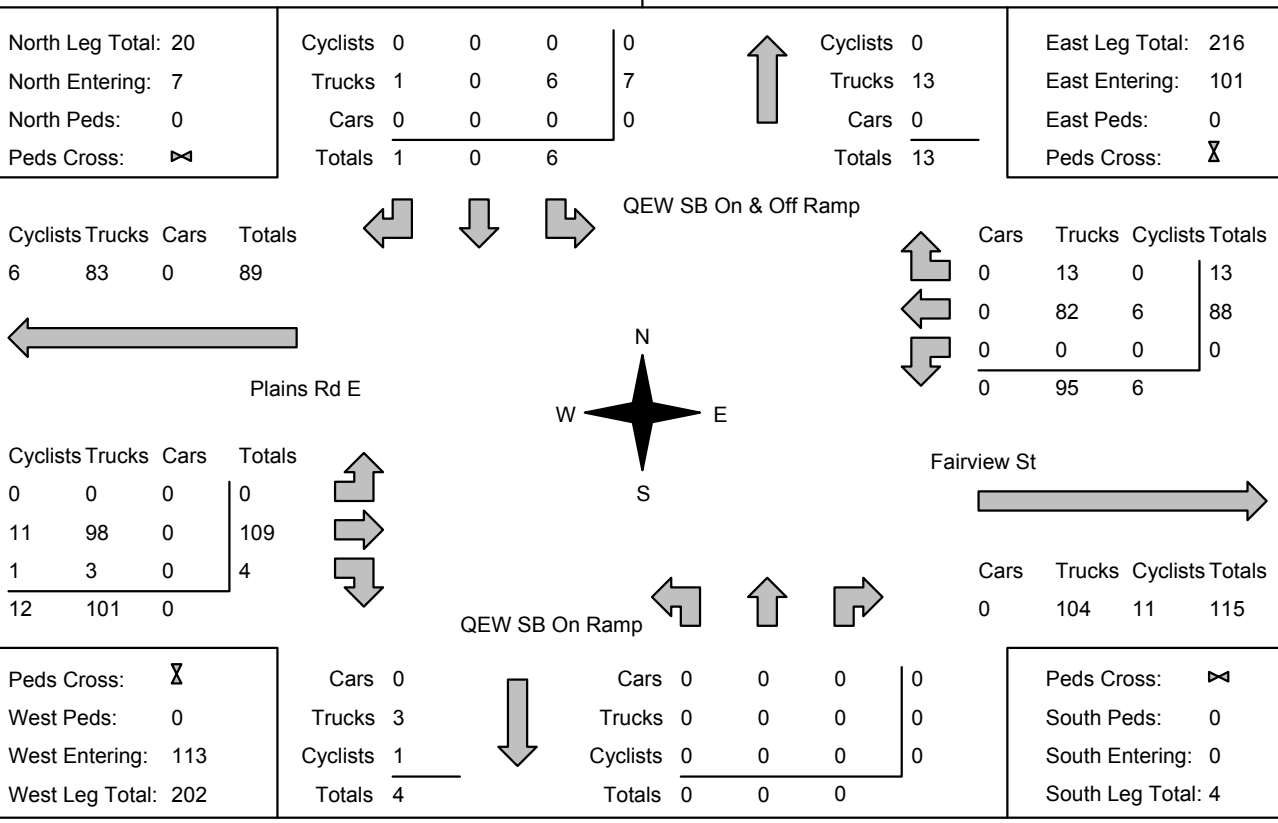
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:45:00
To: 13:45:00

Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E

North Leg Total: 4
North Entering: 1
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	0	1	1
Cars	0	0	0	0
Totals	0	0	1	

Cyclists	0
Trucks	3
Cars	0
Totals	3

East Leg Total: 17
East Entering: 9
East Peds: 0
Peds Cross: ⧖

QEW SB On & Off Ramp

Cyclists	Trucks	Cars	Totals
1	5	0	6

Cars	Trucks	Cyclists	Totals
0	3	0	3
0	5	1	6
0	0	0	0
0	8	1	

Plains Rd E

N
W E
S

Cyclists	Trucks	Cars	Totals
0	0	0	0
2	5	0	7
0	0	0	0
2	5	0	

Fairview St

Cars	Trucks	Cyclists	Totals
0	6	2	8

QEW SB On Ramp

Peds Cross: ⧖
West Peds: 0
West Entering: 7
West Leg Total: 13

Cars	0
Trucks	0
Cyclists	0
Totals	0

Cars	0	0	0	0
Trucks	0	0	0	0
Cyclists	0	0	0	0
Totals	0	0	0	

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

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

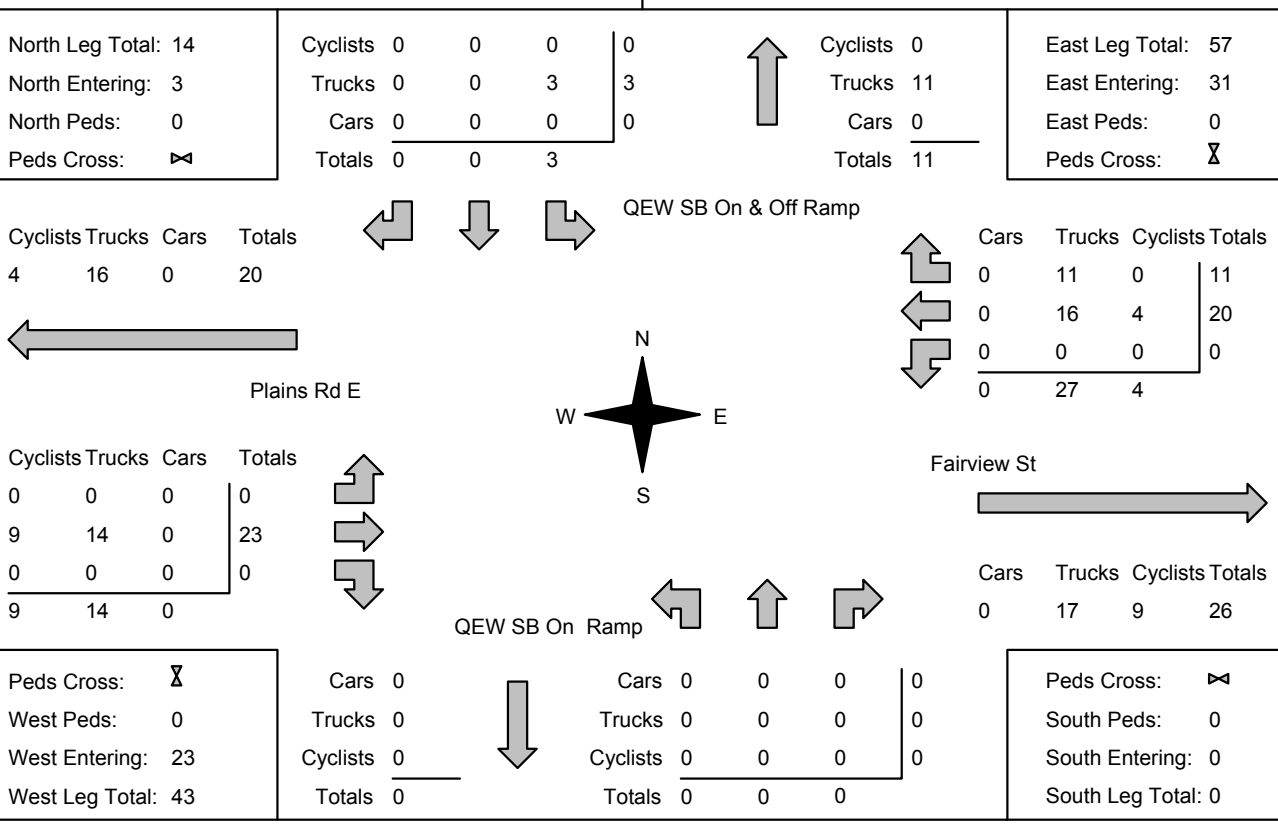
Municipality: Burlington
Site #: 2516600011
Intersection: Fairview St & QEW SB On & Off R
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 10:00:00
To: 11:00:00

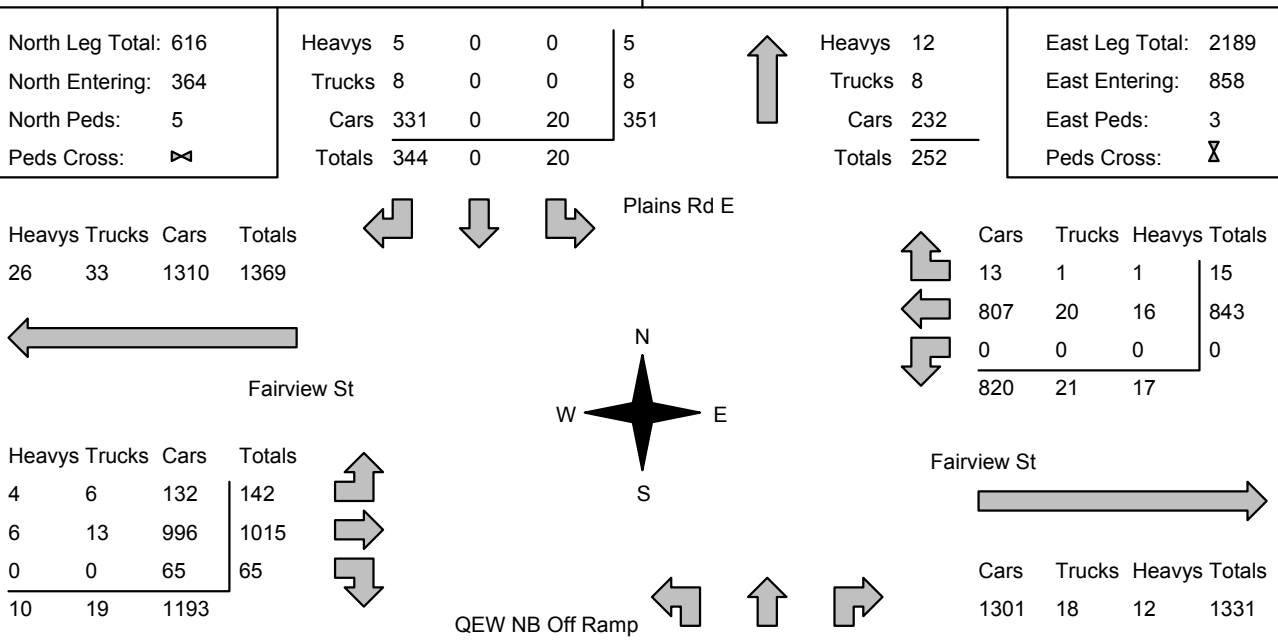
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

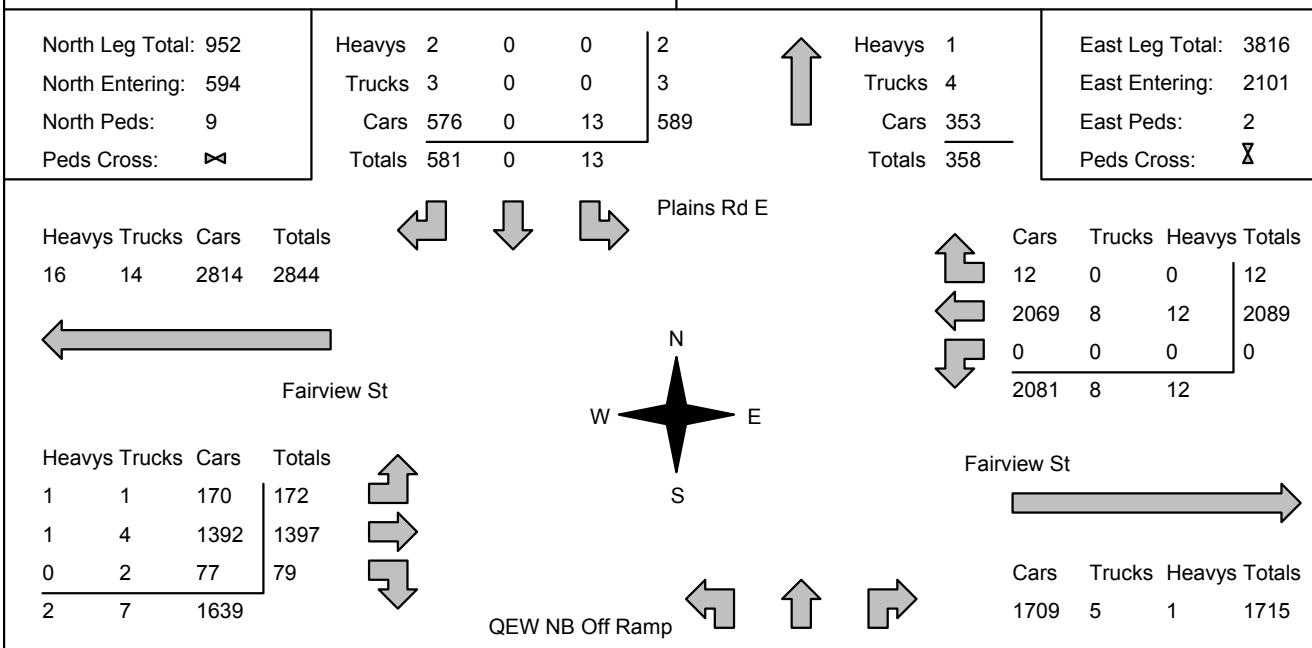
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

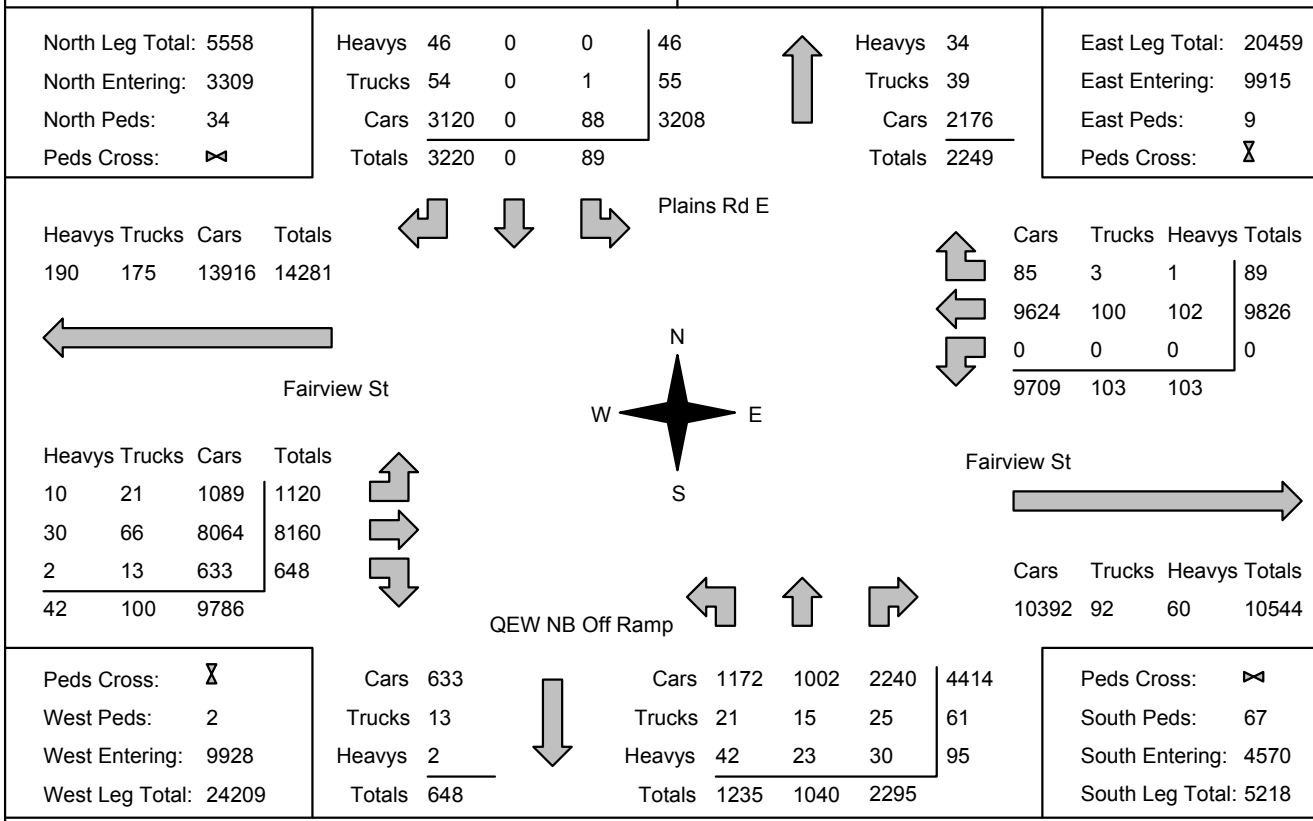
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

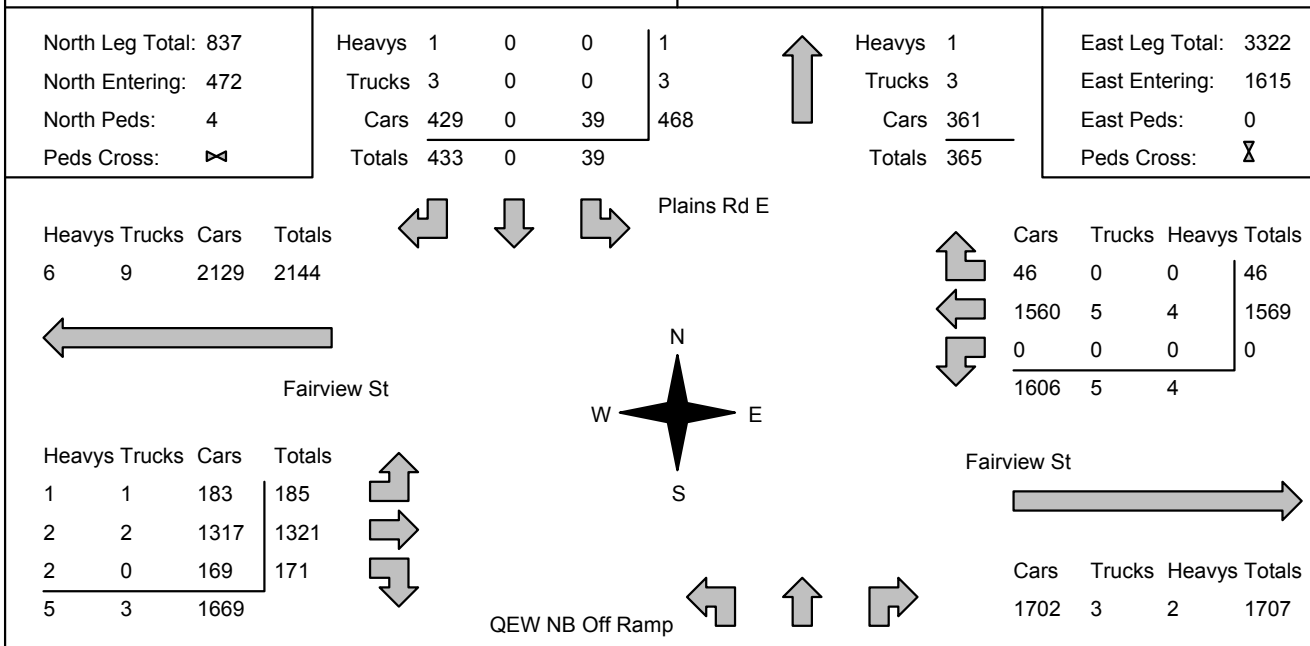
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

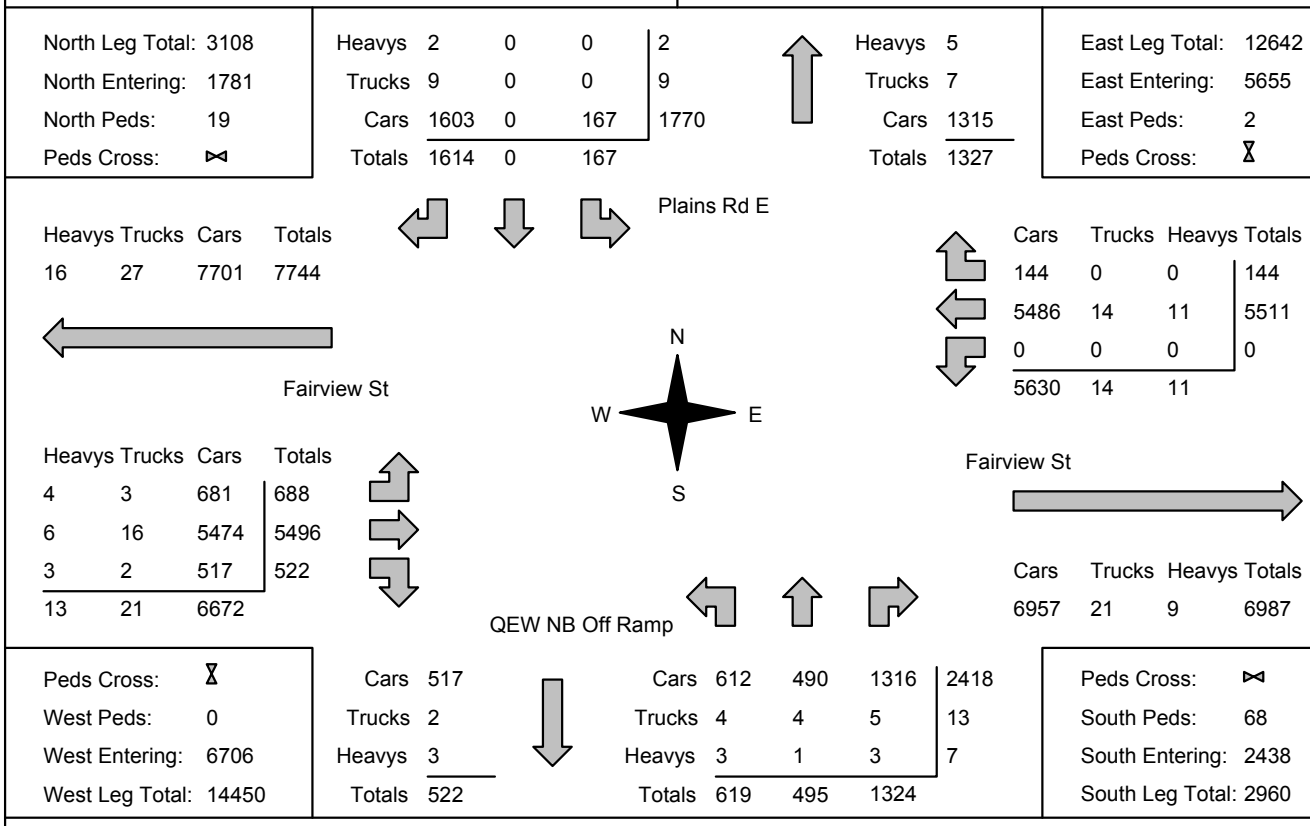
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:15:00
To: 8:15:00

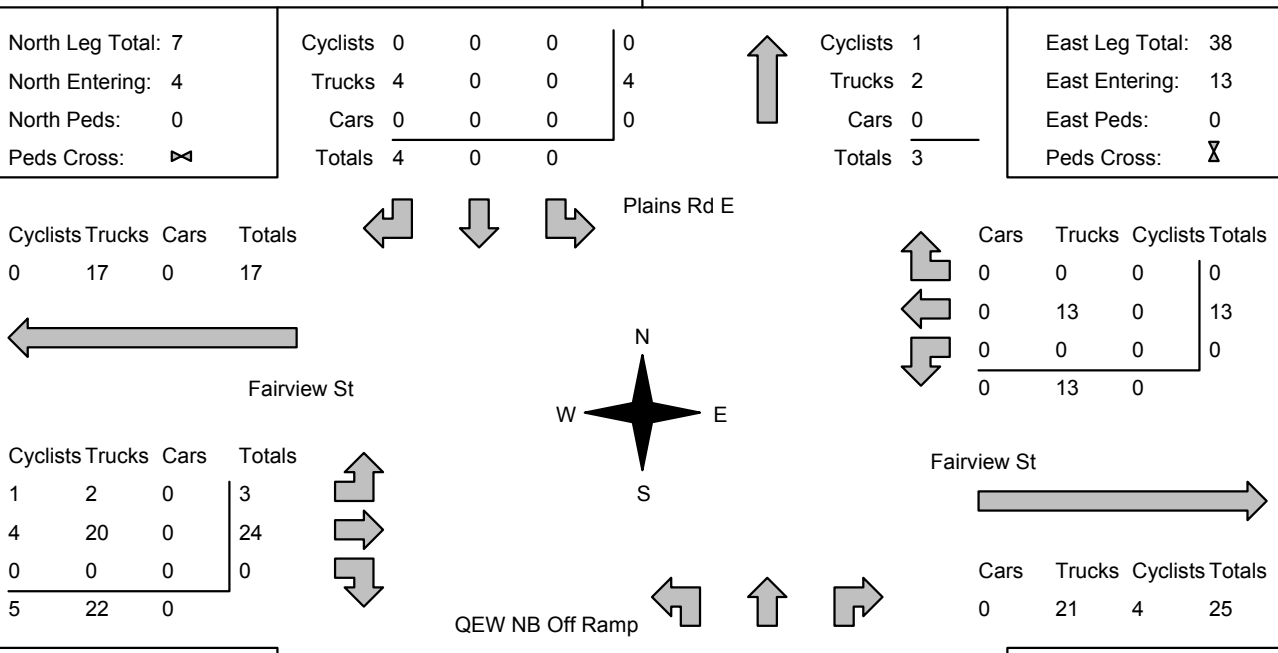
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:00:00
To: 16:00:00

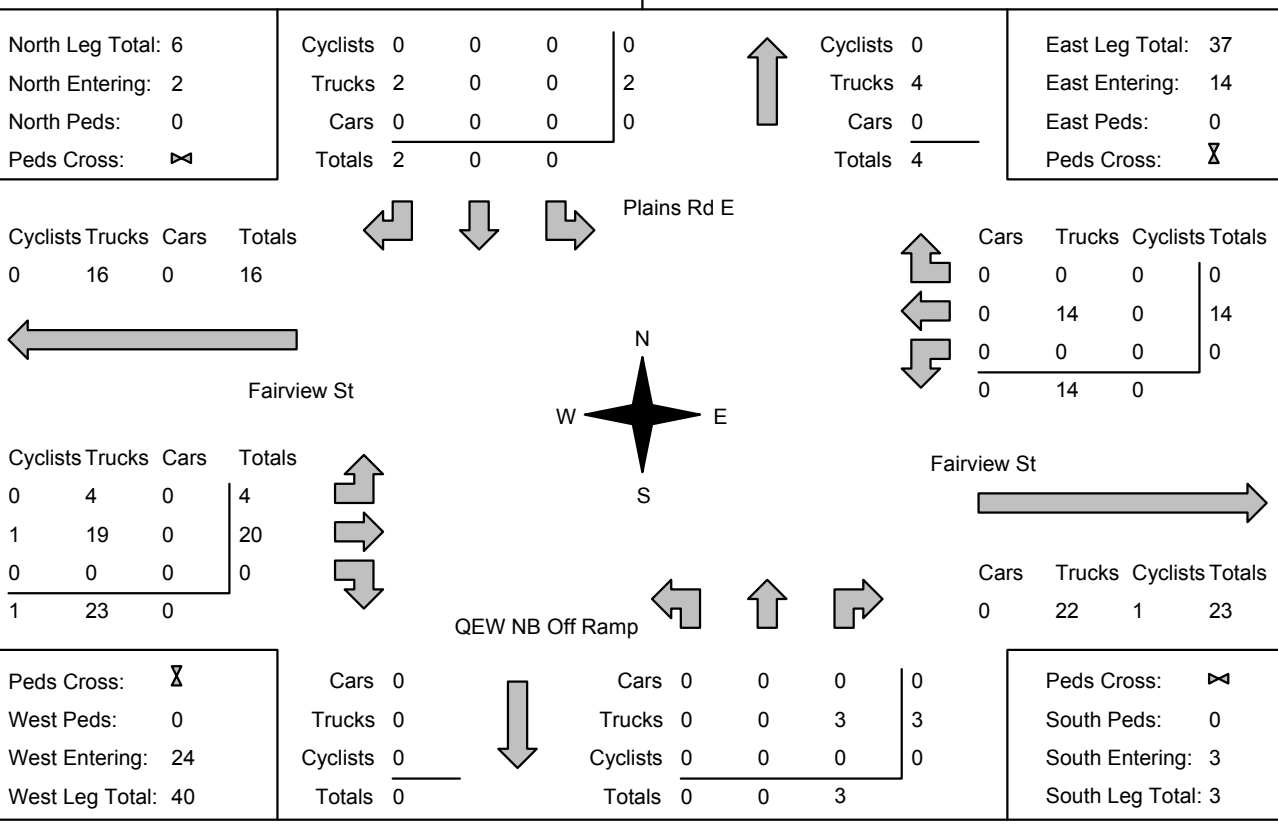
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

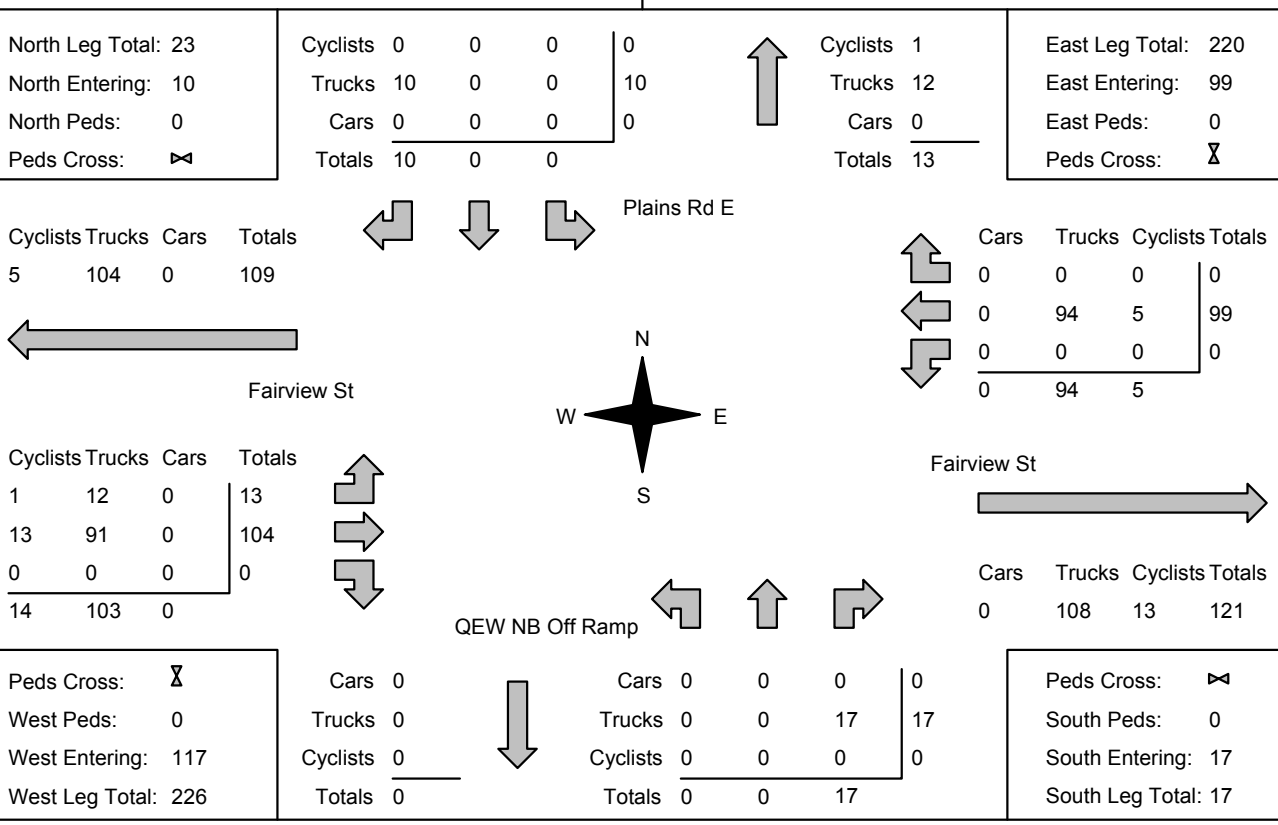
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:00:00
To: 12:00:00

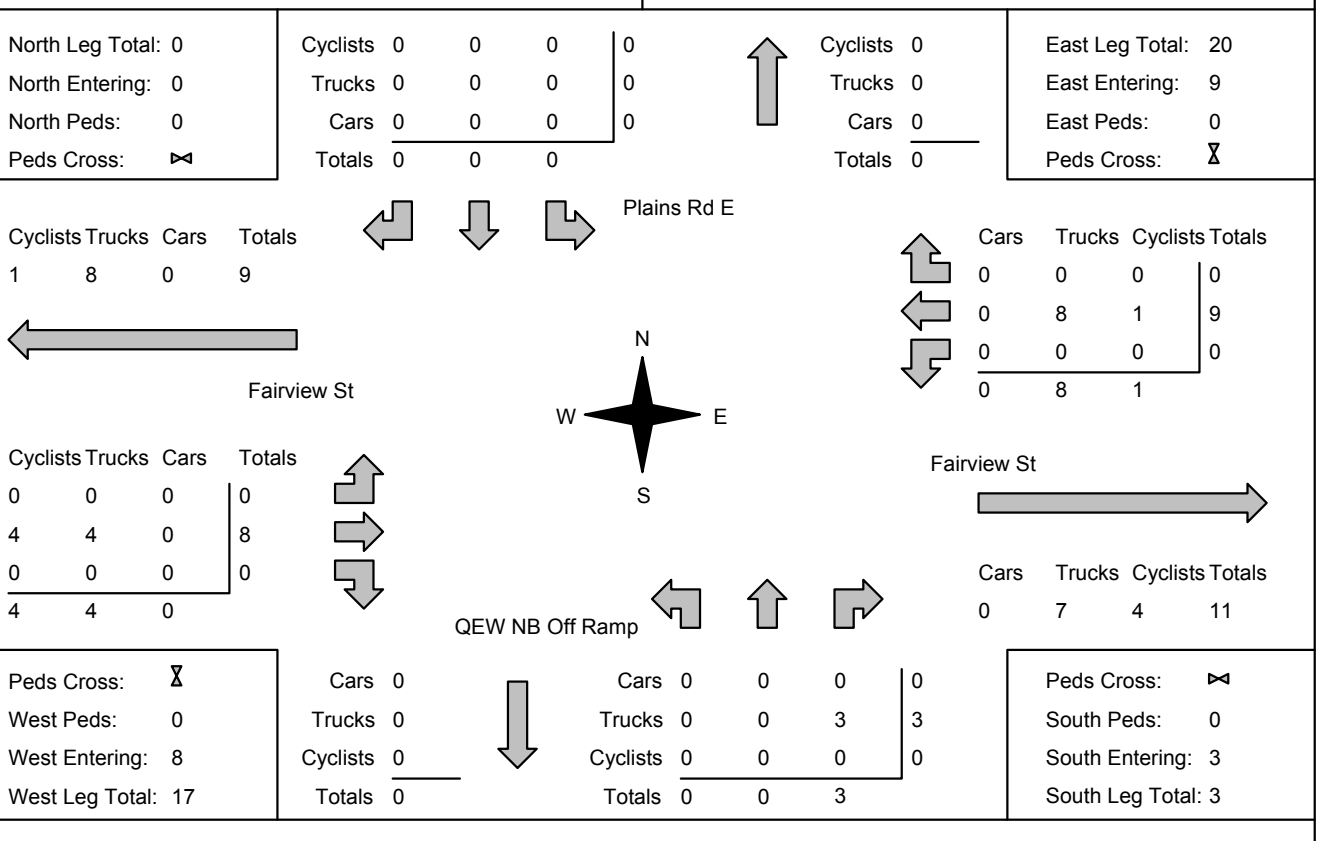
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

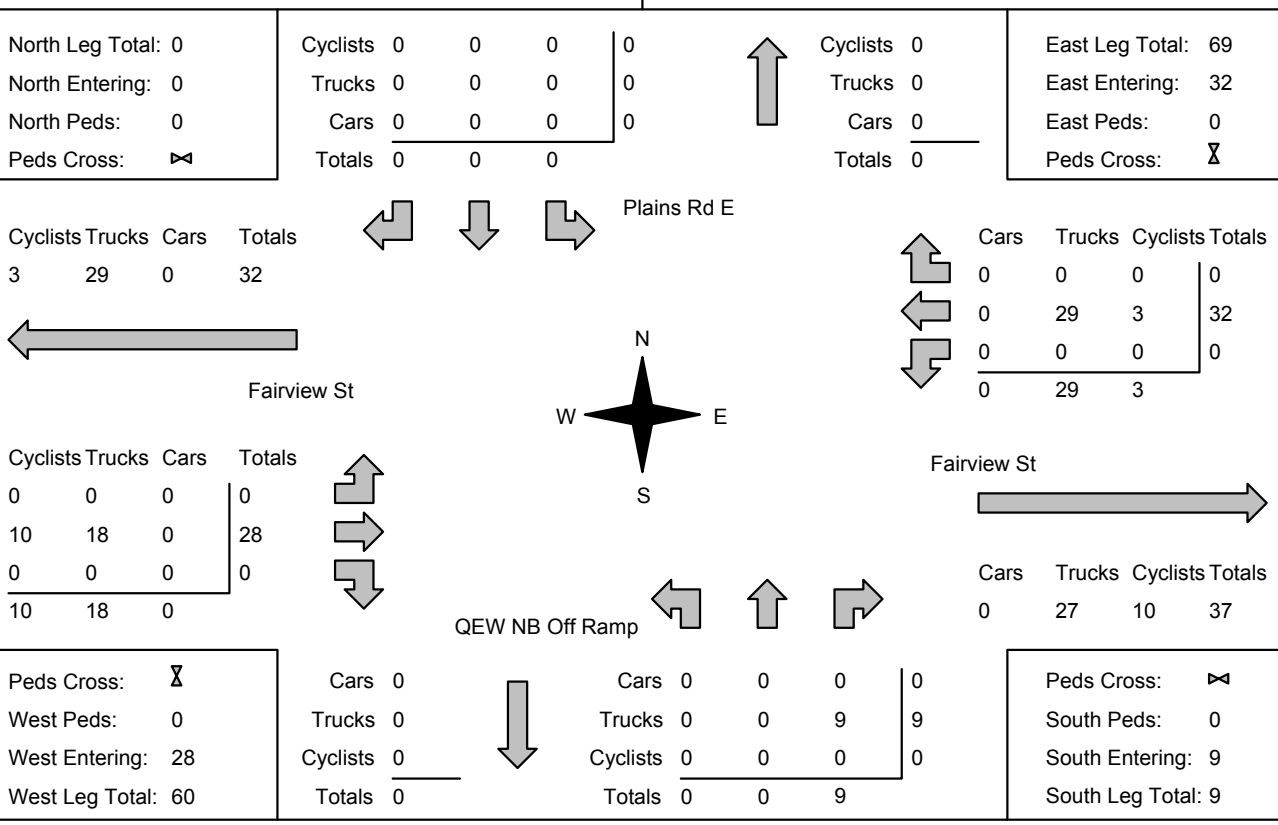
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

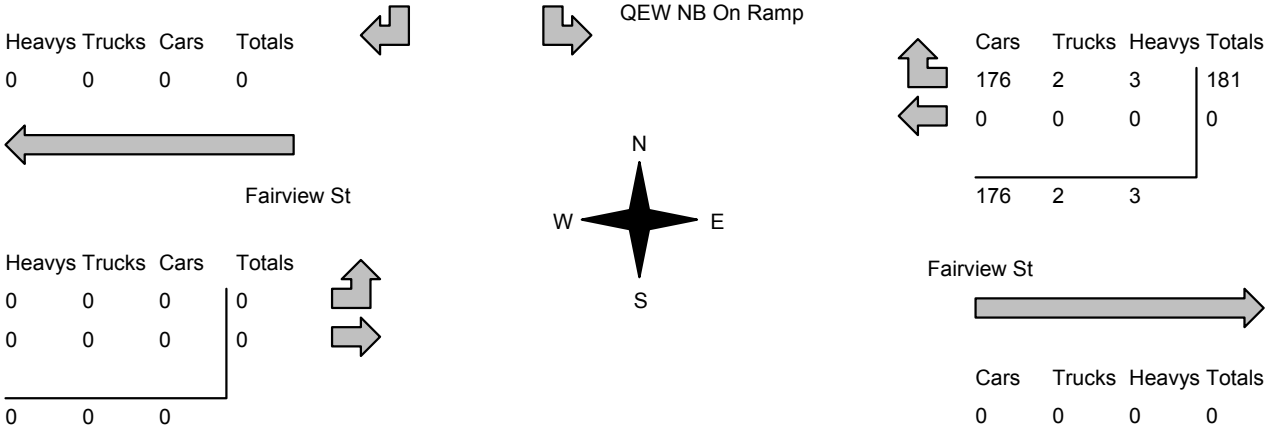
Major Road: Fairview St runs W/E

North Leg Total: 181
North Entering: 0
North Peds: 0
Peds Cross: ⋈

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

Heavys	3
Trucks	2
Cars	176
Totals	181

East Leg Total: 181
East Entering: 181
East Peds: 0
Peds Cross: ⧖



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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:00:00
To: 16:00:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

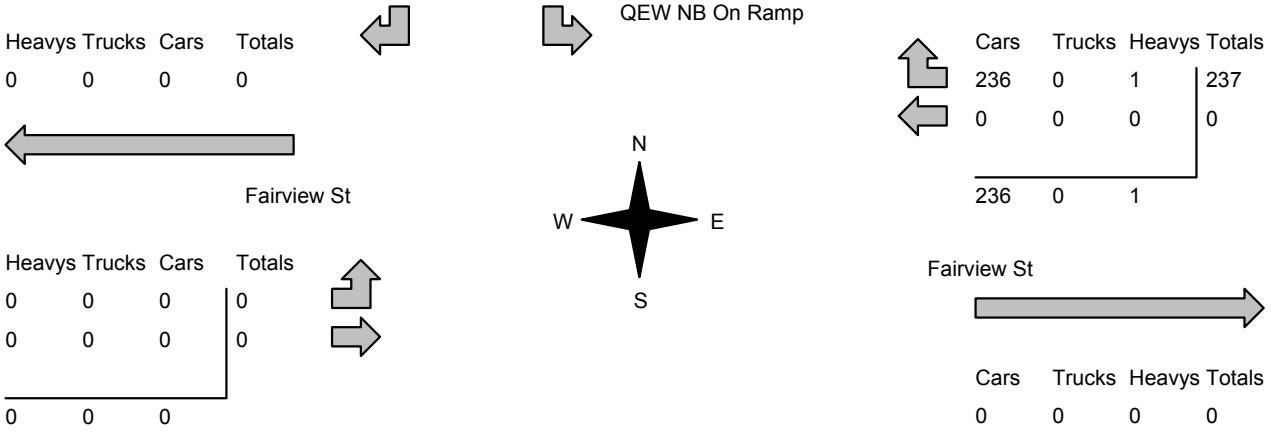
Major Road: Fairview St runs W/E

North Leg Total: 237
North Entering: 0
North Peds: 0
Peds Cross: ⋈

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

Heavys	1
Trucks	0
Cars	236
Totals	237

East Leg Total: 237
East Entering: 237
East Peds: 0
Peds Cross: ⧖



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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

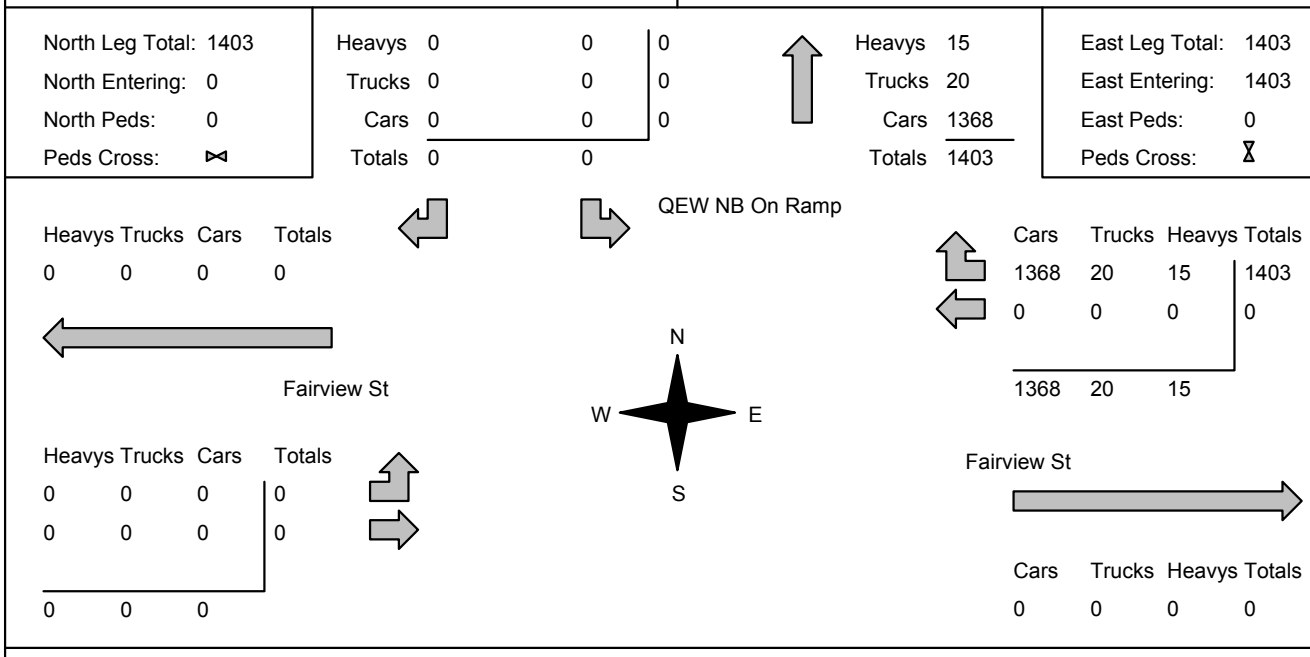
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Fairview St runs W/E



Peds Cross:
West Peds: 0
West Entering: 0
West Leg Total: 0

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

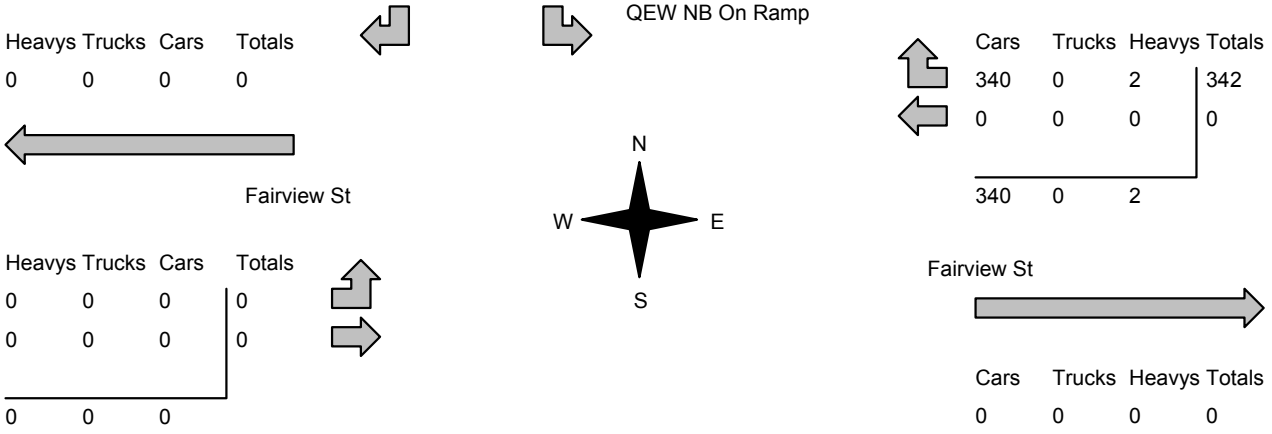
Major Road: Fairview St runs W/E

North Leg Total: 342
North Entering: 0
North Peds: 0
Peds Cross: ⋈

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

Heavys	2
Trucks	0
Cars	340
Totals	342

East Leg Total: 342
East Entering: 342
East Peds: 0
Peds Cross: ⧖



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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

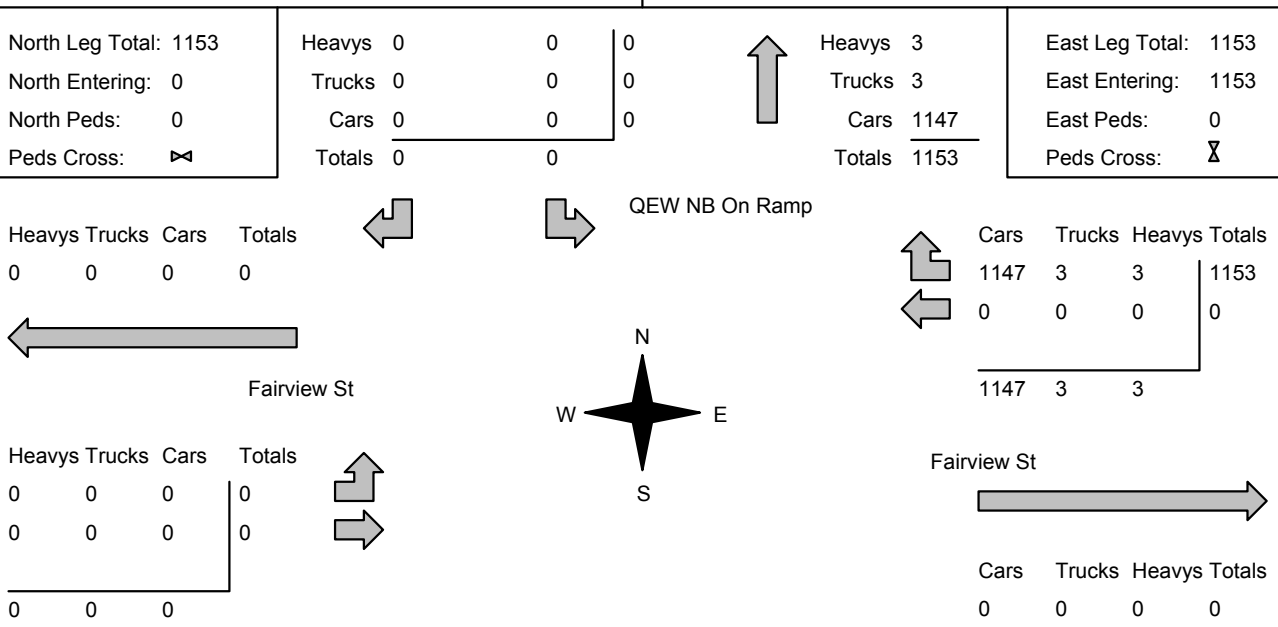
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Fairview St runs W/E



Peds Cross:
West Peds: 0
West Entering: 0
West Leg Total: 0

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 6:45:00
To: 7:45:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

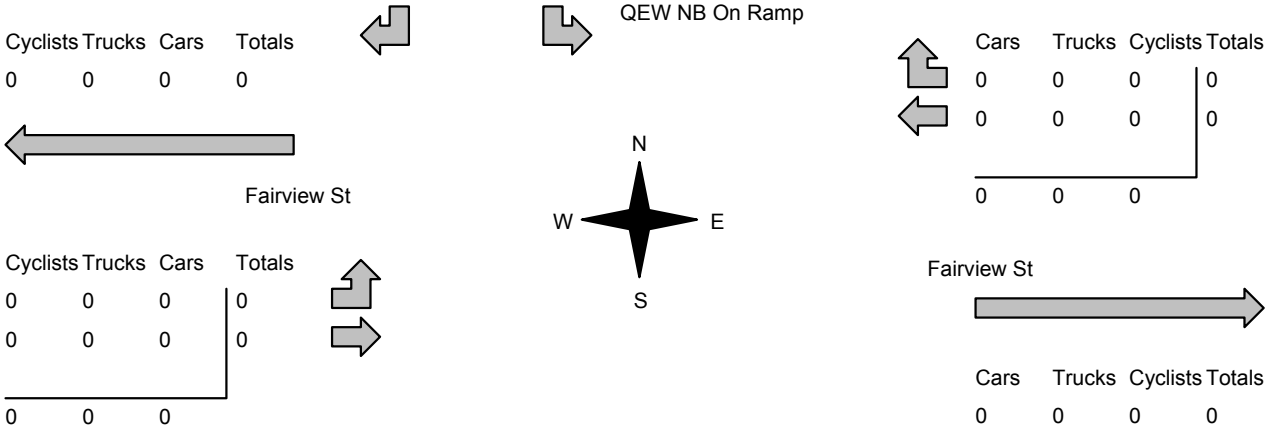
Major Road: Fairview St runs W/E

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

Cyclists	0	0	0
Trucks	0	0	0
Cars	0	0	0
Totals	0	0	

Cyclists	0
Trucks	0
Cars	0
Totals	0

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



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

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

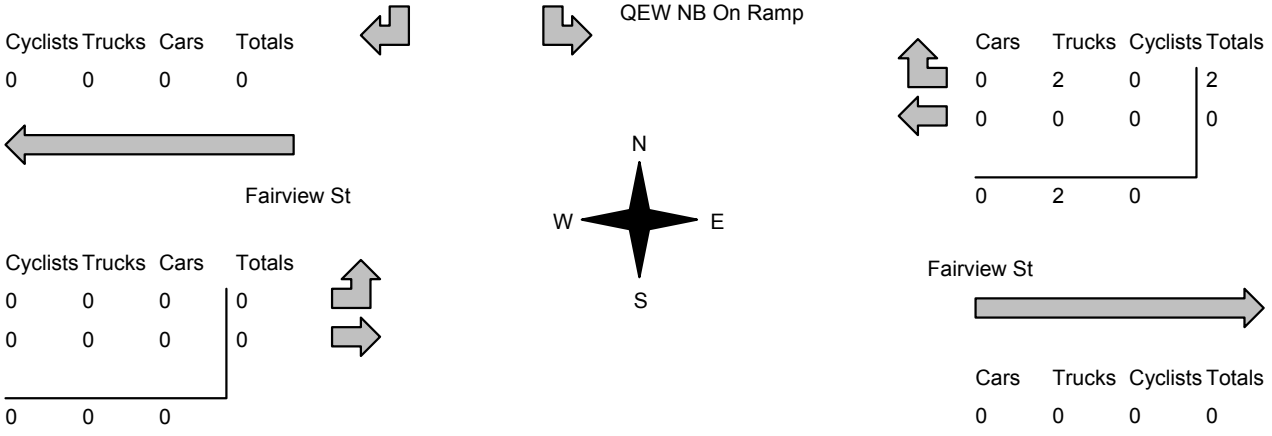
Major Road: Fairview St runs W/E

North Leg Total: 2
North Entering: 0
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0
Trucks	0	0	0
Cars	0	0	0
Totals	0	0	

Cyclists	0
Trucks	2
Cars	0
Totals	2

East Leg Total: 2
East Entering: 2
East Peds: 0
Peds Cross: ⧖



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

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

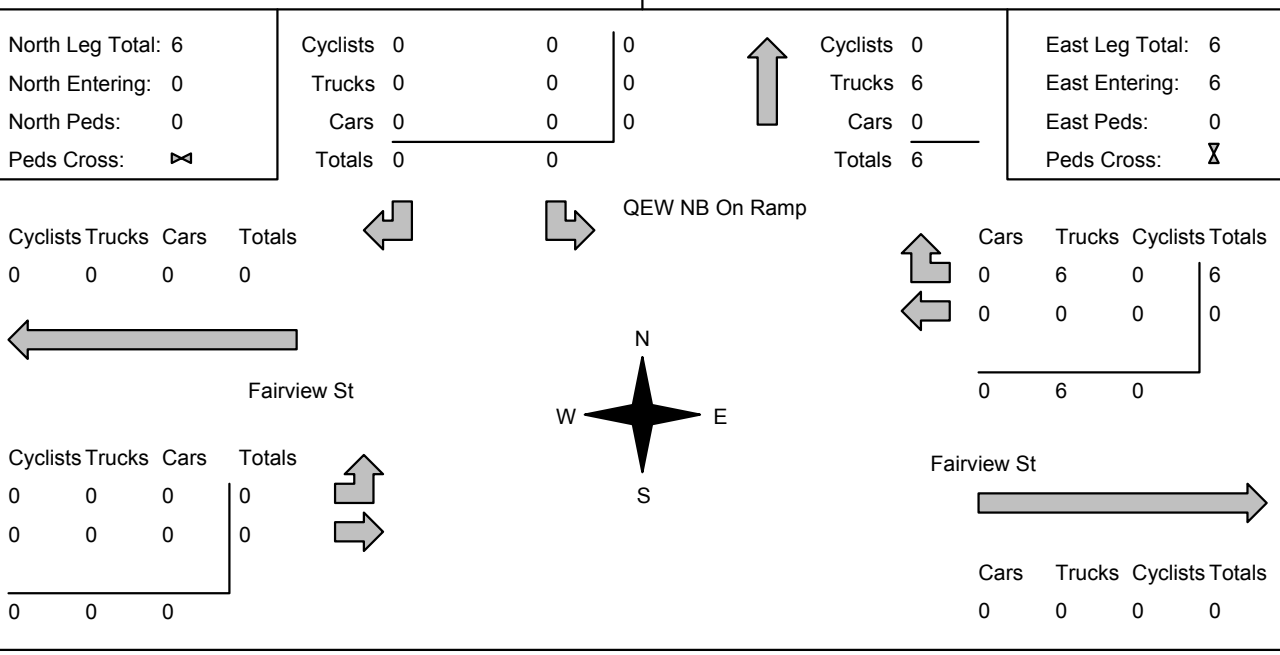
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Fairview St runs W/E



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:00:00
To: 13:00:00

Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

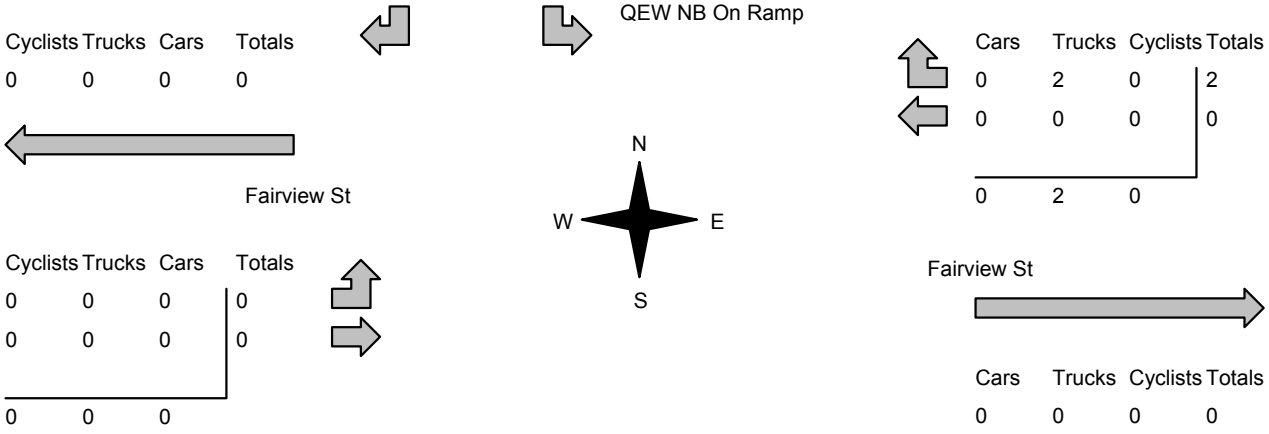
Major Road: Fairview St runs W/E

North Leg Total: 2
North Entering: 0
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0
Trucks	0	0	0
Cars	0	0	0
Totals	0	0	

Cyclists	0
Trucks	2
Cars	0
Totals	2

East Leg Total: 2
East Entering: 2
East Peds: 0
Peds Cross: ⧖



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

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

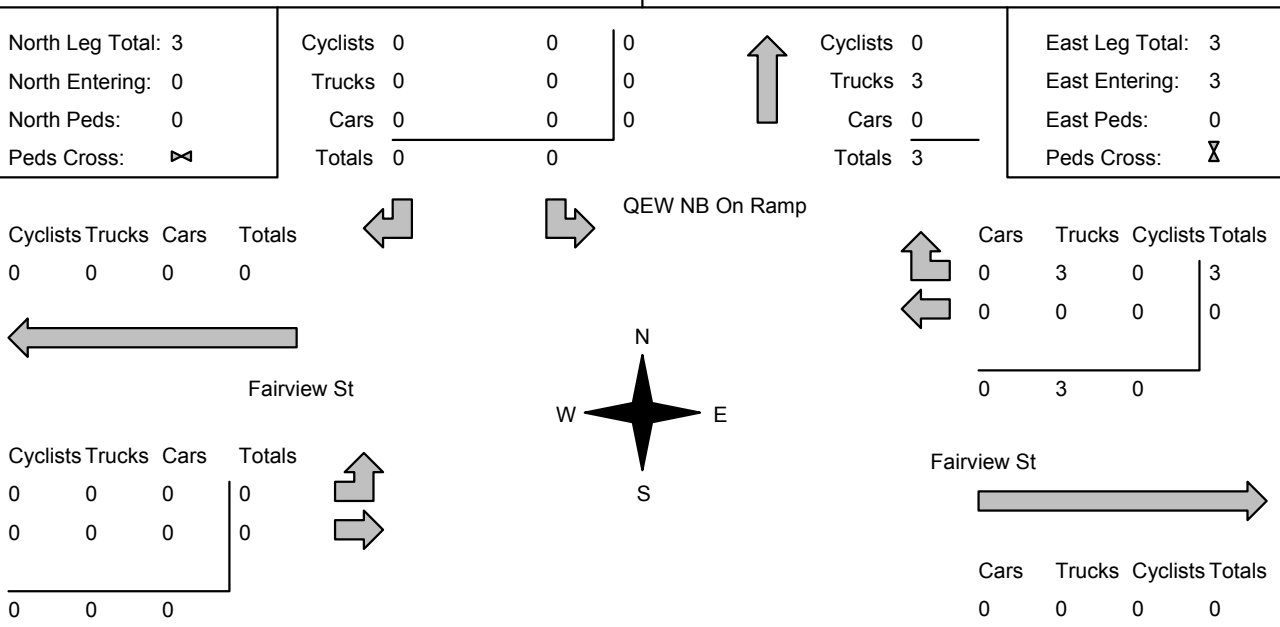
Municipality: Burlington
Site #: 2516600012
Intersection: Fairview St & QEW NB On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Fairview St runs W/E



Peds Cross:
West Peds: 0
West Entering: 0
West Leg Total: 0

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 8:15:00
To: 9:15:00

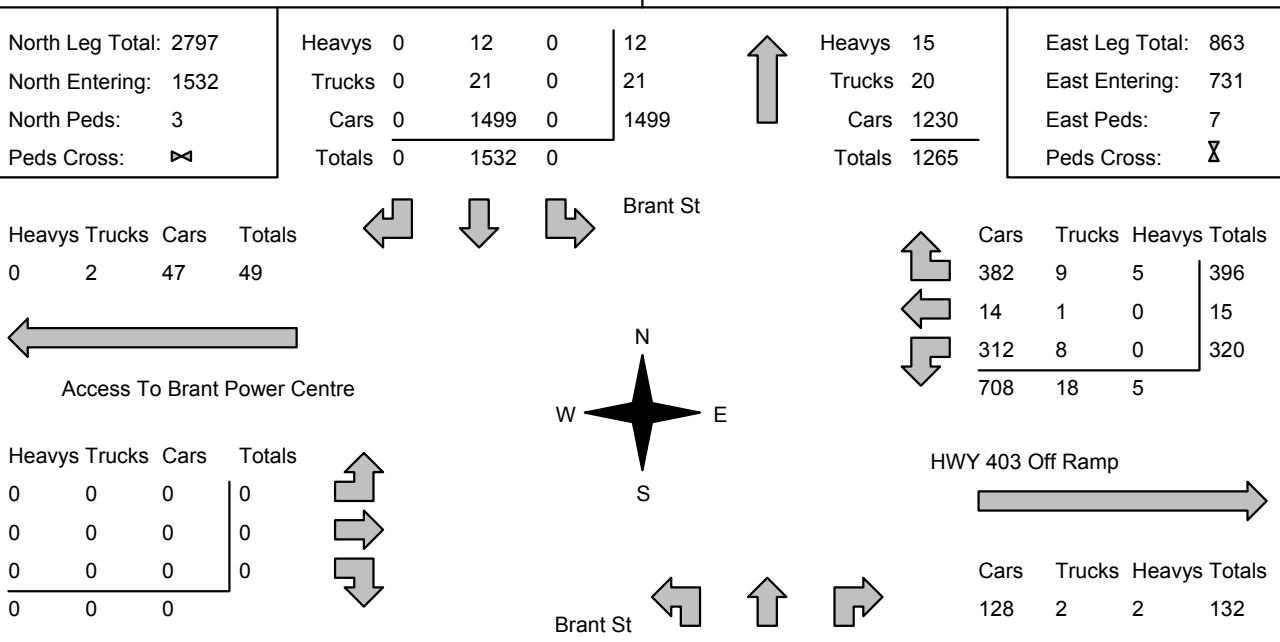
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 3398
North Entering: 1872
North Peds: 0
Peds Cross: ⋈

Heavys	0	7	0	7
Trucks	0	8	0	8
Cars	2	1855	0	1857
Totals	2	1870	0	

Heavys	2
Trucks	13
Cars	1511
Totals	1526

East Leg Total: 657
East Entering: 136
East Peds: 6
Peds Cross: ⧖

Heavys	Trucks	Cars	Totals
0	0	80	80

Brant St

Cars	Trucks	Heavys	Totals
46	1	0	47
6	0	0	6
81	1	1	83
133	2	1	

Access To Brant Power Centre

N
W E
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Heavys	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

HWY 403 Off Ramp

Cars	Trucks	Heavys	Totals
519	0	2	521

Brant St

Peds Cross: ⧖
West Peds: 1
West Entering: 0
West Leg Total: 80

Cars	1936
Trucks	9
Heavys	8
Totals	1953

Cars	72	1465	519	2056
Trucks	0	12	0	12
Heavys	0	2	2	4
Totals	72	1479	521	

Peds Cross: ⋈
South Peds: 0
South Entering: 2072
South Leg Total: 4025

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

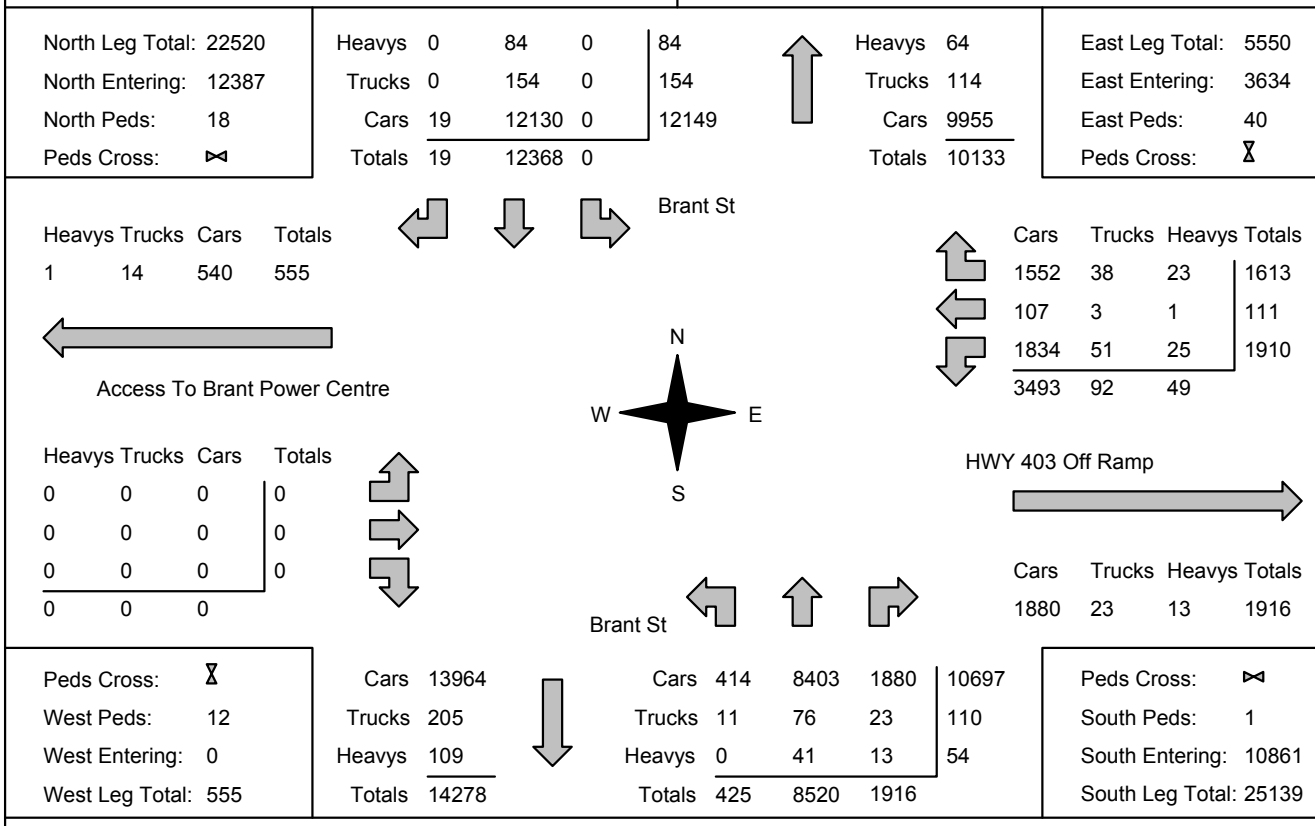
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 3471
North Entering: 1849
North Peds: 6
Peds Cross: ⋈

Heavys	0	3	0	3
Trucks	0	5	0	5
Cars	14	1827	0	1841
Totals	14	1835	0	

Heavys	0
Trucks	8
Cars	1614
Totals	1622

East Leg Total: 1118
East Entering: 888
East Peds: 7
Peds Cross: ⧖

Brant St

Heavys	Trucks	Cars	Totals
0	1	148	149

Access To Brant Power Centre

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

Cars	Trucks	Heavys	Totals
375	4	0	379
37	1	0	38
462	3	6	471
874	8	6	

N
W E
S

HWY 403 Off Ramp

Cars	Trucks	Heavys	Totals
230	0	0	230

Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 149

Cars	2289
Trucks	8
Heavys	9
Totals	2306

Cars	97	1239	230	1566
Trucks	0	4	0	4
Heavys	0	0	0	0
Totals	97	1243	230	

Peds Cross: ⋈
South Peds: 0
South Entering: 1570
South Leg Total: 3876

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

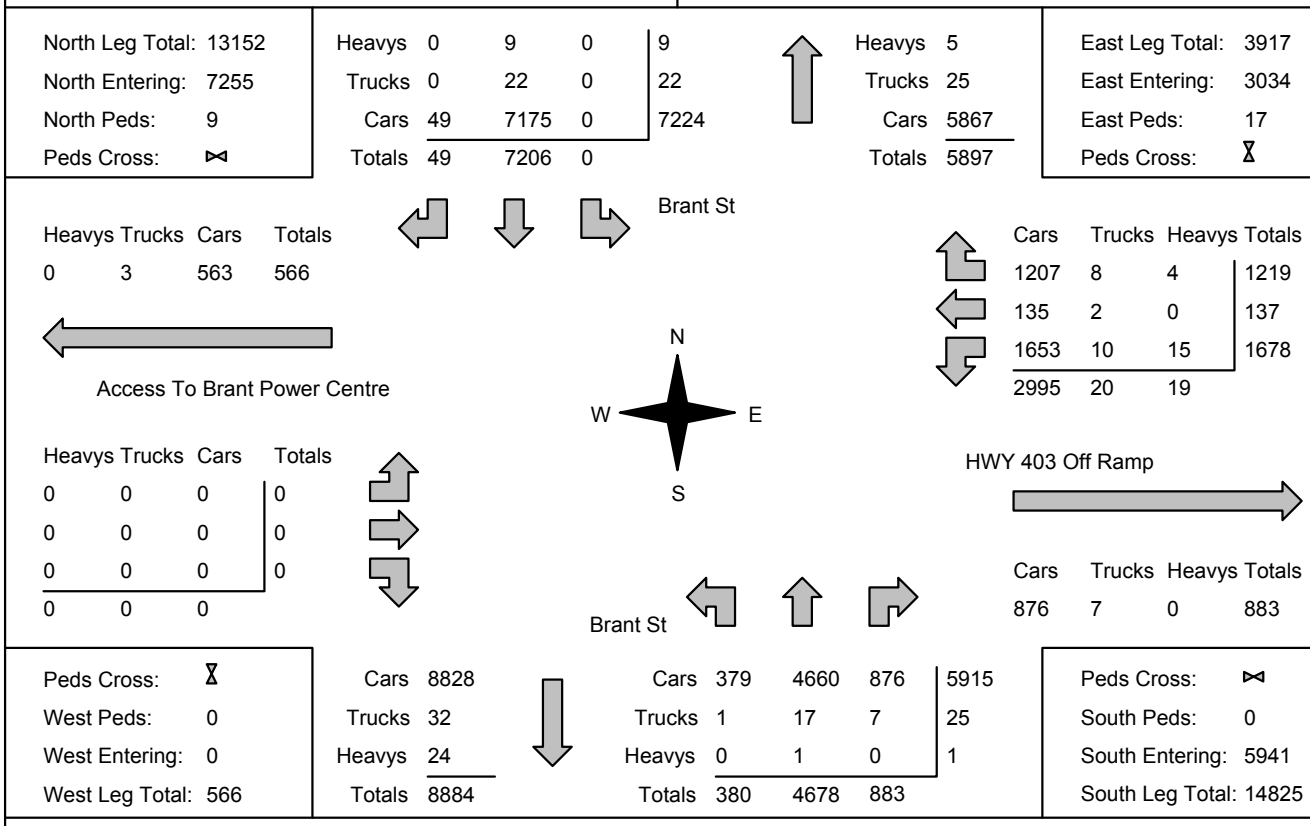
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 40
North Entering: 17
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	1	16	0	17
Cars	0	0	0	0
Totals	1	16	0	

Cyclists	1
Trucks	22
Cars	0
Totals	23

East Leg Total: 9
East Entering: 7
East Peds: 0
Peds Cross: ⧖

Brant St

Cyclists	Trucks	Cars	Totals
0	1	0	1

Access To Brant Power Centre

Cars	Trucks	Cyclists	Totals
0	1	0	1
0	0	0	0
0	6	0	6
0	7	0	

N
W E
S

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

HWY 403 Off Ramp

Cars	Trucks	Cyclists	Totals
0	2	0	2

Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 1

Cars	0
Trucks	22
Cyclists	0
Totals	22

Cars	0	0	0	0
Trucks	0	21	2	23
Cyclists	0	1	0	1
Totals	0	22	2	

Peds Cross: ⋈
South Peds: 0
South Entering: 24
South Leg Total: 46

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:15:00
To: 16:15:00

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

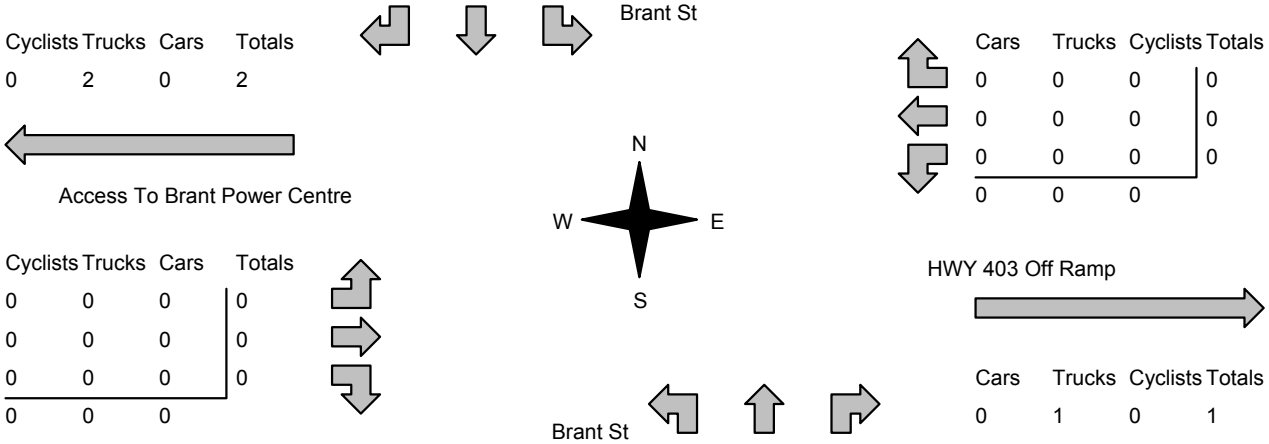
Major Road: Brant St runs N/S

North Leg Total: 38
North Entering: 20
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	1	19	0	20
Cars	0	0	0	0
Totals	1	19	0	

Cyclists	0
Trucks	18
Cars	0
Totals	18

East Leg Total: 1
East Entering: 0
East Peds: 0
Peds Cross: ⧖



Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 2

Cars	0
Trucks	19
Cyclists	0
Totals	19

Cars	0	0	0	0
Trucks	1	18	1	20
Cyclists	0	0	0	0
Totals	1	18	1	

Peds Cross: ⋈
South Peds: 0
South Entering: 20
South Leg Total: 39

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 219
North Entering: 104
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	4	100	0	104
Cars	0	0	0	0
Totals	4	100	0	

Cyclists	3
Trucks	112
Cars	0
Totals	115

East Leg Total: 30
East Entering: 21
East Peds: 0
Peds Cross: ⋈

Brant St

Cyclists	Trucks	Cars	Totals
0	5	0	5

Access To Brant Power Centre

Cars	Trucks	Cyclists	Totals
0	5	0	5
0	0	0	0
0	16	0	16
0	21	0	

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W E
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Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

HWY 403 Off Ramp

Cars	Trucks	Cyclists	Totals
0	9	0	9

Brant St

Peds Cross: ⋈
West Peds: 0
West Entering: 0
West Leg Total: 5

Cars	0
Trucks	116
Cyclists	0
Totals	116

Cars	0	0	0	0
Trucks	1	107	9	117
Cyclists	0	3	0	3
Totals	1	110	9	

Peds Cross: ⋈
South Peds: 0
South Entering: 120
South Leg Total: 236

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:45:00
To: 13:45:00

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 15
North Entering: 10
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	9	0	9
Cars	0	0	0	0
Totals	0	10	0	

Cyclists	1
Trucks	4
Cars	0
Totals	5

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

Brant St

Cyclists	Trucks	Cars	Totals
0	0	0	0

Access To Brant Power Centre

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

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W E
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Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

HWY 403 Off Ramp

Cars	Trucks	Cyclists	Totals
0	0	0	0

Brant St

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

Cars	0
Trucks	9
Cyclists	1
Totals	10

Cars	0	0	0	0
Trucks	0	4	0	4
Cyclists	0	1	0	1
Totals	0	5	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 5
South Leg Total: 15

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 Off Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 45
North Entering: 26
North Peds: 0
Peds Cross: ⋈

Cyclists	0	5	0	5
Trucks	0	21	0	21
Cars	0	0	0	0
Totals	0	26	0	

Cyclists	1
Trucks	18
Cars	0
Totals	19

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

Brant St

Cyclists	Trucks	Cars	Totals
0	0	0	0

Access To Brant Power Centre

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
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Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

HWY 403 Off Ramp

Cars	Trucks	Cyclists	Totals
0	0	0	0

Brant St

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

Cars	0
Trucks	21
Cyclists	5
Totals	26

Cars	0	0	0
Trucks	0	18	0
Cyclists	0	1	0
Totals	0	19	0

Peds Cross: ⋈
South Peds: 0
South Entering: 19
South Leg Total: 45

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 246
North Entering: 246
North Peds: 0
Peds Cross: ⋈

Heavys	3	0	3
Trucks	6	0	6
Cars	237	0	237
Totals	246	0	

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

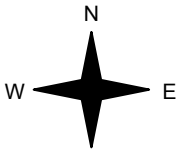


Brant St

Heavys	Trucks	Cars	Totals
3	6	237	246

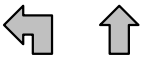


HWY 403 On Ramp



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





Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 246

Cars	0		
Trucks	0		
Heavys	0		
Totals	0		

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

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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

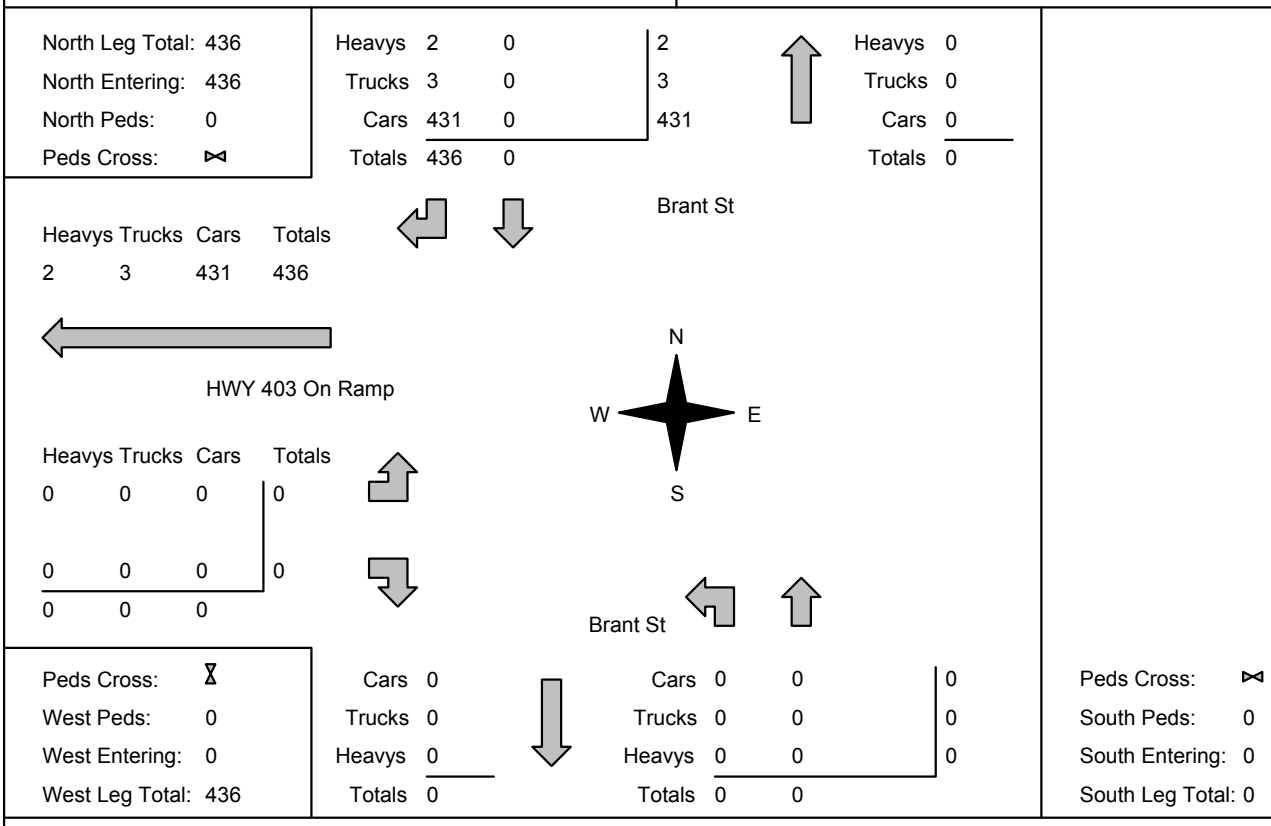
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

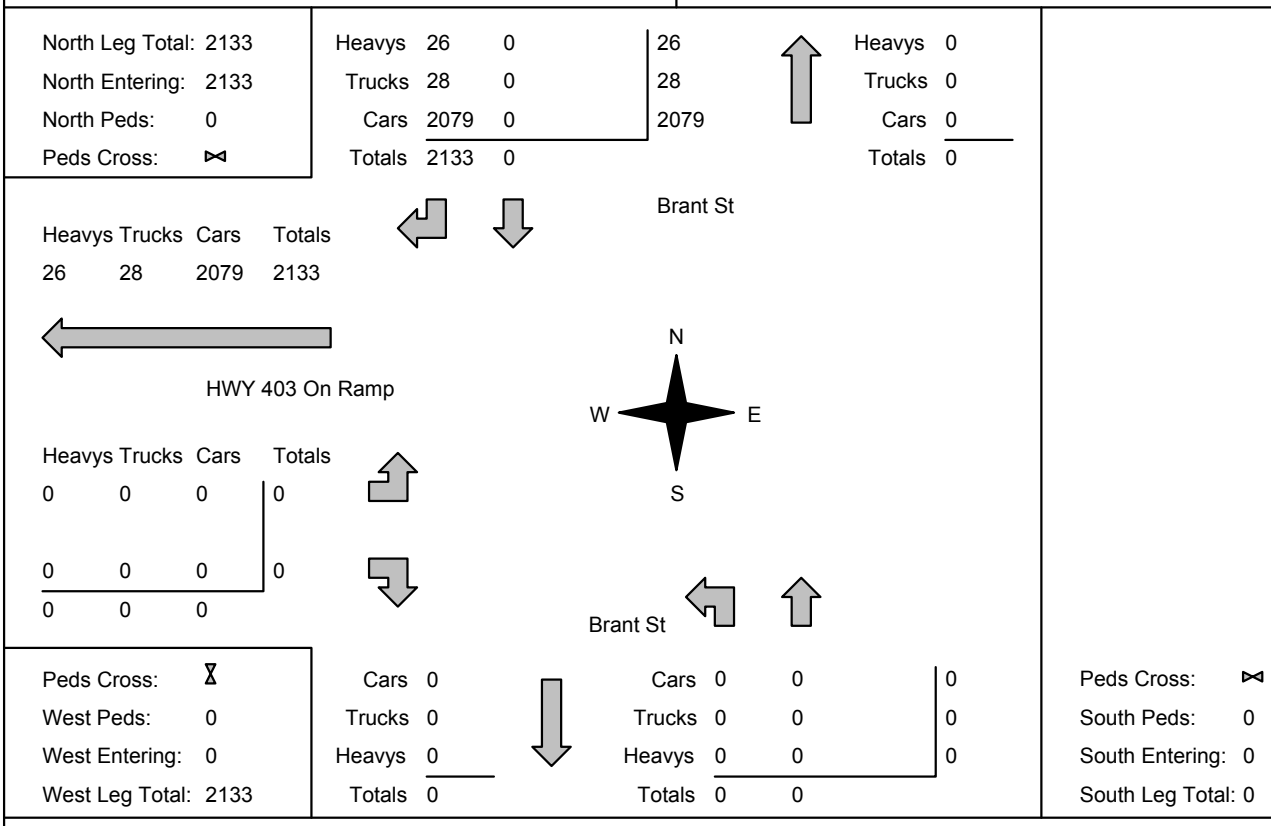
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 11:45:00
To: 12:45:00

Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

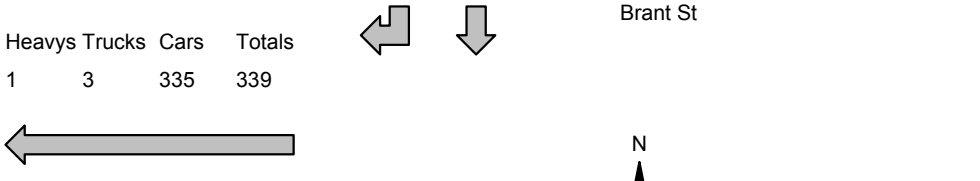
**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 339
North Entering: 339
North Peds: 0
Peds Cross: ⋈

Heavys	1	0	1
Trucks	3	0	3
Cars	335	0	335
Totals	339	0	

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



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

Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 0
West Leg Total: 339

Cars	0		0
Trucks	0		0
Heavys	0		0
Totals	0		

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

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

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

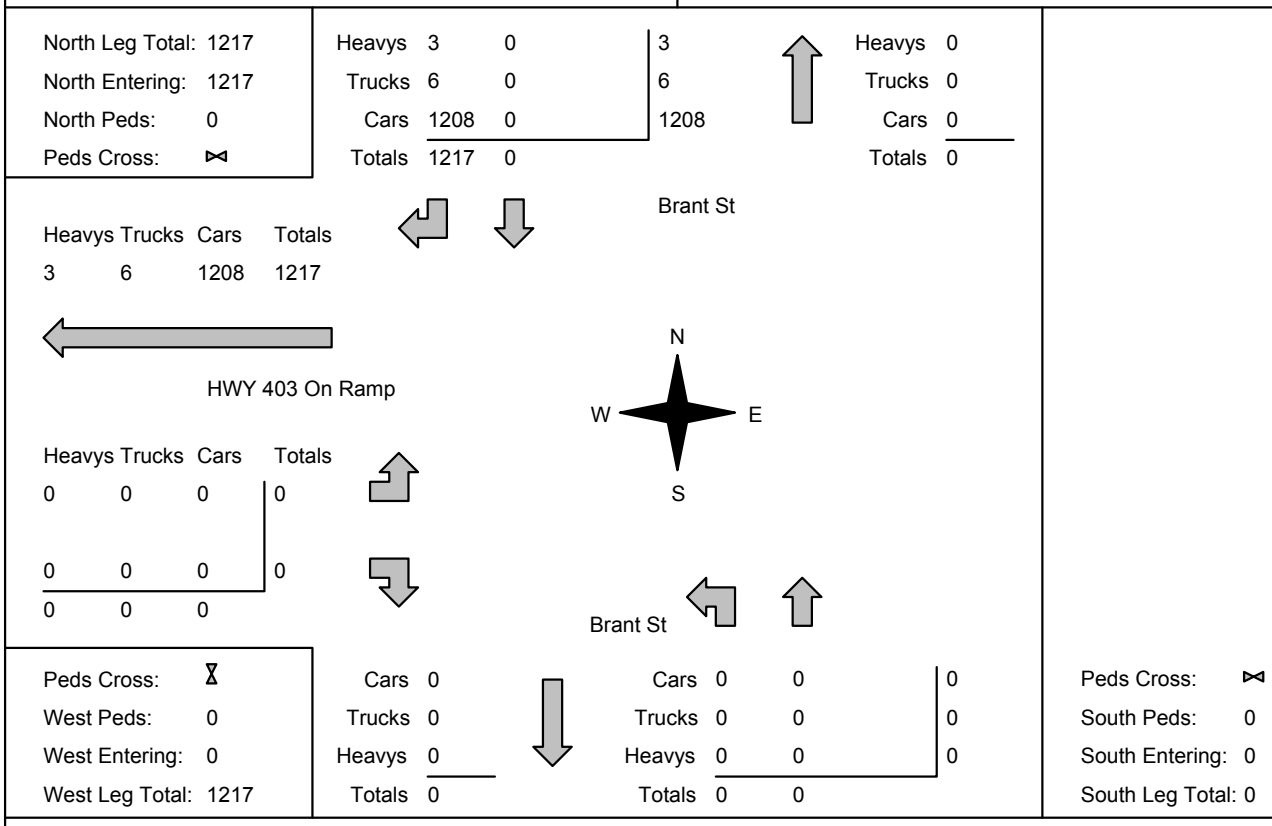
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

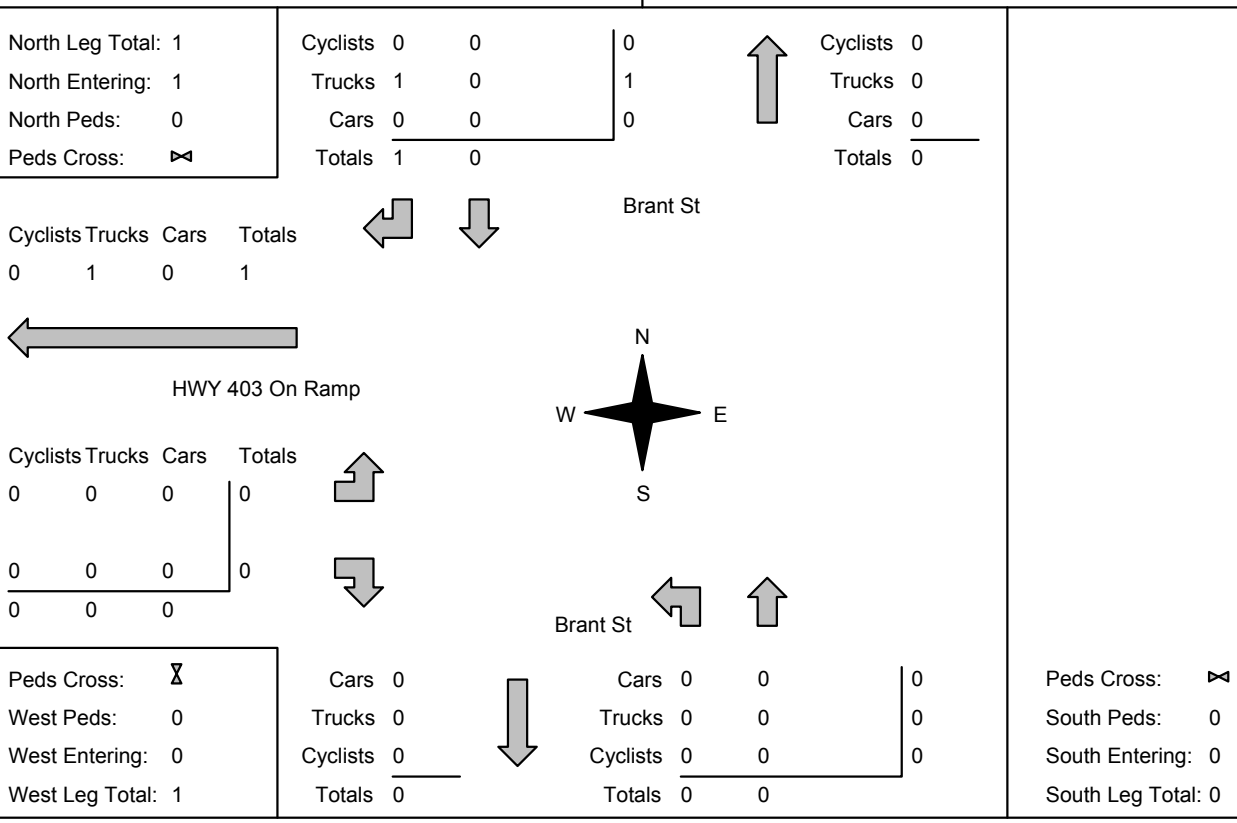
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

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

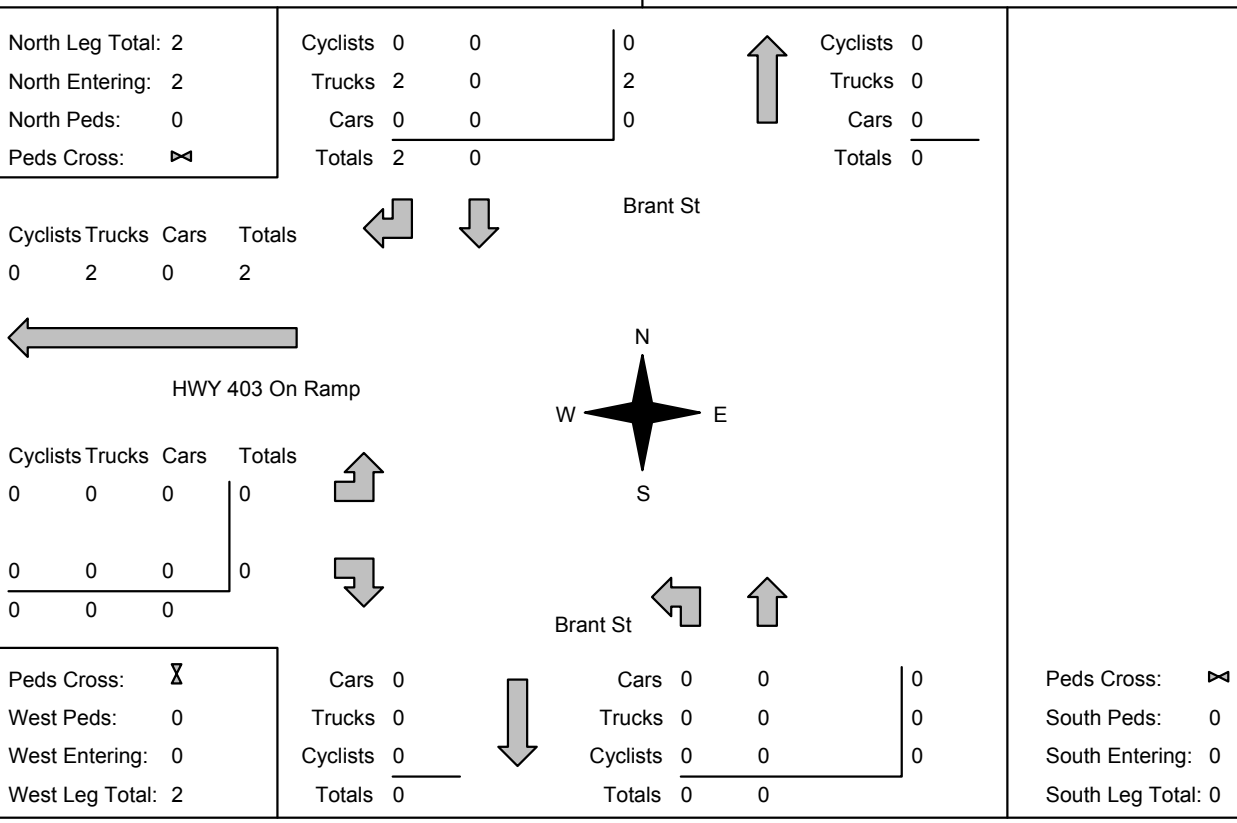
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

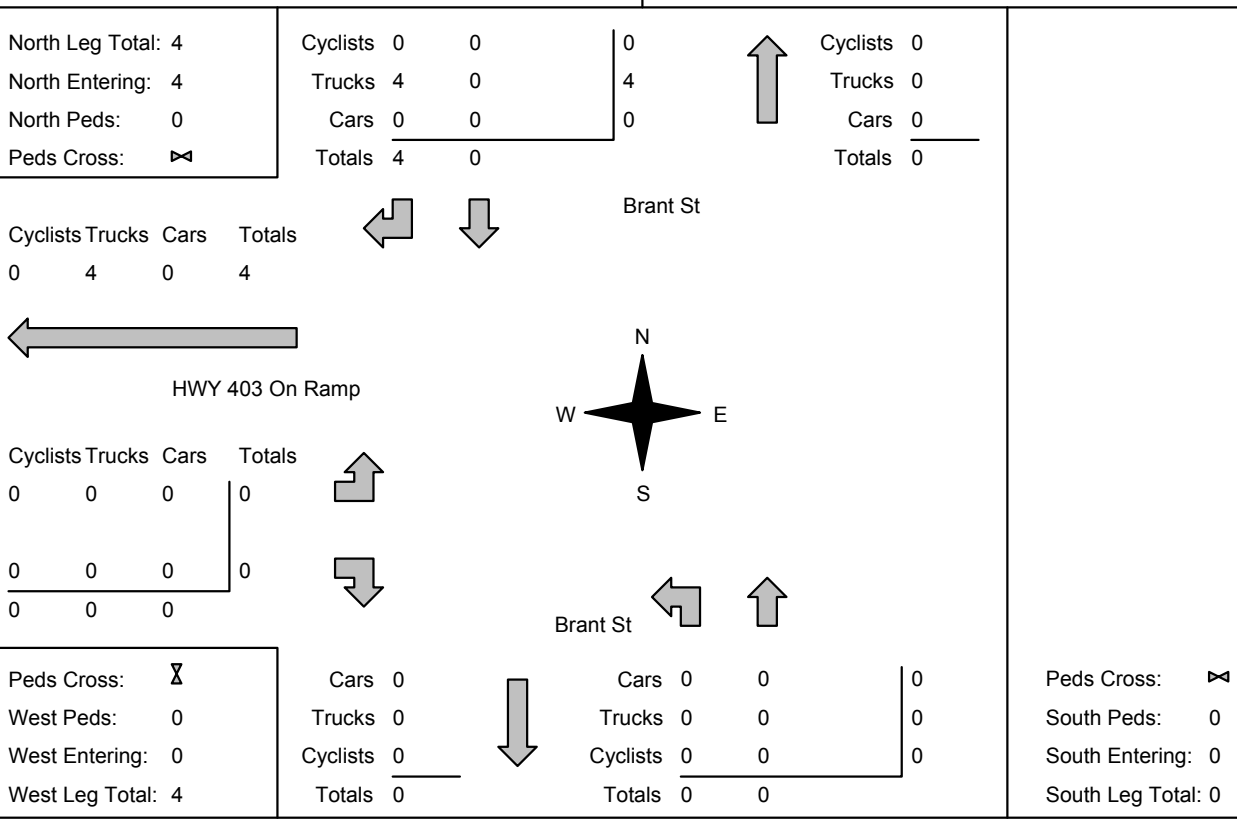
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 10:45:00
To: 11:45:00

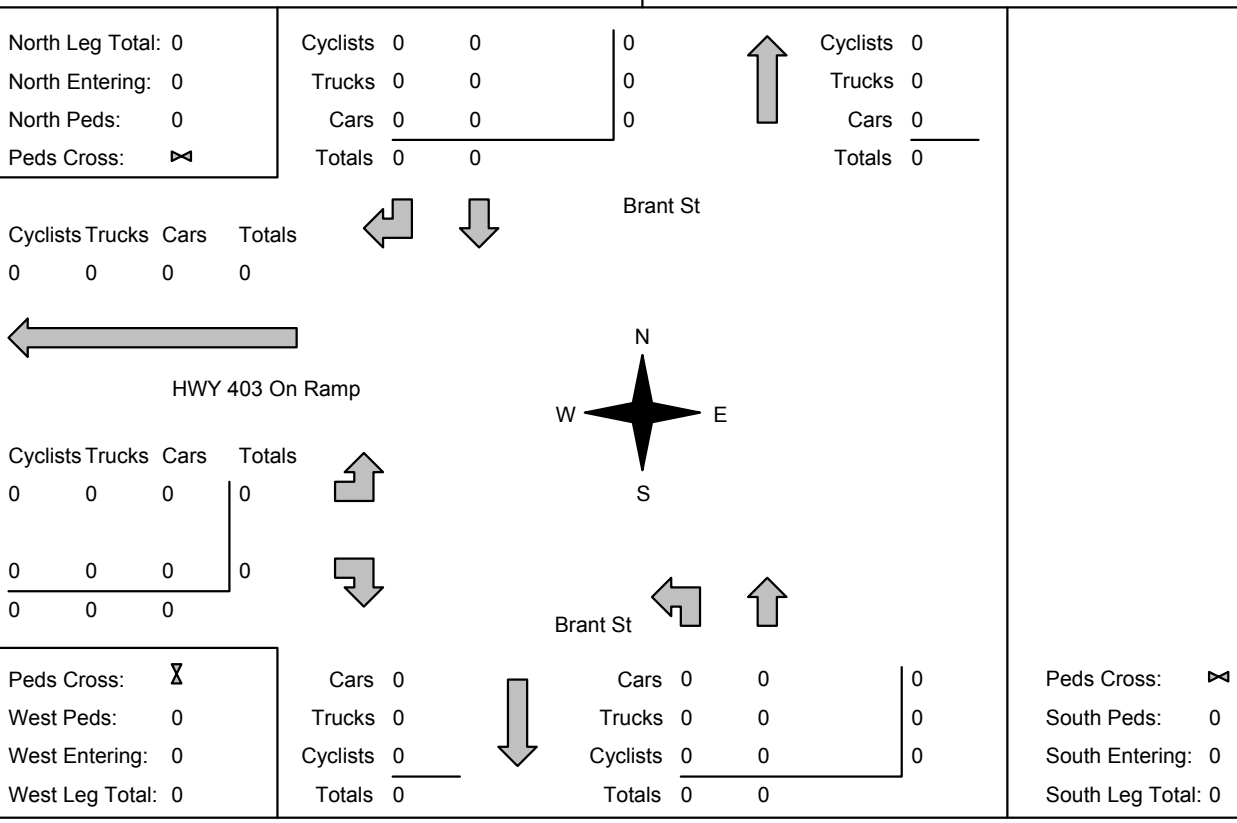
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

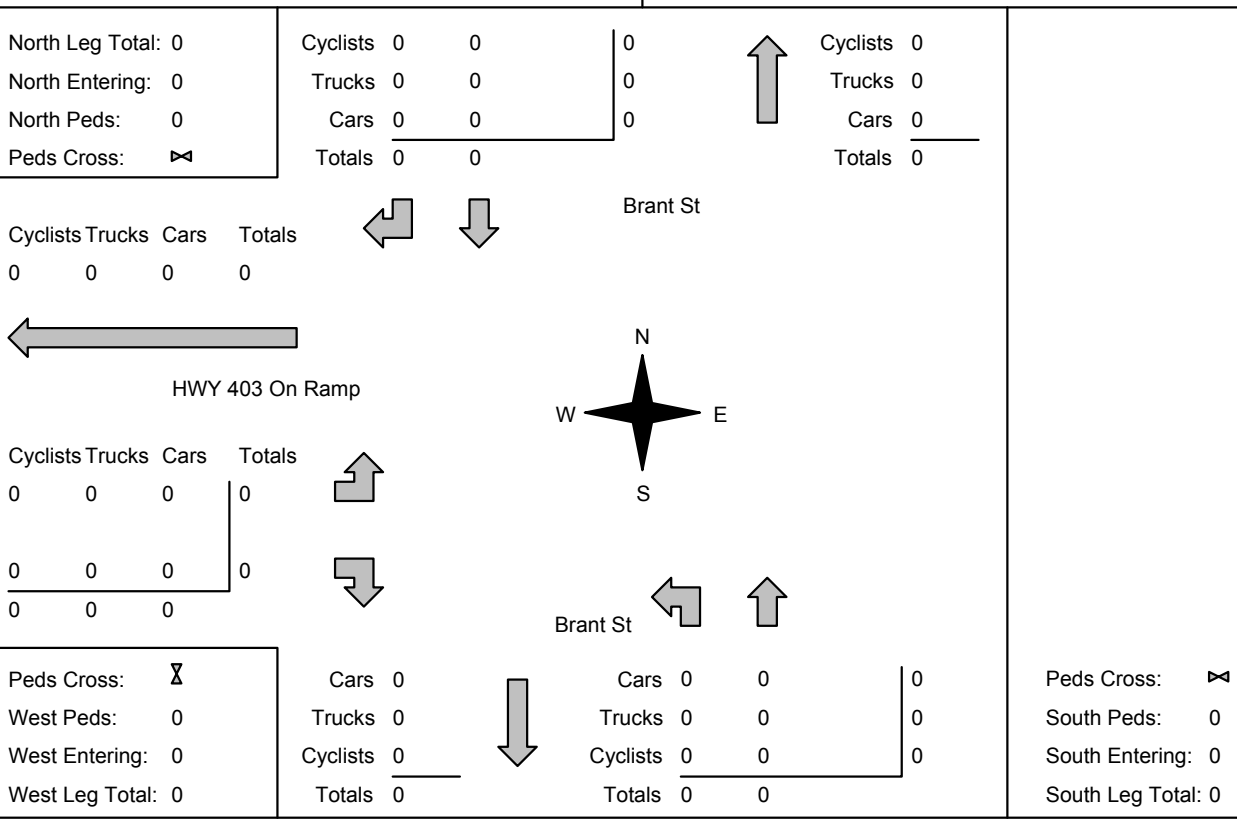
Municipality: Burlington
Site #: 2516600013
Intersection: Brant St & HWY 403 On Ramp
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total:	2739			
North Entering:	1724			
North Peds:	0			
Peds Cross:	⋈			
Heavys	3	11	0	14
Trucks	4	23	0	27
Cars	538	1145	0	1683
Totals	545	1179	0	
Heavys	10			
Trucks	16			
Cars	989			
Totals	1015			
East Leg Total:	416			
East Entering:	0			
East Peds:	0			
Peds Cross:	⧖			

Brant St

Heavys	Trucks	Cars	Totals
3	4	538	545

HWY 403 EB Off & On Ramp

Heavys	Trucks	Cars	Totals
0	0	139	139
0	0	0	0
1	5	159	165
1	5	298	

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

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HWY 403 EB On Ramp

Cars	Trucks	Heavys	Totals
407	4	5	416

Brant St

Peds Cross:	⧖			
West Peds:	0			
West Entering:	304			
West Leg Total:	849			
Cars	1304			
Trucks	28			
Heavys	12			
Totals	1344			
Cars	0	850	407	1257
Trucks	0	16	4	20
Heavys	0	10	5	15
Totals	0	876	416	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	1292			
South Leg Total:	2636			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 16:15:00
To: 17:15:00

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total:	3491			
North Entering:	1658			
North Peds:	0			
Peds Cross:	⋈			
Heavys	0	5	0	5
Trucks	4	11	0	15
Cars	303	1335	0	1638
Totals	307	1351	0	
Heavys	8			
Trucks	11			
Cars	1814			
Totals	1833			
East Leg Total:	401			
East Entering:	0			
East Peds:	0			
Peds Cross:	⧖			

Brant St

Heavys	Trucks	Cars	Totals
0	4	303	307

HWY 403 EB Off & On Ramp

Heavys	Trucks	Cars	Totals
1	6	186	193
0	0	0	0
0	4	190	194
1	10	376	

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

HWY 403 EB On Ramp

Cars	Trucks	Heavys	Totals
389	10	2	401

Brant St

Peds Cross:	⧖			
West Peds:	5			
West Entering:	387			
West Leg Total:	694			
Cars	1525			
Trucks	15			
Heavys	5			
Totals	1545			
Cars	0	1628	389	2017
Trucks	0	5	10	15
Heavys	0	7	2	9
Totals	0	1640	401	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	2041			
South Leg Total:	3586			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

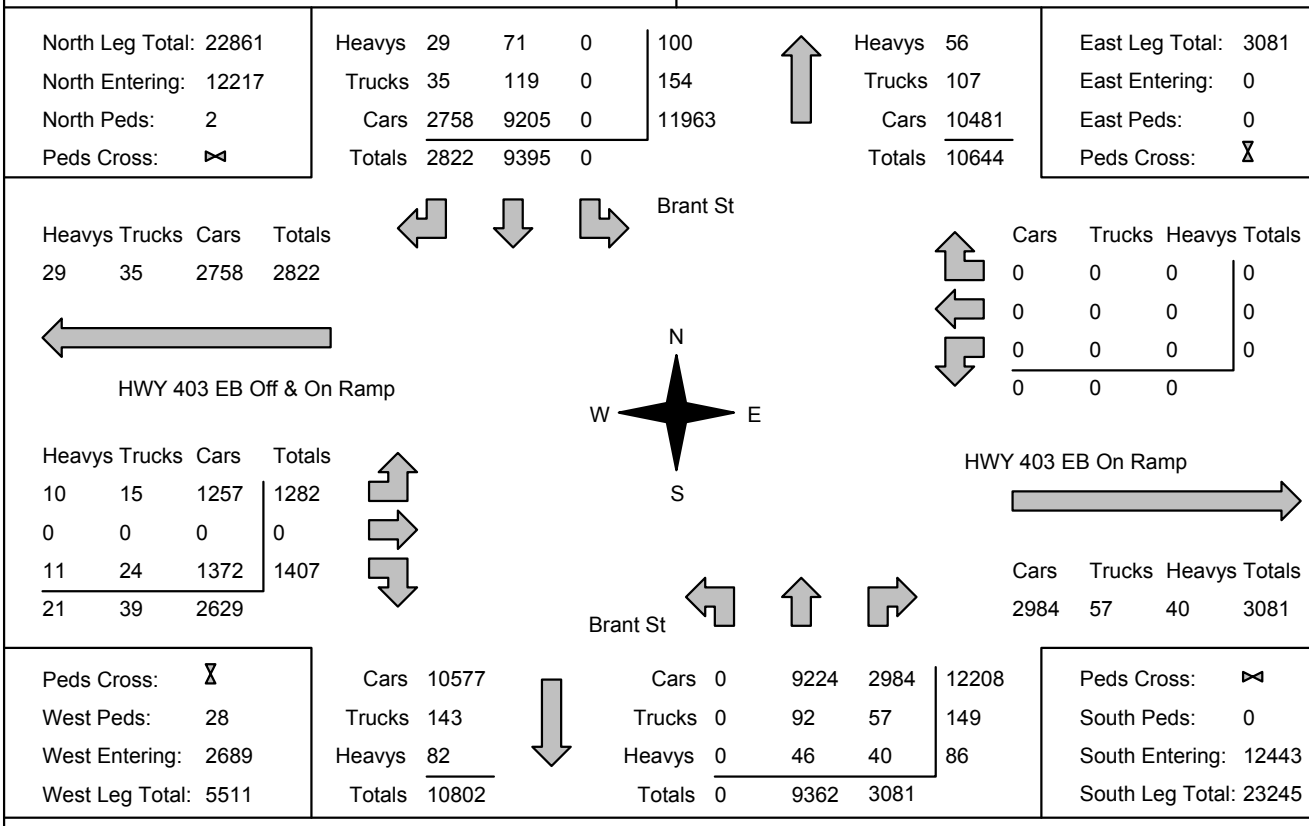
Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 22-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 14:00:00
To: 15:00:00

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total:	3541			
North Entering:	1995			
North Peds:	0			
Peds Cross:	⋈			
Heavys	2	7	0	9
Trucks	1	5	0	6
Cars	388	1592	0	1980
Totals	391	1604	0	
Heavys	0			
Trucks	5			
Cars	1541			
Totals	1546			
East Leg Total:	561			
East Entering:	0			
East Peds:	0			
Peds Cross:	⧖			

Brant St

Heavys	Trucks	Cars	Totals
2	1	388	391

HWY 403 EB Off & On Ramp

Heavys	Trucks	Cars	Totals
0	0	207	207
0	0	0	0
0	2	212	214
0	2	419	

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

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HWY 403 WB On Ramp

Cars	Trucks	Heavys	Totals
552	3	6	561

Brant St

Peds Cross:	⧖			
West Peds:	5			
West Entering:	421			
West Leg Total:	812			
Cars	1804			
Trucks	7			
Heavys	7			
Totals	1818			
Cars	0	1334	552	1886
Trucks	0	5	3	8
Heavys	0	0	6	6
Totals	0	1339	561	
Peds Cross:	⋈			
South Peds:	2			
South Entering:	1900			
South Leg Total:	3718			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

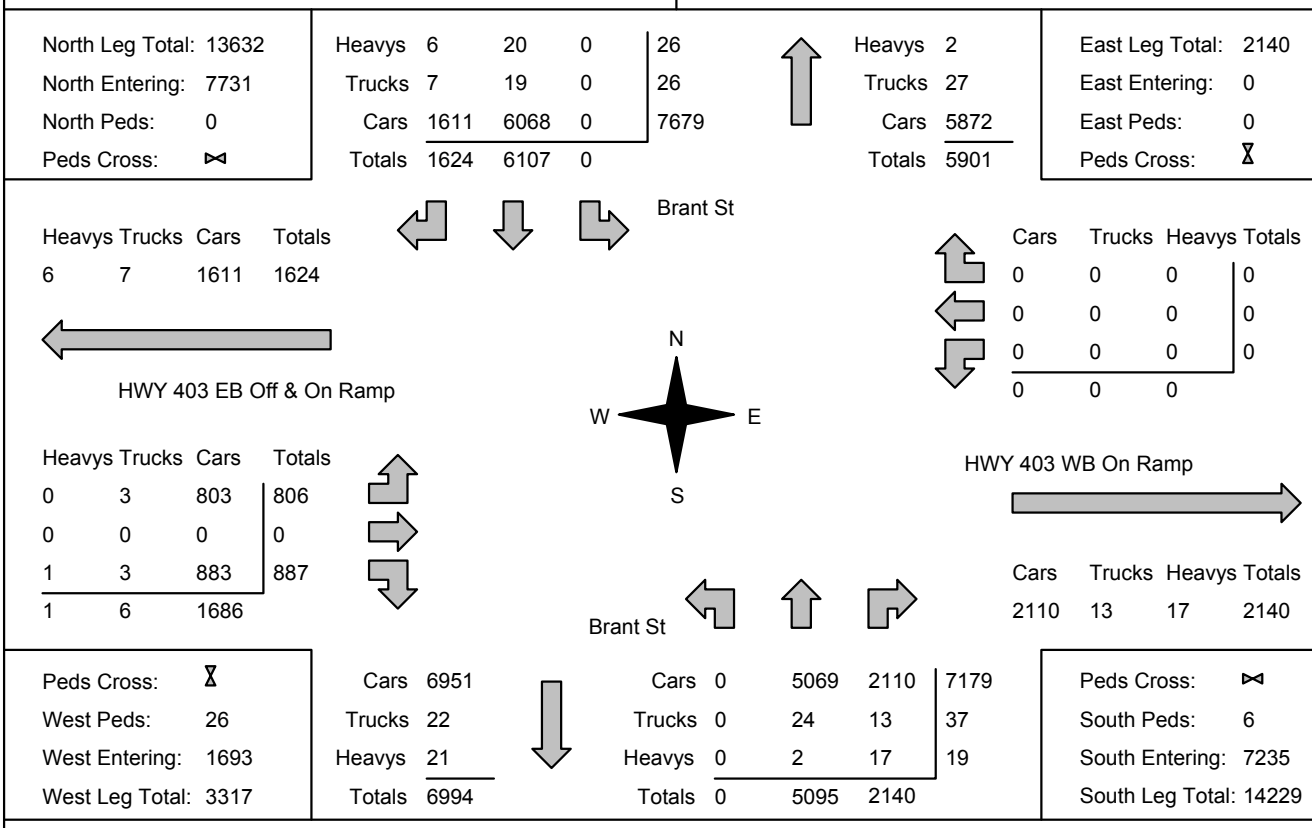
Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 11:00:00

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

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 43
North Entering: 23
North Peds: 0
Peds Cross: ⋈

Cyclists	0	0	0	0
Trucks	0	23	0	23
Cars	0	0	0	0
Totals	0	23	0	

Cyclists	0
Trucks	20
Cars	0
Totals	20

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

Brant St

Cyclists	Trucks	Cars	Totals
0	0	0	0

HWY 403 EB Off & On Ramp

Cyclists	Trucks	Cars	Totals
0	1	0	1
0	0	0	0
0	0	0	0
0	1	0	

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

HWY 403 WB On Ramp

Cars	Trucks	Cyclists	Totals
0	0	0	0

Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 1

Cars	0			
Trucks	23			
Cyclists	0			
Totals	23			

Cars	0	0	0	0
Trucks	0	19	0	19
Cyclists	0	0	0	0
Totals	0	19	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 19
South Leg Total: 42

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 14:00:00
To: 18:00:00

One Hour Peak
From: 15:15:00
To: 16:15:00

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

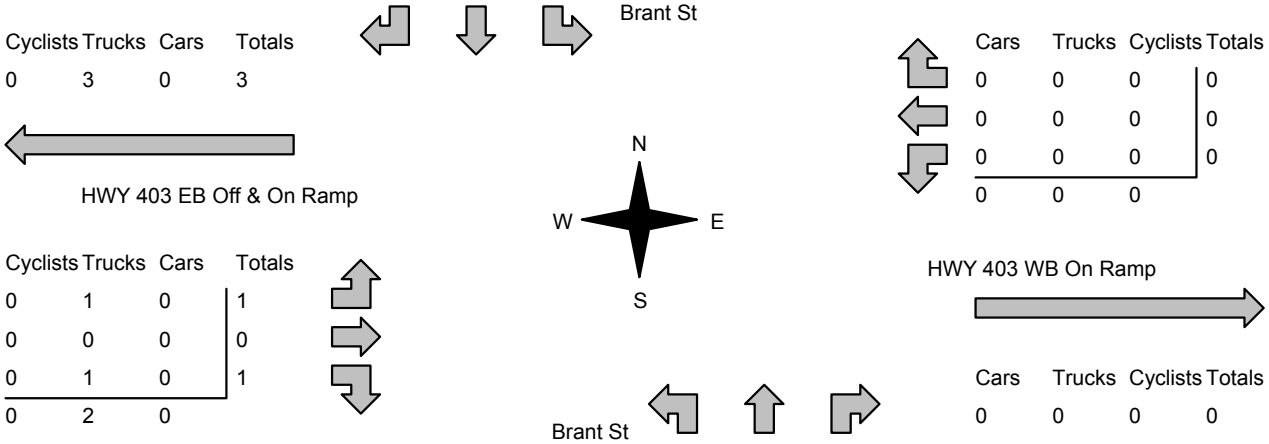
Major Road: Brant St runs N/S

North Leg Total: 41
North Entering: 21
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	3	17	0	20
Cars	0	0	0	0
Totals	3	18	0	

Cyclists	0
Trucks	20
Cars	0
Totals	20

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



Peds Cross: ⧖
West Peds: 0
West Entering: 2
West Leg Total: 5

Cars	0
Trucks	18
Cyclists	1
Totals	19

Cars	0	0	0	0
Trucks	0	19	0	19
Cyclists	0	0	0	0
Totals	0	19	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 19
South Leg Total: 38

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

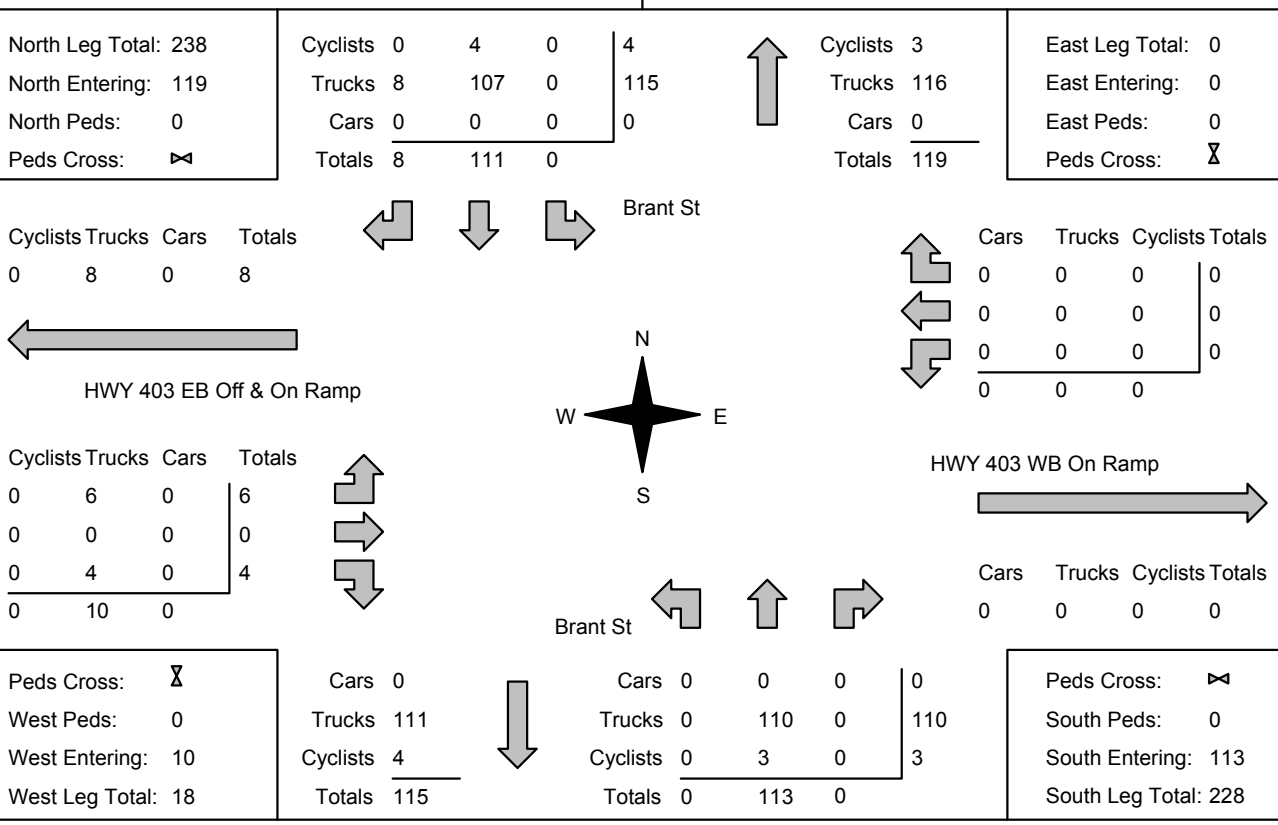
Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 23-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Mid-day Peak Diagram

Specified Period
From: 11:00:00
To: 15:00:00

One Hour Peak
From: 12:30:00
To: 13:30:00

Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S

North Leg Total: 13
North Entering: 8
North Peds: 0
Peds Cross: ⋈

Cyclists	0	1	0	1
Trucks	0	7	0	7
Cars	0	0	0	0
Totals	0	8	0	

Cyclists	1
Trucks	4
Cars	0
Totals	5

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

Brant St

Cyclists	Trucks	Cars	Totals
0	0	0	0

HWY 403 EB Off & On Ramp

Cyclists	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	1	0	1
0	1	0	

Cars	Trucks	Cyclists	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

HWY 403 WB On Ramp

Cars	Trucks	Cyclists	Totals
0	0	0	0

Brant St

Peds Cross: ⧖
West Peds: 0
West Entering: 1
West Leg Total: 1

Cars	0
Trucks	8
Cyclists	1
Totals	9

Cars	0	0	0	0
Trucks	0	4	0	4
Cyclists	0	1	0	1
Totals	0	5	0	

Peds Cross: ⋈
South Peds: 0
South Entering: 5
South Leg Total: 14

Comments

Trucks = Buses

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

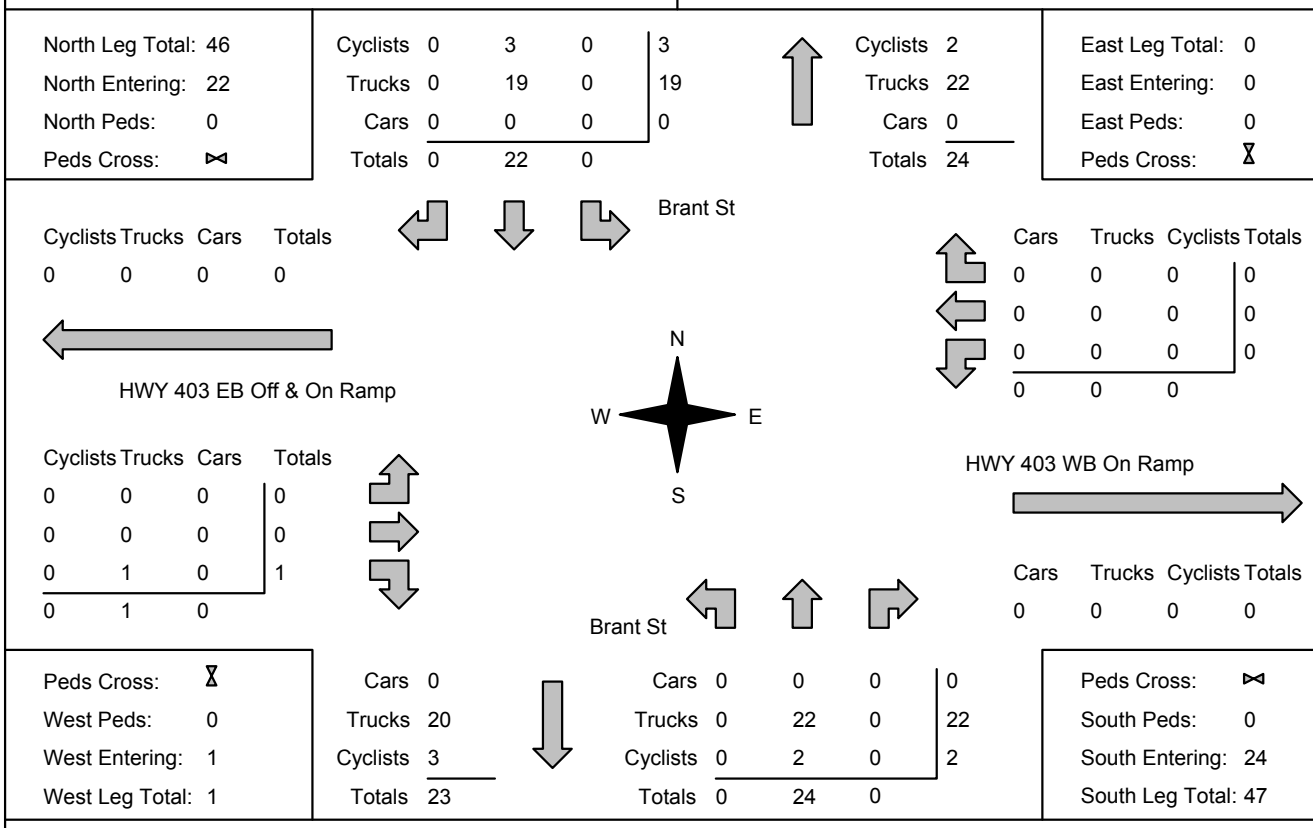
Municipality: Burlington
Site #: 2516600014
Intersection: Brant St & HWY 403 EB Off & On
TFR File #: 1
Count date: 25-Oct-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Brant St runs N/S



Comments

Trucks = Buses

Appendix C:
Signal Timing Plans

Intersection Name:	TS ID:	Line No:	Model:	Controller Make:	IP address:
Aldershot Go Stn @ Bus Entrance	32	4	ACS/3	Econolite	172.22.10.2

Type of Operation:				8 Phase Semi-Actuated	
No	Date			Description	Prepared By
	Y	M	D		
2	2015	10	2	Decrease SS Max time, Increase MS Walk Time	EN
3	2020	12	14	Update Main Street FDW	JR

*- Start from Main Manu

PHASE DESCRIPTION			
Ph1		Ph5	
Ph2	EB -403 On Ramp	Ph6	WB -403 On Ramp
Ph3		Ph7	
Ph4	NB - Bus Entrance	Ph8	

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

Phase:	1	2	3	4	5	6	7	8
Phase in Use :		X		X		X		
Exclusive PED :								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1	Phase:	1	2	3	4	5	6	7	8
Minimum Green	:		8		8		8		
Conditional Service Min. Green	:								
Walk	:		15		7		15		
Ped. Clearance	:		9		10		9		
Pedestrian Carry Over	:								
Vehicle Extension	:		3		3		3		
MAX 1	:		30		15		30		
MAX 2	:		30		15		30		
Yellow Change	:		4		4		4		
Red Clearance	:		3		3		3		

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

Phase:	1	2	3	4	5	6	7	8
Lock Detector :								
Vehicle Recall :		X				X		
Pedestrian Recall :		X				X		
MAX Recall :								
Soft Recall :								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN * - 3 - 2, - 3 - 3

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec)							
					1	2	3	4	5	6	7	8
10			1	10								

CP # 1, 2, 10	Phase:	1	2	3	4	5	6	7	8
Coord Phase	:		X				X		
Vehicle Recall	:								
Pedestrian Recall *(3-3, 5-2)	:		X				X		
Recall to MAX Time	:								
Phase Omit	:								
Special Function Outputs	:								

Coordinator Pattern #	Prefer.	Phase							
		1	2	3	4	5	6	7	8
	1								
	2								

X - select "." deselect

TIME BASE: ACTION PLAN, DAY PLAN *** - 5 - 2, - 5 - 3, -5 - 4**

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan
1	1	10	00:00	254	1

Schedule 1 = Day Plan 1
Schedule 2 = Day Plan 2
Schedule 3 = Day Plan 3

Day Plan 1 (Weekday/Saturday/Sunday/Holidays)

Action Plan 10 = free (254)

TIME BASE DATA - TIME OF YEAR EVENTS *** - 5 - 5**

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	**1**	**Fixed**	**1**	**1**	**0**	**3**
Family Day	**2**	**Float**	**2**	**2**	**3**	**3**
Good Friday	**3**	**Float**	**4**	**6**	**1**	**3**
Victoria Day	**4**	**Float**	**5**	**2**	**3**	**3**
Canada Day	**5**	**Fixed**	**7**	**1**	**0**	**3**
Civic Day	**6**	**Float**	**8**	**2**	**1**	**3**
Labour Day	**7**	**Float**	**9**	**2**	**1**	**3**
Thanksgiving	**8**	**Float**	**10**	**2**	**2**	**3**
Christmas Day	**9**	**Fixed**	**12**	**25**	**0**	**3**

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
NSR @ King Rd	175	1	ACS/3	172.22.27.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

*-Start from Main Menu

No	Date			Description	Prepared by
	Y	M	D		MA
4	2019	11	28	Changed offset pattern 3	

PHASE DESCRIPTION

Ph1	WBLT- NSR	Ph5	
Ph2	EB - NSR	Ph6	WB - NSR
Ph3		Ph7	
Ph4	NB - King Rd	Ph8	SB - King Rd

PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 2

Phase:	1	2	3	4	5	6	7	8
Phase in Use	X	X		X		X		X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1	Phase: 1	2	3	4	5	6	7	8
Minimum Green	6	8		8		8		8
Walk		8				8		
Ped. Clearance		10				10		
Pedestrian Carry Over								
Vehicle Extension	3	3		5		3		3
MAX 1	10	35		30		35		30
MAX 2	10	35		30		35		30
Yellow Change	3	4		4		4		4
Red Clearance		2		3		2		3
Phase Minimum:	10	25	1	16	1	25	1	16

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 8

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall		X				X		
Pedestrian Recall		X				X		
MAX Recall								
Min Recall								

COORDINATION: COORDINATOR PATTERN, SPLIT PATTERN * - 3 - 2, - 3 - 3

Coordinator Pattern (CP)	Cycle Length	Offset (sec)	Timing Plan	Split Pattern	Phases (sec)							
					1	2	3	4	5	6	7	8
1	80	75	1	1	13	37		30		50		30
2	80	75	1	2	13	37		30		50		30
3	90	56	1	3	16	44		30		60		30
4	80	0	1	4	13	27		40		40		40
10	0	0	1	10	0	0		0		0		0

TIME BASE: ACTION PLAN, DAY PLAN * - 5 - 2, - 5 - 3, -5 - 4

Day Plan	Sched. #	Action Plan	Time Period	Pattern	Timing Plan	
1	1	1	07:00	1	1	
1	1	2	09:00	2	1	Schedule 1 = Day Plan 1
1	1	4	15:15	4	1	Schedule 2 = Day Plan 2
1	1	3	16:00	3	1	Schedule 3 = Day Plan 3
1	1	10	19:00	254	1	
2	2	10	6:00	254	1	Day Plan 1 (Weekday)
3	3	10	6:00	254	1	Day Plan 2 (Saturday)
						Day Plan 3 (Sunday, Holidays)
						Action Plan 10 = free (254)

Special Programming:
Pattern 4 in place due to Pollard Windows (employee work day ends)

TIME BASE DATA - TIME OF YEAR EVENTS * - 5 - 5

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Float	4	6	1	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3

Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

Sum of 1&2 – 5&6		Sum of 3&4 – 7&8		Calculated	
				Total 1-4	Total 5-8
				Actual	Actual
1&2	5&6	3&4	7&8		
50	50	30	30	80	80
50	50	30	30	80	80
60	60	30	30	90	90
40	40	40	40	80	80
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
Plains Rd @ King Rd	112	4	EOS	172.24.21.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

No	Date			Description	Prepared by:
	Y	M	D		
9	2025	5	29	Reverted Back to Orignal Timings	MA

*-Start from Main Menu

PHASE DESCRIPTION

Ph1	WBLT- Plains Rd	Ph5	EBLT - Plains Rd
Ph2	EB - Plains Rd	Ph6	WB - Plains Rd
Ph3	SBLT - King Rd	Ph7	NBLT - King Rd
Ph4	NB - King Rd	Ph8	SB - King Rd

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 6

Phase:	1	2	3	4	5	6	7	8
Phase in Use	X	X	X	X	X	X	X	X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1

	Phase: 1	2	3	4	5	6	7	8
Minimum Green	6	20	6	8	6	20	6	8
Walk		16		8		16		8
Ped. Clearance		15		21		15		21
Pedestrian Carry Over								
Vehicle Extension	3	3	3	3	3	3	3	3
MAX 1	15	35	15	25	15	35	15	25
MAX 2	15	35	15	25	15	35	15	25
Yellow Change	4	3.7	4	3.3	4	3.7	4	3.3
Red Clearance		2.3		3.1		2.3		3.1
Phase Minimum:	**10**	**37**	**10**	**35.4**	**10**	**37**	**10**	**35.4**

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 - 1-6

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall		X				X		
Pedestrian Recall								
MAX Recall								
Min Recall								

SCP STRATEGY PLAN

* - 4 -3

PLAN 1									
TIME TO LIVE	130 SECONDS								
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE	NO	YES	NO	YES	NO	YES	NO	YES	

PLAN 2									
TIME TO LIVE									
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

PLAN 3									
TIME TO LIVE									
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

PLAN 4									
TIME TO LIVE	130 SECONDS								
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

TSP/SCP SPLIT PATTERN

* 4 -4 ,

Cycle Length	Plan		Phases							
			1	2	3	4	5	6	7	8
110	1	Max Reduction		11		11		11		11
		Max Extension		11		0		11		0
110	2	Max Reduction		11		11		11		11
		Max Extension		11		0		11		0
130	3	Max Reduction		13		13		13		13
		Max Extension		13		0		13		0
100	4	Max Reduction		10		10		10		10
		Max Extension		10		0		10		0
0	10	Max Reduction		0		0		0		0
		Max Extension		20		0		20		0

EVENT PLAN

* - 5 - 2,

Event plan	Cycle Length	Offset (sec)	Phases (sec)							
			1	2	3	4	5	6	7	8
1	110	24	10	55	15	30	13	52	13	32
2	110	46	11	50	17	32	13	48	17	32
3	130	50	11	70	18	31	11	70	15	34
4	100	76	12	44	14	30	12	44	14	30
10	0	0	0	0	0	0	0	0	0	0

DAY PLAN

* - 5 - 3, -5 - 4

Day Plan	Event Plan	Time Period
1	1	06:00
1	2	09:00
1	3	15:00
1	4	19:00
1	10	22:00
2	4	08:00
2	3	11:30
2	4	19:00
2	10	22:00
3	4	09:00
3	10	20:00

Dayplan

1	Weekday
2	Saturday
3	Sunday & Holiday

Special Programming:

TIME BASE DATA - TIME OF YEAR EVENTS

* - 5 - 5

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Fixed	4	18	0	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3
Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

Intersection Name:	TS ID:	Line No:	Model:	IP address:	Controller Make:
Plains Road @ Waterdown Rd	100	4	EOS	172.24.7.2	Econolite

Type of Operation: 8 Phase Semi-Actuated

No	Date			Description	Prepared by:
	Y	M	D		
11	2024	10	25	NEW TSP PLAN	SE
11	2025	3	24	Amended timing for phase 7&8	

*-Start from Main Menu

PHASE DESCRIPTION

Ph1	WBLT - Plains Road	Ph5	EBLT - Plains Road
Ph2	EB - Plains Road	Ph6	WB - Plains Road
Ph3	SBLT - Waterdown Road	Ph7	NBLT - Waterdown Road
Ph4	NB - Waterdown Road	Ph8	SB - Waterdown Road

CONFIGURATION (PHASE SEQ): PHASE IN USE/EXCLUSIVE PED (MM) *- 1 - 6

Phase:	1	2	3	4	5	6	7	8
Phase in Use	X	X	X	X	X	X	X	X
Exclusive PED								

CONTROLLER TIMING DATA - VEHICLE TIMING * - 2 - 1

Timing Plan: 1

	Phase: 1	2	3	4	5	6	7	8
Minimum Green	6	20	6	8	6	20	6	8
Walk		8		10		8		10
Ped. Clearance		13		17		17		17
Pedestrian Carry Over								
Vehicle Extension	3	3	3	3	3	3	3	3
MAX 1	12	35	12	25	12	35	12	25
MAX 2	12	35	12	25	12	35	12	25
Yellow Change	3	3.7	3	3.3	3	3.7	3	3.3
Red Clearance		2.6		3		2.6		3
Phase Minimum:	9.0	27.3	9.0	33.3	9.0	31.3	9.0	33.3

PHASE DATA - VEHICLE AND PEDESTRIAN RECALLS * - 2 -1-6

Phase:	1	2	3	4	5	6	7	8
Lock Detector								
Vehicle Recall		X				X		
Pedestrian Recall								
MAX Recall								
Min Recall								

SCP STRATEGY PLAN

* - 4 -3

PLAN 1

TIME TO LIVE	130 SECONDS								
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE	NO	YES	NO	YES	NO	YES	NO	YES	

PLAN 2

TIME TO LIVE									
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

PLAN 3

TIME TO LIVE									
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

PLAN 4

TIME TO LIVE	130 SECONDS								
SCP PHASE	1	2	3	4	5	6	7	8	
ENABLE									

SCP SPLIT PATTERN

* 4 -4 ,

Cycle Length	Plan		Phases							
			1	2	3	4	5	6	7	8
110	1	Max Reduction		11		11		11		11
		Max Extension		11		0		11		0
90	2	Max Reduction		9		9		9		9
		Max Extension		9		0		9		0
110	3	Max Reduction		11		11		11		11
		Max Extension		11		0		11		0
90	4	Max Reduction		9		9		9		9
		Max Extension		9		0		9		0
0	10	Max Reduction		0		0		0		0
		Max Extension		20		0		20		0

EVENT PLAN

* - 5 -2,

EVENT PLAN	Cycle Length	Offset (sec)	Phases (sec)							
			1	2	3	4	5	6	7	8
1	110	0	12	51	13	34	31	32	10	37
2	90	84	12	34	10	34	14	32	10	34
3	110	0	15	49	20	26	18	46	10	36
4	90	2	12	34	10	34	14	32	14	30
10	0	0	0	0	0	0	0	0	0	0

DAY PLAN

* - 5 - 3, -5 - 4

Day Plan	Event Plan	Time Period

1	4	06:00
1	1	07:00
1	2	09:00
1	3	15:30
1	4	19:00
1	10	22:00
2	4	08:00
2	3	10:30
2	4	17:00
2	10	21:00
3	4	09:30
3	2	12:00
3	4	17:00
3	10	21:00

Dayplan

1	Weekday
2	Saturday
3	Sunday & Holiday

Special Programming:

TIME BASE DATA - TIME OF YEAR EVENTS *** - 5 - 5**

Events	Exception Day		MON/ MON	DOW/ DOW	WOM/ Year	Day Plan
New Year's Day	1	Fixed	1	1	0	3
Family Day	2	Float	2	2	3	3
Good Friday	3	Fixed	4	18	0	3
Victoria Day	4	Float	5	2	3	3
Canada Day	5	Fixed	7	1	0	3
Civic Day	6	Float	8	2	1	3
Labour Day	7	Float	9	2	1	3
Thanksgiving	8	Float	10	2	2	3
Christmas Day	9	Fixed	12	25	0	3

Appendix D:
Multi-Use Reductions

New Internal Trip Capture Methodology for Multi-Use Developments

Based on NCHRP Project 8-51

INPUTS

Volumes

Use	AM Volumes		PM Volumes		Saturday Volumes	
	Entering	Exiting	Entering	Exiting	Entering	Exiting
Office	78	11	15	84	7	8
Retail	104	85	152	151	163	156
Restaurant	0	0	0	0	0	0
Cinema/ Entertainment	165	57	147	221	120	102
Residential	845	2181	2224	1864	2169	1885
Hotel	128	118	203	196	132	127

Proximity of Uses

Use	Separation Distance (**In Feet**)					
	Office	Retail	Restaurant	Cinema/ Entertainment	Residential	Hotel
Office		1505	0	426	1321	426
Retail	1505		0	1116	2264	1116
Restaurant	0	0		0	0	0
Cinema/ Entertainment	426	1116	0		1123	0
Residential	1321	2264	0	1123		1123
Hotel	426	1116	0	0	1123	

OUTPUTS

AM Peak Hour Multi-Use Reduction Summary

	Office	Retail	Restaurant	Cinema/ Entertainment	Residential	Hotel	In	In%
Office	0	3	0	0	2	2	**8**	**10%**
Retail	3	0	0	0	18	4	**25**	**24%**
Restaurant	0	0	0	0	0	0	**0**	**0%**
Cinema/ Entertainment	0	0	0	0	0	0	**0**	**0%**
Residential	0	12	0	0	0	0	**12**	**1%**
Hotel	0	0	0	0	0	0	**0**	**0%**
Out	**3**	**15**	**0**	**0**	**20**	**7**		
Out %	**27%**	**18%**	**0%**	**0%**	**1%**	**6%**		

PM Peak Hour Multi-Use Reduction Summary (Contains Proximity Factors)

	Office	Retail	Restaurant	Cinema/ Entertainment	Residential	Hotel	In	In%
Office	0	3	0	1	9	0	**12**	**80%**
Retail	7	0	0	6	2	3	**19**	**13%**
Restaurant	0	0	0	0	0	0	**0**	**0%**
Cinema/ Entertainment	0	6	0	0	0	0	**6**	**4%**
Residential	1	22	0	16	0	0	**39**	**2%**
Hotel	0	8	0	2	24	0	**34**	**17%**
Out	**9**	**38**	**0**	**25**	**35**	**3**		
Out %	**11%**	**25%**	**0%**	**11%**	**2%**	**2%**		

Saturday Peak Hour Multi-Use Reduction Summary (Contains Proximity Factors)

	Office	Retail	Restaurant	Cinema/ Entertainment	Residential	Hotel	In	In%
Office	0	2	0	0	4	0	**7**	**100%**
Retail	1	0	0	7	3	3	**13**	**8%**
Restaurant	0	0	0	0	0	0	**0**	**0%**
Cinema/ Entertainment	0	6	0	0	0	0	**6**	**5%**
Residential	0	22	0	7	0	0	**30**	**1%**
Hotel	0	8	0	1	16	0	**25**	**19%**
Out	**1**	**39**	**0**	**16**	**22**	**3**		
Out %	**1%**	**26%**	**0%**	**7%**	**1%**	**2%**		

Appendix E:
Transportation Tomorrow Survey Outputs

TTS Directional Distribution Summary: 1200 King Road

Notes:

1. Directions determined based on centroid coordinates of destination/origin traffic analysis zones.

2. 'Internal' refers to local trips made within the defined radius, while 'External' refers to trips made to areas outside of the defined radius.

3. 'I' refers to local trips made within the subject TAZ that do not have a cardinal direction assigned to them. These trips are excluded from the analysis.

			Internal										External								
	Time Period	Direction	I	NW	N	NE	E	SE	S	SW	W	Total	NW	N	NE	E	SE	S	SW	W	Total
Trips	A.M.	Inbound	0	539	175	1680	959	1535	90	621	783	6382	342	198	743	1073	0	672	1059	897	4984
		Outbound	0	605	121	1615	1896	1381	187	916	745	7466	119	225	988	2467	0	568	603	567	5537
	P.M.	Inbound	0	528	102	1754	1998	2737	477	929	727	9252	187	262	1384	2653	0	944	974	1001	7405
		Outbound	0	455	103	2074	1982	2146	413	819	906	8898	188	389	1069	2130	0	1050	1453	1047	7326
Percentage	A.M.	Inbound	0%	5%	2%	15%	8%	14%	1%	5%	7%	56%	3%	2%	7%	9%	0%	6%	9%	8%	44%
		Outbound	0%	5%	1%	12%	15%	11%	1%	7%	6%	57%	1%	2%	8%	19%	0%	4%	5%	4%	43%
	P.M.	Inbound	0%	3%	1%	11%	12%	16%	3%	6%	4%	56%	1%	2%	8%	16%	0%	6%	6%	6%	44%
		Outbound	0%	3%	1%	13%	12%	13%	3%	5%	6%	55%	1%	2%	7%	13%	0%	6%	9%	6%	45%

Appendix F:
Synchro Capacity Analysis

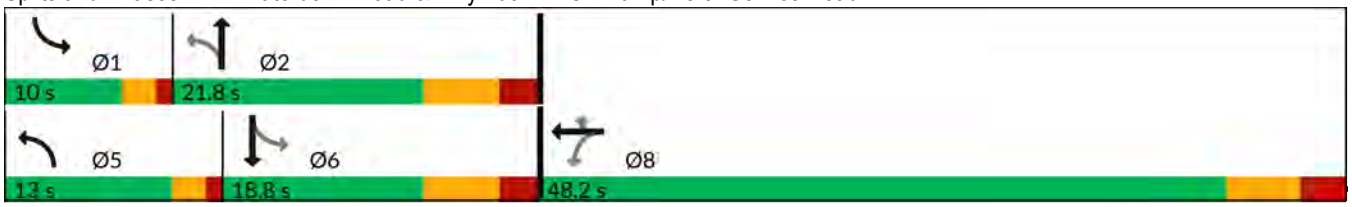
Appendix F-1:
2026 Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	66	99	26	224	259	284	81	308	150
Future Volume (vph)	0	0	0	66	99	26	224	259	284	81	308	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.99					1.00	
Frt						0.850		0.922			0.951	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1366	1500	2963	0	1676	3083	0
Flt Permitted				0.950			0.385			0.434		
Satd. Flow (perm)	0	0	0	1512	1748	1349	608	2963	0	766	3083	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						93		302			87	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	70	105	28	238	276	302	86	328	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	70	105	28	238	578	0	86	488	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				48.2	48.2	48.2	13.0	21.8		10.0	18.8	
Total Split (%)				60.3%	60.3%	60.3%	16.3%	27.3%		12.5%	23.5%	
Maximum Green (s)				41.0	41.0	41.0	10.0	15.0		7.0	12.0	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.1	10.1	10.1	28.4	18.6		22.4	11.6	
Actuated g/C Ratio				0.21	0.21	0.21	0.58	0.38		0.46	0.24	
v/c Ratio				0.22	0.29	0.08	0.44	0.44		0.18	0.61	
Control Delay (s/veh)				18.4	19.0	0.4	8.0	7.4		5.9	17.2	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				18.4	19.0	0.4	8.0	7.4		5.9	17.2	
LOS				B	B	A	A	A		A	B	
Approach Delay (s/veh)					16.2			7.5			15.5	
Approach LOS					B			A			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 48.7	
Natural Cycle: 45	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay (s/veh): 11.5	Intersection LOS: B
Intersection Capacity Utilization 50.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

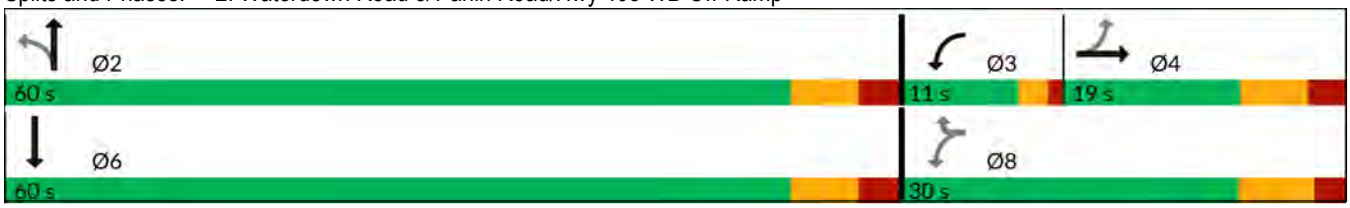


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	277	0	143	0	622	0	0	373	2
Future Volume (vph)	1	0	5	277	0	143	0	622	0	0	373	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3150	0
Flt Permitted		0.993		0.930								
Satd. Flow (perm)	0	1043	0	2900	0	1354	0	3167	0	0	3150	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				159					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	308	0	159	0	691	0	0	414	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	308	0	159	0	691	0	0	416	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.3		16.2		11.9		14.4			14.4	
Actuated g/C Ratio		0.25		0.39		0.29		0.35			0.35	
v/c Ratio		0.02		0.26		0.32		0.62			0.38	
Control Delay (s/veh)		0.2		9.6		4.7		14.3			11.4	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		9.6		4.7		14.3			11.4	
LOS		A		A		A		B			B	
Approach Delay (s/veh)		0.2			8.0			14.3			11.4	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 41.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

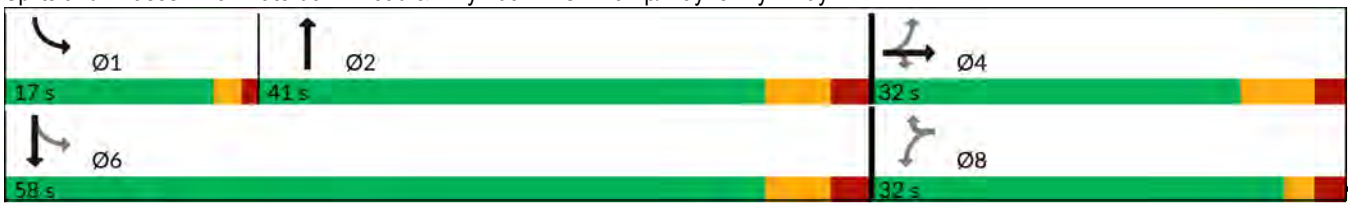


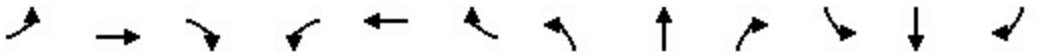
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	111	204	24	0	48	0	395	382	270	382	0
Future Volume (vph)	200	111	204	24	0	48	0	395	382	270	382	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.926				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2945	0	1583	3081	0
Flt Permitted	0.950			0.679						0.169		
Satd. Flow (perm)	1644	1748	1313	1184	0	765	0	2945	0	282	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						85		314				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	217	121	222	26	0	52	0	429	415	293	415	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	217	121	222	26	0	52	0	844	0	293	415	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	32.0	32.0	32.0	32.0		32.0		41.0		17.0	58.0	
Total Split (%)	35.6%	35.6%	35.6%	35.6%		35.6%		45.6%		18.9%	64.4%	
Maximum Green (s)	24.9	24.9	24.9	27.9		27.9		34.0		14.0	51.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	18.4	18.4	18.4	21.6		21.6		20.4		40.0	35.7	
Actuated g/C Ratio	0.27	0.27	0.27	0.31		0.31		0.29		0.58	0.52	
v/c Ratio	0.50	0.26	0.64	0.07		0.18		0.78		0.75	0.26	
Control Delay (s/veh)	27.0	23.1	32.9	19.4		3.0		19.8		26.9	10.6	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	27.0	23.1	32.9	19.4		3.0		19.8		26.9	10.6	
LOS	C	C	C	B		A		B		C	B	
Approach Delay (s/veh)		28.5			8.5			19.8			17.3	
Approach LOS		C			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 69.3			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 20.8		Intersection LOS: C	
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	517	80	94	299	157	58	197	69	141	176	200
Future Volume (vph)	363	517	80	94	299	157	58	197	69	141	176	200
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.98		0.97		0.98
Frt		0.980			0.948			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3177	0	1629	2933	0	1676	1602	0	1541	1682	1366
Flt Permitted	0.250			0.379			0.634			0.414		
Satd. Flow (perm)	423	3177	0	641	2933	0	1109	1602	0	653	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			89			14				222
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	403	574	89	104	332	174	64	219	77	157	196	222
Shared Lane Traffic (%)												
Lane Group Flow (vph)	403	663	0	104	506	0	64	296	0	157	196	222
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	24.0	49.0		15.0	40.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	21.8%	44.5%		13.6%	36.4%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	21.0	42.7		12.0	33.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	49.9	34.2		36.0	23.3		46.9	35.7		54.1	41.7	41.7
Actuated g/C Ratio	0.45	0.31		0.33	0.21		0.43	0.32		0.49	0.38	0.38
v/c Ratio	0.98	0.66		0.35	0.73		0.12	0.56		0.38	0.31	0.35
Control Delay (s/veh)	63.5	35.6		21.3	39.9		16.9	36.1		19.5	27.9	5.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	63.5	35.6		21.3	39.9		16.9	36.1		19.5	27.9	5.5
LOS	E	D		C	D		B	D		B	C	A
Approach Delay (s/veh)		46.2			36.7			32.7			16.9	
Approach LOS		D			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 35.7		Intersection LOS: D	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

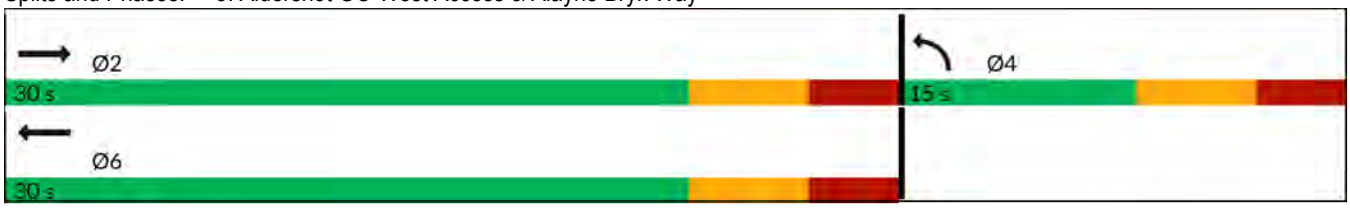


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	757	23	3	57	16	3
Future Volume (vph)	757	23	3	57	16	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.996				0.979	
Flt Protected				0.998	0.960	
Satd. Flow (prot)	3196	0	0	3253	918	0
Flt Permitted				0.932	0.960	
Satd. Flow (perm)	3196	0	0	3038	918	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11				3	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	772	23	3	58	16	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	795	0	0	61	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	45.7			45.7	11.1	
Actuated g/C Ratio	0.94			0.94	0.23	
v/c Ratio	0.27			0.05	0.09	
Control Delay (s/veh)	1.4			1.6	17.3	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	1.4			1.6	17.3	
LOS	A			A	B	
Approach Delay (s/veh)	1.4			1.6	17.3	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.8			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay (s/veh): 1.8		Intersection LOS: A	
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way



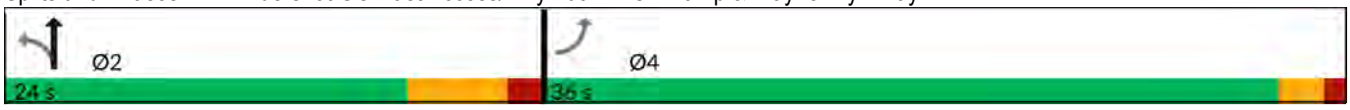


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	593	36	15	27	0	0
Future Volume (vph)	593	36	15	27	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected	0.955			0.982		
Satd. Flow (prot)	1628	0	0	1768	0	0
Flt Permitted	0.955			0.982		
Satd. Flow (perm)	1628	0	0	1768	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	624	38	16	28	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	662	0	0	44	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	36.0		24.0	24.0		
Total Split (%)	60.0%		40.0%	40.0%		
Maximum Green (s)	33.0		18.0	18.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	35.0			11.6		
Actuated g/C Ratio	0.87			0.29		
v/c Ratio	0.47			0.09		
Control Delay (s/veh)	4.4			18.5		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	4.4			18.5		
LOS	A			B		
Approach Delay (s/veh)	4.4			18.5		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 40.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 5.2		Intersection LOS: A	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

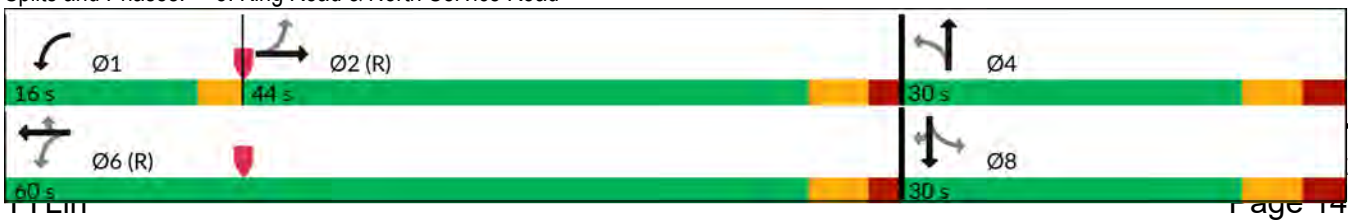


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	200	169	39	93	74	264	68	113	29
Future Volume (vph)	23	252	73	200	169	39	93	74	264	68	113	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.917				0.850
Flt Protected	0.950										0.982	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1754	1530
Flt Permitted	0.646			*0.470							0.565	
Satd. Flow (perm)	1067	1667	0	813	1714	1497	0	*3050	*3050	0	1009	1496
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		89				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	208	176	41	97	77	275	71	118	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	208	176	41	0	449	0	0	189	30
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	43.1	43.1		59.2	56.2	58.2		23.8			23.8	20.8
Actuated g/C Ratio	0.48	0.48		0.66	0.62	0.65		0.26			0.26	0.23
v/c Ratio	0.05	0.42		0.33	0.16	0.04		0.51			0.71	0.07
Control Delay (s/veh)	17.2	18.7		8.6	8.8	2.4		23.5			43.8	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	17.2	18.7		8.6	8.8	2.4		23.5			43.8	0.5
LOS	B	B		A	A	A		C			D	A
Approach Delay (s/veh)		18.6			8.1			23.5			37.9	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: B	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	645	107	50	457	136	148	172	67	231	111	83
Future Volume (vph)	104	645	107	50	457	136	148	172	67	231	111	83
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.96	0.99	0.99		0.99	0.99		0.99		0.98
Frt			0.850		0.966			0.958				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	3061	0	1583	1673	0	1731	1765	1485
Flt Permitted	0.264			0.283			0.682			*0.420		
Satd. Flow (perm)	447	3226	1379	482	3061	0	1128	1673	0	718	1765	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		43			14				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	109	679	113	53	481	143	156	181	71	243	117	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	679	113	53	624	0	156	252	0	243	117	87
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4					8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	58.8	51.1	51.1	54.5	47.3		38.6	25.6		32.1	44.6	42.2
Actuated g/C Ratio	0.45	0.39	0.39	0.42	0.36		0.30	0.20		0.25	0.34	0.32
v/c Ratio	0.38	0.54	0.19	0.20	0.55		0.41	0.74		0.57	0.19	0.16
Control Delay (s/veh)	25.1	33.2	8.3	21.9	32.9		25.3	59.3		50.1	31.6	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	25.1	33.2	8.3	21.9	32.9		25.3	59.3		50.1	31.6	6.3
LOS	C	C	A	C	C		C	E		D	C	A
Approach Delay (s/veh)		29.1			32.0			46.3			36.7	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 34.2		Intersection LOS: C	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

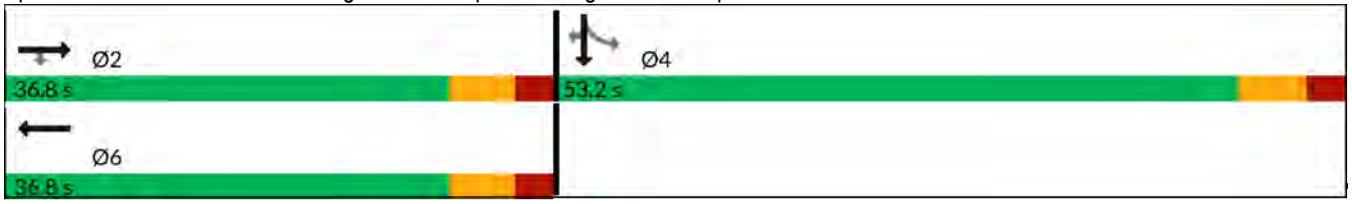


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1012	172	0	977	274	0	0	0	239	1	152
Future Volume (vph)	0	1012	172	0	977	274	0	0	0	239	1	152
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1316	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			183			291						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1077	183	0	1039	291	0	0	0	254	1	162
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1077	183	0	1039	291	0	0	0	127	128	162
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		36.8	36.8		36.8					53.2	53.2	53.2
Total Split (%)		40.9%	40.9%		40.9%					59.1%	59.1%	59.1%
Maximum Green (s)		29.8	29.8		29.8					46.0	46.0	46.0
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		16.9	16.9		16.9	42.5				11.1	11.1	11.1
Actuated g/C Ratio		0.40	0.40		0.40	1.00				0.26	0.26	0.26
v/c Ratio		0.58	0.29		0.56	0.21				0.31	0.31	0.38
Control Delay (s/veh)		11.3	3.1		11.1	0.4				16.3	16.3	13.5
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		11.3	3.1		11.1	0.4				16.3	16.3	13.5
LOS		B	A		B	A				B	B	B
Approach Delay (s/veh)		10.1			8.8						15.2	
Approach LOS		B			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 42.5			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



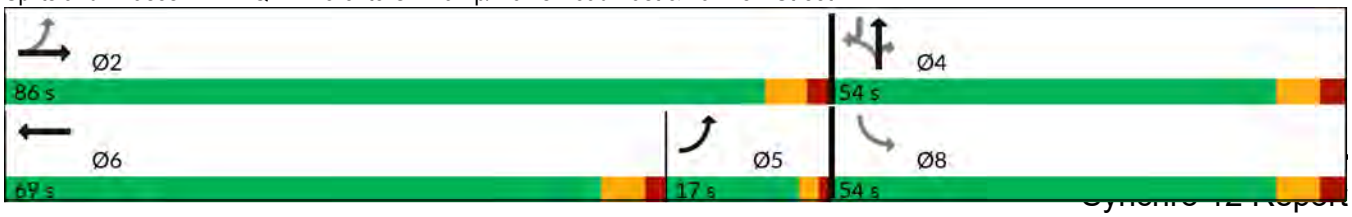
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	146	1046	66	0	865	16	189	99	309	21	0	352
Future Volume (vph)	146	1046	66	0	865	16	189	99	309	21	0	352
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.997			0.930	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4613	0	1533	1410	1384	1710	0	1543
Flt Permitted	0.266						0.950	0.996		0.595		
Satd. Flow (perm)	438	4725	1485	0	4613	0	1533	1410	1363	1069	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			34	81			216
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	152	1090	69	0	901	17	197	103	322	22	0	367
Shared Lane Traffic (%)							10%		34%			
Lane Group Flow (vph)	152	1090	69	0	918	0	177	232	213	22	0	367
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

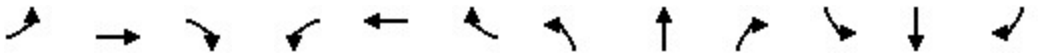
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	17.0	86.0			69.0		54.0	54.0	54.0	54.0		54.0
Total Split (%)	12.1%	61.4%			49.3%		38.6%	38.6%	38.6%	38.6%		38.6%
Maximum Green (s)	14.0	79.3			62.3		46.8	46.8	46.8	46.8		46.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	34.7	30.8	62.0		19.7		16.8	16.8	16.8	16.8		16.8
Actuated g/C Ratio	0.56	0.50	1.00		0.32		0.27	0.27	0.27	0.27		0.27
v/c Ratio	0.39	0.46	0.05		0.62		0.43	0.57	0.50	0.08		0.64
Control Delay (s/veh)	15.9	11.4	0.1		20.6		23.0	23.4	17.0	18.9		14.4
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	15.9	11.4	0.1		20.6		23.0	23.4	17.0	18.9		14.4
LOS	B	B	A		C		C	C	B	B		B
Approach Delay (s/veh)		11.3			20.6			21.1			14.6	
Approach LOS		B			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 62			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 16.2		Intersection LOS: B	
Intersection Capacity Utilization 74.3%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



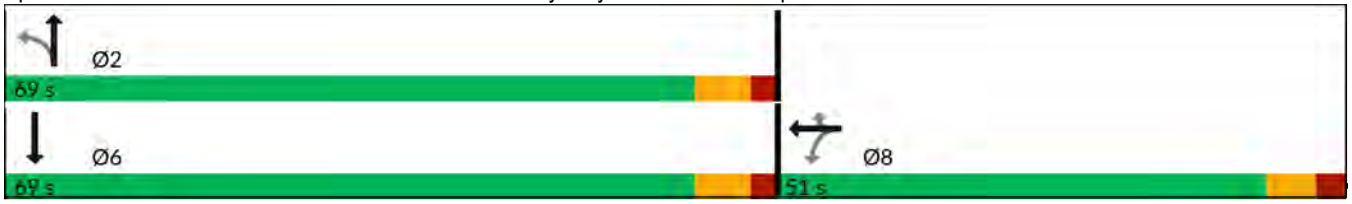


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	336	16	409	35	899	138	0	1564	2
Future Volume (vph)	0	0	0	336	16	409	35	899	138	0	1564	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850			
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4720	0
Flt Permitted				0.950	0.957		0.102					
Satd. Flow (perm)	0	0	0	1547	1556	1448	178	4680	1422	0	4720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						92			138			
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	354	17	431	37	946	145	0	1646	2
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	184	187	431	37	946	145	0	1648	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				51.0	51.0	51.0	69.0	69.0			69.0	
Total Split (%)				42.5%	42.5%	42.5%	57.5%	57.5%			57.5%	
Maximum Green (s)				43.8	43.8	43.8	61.8	61.8			61.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				26.9	26.9	26.9	39.1	39.1	81.7		39.1	
Actuated g/C Ratio				0.33	0.33	0.33	0.48	0.48	1.00		0.48	
v/c Ratio				0.36	0.37	0.80	0.44	0.42	0.10		0.73	
Control Delay (s/veh)				24.8	24.9	33.1	35.5	15.0	0.1		19.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				24.8	24.9	33.1	35.5	15.0	0.1		19.7	
LOS				C	C	C	D	B	A		B	
Approach Delay (s/veh)					29.3			13.7			19.7	
Approach LOS					C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 81.7			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: B	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



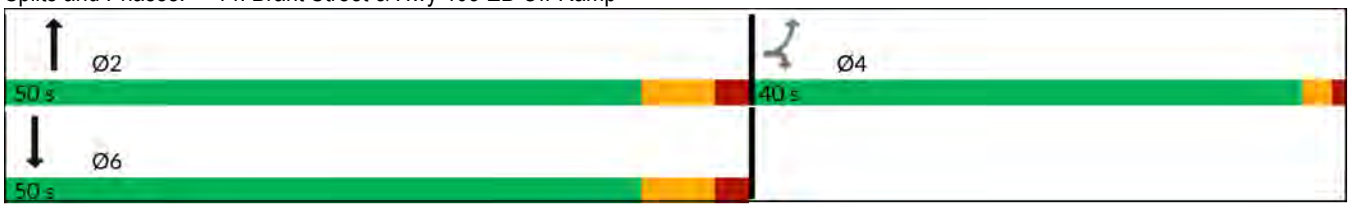


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	144	170	0	904	1215	561
Future Volume (vph)	144	170	0	904	1215	561
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Frt	0.951	0.850				0.850
Flt Protected	0.967					
Satd. Flow (prot)	3149	1339	0	4636	4680	1500
Flt Permitted	0.967					
Satd. Flow (perm)	3149	1339	0	4636	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	28	28				556
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	152	179	0	952	1279	591
Shared Lane Traffic (%)		41%				
Lane Group Flow (vph)	225	106	0	952	1279	591
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	8.7	8.7		18.6	18.6	37.8
Actuated g/C Ratio	0.23	0.23		0.49	0.49	1.00
v/c Ratio	0.30	0.32		0.42	0.56	0.39
Control Delay (s/veh)	11.9	12.9		7.0	8.0	0.8
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	11.9	12.9		7.0	8.0	0.8
LOS	B	B		A	A	A
Approach Delay (s/veh)	12.2			7.0	5.7	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 37.8			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 6.8		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp

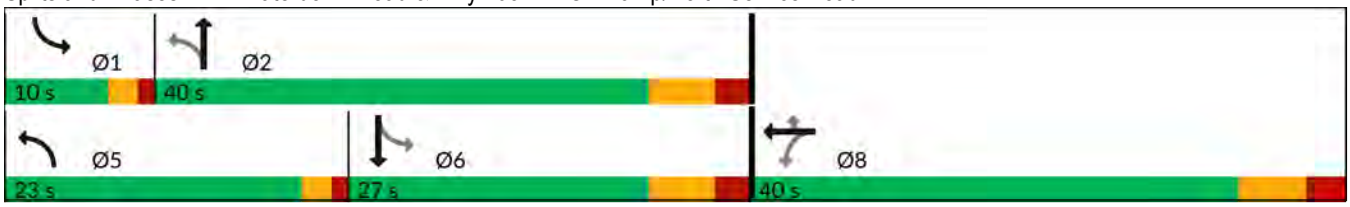


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	211	398	93	357	429	208	99	408	106
Future Volume (vph)	0	0	0	211	398	93	357	429	208	99	408	106
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.951			0.969	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3128	0	1710	3217	0
Flt Permitted				0.950			0.262			0.379		
Satd. Flow (perm)	0	0	0	1660	1782	1480	458	3128	0	682	3217	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						119		104			33	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	237	447	104	401	482	234	111	458	119
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	237	447	104	401	716	0	111	577	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				40.0	40.0	40.0	23.0	40.0		10.0	27.0	
Total Split (%)				44.4%	44.4%	44.4%	25.6%	44.4%		11.1%	30.0%	
Maximum Green (s)				32.8	32.8	32.8	20.0	33.2		7.0	20.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				24.6	24.6	24.6	42.9	31.5		28.4	17.3	
Actuated g/C Ratio				0.32	0.32	0.32	0.55	0.40		0.36	0.22	
v/c Ratio				0.45	0.80	0.19	0.74	0.54		0.32	0.78	
Control Delay (s/veh)				24.7	36.3	4.1	22.7	18.5		14.4	36.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				24.7	36.3	4.1	22.7	18.5		14.4	36.4	
LOS				C	D	A	C	B		B	D	
Approach Delay (s/veh)					28.6			20.0			32.9	
Approach LOS					C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 26.0		Intersection LOS: C	
Intersection Capacity Utilization 73.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

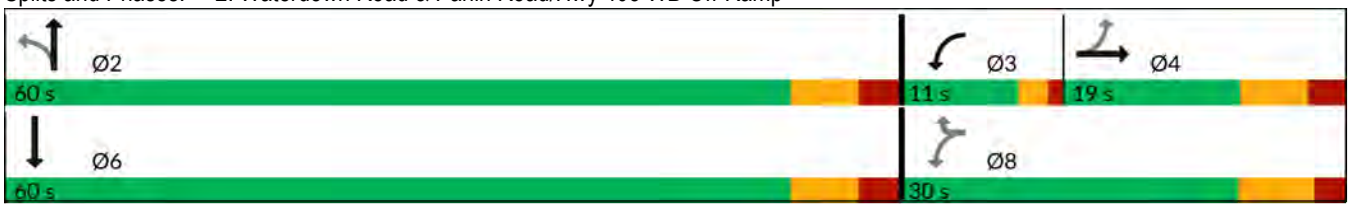


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	260	0	147	2	828	0	0	631	0
Future Volume (vph)	0	0	5	260	0	147	2	828	0	0	631	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.930				0.953				
Satd. Flow (perm)	0	1557	0	3153	0	1485	0	3134	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		208				115						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	313	0	177	2	998	0	0	760	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	313	0	177	0	1000	0	0	760	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.4		16.3		11.9		21.4			21.4	
Actuated g/C Ratio		0.22		0.34		0.25		0.44			0.44	
v/c Ratio		0.01		0.29		0.39		0.72			0.52	
Control Delay (s/veh)		0.0		13.6		10.2		14.5			11.2	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		13.6		10.2		14.5			11.2	
LOS		A		B		B		B			B	
Approach Delay (s/veh)					12.4			14.5			11.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 48.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



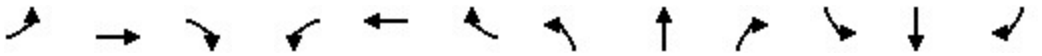
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	106	254	83	0	289	0	406	310	265	572	0
Future Volume (vph)	192	106	254	83	0	289	0	406	310	265	572	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.935				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	3079	0	1629	3353	0
Flt Permitted	0.950			0.681						0.177		
Satd. Flow (perm)	1644	1667	1485	2222	0	1471	0	3079	0	303	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						325		222				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	216	119	285	93	0	325	0	456	348	298	643	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	119	285	93	0	325	0	804	0	298	643	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.0	35.0	35.0	35.0		35.0		35.0		20.0	55.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%		38.9%		38.9%		22.2%	61.1%	
Maximum Green (s)	27.9	27.9	27.9	30.9		30.9		28.0		17.0	48.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	20.0	20.0	20.0	23.2		23.2		20.1		40.6	36.3	
Actuated g/C Ratio	0.28	0.28	0.28	0.32		0.32		0.28		0.57	0.51	
v/c Ratio	0.47	0.25	0.69	0.13		0.47		0.78		0.72	0.38	
Control Delay (s/veh)	26.0	22.7	33.1	18.9		4.9		24.1		23.9	12.1	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	26.0	22.7	33.1	18.9		4.9		24.1		23.9	12.1	
LOS	C	C	C	B		A		C		C	B	
Approach Delay (s/veh)		28.6			8.0			24.1			15.9	
Approach LOS		C			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 71.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 19.9		Intersection LOS: B	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



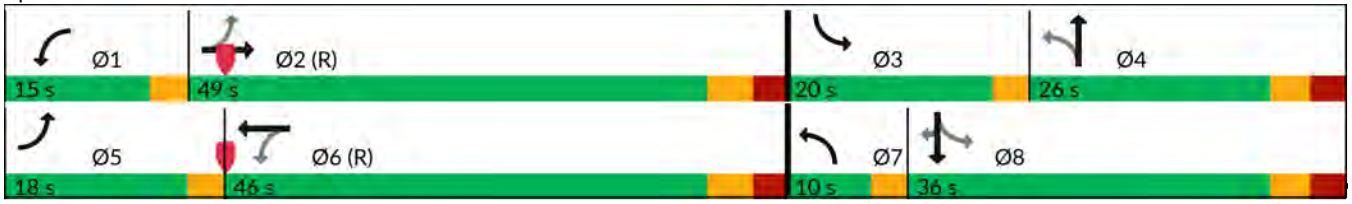


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	636	80	95	1018	118	175	160	59	264	144	471
Future Volume (vph)	239	636	80	95	1018	118	175	160	59	264	144	471
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.983			0.984			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3282	0	1676	3247	0	1676	1611	0	1676	1682	1500
Flt Permitted	0.092			0.315			0.662			0.368		
Satd. Flow (perm)	161	3282	0	554	3247	0	1153	1611	0	641	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			15				277
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	249	663	83	99	1060	123	182	167	61	275	150	491
Shared Lane Traffic (%)												
Lane Group Flow (vph)	249	746	0	99	1183	0	182	228	0	275	150	491
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	61.0	46.1		52.3	40.4		31.2	20.9		43.0	29.7	29.7
Actuated g/C Ratio	0.55	0.42		0.48	0.37		0.28	0.19		0.39	0.27	0.27
v/c Ratio	0.88	0.54		0.28	0.99		0.51	0.72		0.69	0.33	0.82
Control Delay (s/veh)	56.5	25.6		14.2	57.6		32.0	53.5		34.6	34.7	29.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	56.5	25.6		14.2	57.6		32.0	53.5		34.6	34.7	29.0
LOS	E	C		B	E		C	D		C	C	C
Approach Delay (s/veh)		33.3			54.3			44.0			31.6	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 41.5		Intersection LOS: D	
Intersection Capacity Utilization 102.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

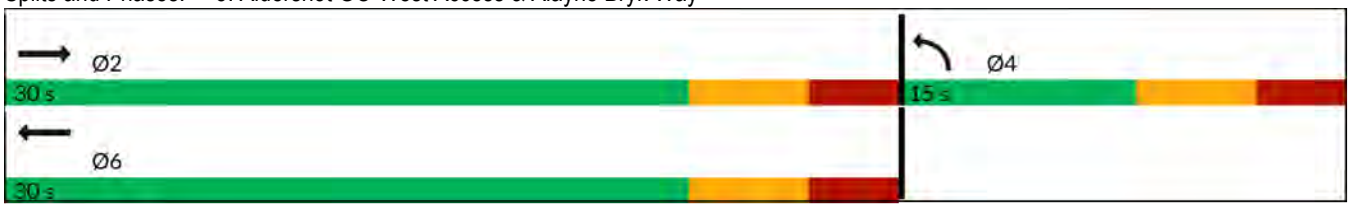


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	662	32	0	349	22	12
Future Volume (vph)	662	32	0	349	22	12
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.993				0.953	
Flt Protected					0.969	
Satd. Flow (prot)	3213	0	0	3420	1044	0
Flt Permitted					0.969	
Satd. Flow (perm)	3213	0	0	3420	1044	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	18				13	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	727	35	0	384	24	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	762	0	0	384	37	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	42.2			42.2	11.1	
Actuated g/C Ratio	0.86			0.86	0.23	
v/c Ratio	0.28			0.13	0.15	
Control Delay (s/veh)	2.7			2.4	14.3	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	2.7			2.4	14.3	
LOS	A			A	B	
Approach Delay (s/veh)	2.7			2.4	14.3	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 49.2			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 3.0		Intersection LOS: A	
Intersection Capacity Utilization 33.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way



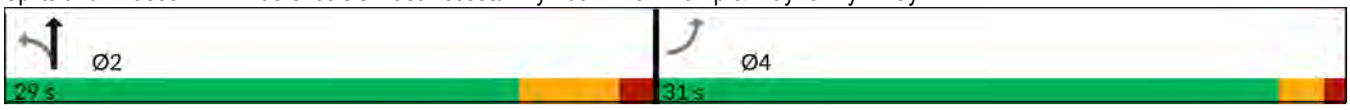


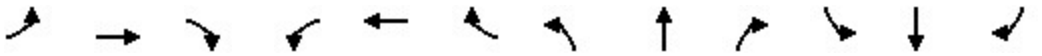
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	531	12	215	42	0	0
Future Volume (vph)	531	12	215	42	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					
Flt Protected	0.953			0.960		
Satd. Flow (prot)	1646	0	0	1728	0	0
Flt Permitted	0.953			0.960		
Satd. Flow (perm)	1646	0	0	1728	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%
Adj. Flow (vph)	648	15	262	51	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	663	0	0	313	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	31.0		29.0	29.0		
Total Split (%)	51.7%		48.3%	48.3%		
Maximum Green (s)	28.0		23.0	23.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	24.2			14.5		
Actuated g/C Ratio	0.51			0.30		
v/c Ratio	0.80			0.60		
Control Delay (s/veh)	20.3			20.2		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	20.3			20.2		
LOS	C			C		
Approach Delay (s/veh)	20.3			20.2		
Approach LOS	C			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 47.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 20.3		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way





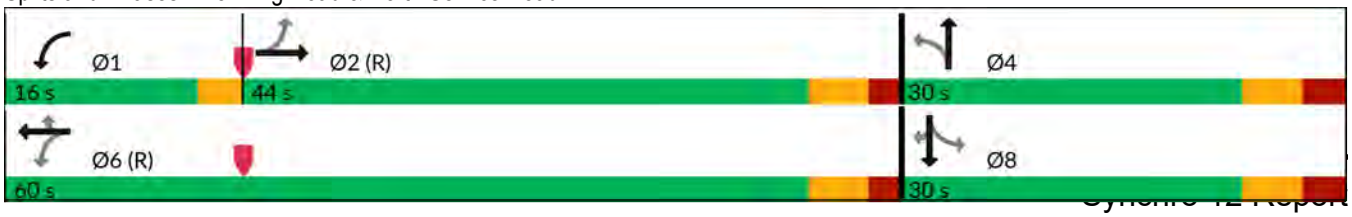
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	450	591	69	53	146	243	58	172	20
Future Volume (vph)	14	267	92	450	591	69	53	146	243	58	172	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.926				0.850
Flt Protected	0.950										0.988	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1744	1530
Flt Permitted	0.429			*0.470							0.648	
Satd. Flow (perm)	772	1698	0	829	1765	1469	0	*3050	*3050	0	1144	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				48		69				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	474	622	73	56	154	256	61	181	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	474	622	73	0	466	0	0	242	21
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	35.7	35.7		56.6	53.6	55.6		26.4			26.4	23.4
Actuated g/C Ratio	0.40	0.40		0.63	0.60	0.62		0.29			0.29	0.26
v/c Ratio	0.05	0.55		0.70	0.59	0.08		0.49			0.72	0.05
Control Delay (s/veh)	20.4	25.0		16.9	15.4	4.3		23.3			40.7	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	20.4	25.0		16.9	15.4	4.3		23.3			40.7	0.2
LOS	C	C		B	B	A		C			D	A
Approach Delay (s/veh)		24.8			15.3			23.3			37.4	
Approach LOS		C			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 21.1		Intersection LOS: C	
Intersection Capacity Utilization 101.9%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	853	185	108	1285	211	163	138	66	299	267	157
Future Volume (vph)	82	853	185	108	1285	211	163	138	66	299	267	157
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.99		0.99	0.99		0.99		0.97
Frt			0.850		0.979			0.952				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3238	0	1613	1653	0	1765	1800	1500
Flt Permitted	0.062			0.235			0.363			*0.420		
Satd. Flow (perm)	112	3320	1393	420	3238	0	611	1653	0	732	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			119		21			17				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	84	870	189	110	1311	215	166	141	67	305	272	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	870	189	110	1526	0	166	208	0	305	272	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4					8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	73.6	66.6	66.6	74.5	67.0		33.8	22.6		17.4	28.7	26.3
Actuated g/C Ratio	0.57	0.51	0.51	0.57	0.52		0.26	0.17		0.13	0.22	0.20
v/c Ratio	0.56	0.51	0.25	0.35	0.91		0.68	0.69		1.30	0.69	0.43
Control Delay (s/veh)	31.4	22.3	7.5	14.4	37.7		48.1	58.0		204.7	56.4	23.7
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)	31.4	22.3	7.5	14.4	37.7		48.1	58.0		204.7	56.4	23.7
LOS	C	C	A	B	D		D	E		F	E	C
Approach Delay (s/veh)		20.6			36.1			53.6			110.7	
Approach LOS		C			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay (s/veh): 47.3		Intersection LOS: D	
Intersection Capacity Utilization 96.9%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

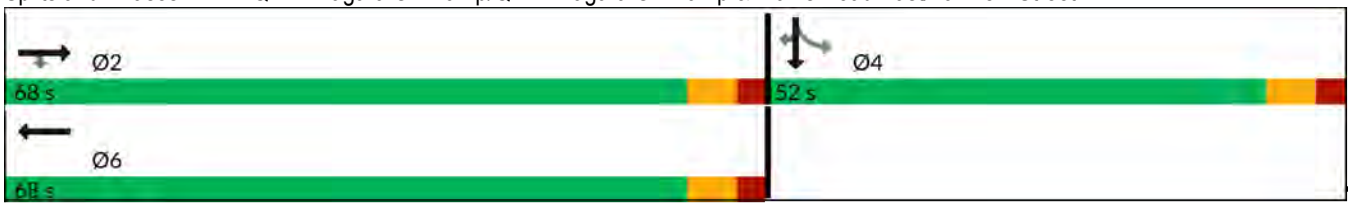


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1174	361	0	1590	1198	0	0	0	518	7	304
Future Volume (vph)	0	1174	361	0	1590	1198	0	0	0	518	7	304
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.954	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1616	1485
Flt Permitted										0.950	0.954	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1616	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			368			717						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1198	368	0	1622	1222	0	0	0	529	7	310
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	1198	368	0	1622	1222	0	0	0	270	266	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		68.0	68.0		68.0					52.0	52.0	52.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		61.0	61.0		61.0					44.8	44.8	44.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		33.8	33.8		33.8	70.3				21.3	21.3	21.3
Actuated g/C Ratio		0.48	0.48		0.48	1.00				0.30	0.30	0.30
v/c Ratio		0.52	0.41		0.70	0.83				0.55	0.54	0.66
Control Delay (s/veh)		14.1	3.1		16.7	6.0				26.3	26.0	27.2
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		14.1	3.1		16.7	6.0				26.3	26.0	27.2
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		11.5			12.1						26.6	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 70.3			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 64.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



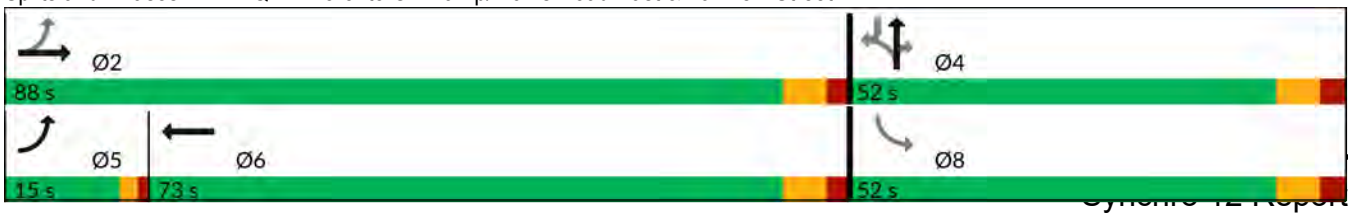
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	1431	98	0	2125	15	181	181	320	14	0	589
Future Volume (vph)	178	1431	98	0	2125	15	181	181	320	14	0	589
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.960	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4807	0	1577	1530	1425	1710	0	1588
Flt Permitted	0.058						0.950	0.997		0.413		
Satd. Flow (perm)	100	4818	1451	0	4807	0	1577	1530	1405	742	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			14	52			169
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	182	1460	100	0	2168	15	185	185	327	14	0	601
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	182	1460	100	0	2183	0	166	279	252	14	0	601
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

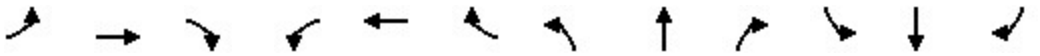
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	15.0	88.0			73.0		52.0	52.0	52.0	52.0		52.0
Total Split (%)	10.7%	62.9%			52.1%		37.1%	37.1%	37.1%	37.1%		37.1%
Maximum Green (s)	12.0	81.3			66.3		44.8	44.8	44.8	44.8		44.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	84.3	80.6	138.2		65.6		43.7	43.7	43.7	43.7		43.7
Actuated g/C Ratio	0.61	0.58	1.00		0.47		0.32	0.32	0.32	0.32		0.32
v/c Ratio	0.93	0.52	0.07		0.96		0.33	0.57	0.53	0.06		0.97
Control Delay (s/veh)	84.5	18.2	0.1		46.3		38.5	42.6	34.9	34.1		63.8
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	84.5	18.2	0.1		46.3		38.5	42.6	34.9	34.1		63.8
LOS	F	B	A		D		D	D	C	C		E
Approach Delay (s/veh)		24.1			46.3			38.9			63.1	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 138.2			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 39.9		Intersection LOS: D	
Intersection Capacity Utilization 114.7%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



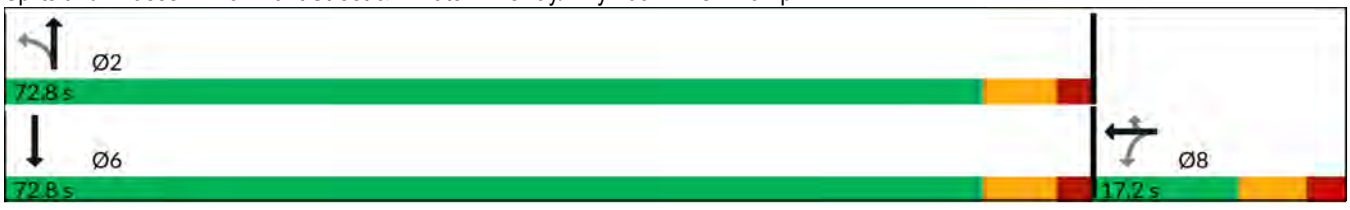


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	86	7	49	74	1512	537	0	1908	5
Future Volume (vph)	0	0	0	86	7	49	74	1512	537	0	1908	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850			
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1577	1599	1485	1676	4771	1515	0	4811	0
Flt Permitted				0.950	0.959		0.081					
Satd. Flow (perm)	0	0	0	1577	1599	1485	143	4771	1480	0	4811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						52			426		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	91	7	52	78	1592	565	0	2008	5
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	49	49	52	78	1592	565	0	2013	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.9	10.9	10.9	60.8	60.8	78.4		60.8	
Actuated g/C Ratio				0.14	0.14	0.14	0.78	0.78	1.00		0.78	
v/c Ratio				0.22	0.22	0.21	0.70	0.43	0.38		0.54	
Control Delay (s/veh)				39.2	39.1	13.3	47.9	4.9	0.7		5.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				39.2	39.1	13.3	47.9	4.9	0.7		5.7	
LOS				D	D	B	D	A	A		A	
Approach Delay (s/veh)					30.2			5.3			5.7	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 6.4		Intersection LOS: A	
Intersection Capacity Utilization 73.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



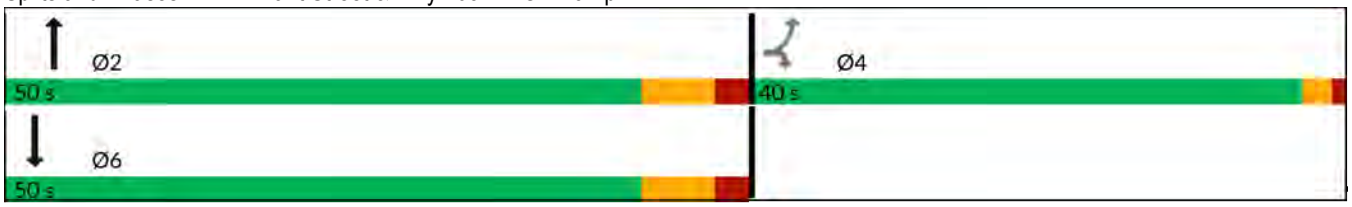


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	200	201	0	1676	1382	319
Future Volume (vph)	200	201	0	1676	1382	319
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor						0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3094	1352	0	4818	4771	1485
Flt Permitted	0.965					
Satd. Flow (perm)	3094	1352	0	4818	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	18	18				277
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	206	207	0	1728	1425	329
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	283	130	0	1728	1425	329
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.8	10.8		25.5	25.5	46.9
Actuated g/C Ratio	0.23	0.23		0.54	0.54	1.00
v/c Ratio	0.39	0.40		0.66	0.55	0.23
Control Delay (s/veh)	17.0	19.1		9.2	8.0	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	17.0	19.1		9.2	8.0	0.4
LOS	B	B		A	A	A
Approach Delay (s/veh)	17.7			9.2	6.6	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 46.9			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp

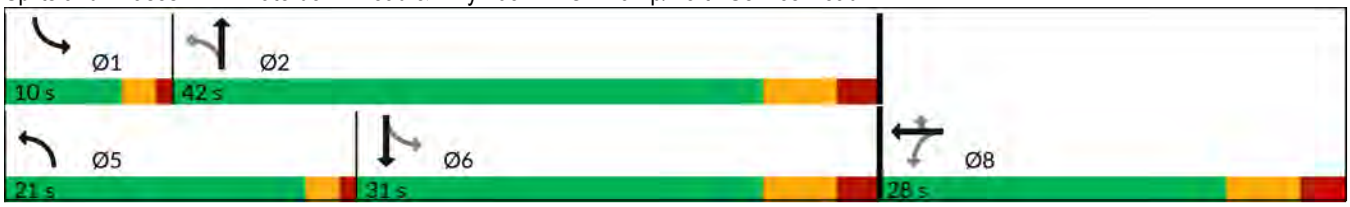


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	119	211	111	298	322	180	138	411	103
Future Volume (vph)	0	0	0	119	211	111	298	322	180	138	411	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.946			0.970	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3164	0	1710	3278	0
Flt Permitted				0.950			0.355			0.463		
Satd. Flow (perm)	0	0	0	1693	1782	1510	626	3164	0	833	3278	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		172			40	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	121	215	113	304	329	184	141	419	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	121	215	113	304	513	0	141	524	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				28.0	28.0	28.0	21.0	42.0		10.0	31.0	
Total Split (%)				35.0%	35.0%	35.0%	26.3%	52.5%		12.5%	38.8%	
Maximum Green (s)				20.8	20.8	20.8	18.0	35.2		7.0	24.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				13.2	13.2	13.2	34.5	22.7		25.5	14.3	
Actuated g/C Ratio				0.23	0.23	0.23	0.59	0.39		0.44	0.25	
v/c Ratio				0.32	0.53	0.25	0.50	0.38		0.30	0.63	
Control Delay (s/veh)				23.1	26.8	5.1	9.3	9.8		8.7	22.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				23.1	26.8	5.1	9.3	9.8		8.7	22.5	
LOS				C	C	A	A	A		A	C	
Approach Delay (s/veh)					20.3			9.6			19.6	
Approach LOS					C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 58.2			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 15.5		Intersection LOS: B	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

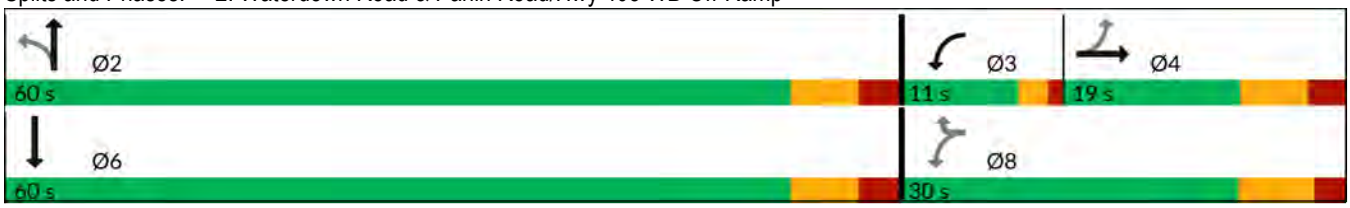


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	373	0	177	1	636	0	0	504	0
Future Volume (vph)	1	0	1	373	0	177	1	636	0	0	504	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.930				0.954				
Satd. Flow (perm)	0	1637	0	3153	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				186						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	393	0	186	1	669	0	0	531	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	393	0	186	0	670	0	0	531	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.3		16.2		11.9		13.8			13.8	
Actuated g/C Ratio		0.25		0.40		0.29		0.34			0.34	
v/c Ratio		0.00		0.31		0.32		0.62			0.47	
Control Delay (s/veh)		0.0		9.5		4.2		14.3			12.3	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		9.5		4.2		14.3			12.3	
LOS		A		A		A		B			B	
Approach Delay (s/veh)					7.8			14.3			12.3	
Approach LOS					A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 40.5			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 11.5		Intersection LOS: B	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

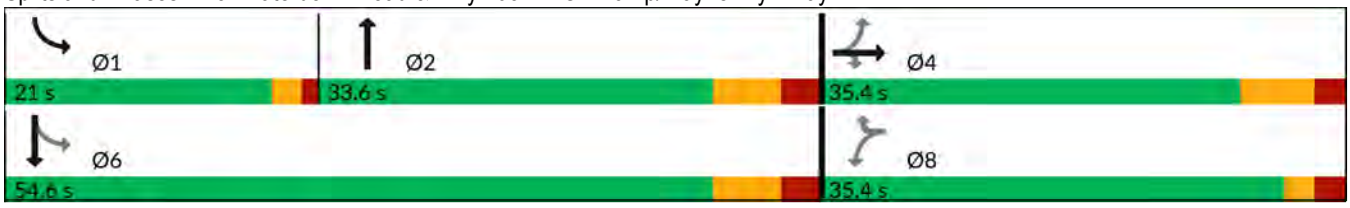


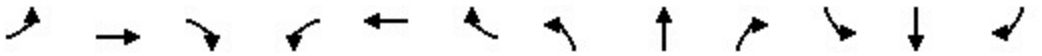
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	318	250	135	24	0	118	0	407	323	278	575	0
Future Volume (vph)	318	250	135	24	0	118	0	407	323	278	575	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.934				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3149	0	1676	3353	0
Flt Permitted	0.950			0.560						0.183		
Satd. Flow (perm)	1693	1782	1452	1714	0	1430	0	3149	0	323	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						126		227				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	338	266	144	26	0	126	0	433	344	296	612	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	266	144	26	0	126	0	777	0	296	612	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.4	35.4	35.4	35.4		35.4		33.6		21.0	54.6	
Total Split (%)	39.3%	39.3%	39.3%	39.3%		39.3%		37.3%		23.3%	60.7%	
Maximum Green (s)	28.3	28.3	28.3	31.3		31.3		26.6		18.0	47.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	20.6	20.6	20.6	23.8		23.8		19.0		39.3	35.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.34		0.34		0.27		0.56	0.50	
v/c Ratio	0.69	0.51	0.34	0.05		0.22		0.77		0.70	0.37	
Control Delay (s/veh)	31.0	25.7	23.5	17.8		5.0		23.3		21.8	12.4	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	31.0	25.7	23.5	17.8		5.0		23.3		21.8	12.4	
LOS	C	C	C	B		A		C		C	B	
Approach Delay (s/veh)		27.7			7.2			23.3			15.4	
Approach LOS		C			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 70.6			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	535	118	68	503	197	124	175	64	236	155	376
Future Volume (vph)	305	535	118	68	503	197	124	175	64	236	155	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.96	0.99		0.99	0.96		0.81	0.99		0.98		0.75
Frt		0.973			0.958			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3265	0	1676	3090	0	1710	1685	0	1676	1765	1500
Flt Permitted	0.243			0.387			0.655			0.301		
Satd. Flow (perm)	417	3265	0	675	3090	0	952	1685	0	522	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			59			15				321
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	318	557	123	71	524	205	129	182	67	246	161	392
Shared Lane Traffic (%)												
Lane Group Flow (vph)	318	680	0	71	729	0	129	249	0	246	161	392
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	61.9	49.6		51.9	40.8		32.5	19.4		42.1	26.1	26.1
Actuated g/C Ratio	0.56	0.45		0.47	0.37		0.30	0.18		0.38	0.24	0.24
v/c Ratio	0.78	0.46		0.18	0.62		0.37	0.81		0.66	0.39	0.77
Control Delay (s/veh)	29.7	23.1		14.2	29.8		25.5	60.6		32.9	37.1	18.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	29.7	23.1		14.2	29.8		25.5	60.6		32.9	37.1	18.6
LOS	C	C		B	C		C	E		C	D	B
Approach Delay (s/veh)		25.2			28.4			48.6			26.7	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 29.4		Intersection LOS: C	
Intersection Capacity Utilization 91.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

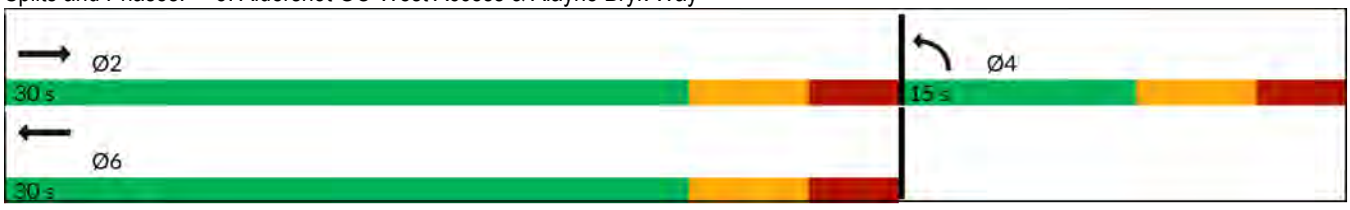


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	784	45	0	135	14	33
Future Volume (vph)	784	45	0	135	14	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.992				0.904	
Flt Protected					0.986	
Satd. Flow (prot)	3323	0	0	3420	1310	0
Flt Permitted					0.986	
Satd. Flow (perm)	3323	0	0	3420	1310	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	22				34	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	800	46	0	138	14	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	846	0	0	138	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	40.4			40.4	11.1	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.30			0.05	0.15	
Control Delay (s/veh)	3.0			2.7	9.5	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.0			2.7	9.5	
LOS	A			A	A	
Approach Delay (s/veh)	3.0			2.7	9.5	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.7			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 3.2		Intersection LOS: A	
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	504	49	62	26	0	0
Future Volume (vph)	504	49	62	26	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected	0.956			0.966		
Satd. Flow (prot)	1685	0	0	1739	0	0
Flt Permitted	0.956			0.966		
Satd. Flow (perm)	1685	0	0	1739	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	542	53	67	28	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	595	0	0	95	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	50.0		20.0	20.0		
Total Split (%)	71.4%		28.6%	28.6%		
Maximum Green (s)	47.0		14.0	14.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	16.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	29.9			10.7		
Actuated g/C Ratio	0.76			0.27		
v/c Ratio	0.47			0.20		
Control Delay (s/veh)	6.3			16.0		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	6.3			16.0		
LOS	A			B		
Approach Delay (s/veh)	6.3			16.0		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 39.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

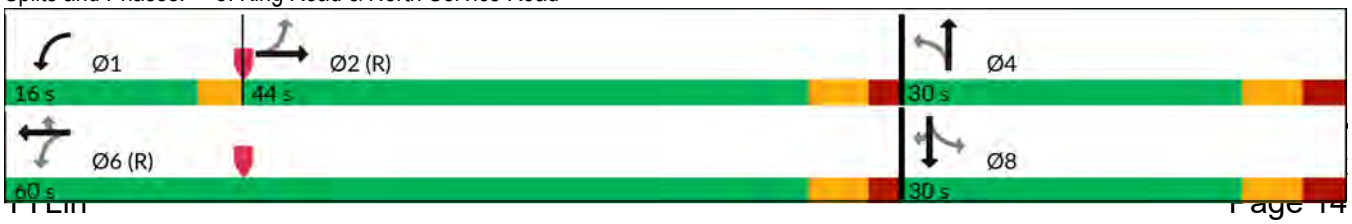


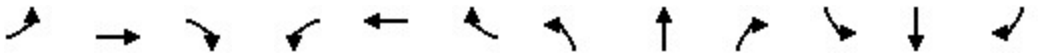
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	283	276	63	117	99	221	65	65	19
Future Volume (vph)	14	223	91	283	276	63	117	99	221	65	65	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				0.97
Frt		0.956				0.850		0.932				0.850
Flt Protected	0.950										0.976	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1757	1530
Flt Permitted	0.582			*0.470							0.517	
Satd. Flow (perm)	1048	1711	0	829	1800	1498	0	*3050	*3050	0	931	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				66		58				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	298	291	66	123	104	233	68	68	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	298	291	66	0	460	0	0	136	20
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	42.5	42.5		60.4	57.4	59.4		22.6			22.6	19.6
Actuated g/C Ratio	0.47	0.47		0.67	0.64	0.66		0.25			0.25	0.22
v/c Ratio	0.03	0.40		0.44	0.25	0.07		0.57			0.58	0.05
Control Delay (s/veh)	17.1	17.9		8.7	8.5	2.2		27.9			39.4	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	17.1	17.9		8.7	8.5	2.2		27.9			39.4	0.3
LOS	B	B		A	A	A		C			D	A
Approach Delay (s/veh)		17.9			8.0			27.9			34.4	
Approach LOS		B			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road





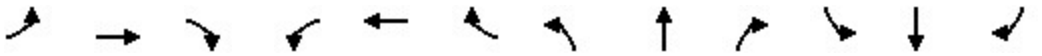
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	764	123	115	870	175	152	150	90	181	236	118
Future Volume (vph)	109	764	123	115	870	175	152	150	90	181	236	118
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95	0.99	0.99		0.99	0.99		0.98		0.97
Frt			0.850		0.975			0.944				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3280	0	1676	1665	0	1782	1782	1515
Flt Permitted	0.149			0.260			0.480			*0.420		
Satd. Flow (perm)	259	3353	1437	460	3280	0	838	1665	0	736	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		26			21				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	111	780	126	117	888	179	155	153	92	185	241	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	780	126	117	1067	0	155	245	0	185	241	120
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		Prot	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4					8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	70.1	62.0	62.0	70.3	62.0		37.0	23.9		19.9	30.7	28.3
Actuated g/C Ratio	0.54	0.48	0.48	0.54	0.48		0.28	0.18		0.15	0.24	0.22
v/c Ratio	0.49	0.49	0.17	0.36	0.68		0.48	0.76		0.68	0.57	0.31
Control Delay (s/veh)	21.6	25.4	7.0	17.3	29.1		33.5	61.0		65.1	49.5	14.8
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)	21.6	25.4	7.0	17.3	29.1		33.5	61.0		65.1	49.5	14.8
LOS	C	C	A	B	C		C	E		E	D	B
Approach Delay (s/veh)		22.7			27.9			50.3			47.2	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 32.4		Intersection LOS: C	
Intersection Capacity Utilization 80.8%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



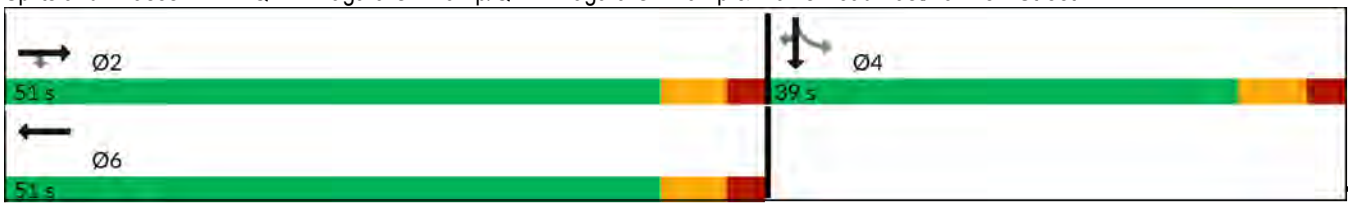


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1367	164	0	1405	283	0	0	0	426	3	260
Future Volume (vph)	0	1367	164	0	1405	283	0	0	0	426	3	260
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			256						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1409	169	0	1448	292	0	0	0	439	3	268
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1409	169	0	1448	292	0	0	0	219	223	268
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		51.0	51.0		51.0					39.0	39.0	39.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		44.0	44.0		44.0					31.8	31.8	31.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		25.7	25.7		25.7	56.5				15.8	15.8	15.8
Actuated g/C Ratio		0.45	0.45		0.45	1.00				0.28	0.28	0.28
v/c Ratio		0.64	0.22		0.66	0.20				0.49	0.49	0.60
Control Delay (s/veh)		13.7	2.9		13.8	0.3				22.3	22.4	21.5
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		13.7	2.9		13.8	0.3				22.3	22.4	21.5
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		12.5			11.5						22.0	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 56.5			
Natural Cycle: 45			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 13.8		Intersection LOS: B	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



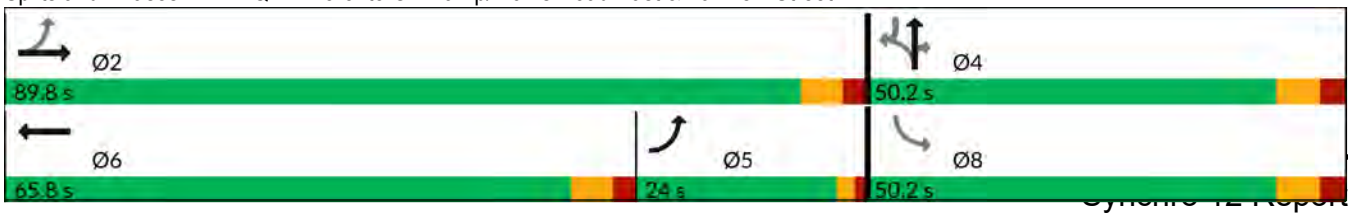
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	1339	173	0	1593	49	148	140	364	40	0	438
Future Volume (vph)	187	1339	173	0	1593	49	148	140	364	40	0	438
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.996			0.936	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4790	0	1593	1499	1425	1710	0	1604
Flt Permitted	0.078						0.950	0.997		0.388		
Satd. Flow (perm)	138	4865	1452	0	4790	0	1593	1499	1425	698	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		4			28	81			251
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	191	1366	177	0	1626	50	151	143	371	41	0	447
Shared Lane Traffic (%)							10%		32%			
Lane Group Flow (vph)	191	1366	177	0	1676	0	136	277	252	41	0	447
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

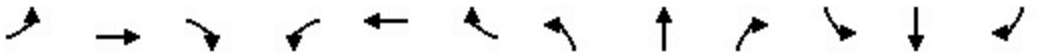
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	24.0	89.8			65.8		50.2	50.2	50.2	50.2		50.2
Total Split (%)	17.1%	64.1%			47.0%		35.9%	35.9%	35.9%	35.9%		35.9%
Maximum Green (s)	21.0	83.1			59.1		43.0	43.0	43.0	43.0		43.0
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	67.9	63.9	105.3		44.9		26.6	26.6	26.6	26.6		26.6
Actuated g/C Ratio	0.64	0.61	1.00		0.43		0.25	0.25	0.25	0.25		0.25
v/c Ratio	0.60	0.46	0.12		0.82		0.34	0.69	0.60	0.23		0.76
Control Delay (s/veh)	42.7	12.4	0.2		31.6		37.1	43.6	31.0	38.5		25.3
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	42.7	12.4	0.2		31.6		37.1	43.6	31.0	38.5		25.3
LOS	D	B	A		C		D	D	C	D		C
Approach Delay (s/veh)		14.5			31.6			37.5			26.4	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 105.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 25.4		Intersection LOS: C	
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



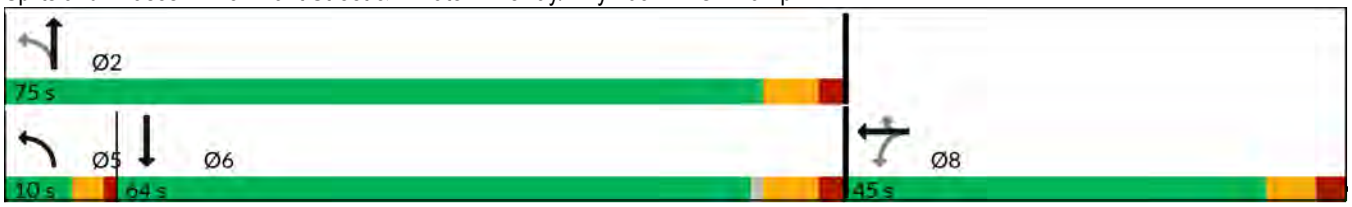


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	485	40	390	98	1260	237	0	1863	14
Future Volume (vph)	0	0	0	485	40	390	98	1260	237	0	1863	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		85.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4860	0
Flt Permitted				0.950	0.959		0.075					
Satd. Flow (perm)	0	0	0	1593	1605	1473	135	4865	1494	0	4860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			179		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	505	42	406	102	1313	247	0	1941	15
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	273	274	406	102	1313	247	0	1956	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				45.0	45.0	45.0	10.0	75.0			64.0	
Total Split (%)				37.5%	37.5%	37.5%	8.3%	62.5%			53.3%	
Maximum Green (s)				37.8	37.8	37.8	6.0	67.8			56.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				30.2	30.2	30.2	63.1	59.8	104.8		49.5	
Actuated g/C Ratio				0.29	0.29	0.29	0.60	0.57	1.00		0.47	
v/c Ratio				0.59	0.59	0.85	0.59	0.47	0.17		0.85	
Control Delay (s/veh)				38.8	38.6	46.7	27.6	14.5	0.2		29.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				38.8	38.6	46.7	27.6	14.5	0.2		29.4	
LOS				D	D	D	C	B	A		C	
Approach Delay (s/veh)					42.1			13.2			29.4	
Approach LOS					D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 104.8			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 26.1		Intersection LOS: C	
Intersection Capacity Utilization 77.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



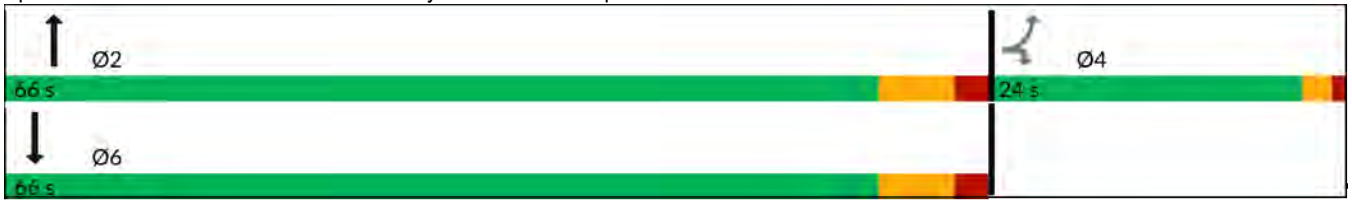


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	213	222	0	1418	1628	402
Future Volume (vph)	213	222	0	1418	1628	402
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			85.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99				0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3194	1365	0	4865	4818	1515
Flt Permitted	0.965					
Satd. Flow (perm)	3194	1347	0	4865	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	32	32				314
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	222	231	0	1477	1696	419
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	310	143	0	1477	1696	419
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	24.0	24.0		66.0	66.0	
Total Split (%)	26.7%	26.7%		73.3%	73.3%	
Maximum Green (s)	21.0	21.0		58.7	58.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.2	10.2		25.8	25.8	46.7
Actuated g/C Ratio	0.22	0.22		0.55	0.55	1.00
v/c Ratio	0.43	0.45		0.55	0.64	0.28
Control Delay (s/veh)	17.3	19.5		7.6	8.5	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	17.3	19.5		7.6	8.5	0.5
LOS	B	B		A	A	A
Approach Delay (s/veh)	18.0			7.6	6.9	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 46.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 8.4		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	609	155	0	14	44	8
Future Vol, veh/h	609	155	0	14	44	8
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	621	158	0	14	45	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	779	0	707	403
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	7	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	847	-	374	603
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	1021	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	847	-	374	596
Mov Cap-2 Maneuver	-	-	-	-	374	-
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	1021	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	397	-	-	847	-
HCM Lane V/C Ratio	0.134	-	-	-	-
HCM Ctrl Dly (s/v)	15.5	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	0.5	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	5	428	5	5	382
Future Vol, veh/h	3	5	428	5	5	382
Conflicting Peds, #/hr	0	0	0	1	1	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	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	3
Mvmt Flow	3	6	498	6	6	444

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	958	502	0	0	505	0
Stage 1	502	-	-	-	-	-
Stage 2	456	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	288	573	-	-	1070	-
Stage 1	612	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	286	573	-	-	1069	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	501	1069	-
HCM Lane V/C Ratio	-	-	0.019	0.005	-
HCM Ctrl Dly (s/v)	-	-	12.3	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	508	154	0	206	150	12
Future Vol, veh/h	508	154	0	206	150	12
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	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	564	171	0	229	167	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	735	0	765	368
Stage 1	-	-	-	-	650	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	879	-	344	635
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	879	-	344	635
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	487	-
Stage 2	-	-	-	-	903	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	25
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	356	-	-	879	-
HCM Lane V/C Ratio	0.506	-	-	-	-
HCM Ctrl Dly (s/v)	25	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q (veh)	2.7	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	6	423	4	0	709
Future Vol, veh/h	12	6	423	4	0	709
Conflicting Peds, #/hr	0	0	0	1	1	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	99	99	99	99	99	99
Heavy Vehicles, %	0	0	2	0	0	1
Mvmt Flow	12	6	427	4	0	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1146	430	0	0	-	-
Stage 1	430	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	222	629	-	-	0	-
Stage 1	660	-	-	-	0	-
Stage 2	488	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	222	628	-	-	-	-
Mov Cap-2 Maneuver	354	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	488	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	414	-
HCM Lane V/C Ratio	-	-	0.044	-
HCM Ctrl Dly (s/v)	-	-	14.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q (veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	543	274	0	62	75	9
Future Vol, veh/h	543	274	0	62	75	9
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	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	572	288	0	65	79	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	860	0	749	430
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	33	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	790	-	348	579
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	790	-	348	579
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	985	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	364	-	-	790	-
HCM Lane V/C Ratio	0.243	-	-	-	-
HCM Ctrl Dly (s/v)	18	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	0.9	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

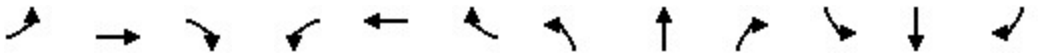
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	431	3	3	467
Future Vol, veh/h	3	0	431	3	3	467
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	3	0	444	3	3	481

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	934	447	0	0	448	0
Stage 1	447	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	297	616	-	-	1123	-
Stage 1	649	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	296	615	-	-	1122	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	620	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1122	-
HCM Lane V/C Ratio	-	-	0.007	0.003	-
HCM Ctrl Dly (s/v)	-	-	13.6	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0	0	-

Appendix F-2:
2031 Future Background Conditions

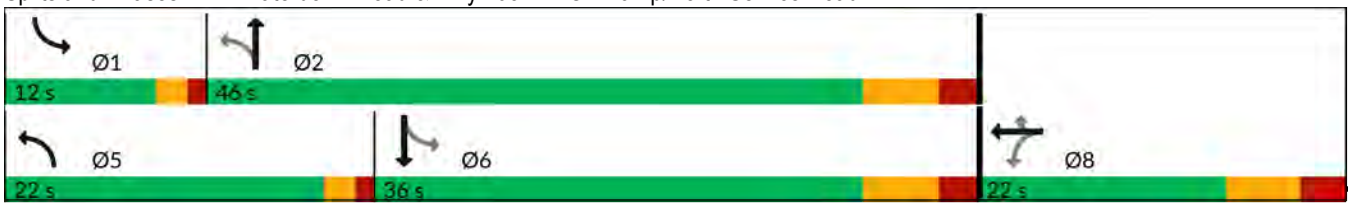


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	105	28	236	273	299	86	324	158
Future Volume (vph)	0	0	0	70	105	28	236	273	299	86	324	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.99					1.00	
Frt						0.850		0.922			0.951	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1366	1500	2963	0	1676	3084	0
Flt Permitted				0.950			0.376			0.422		
Satd. Flow (perm)	0	0	0	1512	1748	1348	594	2963	0	745	3084	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		318			117	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	74	112	30	251	290	318	91	345	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	74	112	30	251	608	0	91	513	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				22.0	22.0	22.0	22.0	46.0		12.0	36.0	
Total Split (%)				27.5%	27.5%	27.5%	27.5%	57.5%		15.0%	45.0%	
Maximum Green (s)				14.8	14.8	14.8	19.0	39.2		9.0	29.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.6	10.6	10.6	31.3	21.5		23.8	12.6	
Actuated g/C Ratio				0.20	0.20	0.20	0.60	0.41		0.46	0.24	
v/c Ratio				0.24	0.32	0.08	0.45	0.43		0.19	0.62	
Control Delay (s/veh)				22.0	22.7	0.4	7.6	6.7		6.2	17.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				22.0	22.7	0.4	7.6	6.7		6.2	17.4	
LOS				C	C	A	A	A		A	B	
Approach Delay (s/veh)					19.4			7.0			15.7	
Approach LOS					B			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 52.2			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B	
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

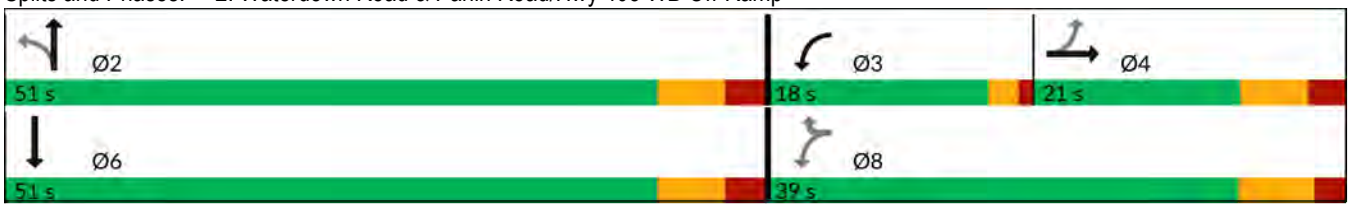


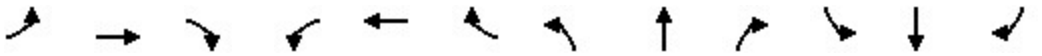
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	385	0	199	0	622	0	0	393	3
Future Volume (vph)	1	0	5	385	0	199	0	622	0	0	393	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3145	0
Flt Permitted		0.993		0.952								
Satd. Flow (perm)	0	1043	0	2968	0	1354	0	3167	0	0	3145	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				169					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	428	0	221	0	691	0	0	437	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	428	0	221	0	691	0	0	440	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	21.0	21.0		18.0		39.0	51.0	51.0			51.0	
Total Split (%)	23.3%	23.3%		20.0%		43.3%	56.7%	56.7%			56.7%	
Maximum Green (s)	13.9	13.9		15.0		31.8	43.8	43.8			43.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.5		17.2		12.8		15.0			15.0	
Actuated g/C Ratio		0.24		0.40		0.30		0.35			0.35	
v/c Ratio		0.02		0.36		0.42		0.63			0.40	
Control Delay (s/veh)		0.2		10.4		7.0		15.0			12.3	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		10.4		7.0		15.0			12.3	
LOS		A		B		A		B			B	
Approach Delay (s/veh)		0.2			9.2			15.0			12.3	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 42.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp





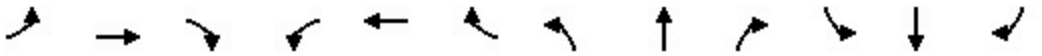
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	155	284	26	0	51	0	416	402	284	402	0
Future Volume (vph)	278	155	284	26	0	51	0	416	402	284	402	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.926				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2945	0	1583	3081	0
Flt Permitted	0.950			0.651						0.156		
Satd. Flow (perm)	1644	1748	1313	1135	0	765	0	2945	0	260	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						85		282				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	302	168	309	28	0	55	0	452	437	309	437	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	302	168	309	28	0	55	0	889	0	309	437	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.0	35.0	35.0	35.0		35.0		35.0		20.0	55.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%		38.9%		38.9%		22.2%	61.1%	
Maximum Green (s)	27.9	27.9	27.9	30.9		30.9		28.0		17.0	48.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	23.9	23.9	23.9	27.0		27.0		22.6		44.6	40.4	
Actuated g/C Ratio	0.30	0.30	0.30	0.34		0.34		0.29		0.56	0.51	
v/c Ratio	0.61	0.32	0.78	0.07		0.17		0.85		0.79	0.28	
Control Delay (s/veh)	30.4	24.2	41.1	19.7		3.1		28.2		32.2	12.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	30.4	24.2	41.1	19.7		3.1		28.2		32.2	12.2	
LOS	C	C	D	B		A		C		C	B	
Approach Delay (s/veh)		33.3			8.7			28.2			20.5	
Approach LOS		C			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 79.1			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 26.8		Intersection LOS: C	
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	544	85	99	315	166	61	208	73	149	185	211
Future Volume (vph)	382	544	85	99	315	166	61	208	73	149	185	211
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.98		0.97		0.98
Frt		0.980			0.948			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3177	0	1629	2933	0	1676	1602	0	1541	1682	1366
Flt Permitted	0.251			0.386			0.629			0.360		
Satd. Flow (perm)	425	3177	0	653	2933	0	1101	1602	0	568	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			85			15				234
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	424	604	94	110	350	184	68	231	81	166	206	234
Shared Lane Traffic (%)												
Lane Group Flow (vph)	424	698	0	110	534	0	68	312	0	166	206	234
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	29.0	55.0		10.0	36.0		9.0	34.0		11.0	36.0	36.0
Total Split (%)	26.4%	50.0%		9.1%	32.7%		8.2%	30.9%		10.0%	32.7%	32.7%
Maximum Green (s)	26.0	48.7		7.0	29.7		6.0	27.7		8.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	55.6	42.4		35.8	25.6		42.1	31.6		48.2	36.6	36.6
Actuated g/C Ratio	0.51	0.39		0.33	0.23		0.38	0.29		0.44	0.33	0.33
v/c Ratio	0.90	0.56		0.40	0.71		0.15	0.66		0.49	0.37	0.39
Control Delay (s/veh)	43.9	27.3		20.8	38.4		20.5	42.0		26.5	32.4	6.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	43.9	27.3		20.8	38.4		20.5	42.0		26.5	32.4	6.2
LOS	D	C		C	D		C	D		C	C	A
Approach Delay (s/veh)		33.6			35.4			38.2			20.7	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 31.8		Intersection LOS: C	
Intersection Capacity Utilization 91.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

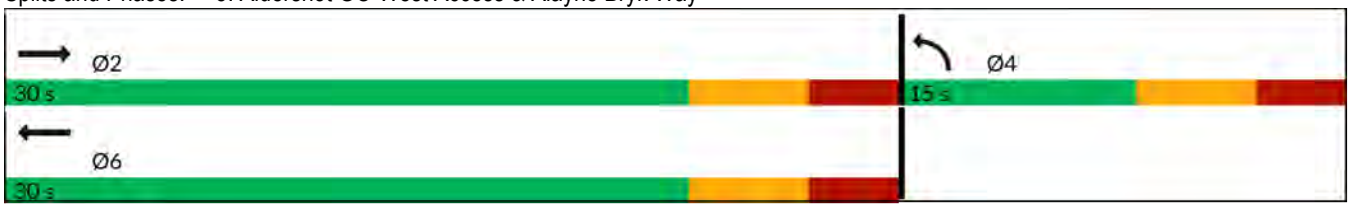


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	25	4	60	17	4
Future Volume (vph)	796	25	4	60	17	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.995				0.974	
Flt Protected				0.997	0.961	
Satd. Flow (prot)	3187	0	0	3212	931	0
Flt Permitted				0.924	0.961	
Satd. Flow (perm)	3187	0	0	2977	931	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	12				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	812	26	4	61	17	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	838	0	0	65	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	45.1			45.1	11.1	
Actuated g/C Ratio	0.93			0.93	0.23	
v/c Ratio	0.28			0.06	0.10	
Control Delay (s/veh)	1.5			1.6	16.5	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	1.5			1.6	16.5	
LOS	A			A	B	
Approach Delay (s/veh)	1.5			1.6	16.5	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.3			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 1.9		Intersection LOS: A	
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





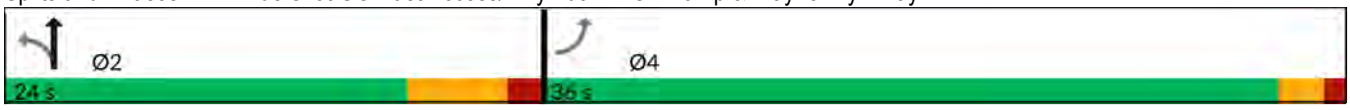
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	624	38	16	29	0	0
Future Volume (vph)	624	38	16	29	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected	0.955			0.983		
Satd. Flow (prot)	1628	0	0	1769	0	0
Flt Permitted	0.955			0.983		
Satd. Flow (perm)	1628	0	0	1769	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	657	40	17	31	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	697	0	0	48	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	36.0		24.0	24.0		
Total Split (%)	60.0%		40.0%	40.0%		
Maximum Green (s)	33.0		18.0	18.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	36.0			11.6		
Actuated g/C Ratio	0.88			0.28		
v/c Ratio	0.49			0.10		
Control Delay (s/veh)	4.6			18.9		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	4.6			18.9		
LOS	A			B		
Approach Delay (s/veh)	4.6			18.9		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 41.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 5.5		Intersection LOS: A	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

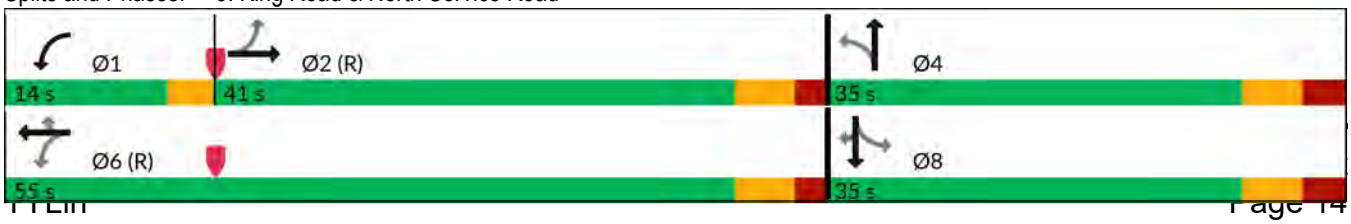


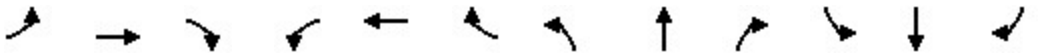
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	211	178	41	98	78	278	72	119	31
Future Volume (vph)	23	252	73	211	178	41	98	78	278	72	119	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.917				0.850
Flt Protected	0.950										0.982	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1754	1530
Flt Permitted	0.641			*0.470							0.545	
Satd. Flow (perm)	1059	1667	0	813	1714	1496	0	*3050	*3050	0	974	1497
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19				48		97				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	220	185	43	102	81	290	75	124	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	220	185	43	0	473	0	0	199	32
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	41.0	41.0		14.0	55.0	55.0	35.0	35.0		35.0	35.0	35.0
Total Split (%)	45.6%	45.6%		15.6%	61.1%	61.1%	38.9%	38.9%		38.9%	38.9%	38.9%
Maximum Green (s)	35.0	35.0		11.0	49.0	49.0	28.0	28.0		28.0	28.0	28.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	42.7	42.7		59.1	56.1	58.1		23.9			23.9	20.9
Actuated g/C Ratio	0.47	0.47		0.66	0.62	0.65		0.27			0.27	0.23
v/c Ratio	0.05	0.42		0.34	0.17	0.04		0.54			0.77	0.08
Control Delay (s/veh)	17.5	19.2		8.8	8.9	2.6		23.6			49.3	1.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	17.5	19.2		8.8	8.9	2.6		23.6			49.3	1.0
LOS	B	B		A	A	A		C			D	A
Approach Delay (s/veh)		19.1			8.3			23.6			42.6	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



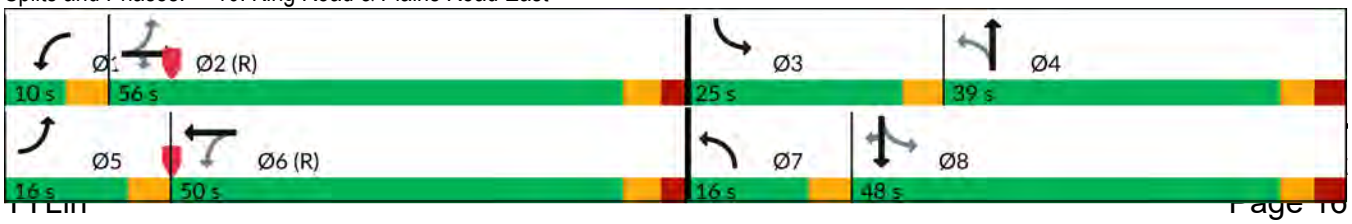


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	678	113	53	481	143	156	181	71	243	117	88
Future Volume (vph)	110	678	113	53	481	143	156	181	71	243	117	88
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	0.99		0.99	0.99		0.99		0.98
Frt			0.850		0.966			0.958				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	3061	0	1583	1673	0	1731	1765	1485
Flt Permitted	0.285			0.311			0.678			*0.420		
Satd. Flow (perm)	484	3226	1378	529	3061	0	1121	1673	0	718	1765	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		33			15				126
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	116	714	119	56	506	151	164	191	75	256	123	93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	116	714	119	56	657	0	164	266	0	256	123	93
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	16.0	56.0	56.0	10.0	50.0		16.0	39.0		25.0	48.0	48.0
Total Split (%)	12.3%	43.1%	43.1%	7.7%	38.5%		12.3%	30.0%		19.2%	36.9%	36.9%
Maximum Green (s)	12.0	50.0	50.0	6.0	44.0		12.0	32.6		21.0	41.6	41.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	70.5	62.3	62.3	64.6	57.4		41.3	27.2		50.6	32.5	30.1
Actuated g/C Ratio	0.54	0.48	0.48	0.50	0.44		0.32	0.21		0.39	0.25	0.23
v/c Ratio	0.33	0.46	0.16	0.17	0.48		0.40	0.73		0.60	0.28	0.21
Control Delay (s/veh)	19.3	26.5	4.2	18.3	28.1		28.8	56.9		33.1	39.2	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	19.3	26.5	4.2	18.3	28.1		28.8	56.9		33.1	39.2	3.3
LOS	B	C	A	B	C		C	E		C	D	A
Approach Delay (s/veh)		22.8			27.3			46.2			28.8	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 29.1		Intersection LOS: C	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

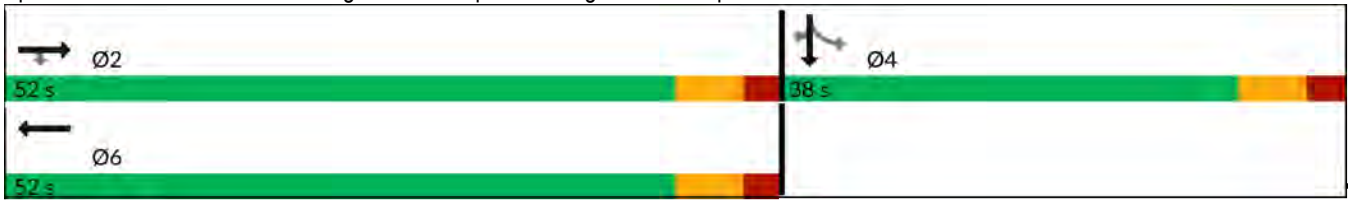


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1064	181	0	1027	318	0	0	0	288	1	184
Future Volume (vph)	0	1064	181	0	1027	318	0	0	0	288	1	184
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1317	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			193			338						57
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1132	193	0	1093	338	0	0	0	306	1	196
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1132	193	0	1093	338	0	0	0	153	154	196
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		52.0	52.0		52.0					38.0	38.0	38.0
Total Split (%)		57.8%	57.8%		57.8%					42.2%	42.2%	42.2%
Maximum Green (s)		45.0	45.0		45.0					30.8	30.8	30.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		19.1	19.1		19.1	45.3				11.7	11.7	11.7
Actuated g/C Ratio		0.42	0.42		0.42	1.00				0.26	0.26	0.26
v/c Ratio		0.57	0.29		0.55	0.25				0.38	0.38	0.46
Control Delay (s/veh)		11.3	3.0		11.1	0.4				18.3	18.3	15.2
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		11.3	3.0		11.1	0.4				18.3	18.3	15.2
LOS		B	A		B	A				B	B	B
Approach Delay (s/veh)		10.1			8.5						17.1	
Approach LOS		B			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 45.3			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 47.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



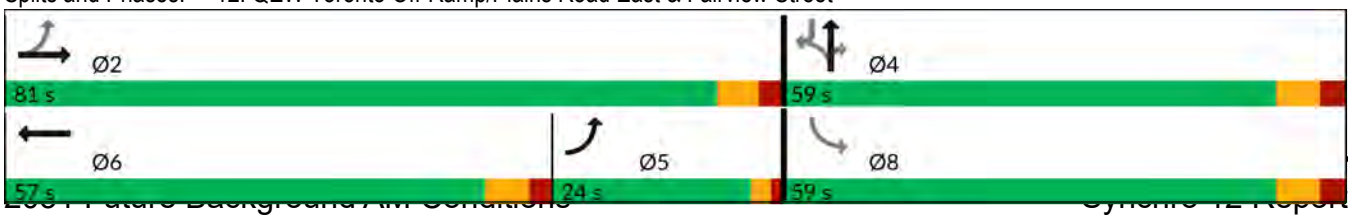
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	1100	70	0	910	17	228	120	373	23	0	370
Future Volume (vph)	154	1100	70	0	910	17	228	120	373	23	0	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.997			0.930	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4613	0	1533	1410	1384	1710	0	1543
Flt Permitted	0.236						0.950	0.996		0.494		
Satd. Flow (perm)	389	4725	1485	0	4613	0	1533	1410	1363	887	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			36	81			301
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	160	1146	73	0	948	18	238	125	389	24	0	385
Shared Lane Traffic (%)							10%		34%			
Lane Group Flow (vph)	160	1146	73	0	966	0	214	281	257	24	0	385
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

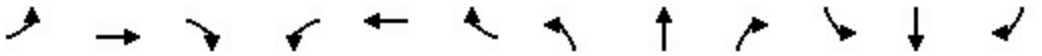
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	24.0	81.0			57.0		59.0	59.0	59.0	59.0		59.0
Total Split (%)	17.1%	57.9%			40.7%		42.1%	42.1%	42.1%	42.1%		42.1%
Maximum Green (s)	21.0	74.3			50.3		51.8	51.8	51.8	51.8		51.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	38.9	35.0	71.0		22.5		21.4	21.4	21.4	21.4		21.4
Actuated g/C Ratio	0.55	0.49	1.00		0.32		0.30	0.30	0.30	0.30		0.30
v/c Ratio	0.44	0.49	0.05		0.66		0.46	0.63	0.55	0.09		0.57
Control Delay (s/veh)	20.9	13.4	0.1		24.2		24.9	26.2	19.6	20.7		9.3
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	20.9	13.4	0.1		24.2		24.9	26.2	19.6	20.7		9.3
LOS	C	B	A		C		C	C	B	C		A
Approach Delay (s/veh)		13.6			24.2			23.6			9.9	
Approach LOS		B			C			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 71			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 78.4%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



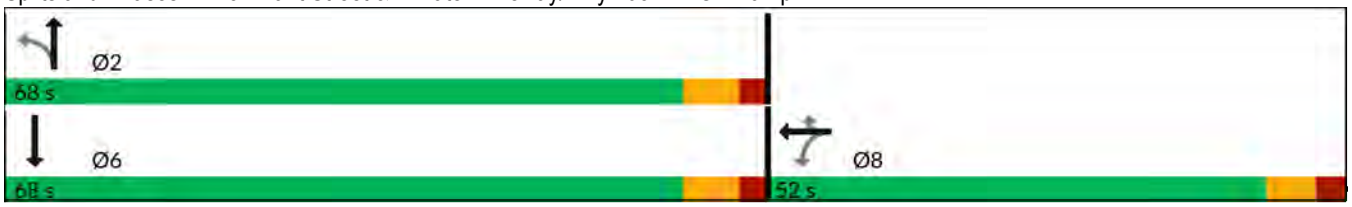


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	386	19	470	37	945	159	0	1644	2
Future Volume (vph)	0	0	0	386	19	470	37	945	159	0	1644	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850			
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4720	0
Flt Permitted				0.950	0.957		0.087					
Satd. Flow (perm)	0	0	0	1547	1556	1448	152	4680	1422	0	4720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						77			151			
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	406	20	495	39	995	167	0	1731	2
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	211	215	495	39	995	167	0	1733	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				52.0	52.0	52.0	68.0	68.0			68.0	
Total Split (%)				43.3%	43.3%	43.3%	56.7%	56.7%			56.7%	
Maximum Green (s)				44.8	44.8	44.8	60.8	60.8			60.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				34.6	34.6	34.6	46.1	46.1	96.0		46.1	
Actuated g/C Ratio				0.36	0.36	0.36	0.48	0.48	1.00		0.48	
v/c Ratio				0.38	0.38	0.87	0.53	0.44	0.12		0.76	
Control Delay (s/veh)				26.8	26.8	42.5	50.4	17.4	0.2		23.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				26.8	26.8	42.5	50.4	17.4	0.2		23.4	
LOS				C	C	D	D	B	A		C	
Approach Delay (s/veh)					35.3			16.1			23.4	
Approach LOS					D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 96			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 24.0		Intersection LOS: C	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



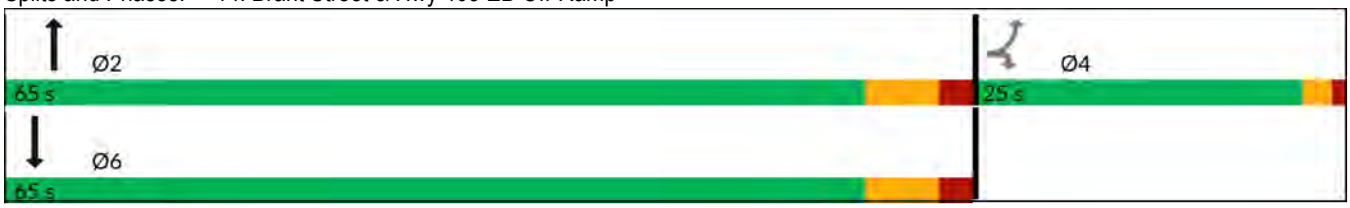


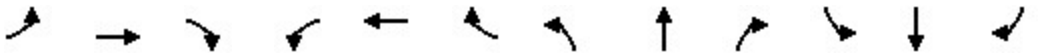
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	166	196	0	951	1277	645
Future Volume (vph)	166	196	0	951	1277	645
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Frt	0.951	0.850				0.850
Flt Protected	0.967					
Satd. Flow (prot)	3149	1339	0	4636	4680	1500
Flt Permitted	0.967					
Satd. Flow (perm)	3149	1339	0	4636	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	66	66				607
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	175	206	0	1001	1344	679
Shared Lane Traffic (%)		41%				
Lane Group Flow (vph)	259	122	0	1001	1344	679
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	25.0	25.0		65.0	65.0	
Total Split (%)	27.8%	27.8%		72.2%	72.2%	
Maximum Green (s)	22.0	22.0		57.7	57.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	8.3	8.3		18.9	18.9	37.6
Actuated g/C Ratio	0.22	0.22		0.50	0.50	1.00
v/c Ratio	0.35	0.35		0.43	0.57	0.45
Control Delay (s/veh)	11.3	10.9		6.6	7.7	1.0
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	11.3	10.9		6.6	7.7	1.0
LOS	B	B		A	A	A
Approach Delay (s/veh)	11.2			6.6	5.4	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 37.6			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 6.4		Intersection LOS: A	
Intersection Capacity Utilization 44.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



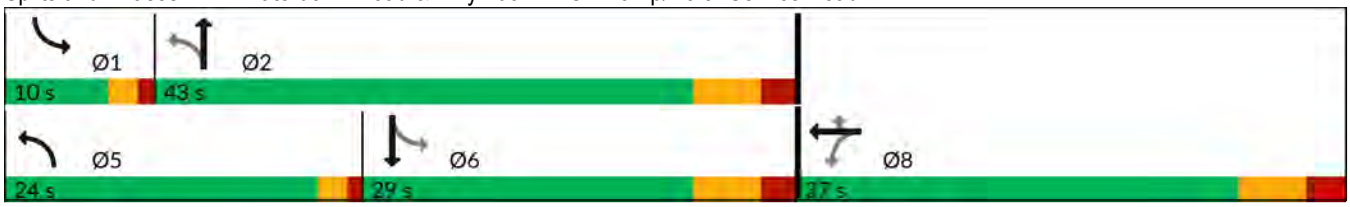


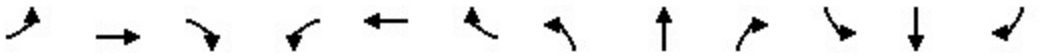
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	222	419	98	376	451	219	105	429	112
Future Volume (vph)	0	0	0	222	419	98	376	451	219	105	429	112
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.951			0.969	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3128	0	1710	3217	0
Flt Permitted				0.950			0.243			0.366		
Satd. Flow (perm)	0	0	0	1660	1782	1480	425	3128	0	659	3217	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						119		110			34	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	249	471	110	422	507	246	118	482	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	249	471	110	422	753	0	118	608	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				37.0	37.0	37.0	24.0	43.0		10.0	29.0	
Total Split (%)				41.1%	41.1%	41.1%	26.7%	47.8%		11.1%	32.2%	
Maximum Green (s)				29.8	29.8	29.8	21.0	36.2		7.0	22.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				25.1	25.1	25.1	45.2	33.8		29.8	18.7	
Actuated g/C Ratio				0.31	0.31	0.31	0.56	0.42		0.37	0.23	
v/c Ratio				0.48	0.85	0.20	0.79	0.55		0.35	0.79	
Control Delay (s/veh)				26.8	42.7	4.9	25.7	18.0		14.4	36.6	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				26.8	42.7	4.9	25.7	18.0		14.4	36.6	
LOS				C	D	A	C	B		B	D	
Approach Delay (s/veh)					32.9			20.8			33.0	
Approach LOS					C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 80.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 27.7		Intersection LOS: C	
Intersection Capacity Utilization 76.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	362	1	205	2	828	0	0	664	0
Future Volume (vph)	0	0	5	362	1	205	2	828	0	0	664	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.816				0.953				
Satd. Flow (perm)	0	1557	0	2766	0	1485	0	3134	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		159				95						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	436	1	247	2	998	0	0	800	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	436	1	247	0	1000	0	0	800	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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)		0.6		2.0	0.6	2.0		0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		NA		pm+pt	NA	Perm	Perm	NA			NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0	17.2	17.2	17.2	17.2			17.2	
Total Split (s)	20.0	20.0		14.0	34.0	34.0	56.0	56.0			56.0	
Total Split (%)	22.2%	22.2%		15.6%	37.8%	37.8%	62.2%	62.2%			62.2%	
Maximum Green (s)	12.9	12.9		11.0	26.8	26.8	48.8	48.8			48.8	
Yellow Time (s)	4.5	4.5		2.0	5.0	5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0	2.2	2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min	Min	Min	Min	Min			Min	
Act Effct Green (s)		11.3		23.8	0.0	19.2		25.4			25.4	
Actuated g/C Ratio		0.19		0.39	0.00	0.32		0.42			0.42	
v/c Ratio		0.01		0.35	no cap	0.46		0.76			0.57	
Control Delay (s/veh)		0.0		14.5		14.0		19.7			15.6	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		14.5	Error	14.0		19.7			15.6	
LOS		A		B	F	B		B			B	
Approach Delay (s/veh)					Error			19.7			15.6	
Approach LOS					F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

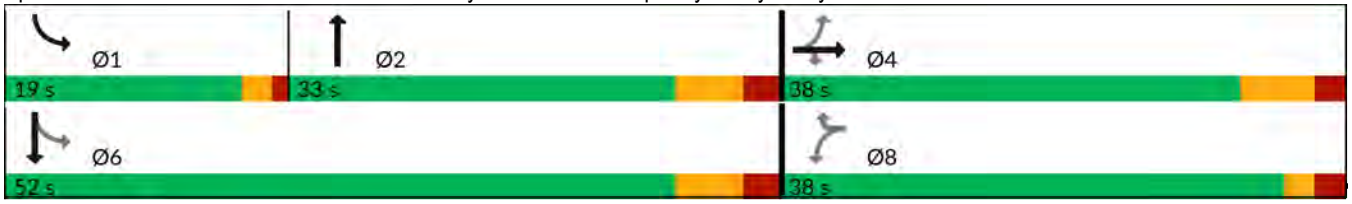


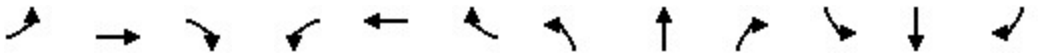
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	267	148	353	88	0	304	0	427	326	279	602	0
Future Volume (vph)	267	148	353	88	0	304	0	427	326	279	602	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.935				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	3079	0	1629	3353	0
Flt Permitted	0.950			0.652						0.159		
Satd. Flow (perm)	1644	1667	1485	2128	0	1471	0	3079	0	273	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						342		214				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	300	166	397	99	0	342	0	480	366	313	676	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	300	166	397	99	0	342	0	846	0	313	676	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	38.0	38.0	38.0	38.0		38.0		33.0		19.0	52.0	
Total Split (%)	42.2%	42.2%	42.2%	42.2%		42.2%		36.7%		21.1%	57.8%	
Maximum Green (s)	30.9	30.9	30.9	33.9		33.9		26.0		16.0	45.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	26.5	26.5	26.5	29.6		29.6		22.1		43.9	39.8	
Actuated g/C Ratio	0.33	0.33	0.33	0.37		0.37		0.27		0.54	0.49	
v/c Ratio	0.56	0.30	0.82	0.13		0.45		0.85		0.80	0.41	
Control Delay (s/veh)	27.4	22.7	40.2	18.4		4.3		30.7		33.8	14.6	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	27.4	22.7	40.2	18.4		4.3		30.7		33.8	14.6	
LOS	C	C	D	B		A		C		C	B	
Approach Delay (s/veh)		32.4			7.5			30.7			20.7	
Approach LOS		C			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 80.9			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 24.8		Intersection LOS: C	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



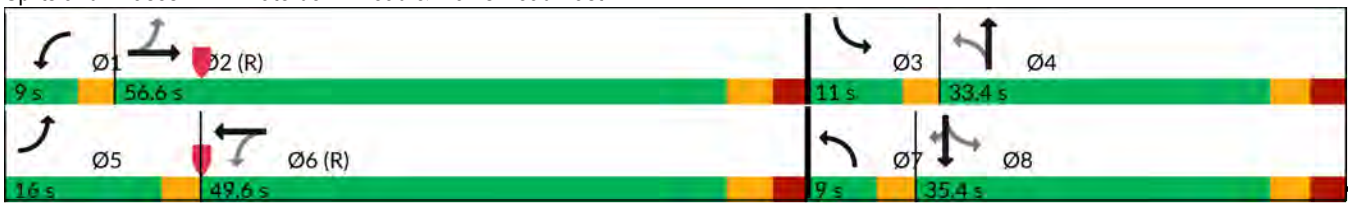


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	252	669	85	100	1070	125	184	169	63	278	152	496
Future Volume (vph)	252	669	85	100	1070	125	184	169	63	278	152	496
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.983			0.984			0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3282	0	1676	3247	0	1676	1609	0	1676	1682	1500
Flt Permitted	0.086			0.317			0.657			0.429		
Satd. Flow (perm)	150	3282	0	558	3247	0	1145	1609	0	747	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			13			16				240
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	263	697	89	104	1115	130	192	176	66	290	158	517
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	786	0	104	1245	0	192	242	0	290	158	517
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	16.0	56.6		9.0	49.6		9.0	33.4		11.0	35.4	35.4
Total Split (%)	14.5%	51.5%		8.2%	45.1%		8.2%	30.4%		10.0%	32.2%	32.2%
Maximum Green (s)	13.0	50.3		6.0	43.3		6.0	27.1		8.0	29.1	29.1
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	62.6	50.3		52.6	43.3		36.4	27.1		40.4	29.1	29.1
Actuated g/C Ratio	0.57	0.46		0.48	0.39		0.33	0.25		0.37	0.26	0.26
v/c Ratio	1.00	0.52		0.32	0.97		0.47	0.59		0.85	0.36	0.92
Control Delay (s/veh)	85.0	22.3		14.2	51.6		30.6	41.0		52.7	35.6	44.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	85.0	22.3		14.2	51.6		30.6	41.0		52.7	35.6	44.5
LOS	F	C		B	D		C	D		D	D	D
Approach Delay (s/veh)		38.0			48.7			36.4			45.5	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 43.5		Intersection LOS: D	
Intersection Capacity Utilization 106.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

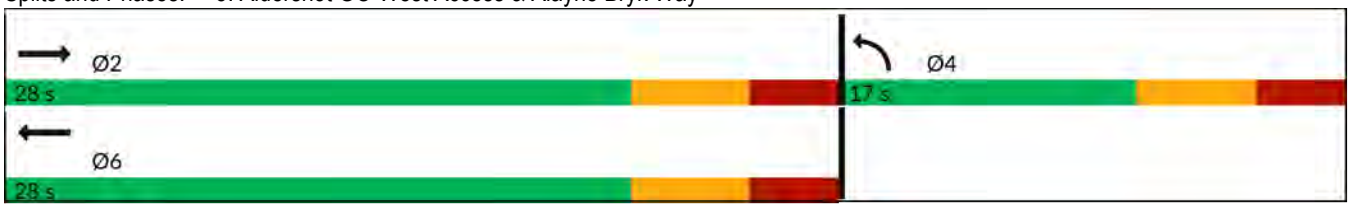


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	696	34	0	367	24	13
Future Volume (vph)	696	34	0	367	24	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.993				0.953	
Flt Protected					0.969	
Satd. Flow (prot)	3213	0	0	3420	1043	0
Flt Permitted					0.969	
Satd. Flow (perm)	3213	0	0	3420	1043	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16				14	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	765	37	0	403	26	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	802	0	0	403	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.6			41.6	11.5	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.29			0.14	0.16	
Control Delay (s/veh)	3.1			2.7	13.6	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.1			2.7	13.6	
LOS	A			A	B	
Approach Delay (s/veh)	3.1			2.7	13.6	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 49			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





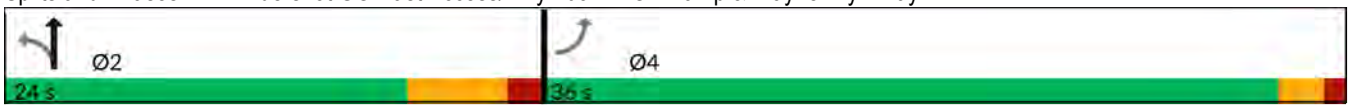
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	559	13	226	45	0	0
Future Volume (vph)	559	13	226	45	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					
Flt Protected	0.953			0.960		
Satd. Flow (prot)	1646	0	0	1728	0	0
Flt Permitted	0.953			0.960		
Satd. Flow (perm)	1646	0	0	1728	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%
Adj. Flow (vph)	682	16	276	55	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	698	0	0	331	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

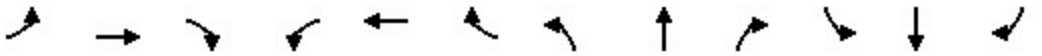


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	36.0		24.0	24.0		
Total Split (%)	60.0%		40.0%	40.0%		
Maximum Green (s)	33.0		18.0	18.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	25.5			14.4		
Actuated g/C Ratio	0.52			0.29		
v/c Ratio	0.82			0.66		
Control Delay (s/veh)	19.9			23.8		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	19.9			23.8		
LOS	B			C		
Approach Delay (s/veh)	19.9			23.8		
Approach LOS	B			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 49.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 21.2		Intersection LOS: C	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way





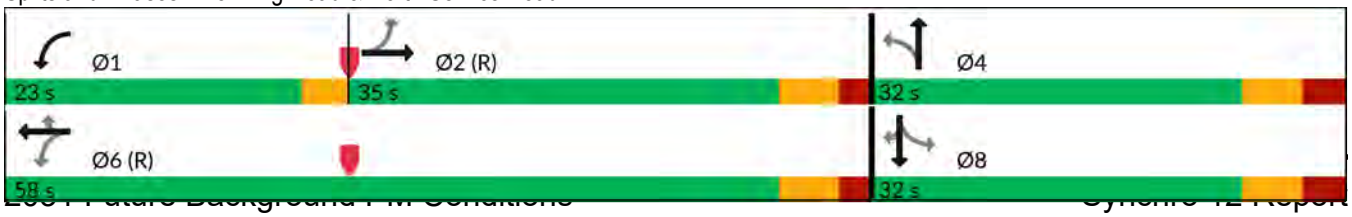
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	473	622	73	56	154	256	61	181	22
Future Volume (vph)	14	267	92	473	622	73	56	154	256	61	181	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.926				0.850
Flt Protected	0.950										0.988	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1744	1530
Flt Permitted	0.416			*0.470							0.610	
Satd. Flow (perm)	749	1698	0	829	1765	1469	0	*3050	*3050	0	1076	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		71				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	498	655	77	59	162	269	64	191	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	498	655	77	0	490	0	0	255	23
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	

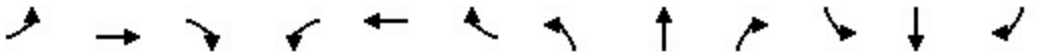
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	35.0	35.0		23.0	58.0	58.0	32.0	32.0		32.0	32.0	32.0
Total Split (%)	38.9%	38.9%		25.6%	64.4%	64.4%	35.6%	35.6%		35.6%	35.6%	35.6%
Maximum Green (s)	29.0	29.0		20.0	52.0	52.0	25.0	25.0		25.0	25.0	25.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	34.2	34.2		57.3	54.3	56.3		25.7			25.7	22.7
Actuated g/C Ratio	0.38	0.38		0.64	0.60	0.63		0.29			0.29	0.25
v/c Ratio	0.05	0.58		0.71	0.62	0.08		0.53			0.83	0.05
Control Delay (s/veh)	22.1	27.2		15.1	15.2	4.0		24.7			53.2	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	22.1	27.2		15.1	15.2	4.0		24.7			53.2	0.2
LOS	C	C		B	B	A		C			D	A
Approach Delay (s/veh)		27.0			14.5			24.7			48.9	
Approach LOS		C			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 22.6		Intersection LOS: C	
Intersection Capacity Utilization 105.4%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	897	195	114	1351	222	172	146	70	315	281	166
Future Volume (vph)	87	897	195	114	1351	222	172	146	70	315	281	166
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.99		0.99	0.99		0.99		0.97
Frt			0.850		0.979			0.952				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3238	0	1613	1653	0	1765	1800	1500
Flt Permitted	0.061			0.218			0.248			*0.420		
Satd. Flow (perm)	110	3320	1393	390	3238	0	418	1653	0	732	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111		20			17				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	89	915	199	116	1379	227	176	149	71	321	287	169
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	915	199	116	1606	0	176	220	0	321	287	169
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	65.6	65.6	13.0	68.6		14.0	35.4		16.0	37.4	37.4
Total Split (%)	7.7%	50.5%	50.5%	10.0%	52.8%		10.8%	27.2%		12.3%	28.8%	28.8%
Maximum Green (s)	6.0	59.6	59.6	9.0	62.6		10.0	29.0		12.0	31.0	31.0
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	74.9	67.6	67.6	77.5	68.9		35.8	25.7		39.8	27.7	25.3
Actuated g/C Ratio	0.58	0.52	0.52	0.60	0.53		0.28	0.20		0.31	0.21	0.19
v/c Ratio	0.58	0.53	0.26	0.36	0.93		0.85	0.65		1.00	0.75	0.47
Control Delay (s/veh)	34.9	23.0	9.3	14.5	39.7		68.3	52.7		90.7	60.0	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)	34.9	23.0	9.3	14.5	39.7		68.3	52.7		90.7	60.0	24.7
LOS	C	C	A	B	D		E	D		F	E	C
Approach Delay (s/veh)		21.6			38.0			59.6			65.0	
Approach LOS		C			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 40.4		Intersection LOS: D	
Intersection Capacity Utilization 100.7%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

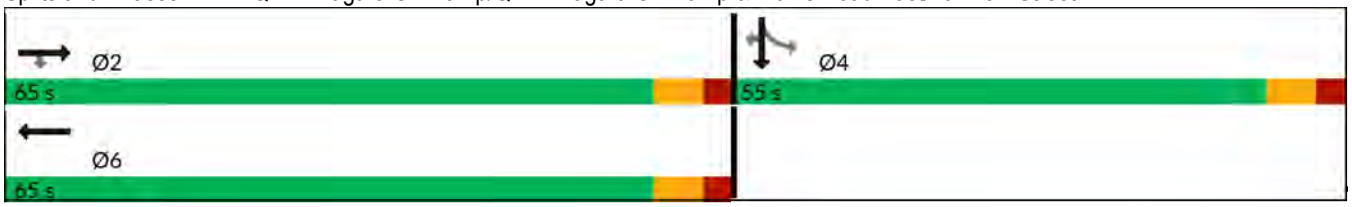


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1234	380	0	1672	1389	0	0	0	625	7	367
Future Volume (vph)	0	1234	380	0	1672	1389	0	0	0	625	7	367
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1614	1485
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1614	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			388			791						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1259	388	0	1706	1417	0	0	0	638	7	374
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	1259	388	0	1706	1417	0	0	0	325	320	374
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		65.0	65.0		65.0					55.0	55.0	55.0
Total Split (%)		54.2%	54.2%		54.2%					45.8%	45.8%	45.8%
Maximum Green (s)		58.0	58.0		58.0					47.8	47.8	47.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		38.8	38.8		38.8	81.9				27.7	27.7	27.7
Actuated g/C Ratio		0.47	0.47		0.47	1.00				0.34	0.34	0.34
v/c Ratio		0.56	0.44		0.75	0.97				0.60	0.59	0.72
Control Delay (s/veh)		17.1	3.3		20.7	19.6				28.5	28.2	31.0
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		17.1	3.3		20.7	19.6				28.5	28.2	31.0
LOS		B	A		C	B				C	C	C
Approach Delay (s/veh)		13.9			20.2						29.3	
Approach LOS		B			C						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 81.9			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: B	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



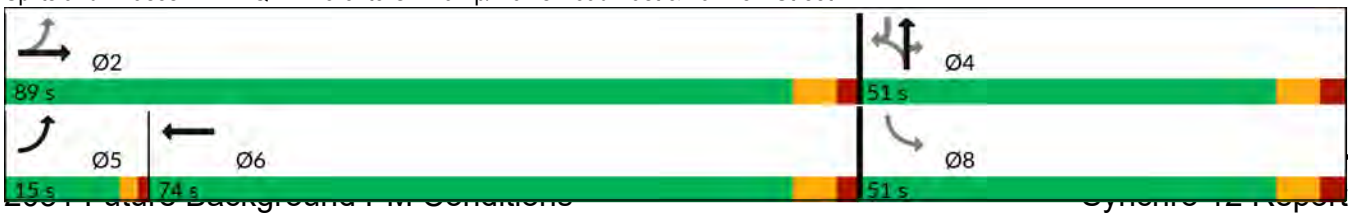
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	188	1504	103	0	2234	16	219	219	386	15	0	620
Future Volume (vph)	188	1504	103	0	2234	16	219	219	386	15	0	620
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.959	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4807	0	1577	1529	1425	1710	0	1588
Flt Permitted	0.057						0.950	0.997		0.324		
Satd. Flow (perm)	99	4818	1451	0	4807	0	1577	1529	1405	583	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			14	52			166
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	192	1535	105	0	2280	16	223	223	394	15	0	633
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	192	1535	105	0	2296	0	201	336	303	15	0	633
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

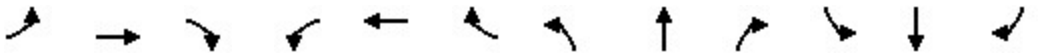
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	15.0	89.0			74.0		51.0	51.0	51.0	51.0		51.0
Total Split (%)	10.7%	63.6%			52.9%		36.4%	36.4%	36.4%	36.4%		36.4%
Maximum Green (s)	12.0	82.3			67.3		43.8	43.8	43.8	43.8		43.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	86.0	82.3	140.0		67.3		43.8	43.8	43.8	43.8		43.8
Actuated g/C Ratio	0.61	0.59	1.00		0.48		0.31	0.31	0.31	0.31		0.31
v/c Ratio	0.99	0.54	0.07		0.99		0.41	0.69	0.64	0.08		1.04
Control Delay (s/veh)	100.1	18.3	0.1		53.3		41.0	48.9	40.9	35.7		81.0
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	100.1	18.3	0.1		53.3		41.0	48.9	40.9	35.7		81.0
LOS	F	B	A		D		D	D	D	D		F
Approach Delay (s/veh)		25.9			53.3			44.1			79.9	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 46.0		Intersection LOS: D	
Intersection Capacity Utilization 121.7%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



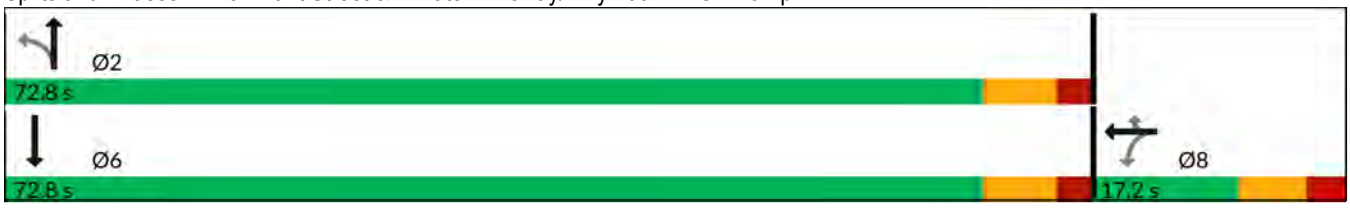


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	99	9	57	78	1590	617	0	2006	5
Future Volume (vph)	0	0	0	99	9	57	78	1590	617	0	2006	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850			
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1601	1485	1676	4771	1515	0	4811	0
Flt Permitted				0.950	0.960		0.072					
Satd. Flow (perm)	0	0	0	1577	1601	1485	127	4771	1480	0	4811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			466		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	104	9	60	82	1674	649	0	2112	5
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	56	57	60	82	1674	649	0	2117	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.1	10.1	10.1	69.1	69.1	87.7		69.1	
Actuated g/C Ratio				0.12	0.12	0.12	0.79	0.79	1.00		0.79	
v/c Ratio				0.31	0.31	0.28	0.82	0.45	0.44		0.56	
Control Delay (s/veh)				42.4	42.4	17.3	71.7	4.8	0.9		5.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				42.4	42.4	17.3	71.7	4.8	0.9		5.7	
LOS				D	D	B	E	A	A		A	
Approach Delay (s/veh)					33.7			6.0			5.7	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 87.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 6.9		Intersection LOS: A	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



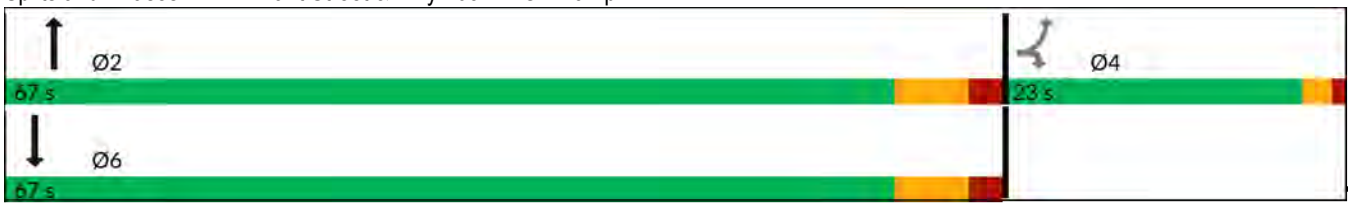


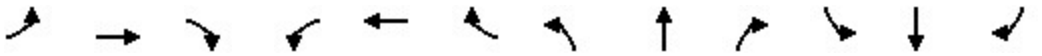
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	231	0	1762	1453	367
Future Volume (vph)	230	231	0	1762	1453	367
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor						0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3094	1352	0	4818	4771	1485
Flt Permitted	0.965					
Satd. Flow (perm)	3094	1352	0	4818	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	52	52				303
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	237	238	0	1816	1498	378
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	325	150	0	1816	1498	378
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	23.0	23.0		67.0	67.0	
Total Split (%)	25.6%	25.6%		74.4%	74.4%	
Maximum Green (s)	20.0	20.0		59.7	59.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.3	10.3		28.4	28.4	49.5
Actuated g/C Ratio	0.21	0.21		0.57	0.57	1.00
v/c Ratio	0.47	0.46		0.66	0.55	0.26
Control Delay (s/veh)	18.1	18.9		8.5	7.4	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	18.1	18.9		8.5	7.4	0.4
LOS	B	B		A	A	A
Approach Delay (s/veh)	18.4			8.5	6.0	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 49.5			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 8.5		Intersection LOS: A	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



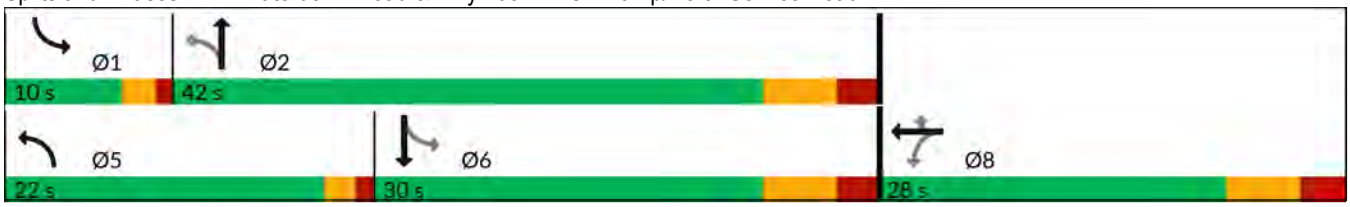


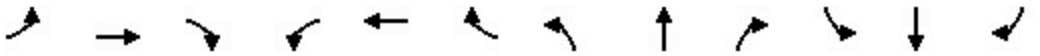
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	119	211	111	298	322	180	138	411	103
Future Volume (vph)	0	0	0	119	211	111	298	322	180	138	411	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.946			0.970	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3164	0	1710	3278	0
Flt Permitted				0.950			0.355			0.463		
Satd. Flow (perm)	0	0	0	1693	1782	1510	626	3164	0	833	3278	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		172			39	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	121	215	113	304	329	184	141	419	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	121	215	113	304	513	0	141	524	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				28.0	28.0	28.0	22.0	42.0		10.0	30.0	
Total Split (%)				35.0%	35.0%	35.0%	27.5%	52.5%		12.5%	37.5%	
Maximum Green (s)				20.8	20.8	20.8	19.0	35.2		7.0	23.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				13.2	13.2	13.2	34.7	22.9		25.5	14.3	
Actuated g/C Ratio				0.23	0.23	0.23	0.59	0.39		0.44	0.24	
v/c Ratio				0.32	0.54	0.25	0.50	0.38		0.30	0.63	
Control Delay (s/veh)				23.3	27.0	5.1	9.2	9.7		8.7	22.8	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				23.3	27.0	5.1	9.2	9.7		8.7	22.8	
LOS				C	C	A	A	A		A	C	
Approach Delay (s/veh)					20.5			9.5			19.8	
Approach LOS					C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 58.4			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 15.6		Intersection LOS: B	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



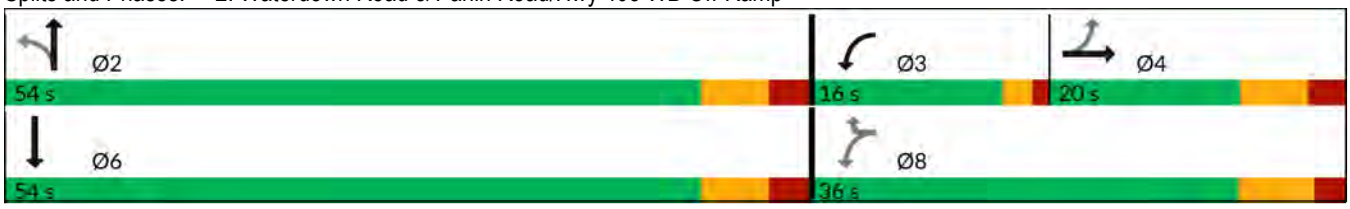


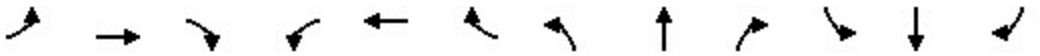
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	373	0	177	1	636	0	0	504	0
Future Volume (vph)	1	0	1	373	0	177	1	636	0	0	504	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.952				0.954				
Satd. Flow (perm)	0	1637	0	3228	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				186						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	393	0	186	1	669	0	0	531	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	393	0	186	0	670	0	0	531	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	20.0	20.0		16.0		36.0	54.0	54.0			54.0	
Total Split (%)	22.2%	22.2%		17.8%		40.0%	60.0%	60.0%			60.0%	
Maximum Green (s)	12.9	12.9		13.0		28.8	46.8	46.8			46.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.5		16.9		12.5		14.1			14.1	
Actuated g/C Ratio		0.25		0.41		0.30		0.34			0.34	
v/c Ratio		0.00		0.30		0.32		0.62			0.47	
Control Delay (s/veh)		0.0		9.4		4.1		14.8			12.8	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		9.4		4.1		14.8			12.8	
LOS		A		A		A		B			B	
Approach Delay (s/veh)					7.7			14.8			12.8	
Approach LOS					A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 41.7			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	
Intersection Capacity Utilization 56.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



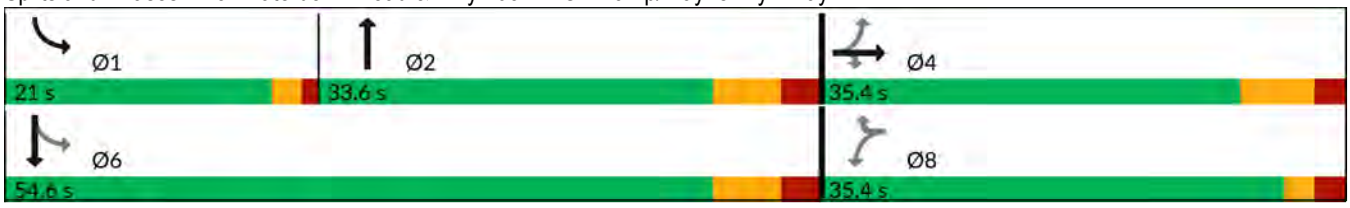


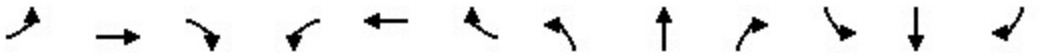
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	318	250	135	24	0	118	0	407	323	278	575	0
Future Volume (vph)	318	250	135	24	0	118	0	407	323	278	575	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.934				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3149	0	1676	3353	0
Flt Permitted	0.950			0.560						0.183		
Satd. Flow (perm)	1693	1782	1452	1714	0	1430	0	3149	0	323	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						126		227				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	338	266	144	26	0	126	0	433	344	296	612	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	266	144	26	0	126	0	777	0	296	612	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.4	35.4	35.4	35.4		35.4		33.6		21.0	54.6	
Total Split (%)	39.3%	39.3%	39.3%	39.3%		39.3%		37.3%		23.3%	60.7%	
Maximum Green (s)	28.3	28.3	28.3	31.3		31.3		26.6		18.0	47.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	20.6	20.6	20.6	23.8		23.8		19.0		39.3	35.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.34		0.34		0.27		0.56	0.50	
v/c Ratio	0.69	0.51	0.34	0.05		0.22		0.77		0.70	0.37	
Control Delay (s/veh)	31.0	25.7	23.5	17.8		5.0		23.3		21.8	12.4	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	31.0	25.7	23.5	17.8		5.0		23.3		21.8	12.4	
LOS	C	C	C	B		A		C		C	B	
Approach Delay (s/veh)		27.7			7.2			23.3			15.4	
Approach LOS		C			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 70.6			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



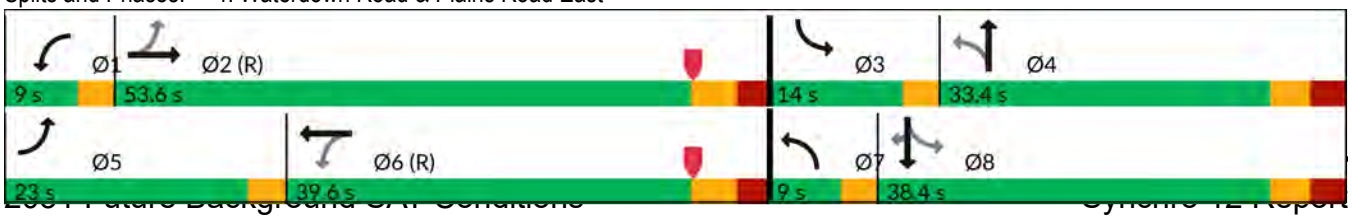


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	535	118	68	503	197	124	175	64	236	155	376
Future Volume (vph)	305	535	118	68	503	197	124	175	64	236	155	376
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.96	0.99		0.99	0.96		0.81	0.99		0.98		0.75
Frt		0.973			0.958			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3265	0	1676	3090	0	1710	1685	0	1676	1765	1500
Flt Permitted	0.243			0.393			0.655			0.318		
Satd. Flow (perm)	418	3265	0	685	3090	0	952	1685	0	551	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			54			16				392
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	318	557	123	71	524	205	129	182	67	246	161	392
Shared Lane Traffic (%)												
Lane Group Flow (vph)	318	680	0	71	729	0	129	249	0	246	161	392
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	23.0	53.6		9.0	39.6		9.0	33.4		14.0	38.4	38.4
Total Split (%)	20.9%	48.7%		8.2%	36.0%		8.2%	30.4%		12.7%	34.9%	34.9%
Maximum Green (s)	20.0	47.3		6.0	33.3		6.0	27.1		11.0	32.1	32.1
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	63.7	52.3		51.1	40.8		32.0	20.4		40.3	25.6	25.6
Actuated g/C Ratio	0.58	0.48		0.46	0.37		0.29	0.19		0.37	0.23	0.23
v/c Ratio	0.73	0.43		0.19	0.62		0.39	0.77		0.72	0.39	0.70
Control Delay (s/veh)	24.2	20.6		13.8	30.5		27.6	54.9		39.3	37.3	10.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	24.2	20.6		13.8	30.5		27.6	54.9		39.3	37.3	10.5
LOS	C	C		B	C		C	D		D	D	B
Approach Delay (s/veh)		21.8			29.0			45.5			24.8	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 27.5		Intersection LOS: C	
Intersection Capacity Utilization 91.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

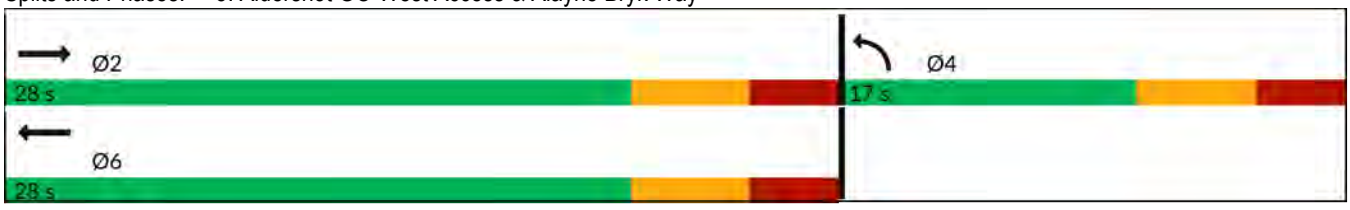


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	784	45	0	135	14	33
Future Volume (vph)	784	45	0	135	14	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.992				0.904	
Flt Protected					0.986	
Satd. Flow (prot)	3323	0	0	3420	1310	0
Flt Permitted					0.986	
Satd. Flow (perm)	3323	0	0	3420	1310	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	20				34	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	800	46	0	138	14	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	846	0	0	138	48	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	40.4			40.4	11.2	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.30			0.05	0.14	
Control Delay (s/veh)	3.1			2.8	9.4	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.1			2.8	9.4	
LOS	A			A	A	
Approach Delay (s/veh)	3.1			2.8	9.4	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.8			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 3.3		Intersection LOS: A	
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	504	49	62	26	0	0
Future Volume (vph)	504	49	62	26	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected	0.956			0.966		
Satd. Flow (prot)	1685	0	0	1739	0	0
Flt Permitted	0.956			0.966		
Satd. Flow (perm)	1685	0	0	1739	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	542	53	67	28	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	595	0	0	95	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	49.0		21.0	21.0		
Total Split (%)	70.0%		30.0%	30.0%		
Maximum Green (s)	46.0		15.0	15.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	16.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	29.9			10.8		
Actuated g/C Ratio	0.76			0.27		
v/c Ratio	0.47			0.20		
Control Delay (s/veh)	6.3			16.0		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	6.3			16.0		
LOS	A			B		
Approach Delay (s/veh)	6.3			16.0		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 39.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

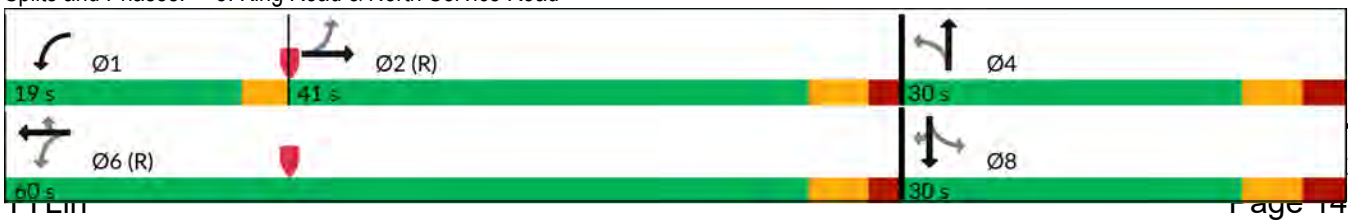


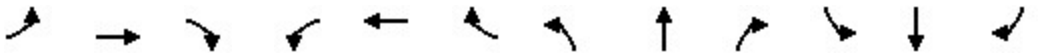
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	283	276	63	117	99	221	65	65	19
Future Volume (vph)	14	223	91	283	276	63	117	99	221	65	65	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				0.97
Frt		0.956				0.850		0.932				0.850
Flt Protected	0.950										0.976	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1757	1530
Flt Permitted	0.582			*0.470							0.517	
Satd. Flow (perm)	1048	1711	0	829	1800	1498	0	*3050	*3050	0	931	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				66		58				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	298	291	66	123	104	233	68	68	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	298	291	66	0	460	0	0	136	20
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	41.0	41.0		19.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	45.6%	45.6%		21.1%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	35.0	35.0		16.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	42.5	42.5		60.4	57.4	59.4		22.6			22.6	19.6
Actuated g/C Ratio	0.47	0.47		0.67	0.64	0.66		0.25			0.25	0.22
v/c Ratio	0.03	0.40		0.44	0.25	0.07		0.57			0.58	0.05
Control Delay (s/veh)	17.1	18.0		8.7	8.5	2.2		27.9			39.4	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	17.1	18.0		8.7	8.5	2.2		27.9			39.4	0.3
LOS	B	B		A	A	A		C			D	A
Approach Delay (s/veh)		18.0			8.0			27.9			34.4	
Approach LOS		B			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



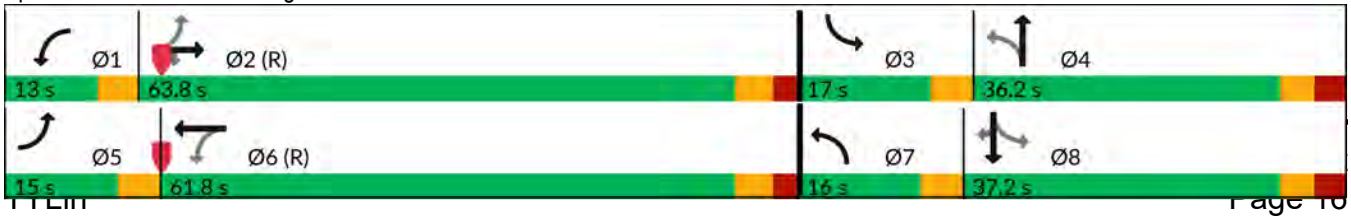


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	764	123	115	870	175	152	150	90	181	236	118
Future Volume (vph)	109	764	123	115	870	175	152	150	90	181	236	118
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.95	0.99	0.99		0.99	0.99		0.98		0.97
Frt			0.850		0.975			0.944				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3280	0	1676	1665	0	1782	1782	1515
Flt Permitted	0.163			0.276			0.311			*0.420		
Satd. Flow (perm)	284	3353	1437	488	3280	0	543	1665	0	736	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		23			22				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	111	780	126	117	888	179	155	153	92	185	241	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	780	126	117	1067	0	155	245	0	185	241	120
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	15.0	63.8	63.8	13.0	61.8		16.0	36.2		17.0	37.2	37.2
Total Split (%)	11.5%	49.1%	49.1%	10.0%	47.5%		12.3%	27.8%		13.1%	28.6%	28.6%
Maximum Green (s)	11.0	57.8	57.8	9.0	55.8		12.0	29.8		13.0	30.8	30.8
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	75.5	66.5	66.5	74.9	66.1		37.8	25.0		39.8	26.0	23.6
Actuated g/C Ratio	0.58	0.51	0.51	0.58	0.51		0.29	0.19		0.31	0.20	0.18
v/c Ratio	0.43	0.46	0.16	0.32	0.64		0.58	0.73		0.55	0.68	0.35
Control Delay (s/veh)	17.3	22.6	6.8	14.7	26.3		40.0	56.8		38.1	57.3	15.9
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)	17.3	22.6	6.8	14.7	26.3		40.0	56.8		38.1	57.3	15.9
LOS	B	C	A	B	C		D	E		D	E	B
Approach Delay (s/veh)		20.1			25.2			50.3			41.7	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 29.6		Intersection LOS: C	
Intersection Capacity Utilization 80.8%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

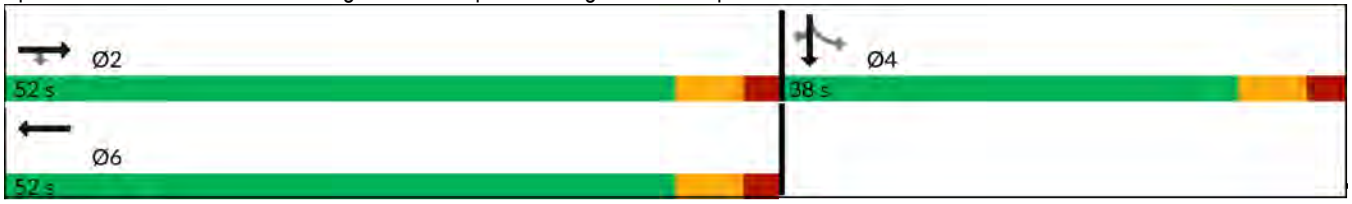


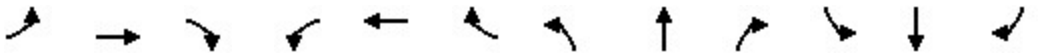
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1367	164	0	1405	283	0	0	0	426	3	260
Future Volume (vph)	0	1367	164	0	1405	283	0	0	0	426	3	260
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			256						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1409	169	0	1448	292	0	0	0	439	3	268
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1409	169	0	1448	292	0	0	0	219	223	268
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		52.0	52.0		52.0					38.0	38.0	38.0
Total Split (%)		57.8%	57.8%		57.8%					42.2%	42.2%	42.2%
Maximum Green (s)		45.0	45.0		45.0					30.8	30.8	30.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		25.7	25.7		25.7	56.5				15.8	15.8	15.8
Actuated g/C Ratio		0.45	0.45		0.45	1.00				0.28	0.28	0.28
v/c Ratio		0.64	0.22		0.65	0.20				0.49	0.50	0.60
Control Delay (s/veh)		13.6	2.9		13.7	0.3				22.4	22.6	21.7
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		13.6	2.9		13.7	0.3				22.4	22.6	21.7
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		12.4			11.5						22.2	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 56.5			
Natural Cycle: 45			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 13.7		Intersection LOS: B	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street





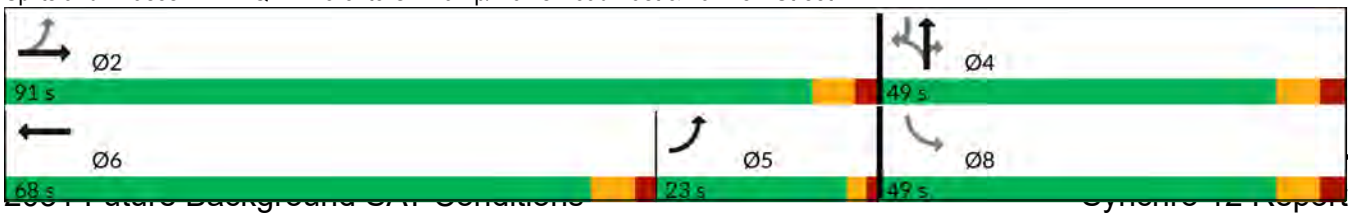
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	1339	173	0	1593	49	148	140	364	40	0	438
Future Volume (vph)	187	1339	173	0	1593	49	148	140	364	40	0	438
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.996			0.936	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4790	0	1593	1499	1425	1710	0	1604
Flt Permitted	0.077						0.950	0.997		0.386		
Satd. Flow (perm)	136	4865	1452	0	4790	0	1593	1499	1425	695	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		4			28	81			234
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	191	1366	177	0	1626	50	151	143	371	41	0	447
Shared Lane Traffic (%)							10%		32%			
Lane Group Flow (vph)	191	1366	177	0	1676	0	136	277	252	41	0	447
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

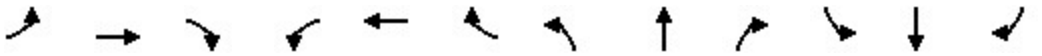
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	23.0	91.0			68.0		49.0	49.0	49.0	49.0		49.0
Total Split (%)	16.4%	65.0%			48.6%		35.0%	35.0%	35.0%	35.0%		35.0%
Maximum Green (s)	20.0	84.3			61.3		41.8	41.8	41.8	41.8		41.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	67.8	63.8	105.0		45.2		26.3	26.3	26.3	26.3		26.3
Actuated g/C Ratio	0.65	0.61	1.00		0.43		0.25	0.25	0.25	0.25		0.25
v/c Ratio	0.61	0.46	0.12		0.81		0.34	0.70	0.60	0.24		0.77
Control Delay (s/veh)	43.5	12.2	0.2		30.8		37.3	44.0	31.3	38.9		28.1
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	43.5	12.2	0.2		30.8		37.3	44.0	31.3	38.9		28.1
LOS	D	B	A		C		D	D	C	D		C
Approach Delay (s/veh)		14.4			30.8			37.8			29.0	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 105			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 25.4		Intersection LOS: C	
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	485	40	390	98	1260	237	0	1863	14
Future Volume (vph)	0	0	0	485	40	390	98	1260	237	0	1863	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		85.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4860	0
Flt Permitted				0.950	0.959		0.075					
Satd. Flow (perm)	0	0	0	1593	1605	1473	135	4865	1494	0	4860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			179		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	505	42	406	102	1313	247	0	1941	15
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	273	274	406	102	1313	247	0	1956	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				46.0	46.0	46.0	11.0	74.0			63.0	
Total Split (%)				38.3%	38.3%	38.3%	9.2%	61.7%			52.5%	
Maximum Green (s)				38.8	38.8	38.8	7.0	66.8			55.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				30.5	30.5	30.5	63.8	60.5	105.8		49.2	
Actuated g/C Ratio				0.29	0.29	0.29	0.60	0.57	1.00		0.47	
v/c Ratio				0.60	0.59	0.85	0.54	0.47	0.17		0.87	
Control Delay (s/veh)				38.9	38.8	46.9	24.8	14.6	0.2		30.8	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				38.9	38.8	46.9	24.8	14.6	0.2		30.8	
LOS				D	D	D	C	B	A		C	
Approach Delay (s/veh)					42.3			13.1			30.8	
Approach LOS					D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 105.8			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 26.8		Intersection LOS: C	
Intersection Capacity Utilization 77.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



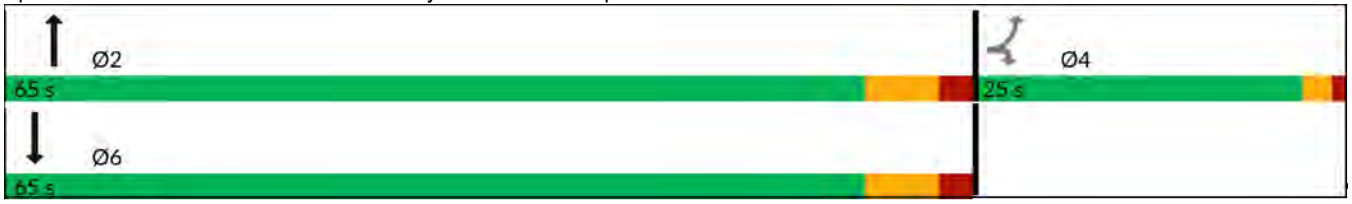


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	213	222	0	1418	1628	402
Future Volume (vph)	213	222	0	1418	1628	402
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			85.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99				0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3194	1365	0	4865	4818	1515
Flt Permitted	0.965					
Satd. Flow (perm)	3194	1347	0	4865	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	30	30				314
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	222	231	0	1477	1696	419
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	310	143	0	1477	1696	419
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

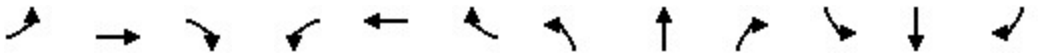
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	25.0	25.0		65.0	65.0	
Total Split (%)	27.8%	27.8%		72.2%	72.2%	
Maximum Green (s)	22.0	22.0		57.7	57.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.3	10.3		25.8	25.8	46.8
Actuated g/C Ratio	0.22	0.22		0.55	0.55	1.00
v/c Ratio	0.43	0.45		0.55	0.64	0.28
Control Delay (s/veh)	17.4	19.7		7.7	8.6	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	17.4	19.7		7.7	8.6	0.5
LOS	B	B		A	A	A
Approach Delay (s/veh)	18.1			7.7	7.0	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 46.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 8.5		Intersection LOS: A	
Intersection Capacity Utilization 53.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



Appendix F-3:
2036 Future Background Conditions

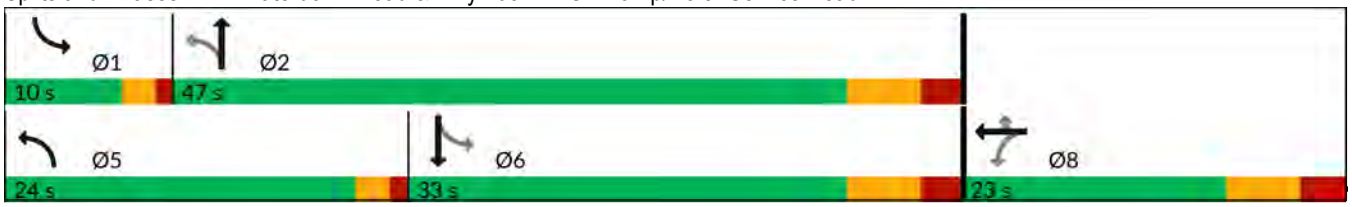


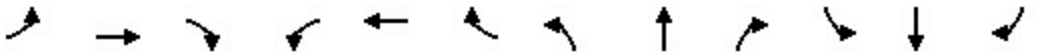
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	73	110	29	248	287	314	90	341	166
Future Volume (vph)	0	0	0	73	110	29	248	287	314	90	341	166
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.99					1.00	
Frt						0.850		0.922			0.951	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1366	1500	2963	0	1676	3084	0
Flt Permitted				0.950			0.352			0.409		
Satd. Flow (perm)	0	0	0	1512	1748	1348	556	2963	0	722	3084	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		334			111	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	78	117	31	264	305	334	96	363	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	78	117	31	264	639	0	96	540	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				23.0	23.0	23.0	24.0	47.0		10.0	33.0	
Total Split (%)				28.8%	28.8%	28.8%	30.0%	58.8%		12.5%	41.3%	
Maximum Green (s)				15.8	15.8	15.8	21.0	40.2		7.0	26.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.8	10.8	10.8	32.4	20.8		24.3	13.2	
Actuated g/C Ratio				0.20	0.20	0.20	0.60	0.39		0.45	0.25	
v/c Ratio				0.26	0.33	0.08	0.48	0.47		0.21	0.64	
Control Delay (s/veh)				23.3	23.9	0.4	8.0	7.1		6.8	18.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				23.3	23.9	0.4	8.0	7.1		6.8	18.5	
LOS				C	C	A	A	A		A	B	
Approach Delay (s/veh)					20.5			7.3			16.8	
Approach LOS					C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 53.7			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 12.4		Intersection LOS: B	
Intersection Capacity Utilization 53.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



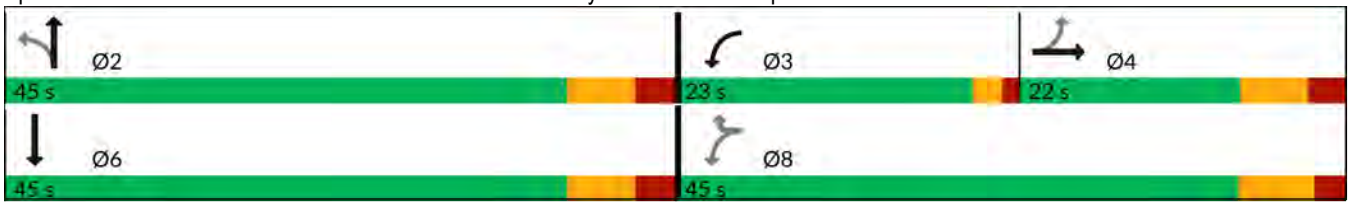


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	535	0	277	0	622	0	0	413	3
Future Volume (vph)	1	0	5	535	0	277	0	622	0	0	413	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3146	0
Flt Permitted		0.993		0.952								
Satd. Flow (perm)	0	1043	0	2968	0	1354	0	3167	0	0	3146	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				124					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	594	0	308	0	691	0	0	459	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	594	0	308	0	691	0	0	462	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	22.0	22.0		23.0		45.0	45.0	45.0			45.0	
Total Split (%)	24.4%	24.4%		25.6%		50.0%	50.0%	50.0%			50.0%	
Maximum Green (s)	14.9	14.9		20.0		37.8	37.8	37.8			37.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.7		19.6		15.1		16.2			16.2	
Actuated g/C Ratio		0.23		0.42		0.32		0.35			0.35	
v/c Ratio		0.02		0.48		0.59		0.63			0.42	
Control Delay (s/veh)		0.2		11.6		13.3		16.4			13.8	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		11.6		13.3		16.4			13.8	
LOS		A		B		B		B			B	
Approach Delay (s/veh)		0.2			12.1			16.4			13.8	
Approach LOS		A			B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 46.7			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 13.9		Intersection LOS: B	
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

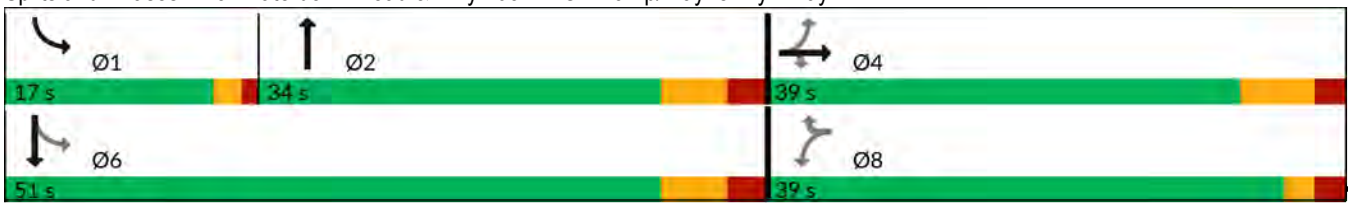


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	215	394	27	0	54	0	437	422	299	422	0
Future Volume (vph)	387	215	394	27	0	54	0	437	422	299	422	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.926				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2945	0	1583	3081	0
Flt Permitted	0.950			0.590						0.144		
Satd. Flow (perm)	1644	1748	1313	1029	0	765	0	2945	0	240	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						85		276				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	421	234	428	29	0	59	0	475	459	325	459	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	421	234	428	29	0	59	0	934	0	325	459	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	39.0	39.0	39.0	39.0		39.0		34.0		17.0	51.0	
Total Split (%)	43.3%	43.3%	43.3%	43.3%		43.3%		37.8%		18.9%	56.7%	
Maximum Green (s)	31.9	31.9	31.9	34.9		34.9		27.0		14.0	44.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	30.8	30.8	30.8	33.9		33.9		24.7		45.9	41.9	
Actuated g/C Ratio	0.35	0.35	0.35	0.39		0.39		0.28		0.53	0.48	
v/c Ratio	0.72	0.38	0.92	0.07		0.17		0.90		0.94	0.31	
Control Delay (s/veh)	32.9	23.3	54.8	17.8		3.1		34.3		59.0	14.8	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	32.9	23.3	54.8	17.8		3.1		34.3		59.0	14.8	
LOS	C	C	D	B		A		C		E	B	
Approach Delay (s/veh)		39.5			7.9			34.3			33.1	
Approach LOS		D			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 86.9			
Natural Cycle: 65			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 35.1		Intersection LOS: D	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	572	89	104	331	174	65	218	77	156	195	221
Future Volume (vph)	401	572	89	104	331	174	65	218	77	156	195	221
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.98		0.97		0.98
Frt		0.980			0.948			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3177	0	1629	2933	0	1676	1602	0	1541	1682	1366
Flt Permitted	0.232			0.372			0.622			0.325		
Satd. Flow (perm)	393	3177	0	630	2933	0	1089	1602	0	513	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			84			16				246
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	446	636	99	116	368	193	72	242	86	173	217	246
Shared Lane Traffic (%)												
Lane Group Flow (vph)	446	735	0	116	561	0	72	328	0	173	217	246
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	30.0	54.0		11.0	35.0		9.0	34.0		11.0	36.0	36.0
Total Split (%)	27.3%	49.1%		10.0%	31.8%		8.2%	30.9%		10.0%	32.7%	32.7%
Maximum Green (s)	27.0	47.7		8.0	28.7		6.0	27.7		8.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	56.9	42.9		36.7	25.7		40.8	30.3		46.7	35.4	35.4
Actuated g/C Ratio	0.52	0.39		0.33	0.23		0.37	0.28		0.42	0.32	0.32
v/c Ratio	0.93	0.59		0.41	0.75		0.16	0.72		0.55	0.40	0.41
Control Delay (s/veh)	49.4	27.6		20.4	40.1		21.4	45.8		29.8	33.8	6.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	49.4	27.6		20.4	40.1		21.4	45.8		29.8	33.8	6.3
LOS	D	C		C	D		C	D		C	C	A
Approach Delay (s/veh)		35.8			36.7			41.4			22.1	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 33.8		Intersection LOS: C	
Intersection Capacity Utilization 93.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East



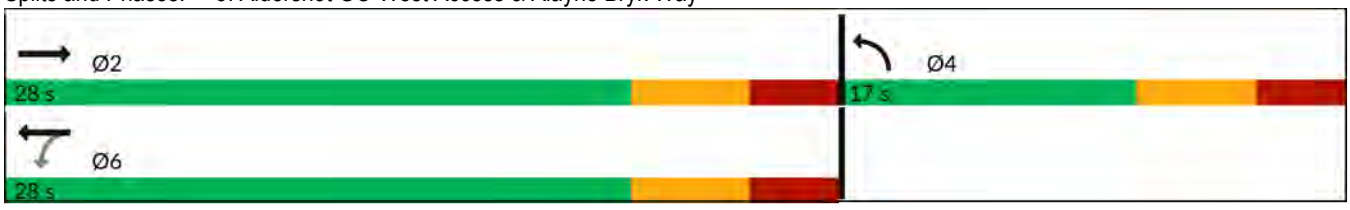


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	837	26	4	63	18	4
Future Volume (vph)	837	26	4	63	18	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.995				0.975	
Flt Protected				0.997	0.961	
Satd. Flow (prot)	3188	0	0	3220	928	0
Flt Permitted				0.923	0.961	
Satd. Flow (perm)	3188	0	0	2981	928	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	854	27	4	64	18	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	881	0	0	68	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		6	6	4	
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	
Minimum Split (s)	31.0		31.0	31.0	24.0	
Total Split (s)	28.0		28.0	28.0	17.0	
Total Split (%)	62.2%		62.2%	62.2%	37.8%	
Maximum Green (s)	21.0		21.0	21.0	10.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	3.0		3.0	3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Ped		Ped	Ped	None	
Walk Time (s)	15.0		15.0	15.0	7.0	
Flash Don't Walk (s)	9.0		9.0	9.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effct Green (s)	45.0			45.0	11.4	
Actuated g/C Ratio	0.93			0.93	0.24	
v/c Ratio	0.30			0.02	0.10	
Control Delay (s/veh)	1.8			1.7	16.0	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	1.8			1.7	16.0	
LOS	A			A	B	
Approach Delay (s/veh)	1.8			1.7	16.0	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.5			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 2.1		Intersection LOS: A	
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	656	40	17	30	0	0
Future Volume (vph)	656	40	17	30	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected	0.955			0.982		
Satd. Flow (prot)	1628	0	0	1768	0	0
Flt Permitted	0.955			0.982		
Satd. Flow (perm)	1628	0	0	1768	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	691	42	18	32	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	733	0	0	50	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	42.0		18.0	18.0		
Total Split (%)	70.0%		30.0%	30.0%		
Maximum Green (s)	39.0		12.0	12.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	37.1			11.9		
Actuated g/C Ratio	0.88			0.28		
v/c Ratio	0.51			0.10		
Control Delay (s/veh)	4.6			20.1		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	4.6			20.1		
LOS	A			C		
Approach Delay (s/veh)	4.6			20.1		
Approach LOS	A			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 42.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 5.6		Intersection LOS: A	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

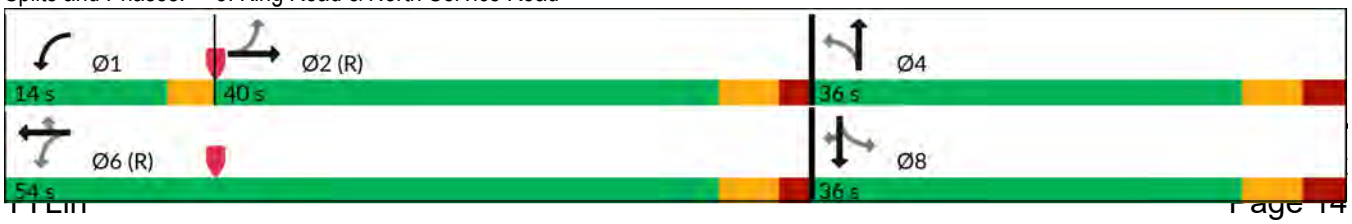


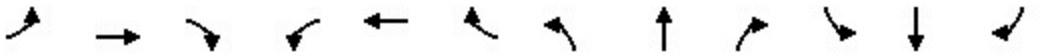
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	221	187	44	103	82	292	76	125	33
Future Volume (vph)	23	252	73	221	187	44	103	82	292	76	125	33
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.917				0.850
Flt Protected	0.950										0.981	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1753	1530
Flt Permitted	0.635			*0.470							0.542	
Satd. Flow (perm)	1049	1667	0	813	1714	1496	0	*3050	*3050	0	968	1497
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19				48		98				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	230	195	46	107	85	304	79	130	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	230	195	46	0	496	0	0	209	34
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	40.0	40.0		14.0	54.0	54.0	36.0	36.0		36.0	36.0	36.0
Total Split (%)	44.4%	44.4%		15.6%	60.0%	60.0%	40.0%	40.0%		40.0%	40.0%	40.0%
Maximum Green (s)	34.0	34.0		11.0	48.0	48.0	29.0	29.0		29.0	29.0	29.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	41.9	41.9		58.1	55.1	57.1		24.9			24.9	21.9
Actuated g/C Ratio	0.47	0.47		0.65	0.61	0.63		0.28			0.28	0.24
v/c Ratio	0.05	0.43		0.37	0.19	0.05		0.54			0.78	0.08
Control Delay (s/veh)	17.8	19.6		9.5	9.5	2.9		23.3			49.4	1.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	17.8	19.6		9.5	9.5	2.9		23.3			49.4	1.2
LOS	B	B		A	A	A		C			D	A
Approach Delay (s/veh)		19.5			8.9			23.3			42.7	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 21.1		Intersection LOS: C	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



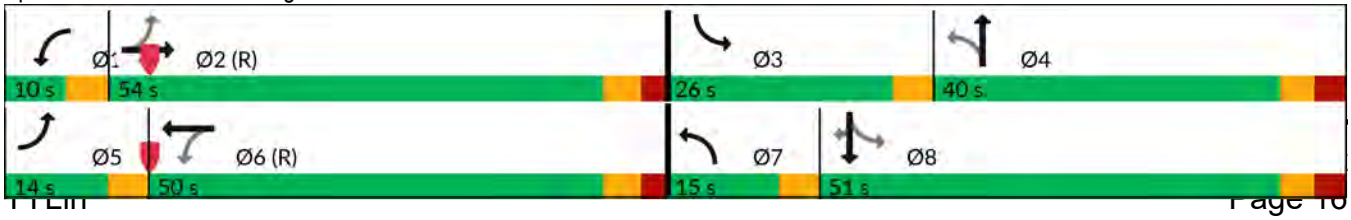


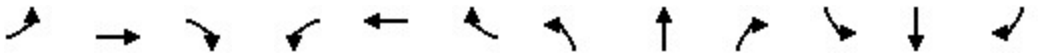
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	713	119	56	505	151	164	190	75	256	123	92
Future Volume (vph)	115	713	119	56	505	151	164	190	75	256	123	92
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	0.99		0.99	0.99		0.99		0.98
Frt			0.850		0.965			0.958				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	3058	0	1583	1672	0	1731	1765	1485
Flt Permitted	0.266			0.286			0.674			*0.420		
Satd. Flow (perm)	452	3226	1378	487	3058	0	1114	1672	0	718	1765	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		33			15				97
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	121	751	125	59	532	159	173	200	79	269	129	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	751	125	59	691	0	173	279	0	269	129	97
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	14.0	54.0	54.0	10.0	50.0		15.0	40.0		26.0	51.0	51.0
Total Split (%)	10.8%	41.5%	41.5%	7.7%	38.5%		11.5%	30.8%		20.0%	39.2%	39.2%
Maximum Green (s)	10.0	48.0	48.0	6.0	44.0		11.0	33.6		22.0	44.6	44.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	69.2	60.9	60.9	63.4	56.4		41.9	28.2		52.0	34.3	31.9
Actuated g/C Ratio	0.53	0.47	0.47	0.49	0.43		0.32	0.22		0.40	0.26	0.25
v/c Ratio	0.37	0.50	0.18	0.20	0.51		0.42	0.75		0.61	0.28	0.23
Control Delay (s/veh)	20.7	27.9	4.7	19.2	29.2		28.5	56.9		32.5	37.6	7.2
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)	20.7	27.9	4.7	19.2	29.2		28.5	56.9		32.5	37.6	7.2
LOS	C	C	A	B	C		C	E		C	D	A
Approach Delay (s/veh)		24.1			28.4			46.0			28.9	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 29.9		Intersection LOS: C	
Intersection Capacity Utilization 79.6%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



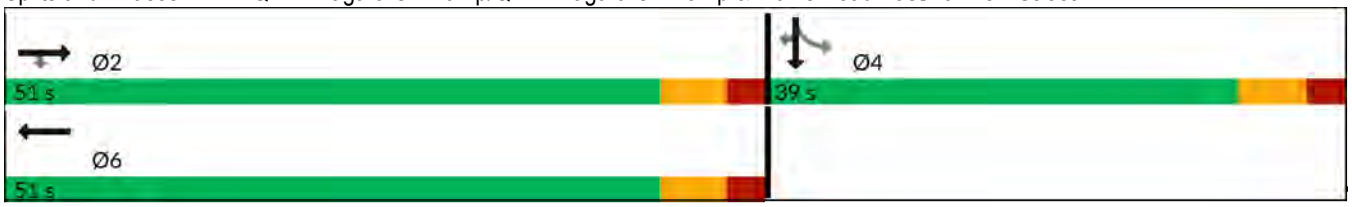


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1118	190	0	1080	369	0	0	0	348	1	221
Future Volume (vph)	0	1118	190	0	1080	369	0	0	0	348	1	221
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1317	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			202			393						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1189	202	0	1149	393	0	0	0	370	1	235
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1189	202	0	1149	393	0	0	0	185	186	235
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		51.0	51.0		51.0					39.0	39.0	39.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		44.0	44.0		44.0					31.8	31.8	31.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		20.9	20.9		20.9	49.2				13.5	13.5	13.5
Actuated g/C Ratio		0.42	0.42		0.42	1.00				0.27	0.27	0.27
v/c Ratio		0.60	0.30		0.58	0.29				0.43	0.43	0.53
Control Delay (s/veh)		12.4	3.2		12.2	0.5				19.4	19.4	17.7
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		12.4	3.2		12.2	0.5				19.4	19.4	17.7
LOS		B	A		B	A				B	B	B
Approach Delay (s/veh)		11.1			9.2						18.8	
Approach LOS		B			A						B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 49.2			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	1156	73	0	956	18	275	144	449	24	0	389
Future Volume (vph)	162	1156	73	0	956	18	275	144	449	24	0	389
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.997			0.929	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4613	0	1533	1408	1384	1710	0	1543
Flt Permitted	0.207						0.950	0.996		0.407		
Satd. Flow (perm)	341	4725	1485	0	4613	0	1533	1408	1363	731	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			38	81			294
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	169	1204	76	0	996	19	286	150	468	25	0	405
Shared Lane Traffic (%)							10%		34%			
Lane Group Flow (vph)	169	1204	76	0	1015	0	257	338	309	25	0	405
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

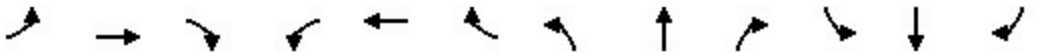
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	23.0	77.0			54.0		63.0	63.0	63.0	63.0		63.0
Total Split (%)	16.4%	55.0%			38.6%		45.0%	45.0%	45.0%	45.0%		45.0%
Maximum Green (s)	20.0	70.3			47.3		55.8	55.8	55.8	55.8		55.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	44.0	40.0	82.5		26.1		27.5	27.5	27.5	27.5		27.5
Actuated g/C Ratio	0.53	0.48	1.00		0.32		0.33	0.33	0.33	0.33		0.33
v/c Ratio	0.50	0.53	0.05		0.70		0.50	0.68	0.61	0.10		0.57
Control Delay (s/veh)	28.2	16.4	0.1		28.8		26.8	29.6	23.0	22.3		10.3
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	28.2	16.4	0.1		28.8		26.8	29.6	23.0	22.3		10.3
LOS	C	B	A		C		C	C	C	C		B
Approach Delay (s/veh)		16.9			28.8			26.5			11.0	
Approach LOS		B			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 82.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 21.7		Intersection LOS: C	
Intersection Capacity Utilization 83.1%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



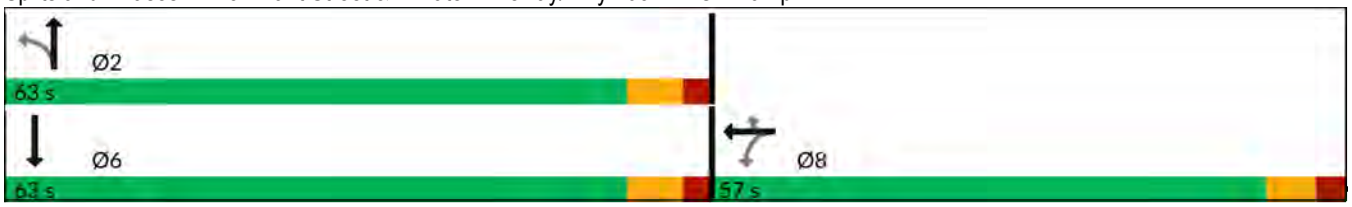


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	443	22	540	39	994	182	0	1728	2
Future Volume (vph)	0	0	0	443	22	540	39	994	182	0	1728	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850			
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4720	0
Flt Permitted				0.950	0.957		0.082					
Satd. Flow (perm)	0	0	0	1547	1556	1448	143	4680	1422	0	4720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			165			
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	466	23	568	41	1046	192	0	1819	2
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	242	247	568	41	1046	192	0	1821	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				57.0	57.0	57.0	63.0	63.0			63.0	
Total Split (%)				47.5%	47.5%	47.5%	52.5%	52.5%			52.5%	
Maximum Green (s)				49.8	49.8	49.8	55.8	55.8			55.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				43.9	43.9	43.9	49.1	49.1	107.8		49.1	
Actuated g/C Ratio				0.41	0.41	0.41	0.46	0.46	1.00		0.46	
v/c Ratio				0.38	0.39	0.92	0.63	0.49	0.14		0.85	
Control Delay (s/veh)				25.5	25.5	49.7	70.1	21.9	0.2		31.1	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				25.5	25.5	49.7	70.1	21.9	0.2		31.1	
LOS				C	C	D	E	C	A		C	
Approach Delay (s/veh)					38.5			20.2			31.1	
Approach LOS					D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.8			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 29.6		Intersection LOS: C	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



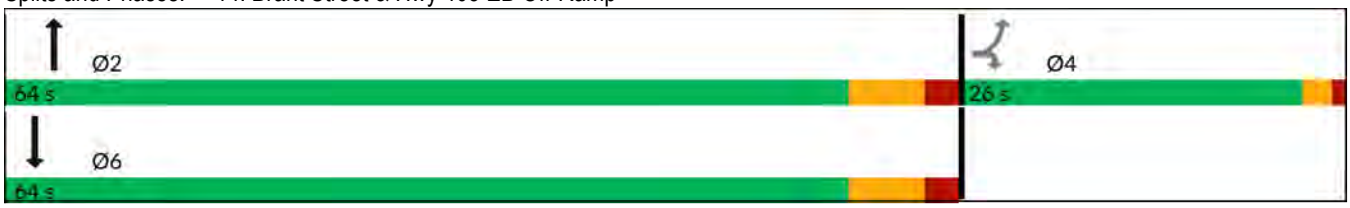


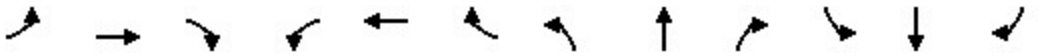
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	190	225	0	999	1343	740
Future Volume (vph)	190	225	0	999	1343	740
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Frt	0.950	0.850				0.850
Flt Protected	0.968					
Satd. Flow (prot)	3148	1339	0	4636	4680	1500
Flt Permitted	0.968					
Satd. Flow (perm)	3148	1339	0	4636	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	54	54				662
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	200	237	0	1052	1414	779
Shared Lane Traffic (%)		42%				
Lane Group Flow (vph)	300	137	0	1052	1414	779
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	26.0	26.0		64.0	64.0	
Total Split (%)	28.9%	28.9%		71.1%	71.1%	
Maximum Green (s)	23.0	23.0		56.7	56.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	9.1	9.1		20.3	20.3	40.0
Actuated g/C Ratio	0.23	0.23		0.51	0.51	1.00
v/c Ratio	0.39	0.39		0.45	0.60	0.52
Control Delay (s/veh)	13.3	13.7		7.0	8.2	1.3
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	13.3	13.7		7.0	8.2	1.3
LOS	B	B		A	A	A
Approach Delay (s/veh)	13.4			7.0	5.7	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 40			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



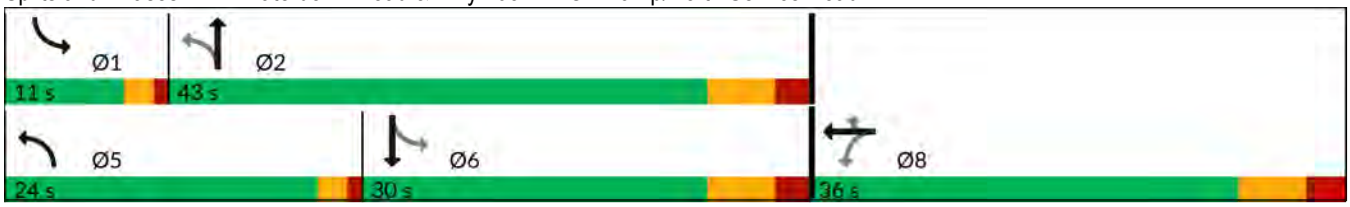


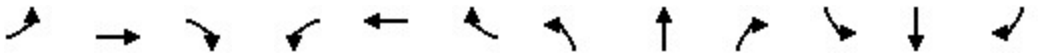
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	234	440	103	395	474	230	110	451	118
Future Volume (vph)	0	0	0	234	440	103	395	474	230	110	451	118
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.951			0.969	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3128	0	1710	3217	0
Flt Permitted				0.950			0.222			0.352		
Satd. Flow (perm)	0	0	0	1660	1782	1480	388	3128	0	634	3217	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						119		109			35	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	263	494	116	444	533	258	124	507	133
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	263	494	116	444	791	0	124	640	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				36.0	36.0	36.0	24.0	43.0		11.0	30.0	
Total Split (%)				40.0%	40.0%	40.0%	26.7%	47.8%		12.2%	33.3%	
Maximum Green (s)				28.8	28.8	28.8	21.0	36.2		8.0	23.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				26.0	26.0	26.0	47.1	35.0		31.5	19.8	
Actuated g/C Ratio				0.31	0.31	0.31	0.56	0.42		0.38	0.24	
v/c Ratio				0.51	0.89	0.21	0.84	0.58		0.37	0.81	
Control Delay (s/veh)				28.1	48.1	5.4	31.6	18.9		14.2	37.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				28.1	48.1	5.4	31.6	18.9		14.2	37.7	
LOS				C	D	A	C	B		B	D	
Approach Delay (s/veh)					36.4			23.5			33.9	
Approach LOS					D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 83.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 30.2		Intersection LOS: C	
Intersection Capacity Utilization 79.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



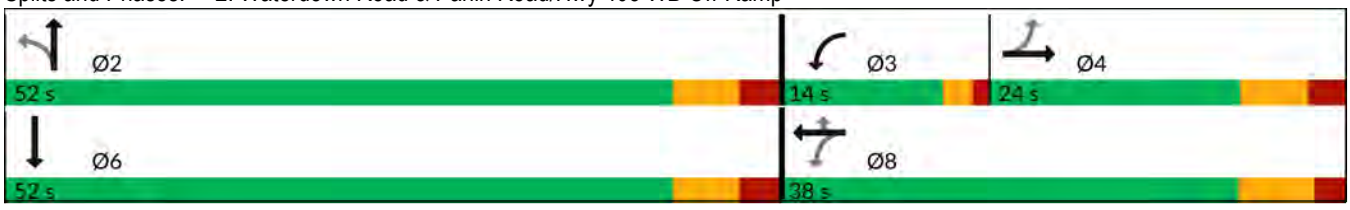


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	502	1	284	2	828	0	0	698	0
Future Volume (vph)	0	0	5	502	1	284	2	828	0	0	698	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.727				0.953				
Satd. Flow (perm)	0	1557	0	2465	0	1485	0	3134	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		111				75						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	605	1	342	2	998	0	0	841	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	605	1	342	0	1000	0	0	841	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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)		0.6		2.0	0.6	2.0		0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		NA		pm+pt	NA	Perm	Perm	NA			NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0	17.2	17.2	17.2	17.2			17.2	
Total Split (s)	24.0	24.0		14.0	38.0	38.0	52.0	52.0			52.0	
Total Split (%)	26.7%	26.7%		15.6%	42.2%	42.2%	57.8%	57.8%			57.8%	
Maximum Green (s)	16.9	16.9		11.0	30.8	30.8	44.8	44.8			44.8	
Yellow Time (s)	4.5	4.5		2.0	5.0	5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0	2.2	2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min	Min	Min	Min	Min			Min	
Act Effct Green (s)		12.1		26.6	0.0	22.0		27.3			27.3	
Actuated g/C Ratio		0.19		0.41	0.00	0.34		0.42			0.42	
v/c Ratio		0.02		0.48	no cap	0.62		0.76			0.60	
Control Delay (s/veh)		0.0		16.1		20.1		21.3			17.5	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		16.1	Error	20.1		21.3			17.5	
LOS		A		B	F	C		C			B	
Approach Delay (s/veh)					Error			21.3			17.5	
Approach LOS					F			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65.1			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



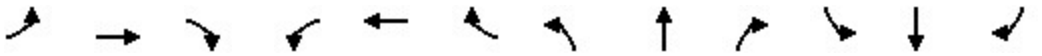
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	205	491	92	0	320	0	449	343	293	632	0
Future Volume (vph)	371	205	491	92	0	320	0	449	343	293	632	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.935				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	3079	0	1629	3353	0
Flt Permitted	0.950			0.603						0.151		
Satd. Flow (perm)	1644	1667	1485	1968	0	1471	0	3079	0	259	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						360		212				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	417	230	552	103	0	360	0	504	385	329	710	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	417	230	552	103	0	360	0	889	0	329	710	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	42.3	42.3	42.3	42.3		42.3		31.7		16.0	47.7	
Total Split (%)	47.0%	47.0%	47.0%	47.0%		47.0%		35.2%		17.8%	53.0%	
Maximum Green (s)	35.2	35.2	35.2	38.2		38.2		24.7		13.0	40.7	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	34.2	34.2	34.2	37.2		37.2		23.4		43.4	39.4	
Actuated g/C Ratio	0.39	0.39	0.39	0.42		0.42		0.27		0.49	0.45	
v/c Ratio	0.65	0.35	0.96	0.12		0.43		0.91		0.99	0.47	
Control Delay (s/veh)	28.0	21.2	56.0	16.2		3.7		38.5		71.2	18.3	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	28.0	21.2	56.0	16.2		3.7		38.5		71.2	18.3	
LOS	C	C	E	B		A		D		E	B	
Approach Delay (s/veh)		39.6			6.5			38.5			35.0	
Approach LOS		D			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 87.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 33.7		Intersection LOS: C	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	703	89	105	1125	131	194	177	66	292	160	521
Future Volume (vph)	265	703	89	105	1125	131	194	177	66	292	160	521
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.983			0.984			0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3282	0	1676	3247	0	1676	1609	0	1676	1682	1500
Flt Permitted	0.088			0.283			0.651			0.396		
Satd. Flow (perm)	154	3282	0	498	3247	0	1134	1609	0	690	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			13			16				236
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	276	732	93	109	1172	136	202	184	69	304	167	543
Shared Lane Traffic (%)												
Lane Group Flow (vph)	276	825	0	109	1308	0	202	253	0	304	167	543
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	16.0	54.7		10.0	48.7		9.0	33.3		12.0	36.3	36.3
Total Split (%)	14.5%	49.7%		9.1%	44.3%		8.2%	30.3%		10.9%	33.0%	33.0%
Maximum Green (s)	13.0	48.4		7.0	42.4		6.0	27.0		9.0	30.0	30.0
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	61.7	48.5		52.6	42.4		36.3	27.0		42.3	30.0	30.0
Actuated g/C Ratio	0.56	0.44		0.48	0.39		0.33	0.25		0.38	0.27	0.27
v/c Ratio	1.05	0.57		0.35	1.04		0.50	0.62		0.88	0.36	0.95
Control Delay (s/veh)	96.8	24.3		15.1	69.6		31.1	42.2		55.4	35.1	51.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	96.8	24.3		15.1	69.6		31.1	42.2		55.4	35.1	51.1
LOS	F	C		B	E		C	D		E	D	D
Approach Delay (s/veh)		42.5			65.4			37.3			49.8	
Approach LOS		D			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 51.9		Intersection LOS: D	
Intersection Capacity Utilization 109.5%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

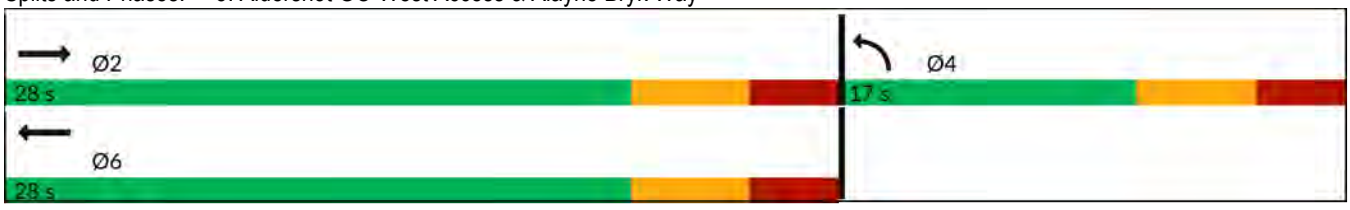


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	732	36	0	386	25	14
Future Volume (vph)	732	36	0	386	25	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.993				0.952	
Flt Protected					0.969	
Satd. Flow (prot)	3211	0	0	3420	1045	0
Flt Permitted					0.969	
Satd. Flow (perm)	3211	0	0	3420	1045	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	17				15	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	804	40	0	424	27	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	844	0	0	424	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.5			41.5	11.6	
Actuated g/C Ratio	0.85			0.85	0.24	
v/c Ratio	0.31			0.15	0.16	
Control Delay (s/veh)	3.3			2.8	13.4	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.3			2.8	13.4	
LOS	A			A	B	
Approach Delay (s/veh)	3.3			2.8	13.4	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 49			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 3.4		Intersection LOS: A	
Intersection Capacity Utilization 35.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way



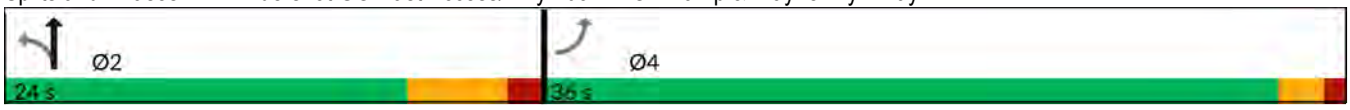


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	587	14	238	47	0	0
Future Volume (vph)	587	14	238	47	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					
Flt Protected	0.953			0.960		
Satd. Flow (prot)	1646	0	0	1728	0	0
Flt Permitted	0.953			0.960		
Satd. Flow (perm)	1646	0	0	1728	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%
Adj. Flow (vph)	716	17	290	57	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	733	0	0	347	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	36.0		24.0	24.0		
Total Split (%)	60.0%		40.0%	40.0%		
Maximum Green (s)	33.0		18.0	18.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	26.6			14.8		
Actuated g/C Ratio	0.52			0.29		
v/c Ratio	0.85			0.69		
Control Delay (s/veh)	22.3			25.7		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	22.3			25.7		
LOS	C			C		
Approach Delay (s/veh)	22.3			25.7		
Approach LOS	C			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 50.8			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 23.4		Intersection LOS: C	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	498	653	77	59	162	269	65	190	23
Future Volume (vph)	14	267	92	498	653	77	59	162	269	65	190	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.926				0.850
Flt Protected	0.950										0.987	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1742	1530
Flt Permitted	0.404			*0.470							0.600	
Satd. Flow (perm)	727	1698	0	829	1765	1469	0	*3050	*3050	0	1059	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		72				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	524	687	81	62	171	283	68	200	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	524	687	81	0	516	0	0	268	24
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	

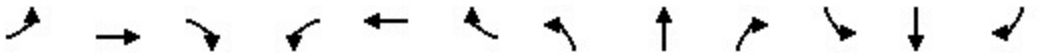
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	33.0	33.0		24.0	57.0	57.0	33.0	33.0		33.0	33.0	33.0
Total Split (%)	36.7%	36.7%		26.7%	63.3%	63.3%	36.7%	36.7%		36.7%	36.7%	36.7%
Maximum Green (s)	27.0	27.0		21.0	51.0	51.0	26.0	26.0		26.0	26.0	26.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	32.1	32.1		56.4	53.4	55.4		26.6			26.6	23.6
Actuated g/C Ratio	0.36	0.36		0.63	0.59	0.62		0.30			0.30	0.26
v/c Ratio	0.06	0.61		0.74	0.66	0.09		0.54			0.86	0.05
Control Delay (s/veh)	23.5	29.7		16.9	16.8	4.3		24.5			55.7	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.5	29.7		16.9	16.8	4.3		24.5			55.7	0.2
LOS	C	C		B	B	A		C			E	A
Approach Delay (s/veh)		29.5			16.0			24.5			51.1	
Approach LOS		C			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 24.0		Intersection LOS: C	
Intersection Capacity Utilization 109.1%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	943	205	120	1420	234	181	153	73	331	295	174
Future Volume (vph)	91	943	205	120	1420	234	181	153	73	331	295	174
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	1.00	0.99		0.99	0.99		0.99		0.97
Frt			0.850		0.979			0.952				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3238	0	1613	1653	0	1765	1800	1500
Flt Permitted	0.062			0.196			0.231			*0.420		
Satd. Flow (perm)	112	3320	1393	351	3238	0	389	1653	0	732	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			110		20			17				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	93	962	209	122	1449	239	185	156	74	338	301	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	962	209	122	1688	0	185	230	0	338	301	178
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	64.6	64.6	14.0	68.6		14.0	35.4		16.0	37.4	37.4
Total Split (%)	7.7%	49.7%	49.7%	10.8%	52.8%		10.8%	27.2%		12.3%	28.8%	28.8%
Maximum Green (s)	6.0	58.6	58.6	10.0	62.6		10.0	29.0		12.0	31.0	31.0
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	73.8	66.6	66.6	77.3	68.3		36.4	26.4		40.4	28.4	26.0
Actuated g/C Ratio	0.57	0.51	0.51	0.59	0.53		0.28	0.20		0.31	0.22	0.20
v/c Ratio	0.61	0.57	0.27	0.40	0.99		0.91	0.66		1.05	0.77	0.49
Control Delay (s/veh)	37.7	24.4	10.2	15.6	49.4		80.4	52.8		102.1	60.5	25.7
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)	37.7	24.4	10.2	15.6	49.4		80.4	52.8		102.1	60.5	25.7
LOS	D	C	B	B	D		F	D		F	E	C
Approach Delay (s/veh)		23.0			47.2			65.1			70.1	
Approach LOS		C			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 46.2		Intersection LOS: D	
Intersection Capacity Utilization 104.6%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

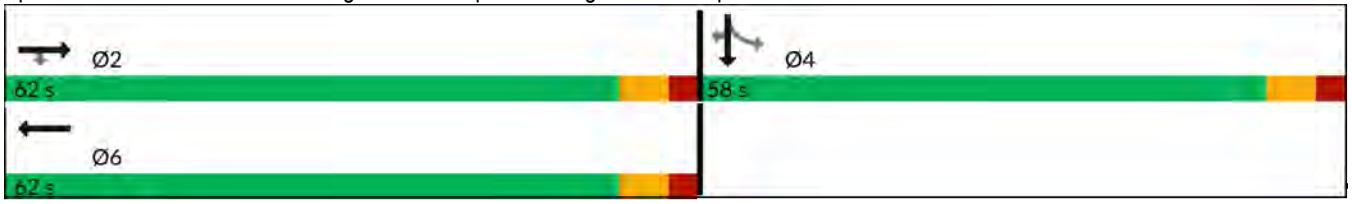


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1297	399	0	1757	1611	0	0	0	753	7	442
Future Volume (vph)	0	1297	399	0	1757	1611	0	0	0	753	7	442
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1614	1485
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1614	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			407			873						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1323	407	0	1793	1644	0	0	0	768	7	451
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1323	407	0	1793	1644	0	0	0	384	391	451
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		62.0	62.0		62.0					58.0	58.0	58.0
Total Split (%)		51.7%	51.7%		51.7%					48.3%	48.3%	48.3%
Maximum Green (s)		55.0	55.0		55.0					50.8	50.8	50.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		43.7	43.7		43.7	94.2				35.4	35.4	35.4
Actuated g/C Ratio		0.46	0.46		0.46	1.00				0.38	0.38	0.38
v/c Ratio		0.60	0.46		0.80	1.12				0.64	0.65	0.79
Control Delay (s/veh)		20.8	3.7		25.7	71.4				30.2	30.5	35.6
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		20.8	3.7		25.7	71.4				30.2	30.5	35.6
LOS		C	A		C	E				C	C	D
Approach Delay (s/veh)		16.8			47.6						32.3	
Approach LOS		B			D						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 94.2			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 36.3		Intersection LOS: D	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



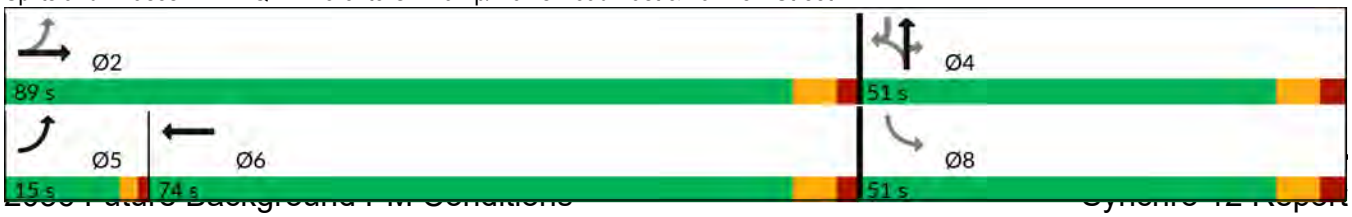
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	197	1581	109	0	2348	17	263	263	465	16	0	651
Future Volume (vph)	197	1581	109	0	2348	17	263	263	465	16	0	651
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.960	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4807	0	1577	1530	1425	1710	0	1588
Flt Permitted	0.057						0.950	0.997		0.225		
Satd. Flow (perm)	99	4818	1451	0	4807	0	1577	1530	1405	405	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			14	52			166
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	201	1613	111	0	2396	17	268	268	474	16	0	664
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	201	1613	111	0	2413	0	241	404	365	16	0	664
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

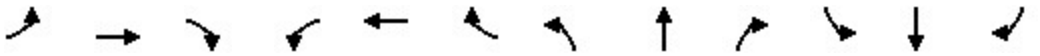
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	15.0	89.0			74.0		51.0	51.0	51.0	51.0		51.0
Total Split (%)	10.7%	63.6%			52.9%		36.4%	36.4%	36.4%	36.4%		36.4%
Maximum Green (s)	12.0	82.3			67.3		43.8	43.8	43.8	43.8		43.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	86.0	82.3	140.0		67.3		43.8	43.8	43.8	43.8		43.8
Actuated g/C Ratio	0.61	0.59	1.00		0.48		0.31	0.31	0.31	0.31		0.31
v/c Ratio	1.04	0.57	0.08		1.04		0.49	0.83	0.77	0.13		1.09
Control Delay (s/veh)	112.4	18.9	0.1		67.1		43.1	58.6	49.2	37.9		96.7
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	112.4	18.9	0.1		67.1		43.1	58.6	49.2	37.9		96.7
LOS	F	B	A		E		D	E	D	D		F
Approach Delay (s/veh)		27.6			67.1			51.5			95.3	
Approach LOS		C			E			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay (s/veh): 55.1		Intersection LOS: E	
Intersection Capacity Utilization 129.2%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



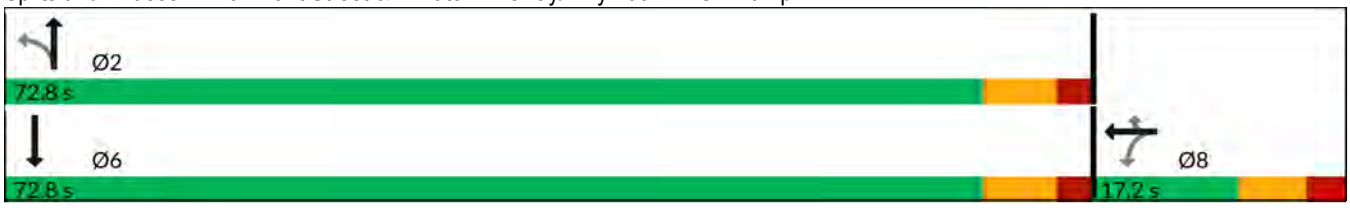


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	114	10	65	82	1671	708	0	2108	5
Future Volume (vph)	0	0	0	114	10	65	82	1671	708	0	2108	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850			
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1602	1485	1676	4771	1515	0	4811	0
Flt Permitted				0.950	0.960		0.062					
Satd. Flow (perm)	0	0	0	1577	1602	1485	109	4771	1480	0	4811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			509		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	120	11	68	86	1759	745	0	2219	5
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	65	66	68	86	1759	745	0	2224	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.0	10.0	10.0	70.9	70.9	90.3		70.9	
Actuated g/C Ratio				0.11	0.11	0.11	0.79	0.79	1.00		0.79	
v/c Ratio				0.37	0.37	0.32	1.01	0.47	0.50		0.59	
Control Delay (s/veh)				44.0	43.9	20.0	125.1	5.0	1.2		6.0	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				44.0	43.9	20.0	125.1	5.0	1.2		6.0	
LOS				D	D	B	F	A	A		A	
Approach Delay (s/veh)					35.8			7.9			6.0	
Approach LOS					D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90.3			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 8.2		Intersection LOS: A	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



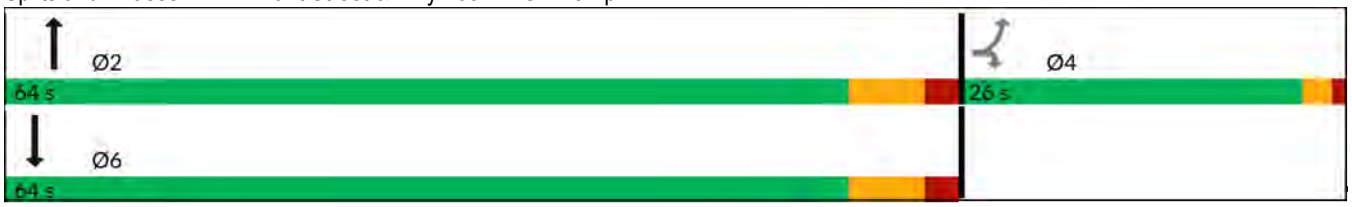


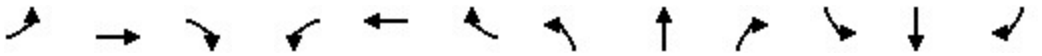
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	264	265	0	1852	1527	421
Future Volume (vph)	264	265	0	1852	1527	421
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor						0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3094	1352	0	4818	4771	1485
Flt Permitted	0.965					
Satd. Flow (perm)	3094	1352	0	4818	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	37	37				331
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	272	273	0	1909	1574	434
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	373	172	0	1909	1574	434
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	26.0	26.0		64.0	64.0	
Total Split (%)	28.9%	28.9%		71.1%	71.1%	
Maximum Green (s)	23.0	23.0		56.7	56.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	12.5	12.5		32.1	32.1	55.5
Actuated g/C Ratio	0.23	0.23		0.58	0.58	1.00
v/c Ratio	0.52	0.52		0.68	0.57	0.30
Control Delay (s/veh)	21.0	23.2		9.7	8.3	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	21.0	23.2		9.7	8.3	0.5
LOS	C	C		A	A	A
Approach Delay (s/veh)	21.7			9.7	6.6	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.5			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 9.8		Intersection LOS: A	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp





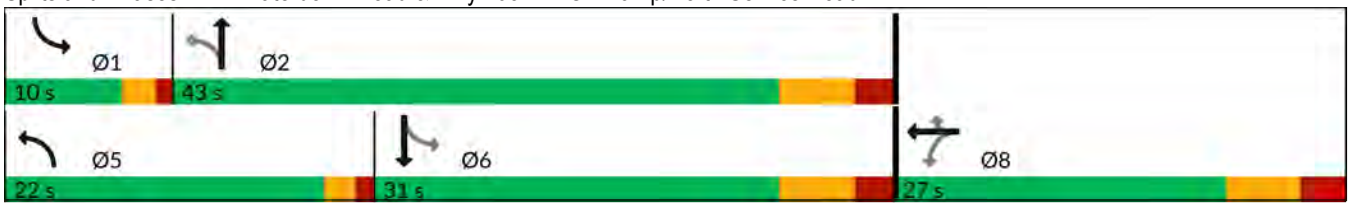
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	132	234	123	330	356	199	153	454	114
Future Volume (vph)	0	0	0	132	234	123	330	356	199	153	454	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.946			0.970	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3164	0	1710	3278	0
Flt Permitted				0.950			0.312			0.439		
Satd. Flow (perm)	0	0	0	1693	1782	1510	551	3164	0	790	3278	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		176			40	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	135	239	126	337	363	203	156	463	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	135	239	126	337	566	0	156	579	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	

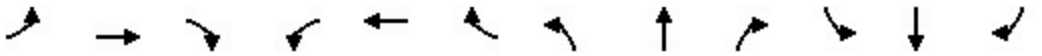
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				27.0	27.0	27.0	22.0	43.0		10.0	31.0	
Total Split (%)				33.8%	33.8%	33.8%	27.5%	53.8%		12.5%	38.8%	
Maximum Green (s)				19.8	19.8	19.8	19.0	36.2		7.0	24.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				13.8	13.8	13.8	37.1	25.4		26.7	15.5	
Actuated g/C Ratio				0.22	0.22	0.22	0.60	0.41		0.43	0.25	
v/c Ratio				0.36	0.60	0.29	0.56	0.40		0.35	0.68	
Control Delay (s/veh)				25.2	30.0	6.4	10.2	10.0		9.4	24.3	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				25.2	30.0	6.4	10.2	10.0		9.4	24.3	
LOS				C	C	A	B	A		A	C	
Approach Delay (s/veh)					22.8			10.1			21.2	
Approach LOS					C			B			C	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 61.4
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay (s/veh): 16.9 Intersection LOS: B
Intersection Capacity Utilization 64.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



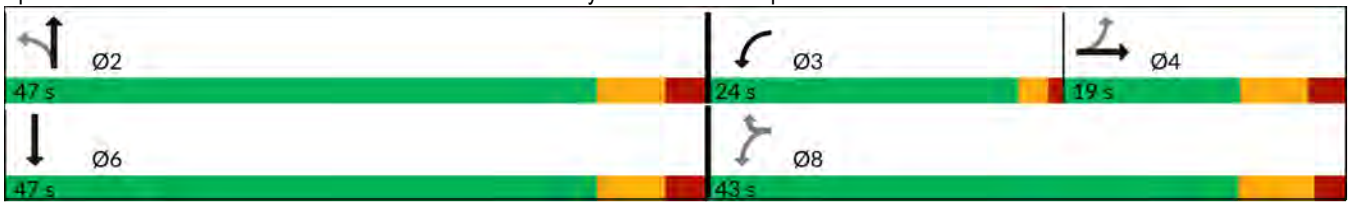


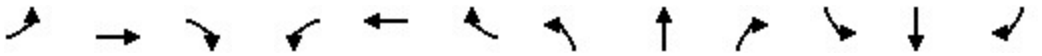
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	721	0	342	1	636	0	0	557	0
Future Volume (vph)	1	0	1	721	0	342	1	636	0	0	557	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.952				0.954				
Satd. Flow (perm)	0	1637	0	3228	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				149						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	759	0	360	1	669	0	0	586	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	759	0	360	0	670	0	0	586	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		24.0		43.0	47.0	47.0			47.0	
Total Split (%)	21.1%	21.1%		26.7%		47.8%	52.2%	52.2%			52.2%	
Maximum Green (s)	11.9	11.9		21.0		35.8	39.8	39.8			39.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		19.8		15.3		15.7			15.7	
Actuated g/C Ratio		0.23		0.43		0.33		0.34			0.34	
v/c Ratio		0.00		0.55		0.60		0.62			0.52	
Control Delay (s/veh)		0.0		11.9		12.2		16.7			15.1	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		11.9		12.2		16.7			15.1	
LOS		A		B		B		B			B	
Approach Delay (s/veh)					12.0			16.7			15.1	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 46.5			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 14.1		Intersection LOS: B	
Intersection Capacity Utilization 67.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	614	483	261	27	0	131	0	450	357	308	636	0
Future Volume (vph)	614	483	261	27	0	131	0	450	357	308	636	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.934				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3149	0	1676	3353	0
Flt Permitted	0.950			0.305						0.159		
Satd. Flow (perm)	1693	1782	1452	934	0	1430	0	3149	0	281	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						139		188				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	653	514	278	29	0	139	0	479	380	328	677	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	653	514	278	29	0	139	0	859	0	328	677	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	44.0	44.0	44.0	44.0		44.0		30.0		16.0	46.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%		48.9%		33.3%		17.8%	51.1%	
Maximum Green (s)	36.9	36.9	36.9	39.9		39.9		23.0		13.0	39.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	35.7	35.7	35.7	38.7		38.7		22.1		42.1	38.1	
Actuated g/C Ratio	0.41	0.41	0.41	0.44		0.44		0.25		0.48	0.43	
v/c Ratio	0.95	0.71	0.47	0.07		0.20		0.92		0.96	0.47	
Control Delay (s/veh)	51.2	28.5	22.6	15.1		3.5		41.9		62.7	19.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	51.2	28.5	22.6	15.1		3.5		41.9		62.7	19.2	
LOS	D	C	C	B		A		D		E	B	
Approach Delay (s/veh)		37.6			5.5			41.9			33.4	
Approach LOS		D			A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 88			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 35.9		Intersection LOS: D	
Intersection Capacity Utilization 94.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	591	131	76	556	218	137	194	71	261	172	416
Future Volume (vph)	337	591	131	76	556	218	137	194	71	261	172	416
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.97	0.99		0.99	0.96		0.81	0.99		0.98		0.75
Frt		0.973			0.958			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3265	0	1676	3090	0	1710	1685	0	1676	1765	1500
Flt Permitted	0.187			0.366			0.644			0.287		
Satd. Flow (perm)	324	3265	0	638	3090	0	942	1685	0	498	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			55			16				390
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	351	616	136	79	579	227	143	202	74	272	179	433
Shared Lane Traffic (%)												
Lane Group Flow (vph)	351	752	0	79	806	0	143	276	0	272	179	433
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	23.0	54.6		9.0	40.6		9.0	33.4		13.0	37.4	37.4
Total Split (%)	20.9%	49.6%		8.2%	36.9%		8.2%	30.4%		11.8%	34.0%	34.0%
Maximum Green (s)	20.0	48.3		6.0	34.3		6.0	27.1		10.0	31.1	31.1
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	63.3	51.9		48.2	38.0		32.7	21.7		40.7	26.6	26.6
Actuated g/C Ratio	0.58	0.47		0.44	0.35		0.30	0.20		0.37	0.24	0.24
v/c Ratio	0.83	0.48		0.23	0.73		0.43	0.80		0.85	0.42	0.76
Control Delay (s/veh)	35.4	21.2		14.3	35.0		29.1	56.7		53.4	37.6	15.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	35.4	21.2		14.3	35.0		29.1	56.7		53.4	37.6	15.2
LOS	D	C		B	D		C	E		D	D	B
Approach Delay (s/veh)		25.8			33.2			47.3			31.5	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 32.0		Intersection LOS: C	
Intersection Capacity Utilization 97.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

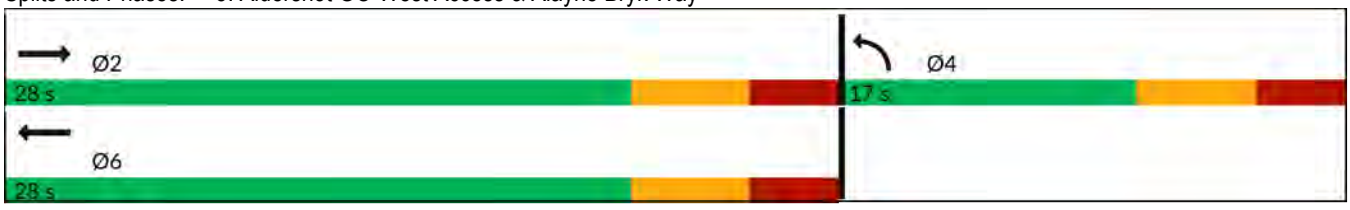


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	867	50	0	150	16	37
Future Volume (vph)	867	50	0	150	16	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.992				0.905	
Flt Protected					0.985	
Satd. Flow (prot)	3323	0	0	3420	1306	0
Flt Permitted					0.985	
Satd. Flow (perm)	3323	0	0	3420	1306	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	20				38	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	885	51	0	153	16	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	936	0	0	153	54	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	39.8			39.8	11.2	
Actuated g/C Ratio	0.84			0.84	0.24	
v/c Ratio	0.33			0.05	0.16	
Control Delay (s/veh)	3.3			2.8	9.2	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.3			2.8	9.2	
LOS	A			A	A	
Approach Delay (s/veh)	3.3			2.8	9.2	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.3			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 3.5		Intersection LOS: A	
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	557	55	69	29	0	0
Future Volume (vph)	557	55	69	29	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected	0.956			0.966		
Satd. Flow (prot)	1685	0	0	1739	0	0
Flt Permitted	0.956			0.966		
Satd. Flow (perm)	1685	0	0	1739	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	599	59	74	31	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	658	0	0	105	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	50.0		20.0	20.0		
Total Split (%)	71.4%		28.6%	28.6%		
Maximum Green (s)	47.0		14.0	14.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	16.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	30.6			11.0		
Actuated g/C Ratio	0.69			0.25		
v/c Ratio	0.57			0.25		
Control Delay (s/veh)	8.2			18.4		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	8.2			18.4		
LOS	A			B		
Approach Delay (s/veh)	8.2			18.4		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 44.6			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

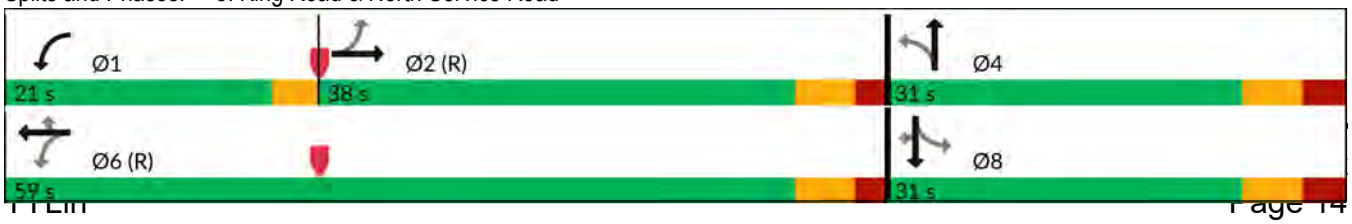


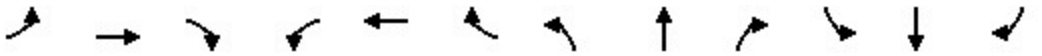
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	313	305	70	130	110	245	72	72	21
Future Volume (vph)	14	223	91	313	305	70	130	110	245	72	72	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				0.97
Frt		0.956				0.850		0.932				0.850
Flt Protected	0.950										0.976	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1757	1530
Flt Permitted	0.566			*0.470							0.506	
Satd. Flow (perm)	1019	1711	0	829	1800	1498	0	*3050	*3050	0	911	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				74		58				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	329	321	74	137	116	258	76	76	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	329	321	74	0	511	0	0	152	22
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	38.0	38.0		21.0	59.0	59.0	31.0	31.0		31.0	31.0	31.0
Total Split (%)	42.2%	42.2%		23.3%	65.6%	65.6%	34.4%	34.4%		34.4%	34.4%	34.4%
Maximum Green (s)	32.0	32.0		18.0	53.0	53.0	24.0	24.0		24.0	24.0	24.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	40.0	40.0		58.9	55.9	57.9		24.1			24.1	21.1
Actuated g/C Ratio	0.44	0.44		0.65	0.62	0.64		0.27			0.27	0.23
v/c Ratio	0.03	0.43		0.49	0.29	0.07		0.59			0.62	0.05
Control Delay (s/veh)	18.7	20.1		10.0	9.5	2.2		27.7			40.0	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	18.7	20.1		10.0	9.5	2.2		27.7			40.0	0.2
LOS	B	C		B	A	A		C			D	A
Approach Delay (s/veh)		20.0			9.0			27.7			35.0	
Approach LOS		C			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



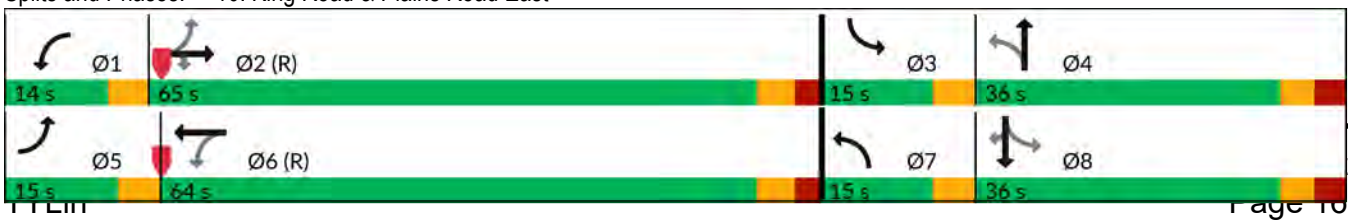


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	844	136	128	962	194	168	166	100	200	261	131
Future Volume (vph)	121	844	136	128	962	194	168	166	100	200	261	131
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.99		0.99	0.99		0.98		0.97
Frt			0.850		0.975			0.944				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3280	0	1676	1665	0	1782	1782	1515
Flt Permitted	0.124			0.235			0.268			*0.420		
Satd. Flow (perm)	217	3353	1437	416	3280	0	469	1665	0	736	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		24			22				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	123	861	139	131	982	198	171	169	102	204	266	134
Shared Lane Traffic (%)												
Lane Group Flow (vph)	123	861	139	131	1180	0	171	271	0	204	266	134
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	15.0	65.0	65.0	14.0	64.0		15.0	36.0		15.0	36.0	36.0
Total Split (%)	11.5%	50.0%	50.0%	10.8%	49.2%		11.5%	27.7%		11.5%	27.7%	27.7%
Maximum Green (s)	11.0	59.0	59.0	10.0	58.0		11.0	29.6		11.0	29.6	29.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	74.4	65.0	65.0	74.3	64.9		39.0	26.5		40.3	27.1	24.7
Actuated g/C Ratio	0.57	0.50	0.50	0.57	0.50		0.30	0.20		0.31	0.21	0.19
v/c Ratio	0.54	0.51	0.18	0.40	0.72		0.67	0.76		0.61	0.72	0.38
Control Delay (s/veh)	21.2	24.3	7.8	15.9	29.0		45.3	58.4		40.8	58.7	18.7
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)	21.2	24.3	7.8	15.9	29.0		45.3	58.4		40.8	58.7	18.7
LOS	C	C	A	B	C		D	E		D	E	B
Approach Delay (s/veh)		21.9			27.7			53.3			43.8	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 31.9		Intersection LOS: C	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

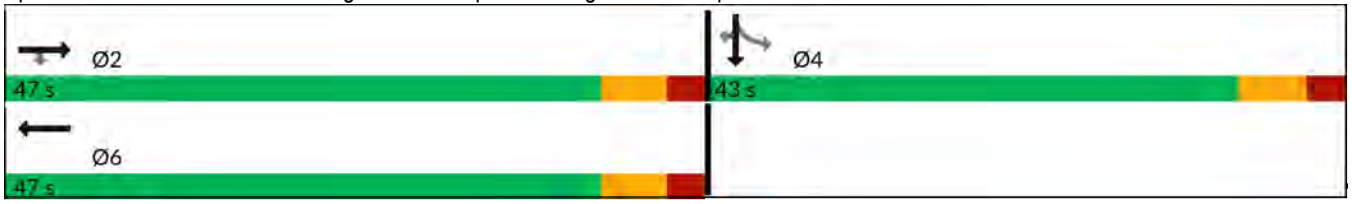


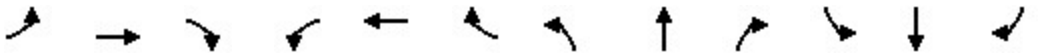
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1511	182	0	1552	381	0	0	0	619	3	378
Future Volume (vph)	0	1511	182	0	1552	381	0	0	0	619	3	378
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			188			312						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1558	188	0	1600	393	0	0	0	638	3	390
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1558	188	0	1600	393	0	0	0	319	322	390
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		47.0	47.0		47.0					43.0	43.0	43.0
Total Split (%)		52.2%	52.2%		52.2%					47.8%	47.8%	47.8%
Maximum Green (s)		40.0	40.0		40.0					35.8	35.8	35.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		31.3	31.3		31.3	69.9				23.5	23.5	23.5
Actuated g/C Ratio		0.45	0.45		0.45	1.00				0.34	0.34	0.34
v/c Ratio		0.72	0.25		0.74	0.27				0.59	0.59	0.74
Control Delay (s/veh)		18.8	3.4		19.0	0.5				24.8	24.9	27.7
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		18.8	3.4		19.0	0.5				24.8	24.9	27.7
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		17.1			15.4						25.9	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 69.9			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 70.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street





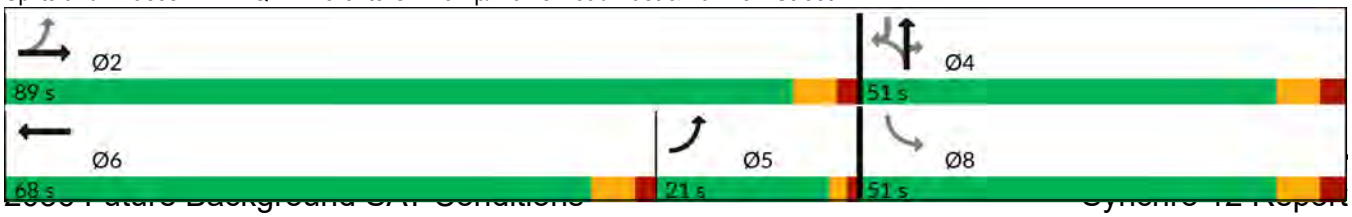
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	1480	192	0	1760	55	215	204	529	45	0	484
Future Volume (vph)	207	1480	192	0	1760	55	215	204	529	45	0	484
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.995			0.936	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4785	0	1593	1499	1425	1710	0	1604
Flt Permitted	0.064						0.950	0.997		0.216		
Satd. Flow (perm)	113	4865	1452	0	4785	0	1593	1499	1425	389	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		4			28	81			209
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	211	1510	196	0	1796	56	219	208	540	46	0	494
Shared Lane Traffic (%)							10%		32%			
Lane Group Flow (vph)	211	1510	196	0	1852	0	197	403	367	46	0	494
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

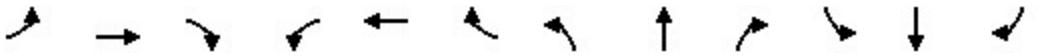
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	21.0	89.0			68.0		51.0	51.0	51.0	51.0		51.0
Total Split (%)	15.0%	63.6%			48.6%		36.4%	36.4%	36.4%	36.4%		36.4%
Maximum Green (s)	18.0	82.3			61.3		43.8	43.8	43.8	43.8		43.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	78.9	75.1	127.5		55.4		38.2	38.2	38.2	38.2		38.2
Actuated g/C Ratio	0.62	0.59	1.00		0.43		0.30	0.30	0.30	0.30		0.30
v/c Ratio	0.77	0.53	0.13		0.89		0.41	0.86	0.76	0.40		0.79
Control Delay (s/veh)	65.2	16.8	0.2		40.2		39.9	59.0	43.4	49.7		33.8
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	65.2	16.8	0.2		40.2		39.9	59.0	43.4	49.7		33.8
LOS	E	B	A		D		D	E	D	D		C
Approach Delay (s/veh)		20.4			40.2			49.2			35.2	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 127.5			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 34.1		Intersection LOS: C	
Intersection Capacity Utilization 104.0%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



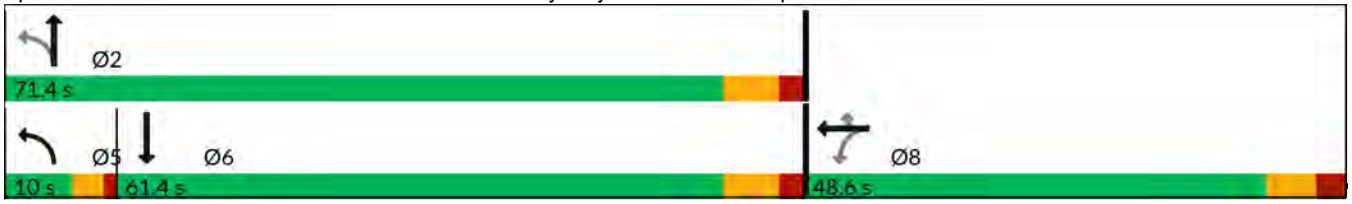


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	640	53	515	109	1392	313	0	2058	14
Future Volume (vph)	0	0	0	640	53	515	109	1392	313	0	2058	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		85.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4860	0
Flt Permitted				0.950	0.959		0.069					
Satd. Flow (perm)	0	0	0	1593	1605	1473	124	4865	1494	0	4860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			214		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	667	55	536	114	1450	326	0	2144	15
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	360	362	536	114	1450	326	0	2159	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				48.6	48.6	48.6	10.0	71.4			61.4	
Total Split (%)				40.5%	40.5%	40.5%	8.3%	59.5%			51.2%	
Maximum Green (s)				41.4	41.4	41.4	6.0	64.2			54.2	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				40.6	40.6	40.6	67.4	64.2	119.2		54.2	
Actuated g/C Ratio				0.34	0.34	0.34	0.57	0.54	1.00		0.45	
v/c Ratio				0.66	0.66	0.97	0.77	0.55	0.22		0.98	
Control Delay (s/veh)				40.5	40.4	66.2	49.9	19.2	0.3		46.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				40.5	40.4	66.2	49.9	19.2	0.3		46.7	
LOS				D	D	E	D	B	A		D	
Approach Delay (s/veh)					51.4			17.8			46.7	
Approach LOS					D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 119.2			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 37.5		Intersection LOS: D	
Intersection Capacity Utilization 85.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	281	293	0	1567	1799	530
Future Volume (vph)	281	293	0	1567	1799	530
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			85.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99				0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3194	1365	0	4865	4818	1515
Flt Permitted	0.965					
Satd. Flow (perm)	3194	1347	0	4865	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16	16				374
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	293	305	0	1632	1874	552
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	409	189	0	1632	1874	552
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	673	172	0	16	49	9
Future Vol, veh/h	673	172	0	16	49	9
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	687	176	0	16	50	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	863	0	783	445
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	8	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	788	-	335	566
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	788	-	335	560
Mov Cap-2 Maneuver	-	-	-	-	335	-
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	1019	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	357	-	-	788	-
HCM Lane V/C Ratio	0.166	-	-	-	-
HCM Ctrl Dly (s/v)	17.1	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	0.6	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	473	6	6	422
Future Vol, veh/h	4	6	473	6	6	422
Conflicting Peds, #/hr	0	0	0	1	1	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	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	3
Mvmt Flow	5	7	550	7	7	491

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1060	555	0	0	558	0
Stage 1	555	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	250	535	-	-	1023	-
Stage 1	579	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	248	535	-	-	1022	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	605	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	462	1022	-
HCM Lane V/C Ratio	-	-	0.025	0.007	-
HCM Ctrl Dly (s/v)	-	-	13	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	562	171	0	228	166	14
Future Vol, veh/h	562	171	0	228	166	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	624	190	0	253	184	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	814	0	846	407
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	822	-	305	599
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	822	-	305	599
Mov Cap-2 Maneuver	-	-	-	-	305	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	33.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	317	-	-	822	-
HCM Lane V/C Ratio	0.631	-	-	-	-
HCM Ctrl Dly (s/v)	33.9	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q (veh)	4	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	7	468	5	0	784
Future Vol, veh/h	14	7	468	5	0	784
Conflicting Peds, #/hr	0	0	0	1	1	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	99	99	99	99	99	99
Heavy Vehicles, %	0	0	2	0	0	1
Mvmt Flow	14	7	473	5	0	792

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1269	477	0	0	-	-
Stage 1	477	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	188	592	-	-	0	-
Stage 1	629	-	-	-	0	-
Stage 2	450	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	591	-	-	-	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	450	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	379	-
HCM Lane V/C Ratio	-	-	0.056	-
HCM Ctrl Dly (s/v)	-	-	15.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q (veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	600	303	0	69	83	10
Future Vol, veh/h	600	303	0	69	83	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	632	319	0	73	87	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	951	0	829	476
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	730	-	309	541
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	730	-	309	541
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	407	-
Stage 2	-	-	-	-	981	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	20.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	324	-	-	730	-
HCM Lane V/C Ratio	0.302	-	-	-	-
HCM Ctrl Dly (s/v)	20.9	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	1.2	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	477	4	4	516
Future Vol, veh/h	4	0	477	4	4	516
Conflicting Peds, #/hr	0	0	0	1	1	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	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	4	0	492	4	4	532

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1035	495	0	0	497	0
Stage 1	495	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	259	579	-	-	1077	-
Stage 1	617	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	257	579	-	-	1076	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	585	-	-	-	-	-

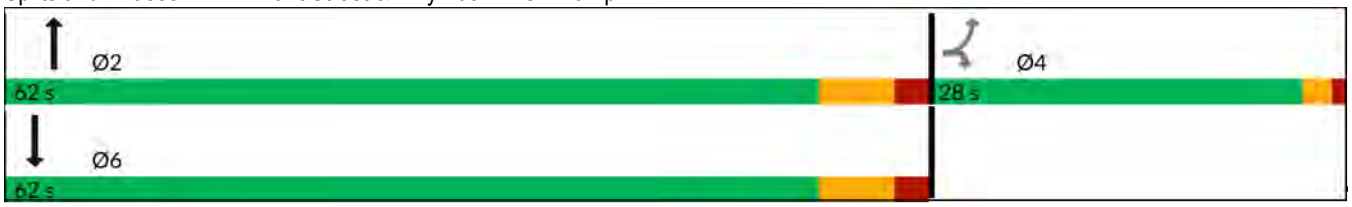
Approach	WB	NB	SB
HCM Ctrl Dly, s/v	14.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	391	1076	-
HCM Lane V/C Ratio	-	-	0.011	0.004	-
HCM Ctrl Dly (s/v)	-	-	14.3	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0	0	-

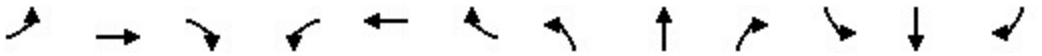
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	28.0	28.0		62.0	62.0	
Total Split (%)	31.1%	31.1%		68.9%	68.9%	
Maximum Green (s)	25.0	25.0		54.7	54.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	13.9	13.9		32.2	32.2	57.1
Actuated g/C Ratio	0.24	0.24		0.56	0.56	1.00
v/c Ratio	0.52	0.56		0.59	0.69	0.37
Control Delay (s/veh)	21.7	26.2		9.3	10.6	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	21.7	26.2		9.3	10.6	0.7
LOS	C	C		A	B	A
Approach Delay (s/veh)	23.1			9.3	8.3	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 57.1			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 10.6		Intersection LOS: B	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



Appendix F-4:
2041 Future Background Conditions

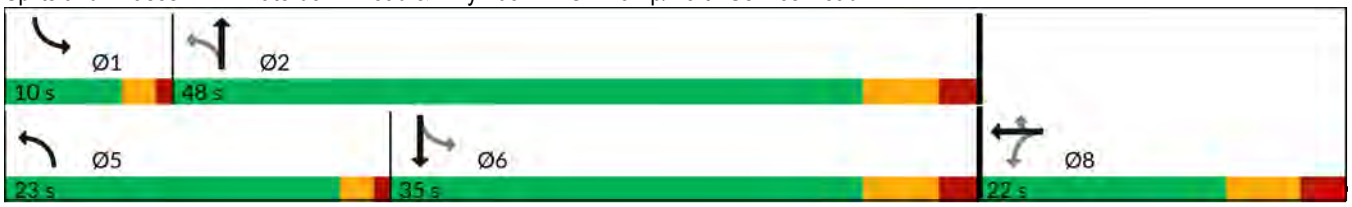


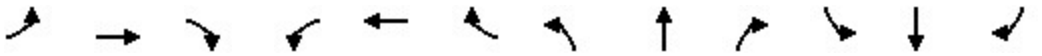
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	77	115	31	261	301	330	95	358	175
Future Volume (vph)	0	0	0	77	115	31	261	301	330	95	358	175
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.99					1.00	
Frt						0.850		0.922			0.951	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1366	1500	2963	0	1676	3084	0
Flt Permitted				0.950			0.331			0.397		
Satd. Flow (perm)	0	0	0	1512	1748	1348	523	2963	0	701	3084	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		351			115	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	82	122	33	278	320	351	101	381	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	82	122	33	278	671	0	101	567	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				22.0	22.0	22.0	23.0	48.0		10.0	35.0	
Total Split (%)				27.5%	27.5%	27.5%	28.8%	60.0%		12.5%	43.8%	
Maximum Green (s)				14.8	14.8	14.8	20.0	41.2		7.0	28.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.9	10.9	10.9	33.4	21.7		24.8	13.7	
Actuated g/C Ratio				0.20	0.20	0.20	0.61	0.40		0.45	0.25	
v/c Ratio				0.27	0.35	0.09	0.51	0.48		0.23	0.66	
Control Delay (s/veh)				24.1	24.8	0.5	8.4	7.0		7.0	19.2	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				24.1	24.8	0.5	8.4	7.0		7.0	19.2	
LOS				C	C	A	A	A		A	B	
Approach Delay (s/veh)					21.1			7.4			17.3	
Approach LOS					C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 54.8			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 12.8		Intersection LOS: B	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



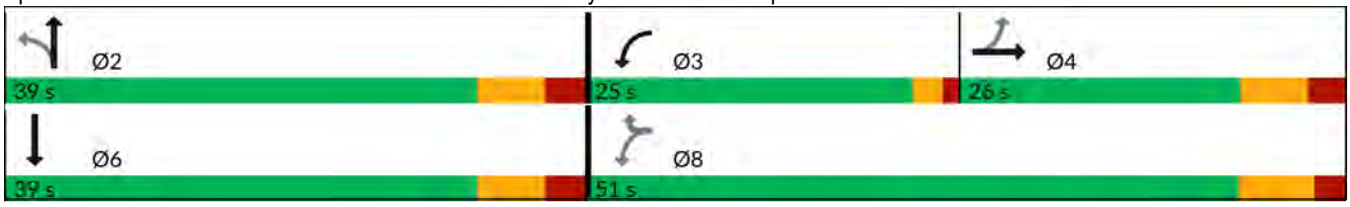


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	744	0	384	0	622	0	0	434	3
Future Volume (vph)	1	0	5	744	0	384	0	622	0	0	434	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3146	0
Flt Permitted		0.993		0.870								
Satd. Flow (perm)	0	1043	0	2713	0	1354	0	3167	0	0	3146	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				81					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	827	0	427	0	691	0	0	482	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	827	0	427	0	691	0	0	485	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	26.0	26.0		25.0		51.0	39.0	39.0			39.0	
Total Split (%)	28.9%	28.9%		27.8%		56.7%	43.3%	43.3%			43.3%	
Maximum Green (s)	18.9	18.9		22.0		43.8	31.8	31.8			31.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		11.2		25.9		21.3		18.2			18.2	
Actuated g/C Ratio		0.20		0.47		0.39		0.33			0.33	
v/c Ratio		0.03		0.60		0.74		0.66			0.47	
Control Delay (s/veh)		0.2		13.1		20.8		20.3			17.3	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		13.1		20.8		20.3			17.3	
LOS		A		B		C		C			B	
Approach Delay (s/veh)		0.2			15.7			20.3			17.3	
Approach LOS		A			B			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 17.3		Intersection LOS: B	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

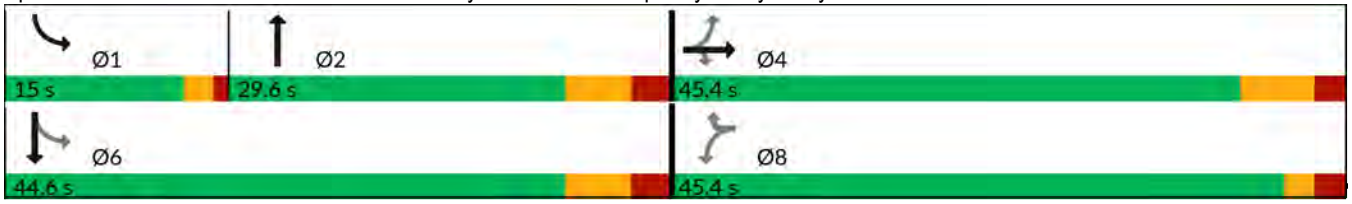


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	537	298	548	28	0	56	0	459	444	314	444	0
Future Volume (vph)	537	298	548	28	0	56	0	459	444	314	444	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.926				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2945	0	1583	3081	0
Flt Permitted	0.950			0.506						0.156		
Satd. Flow (perm)	1644	1748	1313	883	0	765	0	2945	0	260	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						85		261				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	584	324	596	30	0	61	0	499	483	341	483	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	584	324	596	30	0	61	0	982	0	341	483	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	45.4	45.4	45.4	45.4		45.4		29.6		15.0	44.6	
Total Split (%)	50.4%	50.4%	50.4%	50.4%		50.4%		32.9%		16.7%	49.6%	
Maximum Green (s)	38.3	38.3	38.3	41.3		41.3		22.6		12.0	37.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	38.3	38.3	38.3	41.3		41.3		22.6		41.6	37.6	
Actuated g/C Ratio	0.43	0.43	0.43	0.46		0.46		0.25		0.46	0.42	
v/c Ratio	0.84	0.44	1.07	0.07		0.15		1.05		1.15	0.38	
Control Delay (s/veh)	35.7	20.6	85.2	14.4		2.7		69.6		123.0	19.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	35.7	20.6	85.2	14.4		2.7		69.6		123.0	19.2	
LOS	D	C	F	B		A		E		F	B	
Approach Delay (s/veh)		52.1			6.5			69.6			62.2	
Approach LOS		D			A			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay (s/veh): 58.3		Intersection LOS: E	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	422	601	93	110	348	183	68	229	81	164	205	233
Future Volume (vph)	422	601	93	110	348	183	68	229	81	164	205	233
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.98		0.98		0.98
Frt		0.980			0.948			0.961				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3178	0	1629	2933	0	1676	1602	0	1541	1682	1366
Flt Permitted	0.211			0.359			0.608			0.290		
Satd. Flow (perm)	357	3178	0	608	2933	0	1065	1602	0	459	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			82			15				259
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	469	668	103	122	387	203	76	254	90	182	228	259
Shared Lane Traffic (%)												
Lane Group Flow (vph)	469	771	0	122	590	0	76	344	0	182	228	259
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	31.0	53.0		12.0	34.0		9.0	34.0		11.0	36.0	36.0
Total Split (%)	28.2%	48.2%		10.9%	30.9%		8.2%	30.9%		10.0%	32.7%	32.7%
Maximum Green (s)	28.0	46.7		9.0	27.7		6.0	27.7		8.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	58.5	43.7		37.6	25.8		39.4	29.3		45.0	34.1	34.1
Actuated g/C Ratio	0.53	0.40		0.34	0.23		0.36	0.27		0.41	0.31	0.31
v/c Ratio	0.96	0.61		0.43	0.79		0.18	0.79		0.64	0.44	0.44
Control Delay (s/veh)	55.2	27.6		20.0	42.2		22.4	50.7		35.8	35.3	6.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	55.2	27.6		20.0	42.2		22.4	50.7		35.8	35.3	6.5
LOS	E	C		B	D		C	D		D	D	A
Approach Delay (s/veh)		38.1			38.4			45.6			24.3	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 36.1		Intersection LOS: D	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

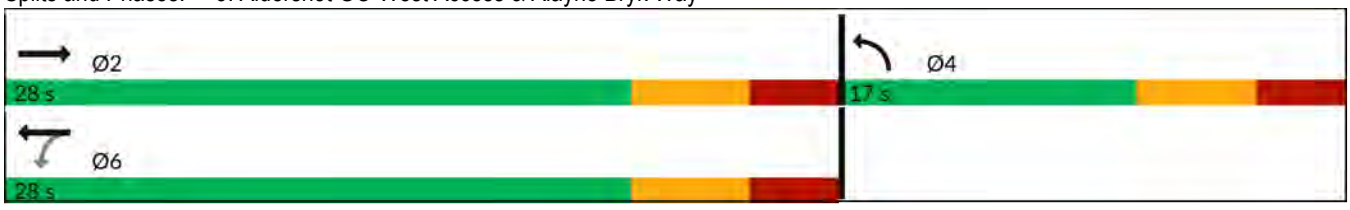


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	879	27	4	67	19	4
Future Volume (vph)	879	27	4	67	19	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.995				0.977	
Flt Protected				0.997	0.960	
Satd. Flow (prot)	3189	0	0	3230	925	0
Flt Permitted				0.923	0.960	
Satd. Flow (perm)	3189	0	0	2990	925	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	897	28	4	68	19	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	925	0	0	72	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2		6	6	4	
Switch Phase						
Minimum Initial (s)	8.0		8.0	8.0	8.0	
Minimum Split (s)	31.0		31.0	31.0	24.0	
Total Split (s)	28.0		28.0	28.0	17.0	
Total Split (%)	62.2%		62.2%	62.2%	37.8%	
Maximum Green (s)	21.0		21.0	21.0	10.0	
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	3.0		3.0	3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Recall Mode	Ped		Ped	Ped	None	
Walk Time (s)	15.0		15.0	15.0	7.0	
Flash Don't Walk (s)	9.0		9.0	9.0	10.0	
Pedestrian Calls (#/hr)	0		0	0	0	
Act Effct Green (s)	44.8			44.8	11.4	
Actuated g/C Ratio	0.93			0.93	0.24	
v/c Ratio	0.31			0.03	0.10	
Control Delay (s/veh)	1.9			1.7	15.9	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	1.9			1.7	15.9	
LOS	A			A	B	
Approach Delay (s/veh)	1.9			1.7	15.9	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.3			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.31			
Intersection Signal Delay (s/veh): 2.2		Intersection LOS: A	
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	689	42	18	32	0	0
Future Volume (vph)	689	42	18	32	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					
Flt Protected	0.955			0.982		
Satd. Flow (prot)	1628	0	0	1768	0	0
Flt Permitted	0.955			0.982		
Satd. Flow (perm)	1628	0	0	1768	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	0%	0%	0%	0%
Adj. Flow (vph)	725	44	19	34	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	0	0	53	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	44.0		16.0	16.0		
Total Split (%)	73.3%		26.7%	26.7%		
Maximum Green (s)	41.0		10.0	10.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	40.0			11.9		
Actuated g/C Ratio	0.82			0.24		
v/c Ratio	0.58			0.12		
Control Delay (s/veh)	6.4			23.7		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	6.4			23.7		
LOS	A			C		
Approach Delay (s/veh)	6.4			23.7		
Approach LOS	A			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 48.8			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 7.5		Intersection LOS: A	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

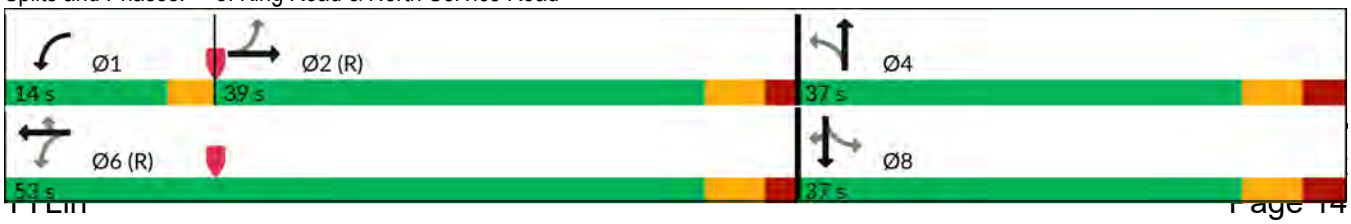


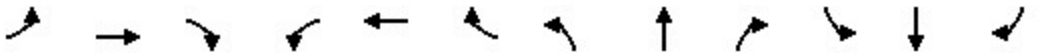
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	233	197	46	108	86	307	79	132	34
Future Volume (vph)	23	252	73	233	197	46	108	86	307	79	132	34
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.917				0.850
Flt Protected	0.950										0.982	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1755	1530
Flt Permitted	0.629			*0.470							0.544	
Satd. Flow (perm)	1039	1667	0	813	1714	1496	0	*3050	*3050	0	972	1497
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				48		100				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	243	205	48	113	90	320	82	138	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	243	205	48	0	523	0	0	220	35
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	39.0	39.0		14.0	53.0	53.0	37.0	37.0		37.0	37.0	37.0
Total Split (%)	43.3%	43.3%		15.6%	58.9%	58.9%	41.1%	41.1%		41.1%	41.1%	41.1%
Maximum Green (s)	33.0	33.0		11.0	47.0	47.0	30.0	30.0		30.0	30.0	30.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	40.8	40.8		57.1	54.1	56.1		25.9			25.9	22.9
Actuated g/C Ratio	0.45	0.45		0.63	0.60	0.62		0.29			0.29	0.25
v/c Ratio	0.05	0.44		0.39	0.20	0.05		0.55			0.79	0.08
Control Delay (s/veh)	18.3	20.5		10.3	10.1	3.2		23.1			48.7	1.4
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	18.3	20.5		10.3	10.1	3.2		23.1			48.7	1.4
LOS	B	C		B	B	A		C			D	A
Approach Delay (s/veh)		20.4			9.5			23.1			42.2	
Approach LOS		C			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 21.4		Intersection LOS: C	
Intersection Capacity Utilization 90.2%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



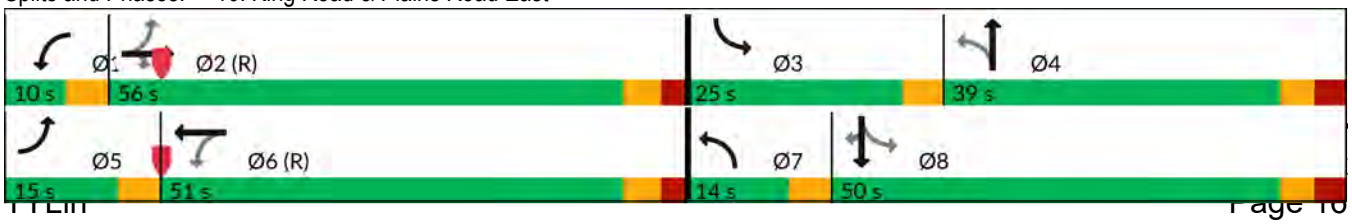


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	749	125	59	531	158	172	200	78	269	129	97
Future Volume (vph)	121	749	125	59	531	158	172	200	78	269	129	97
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99		0.95	0.99	0.99		0.99	0.99		0.99		0.98
Frt			0.850		0.966			0.958				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	3061	0	1583	1673	0	1731	1765	1485
Flt Permitted	0.243			0.266			0.670			*0.420		
Satd. Flow (perm)	413	3226	1378	453	3061	0	1108	1673	0	718	1765	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		33			15				126
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	127	788	132	62	559	166	181	211	82	283	136	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	127	788	132	62	725	0	181	293	0	283	136	102
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	15.0	56.0	56.0	10.0	51.0		14.0	39.0		25.0	50.0	50.0
Total Split (%)	11.5%	43.1%	43.1%	7.7%	39.2%		10.8%	30.0%		19.2%	38.5%	38.5%
Maximum Green (s)	11.0	50.0	50.0	6.0	45.0		10.0	32.6		21.0	43.6	43.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	68.6	60.1	60.1	62.4	55.2		42.4	28.7		52.7	35.1	32.7
Actuated g/C Ratio	0.53	0.46	0.46	0.48	0.42		0.33	0.22		0.41	0.27	0.25
v/c Ratio	0.41	0.53	0.19	0.22	0.55		0.44	0.77		0.63	0.29	0.22
Control Delay (s/veh)	21.5	28.8	5.3	19.5	30.6		29.2	58.3		33.1	37.4	3.9
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)	21.5	28.8	5.3	19.5	30.6		29.2	58.3		33.1	37.4	3.9
LOS	C	C	A	B	C		C	E		C	D	A
Approach Delay (s/veh)		24.9			29.7			47.2			28.5	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 81.2%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

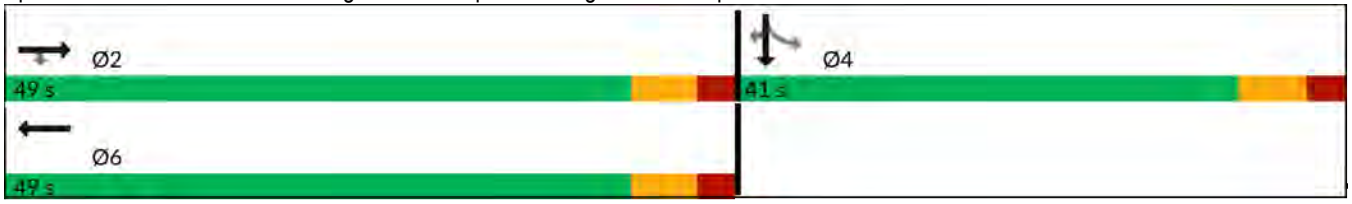


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1175	200	0	1135	427	0	0	0	419	1	266
Future Volume (vph)	0	1175	200	0	1135	427	0	0	0	419	1	266
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1317	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			213			454						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1250	213	0	1207	454	0	0	0	446	1	283
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1250	213	0	1207	454	0	0	0	223	224	283
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		49.0	49.0		49.0					41.0	41.0	41.0
Total Split (%)		54.4%	54.4%		54.4%					45.6%	45.6%	45.6%
Maximum Green (s)		42.0	42.0		42.0					33.8	33.8	33.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		23.0	23.0		23.0	53.9				15.9	15.9	15.9
Actuated g/C Ratio		0.43	0.43		0.43	1.00				0.29	0.29	0.29
v/c Ratio		0.63	0.31		0.60	0.33				0.48	0.49	0.60
Control Delay (s/veh)		13.9	3.3		13.6	0.7				20.8	20.8	20.2
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		13.9	3.3		13.6	0.7				20.8	20.8	20.2
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		12.3			10.1						20.6	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 53.9			
Natural Cycle: 45			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 12.9		Intersection LOS: B	
Intersection Capacity Utilization 54.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



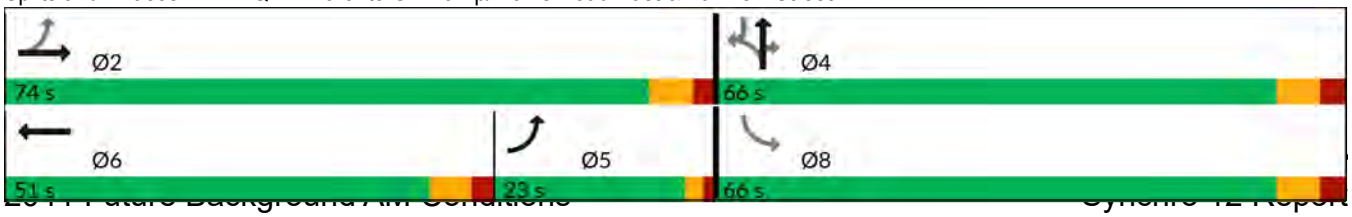
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	1215	77	0	1005	19	331	174	541	25	0	409
Future Volume (vph)	170	1215	77	0	1005	19	331	174	541	25	0	409
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.997			0.929	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4613	0	1533	1408	1384	1710	0	1543
Flt Permitted	0.176						0.950	0.996		0.330		
Satd. Flow (perm)	290	4725	1485	0	4613	0	1533	1408	1363	593	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			28	81			302
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	177	1266	80	0	1047	20	345	181	564	26	0	426
Shared Lane Traffic (%)							10%		34%			
Lane Group Flow (vph)	177	1266	80	0	1067	0	310	408	372	26	0	426
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

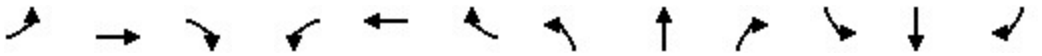
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	23.0	74.0			51.0		66.0	66.0	66.0	66.0		66.0
Total Split (%)	16.4%	52.9%			36.4%		47.1%	47.1%	47.1%	47.1%		47.1%
Maximum Green (s)	20.0	67.3			44.3		58.8	58.8	58.8	58.8		58.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	49.9	45.9	97.7		30.4		36.7	36.7	36.7	36.7		36.7
Actuated g/C Ratio	0.51	0.47	1.00		0.31		0.38	0.38	0.38	0.38		0.38
v/c Ratio	0.57	0.57	0.05		0.74		0.54	0.75	0.66	0.12		0.55
Control Delay (s/veh)	38.5	20.7	0.1		35.3		28.8	35.1	26.7	23.9		10.4
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	38.5	20.7	0.1		35.3		28.8	35.1	26.7	23.9		10.4
LOS	D	C	A		D		C	D	C	C		B
Approach Delay (s/veh)		21.7			35.3			30.5			11.2	
Approach LOS		C			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 97.7			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 26.4		Intersection LOS: C	
Intersection Capacity Utilization 88.4%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



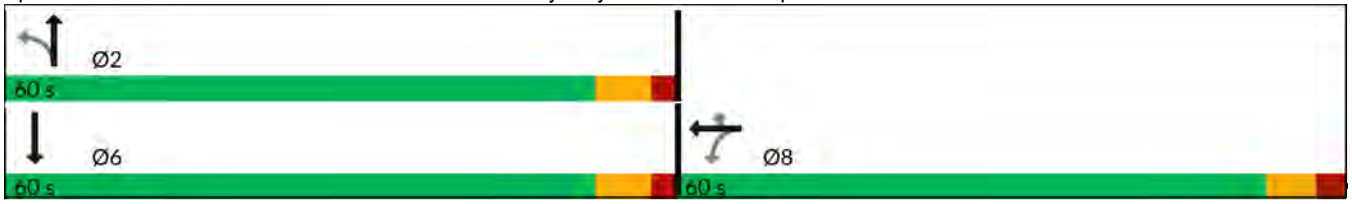


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	509	25	619	41	1044	209	0	1816	2
Future Volume (vph)	0	0	0	509	25	619	41	1044	209	0	1816	2
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850			
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4720	0
Flt Permitted				0.950	0.957		0.077					
Satd. Flow (perm)	0	0	0	1547	1556	1448	135	4680	1422	0	4720	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						38			180			
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	536	26	652	43	1099	220	0	1912	2
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	279	283	652	43	1099	220	0	1914	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				60.0	60.0	60.0	60.0	60.0			60.0	
Total Split (%)				50.0%	50.0%	50.0%	50.0%	50.0%			50.0%	
Maximum Green (s)				52.8	52.8	52.8	52.8	52.8			52.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				52.8	52.8	52.8	51.8	51.8	119.0		51.8	
Actuated g/C Ratio				0.44	0.44	0.44	0.44	0.44	1.00		0.44	
v/c Ratio				0.41	0.41	0.98	0.74	0.54	0.15		0.93	
Control Delay (s/veh)				25.0	25.0	62.8	93.0	26.0	0.2		41.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				25.0	25.0	62.8	93.0	26.0	0.2		41.5	
LOS				C	C	E	F	C	A		D	
Approach Delay (s/veh)					45.3			23.9			41.5	
Approach LOS					D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 119			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 37.2		Intersection LOS: D	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



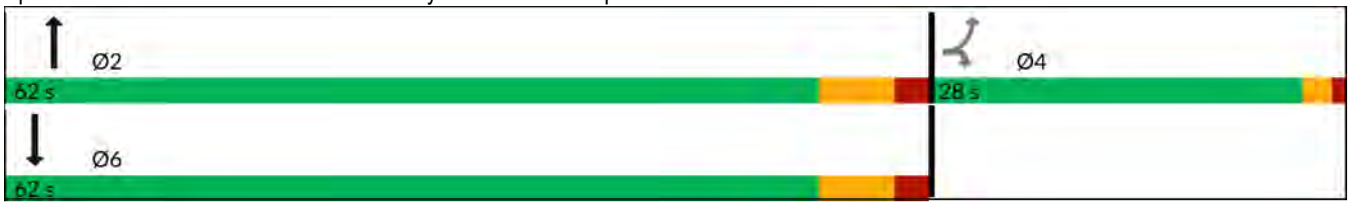


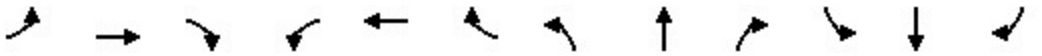
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	218	258	0	1050	1411	849
Future Volume (vph)	218	258	0	1050	1411	849
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Frt	0.950	0.850				0.850
Flt Protected	0.968					
Satd. Flow (prot)	3148	1339	0	4636	4680	1500
Flt Permitted	0.968					
Satd. Flow (perm)	3148	1339	0	4636	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	41	41				723
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	229	272	0	1105	1485	894
Shared Lane Traffic (%)		42%				
Lane Group Flow (vph)	343	158	0	1105	1485	894
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	28.0	28.0		62.0	62.0	
Total Split (%)	31.1%	31.1%		68.9%	68.9%	
Maximum Green (s)	25.0	25.0		54.7	54.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.3	10.3		22.0	22.0	43.1
Actuated g/C Ratio	0.24	0.24		0.51	0.51	1.00
v/c Ratio	0.44	0.45		0.47	0.62	0.60
Control Delay (s/veh)	15.1	16.7		7.5	8.9	1.8
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	15.1	16.7		7.5	8.9	1.8
LOS	B	B		A	A	A
Approach Delay (s/veh)	15.6			7.5	6.2	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 43.1			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 49.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



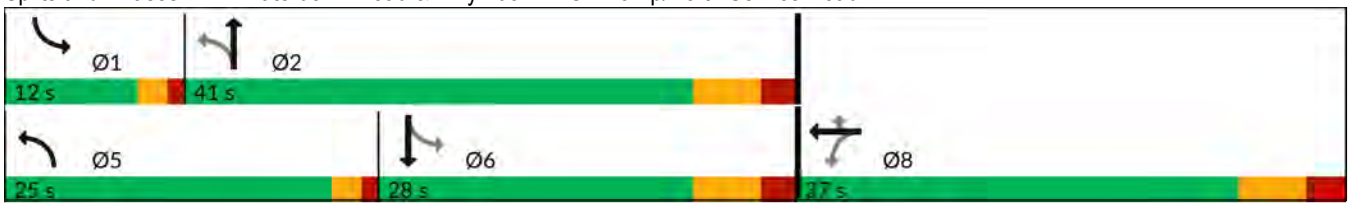


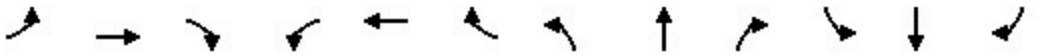
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	245	463	108	415	499	242	115	474	124
Future Volume (vph)	0	0	0	245	463	108	415	499	242	115	474	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.951			0.969	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3128	0	1710	3217	0
Flt Permitted				0.950			0.182			0.338		
Satd. Flow (perm)	0	0	0	1660	1782	1480	318	3128	0	608	3217	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						121		106			34	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	275	520	121	466	561	272	129	533	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	275	520	121	466	833	0	129	672	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				37.0	37.0	37.0	25.0	41.0		12.0	28.0	
Total Split (%)				41.1%	41.1%	41.1%	27.8%	45.6%		13.3%	31.1%	
Maximum Green (s)				29.8	29.8	29.8	22.0	34.2		9.0	21.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				27.9	27.9	27.9	48.5	33.3		32.1	20.0	
Actuated g/C Ratio				0.32	0.32	0.32	0.56	0.38		0.37	0.23	
v/c Ratio				0.51	0.91	0.22	0.91	0.66		0.39	0.87	
Control Delay (s/veh)				28.1	50.2	5.4	44.1	22.2		15.2	44.6	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				28.1	50.2	5.4	44.1	22.2		15.2	44.6	
LOS				C	D	A	D	C		B	D	
Approach Delay (s/veh)					37.7			30.1			39.9	
Approach LOS					D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 86.6			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 35.0		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



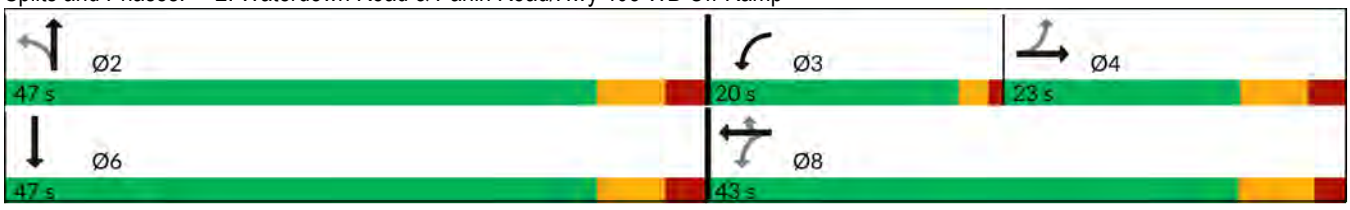


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	698	1	395	2	828	0	0	733	0
Future Volume (vph)	0	0	5	698	1	395	2	828	0	0	733	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.727				0.953				
Satd. Flow (perm)	0	1557	0	2465	0	1485	0	3134	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				53						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	841	1	476	2	998	0	0	883	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	841	1	476	0	1000	0	0	883	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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)		0.6		2.0	0.6	2.0		0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		NA		pm+pt	NA	Perm	Perm	NA			NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0	17.2	17.2	17.2	17.2			17.2	
Total Split (s)	23.0	23.0		20.0	43.0	43.0	47.0	47.0			47.0	
Total Split (%)	25.6%	25.6%		22.2%	47.8%	47.8%	52.2%	52.2%			52.2%	
Maximum Green (s)	15.9	15.9		17.0	35.8	35.8	39.8	39.8			39.8	
Yellow Time (s)	4.5	4.5		2.0	5.0	5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0	2.2	2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min	Min	Min	Min	Min			Min	
Act Effct Green (s)		11.7		32.2	0.0	27.7		29.3			29.3	
Actuated g/C Ratio		0.16		0.44	0.00	0.38		0.40			0.40	
v/c Ratio		0.02		0.60	no cap	0.79		0.79			0.66	
Control Delay (s/veh)		0.2		18.0		29.4		24.9			20.9	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		18.0	Error	29.4		24.9			20.9	
LOS		A		B	F	C		C			C	
Approach Delay (s/veh)		0.2			Error			24.9			20.9	
Approach LOS		A			F			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 72.5			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

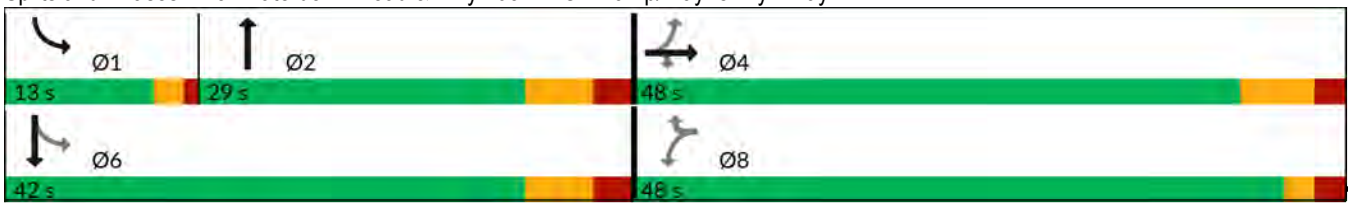


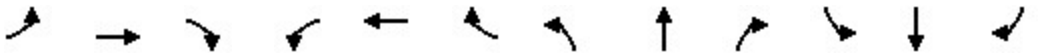
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	516	285	682	97	0	336	0	472	360	308	665	0
Future Volume (vph)	516	285	682	97	0	336	0	472	360	308	665	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.935				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	3079	0	1629	3353	0
Flt Permitted	0.950			0.521						0.160		
Satd. Flow (perm)	1644	1667	1485	1700	0	1471	0	3079	0	274	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						378		202				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	580	320	766	109	0	378	0	530	404	346	747	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	580	320	766	109	0	378	0	934	0	346	747	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	48.0	48.0	48.0	48.0		48.0		29.0		13.0	42.0	
Total Split (%)	53.3%	53.3%	53.3%	53.3%		53.3%		32.2%		14.4%	46.7%	
Maximum Green (s)	40.9	40.9	40.9	43.9		43.9		22.0		10.0	35.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	40.9	40.9	40.9	43.9		43.9		22.0		39.0	35.0	
Actuated g/C Ratio	0.45	0.45	0.45	0.49		0.49		0.24		0.43	0.39	
v/c Ratio	0.78	0.42	1.14	0.13		0.41		1.03		1.29	0.57	
Control Delay (s/veh)	29.5	18.8	104.7	13.2		3.0		66.1		176.2	23.8	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	29.5	18.8	104.7	13.2		3.0		66.1		176.2	23.8	
LOS	C	B	F	B		A		E		F	C	
Approach Delay (s/veh)		62.0			5.3			66.1			72.0	
Approach LOS		E			A			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.29			
Intersection Signal Delay (s/veh): 59.0		Intersection LOS: E	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



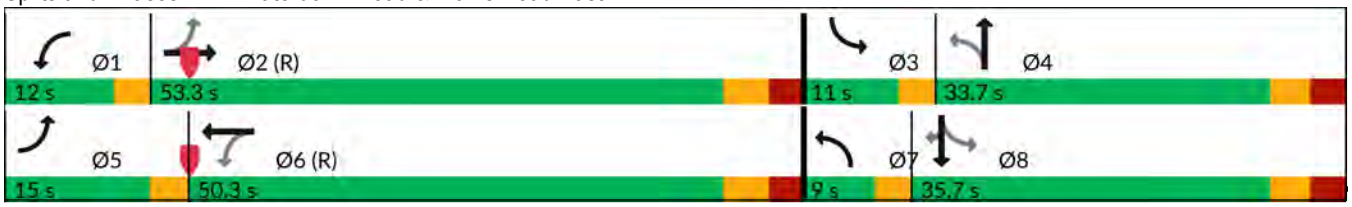


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	739	93	111	1182	137	204	186	69	307	168	547
Future Volume (vph)	278	739	93	111	1182	137	204	186	69	307	168	547
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.983			0.984			0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3282	0	1676	3247	0	1676	1610	0	1676	1682	1500
Flt Permitted	0.085			0.244			0.638			0.392		
Satd. Flow (perm)	149	3282	0	430	3247	0	1112	1610	0	683	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			13			16				213
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	290	770	97	116	1231	143	213	194	72	320	175	570
Shared Lane Traffic (%)												
Lane Group Flow (vph)	290	867	0	116	1374	0	213	266	0	320	175	570
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	15.0	53.3		12.0	50.3		9.0	33.7		11.0	35.7	35.7
Total Split (%)	13.6%	48.5%		10.9%	45.7%		8.2%	30.6%		10.0%	32.5%	32.5%
Maximum Green (s)	12.0	47.0		9.0	44.0		6.0	27.4		8.0	29.4	29.4
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	62.3	47.7		55.6	44.0		36.7	27.4		40.7	29.4	29.4
Actuated g/C Ratio	0.57	0.43		0.51	0.40		0.33	0.25		0.37	0.27	0.27
v/c Ratio	1.16	0.61		0.37	1.05		0.53	0.64		0.99	0.39	1.04
Control Delay (s/veh)	136.8	25.8		15.0	72.5		32.3	42.9		79.4	36.1	76.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	136.8	25.8		15.0	72.5		32.3	42.9		79.4	36.1	76.2
LOS	F	C		B	E		C	D		E	D	E
Approach Delay (s/veh)		53.7			68.0			38.2			70.6	
Approach LOS		D			E			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay (s/veh): 61.3		Intersection LOS: E	
Intersection Capacity Utilization 113.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

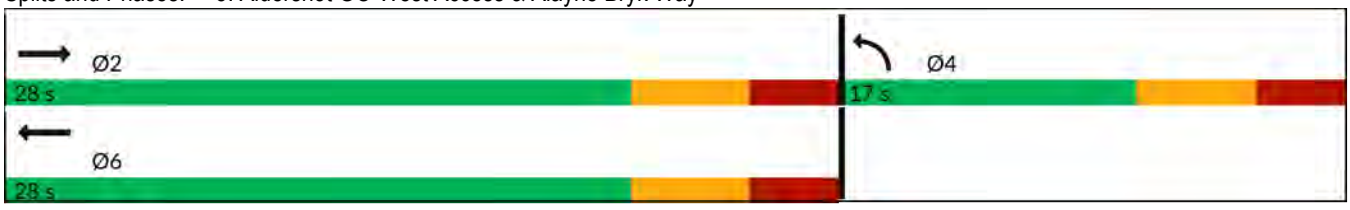


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	769	38	0	406	26	14
Future Volume (vph)	769	38	0	406	26	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.993				0.954	
Flt Protected					0.968	
Satd. Flow (prot)	3211	0	0	3420	1040	0
Flt Permitted					0.968	
Satd. Flow (perm)	3211	0	0	3420	1040	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	17				15	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	845	42	0	446	29	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	887	0	0	446	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.1			41.1	11.6	
Actuated g/C Ratio	0.84			0.84	0.24	
v/c Ratio	0.33			0.15	0.17	
Control Delay (s/veh)	3.4			2.8	13.4	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.4			2.8	13.4	
LOS	A			A	B	
Approach Delay (s/veh)	3.4			2.8	13.4	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.7			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay (s/veh): 3.6		Intersection LOS: A	
Intersection Capacity Utilization 37.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





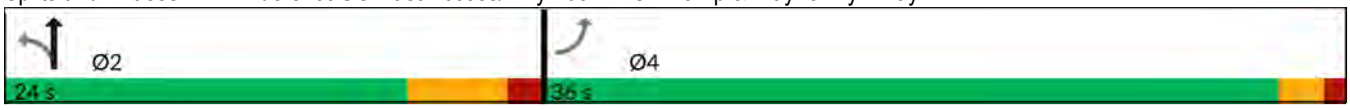
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	617	14	250	49	0	0
Future Volume (vph)	617	14	250	49	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					
Flt Protected	0.953			0.960		
Satd. Flow (prot)	1646	0	0	1728	0	0
Flt Permitted	0.953			0.960		
Satd. Flow (perm)	1646	0	0	1728	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	3					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%
Adj. Flow (vph)	752	17	305	60	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	769	0	0	365	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

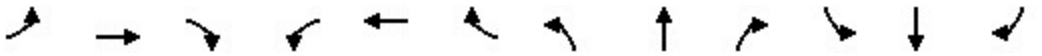


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	36.0		24.0	24.0		
Total Split (%)	60.0%		40.0%	40.0%		
Maximum Green (s)	33.0		18.0	18.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	20.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	28.0			15.4		
Actuated g/C Ratio	0.53			0.29		
v/c Ratio	0.88			0.73		
Control Delay (s/veh)	25.2			28.0		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	25.2			28.0		
LOS	C			C		
Approach Delay (s/veh)	25.2			28.0		
Approach LOS	C			C		

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 52.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 26.1		Intersection LOS: C	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	523	687	81	62	170	283	68	200	24
Future Volume (vph)	14	267	92	523	687	81	62	170	283	68	200	24
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.926				0.850
Flt Protected	0.950										0.987	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1742	1530
Flt Permitted	0.390			*0.470							0.599	
Satd. Flow (perm)	702	1698	0	829	1765	1469	0	*3050	*3050	0	1057	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		73				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	551	723	85	65	179	298	72	211	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	551	723	85	0	542	0	0	283	25
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	

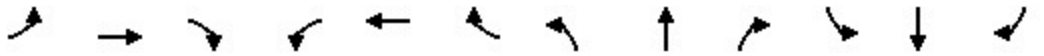
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	33.0	33.0		23.0	56.0	56.0	34.0	34.0		34.0	34.0	34.0
Total Split (%)	36.7%	36.7%		25.6%	62.2%	62.2%	37.8%	37.8%		37.8%	37.8%	37.8%
Maximum Green (s)	27.0	27.0		20.0	50.0	50.0	27.0	27.0		27.0	27.0	27.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	30.4	30.4		55.1	52.1	54.1		27.9			27.9	24.9
Actuated g/C Ratio	0.34	0.34		0.61	0.58	0.60		0.31			0.31	0.28
v/c Ratio	0.06	0.65		0.78	0.71	0.09		0.55			0.87	0.05
Control Delay (s/veh)	23.9	31.7		20.3	19.1	4.7		23.9			55.4	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.9	31.7		20.3	19.1	4.7		23.9			55.4	0.2
LOS	C	C		C	B	A		C			E	A
Approach Delay (s/veh)		31.4			18.7			23.9			50.9	
Approach LOS		C			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 25.5		Intersection LOS: C	
Intersection Capacity Utilization 112.8%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	991	215	126	1492	245	190	161	77	348	310	183
Future Volume (vph)	96	991	215	126	1492	245	190	161	77	348	310	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	1.00	0.99		0.99	0.99		0.99		0.97
Frt			0.850		0.979			0.951				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3238	0	1613	1652	0	1765	1800	1500
Flt Permitted	0.064			0.171			0.198			*0.420		
Satd. Flow (perm)	115	3320	1393	306	3238	0	334	1652	0	733	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		20			18				126
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	98	1011	219	129	1522	250	194	164	79	355	316	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	1011	219	129	1772	0	194	243	0	355	316	187
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	63.6	63.6	15.0	68.6		15.0	35.4		16.0	36.4	36.4
Total Split (%)	7.7%	48.9%	48.9%	11.5%	52.8%		11.5%	27.2%		12.3%	28.0%	28.0%
Maximum Green (s)	6.0	57.6	57.6	11.0	62.6		11.0	29.0		12.0	30.0	30.0
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	71.8	64.8	64.8	76.2	67.2		38.8	27.8		40.8	28.8	26.4
Actuated g/C Ratio	0.55	0.50	0.50	0.59	0.52		0.30	0.21		0.31	0.22	0.20
v/c Ratio	0.66	0.61	0.29	0.46	1.05		0.94	0.66		1.10	0.79	0.47
Control Delay (s/veh)	42.3	26.4	9.6	17.4	68.4		83.1	52.0		114.7	62.7	19.3
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)	42.3	26.4	9.6	17.4	68.4		83.1	52.0		114.7	62.7	19.3
LOS	D	C	A	B	E		F	D		F	E	B
Approach Delay (s/veh)		24.8			64.9			65.8			74.8	
Approach LOS		C			E			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 55.1		Intersection LOS: E	
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

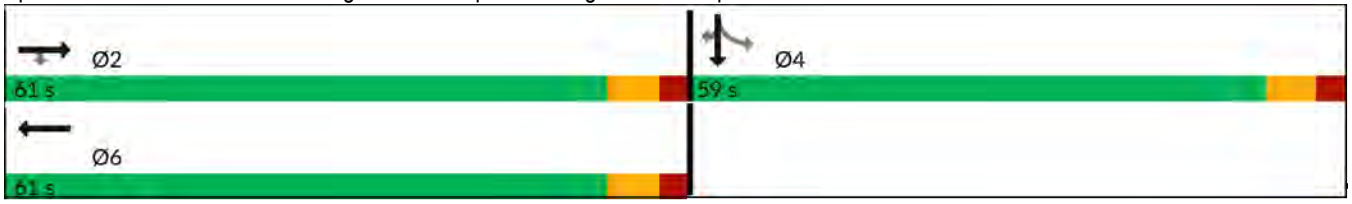


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1363	420	0	1846	1867	0	0	0	907	7	532
Future Volume (vph)	0	1363	420	0	1846	1867	0	0	0	907	7	532
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1614	1485
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1614	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			429			963						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1391	429	0	1884	1905	0	0	0	926	7	543
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1391	429	0	1884	1905	0	0	0	463	470	543
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		61.0	61.0		61.0					59.0	59.0	59.0
Total Split (%)		50.8%	50.8%		50.8%					49.2%	49.2%	49.2%
Maximum Green (s)		54.0	54.0		54.0					51.8	51.8	51.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		48.4	48.4		48.4	107.1				44.1	44.1	44.1
Actuated g/C Ratio		0.45	0.45		0.45	1.00				0.41	0.41	0.41
v/c Ratio		0.65	0.48		0.87	1.30				0.70	0.71	0.87
Control Delay (s/veh)		25.0	3.9		32.3	151.0				33.2	33.5	43.6
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		25.0	3.9		32.3	151.0				33.2	33.5	43.6
LOS		C	A		C	F				C	C	D
Approach Delay (s/veh)		20.0			92.0						37.1	
Approach LOS		C			F						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.1			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay (s/veh): 62.1		Intersection LOS: E	
Intersection Capacity Utilization 84.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



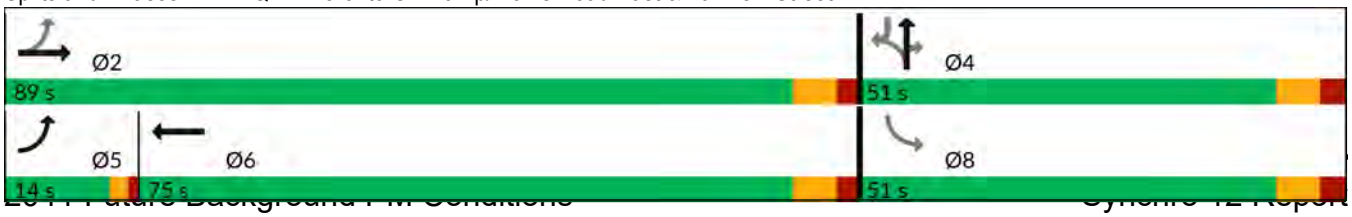
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	1662	114	0	2468	18	317	317	560	17	0	684
Future Volume (vph)	207	1662	114	0	2468	18	317	317	560	17	0	684
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.960	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4807	0	1577	1530	1425	1710	0	1588
Flt Permitted	0.056						0.950	0.997		0.111		
Satd. Flow (perm)	97	4818	1451	0	4807	0	1577	1530	1405	200	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			14	52			152
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	211	1696	116	0	2518	18	323	323	571	17	0	698
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	211	1696	116	0	2536	0	291	486	440	17	0	698
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

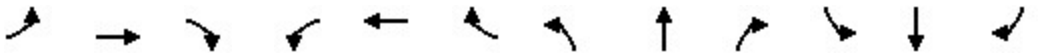
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	14.0	89.0			75.0		51.0	51.0	51.0	51.0		51.0
Total Split (%)	10.0%	63.6%			53.6%		36.4%	36.4%	36.4%	36.4%		36.4%
Maximum Green (s)	11.0	82.3			68.3		43.8	43.8	43.8	43.8		43.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	86.0	82.3	140.0		68.3		43.8	43.8	43.8	43.8		43.8
Actuated g/C Ratio	0.61	0.59	1.00		0.49		0.31	0.31	0.31	0.31		0.31
v/c Ratio	1.17	0.60	0.08		1.08		0.59	1.00	0.93	0.27		1.16
Control Delay (s/veh)	152.4	19.5	0.1		79.7		46.4	86.1	67.7	50.2		123.7
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	152.4	19.5	0.1		79.7		46.4	86.1	67.7	50.2		123.7
LOS	F	B	A		E		D	F	E	D		F
Approach Delay (s/veh)		32.2			79.7			70.0			122.0	
Approach LOS		C			E			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay (s/veh): 67.7		Intersection LOS: E	
Intersection Capacity Utilization 137.7%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



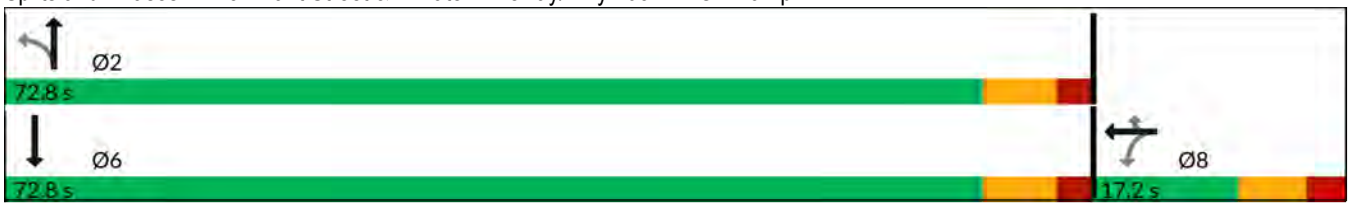


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	131	11	75	86	1756	813	0	2216	5
Future Volume (vph)	0	0	0	131	11	75	86	1756	813	0	2216	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850			
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1601	1485	1676	4771	1515	0	4812	0
Flt Permitted				0.950	0.960		0.058					
Satd. Flow (perm)	0	0	0	1577	1601	1485	102	4771	1480	0	4812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			556		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	138	12	79	91	1848	856	0	2333	5
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	75	75	79	91	1848	856	0	2338	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.0	10.0	10.0	70.2	70.2	89.6		70.2	
Actuated g/C Ratio				0.11	0.11	0.11	0.78	0.78	1.00		0.78	
v/c Ratio				0.43	0.42	0.37	1.14	0.49	0.58		0.62	
Control Delay (s/veh)				45.5	45.2	22.7	169.3	5.2	1.7		6.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				45.5	45.2	22.7	169.3	5.2	1.7		6.4	
LOS				D	D	C	F	A	A		A	
Approach Delay (s/veh)					37.6			9.4			6.4	
Approach LOS					D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 89.6			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.14			
Intersection Signal Delay (s/veh): 9.3		Intersection LOS: A	
Intersection Capacity Utilization 80.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



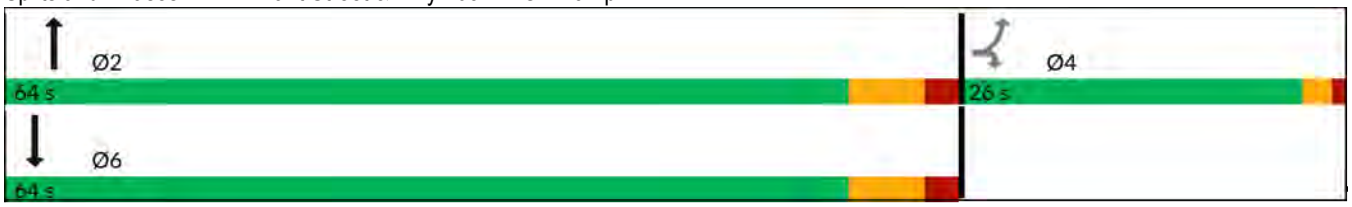


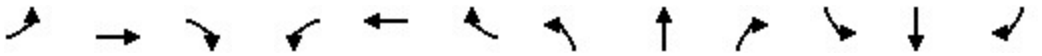
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	303	305	0	1946	1605	483
Future Volume (vph)	303	305	0	1946	1605	483
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor						0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3094	1352	0	4818	4771	1485
Flt Permitted	0.965					
Satd. Flow (perm)	3094	1352	0	4818	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	31	31				362
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	312	314	0	2006	1655	498
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	428	198	0	2006	1655	498
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	26.0	26.0		64.0	64.0	
Total Split (%)	28.9%	28.9%		71.1%	71.1%	
Maximum Green (s)	23.0	23.0		56.7	56.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	14.3	14.3		35.9	35.9	61.1
Actuated g/C Ratio	0.23	0.23		0.59	0.59	1.00
v/c Ratio	0.57	0.58		0.71	0.59	0.34
Control Delay (s/veh)	23.9	27.2		10.7	9.1	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	23.9	27.2		10.7	9.1	0.6
LOS	C	C		B	A	A
Approach Delay (s/veh)	24.9			10.7	7.1	
Approach LOS	C			B	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 61.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B	
Intersection Capacity Utilization 61.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	139	245	129	346	374	209	161	478	120
Future Volume (vph)	0	0	0	139	245	129	346	374	209	161	478	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.946			0.970	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3164	0	1710	3278	0
Flt Permitted				0.950			0.289			0.427		
Satd. Flow (perm)	0	0	0	1693	1782	1510	510	3164	0	769	3278	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		166			39	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	142	250	132	353	382	213	164	488	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	142	250	132	353	595	0	164	610	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				27.4	27.4	27.4	23.0	40.6		12.0	29.6	
Total Split (%)				34.3%	34.3%	34.3%	28.8%	50.8%		15.0%	37.0%	
Maximum Green (s)				20.2	20.2	20.2	20.0	33.8		9.0	22.8	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				14.3	14.3	14.3	38.3	25.7		28.3	16.2	
Actuated g/C Ratio				0.23	0.23	0.23	0.61	0.41		0.45	0.26	
v/c Ratio				0.37	0.62	0.30	0.60	0.43		0.35	0.70	
Control Delay (s/veh)				25.8	31.2	6.9	11.2	11.4		9.3	25.6	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				25.8	31.2	6.9	11.2	11.4		9.3	25.6	
LOS				C	C	A	B	B		A	C	
Approach Delay (s/veh)					23.6			11.3			22.2	
Approach LOS					C			B			C	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 63.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.70
Intersection Signal Delay (s/veh): 17.9 Intersection LOS: B
Intersection Capacity Utilization 66.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

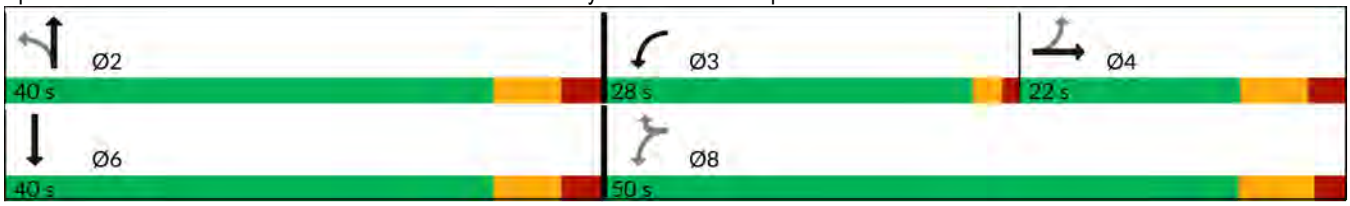


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	1001	0	475	1	636	0	0	586	0
Future Volume (vph)	1	0	1	1001	0	475	1	636	0	0	586	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.930				0.954				
Satd. Flow (perm)	0	1637	0	3153	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				95						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	1054	0	500	1	669	0	0	617	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	1054	0	500	0	670	0	0	617	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	22.0	22.0		28.0		50.0	40.0	40.0			40.0	
Total Split (%)	24.4%	24.4%		31.1%		55.6%	44.4%	44.4%			44.4%	
Maximum Green (s)	14.9	14.9		25.0		42.8	32.8	32.8			32.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		26.2		21.7		17.7			17.7	
Actuated g/C Ratio		0.20		0.48		0.40		0.32			0.32	
v/c Ratio		0.01		0.69		0.76		0.65			0.57	
Control Delay (s/veh)		0.0		14.1		19.9		20.3			18.7	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		14.1		19.9		20.3			18.7	
LOS		A		B		B		C			B	
Approach Delay (s/veh)					16.0			20.3			18.7	
Approach LOS					B			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 54.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

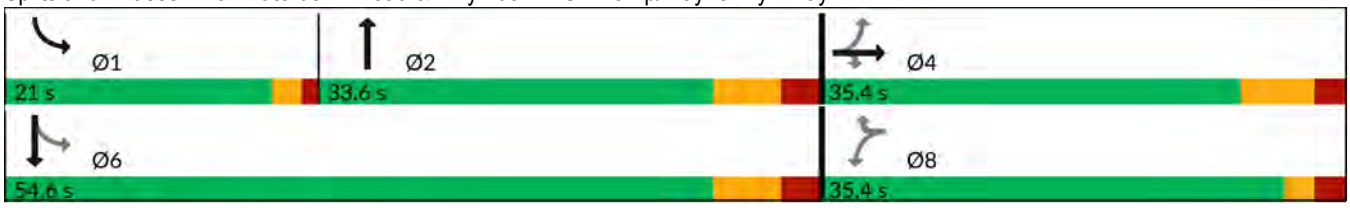


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	854	671	363	28	0	137	0	473	375	323	668	0
Future Volume (vph)	854	671	363	28	0	137	0	473	375	323	668	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.934				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3149	0	1676	3353	0
Flt Permitted	0.950			0.122						0.141		
Satd. Flow (perm)	1693	1782	1452	374	0	1430	0	3149	0	249	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						146		104				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	909	714	386	30	0	146	0	503	399	344	711	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	909	714	386	30	0	146	0	902	0	344	711	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.4	35.4	35.4	35.4		35.4		33.6		21.0	54.6	
Total Split (%)	39.3%	39.3%	39.3%	39.3%		39.3%		37.3%		23.3%	60.7%	
Maximum Green (s)	28.3	28.3	28.3	31.3		31.3		26.6		18.0	47.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	29.7	29.7	29.7	32.7		32.7		25.3		48.5	44.4	
Actuated g/C Ratio	0.34	0.34	0.34	0.37		0.37		0.29		0.55	0.50	
v/c Ratio	1.60	1.19	0.79	0.22		0.24		0.92		0.87	0.42	
Control Delay (s/veh)	303.2	132.2	40.7	25.1		4.5		43.6		42.3	14.8	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	303.2	132.2	40.7	25.1		4.5		43.6		42.3	14.8	
LOS	F	F	D	C		A		D		D	B	
Approach Delay (s/veh)		192.0			8.0			43.6			23.8	
Approach LOS		F			A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 88.3			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay (s/veh): 109.0		Intersection LOS: F	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	355	622	137	79	584	229	144	204	75	274	180	437
Future Volume (vph)	355	622	137	79	584	229	144	204	75	274	180	437
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.97	0.99		0.99	0.96		0.81	0.99		0.98		0.75
Frt		0.973			0.958			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3265	0	1676	3090	0	1710	1685	0	1676	1765	1500
Flt Permitted	0.156			0.352			0.639			0.270		
Satd. Flow (perm)	271	3265	0	614	3090	0	937	1685	0	469	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			55			16				386
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	370	648	143	82	608	239	150	213	78	285	188	455
Shared Lane Traffic (%)												
Lane Group Flow (vph)	370	791	0	82	847	0	150	291	0	285	188	455
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	23.0	54.6		9.0	40.6		9.0	33.4		13.0	37.4	37.4
Total Split (%)	20.9%	49.6%		8.2%	36.9%		8.2%	30.4%		11.8%	34.0%	34.0%
Maximum Green (s)	20.0	48.3		6.0	34.3		6.0	27.1		10.0	31.1	31.1
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	63.4	52.2		46.3	36.3		33.0	22.4		40.6	27.0	27.0
Actuated g/C Ratio	0.58	0.47		0.42	0.33		0.30	0.20		0.37	0.25	0.25
v/c Ratio	0.87	0.51		0.25	0.80		0.45	0.82		0.94	0.43	0.80
Control Delay (s/veh)	44.0	21.4		14.7	38.9		30.0	57.7		69.3	37.7	18.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	44.0	21.4		14.7	38.9		30.0	57.7		69.3	37.7	18.6
LOS	D	C		B	D		C	E		E	D	B
Approach Delay (s/veh)		28.6			36.8			48.3			38.0	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 35.8		Intersection LOS: D	
Intersection Capacity Utilization 100.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East

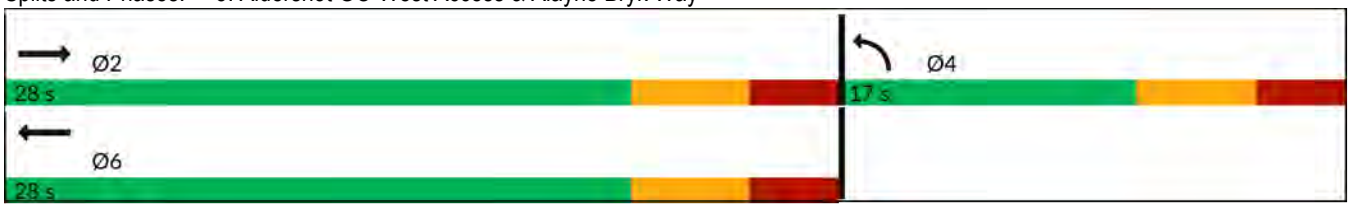


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	911	53	0	157	17	39
Future Volume (vph)	911	53	0	157	17	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.992				0.905	
Flt Protected					0.985	
Satd. Flow (prot)	3323	0	0	3420	1305	0
Flt Permitted					0.985	
Satd. Flow (perm)	3323	0	0	3420	1305	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	20				40	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	930	54	0	160	17	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	984	0	0	160	57	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	28.0			28.0	17.0	
Total Split (%)	62.2%			62.2%	37.8%	
Maximum Green (s)	21.0			21.0	10.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	39.6			39.6	11.2	
Actuated g/C Ratio	0.84			0.84	0.24	
v/c Ratio	0.35			0.06	0.17	
Control Delay (s/veh)	3.5			2.8	9.0	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	3.5			2.8	9.0	
LOS	A			A	A	
Approach Delay (s/veh)	3.5			2.8	9.0	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.2			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay (s/veh): 3.6		Intersection LOS: A	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	586	57	72	31	0	0
Future Volume (vph)	586	57	72	31	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988					
Flt Protected	0.956			0.966		
Satd. Flow (prot)	1685	0	0	1739	0	0
Flt Permitted	0.956			0.966		
Satd. Flow (perm)	1685	0	0	1739	0	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15					
Link Speed (k/h)	50			50	100	
Link Distance (m)	105.8			76.9	59.1	
Travel Time (s)	7.6			5.5	2.1	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%
Adj. Flow (vph)	630	61	77	33	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	691	0	0	110	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1			2	2	
Detector Template	Left			Thru	Thru	
Leading Detector (m)	2.0			10.0	10.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0		
Detector 1 Size(m)	2.0			0.6		
Detector 1 Type	Cl+Ex			Cl+Ex		
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0		
Detector 1 Queue (s)	0.0			0.0		
Detector 1 Delay (s)	0.0			0.0		
Detector 2 Position(m)				9.4		
Detector 2 Size(m)				0.6		
Detector 2 Type				Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0		
Turn Type	Perm		Perm	NA		
Protected Phases				2		
Permitted Phases	4		2			
Detector Phase	4		2	2		
Switch Phase						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Initial (s)	7.0		10.0	10.0		
Minimum Split (s)	10.0		16.0	16.0		
Total Split (s)	50.0		20.0	20.0		
Total Split (%)	71.4%		28.6%	28.6%		
Maximum Green (s)	47.0		14.0	14.0		
Yellow Time (s)	2.0		4.5	4.5		
All-Red Time (s)	1.0		1.5	1.5		
Lost Time Adjust (s)	0.0			0.0		
Total Lost Time (s)	3.0			6.0		
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0	3.0		
Recall Mode	Min		None	None		
Walk Time (s)	7.0		7.0	7.0		
Flash Don't Walk (s)	16.0		16.0	16.0		
Pedestrian Calls (#/hr)	0		0	0		
Act Effct Green (s)	31.7			11.1		
Actuated g/C Ratio	0.69			0.24		
v/c Ratio	0.59			0.26		
Control Delay (s/veh)	8.5			19.4		
Queue Delay	0.0			0.0		
Total Delay (s/veh)	8.5			19.4		
LOS	A			B		
Approach Delay (s/veh)	8.5			19.4		
Approach LOS	A			B		

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 45.8			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 10.0		Intersection LOS: A	
Intersection Capacity Utilization 54.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way



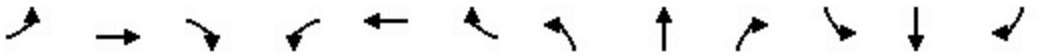
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	329	321	74	136	115	257	76	76	23
Future Volume (vph)	14	223	91	329	321	74	136	115	257	76	76	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				0.97
Frt		0.956				0.850		0.932				0.850
Flt Protected	0.950										0.976	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1757	1530
Flt Permitted	0.557			*0.470							0.502	
Satd. Flow (perm)	1003	1711	0	829	1800	1498	0	*3050	*3050	0	904	1488
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				75		60				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	346	338	78	143	121	271	80	80	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	346	338	78	0	535	0	0	160	24
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	38.0	38.0		20.0	58.0	58.0	32.0	32.0		32.0	32.0	32.0
Total Split (%)	42.2%	42.2%		22.2%	64.4%	64.4%	35.6%	35.6%		35.6%	35.6%	35.6%
Maximum Green (s)	32.0	32.0		17.0	52.0	52.0	25.0	25.0		25.0	25.0	25.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	38.8	38.8		58.0	55.0	57.0		25.0			25.0	22.0
Actuated g/C Ratio	0.43	0.43		0.64	0.61	0.63		0.28			0.28	0.24
v/c Ratio	0.03	0.44		0.52	0.31	0.08		0.60			0.64	0.06
Control Delay (s/veh)	19.4	20.9		10.9	10.1	2.5		27.3			40.0	0.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	19.4	20.9		10.9	10.1	2.5		27.3			40.0	0.3
LOS	B	C		B	B	A		C			D	A
Approach Delay (s/veh)		20.9			9.7			27.3			34.8	
Approach LOS		C			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 19.5		Intersection LOS: B	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



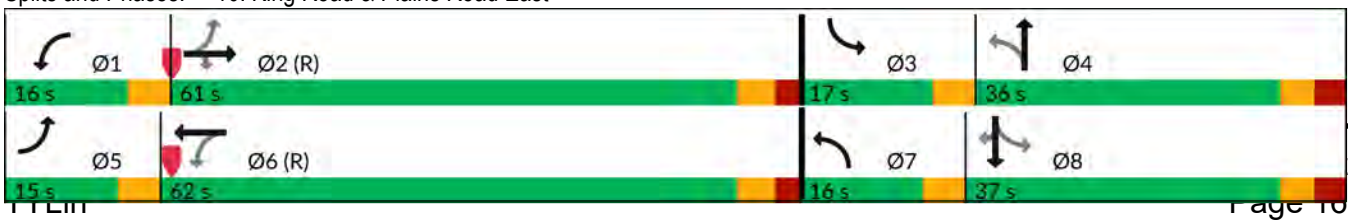


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	887	143	134	1011	204	177	175	105	211	274	137
Future Volume (vph)	127	887	143	134	1011	204	177	175	105	211	274	137
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.99		0.99	0.99		0.98		0.97
Frt			0.850		0.975			0.944				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3280	0	1676	1666	0	1782	1782	1515
Flt Permitted	0.101			0.210			0.264			*0.420		
Satd. Flow (perm)	177	3353	1437	372	3280	0	462	1666	0	736	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		23			22				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			890.3	
Travel Time (s)		140.0			34.2			21.9			64.1	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	130	905	146	137	1032	208	181	179	107	215	280	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	905	146	137	1240	0	181	286	0	215	280	140
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	15.0	61.0	61.0	16.0	62.0		16.0	36.0		17.0	37.0	37.0
Total Split (%)	11.5%	46.9%	46.9%	12.3%	47.7%		12.3%	27.7%		13.1%	28.5%	28.5%
Maximum Green (s)	11.0	55.0	55.0	12.0	56.0		12.0	29.6		13.0	30.6	30.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	72.6	62.9	62.9	73.2	63.2		40.1	27.3		42.0	28.3	25.9
Actuated g/C Ratio	0.56	0.48	0.48	0.56	0.49		0.31	0.21		0.32	0.22	0.20
v/c Ratio	0.62	0.56	0.20	0.44	0.77		0.69	0.78		0.62	0.72	0.38
Control Delay (s/veh)	29.7	26.6	8.9	17.5	32.3		45.8	59.2		39.5	57.8	19.2
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)	29.7	26.6	8.9	17.5	32.3		45.8	59.2		39.5	57.8	19.2
LOS	C	C	A	B	C		D	E		D	E	B
Approach Delay (s/veh)		24.7			30.8			54.0			43.1	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 33.9		Intersection LOS: C	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East

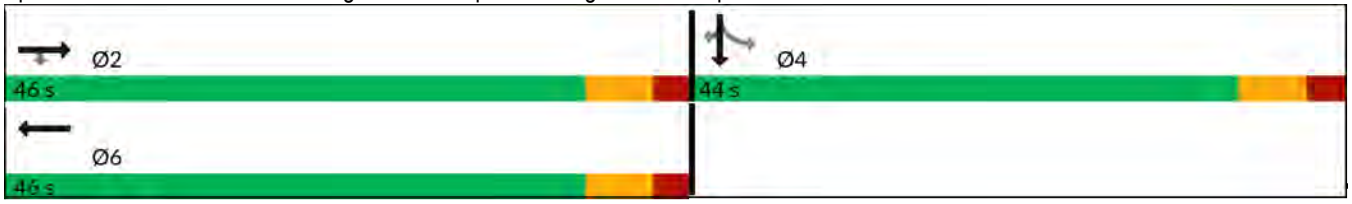


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1588	191	0	1632	441	0	0	0	746	3	455
Future Volume (vph)	0	1588	191	0	1632	441	0	0	0	746	3	455
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			197			343						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1637	197	0	1682	455	0	0	0	769	3	469
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1637	197	0	1682	455	0	0	0	384	388	469
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		46.0	46.0		46.0					44.0	44.0	44.0
Total Split (%)		51.1%	51.1%		51.1%					48.9%	48.9%	48.9%
Maximum Green (s)		39.0	39.0		39.0					36.8	36.8	36.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		33.8	33.8		33.8	77.3				28.8	28.8	28.8
Actuated g/C Ratio		0.44	0.44		0.44	1.00				0.37	0.37	0.37
v/c Ratio		0.78	0.26		0.79	0.31				0.64	0.65	0.81
Control Delay (s/veh)		22.4	3.5		22.8	0.6				26.1	26.2	32.1
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		22.4	3.5		22.8	0.6				26.1	26.2	32.1
LOS		C	A		C	A				C	C	C
Approach Delay (s/veh)		20.4			18.1						28.4	
Approach LOS		C			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 77.3			
Natural Cycle: 55			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 21.3		Intersection LOS: C	
Intersection Capacity Utilization 76.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



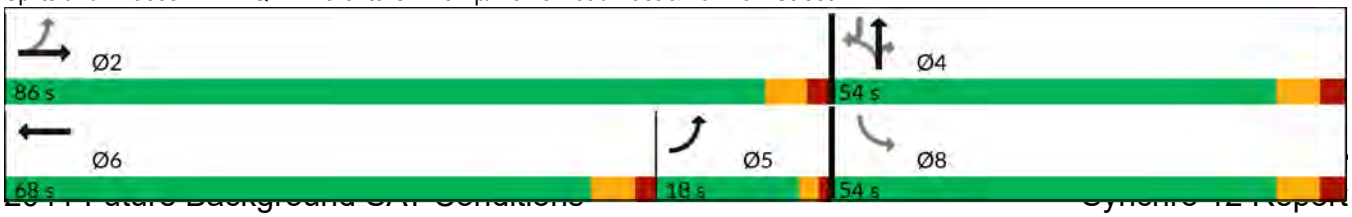
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	1555	201	0	1850	57	259	245	637	47	0	509
Future Volume (vph)	218	1555	201	0	1850	57	259	245	637	47	0	509
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.996			0.936	0.850			*0.900
Flt Protected	0.950						0.950	0.997		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4790	0	1593	1499	1425	1710	0	1604
Flt Permitted	0.060						0.950	0.997		0.146		
Satd. Flow (perm)	106	4865	1452	0	4790	0	1593	1499	1425	263	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		4			22	81			172
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	222	1587	205	0	1888	58	264	250	650	48	0	519
Shared Lane Traffic (%)							10%		32%			
Lane Group Flow (vph)	222	1587	205	0	1946	0	238	484	442	48	0	519
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

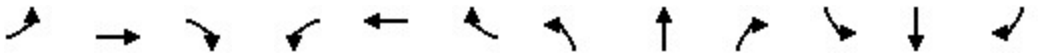
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	18.0	86.0			68.0		54.0	54.0	54.0	54.0		54.0
Total Split (%)	12.9%	61.4%			48.6%		38.6%	38.6%	38.6%	38.6%		38.6%
Maximum Green (s)	15.0	79.3			61.3		46.8	46.8	46.8	46.8		46.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	81.4	77.7	137.0		59.6		45.4	45.4	45.4	45.4		45.4
Actuated g/C Ratio	0.59	0.57	1.00		0.44		0.33	0.33	0.33	0.33		0.33
v/c Ratio	0.94	0.58	0.14		0.93		0.45	0.95	0.84	0.56		0.80
Control Delay (s/veh)	97.2	20.2	0.2		46.2		39.6	71.7	50.1	65.5		38.3
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	97.2	20.2	0.2		46.2		39.6	71.7	50.1	65.5		38.3
LOS	F	C	A		D		D	E	D	E		D
Approach Delay (s/veh)		26.7			46.2			56.9			40.6	
Approach LOS		C			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 137			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 40.9		Intersection LOS: D	
Intersection Capacity Utilization 111.1%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	734	61	591	114	1463	359	0	2163	14
Future Volume (vph)	0	0	0	734	61	591	114	1463	359	0	2163	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		85.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4860	0
Flt Permitted				0.950	0.959		0.071					
Satd. Flow (perm)	0	0	0	1593	1605	1473	128	4865	1494	0	4860	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			234		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	765	64	616	119	1524	374	0	2253	15
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	413	416	616	119	1524	374	0	2268	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				50.3	50.3	50.3	10.0	69.7			59.7	
Total Split (%)				41.9%	41.9%	41.9%	8.3%	58.1%			49.8%	
Maximum Green (s)				43.1	43.1	43.1	6.0	62.5			52.5	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				43.1	43.1	43.1	65.7	62.5	120.0		52.5	
Actuated g/C Ratio				0.36	0.36	0.36	0.55	0.52	1.00		0.44	
v/c Ratio				0.72	0.72	1.07	0.80	0.60	0.25		1.07	
Control Delay (s/veh)				41.8	41.8	90.0	54.8	21.3	0.4		73.4	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				41.8	41.8	90.0	54.8	21.3	0.4		73.4	
LOS				D	D	F	D	C	A		E	
Approach Delay (s/veh)					62.4			19.4			73.4	
Approach LOS					E			B			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay (s/veh): 51.6		Intersection LOS: D	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



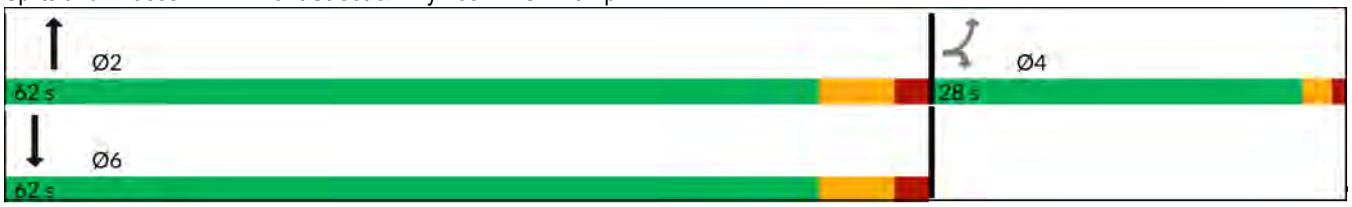


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	323	336	0	1647	1891	609
Future Volume (vph)	323	336	0	1647	1891	609
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			85.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99				0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3194	1365	0	4865	4818	1515
Flt Permitted	0.965					
Satd. Flow (perm)	3194	1347	0	4865	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13	13				408
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	336	350	0	1716	1970	634
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	469	217	0	1716	1970	634
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	28.0	28.0		62.0	62.0	
Total Split (%)	31.1%	31.1%		68.9%	68.9%	
Maximum Green (s)	25.0	25.0		54.7	54.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	16.0	16.0		36.3	36.3	63.3
Actuated g/C Ratio	0.25	0.25		0.57	0.57	1.00
v/c Ratio	0.58	0.62		0.61	0.71	0.43
Control Delay (s/veh)	24.5	30.5		10.1	11.6	0.9
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	24.5	30.5		10.1	11.6	0.9
LOS	C	C		B	B	A
Approach Delay (s/veh)	26.4			10.1	9.0	
Approach LOS	C			B	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 63.3			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 11.8		Intersection LOS: B	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	708	180	0	17	52	10
Future Vol, veh/h	708	180	0	17	52	10
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	722	184	0	17	53	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	906	0	823	466
Stage 1	-	-	-	-	814	-
Stage 2	-	-	-	-	9	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	759	-	316	549
Stage 1	-	-	-	-	401	-
Stage 2	-	-	-	-	1018	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	759	-	316	543
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	401	-
Stage 2	-	-	-	-	1018	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	339	-	-	759	-
HCM Lane V/C Ratio	0.187	-	-	-	-
HCM Ctrl Dly (s/v)	18	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	0.7	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	6	497	6	6	444
Future Vol, veh/h	4	6	497	6	6	444
Conflicting Peds, #/hr	0	0	0	1	1	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	86	86	86	86	86	86
Heavy Vehicles, %	0	0	4	0	0	3
Mvmt Flow	5	7	578	7	7	516

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1113	583	0	0	586	0
Stage 1	583	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	233	516	-	-	999	-
Stage 1	562	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	230	516	-	-	998	-
Mov Cap-2 Maneuver	367	-	-	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	588	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	444	998	-
HCM Lane V/C Ratio	-	-	0.026	0.007	-
HCM Ctrl Dly (s/v)	-	-	13.3	8.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	590	179	0	240	175	14
Future Vol, veh/h	590	179	0	240	175	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	656	199	0	267	194	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	855	0	890	428
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	793	-	286	581
Stage 1	-	-	-	-	430	-
Stage 2	-	-	-	-	884	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	793	-	286	581
Mov Cap-2 Maneuver	-	-	-	-	286	-
Stage 1	-	-	-	-	430	-
Stage 2	-	-	-	-	884	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	41.8
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	297	-	-	793	-
HCM Lane V/C Ratio	0.707	-	-	-	-
HCM Ctrl Dly (s/v)	41.8	-	-	0	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q (veh)	5	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	7	492	5	0	824
Future Vol, veh/h	14	7	492	5	0	824
Conflicting Peds, #/hr	0	0	0	1	1	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	99	99	99	99	99	99
Heavy Vehicles, %	0	0	2	0	0	1
Mvmt Flow	14	7	497	5	0	832

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1333	501	0	0	-	-
Stage 1	501	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	172	574	-	-	0	-
Stage 1	613	-	-	-	0	-
Stage 2	431	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	172	574	-	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	362	-
HCM Lane V/C Ratio	-	-	0.059	-
HCM Ctrl Dly (s/v)	-	-	15.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q (veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	543	274	0	62	75	9
Future Vol, veh/h	543	274	0	62	75	9
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	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	572	288	0	65	79	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	860	0	749	430
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	33	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	790	-	348	579
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	790	-	348	579
Mov Cap-2 Maneuver	-	-	-	-	348	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	985	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	364	-	-	790	-
HCM Lane V/C Ratio	0.243	-	-	-	-
HCM Ctrl Dly (s/v)	18	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q (veh)	0.9	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	431	3	3	467
Future Vol, veh/h	3	0	431	3	3	467
Conflicting Peds, #/hr	0	0	0	1	1	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	97	97	97	97	97	97
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	3	0	444	3	3	481

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	934	447	0	0	448	0
Stage 1	447	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	297	616	-	-	1123	-
Stage 1	649	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	296	615	-	-	1122	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	620	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1122	-
HCM Lane V/C Ratio	-	-	0.007	0.003	-
HCM Ctrl Dly (s/v)	-	-	13.6	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0	0	-

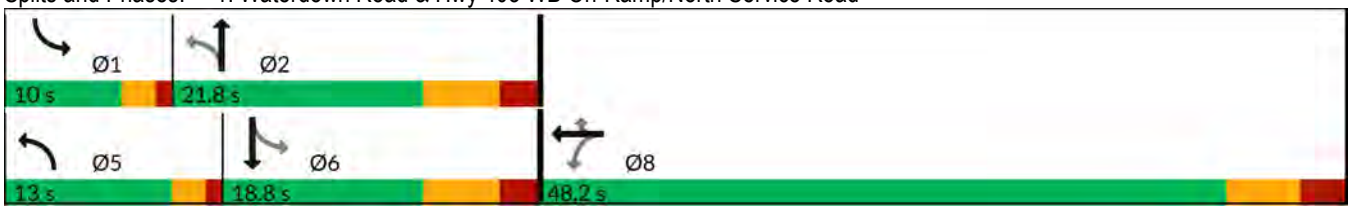
Appendix F-5:
2031 Future Total Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	70	105	0	420	581	271	78	485	158
Future Volume (vph)	0	0	0	70	105	0	420	581	271	78	485	158
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00							1.00	
Frt								0.952			0.963	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1607	1500	3042	0	1676	3118	0
Flt Permitted				0.950			0.259			0.315		
Satd. Flow (perm)	0	0	0	1512	1748	1607	409	3042	0	556	3118	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								84			46	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	74	112	0	447	618	288	83	516	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	74	112	0	447	906	0	83	684	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				48.2	48.2	48.2	13.0	21.8		10.0	18.8	
Total Split (%)				60.3%	60.3%	60.3%	16.3%	27.3%		12.5%	23.5%	
Maximum Green (s)				41.0	41.0	41.0	10.0	15.0		7.0	12.0	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.2	10.2		28.8	19.0		22.8	12.0	
Actuated g/C Ratio				0.21	0.21		0.59	0.39		0.46	0.24	
v/c Ratio				0.24	0.31		0.97	0.74		0.20	0.86	
Control Delay (s/veh)				18.5	19.3		49.0	19.8		6.2	30.7	
Queue Delay				0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)				18.5	19.3		49.0	19.8		6.2	30.7	
LOS				B	B		D	B		A	C	
Approach Delay (s/veh)					19.0			29.5			28.0	
Approach LOS					B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 49.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 28.1		Intersection LOS: C	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

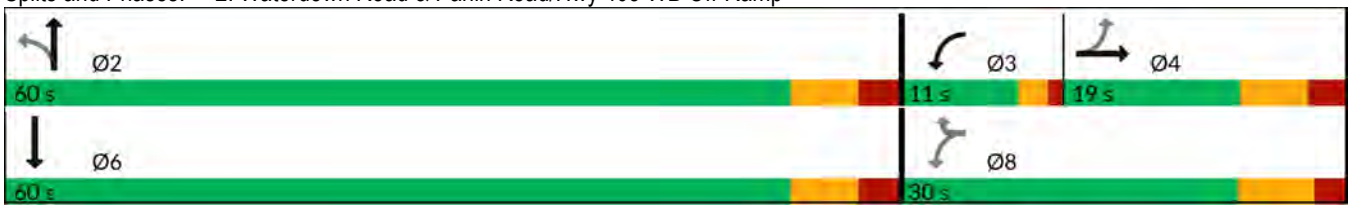


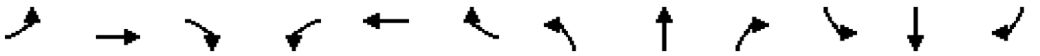
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	413	0	199	0	1016	0	0	554	3
Future Volume (vph)	1	0	5	413	0	199	0	1016	0	0	554	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3150	0
Flt Permitted		0.993		0.930								
Satd. Flow (perm)	0	1043	0	2900	0	1354	0	3167	0	0	3150	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				84					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	459	0	221	0	1129	0	0	616	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	459	0	221	0	1129	0	0	619	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.5		17.4		13.0		26.1			26.1	
Actuated g/C Ratio		0.19		0.32		0.24		0.48			0.48	
v/c Ratio		0.03		0.48		0.57		0.74			0.41	
Control Delay (s/veh)		0.2		18.2		19.4		14.8			9.9	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		18.2		19.4		14.8			9.9	
LOS		A		B		B		B			A	
Approach Delay (s/veh)		0.2			18.6			14.8			9.9	
Approach LOS		A			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 54.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 14.5		Intersection LOS: B	
Intersection Capacity Utilization 68.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp





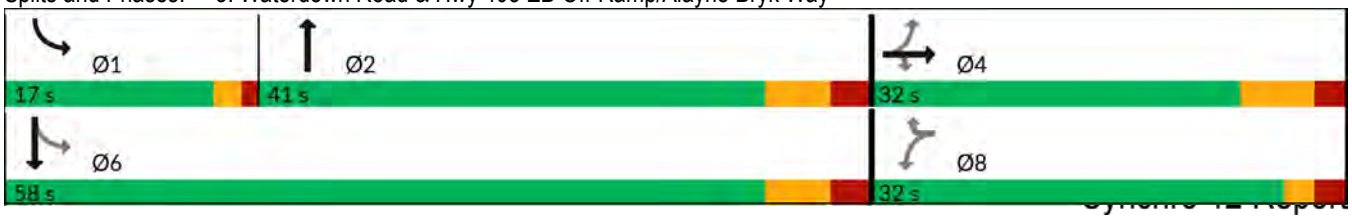
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	155	284	284	0	543	0	416	643	487	402	0
Future Volume (vph)	278	155	284	284	0	543	0	416	643	487	402	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.909				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2901	0	1583	3081	0
Flt Permitted	0.950			0.651						0.117		
Satd. Flow (perm)	1644	1748	1313	1135	0	765	0	2901	0	195	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						385		330				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	302	168	309	309	0	590	0	452	699	529	437	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	302	168	309	309	0	590	0	1151	0	529	437	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	32.0	32.0	32.0	32.0		32.0		41.0		17.0	58.0	
Total Split (%)	35.6%	35.6%	35.6%	35.6%		35.6%		45.6%		18.9%	64.4%	
Maximum Green (s)	24.9	24.9	24.9	27.9		27.9		34.0		14.0	51.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	26.8	26.8	26.8	29.9		29.9		31.3		52.4	48.4	
Actuated g/C Ratio	0.30	0.30	0.30	0.33		0.33		0.35		0.59	0.54	
v/c Ratio	0.61	0.32	0.78	0.82		1.15		0.96dr		1.59	0.26	
Control Delay (s/veh)	33.5	26.7	44.6	46.7		103.1		35.0		302.1	11.8	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	33.5	26.7	44.6	46.7		103.1		35.0		302.1	11.8	
LOS	C	C	D	D		F		D		F	B	
Approach Delay (s/veh)		36.4			83.7			35.0			170.8	
Approach LOS		D			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 89.4			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.59			
Intersection Signal Delay (s/veh): 81.4		Intersection LOS: F	
Intersection Capacity Utilization 100.9%		ICU Level of Service G	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

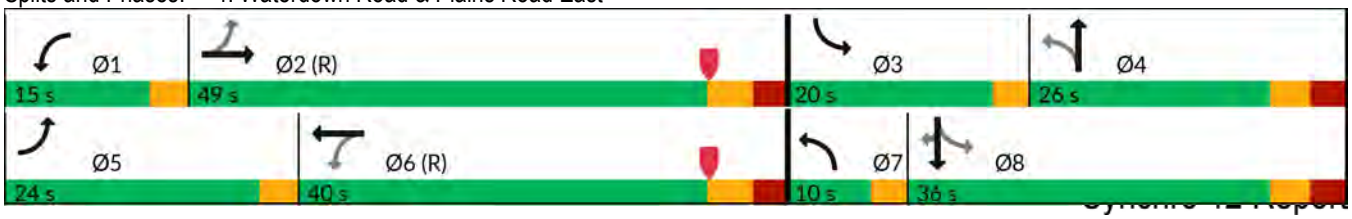


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	526	493	85	99	315	166	61	277	67	135	301	353
Future Volume (vph)	526	493	85	99	315	166	61	277	67	135	301	353
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.99		0.98		0.98
Frt		0.978			0.948			0.971				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3167	0	1629	2933	0	1676	1634	0	1541	1682	1366
Flt Permitted	0.229			0.408			0.488			0.303		
Satd. Flow (perm)	387	3167	0	689	2933	0	855	1634	0	482	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			90			10				316
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	584	548	94	110	350	184	68	308	74	150	334	392
Shared Lane Traffic (%)												
Lane Group Flow (vph)	584	642	0	110	534	0	68	382	0	150	334	392
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	24.0	49.0		15.0	40.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	21.8%	44.5%		13.6%	36.4%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	21.0	42.7		12.0	33.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	50.8	34.9		36.4	23.5		46.4	35.0		53.2	40.6	40.6
Actuated g/C Ratio	0.46	0.32		0.33	0.21		0.42	0.32		0.48	0.37	0.37
v/c Ratio	1.42	0.63		0.35	0.77		0.16	0.73		0.43	0.54	0.57
Control Delay (s/veh)	225.3	33.9		20.6	41.1		18.0	43.7		21.5	33.7	10.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	225.3	33.9		20.6	41.1		18.0	43.7		21.5	33.7	10.6
LOS	F	C		C	D		B	D		C	C	B
Approach Delay (s/veh)		125.1			37.6			39.8			21.3	
Approach LOS		F			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.42			
Intersection Signal Delay (s/veh): 67.0		Intersection LOS: E	
Intersection Capacity Utilization 99.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East



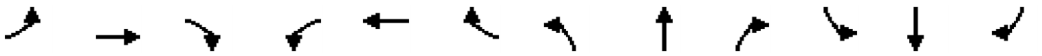
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1240	25	4	810	17	4
Future Volume (vph)	1240	25	4	810	17	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.997				0.974	
Flt Protected					0.961	
Satd. Flow (prot)	3223	0	0	3404	931	0
Flt Permitted				0.949	0.961	
Satd. Flow (perm)	3223	0	0	3230	931	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	1265	26	4	827	17	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1291	0	0	831	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	45.1			45.1	11.1	
Actuated g/C Ratio	0.93			0.93	0.23	
v/c Ratio	0.43			0.62	0.10	
Control Delay (s/veh)	2.1			6.8	16.5	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	2.1			6.8	16.5	
LOS	A			A	B	
Approach Delay (s/veh)	2.1			6.8	16.5	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.3			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 4.1		Intersection LOS: A	
Intersection Capacity Utilization 50.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way



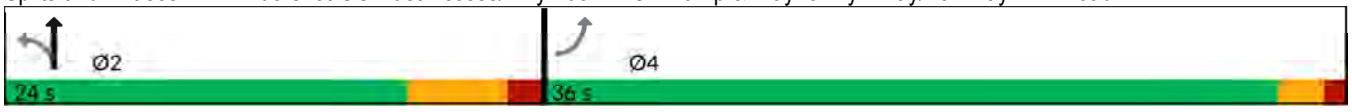


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	624	444	38	0	750	130	16	29	0	0	0	0
Future Volume (vph)	624	444	38	0	750	130	16	29	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988				0.850						
Flt Protected	0.950							0.983				
Satd. Flow (prot)	1629	1778	0	0	1800	1530	0	1769	1800	0	0	0
Flt Permitted	0.950							0.983				
Satd. Flow (perm)	1629	1778	0	0	1800	1530	0	1769	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				115						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	657	467	40	0	789	137	17	31	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	657	507	0	0	789	137	0	48	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	36.0						24.0	24.0				
Total Split (%)	60.0%						40.0%	40.0%				
Maximum Green (s)	33.0						18.0	18.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	20.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	34.7	0.0			0.0	0.0		11.6				
Actuated g/C Ratio	0.87	0.00			0.00	0.00		0.29				
v/c Ratio	0.46	101.40			no cap	1.19		0.09				
Control Delay (s/veh)	4.4	Error				162.0		18.2				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	4.4	Error			Error	162.0		18.2				
LOS	A	F			F	F		B				
Approach Delay (s/veh)		19838.8			Error			18.2				
Approach LOS		F			F			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 39.8			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 98.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

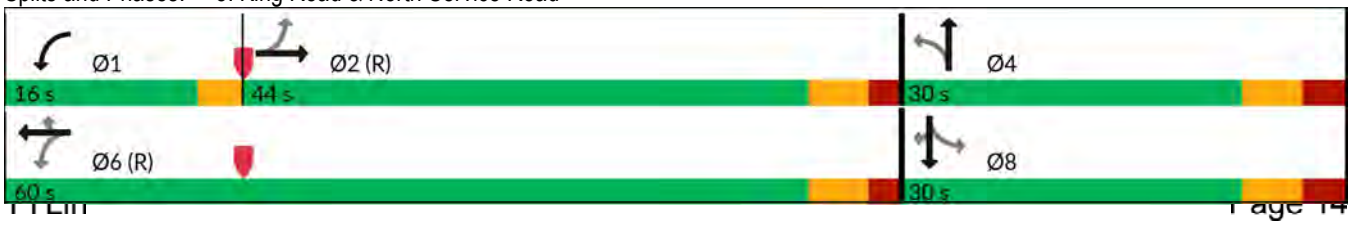


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	244	162	41	89	266	717	72	226	29
Future Volume (vph)	23	252	73	244	162	41	89	266	717	72	226	29
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.910				0.850
Flt Protected	0.950										0.988	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1770	1530
Flt Permitted	0.650			*0.470							0.544	
Satd. Flow (perm)	1073	1667	0	813	1714	1497	0	*3050	*3050	0	974	1496
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		114				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	254	169	43	93	277	747	75	235	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	254	169	43	0	1117	0	0	310	30
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	23.6	23.6		41.8	38.8	40.8		41.2			41.2	38.2
Actuated g/C Ratio	0.26	0.26		0.46	0.43	0.45		0.46			0.46	0.42
v/c Ratio	0.09	0.75		0.51	0.23	0.06		0.77			0.70	0.04
Control Delay (s/veh)	23.1	39.0		17.8	15.7	3.1		24.3			32.5	0.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.1	39.0		17.8	15.7	3.1		24.3			32.5	0.2
LOS	C	D		B	B	A		C			C	A
Approach Delay (s/veh)		37.9			15.7			24.3			29.7	
Approach LOS		D			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 25.5		Intersection LOS: C	
Intersection Capacity Utilization 131.2%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road

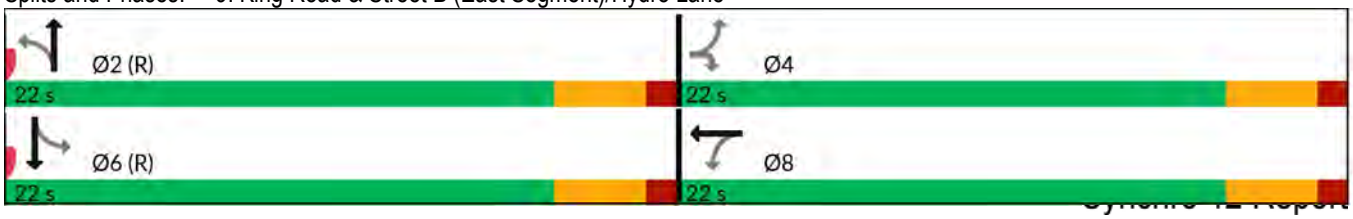


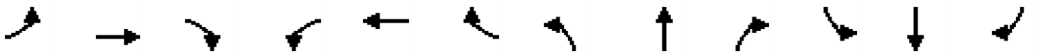
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	0	0	4	0	6	67	692	6	6	462	72
Future Volume (vph)	314	0	0	4	0	6	67	692	6	6	462	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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		1.00		
Frt					0.850			0.999			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1729	0	1710	1719	0
Flt Permitted	0.753			0.950			0.254			0.195		
Satd. Flow (perm)	1355	0	1800	1710	1530	0	457	1729	0	351	1719	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					79			1			22	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.2			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	365	0	0	5	0	7	78	805	7	7	537	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	365	0	0	5	7	0	78	812	0	7	621	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases					8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%		50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	15.5			15.5	15.5		20.5	20.5		20.5	20.5	
Actuated g/C Ratio	0.35			0.35	0.35		0.47	0.47		0.47	0.47	
v/c Ratio	0.77			0.01	0.01		0.37	1.01		0.04	0.76	
Control Delay (s/veh)	24.3			7.8	0.0		15.3	49.8		8.8	20.6	
Queue Delay	0.0			0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	24.3			7.8	0.0		15.3	49.8		8.8	20.6	
LOS	C			A	A		B	D		A	C	
Approach Delay (s/veh)		24.3			3.2			46.8			20.4	
Approach LOS		C			A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 33.5		Intersection LOS: C	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane





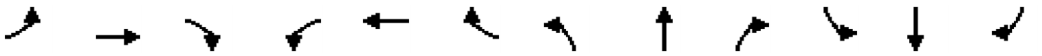
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	678	113	53	436	522	142	255	71	761	117	80
Future Volume (vph)	38	678	113	53	436	522	142	255	71	761	117	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	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	0.99		0.99		0.98
Frt			0.850		0.918			0.967				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	2911	0	1583	1700	0	1731	1765	1485
Flt Permitted	0.092			0.220			0.678			*0.420		
Satd. Flow (perm)	157	3226	1379	375	2911	0	1121	1700	0	719	1765	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		339			10				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.2	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	40	714	119	56	459	549	149	268	75	801	123	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	714	119	56	1008	0	149	343	0	801	123	84
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	51.8	46.3	46.3	52.0	46.4		39.5	27.0		66.9	50.4	48.0
Actuated g/C Ratio	0.40	0.36	0.36	0.40	0.36		0.30	0.21		0.51	0.39	0.37
v/c Ratio	0.29	0.62	0.22	0.26	0.80		0.39	0.95		1.23	0.18	0.14
Control Delay (s/veh)	24.2	36.7	7.9	22.5	29.3		25.2	85.8		144.8	31.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	24.2	36.7	7.9	22.5	29.3		25.2	85.8		144.8	31.5	7.0
LOS	C	D	A	C	C		C	F		F	C	A
Approach Delay (s/veh)		32.2			28.9			67.5			119.5	
Approach LOS		C			C			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay (s/veh): 61.8		Intersection LOS: E	
Intersection Capacity Utilization 115.0%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



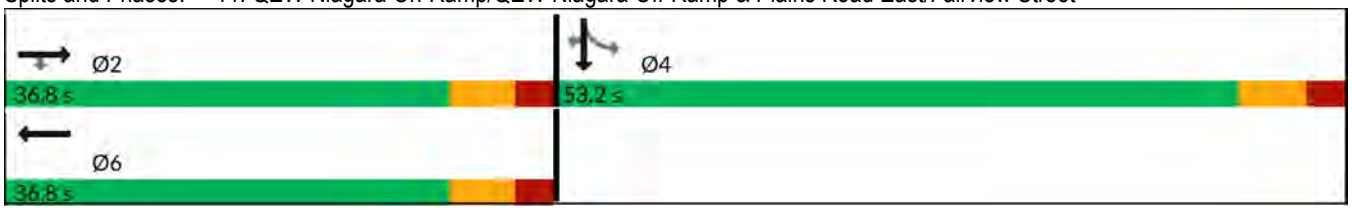


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1526	237	0	1292	318	0	0	0	288	1	252
Future Volume (vph)	0	1526	237	0	1292	318	0	0	0	288	1	252
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1316	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237			312						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1623	252	0	1374	338	0	0	0	306	1	268
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1623	252	0	1374	338	0	0	0	153	154	268
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		36.8	36.8		36.8					53.2	53.2	53.2
Total Split (%)		40.9%	40.9%		40.9%					59.1%	59.1%	59.1%
Maximum Green (s)		29.8	29.8		29.8					46.0	46.0	46.0
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		29.9	29.9		29.9	58.8				14.6	14.6	14.6
Actuated g/C Ratio		0.51	0.51		0.51	1.00				0.25	0.25	0.25
v/c Ratio		0.68	0.32		0.58	0.25				0.40	0.40	0.66
Control Delay (s/veh)		13.4	3.2		11.9	0.4				21.2	21.2	24.3
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		13.4	3.2		11.9	0.4				21.2	21.2	24.3
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		12.1			9.7						22.6	
Approach LOS		B			A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 58.8			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



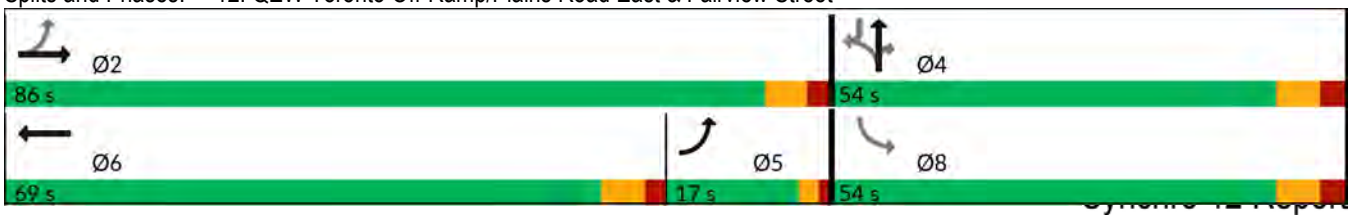
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	332	1384	70	0	1121	17	282	120	373	23	0	370
Future Volume (vph)	332	1384	70	0	1121	17	282	120	373	23	0	370
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.998			0.932	0.850			*0.900
Flt Protected	0.950						0.950	0.995		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4619	0	1533	1411	1384	1710	0	1543
Flt Permitted	0.159						0.950	0.995		0.436		
Satd. Flow (perm)	262	4725	1485	0	4619	0	1533	1411	1363	783	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			32	81			181
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	346	1442	73	0	1168	18	294	125	389	24	0	385
Shared Lane Traffic (%)							10%		33%			
Lane Group Flow (vph)	346	1442	73	0	1186	0	265	282	261	24	0	385
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

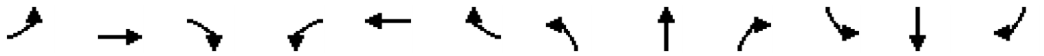
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	17.0	86.0			69.0		54.0	54.0	54.0	54.0		54.0
Total Split (%)	12.1%	61.4%			49.3%		38.6%	38.6%	38.6%	38.6%		38.6%
Maximum Green (s)	14.0	79.3			62.3		46.8	46.8	46.8	46.8		46.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	52.1	48.3	86.8		30.6		24.1	24.1	24.1	24.1		24.1
Actuated g/C Ratio	0.60	0.56	1.00		0.35		0.28	0.28	0.28	0.28		0.28
v/c Ratio	0.92	0.55	0.05		0.73		0.62	0.68	0.60	0.11		0.69
Control Delay (s/veh)	61.8	14.1	0.1		27.8		34.9	34.1	24.9	25.8		21.6
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	61.8	14.1	0.1		27.8		34.9	34.1	24.9	25.8		21.6
LOS	E	B	A		C		C	C	C	C		C
Approach Delay (s/veh)		22.4			27.8			31.4			21.8	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 86.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 25.5		Intersection LOS: C	
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



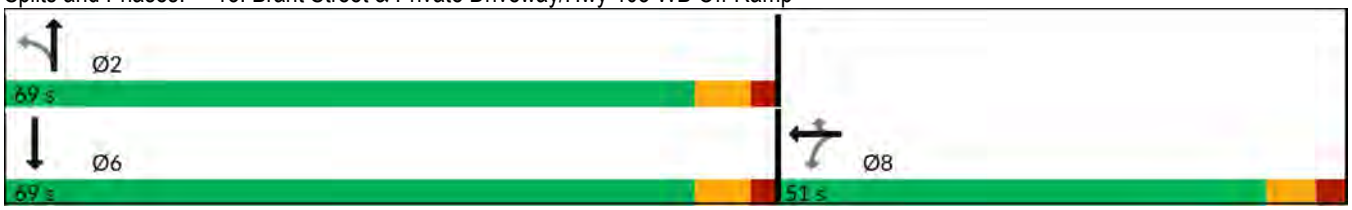


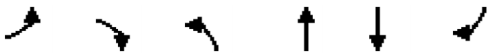
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	386	19	470	37	1123	159	0	1740	18
Future Volume (vph)	0	0	0	386	19	470	37	1123	159	0	1740	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850		0.998	
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4671	0
Flt Permitted				0.950	0.957		0.079					
Satd. Flow (perm)	0	0	0	1547	1556	1448	138	4680	1422	0	4671	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						48			127		2	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	406	20	495	39	1182	167	0	1832	19
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	211	215	495	39	1182	167	0	1851	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				51.0	51.0	51.0	69.0	69.0			69.0	
Total Split (%)				42.5%	42.5%	42.5%	57.5%	57.5%			57.5%	
Maximum Green (s)				43.8	43.8	43.8	61.8	61.8			61.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				37.5	37.5	37.5	50.6	50.6	103.0		50.6	
Actuated g/C Ratio				0.36	0.36	0.36	0.49	0.49	1.00		0.49	
v/c Ratio				0.38	0.38	0.89	0.57	0.51	0.12		0.81	
Control Delay (s/veh)				27.9	28.0	48.6	57.7	19.0	0.2		25.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				27.9	28.0	48.6	57.7	19.0	0.2		25.7	
LOS				C	C	D	E	B	A		C	
Approach Delay (s/veh)					39.1			17.8			25.7	
Approach LOS					D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 26.0		Intersection LOS: C	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



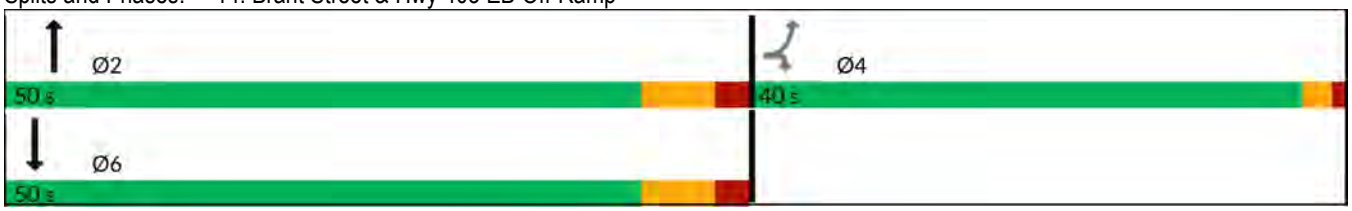


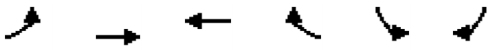
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	167	197	55	1129	1390	645
Future Volume (vph)	167	197	55	1129	1390	645
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Frt	0.951	0.850				0.850
Flt Protected	0.967			0.998		
Satd. Flow (prot)	3149	1339	0	4639	4680	1500
Flt Permitted	0.967			0.790		
Satd. Flow (perm)	3149	1339	0	3672	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16	16				557
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	176	207	58	1188	1463	679
Shared Lane Traffic (%)		41%				
Lane Group Flow (vph)	261	122	0	1246	1463	679
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	10.8	10.8		43.2	43.2	64.3
Actuated g/C Ratio	0.17	0.17		0.67	0.67	1.00
v/c Ratio	0.48	0.51		0.99	0.47	0.45
Control Delay (s/veh)	25.5	28.8		37.4	6.0	1.0
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	25.5	28.8		37.4	6.0	1.0
LOS	C	C		D	A	A
Approach Delay (s/veh)	26.5			37.4	4.4	
Approach LOS	C			D	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 64.3			
Natural Cycle: 70			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 17.6		Intersection LOS: B	
Intersection Capacity Utilization 75.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



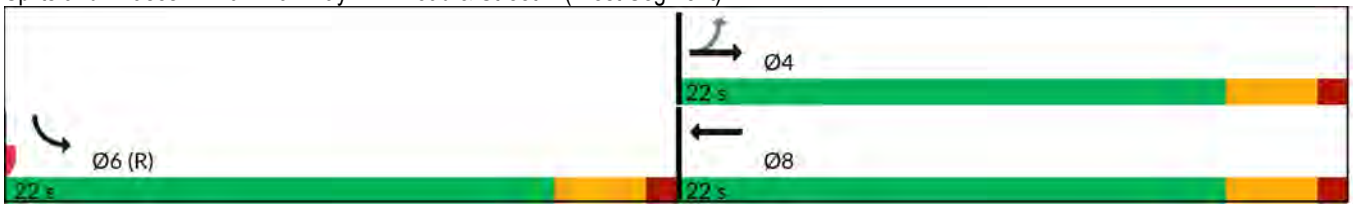


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	87	426	600	0	0	283
Future Volume (vph)	87	426	600	0	0	283
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.992				
Satd. Flow (prot)	0	3326	3353	0	1526	0
Flt Permitted		0.729				
Satd. Flow (perm)	0	2444	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					133	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	463	652	0	0	308
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	558	652	0	308	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		14.3	14.3		21.7	
Actuated g/C Ratio		0.33	0.33		0.49	
v/c Ratio		0.70	0.60		0.38	
Control Delay (s/veh)		17.7	21.8		6.4	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		17.7	21.8		6.4	
LOS		B	C		A	
Approach Delay (s/veh)		17.7	21.8		6.4	
Approach LOS		B	C		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 17.2		Intersection LOS: B	
Intersection Capacity Utilization 61.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)



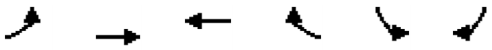
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	330	20	30	424	5	21	0	30	129	0	157
Future Volume (vph)	76	330	20	30	424	5	21	0	30	129	0	157
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998			0.920			0.926	
Flt Protected		0.991		0.950				0.980			0.978	
Satd. Flow (prot)	0	3300	0	1676	1761	0	0	1591	0	0	1598	0
Flt Permitted		0.732		0.470				0.860			0.846	
Satd. Flow (perm)	0	2437	0	829	1761	0	0	1396	0	0	1382	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			2			33			169	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	359	22	33	461	5	23	0	33	140	0	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	464	0	33	466	0	0	56	0	0	311	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		15.5		15.5	15.5			20.5			20.5	
Actuated g/C Ratio		0.35		0.35	0.35			0.47			0.47	
v/c Ratio		0.54		0.11	0.75			0.08			0.42	
Control Delay (s/veh)		23.9		10.7	22.5			5.2			6.5	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		23.9		10.7	22.5			5.2			6.5	
LOS		C		B	C			A			A	
Approach Delay (s/veh)		23.9			21.8			5.2			6.5	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



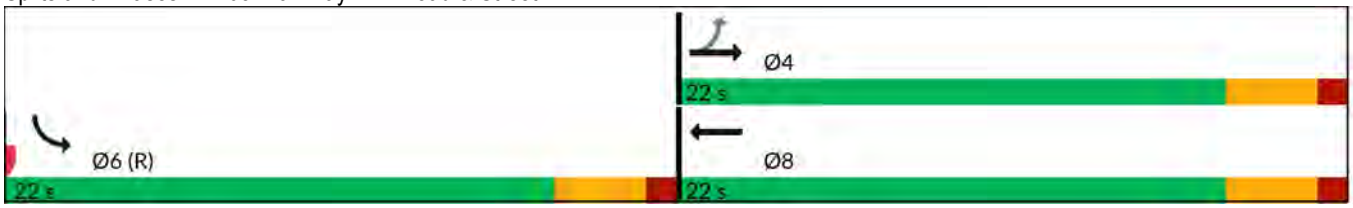


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	70	419	346	172	331	112
Future Volume (vph)	70	419	346	172	331	112
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.950		0.966	
Flt Protected		0.993			0.964	
Satd. Flow (prot)	0	3329	3185	0	1643	0
Flt Permitted		0.810			0.964	
Satd. Flow (perm)	0	2716	3185	0	1643	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			187		47	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	455	376	187	360	122
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	531	563	0	482	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		13.6	13.6		22.4	
Actuated g/C Ratio		0.31	0.31		0.51	
v/c Ratio		0.63	0.50		0.56	
Control Delay (s/veh)		23.0	9.2		11.6	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		23.0	9.2		11.6	
LOS		C	A		B	
Approach Delay (s/veh)		23.0	9.2		11.6	
Approach LOS		C	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 14.6		Intersection LOS: B	
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

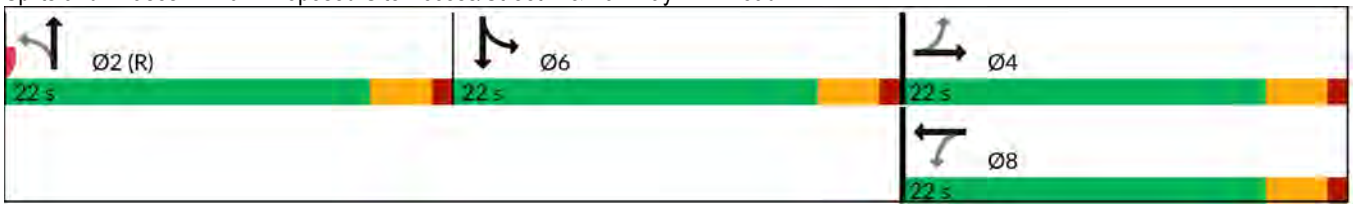


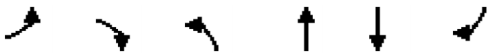
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	789	20	21	404	28	64	26	68	85	8	9
Future Volume (vph)	9	789	20	21	404	28	64	26	68	85	8	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.991			0.942			0.988	
Flt Protected		0.999			0.998			0.980			0.960	
Satd. Flow (prot)	0	3336	0	0	3316	0	0	1629	0	0	1674	0
Flt Permitted		0.948			0.766			0.934			0.960	
Satd. Flow (perm)	0	3166	0	0	2545	0	0	1553	0	0	1674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			10			57			7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			138.0			66.5			187.8	
Travel Time (s)		6.4			9.9			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	858	22	23	439	30	70	28	74	92	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	890	0	0	492	0	0	172	0	0	111	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		1.03			0.70			0.37			0.24	
Control Delay (s/veh)		64.3			27.4			15.7			19.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		64.3			27.4			15.7			19.2	
LOS		E			C			B			B	
Approach Delay (s/veh)		64.3			27.4			15.7			19.2	
Approach LOS		E			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 45.4		Intersection LOS: D	
Intersection Capacity Utilization 48.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



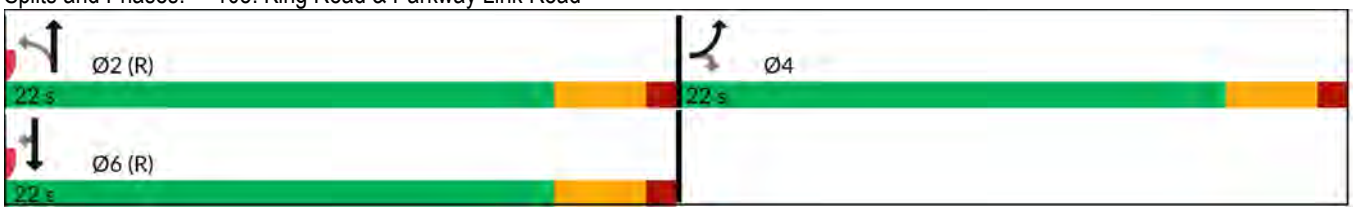


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	401	541	384	407	377	68
Future Volume (vph)	401	541	384	407	377	68
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.446			
Satd. Flow (perm)	1676	1500	787	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		297				74
Link Speed (k/h)	50			50	50	
Link Distance (m)	138.0			700.2	190.2	
Travel Time (s)	9.9			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	436	588	417	442	410	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	436	588	417	442	410	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	15.6	15.6	20.4	20.4	20.4	20.4
Actuated g/C Ratio	0.35	0.35	0.46	0.46	0.46	0.46
v/c Ratio	0.73	0.81	1.15	0.54	0.50	0.10
Control Delay (s/veh)	20.1	16.9	115.1	12.6	16.1	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	16.9	115.1	12.6	16.1	9.2
LOS	C	B	F	B	B	A
Approach Delay (s/veh)	18.3			62.3	15.0	
Approach LOS	B			E	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay (s/veh): 33.6		Intersection LOS: C	
Intersection Capacity Utilization 76.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

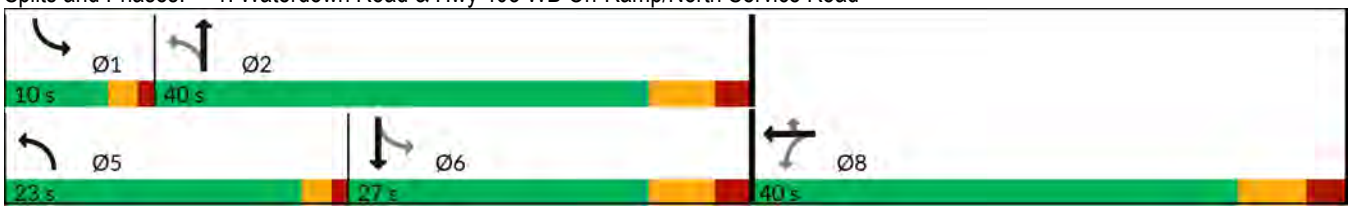


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	222	419	32	684	820	199	96	650	112
Future Volume (vph)	0	0	0	222	419	32	684	820	199	96	650	112
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.971			0.978	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3206	0	1710	3247	0
Flt Permitted				0.950			0.167			0.210		
Satd. Flow (perm)	0	0	0	1660	1782	1480	292	3206	0	378	3247	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						119		37			20	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	249	471	36	769	921	224	108	730	126
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	249	471	36	769	1145	0	108	856	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				40.0	40.0	40.0	23.0	40.0		10.0	27.0	
Total Split (%)				44.4%	44.4%	44.4%	25.6%	44.4%		11.1%	30.0%	
Maximum Green (s)				32.8	32.8	32.8	20.0	33.2		7.0	20.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				26.4	26.4	26.4	47.3	35.6		31.2	20.3	
Actuated g/C Ratio				0.31	0.31	0.31	0.56	0.42		0.37	0.24	
v/c Ratio				0.48	0.84	0.07	1.56	0.83		0.43	1.07	
Control Delay (s/veh)				26.1	41.1	0.2	285.2	29.7		17.8	84.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				26.1	41.1	0.2	285.2	29.7		17.8	84.5	
LOS				C	D	A	F	C		B	F	
Approach Delay (s/veh)					34.2			132.3			77.0	
Approach LOS					C			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 83.9			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.56			
Intersection Signal Delay (s/veh): 97.2		Intersection LOS: F	
Intersection Capacity Utilization 101.0%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

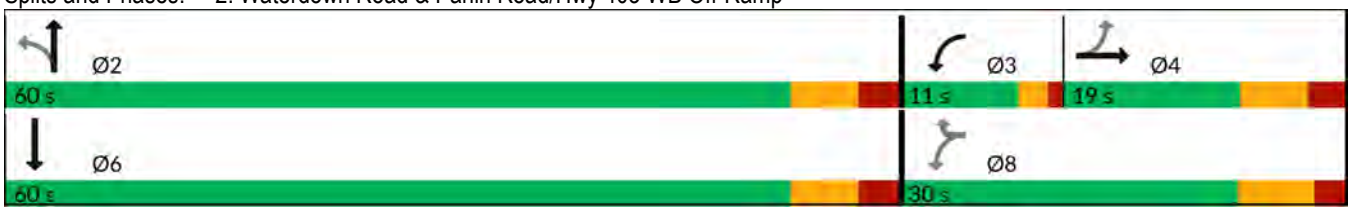


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	433	0	205	2	1334	0	0	885	0
Future Volume (vph)	0	0	5	433	0	205	2	1334	0	0	885	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.816				0.954				
Satd. Flow (perm)	0	1557	0	2766	0	1485	0	3137	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		95				51						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	522	0	247	2	1607	0	0	1066	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	522	0	247	0	1609	0	0	1066	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.7		20.4		16.1		43.4			43.4	
Actuated g/C Ratio		0.14		0.27		0.22		0.58			0.58	
v/c Ratio		0.02		0.60		0.69		0.88			0.55	
Control Delay (s/veh)		0.2		28.0		33.3		20.7			11.0	
Queue Delay		0.0		0.0		0.0		0.0			0.1	
Total Delay (s/veh)		0.2		28.0		33.3		20.7			11.1	
LOS		A		C		C		C			B	
Approach Delay (s/veh)		0.2			29.7			20.7			11.1	
Approach LOS		A			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 74.4			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 19.7		Intersection LOS: B	
Intersection Capacity Utilization 78.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



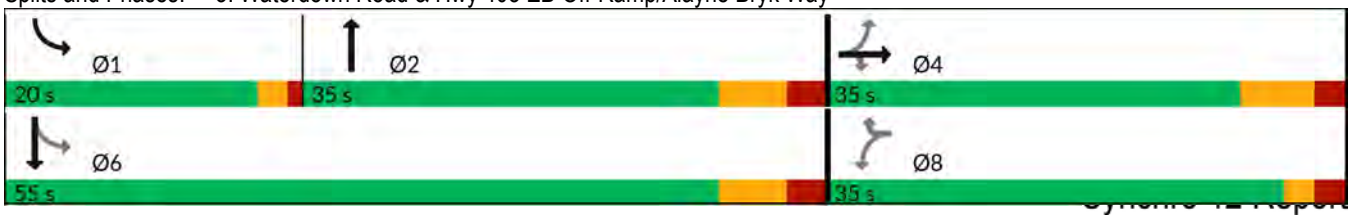
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	267	148	353	385	0	981	0	427	693	598	602	0
Future Volume (vph)	267	148	353	385	0	981	0	427	693	598	602	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.907				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	2976	0	1629	3353	0
Flt Permitted	0.950			0.652						0.129		
Satd. Flow (perm)	1644	1667	1485	2128	0	1471	0	2976	0	221	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						501		350				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	300	166	397	433	0	1102	0	480	779	672	676	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	300	166	397	433	0	1102	0	1259	0	672	676	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.0	35.0	35.0	35.0		35.0		35.0		20.0	55.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%		38.9%		38.9%		22.2%	61.1%	
Maximum Green (s)	27.9	27.9	27.9	30.9		30.9		28.0		17.0	48.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	29.3	29.3	29.3	32.3		32.3		28.0		52.0	48.0	
Actuated g/C Ratio	0.32	0.32	0.32	0.35		0.35		0.31		0.57	0.53	
v/c Ratio	0.57	0.31	0.84	0.58		1.31		1.12dr		1.74	0.38	
Control Delay (s/veh)	30.7	25.2	45.6	27.5		164.4		78.5		363.8	14.0	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	30.7	25.2	45.6	27.5		164.4		78.5		363.8	14.0	
LOS	C	C	D	C		F		E		F	B	
Approach Delay (s/veh)		36.5			125.8			78.5			188.4	
Approach LOS		D			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 91.4			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.74			
Intersection Signal Delay (s/veh): 115.4		Intersection LOS: F	
Intersection Capacity Utilization 130.9%		ICU Level of Service H	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

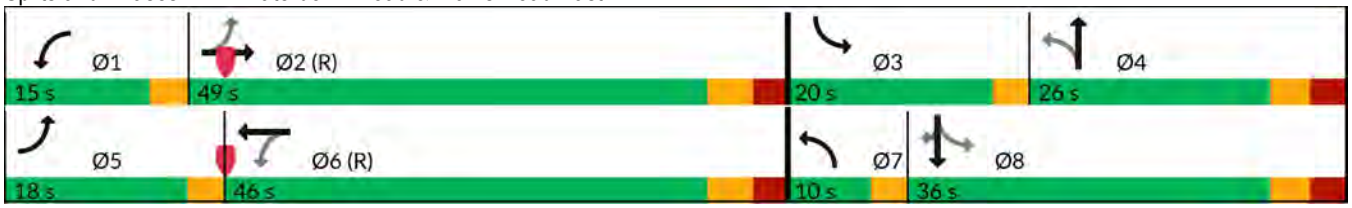


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	606	85	100	1070	125	184	317	58	252	331	614
Future Volume (vph)	450	606	85	100	1070	125	184	317	58	252	331	614
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.981			0.984			0.977				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3274	0	1676	3247	0	1676	1648	0	1676	1682	1500
Flt Permitted	0.094			0.335			0.454			0.169		
Satd. Flow (perm)	164	3274	0	590	3247	0	794	1648	0	296	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			13			7				261
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	469	631	89	104	1115	130	192	330	60	263	345	640
Shared Lane Traffic (%)												
Lane Group Flow (vph)	469	720	0	104	1245	0	192	390	0	263	345	640
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	61.0	46.0		51.7	39.7		31.0	20.7		43.0	29.7	29.7
Actuated g/C Ratio	0.55	0.42		0.47	0.36		0.28	0.19		0.39	0.27	0.27
v/c Ratio	1.60	0.52		0.29	1.06		0.69	1.24		0.83	0.76	1.10
Control Delay (s/veh)	308.8	25.3		14.2	76.5		41.6	169.0		48.8	49.1	89.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	308.8	25.3		14.2	76.5		41.6	169.0		48.8	49.1	89.9
LOS	F	C		B	E		D	F		D	D	F
Approach Delay (s/veh)		137.1			71.7			127.0			70.0	
Approach LOS		F			E			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay (s/veh): 96.4		Intersection LOS: F	
Intersection Capacity Utilization 116.2%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1381	34	0	1340	24	13
Future Volume (vph)	1381	34	0	1340	24	13
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.996				0.953	
Flt Protected					0.969	
Satd. Flow (prot)	3263	0	0	3420	1043	0
Flt Permitted					0.969	
Satd. Flow (perm)	3263	0	0	3420	1043	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	9				14	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	1518	37	0	1473	26	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1555	0	0	1473	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.6			41.6	11.1	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.56			0.50	0.16	
Control Delay (s/veh)	5.2			4.2	13.9	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	5.2			4.2	13.9	
LOS	A			A	B	
Approach Delay (s/veh)	5.2			4.2	13.9	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.7			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 4.8		Intersection LOS: A	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

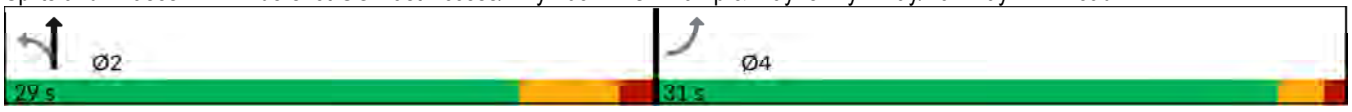


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	559	685	13	0	973	112	226	45	0	0	0	0
Future Volume (vph)	559	685	13	0	973	112	226	45	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997				0.850						
Flt Protected	0.950							0.960				
Satd. Flow (prot)	1644	1795	0	0	1800	1530	0	1728	1800	0	0	0
Flt Permitted	0.950							0.960				
Satd. Flow (perm)	1644	1795	0	0	1800	1530	0	1728	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				109						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	682	835	16	0	1187	137	276	55	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	682	851	0	0	1187	137	0	331	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	31.0						29.0	29.0				
Total Split (%)	51.7%						48.3%	48.3%				
Maximum Green (s)	28.0						23.0	23.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	20.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	25.0	0.0			0.0	0.0		15.1				
Actuated g/C Ratio	0.51	0.00			0.00	0.00		0.31				
v/c Ratio	0.82	851.00			no cap	1.26		0.63				
Control Delay (s/veh)	22.2	Error				188.6		21.1				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	22.2	Error			Error	188.6		21.1				
LOS	C	F			F	F		C				
Approach Delay (s/veh)		213339.3			Error			21.1				
Approach LOS		F			F			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 49.3			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 120.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road



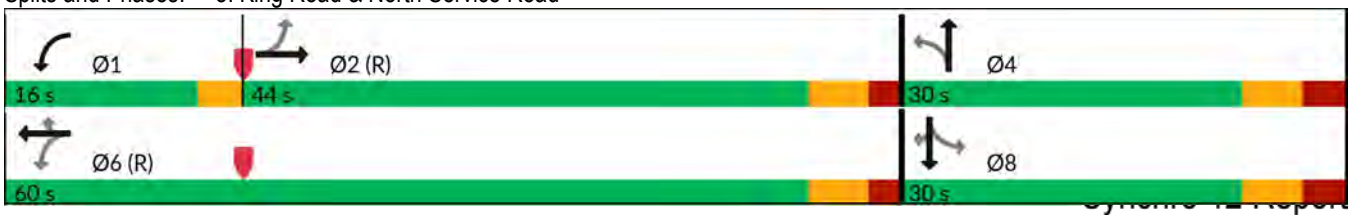
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	553	563	73	51	331	671	61	361	20
Future Volume (vph)	14	267	92	553	563	73	51	331	671	61	361	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.914				0.850
Flt Protected	0.950										0.993	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1752	1530
Flt Permitted	0.402			*0.470							0.622	
Satd. Flow (perm)	724	1698	0	829	1765	1469	0	*3050	*3050	0	1098	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				48		99				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	582	593	77	54	348	706	64	380	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	582	593	77	0	1108	0	0	444	21
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	24.8	24.8		43.8	40.8	42.8		39.2			39.2	36.2
Actuated g/C Ratio	0.28	0.28		0.49	0.45	0.48		0.44			0.44	0.40
v/c Ratio	0.08	0.78		1.08	0.74	0.11		0.80			0.93	0.03
Control Delay (s/veh)	21.6	39.0		83.8	25.9	5.2		27.2			55.2	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	21.6	39.0		83.8	25.9	5.2		27.2			55.2	0.1
LOS	C	D		F	C	A		C			E	A
Approach Delay (s/veh)		38.4			51.5			27.2			52.7	
Approach LOS		D			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 41.7		Intersection LOS: D	
Intersection Capacity Utilization 156.5%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road

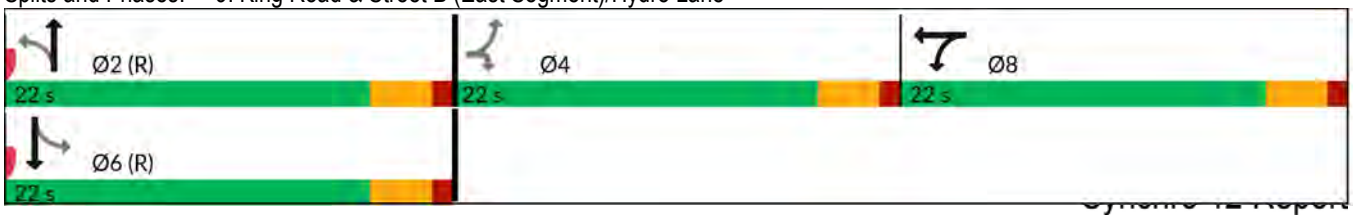


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	385	0	0	13	0	7	135	583	5	0	871	119
Future Volume (vph)	385	0	0	13	0	7	135	583	5	0	871	119
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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				
Frt					0.850			0.999			0.982	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1763	0	1800	1752	0
Flt Permitted	0.222			0.950			0.129					
Satd. Flow (perm)	400	0	1800	1710	1530	0	232	1763	0	1800	1752	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					114			1			10	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
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 (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	389	0	0	13	0	7	136	589	5	0	880	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	389	0	0	13	7	0	136	594	0	0	1000	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA		Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.3	8.3		33.5	33.5			33.5	
Actuated g/C Ratio	0.27			0.13	0.13		0.51	0.51			0.51	
v/c Ratio	3.57			0.06	0.02		1.16	0.66			1.12	
Control Delay (s/veh)	Error			22.8	0.1		159.3	22.0			89.7	
Queue Delay	0.0			0.0	0.0		0.0	0.0			0.0	
Total Delay (s/veh)	Error			22.8	0.1		159.3	22.0			89.7	
LOS	F			C	A		F	C			F	
Approach Delay (s/veh)		1192.4			14.9			47.6			89.7	
Approach LOS		F			B			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.57			
Intersection Signal Delay (s/veh): 275.2		Intersection LOS: F	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane



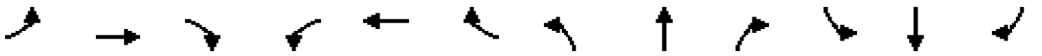
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	897	195	114	1223	1024	156	300	70	834	281	151
Future Volume (vph)	18	897	195	114	1223	1024	156	300	70	834	281	151
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.97		0.99	0.99		0.99		0.97
Frt			0.850		0.932			0.972				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	2989	0	1613	1686	0	1765	1800	1500
Flt Permitted	0.062			0.205			0.308			*0.420		
Satd. Flow (perm)	112	3320	1393	367	2989	0	519	1686	0	734	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			119		236			8				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	18	915	199	116	1248	1045	159	306	71	851	287	154
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	915	199	116	2293	0	159	377	0	851	287	154
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	72.3	66.0	66.0	75.5	72.7		37.7	27.0		44.2	30.3	27.9
Actuated g/C Ratio	0.56	0.51	0.51	0.58	0.56		0.29	0.21		0.34	0.23	0.21
v/c Ratio	0.13	0.54	0.26	0.41	1.29		0.66	1.06		2.36	0.68	0.40
Control Delay (s/veh)	13.1	23.2	8.1	16.1	160.7		46.3	112.1		643.1	55.2	21.9
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)	13.1	23.2	8.1	16.1	160.7		46.3	112.1		643.1	55.2	21.9
LOS	B	C	A	B	F		D	F		F	E	C
Approach Delay (s/veh)		20.4			153.7			92.6			438.5	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.36			
Intersection Signal Delay (s/veh): 188.0		Intersection LOS: F	
Intersection Capacity Utilization 160.6%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



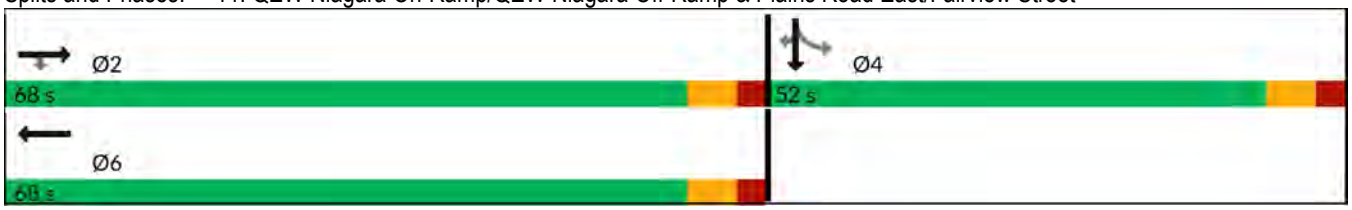


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1659	474	0	2163	1389	0	0	0	625	7	549
Future Volume (vph)	0	1659	474	0	2163	1389	0	0	0	625	7	549
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1614	1485
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1614	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			447			612						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1693	484	0	2207	1417	0	0	0	638	7	560
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	0	1693	484	0	2207	1417	0	0	0	325	320	560
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		68.0	68.0		68.0					52.0	52.0	52.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		61.0	61.0		61.0					44.8	44.8	44.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		59.5	59.5		59.5	118.5				44.8	44.8	44.8
Actuated g/C Ratio		0.50	0.50		0.50	1.00				0.38	0.38	0.38
v/c Ratio		0.71	0.51		0.91	0.97				0.54	0.53	0.97
Control Delay (s/veh)		24.7	4.3		34.0	19.4				33.1	32.8	66.4
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		24.7	4.3		34.0	19.4				33.1	32.8	66.4
LOS		C	A		C	B				C	C	E
Approach Delay (s/veh)		20.2			28.3						48.5	
Approach LOS		C			C						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 118.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 29.2		Intersection LOS: C	
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



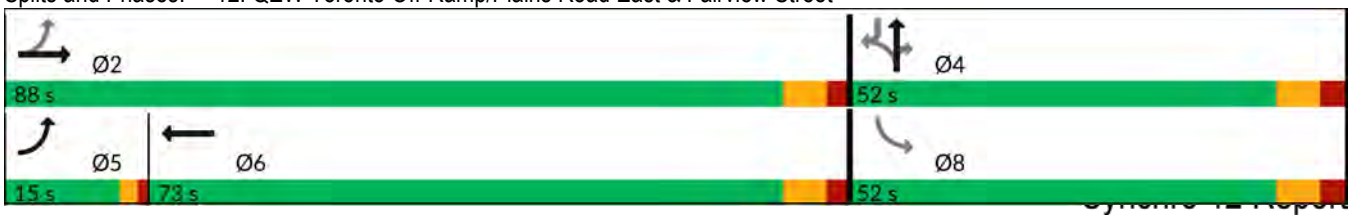
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	1787	103	0	2643	16	301	219	386	15	0	620
Future Volume (vph)	330	1787	103	0	2643	16	301	219	386	15	0	620
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.962	0.850			*0.900
Flt Protected	0.950						0.950	0.995		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4808	0	1577	1530	1425	1710	0	1588
Flt Permitted	0.058						0.950	0.995		0.324		
Satd. Flow (perm)	100	4818	1451	0	4808	0	1577	1530	1405	583	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			13	52			167
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	337	1823	105	0	2697	16	307	223	394	15	0	633
Shared Lane Traffic (%)							10%		22%			
Lane Group Flow (vph)	337	1823	105	0	2713	0	276	341	307	15	0	633
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	15.0	88.0			73.0		52.0	52.0	52.0	52.0		52.0
Total Split (%)	10.7%	62.9%			52.1%		37.1%	37.1%	37.1%	37.1%		37.1%
Maximum Green (s)	12.0	81.3			66.3		44.8	44.8	44.8	44.8		44.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	85.0	81.3	140.0		66.3		44.8	44.8	44.8	44.8		44.8
Actuated g/C Ratio	0.61	0.58	1.00		0.47		0.32	0.32	0.32	0.32		0.32
v/c Ratio	1.75	0.65	0.07		1.19		0.55	0.68	0.63	0.08		1.02
Control Delay (s/veh)	383.3	21.2	0.1		124.9		44.2	48.0	40.2	34.9		75.5
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	383.3	21.2	0.1		124.9		44.2	48.0	40.2	34.9		75.5
LOS	F	C	A		F		D	D	D	C		E
Approach Delay (s/veh)		74.1			124.9			44.3			74.6	
Approach LOS		E			F			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.75			
Intersection Signal Delay (s/veh): 91.0		Intersection LOS: F	
Intersection Capacity Utilization 132.3%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



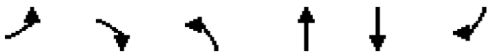
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	99	9	57	78	1732	617	0	2119	25
Future Volume (vph)	0	0	0	99	9	57	78	1732	617	0	2119	25
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850		0.998	
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1601	1485	1676	4771	1515	0	4775	0
Flt Permitted				0.950	0.960		0.060					
Satd. Flow (perm)	0	0	0	1577	1601	1485	106	4771	1480	0	4775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			427		5	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	104	9	60	82	1823	649	0	2231	26
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	56	57	60	82	1823	649	0	2257	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.0	10.0	10.0	71.8	71.8	91.2		71.8	
Actuated g/C Ratio				0.11	0.11	0.11	0.79	0.79	1.00		0.79	
v/c Ratio				0.32	0.33	0.29	0.99	0.49	0.44		0.60	
Control Delay (s/veh)				43.0	42.9	17.6	119.6	5.0	0.9		6.1	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				43.0	42.9	17.6	119.6	5.0	0.9		6.1	
LOS				D	D	B	F	A	A		A	
Approach Delay (s/veh)					34.1			7.7			6.1	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 91.2			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



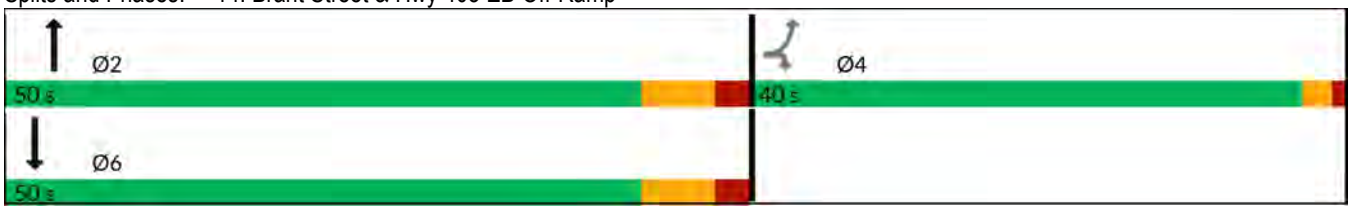


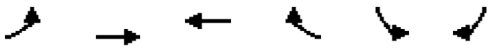
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	234	131	1904	1614	367
Future Volume (vph)	231	234	131	1904	1614	367
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Ped Bike Factor				1.00		0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965			0.997		
Satd. Flow (prot)	3094	1352	0	4809	4771	1485
Flt Permitted	0.965			0.665		
Satd. Flow (perm)	3094	1352	0	3208	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8	8				273
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	238	241	135	1963	1664	378
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	327	152	0	2098	1664	378
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	12.6	12.6		42.8	42.8	65.7
Actuated g/C Ratio	0.19	0.19		0.65	0.65	1.00
v/c Ratio	0.55	0.58		2.29	0.54	0.26
Control Delay (s/veh)	26.8	31.7		599.9	7.3	0.4
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	26.8	31.7		599.9	7.3	0.4
LOS	C	C		F	A	A
Approach Delay (s/veh)	28.4			599.9	6.1	
Approach LOS	C			F	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65.7			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 2.29			
Intersection Signal Delay (s/veh): 278.1		Intersection LOS: F	
Intersection Capacity Utilization 99.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



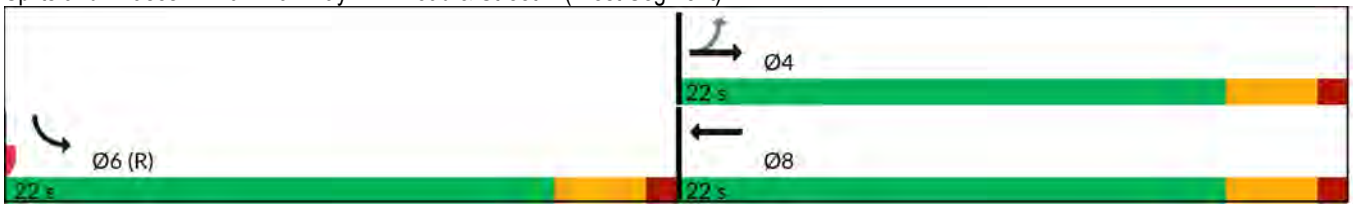


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	141	594	896	0	0	192
Future Volume (vph)	141	594	896	0	0	192
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.991				
Satd. Flow (prot)	0	3323	3353	0	1526	0
Flt Permitted		0.586				
Satd. Flow (perm)	0	1965	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					44	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	646	974	0	0	209
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	799	974	0	209	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		18.0	18.0		18.0	
Actuated g/C Ratio		0.41	0.41		0.41	
v/c Ratio		1.00	0.71		0.32	
Control Delay (s/veh)		48.3	18.1		8.6	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		48.3	18.1		8.6	
LOS		D	B		A	
Approach Delay (s/veh)		48.3	18.1		8.6	
Approach LOS		D	B		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 29.3		Intersection LOS: C	
Intersection Capacity Utilization 70.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)



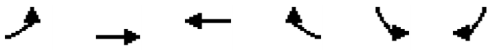
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	433	118	207	606	14	158	0	200	68	0	133
Future Volume (vph)	45	433	118	207	606	14	158	0	200	68	0	133
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.997			0.925			0.911	
Flt Protected		0.996		0.950				0.978			0.983	
Satd. Flow (prot)	0	3239	0	1676	1759	0	0	1596	0	0	1580	0
Flt Permitted		0.747		0.358				0.792			0.821	
Satd. Flow (perm)	0	2430	0	632	1759	0	0	1293	0	0	1320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		83			3			175			130	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	471	128	225	659	15	172	0	217	74	0	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	648	0	225	674	0	0	389	0	0	219	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		17.9		17.9	17.9			18.1			18.1	
Actuated g/C Ratio		0.41		0.41	0.41			0.41			0.41	
v/c Ratio		0.62		0.88	0.94			0.61			0.35	
Control Delay (s/veh)		19.0		47.7	37.3			10.6			6.0	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		19.0		47.7	37.3			10.6			6.0	
LOS		B		D	D			B			A	
Approach Delay (s/veh)		19.0			39.9			10.6			6.0	
Approach LOS		B			D			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 24.9		Intersection LOS: C	
Intersection Capacity Utilization 95.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



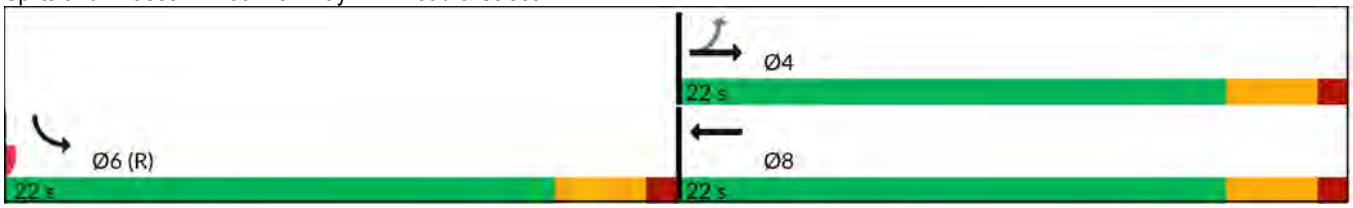


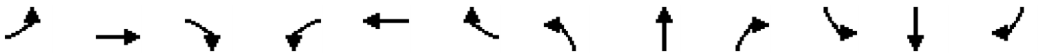
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	137	564	697	227	201	129
Future Volume (vph)	137	564	697	227	201	129
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.963		0.947	
Flt Protected		0.990			0.970	
Satd. Flow (prot)	0	3319	3229	0	1621	0
Flt Permitted		0.579			0.970	
Satd. Flow (perm)	0	1941	3229	0	1621	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			121		89	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	149	613	758	247	218	140
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	762	1005	0	358	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		18.0	18.0		18.0	
Actuated g/C Ratio		0.41	0.41		0.41	
v/c Ratio		0.96	0.72		0.50	
Control Delay (s/veh)		38.6	13.1		10.1	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		38.6	13.1		10.1	
LOS		D	B		B	
Approach Delay (s/veh)		38.6	13.1		10.1	
Approach LOS		D	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 21.7		Intersection LOS: C	
Intersection Capacity Utilization 78.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D



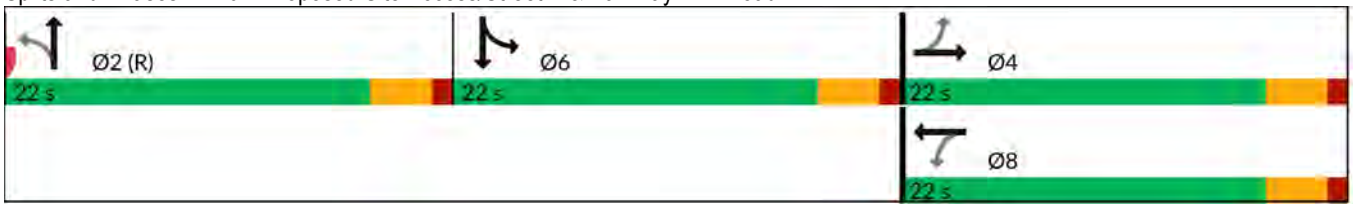


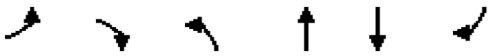
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	767	27	35	857	47	47	21	39	49	13	54
Future Volume (vph)	70	767	27	35	857	47	47	21	39	49	13	54
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.993			0.951			0.937	
Flt Protected		0.996			0.998			0.978			0.979	
Satd. Flow (prot)	0	3323	0	0	3323	0	0	1641	0	0	1619	0
Flt Permitted		0.530			0.681			0.711			0.979	
Satd. Flow (perm)	0	1768	0	0	2267	0	0	1193	0	0	1619	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			8			42			59	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	834	29	38	932	51	51	23	42	53	14	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	939	0	0	1021	0	0	116	0	0	126	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		1.94			1.64			0.33			0.26	
Control Delay (s/veh)		450.1			316.6			15.9			12.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		450.1			316.6			15.9			12.6	
LOS		F			F			B			B	
Approach Delay (s/veh)		450.1			316.6			15.9			12.6	
Approach LOS		F			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.94			
Intersection Signal Delay (s/veh): 340.3		Intersection LOS: F	
Intersection Capacity Utilization 72.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



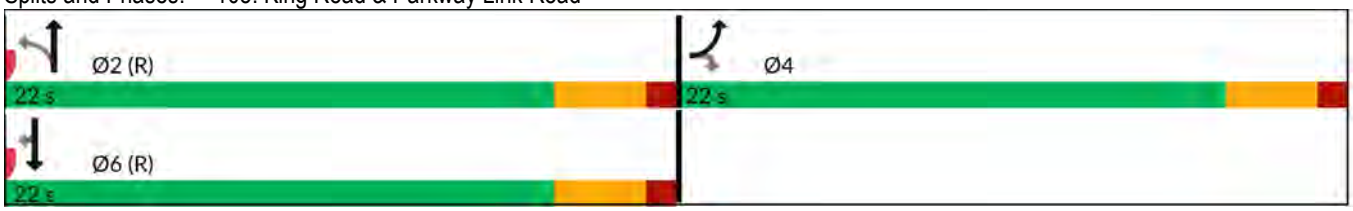


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	298	556	799	497	706	141
Future Volume (vph)	298	556	799	497	706	141
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. 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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.216			
Satd. Flow (perm)	1676	1500	381	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		90				131
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	324	604	868	540	767	153
Shared Lane Traffic (%)						
Lane Group Flow (vph)	324	604	868	540	767	153
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	17.5	17.5	18.5	18.5	18.5	18.5
Actuated g/C Ratio	0.40	0.40	0.42	0.42	0.42	0.42
v/c Ratio	0.49	0.93	5.46	0.73	1.04	0.22
Control Delay (s/veh)	12.7	36.3	Error	19.1	61.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	36.3	Error	19.1	61.2	3.7
LOS	B	D	F	B	E	A
Approach Delay (s/veh)	28.0			1256.7	51.6	
Approach LOS	C			F	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 5.46			
Intersection Signal Delay (s/veh): 566.0		Intersection LOS: F	
Intersection Capacity Utilization 113.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

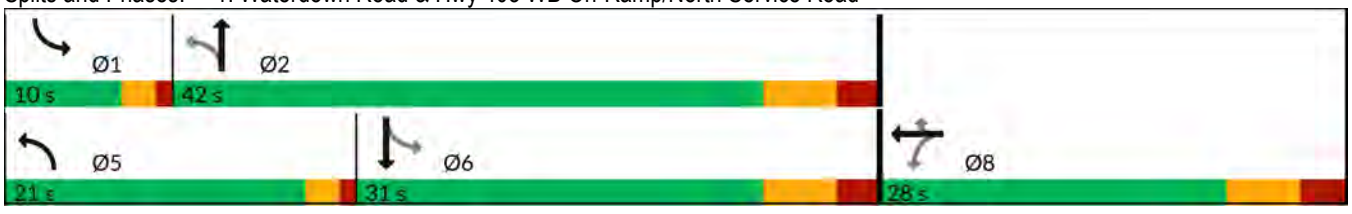


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	126	222	76	584	644	172	133	639	109
Future Volume (vph)	0	0	0	126	222	76	584	644	172	133	639	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.968			0.978	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3254	0	1710	3307	0
Flt Permitted				0.950			0.203			0.338		
Satd. Flow (perm)	0	0	0	1693	1782	1510	358	3254	0	608	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		54			25	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	129	227	78	596	657	176	136	652	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	129	227	78	596	833	0	136	763	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				28.0	28.0	28.0	21.0	42.0		10.0	31.0	
Total Split (%)				35.0%	35.0%	35.0%	26.3%	52.5%		12.5%	38.8%	
Maximum Green (s)				20.8	20.8	20.8	18.0	35.2		7.0	24.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				14.5	14.5	14.5	45.2	33.6		31.0	20.1	
Actuated g/C Ratio				0.21	0.21	0.21	0.65	0.48		0.44	0.29	
v/c Ratio				0.37	0.62	0.19	1.04	0.52		0.36	0.79	
Control Delay (s/veh)				27.7	33.6	2.1	67.4	14.4		10.0	29.3	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				27.7	33.6	2.1	67.4	14.4		10.0	29.3	
LOS				C	C	A	E	B		B	C	
Approach Delay (s/veh)					26.2			36.5			26.4	
Approach LOS					C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 70			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 31.6		Intersection LOS: C	
Intersection Capacity Utilization 83.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

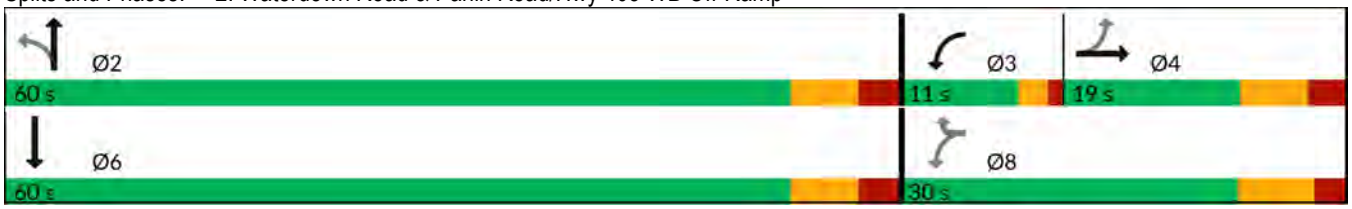


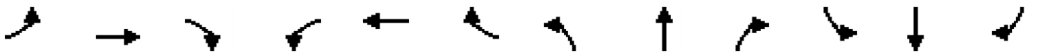
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	584	0	246	1	1079	0	0	737	0
Future Volume (vph)	1	0	1	584	0	246	1	1079	0	0	737	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.930				0.954				
Satd. Flow (perm)	0	1637	0	3153	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				83						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	615	0	259	1	1136	0	0	776	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	615	0	259	0	1137	0	0	776	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.5		17.8		13.3		26.3			26.3	
Actuated g/C Ratio		0.19		0.32		0.24		0.48			0.48	
v/c Ratio		0.01		0.59		0.60		0.74			0.48	
Control Delay (s/veh)		0.0		19.5		20.2		14.8			10.7	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		19.5		20.2		14.8			10.7	
LOS		A		B		C		B			B	
Approach Delay (s/veh)					19.7			14.8			10.7	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 54.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 15.2		Intersection LOS: B	
Intersection Capacity Utilization 73.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



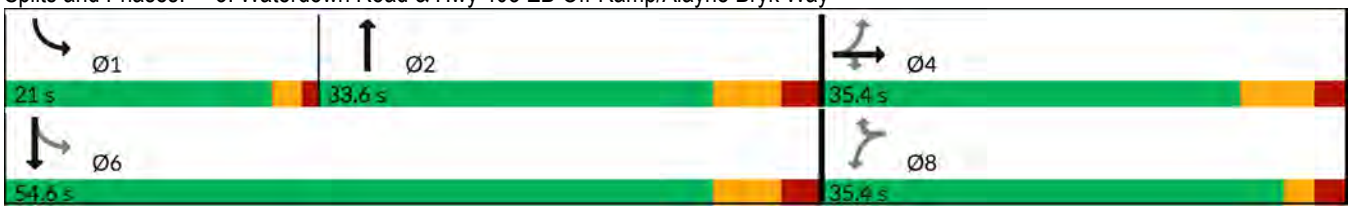


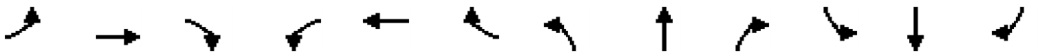
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	442	348	188	264	0	700	0	428	673	589	605	0
Future Volume (vph)	442	348	188	264	0	700	0	428	673	589	605	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.908				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3056	0	1676	3353	0
Flt Permitted	0.950			0.387						0.135		
Satd. Flow (perm)	1693	1782	1452	1185	0	1430	0	3056	0	238	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						526		157				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	470	370	200	281	0	745	0	455	716	627	644	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	470	370	200	281	0	745	0	1171	0	627	644	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.4	35.4	35.4	35.4		35.4		33.6		21.0	54.6	
Total Split (%)	39.3%	39.3%	39.3%	39.3%		39.3%		37.3%		23.3%	60.7%	
Maximum Green (s)	28.3	28.3	28.3	31.3		31.3		26.6		18.0	47.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	28.2	28.2	28.2	31.2		31.2		26.7		51.7	47.7	
Actuated g/C Ratio	0.31	0.31	0.31	0.35		0.35		0.30		0.57	0.53	
v/c Ratio	0.89	0.66	0.44	0.69		0.89		1.27dr		1.48	0.36	
Control Delay (s/veh)	49.5	33.1	27.8	34.7		22.2		108.1		250.1	13.6	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	49.5	33.1	27.8	34.7		22.2		108.1		250.1	13.6	
LOS	D	C	C	C		C		F		F	B	
Approach Delay (s/veh)		39.5			25.7			108.1			130.3	
Approach LOS		D			C			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay (s/veh): 79.8		Intersection LOS: E	
Intersection Capacity Utilization 122.1%		ICU Level of Service H	
Analysis Period (min) 15			
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



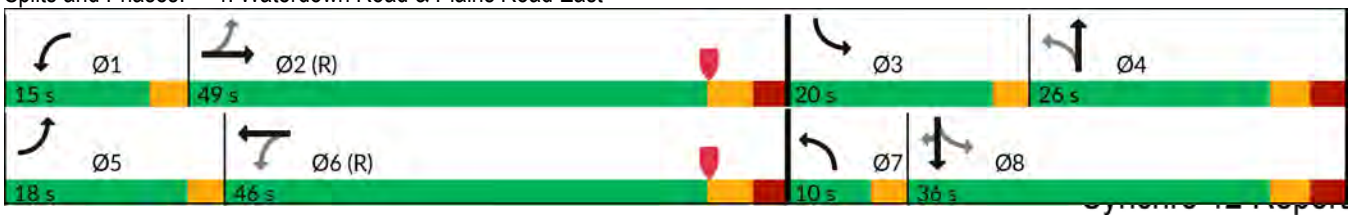


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	498	510	125	72	529	208	131	323	62	226	297	500
Future Volume (vph)	498	510	125	72	529	208	131	323	62	226	297	500
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.97	0.99		0.99	0.96		0.84	0.99		0.99		0.75
Frt		0.970			0.958			0.976				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3252	0	1676	3089	0	1710	1723	0	1676	1765	1500
Flt Permitted	0.160			0.372			0.504			0.210		
Satd. Flow (perm)	276	3252	0	649	3089	0	766	1723	0	367	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			59			8				307
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	519	531	130	75	551	217	136	336	65	235	309	521
Shared Lane Traffic (%)												
Lane Group Flow (vph)	519	661	0	75	768	0	136	401	0	235	309	521
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	53.1	40.6		43.2	31.8		42.3	29.8		50.8	35.4	35.4
Actuated g/C Ratio	0.48	0.37		0.39	0.29		0.38	0.27		0.46	0.32	0.32
v/c Ratio	1.59	0.54		0.23	0.82		0.37	0.85		0.68	0.54	0.91
Control Delay (s/veh)	303.6	27.7		16.1	41.0		23.5	57.5		30.6	36.8	38.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	303.6	27.7		16.1	41.0		23.5	57.5		30.6	36.8	38.3
LOS	F	C		B	D		C	E		C	D	D
Approach Delay (s/veh)		149.1			38.8			48.9			36.2	
Approach LOS		F			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.59			
Intersection Signal Delay (s/veh): 75.4		Intersection LOS: E	
Intersection Capacity Utilization 106.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1453	48	0	955	15	35
Future Volume (vph)	1453	48	0	955	15	35
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.995				0.905	
Flt Protected					0.986	
Satd. Flow (prot)	3348	0	0	3420	1310	0
Flt Permitted					0.986	
Satd. Flow (perm)	3348	0	0	3420	1310	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	12				34	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	1483	49	0	974	15	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1532	0	0	974	51	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	40.1			40.1	11.0	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.54			0.34	0.15	
Control Delay (s/veh)	4.7			3.2	9.7	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	4.7			3.2	9.7	
LOS	A			A	A	
Approach Delay (s/veh)	4.7			3.2	9.7	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.4			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 4.3		Intersection LOS: A	
Intersection Capacity Utilization 57.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

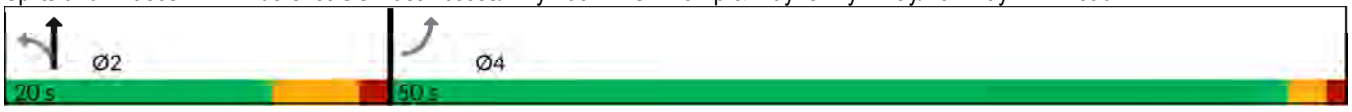


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	530	629	52	0	813	98	66	28	0	0	0	0
Future Volume (vph)	530	629	52	0	813	98	66	28	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989				0.850						
Flt Protected	0.950							0.966				
Satd. Flow (prot)	1693	1780	0	0	1800	1530	0	1739	1800	0	0	0
Flt Permitted	0.950							0.966				
Satd. Flow (perm)	1693	1780	0	0	1800	1530	0	1739	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				94						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	570	676	56	0	874	105	71	30	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	570	732	0	0	874	105	0	101	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	50.0						20.0	20.0				
Total Split (%)	71.4%						28.6%	28.6%				
Maximum Green (s)	47.0						14.0	14.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	16.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	27.7	0.0			0.0	0.0		10.7				
Actuated g/C Ratio	0.67	0.00			0.00	0.00		0.26				
v/c Ratio	0.51	183.00			no cap	1.12		0.23				
Control Delay (s/veh)	7.7	Error				147.7		16.2				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	7.7	Error			Error	147.7		16.2				
LOS	A	F			F	F		B				
Approach Delay (s/veh)		46301.7			Error			16.2				
Approach LOS		F			F			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 41.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 103.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

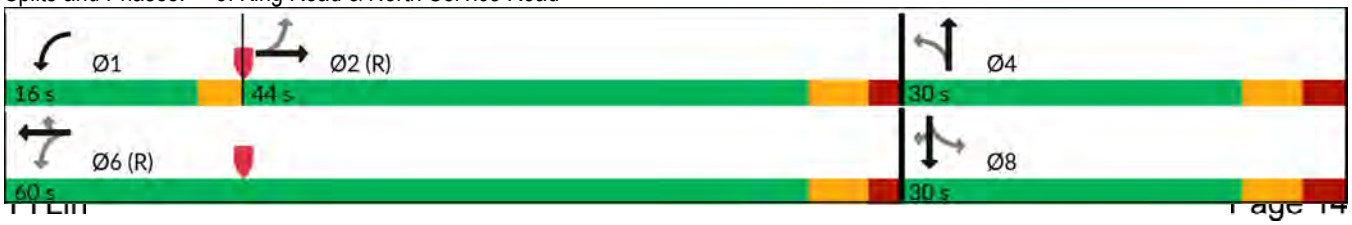


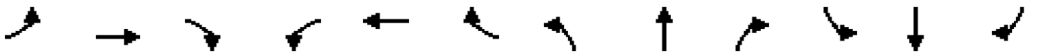
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	344	264	67	112	261	597	69	234	19
Future Volume (vph)	14	223	91	344	264	67	112	261	597	69	234	19
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.98				0.97
Frt		0.956				0.850		0.917				0.850
Flt Protected	0.950										0.989	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1780	1530
Flt Permitted	0.589			*0.470							0.615	
Satd. Flow (perm)	1060	1711	0	829	1800	1498	0	*3050	*3050	0	1107	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				71		90				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	362	278	71	118	275	628	73	246	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	362	278	71	0	1021	0	0	319	20
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	21.8	21.8		40.8	37.8	39.8		42.2			42.2	39.2
Actuated g/C Ratio	0.24	0.24		0.45	0.42	0.44		0.47			0.47	0.44
v/c Ratio	0.06	0.76		0.71	0.37	0.10		0.69			0.62	0.03
Control Delay (s/veh)	23.3	39.7		24.4	18.4	3.2		21.5			26.7	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.3	39.7		24.4	18.4	3.2		21.5			26.7	0.1
LOS	C	D		C	B	A		C			C	A
Approach Delay (s/veh)		39.0			20.0			21.5			25.2	
Approach LOS		D			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 24.1		Intersection LOS: C	
Intersection Capacity Utilization 130.1%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road



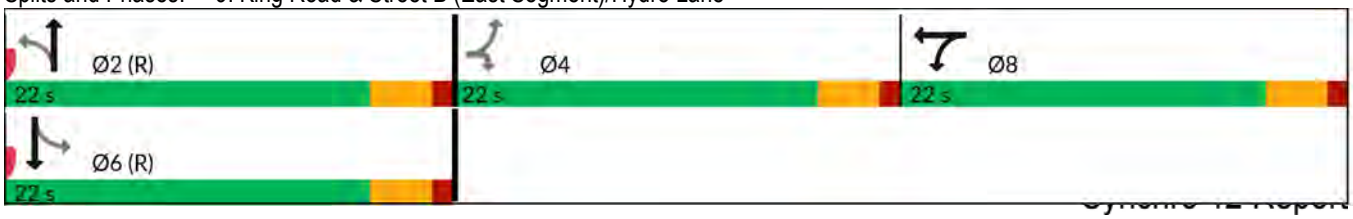


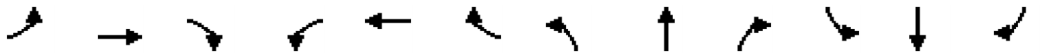
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	0	0	4	0	0	123	552	4	4	581	109
Future Volume (vph)	338	0	0	4	0	0	123	552	4	4	581	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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		1.00	1.00	
Frt								0.999			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	0	1800	1710	1800	0	1710	1780	0	1710	1736	0
Flt Permitted	0.222			0.950			0.176			0.287		
Satd. Flow (perm)	400	0	1800	1710	1800	0	317	1780	0	516	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								1			14	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)						1			4			2
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 (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	348	0	0	4	0	0	127	569	4	4	599	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	348	0	0	4	0	0	127	573	0	4	711	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split			Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.1			35.6	35.6		35.6	35.6	
Actuated g/C Ratio	0.27			0.12			0.54	0.54		0.54	0.54	
v/c Ratio	3.19			0.02			0.74	0.60		0.01	0.75	
Control Delay (s/veh)	Error			22.0			48.1	18.7		13.0	22.9	
Queue Delay	0.0			0.0			0.0	0.0		0.0	0.0	
Total Delay (s/veh)	Error			22.0			48.1	18.7		13.0	22.9	
LOS	F			C			D	B		B	C	
Approach Delay (s/veh)		1025.4			22.0			24.0			22.8	
Approach LOS		F			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.19			
Intersection Signal Delay (s/veh): 220.8		Intersection LOS: F	
Intersection Capacity Utilization 82.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane





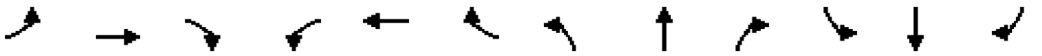
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	803	130	121	828	887	145	300	95	647	249	114
Future Volume (vph)	32	803	130	121	828	887	145	300	95	647	249	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.98		0.99	0.99		0.99		0.97
Frt			0.850		0.922			0.964				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3060	0	1676	1707	0	1782	1782	1515
Flt Permitted	0.062			0.245			0.383			*0.420		
Satd. Flow (perm)	108	3353	1437	433	3060	0	669	1707	0	738	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		301			11				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	33	819	133	123	845	905	148	306	97	660	254	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	819	133	123	1750	0	148	403	0	660	254	116
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	72.5	66.0	66.0	74.7	70.5		37.6	27.0		44.2	30.4	28.0
Actuated g/C Ratio	0.56	0.51	0.51	0.57	0.54		0.29	0.21		0.34	0.23	0.22
v/c Ratio	0.24	0.48	0.17	0.39	0.97		0.54	1.11		1.82	0.61	0.30
Control Delay (s/veh)	15.4	22.0	6.2	15.5	40.6		39.1	126.2		405.2	51.9	14.8
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)	15.4	22.0	6.2	15.5	40.6		39.1	126.2		405.2	51.9	14.8
LOS	B	C	A	B	D		D	F		F	D	B
Approach Delay (s/veh)		19.7			38.9			102.8			274.1	
Approach LOS		B			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.82			
Intersection Signal Delay (s/veh): 97.2		Intersection LOS: F	
Intersection Capacity Utilization 134.7%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1811	255	0	1925	329	0	0	0	514	3	482
Future Volume (vph)	0	1811	255	0	1925	329	0	0	0	514	3	482
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			263			217						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1867	263	0	1985	339	0	0	0	530	3	497
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1867	263	0	1985	339	0	0	0	265	268	497
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		51.0	51.0		51.0					39.0	39.0	39.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		44.0	44.0		44.0					31.8	31.8	31.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		41.0	41.0		41.0	84.9				29.5	29.5	29.5
Actuated g/C Ratio		0.48	0.48		0.48	1.00				0.35	0.35	0.35
v/c Ratio		0.80	0.31		0.84	0.23				0.47	0.48	0.91
Control Delay (s/veh)		22.0	2.8		23.6	0.4				25.6	25.6	48.1
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		22.0	2.8		23.6	0.4				25.6	25.6	48.1
LOS		C	A		C	A				C	C	D
Approach Delay (s/veh)		19.6			20.2						36.5	
Approach LOS		B			C						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 84.9			
Natural Cycle: 70			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 23.0		Intersection LOS: C	
Intersection Capacity Utilization 84.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



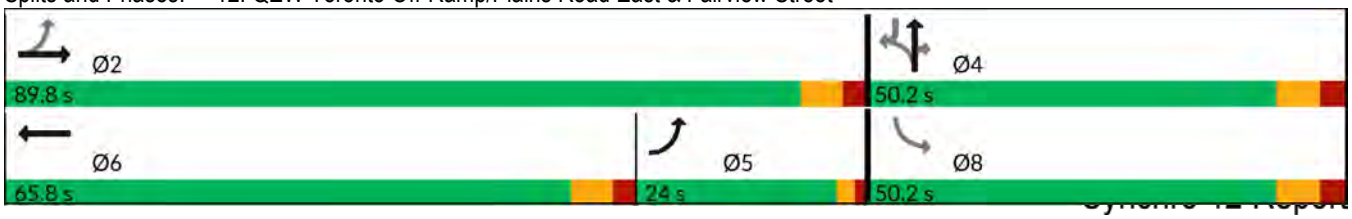
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	323	1656	182	0	2049	52	253	169	439	43	0	461
Future Volume (vph)	323	1656	182	0	2049	52	253	169	439	43	0	461
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.996			0.938	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4791	0	1593	1500	1425	1710	0	1604
Flt Permitted	0.061						0.950	0.996		0.260		
Satd. Flow (perm)	108	4865	1452	0	4791	0	1593	1500	1425	468	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		3			20	81			248
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	330	1690	186	0	2091	53	258	172	448	44	0	470
Shared Lane Traffic (%)							10%		31%			
Lane Group Flow (vph)	330	1690	186	0	2144	0	232	337	309	44	0	470
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	24.0	89.8			65.8		50.2	50.2	50.2	50.2		50.2
Total Split (%)	17.1%	64.1%			47.0%		35.9%	35.9%	35.9%	35.9%		35.9%
Maximum Green (s)	21.0	83.1			59.1		43.0	43.0	43.0	43.0		43.0
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	87.1	83.4	132.0		59.3		34.6	34.6	34.6	34.6		34.6
Actuated g/C Ratio	0.66	0.63	1.00		0.45		0.26	0.26	0.26	0.26		0.26
v/c Ratio	1.03	0.55	0.13		0.99		0.56	0.83	0.71	0.36		0.78
Control Delay (s/veh)	104.7	15.4	0.2		54.8		46.9	60.2	41.5	47.9		30.0
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	104.7	15.4	0.2		54.8		46.9	60.2	41.5	47.9		30.0
LOS	F	B	A		D		D	E	D	D		C
Approach Delay (s/veh)		27.5			54.8			50.1			31.5	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 132			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 41.5		Intersection LOS: D	
Intersection Capacity Utilization 107.5%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

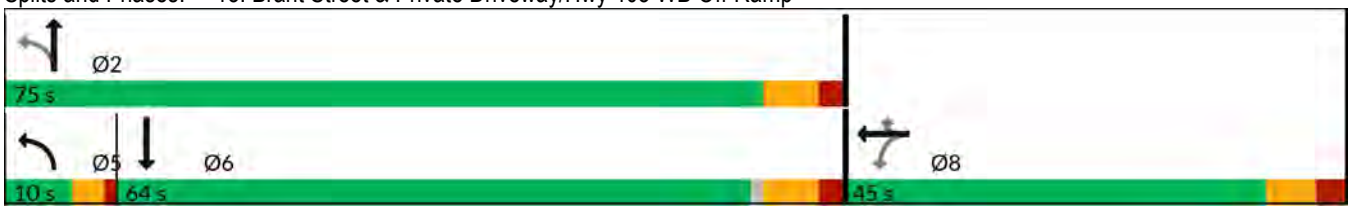


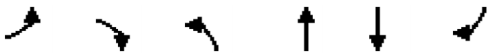
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	557	46	448	103	1451	273	0	2057	32
Future Volume (vph)	0	0	0	557	46	448	103	1451	273	0	2057	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.998	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4855	0
Flt Permitted				0.950	0.959		0.068					
Satd. Flow (perm)	0	0	0	1593	1605	1473	122	4865	1494	0	4855	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			169		2	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	580	48	467	107	1511	284	0	2143	33
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	313	315	467	107	1511	284	0	2176	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				45.0	45.0	45.0	10.0	75.0			64.0	
Total Split (%)				37.5%	37.5%	37.5%	8.3%	62.5%			53.3%	
Maximum Green (s)				37.8	37.8	37.8	6.0	67.8			56.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				35.6	35.6	35.6	68.3	65.1	115.1		55.0	
Actuated g/C Ratio				0.31	0.31	0.31	0.59	0.57	1.00		0.48	
v/c Ratio				0.64	0.64	0.92	0.69	0.55	0.19		0.94	
Control Delay (s/veh)				41.2	41.2	57.7	39.7	17.0	0.3		37.8	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				41.2	41.2	57.7	39.7	17.0	0.3		37.8	
LOS				D	D	E	D	B	A		D	
Approach Delay (s/veh)					48.2			15.7			37.8	
Approach LOS					D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 115.1			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay (s/veh): 31.9		Intersection LOS: C	
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



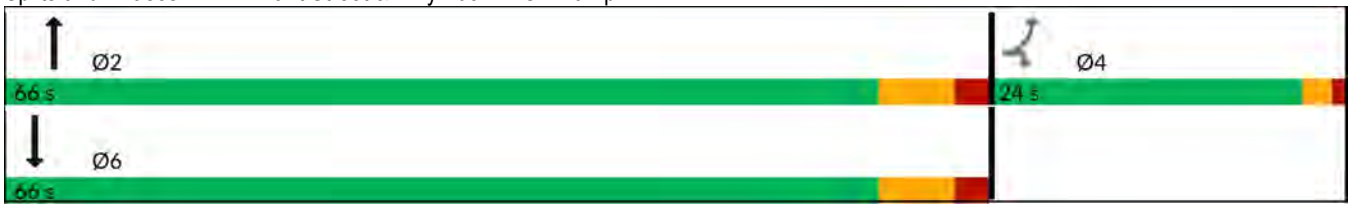


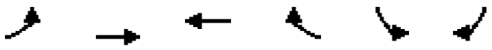
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	246	257	120	1617	1854	462
Future Volume (vph)	246	257	120	1617	1854	462
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99		1.00		0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965			0.997		
Satd. Flow (prot)	3194	1365	0	4854	4818	1515
Flt Permitted	0.965			0.645		
Satd. Flow (perm)	3194	1347	0	3140	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	19	19				299
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	256	268	125	1684	1931	481
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	358	166	0	1809	1931	481
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	24.0	24.0		66.0	66.0	
Total Split (%)	26.7%	26.7%		73.3%	73.3%	
Maximum Green (s)	21.0	21.0		58.7	58.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	14.8	14.8		58.8	58.8	84.0
Actuated g/C Ratio	0.18	0.18		0.70	0.70	1.00
v/c Ratio	0.62	0.66		1.93	0.57	0.33
Control Delay (s/veh)	34.9	41.0		440.1	7.6	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	34.9	41.0		440.1	7.6	0.6
LOS	C	D		F	A	A
Approach Delay (s/veh)	36.8			440.1	6.2	
Approach LOS	D			F	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 84			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.93			
Intersection Signal Delay (s/veh): 175.0		Intersection LOS: F	
Intersection Capacity Utilization 100.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp





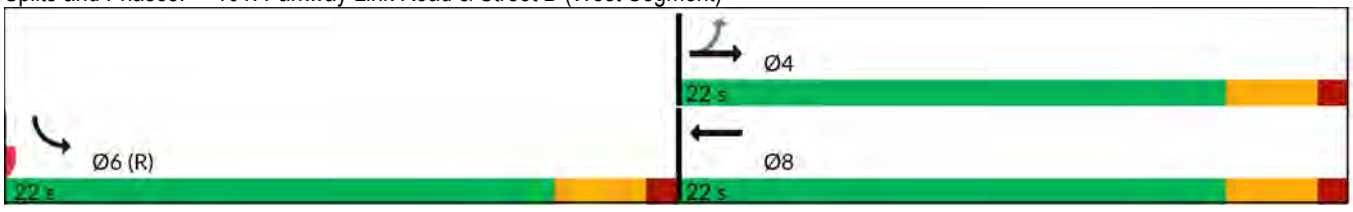
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	216	463	656	0	0	270
Future Volume (vph)	216	463	656	0	0	270
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.984				
Satd. Flow (prot)	0	3299	3353	0	1526	0
Flt Permitted		0.604				
Satd. Flow (perm)	0	2025	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					108	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	235	503	713	0	0	293
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	738	713	0	293	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		17.6	17.6		18.4	
Actuated g/C Ratio		0.40	0.40		0.42	
v/c Ratio		1.05dl	0.53		0.42	
Control Delay (s/veh)		31.9	17.7		8.0	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		31.9	17.7		8.0	
LOS		C	B		A	
Approach Delay (s/veh)		31.9	17.7		8.0	
Approach LOS		C	B		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 22.1		Intersection LOS: C	
Intersection Capacity Utilization 66.9%		ICU Level of Service C	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)



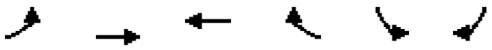
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	389	19	33	490	22	28	0	36	99	0	139
Future Volume (vph)	56	389	19	33	490	22	28	0	36	99	0	139
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.994			0.924			0.921	
Flt Protected		0.994		0.950				0.979			0.980	
Satd. Flow (prot)	0	3313	0	1676	1754	0	0	1596	0	0	1593	0
Flt Permitted		0.759		0.446				0.851			0.858	
Satd. Flow (perm)	0	2530	0	787	1754	0	0	1388	0	0	1395	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			6			39			151	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	61	423	21	36	533	24	30	0	39	108	0	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	505	0	36	557	0	0	69	0	0	259	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		16.7		16.7	16.7			19.3			19.3	
Actuated g/C Ratio		0.38		0.38	0.38			0.44			0.44	
v/c Ratio		0.52		0.12	0.83			0.11			0.37	
Control Delay (s/veh)		21.0		11.4	25.3			5.3			6.0	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		21.0		11.4	25.3			5.3			6.0	
LOS		C		B	C			A			A	
Approach Delay (s/veh)		21.0			24.5			5.3			6.0	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 18.9		Intersection LOS: B	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



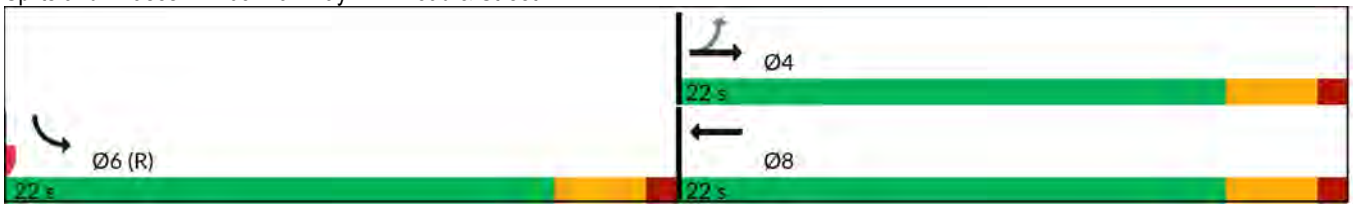


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	103	421	434	330	239	111
Future Volume (vph)	103	421	434	330	239	111
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.935		0.957	
Flt Protected		0.990			0.967	
Satd. Flow (prot)	0	3319	3135	0	1633	0
Flt Permitted		0.636			0.967	
Satd. Flow (perm)	0	2132	3135	0	1633	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			359		64	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	112	458	472	359	260	121
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	570	831	0	381	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		15.4	15.4		20.6	
Actuated g/C Ratio		0.35	0.35		0.47	
v/c Ratio		0.77	0.63		0.48	
Control Delay (s/veh)		25.6	8.4		9.9	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		25.6	8.4		9.9	
LOS		C	A		A	
Approach Delay (s/veh)		25.6	8.4		9.9	
Approach LOS		C	A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 70.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

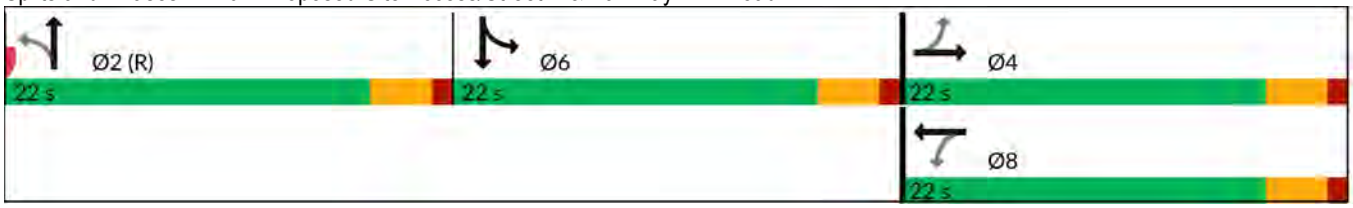


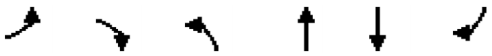
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	637	41	53	688	70	61	27	51	67	19	9
Future Volume (vph)	13	637	41	53	688	70	61	27	51	67	19	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.987			0.950			0.987	
Flt Protected		0.999			0.997			0.978			0.966	
Satd. Flow (prot)	0	3319	0	0	3299	0	0	1640	0	0	1683	0
Flt Permitted		0.836			0.715			0.867			0.966	
Satd. Flow (perm)	0	2778	0	0	2366	0	0	1453	0	0	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			15			43			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	692	45	58	748	76	66	29	55	73	21	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	751	0	0	882	0	0	150	0	0	104	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		0.98			1.34			0.35			0.22	
Control Delay (s/veh)		55.0			189.7			16.6			18.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		55.0			189.7			16.6			18.8	
LOS		D			F			B			B	
Approach Delay (s/veh)		55.0			189.7			16.6			18.8	
Approach LOS		D			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay (s/veh): 112.9		Intersection LOS: F	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



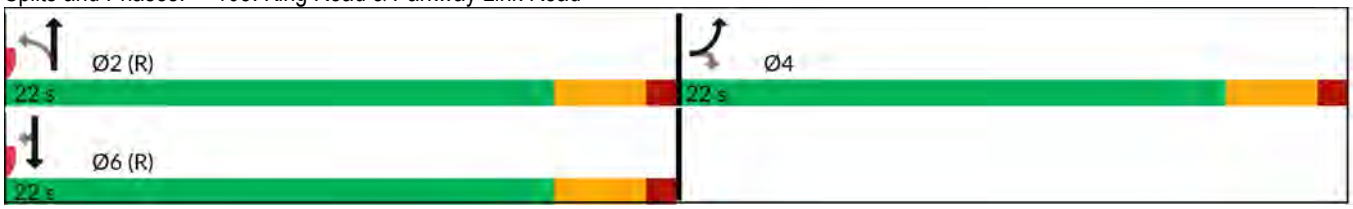


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	260	494	708	474	459	102
Future Volume (vph)	260	494	708	474	459	102
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. 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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.374			
Satd. Flow (perm)	1676	1500	660	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		222				111
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	537	770	515	499	111
Shared Lane Traffic (%)						
Lane Group Flow (vph)	283	537	770	515	499	111
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	14.7	14.7	21.3	21.3	21.3	21.3
Actuated g/C Ratio	0.33	0.33	0.48	0.48	0.48	0.48
v/c Ratio	0.51	0.83	2.41	0.60	0.58	0.14
Control Delay (s/veh)	14.2	20.0	659.4	14.3	13.6	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.2	20.0	659.4	14.3	13.6	2.9
LOS	B	B	F	B	B	A
Approach Delay (s/veh)	18.0			400.9	11.7	
Approach LOS	B			F	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.41			
Intersection Signal Delay (s/veh): 197.8		Intersection LOS: F	
Intersection Capacity Utilization 92.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road



Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1085	163	0	765	47	9
Future Vol, veh/h	1085	163	0	765	47	9
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	1107	166	0	781	48	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1273	0	1581	650
Stage 1	-	-	-	-	1190	-
Stage 2	-	-	-	-	391	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	552	-	102	417
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	552	-	102	412
Mov Cap-2 Maneuver	-	-	-	-	102	-
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	63
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	116	-	-	552	-
HCM Lane V/C Ratio	0.493	-	-	-	-
HCM Ctrl Dly (s/v)	63	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	2.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	228	144	39	90	109
Future Vol, veh/h	135	228	144	39	90	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	248	157	42	98	118
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	11.4	10.1	10.3
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	45%	0%	79%
Vol Thru, %	0%	37%	21%
Vol Right, %	55%	63%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	199	363	183
LT Vol	90	0	144
Through Vol	0	135	39
RT Vol	109	228	0
Lane Flow Rate	216	395	199
Geometry Grp	1	1	1
Degree of Util (X)	0.301	0.478	0.28
Departure Headway (Hd)	5.007	4.361	5.075
Convergence, Y/N	Yes	Yes	Yes
Cap	712	821	702
Service Time	3.082	2.417	3.146
HCM Lane V/C Ratio	0.303	0.481	0.283
HCM Control Delay, s/veh	10.3	11.4	10.1
HCM Lane LOS	B	B	B
HCM 95th-tile Q	1.3	2.6	1.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	425	19	28	811	70	101
Future Vol, veh/h	425	19	28	811	70	101
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	462	21	30	882	76	110

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	483	0	974	242
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	501	-
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	-	-	1076	-	249	759
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	574	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1076	-	235	759
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	542	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.5	21.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	397	-	-	1076	-
HCM Lane V/C Ratio	0.468	-	-	0.028	-
HCM Ctrl Dly (s/v)	21.8	-	-	8.4	0.2
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	2.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	483	818	66	30	21
Future Vol, veh/h	44	483	818	66	30	21
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	48	525	889	72	33	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	961	0	-	0	1284	481
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	359	-
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	712	-	-	-	157	531
Stage 1	-	-	-	-	347	-
Stage 2	-	-	-	-	677	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	712	-	-	-	142	531
Mov Cap-2 Maneuver	-	-	-	-	142	-
Stage 1	-	-	-	-	314	-
Stage 2	-	-	-	-	677	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.2	0	29.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	712	-	-	-	203
HCM Lane V/C Ratio	0.067	-	-	-	0.273
HCM Ctrl Dly (s/v)	10.4	0.4	-	-	29.3
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q (veh)	0.2	-	-	-	1.1

Intersection	
Int Delay, s/veh	93.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1219	162	0	1190	158	13
Future Vol, veh/h	1219	162	0	1190	158	13
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	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	1354	180	0	1322	176	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1534	0	2105	767
Stage 1	-	-	-	-	1444	-
Stage 2	-	-	-	-	661	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	439	-	~ 45	349
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	481	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	439	-	~ 45	349
Mov Cap-2 Maneuver	-	-	-	-	~ 45	-
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	481	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 1505
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	48	-	-	439	-
HCM Lane V/C Ratio	3.958	-	-	-	-
HCM Ctrl Dly (s/v)	$ 1505	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	21.1	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	171	57	41	191	0	0	0	0	0	0	0
Future Vol, veh/h	0	171	57	41	191	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	186	62	45	208	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.5	8.9	0	0
HCM LOS	A	A	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	18%	0%
Vol Thru, %	100%	75%	82%	100%
Vol Right, %	0%	25%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	228	232	0
LT Vol	0	0	41	0
Through Vol	0	171	191	0
RT Vol	0	57	0	0
Lane Flow Rate	0	248	252	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.273	0.291	0
Departure Headway (Hd)	4.982	3.97	4.153	4.982
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	897	862	0
Service Time	2.982	2.026	2.197	2.982
HCM Lane V/C Ratio	0	0.276	0.292	0
HCM Control Delay, s/veh	8	8.5	8.9	8
HCM Lane LOS	N	A	A	N
HCM 95th-tile Q	0	1.1	1.2	0

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	125	150	66	169	178
Future Vol, veh/h	102	125	150	66	169	178
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	136	163	72	184	193
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	10.6	11.4	13.4
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	49%	0%	69%
Vol Thru, %	0%	45%	31%
Vol Right, %	51%	55%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	347	227	216
LT Vol	169	0	150
Through Vol	0	102	66
RT Vol	178	125	0
Lane Flow Rate	377	247	235
Geometry Grp	1	1	1
Degree of Util (X)	0.524	0.341	0.355
Departure Headway (Hd)	4.998	4.974	5.436
Convergence, Y/N	Yes	Yes	Yes
Cap	724	723	662
Service Time	2.998	3.008	3.469
HCM Lane V/C Ratio	0.521	0.342	0.355
HCM Control Delay, s/veh	13.4	10.6	11.4
HCM Lane LOS	B	B	B
HCM 95th-tile Q	3.1	1.5	1.6

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	275	0	71	179	14	0	40	97	24	44	53
Future Vol, veh/h	31	275	0	71	179	14	0	40	97	24	44	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	299	0	77	195	15	0	43	105	26	48	58
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12.9	12	9.9	10.1
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	27%	20%
Vol Thru, %	29%	90%	68%	36%
Vol Right, %	71%	0%	5%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	306	264	121
LT Vol	0	31	71	24
Through Vol	40	275	179	44
RT Vol	97	0	14	53
Lane Flow Rate	149	333	287	132
Geometry Grp	1	1	1	1
Degree of Util (X)	0.222	0.477	0.417	0.204
Departure Headway (Hd)	5.36	5.168	5.232	5.589
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	669	698	689	641
Service Time	3.406	3.201	3.267	3.636
HCM Lane V/C Ratio	0.223	0.477	0.417	0.206
HCM Control Delay, s/veh	9.9	12.9	12	10.1
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.8	2.6	2.1	0.8

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	657	29	51	826	49	62
Future Vol, veh/h	657	29	51	826	49	62
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	714	32	55	898	53	67

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	746	0	1289	373
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	559	-
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	-	-	858	-	155	624
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	858	-	135	624
Mov Cap-2 Maneuver	-	-	-	-	135	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	467	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1	34.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	240	-	-	858	-
HCM Lane V/C Ratio	0.503	-	-	0.065	-
HCM Ctrl Dly (s/v)	34.3	-	-	9.5	0.5
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q (veh)	2.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	704	1064	24	30	24
Future Vol, veh/h	14	704	1064	24	30	24
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	15	765	1157	26	33	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1183	0	-	0	1583	592
Stage 1	-	-	-	-	1170	-
Stage 2	-	-	-	-	413	-
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	586	-	-	-	99	449
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	636	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	586	-	-	-	95	449
Mov Cap-2 Maneuver	-	-	-	-	95	-
Stage 1	-	-	-	-	245	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.4	0	45.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	586	-	-	-	146
HCM Lane V/C Ratio	0.026	-	-	-	0.402
HCM Ctrl Dly (s/v)	11.3	0.2	-	-	45.3
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q (veh)	0.1	-	-	-	1.7

Intersection	
Int Delay, s/veh	12.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1200	288	0	879	79	10
Future Vol, veh/h	1200	288	0	879	79	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	1263	303	0	925	83	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1566	0	1878	783
Stage 1	-	-	-	-	1415	-
Stage 2	-	-	-	-	463	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	427	-	~ 63	341
Stage 1	-	-	-	-	190	-
Stage 2	-	-	-	-	600	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	427	-	~ 63	341
Mov Cap-2 Maneuver	-	-	-	-	~ 63	-
Stage 1	-	-	-	-	190	-
Stage 2	-	-	-	-	600	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 333.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	69	-	-	427	-
HCM Lane V/C Ratio	1.358	-	-	-	-
HCM Ctrl Dly (s/v)	$ 333.5	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	7.7	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	245	78	56	284	0	0	0	0	0	0	0
Future Vol, veh/h	0	245	78	56	284	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	266	85	61	309	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.8	10.6	0	0
HCM LOS	A	B	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	16%	0%
Vol Thru, %	100%	76%	84%	100%
Vol Right, %	0%	24%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	323	340	0
LT Vol	0	0	56	0
Through Vol	0	245	284	0
RT Vol	0	78	0	0
Lane Flow Rate	0	351	370	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.396	0.434	0
Departure Headway (Hd)	5.438	4.063	4.227	5.438
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	874	843	0
Service Time	3.438	2.15	2.297	3.438
HCM Lane V/C Ratio	0	0.402	0.439	0
HCM Control Delay, s/veh	8.4	9.8	10.6	8.4
HCM Lane LOS	N	A	B	N
HCM 95th-tile Q	0	1.9	2.2	0

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	142	170	136	100	258	139
Future Vol, veh/h	142	170	136	100	258	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	185	148	109	280	151
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	13.6	13	18.3
HCM LOS	B	B	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	65%	0%	58%
Vol Thru, %	0%	46%	42%
Vol Right, %	35%	54%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	397	312	236
LT Vol	258	0	136
Through Vol	0	142	100
RT Vol	139	170	0
Lane Flow Rate	432	339	257
Geometry Grp	1	1	1
Degree of Util (X)	0.654	0.499	0.416
Departure Headway (Hd)	5.452	5.299	5.838
Convergence, Y/N	Yes	Yes	Yes
Cap	660	678	613
Service Time	3.498	3.354	3.897
HCM Lane V/C Ratio	0.655	0.5	0.419
HCM Control Delay, s/veh	18.3	13.6	13
HCM Lane LOS	C	B	B
HCM 95th-tile Q	4.8	2.8	2

Intersection	
Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	270	0	34	189	22	0	63	46	32	60	73
Future Vol, veh/h	49	270	0	34	189	22	0	63	46	32	60	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	293	0	37	205	24	0	68	50	35	65	79
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	13.5	11.7	10	10.7
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	15%	14%	19%
Vol Thru, %	58%	85%	77%	36%
Vol Right, %	42%	0%	9%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	109	319	245	165
LT Vol	0	49	34	32
Through Vol	63	270	189	60
RT Vol	46	0	22	73
Lane Flow Rate	118	347	266	179
Geometry Grp	1	1	1	1
Degree of Util (X)	0.185	0.503	0.391	0.276
Departure Headway (Hd)	5.626	5.219	5.279	5.531
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	635	690	682	647
Service Time	3.683	3.257	3.321	3.582
HCM Lane V/C Ratio	0.186	0.503	0.39	0.277
HCM Control Delay, s/veh	10	13.5	11.7	10.7
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.7	2.8	1.9	1.1

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	585	45	78	845	66	84
Future Vol, veh/h	585	45	78	845	66	84
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	636	49	85	918	72	91

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	685	0	1290	343
Stage 1	-	-	-	-	661	-
Stage 2	-	-	-	-	629	-
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	-	-	904	-	155	653
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	494	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	904	-	125	653
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	399	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.5	52.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	228	-	-	904	-
HCM Lane V/C Ratio	0.715	-	-	0.094	-
HCM Ctrl Dly (s/v)	52.6	-	-	9.4	0.8
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q (veh)	4.8	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.8

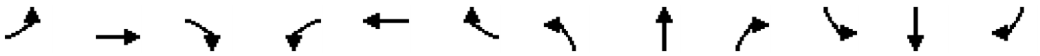
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	657	905	20	22	17
Future Vol, veh/h	12	657	905	20	22	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	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	13	714	984	22	24	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1006	0	-	0	1378	503
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	383	-
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	684	-	-	-	136	514
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	684	-	-	-	132	514
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.4	0	28.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	684	-	-	-	195
HCM Lane V/C Ratio	0.019	-	-	-	0.217
HCM Ctrl Dly (s/v)	10.4	0.2	-	-	28.5
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q (veh)	0.1	-	-	-	0.8

Appendix F-6:
2036 Future Total Conditions

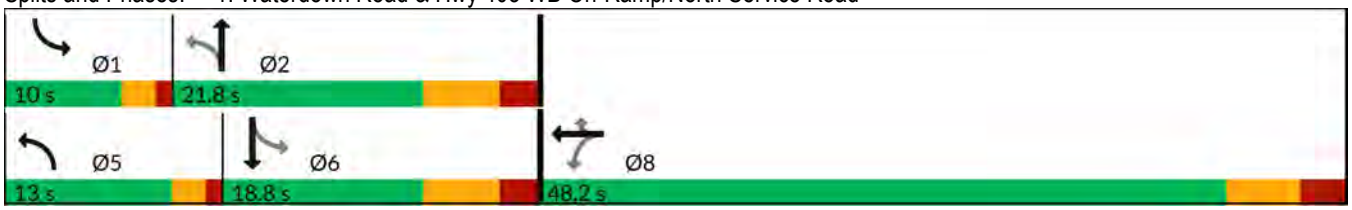


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	73	110	0	424	583	286	82	502	166
Future Volume (vph)	0	0	0	73	110	0	424	583	286	82	502	166
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00							1.00	
Frt								0.951			0.963	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1607	1500	3039	0	1676	3119	0
Flt Permitted				0.950			0.247			0.309		
Satd. Flow (perm)	0	0	0	1512	1748	1607	390	3039	0	545	3119	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								93			48	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	78	117	0	451	620	304	87	534	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	78	117	0	451	924	0	87	711	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				48.2	48.2	48.2	13.0	21.8		10.0	18.8	
Total Split (%)				60.3%	60.3%	60.3%	16.3%	27.3%		12.5%	23.5%	
Maximum Green (s)				41.0	41.0	41.0	10.0	15.0		7.0	12.0	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				10.2	10.2		28.8	19.0		22.8	12.0	
Actuated g/C Ratio				0.21	0.21		0.59	0.39		0.46	0.24	
v/c Ratio				0.25	0.32		1.00	0.75		0.21	0.89	
Control Delay (s/veh)				18.7	19.4		56.2	20.3		6.3	34.1	
Queue Delay				0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)				18.7	19.4		56.2	20.3		6.3	34.1	
LOS				B	B		E	C		A	C	
Approach Delay (s/veh)					19.1			32.0			31.0	
Approach LOS					B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 49.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 30.6		Intersection LOS: C	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

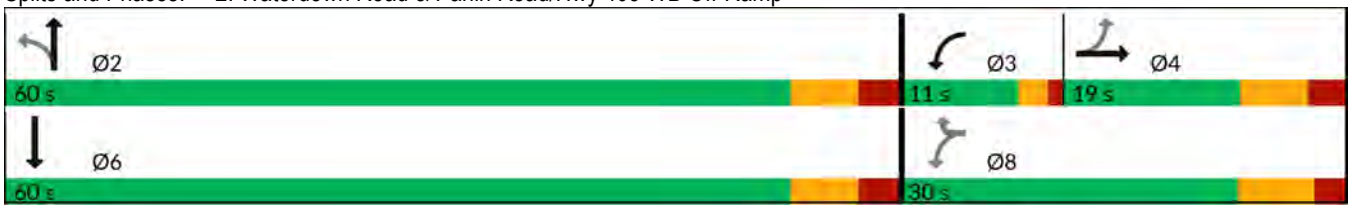


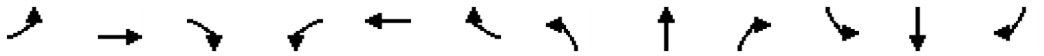
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	563	0	277	0	996	0	0	574	3
Future Volume (vph)	1	0	5	563	0	277	0	996	0	0	574	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3151	0
Flt Permitted		0.993		0.851								
Satd. Flow (perm)	0	1043	0	2653	0	1354	0	3167	0	0	3151	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				89					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	626	0	308	0	1107	0	0	638	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	626	0	308	0	1107	0	0	641	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		20.5		16.1		27.6			27.6	
Actuated g/C Ratio		0.18		0.35		0.27		0.47			0.47	
v/c Ratio		0.03		0.62		0.71		0.75			0.43	
Control Delay (s/veh)		0.2		20.2		24.8		16.5			11.5	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		20.2		24.8		16.5			11.5	
LOS		A		C		C		B			B	
Approach Delay (s/veh)		0.2			21.7			16.5			11.5	
Approach LOS		A			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 58.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 17.1		Intersection LOS: B	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp





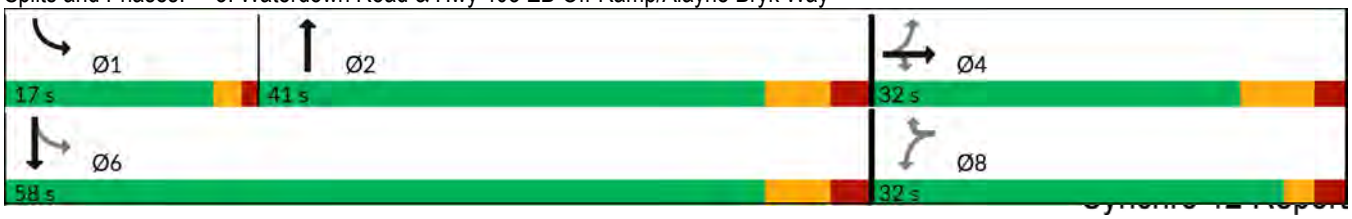
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	215	394	273	0	526	0	437	663	502	422	0
Future Volume (vph)	387	215	394	273	0	526	0	437	663	502	422	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.910				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	2903	0	1583	3081	0
Flt Permitted	0.950			0.560						0.109		
Satd. Flow (perm)	1644	1748	1313	977	0	765	0	2903	0	182	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						372		242				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	421	234	428	297	0	572	0	475	721	546	459	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	421	234	428	297	0	572	0	1196	0	546	459	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

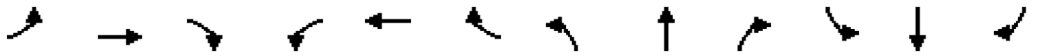
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	32.0	32.0	32.0	32.0		32.0		41.0		17.0	58.0	
Total Split (%)	35.6%	35.6%	35.6%	35.6%		35.6%		45.6%		18.9%	64.4%	
Maximum Green (s)	24.9	24.9	24.9	27.9		27.9		34.0		14.0	51.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	26.8	26.8	26.8	29.8		29.8		33.6		54.7	50.7	
Actuated g/C Ratio	0.29	0.29	0.29	0.33		0.33		0.37		0.60	0.55	
v/c Ratio	0.88	0.46	1.11	0.94		1.15		1.04dr		1.69	0.27	
Control Delay (s/veh)	51.4	29.7	113.1	68.6		100.6		45.9		346.6	11.7	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	51.4	29.7	113.1	68.6		100.6		45.9		346.6	11.7	
LOS	D	C	F	E		F		D		F	B	
Approach Delay (s/veh)		71.1			89.6			45.9			193.6	
Approach LOS		E			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 91.6			
Natural Cycle: 130			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.69			
Intersection Signal Delay (s/veh): 97.4		Intersection LOS: F	
Intersection Capacity Utilization 107.5%		ICU Level of Service G	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



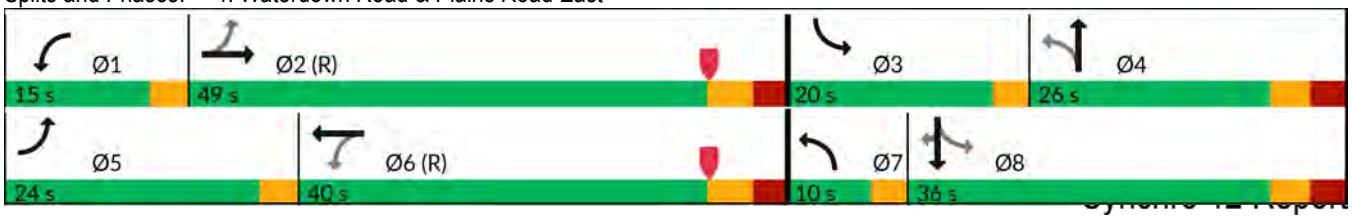


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	545	521	89	104	331	174	65	287	71	142	306	356
Future Volume (vph)	545	521	89	104	331	174	65	287	71	142	306	356
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.99		0.99	0.99		0.99	0.99		0.98		0.98
Frt		0.978			0.948			0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1613	3167	0	1629	2933	0	1676	1632	0	1541	1682	1366
Flt Permitted	0.216			0.376			0.485			0.270		
Satd. Flow (perm)	365	3167	0	636	2933	0	850	1632	0	430	1682	1334
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			89			10				313
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	606	579	99	116	368	193	72	319	79	158	340	396
Shared Lane Traffic (%)												
Lane Group Flow (vph)	606	678	0	116	561	0	72	398	0	158	340	396
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	24.0	49.0		15.0	40.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	21.8%	44.5%		13.6%	36.4%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	21.0	42.7		12.0	33.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	51.6	35.5		37.3	24.3		45.1	33.8		52.4	39.9	39.9
Actuated g/C Ratio	0.47	0.32		0.34	0.22		0.41	0.31		0.48	0.36	0.36
v/c Ratio	1.48	0.65		0.38	0.78		0.18	0.78		0.48	0.56	0.58
Control Delay (s/veh)	253.2	34.1		20.7	41.7		18.7	48.3		23.1	34.8	11.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	253.2	34.1		20.7	41.7		18.7	48.3		23.1	34.8	11.4
LOS	F	C		C	D		B	D		C	C	B
Approach Delay (s/veh)		137.5			38.1			43.8			22.4	
Approach LOS		F			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.48			
Intersection Signal Delay (s/veh): 73.1		Intersection LOS: E	
Intersection Capacity Utilization 100.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1281	26	4	781	18	4
Future Volume (vph)	1281	26	4	781	18	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.997				0.975	
Flt Protected					0.961	
Satd. Flow (prot)	3223	0	0	3403	928	0
Flt Permitted				0.949	0.961	
Satd. Flow (perm)	3223	0	0	3229	928	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	1307	27	4	797	18	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1334	0	0	801	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	44.9			44.9	11.1	
Actuated g/C Ratio	0.93			0.93	0.23	
v/c Ratio	0.44			0.60	0.10	
Control Delay (s/veh)	2.2			6.4	16.4	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	2.2			6.4	16.4	
LOS	A			A	B	
Approach Delay (s/veh)	2.2			6.4	16.4	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.1			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 3.9		Intersection LOS: A	
Intersection Capacity Utilization 51.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

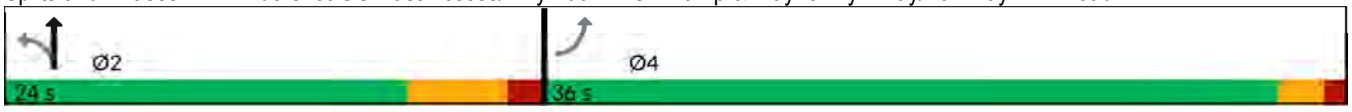


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	656	444	40	0	718	124	17	30	0	0	0	0
Future Volume (vph)	656	444	40	0	718	124	17	30	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988				0.850						
Flt Protected	0.950							0.982				
Satd. Flow (prot)	1629	1778	0	0	1800	1530	0	1768	1800	0	0	0
Flt Permitted	0.950							0.982				
Satd. Flow (perm)	1629	1778	0	0	1800	1530	0	1768	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				114						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	691	467	42	0	756	131	18	32	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	691	509	0	0	756	131	0	50	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	36.0						24.0	24.0				
Total Split (%)	60.0%						40.0%	40.0%				
Maximum Green (s)	33.0						18.0	18.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	20.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	35.5	0.0			0.0	0.0		11.5				
Actuated g/C Ratio	0.87	0.00			0.00	0.00		0.28				
v/c Ratio	0.49	101.80			no cap	1.15		0.10				
Control Delay (s/veh)	4.6	Error				147.6		18.5				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	4.6	Error			Error	147.6		18.5				
LOS	A	F			F	F		B				
Approach Delay (s/veh)		19396.1			Error			18.5				
Approach LOS		F			F			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 40.7			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 98.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

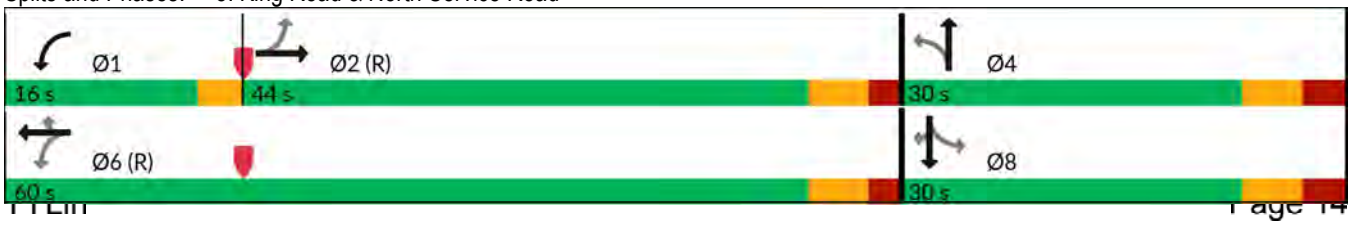


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	254	171	44	94	261	708	76	232	31
Future Volume (vph)	23	252	73	254	171	44	94	261	708	76	232	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.910				0.850
Flt Protected	0.950										0.988	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1770	1530
Flt Permitted	0.645			*0.470							0.538	
Satd. Flow (perm)	1065	1667	0	813	1714	1497	0	*3050	*3050	0	964	1496
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		112				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	265	178	46	98	272	738	79	242	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	265	178	46	0	1108	0	0	321	32
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	23.5	23.5		41.8	38.8	40.8		41.2			41.2	38.2
Actuated g/C Ratio	0.26	0.26		0.46	0.43	0.45		0.46			0.46	0.42
v/c Ratio	0.09	0.76		0.53	0.24	0.07		0.76			0.73	0.05
Control Delay (s/veh)	23.1	39.2		18.2	15.8	3.3		24.2			34.5	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.1	39.2		18.2	15.8	3.3		24.2			34.5	0.7
LOS	C	D		B	B	A		C			C	A
Approach Delay (s/veh)		38.1			15.9			24.2			31.4	
Approach LOS		D			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 25.7		Intersection LOS: C	
Intersection Capacity Utilization 131.8%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road

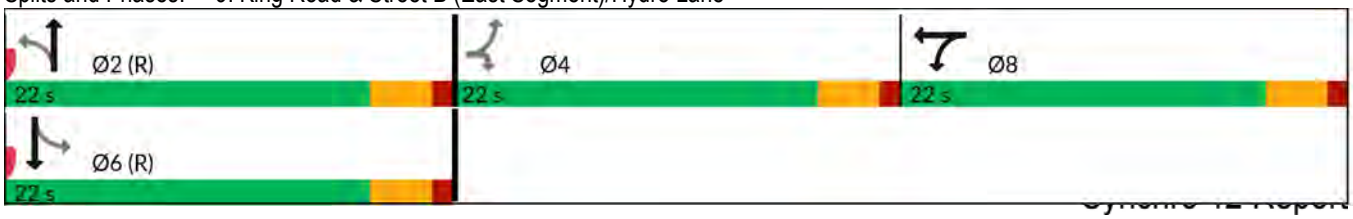


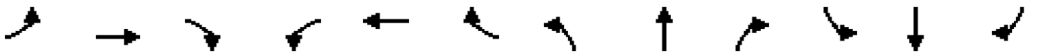
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	298	0	0	4	0	6	67	699	6	6	482	72
Future Volume (vph)	298	0	0	4	0	6	67	699	6	6	482	72
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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		1.00		
Frt					0.850			0.999			0.980	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1729	0	1710	1719	0
Flt Permitted	0.222			0.950			0.213			0.128		
Satd. Flow (perm)	400	0	1800	1710	1530	0	383	1729	0	230	1719	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					112			1			11	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	347	0	0	5	0	7	78	813	7	7	560	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	0	0	5	7	0	78	820	0	7	644	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA		Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.1	8.1		33.6	33.6		33.6	33.6	
Actuated g/C Ratio	0.27			0.12	0.12		0.51	0.51		0.51	0.51	
v/c Ratio	3.18			0.02	0.02		0.40	0.93		0.06	0.73	
Control Delay (s/veh)	Error			22.0	0.2		26.9	39.5		16.5	23.9	
Queue Delay	0.0			0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	Error			22.0	0.2		26.9	39.5		16.5	23.9	
LOS	F			C	A		C	D		B	C	
Approach Delay (s/veh)		1021.4			9.3			38.4			23.9	
Approach LOS		F			A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.18			
Intersection Signal Delay (s/veh): 212.0		Intersection LOS: F	
Intersection Capacity Utilization 77.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane





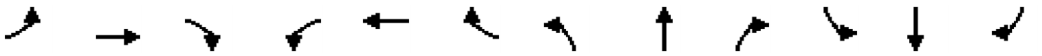
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	713	119	56	460	530	150	264	75	751	123	84
Future Volume (vph)	43	713	119	56	460	530	150	264	75	751	123	84
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00		0.96	0.99	0.97		0.99	0.99		0.99		0.98
Frt			0.850		0.920			0.967				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	2918	0	1583	1699	0	1731	1765	1485
Flt Permitted	0.088			0.211			0.674			*0.420		
Satd. Flow (perm)	150	3226	1379	359	2918	0	1115	1699	0	719	1765	1451
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		327			10				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	45	751	125	59	484	558	158	278	79	791	129	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	751	125	59	1042	0	158	357	0	791	129	88
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	53.9	48.4	48.4	54.0	48.4		40.0	27.0		64.6	47.9	45.5
Actuated g/C Ratio	0.41	0.37	0.37	0.42	0.37		0.31	0.21		0.50	0.37	0.35
v/c Ratio	0.33	0.63	0.22	0.27	0.81		0.41	0.99		1.28	0.20	0.16
Control Delay (s/veh)	24.1	35.4	8.0	21.7	29.4		26.3	95.3		163.1	33.5	7.9
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)	24.1	35.4	8.0	21.7	29.4		26.3	95.3		163.1	33.5	7.9
LOS	C	D	A	C	C		C	F		F	C	A
Approach Delay (s/veh)		31.1			29.0			74.1			133.0	
Approach LOS		C			C			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay (s/veh): 65.7		Intersection LOS: E	
Intersection Capacity Utilization 115.8%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



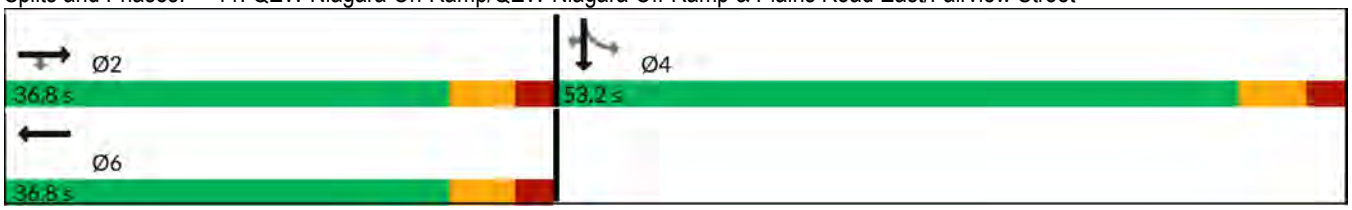


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1559	244	0	1345	369	0	0	0	348	1	289
Future Volume (vph)	0	1559	244	0	1345	369	0	0	0	348	1	289
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1567	1515
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4680	1316	0	4680	1360	0	0	0	1562	1567	1494
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			240			349						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1659	260	0	1431	393	0	0	0	370	1	307
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1659	260	0	1431	393	0	0	0	185	186	307
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		36.8	36.8		36.8					53.2	53.2	53.2
Total Split (%)		40.9%	40.9%		40.9%					59.1%	59.1%	59.1%
Maximum Green (s)		29.8	29.8		29.8					46.0	46.0	46.0
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		30.0	30.0		30.0	60.9				16.6	16.6	16.6
Actuated g/C Ratio		0.49	0.49		0.49	1.00				0.27	0.27	0.27
v/c Ratio		0.72	0.34		0.62	0.29				0.44	0.44	0.70
Control Delay (s/veh)		15.4	3.7		13.7	0.5				21.1	21.1	25.3
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		15.4	3.7		13.7	0.5				21.1	21.1	25.3
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		13.9			10.9						23.0	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.9			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 14.0		Intersection LOS: B	
Intersection Capacity Utilization 60.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



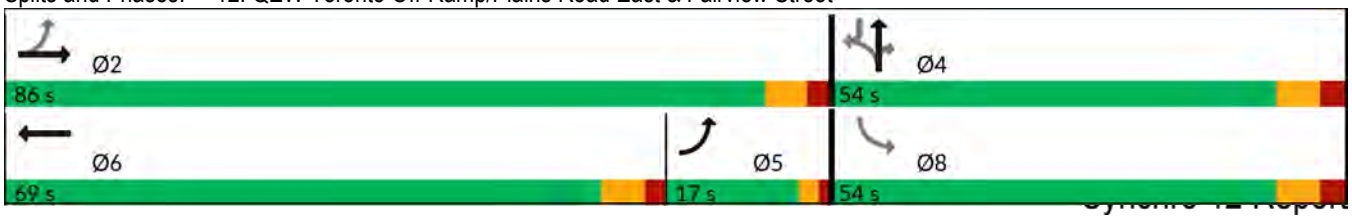
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	332	1427	73	0	1167	18	329	144	449	24	0	389
Future Volume (vph)	332	1427	73	0	1167	18	329	144	449	24	0	389
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00		0.97		1.00			0.99	0.98	1.00		
Frt			0.850		0.998			0.932	0.850			*0.900
Flt Protected	0.950						0.950	0.995		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4619	0	1533	1411	1384	1710	0	1543
Flt Permitted	0.141						0.950	0.995		0.362		
Satd. Flow (perm)	233	4725	1485	0	4619	0	1533	1411	1363	651	0	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		2			29	81			177
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	346	1486	76	0	1216	19	343	150	468	25	0	405
Shared Lane Traffic (%)							10%		33%			
Lane Group Flow (vph)	346	1486	76	0	1235	0	309	338	314	25	0	405
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

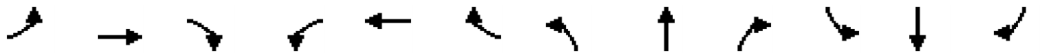
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	17.0	86.0			69.0		54.0	54.0	54.0	54.0		54.0
Total Split (%)	12.1%	61.4%			49.3%		38.6%	38.6%	38.6%	38.6%		38.6%
Maximum Green (s)	14.0	79.3			62.3		46.8	46.8	46.8	46.8		46.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	55.7	51.8	96.2		34.2		29.9	29.9	29.9	29.9		29.9
Actuated g/C Ratio	0.58	0.54	1.00		0.36		0.31	0.31	0.31	0.31		0.31
v/c Ratio	1.03	0.58	0.05		0.75		0.65	0.74	0.66	0.12		0.67
Control Delay (s/veh)	92.4	17.1	0.1		31.2		36.0	37.9	28.3	26.4		22.0
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	92.4	17.1	0.1		31.2		36.0	37.9	28.3	26.4		22.0
LOS	F	B	A		C		D	D	C	C		C
Approach Delay (s/veh)		30.1			31.2			34.2			22.2	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 96.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 30.5		Intersection LOS: C	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



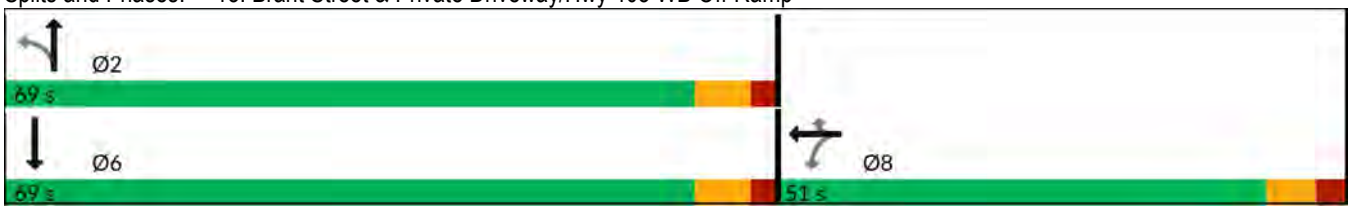


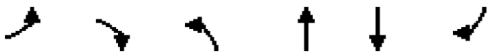
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	443	22	540	39	1164	182	0	1819	18
Future Volume (vph)	0	0	0	443	22	540	39	1164	182	0	1819	18
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4678	0
Flt Permitted				0.950	0.957		0.073					
Satd. Flow (perm)	0	0	0	1547	1556	1448	128	4680	1422	0	4678	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						43			141		2	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	466	23	568	41	1225	192	0	1915	19
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	242	247	568	41	1225	192	0	1934	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				51.0	51.0	51.0	69.0	69.0			69.0	
Total Split (%)				42.5%	42.5%	42.5%	57.5%	57.5%			57.5%	
Maximum Green (s)				43.8	43.8	43.8	61.8	61.8			61.8	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				44.0	44.0	44.0	54.8	54.8	113.3		54.8	
Actuated g/C Ratio				0.39	0.39	0.39	0.48	0.48	1.00		0.48	
v/c Ratio				0.40	0.41	0.97	0.67	0.54	0.14		0.85	
Control Delay (s/veh)				29.1	29.2	62.9	73.9	21.2	0.2		29.9	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				29.1	29.2	62.9	73.9	21.2	0.2		29.9	
LOS				C	C	E	E	C	A		C	
Approach Delay (s/veh)					47.3			19.9			29.9	
Approach LOS					D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 113.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 30.8		Intersection LOS: C	
Intersection Capacity Utilization 71.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



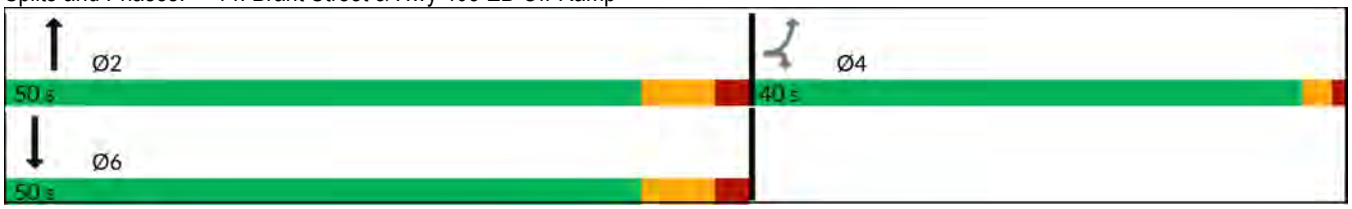


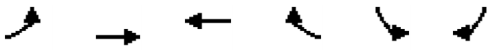
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	191	226	55	1169	1451	740
Future Volume (vph)	191	226	55	1169	1451	740
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Frt	0.950	0.850				0.850
Flt Protected	0.968			0.998		
Satd. Flow (prot)	3148	1339	0	4638	4680	1500
Flt Permitted	0.968			0.786		
Satd. Flow (perm)	3148	1339	0	3653	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13	13				613
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	201	238	58	1231	1527	779
Shared Lane Traffic (%)		42%				
Lane Group Flow (vph)	301	138	0	1289	1527	779
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	11.7	11.7		42.8	42.8	64.8
Actuated g/C Ratio	0.18	0.18		0.66	0.66	1.00
v/c Ratio	0.52	0.55		1.05	0.49	0.52
Control Delay (s/veh)	26.1	30.3		56.6	6.6	1.3
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	26.1	30.3		56.6	6.6	1.3
LOS	C	C		E	A	A
Approach Delay (s/veh)	27.4			56.6	4.8	
Approach LOS	C			E	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 64.8			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 23.8		Intersection LOS: C	
Intersection Capacity Utilization 78.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



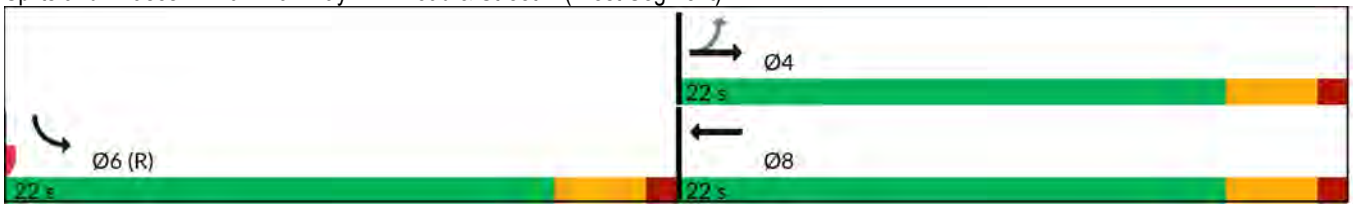


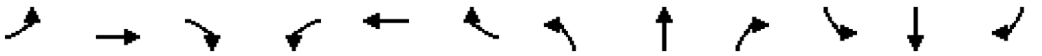
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	87	419	580	0	0	269
Future Volume (vph)	87	419	580	0	0	269
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.991				
Satd. Flow (prot)	0	3323	3353	0	1526	0
Flt Permitted		0.737				
Satd. Flow (perm)	0	2471	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					143	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	95	455	630	0	0	292
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	550	630	0	292	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		14.2	14.2		21.8	
Actuated g/C Ratio		0.32	0.32		0.50	
v/c Ratio		0.69	0.58		0.35	
Control Delay (s/veh)		17.4	21.8		5.8	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		17.4	21.8		5.8	
LOS		B	C		A	
Approach Delay (s/veh)		17.4	21.8		5.8	
Approach LOS		B	C		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 17.0		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)





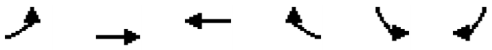
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	324	20	30	412	5	20	0	28	123	0	149
Future Volume (vph)	76	324	20	30	412	5	20	0	28	123	0	149
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998			0.922			0.926	
Flt Protected		0.991		0.950				0.979			0.978	
Satd. Flow (prot)	0	3300	0	1676	1761	0	0	1593	0	0	1598	0
Flt Permitted		0.737		0.475				0.863			0.849	
Satd. Flow (perm)	0	2454	0	838	1761	0	0	1404	0	0	1387	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			2			30			162	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	352	22	33	448	5	22	0	30	134	0	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	457	0	33	453	0	0	52	0	0	296	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		15.3		15.3	15.3			20.7			20.7	
Actuated g/C Ratio		0.35		0.35	0.35			0.47			0.47	
v/c Ratio		0.53		0.11	0.74			0.08			0.40	
Control Delay (s/veh)		24.0		10.8	22.4			5.3			6.2	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		24.0		10.8	22.4			5.3			6.2	
LOS		C		B	C			A			A	
Approach Delay (s/veh)		24.0			21.6			5.3			6.2	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



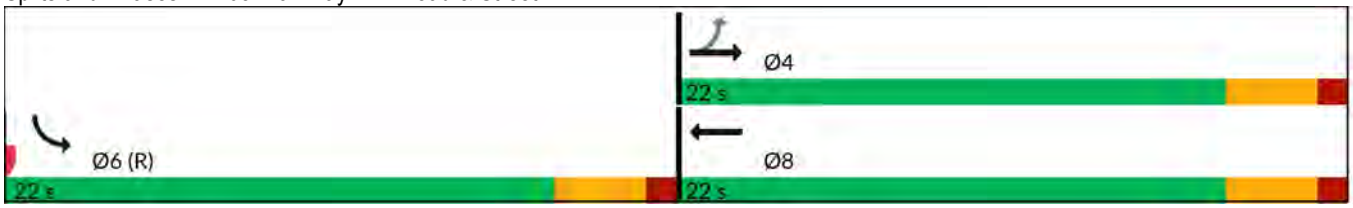


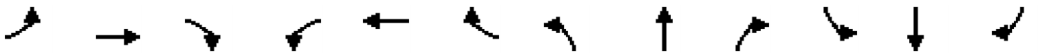
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	67	408	339	172	315	109
Future Volume (vph)	67	408	339	172	315	109
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.949		0.965	
Flt Protected		0.993			0.964	
Satd. Flow (prot)	0	3329	3182	0	1642	0
Flt Permitted		0.818			0.964	
Satd. Flow (perm)	0	2743	3182	0	1642	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			187		48	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	443	368	187	342	118
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	516	555	0	460	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		13.5	13.5		22.5	
Actuated g/C Ratio		0.31	0.31		0.51	
v/c Ratio		0.62	0.50		0.53	
Control Delay (s/veh)		22.9	9.2		10.5	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		22.9	9.2		10.5	
LOS		C	A		B	
Approach Delay (s/veh)		22.9	9.2		10.5	
Approach LOS		C	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D



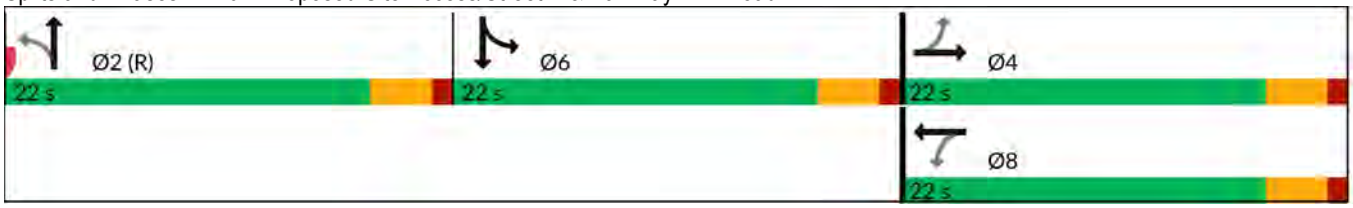


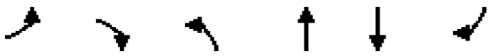
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	758	20	21	404	28	61	25	65	81	8	9
Future Volume (vph)	8	758	20	21	404	28	61	25	65	81	8	9
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.991			0.942			0.987	
Flt Protected		0.999			0.998			0.980			0.961	
Satd. Flow (prot)	0	3336	0	0	3316	0	0	1629	0	0	1674	0
Flt Permitted		0.949			0.787			0.933			0.961	
Satd. Flow (perm)	0	3169	0	0	2615	0	0	1551	0	0	1674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			10			57			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	824	22	23	439	30	66	27	71	88	9	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	855	0	0	492	0	0	164	0	0	107	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		0.99			0.68			0.35			0.23	
Control Delay (s/veh)		53.7			26.7			15.3			18.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		53.7			26.7			15.3			18.9	
LOS		D			C			B			B	
Approach Delay (s/veh)		53.7			26.7			15.3			18.9	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 39.3		Intersection LOS: D	
Intersection Capacity Utilization 46.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



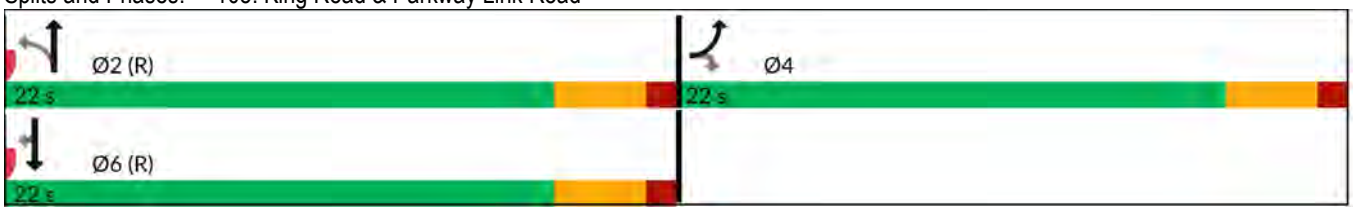


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	385	518	384	407	377	68
Future Volume (vph)	385	518	384	407	377	68
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.450			
Satd. Flow (perm)	1676	1500	794	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		297				74
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	418	563	417	442	410	74
Shared Lane Traffic (%)						
Lane Group Flow (vph)	418	563	417	442	410	74
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	15.2	15.2	20.8	20.8	20.8	20.8
Actuated g/C Ratio	0.35	0.35	0.47	0.47	0.47	0.47
v/c Ratio	0.72	0.79	1.11	0.53	0.49	0.10
Control Delay (s/veh)	19.8	15.2	103.4	12.3	11.7	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.8	15.2	103.4	12.3	11.7	3.2
LOS	B	B	F	B	B	A
Approach Delay (s/veh)	17.1			56.5	10.4	
Approach LOS	B			E	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay (s/veh): 30.3		Intersection LOS: C	
Intersection Capacity Utilization 75.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

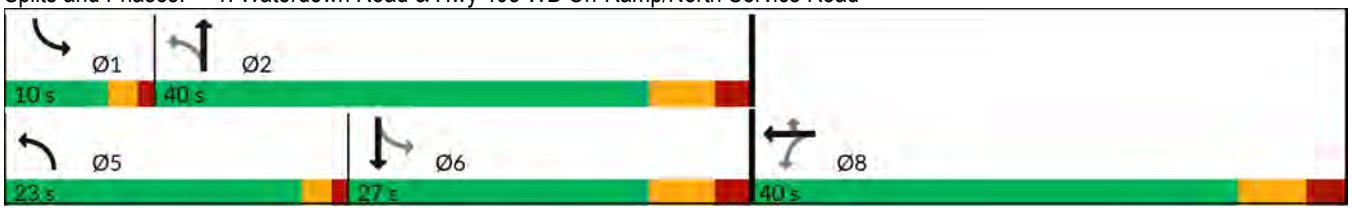


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	234	440	37	687	832	210	101	662	118
Future Volume (vph)	0	0	0	234	440	37	687	832	210	101	662	118
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.970			0.977	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	1660	3202	0	1710	3244	0
Flt Permitted				0.950			0.167			0.190		
Satd. Flow (perm)	0	0	0	1660	1782	1480	292	3202	0	342	3244	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						119		39			21	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	263	494	42	772	935	236	113	744	133
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	263	494	42	772	1171	0	113	877	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				40.0	40.0	40.0	23.0	40.0		10.0	27.0	
Total Split (%)				44.4%	44.4%	44.4%	25.6%	44.4%		11.1%	30.0%	
Maximum Green (s)				32.8	32.8	32.8	20.0	33.2		7.0	20.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				27.4	27.4	27.4	47.2	35.6		31.2	20.3	
Actuated g/C Ratio				0.32	0.32	0.32	0.56	0.42		0.37	0.24	
v/c Ratio				0.49	0.86	0.08	1.59	0.86		0.47	1.11	
Control Delay (s/veh)				26.2	42.5	0.3	296.5	31.9		19.7	98.3	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				26.2	42.5	0.3	296.5	31.9		19.7	98.3	
LOS				C	D	A	F	C		B	F	
Approach Delay (s/veh)					34.9			137.0			89.3	
Approach LOS					C			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 84.9			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.59			
Intersection Signal Delay (s/veh): 102.5		Intersection LOS: F	
Intersection Capacity Utilization 102.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

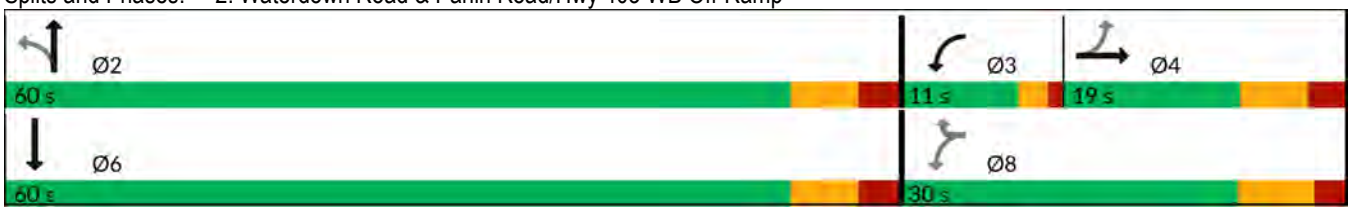


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	569	0	284	2	1307	0	0	909	0
Future Volume (vph)	0	0	5	569	0	284	2	1307	0	0	909	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.800				0.954				
Satd. Flow (perm)	0	1557	0	2712	0	1485	0	3137	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				51						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	686	0	342	2	1575	0	0	1095	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	686	0	342	0	1577	0	0	1095	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.6		24.1		19.8		45.5			45.5	
Actuated g/C Ratio		0.13		0.30		0.25		0.57			0.57	
v/c Ratio		0.02		0.72		0.84		0.89			0.58	
Control Delay (s/veh)		0.2		31.5		46.0		22.6			12.7	
Queue Delay		0.0		0.0		0.0		0.1			0.2	
Total Delay (s/veh)		0.2		31.5		46.0		22.7			12.9	
LOS		A		C		D		C			B	
Approach Delay (s/veh)		0.2			36.3			22.7			12.9	
Approach LOS		A			D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 80.2			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 23.6		Intersection LOS: C	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



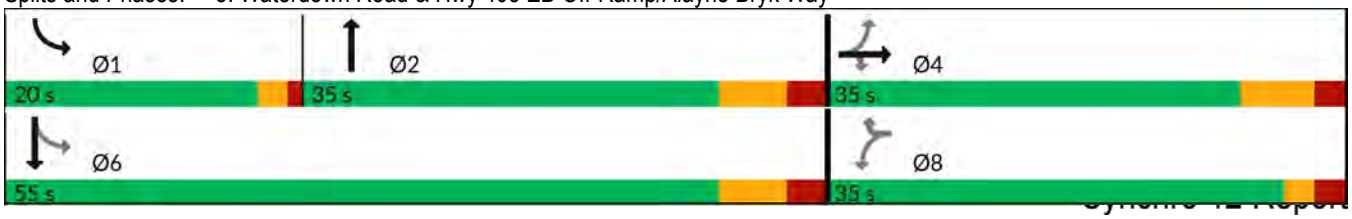
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	205	491	378	0	970	0	449	699	598	632	0
Future Volume (vph)	371	205	491	378	0	970	0	449	699	598	632	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850		0.909				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	2983	0	1629	3353	0
Flt Permitted	0.950			0.577						0.129		
Satd. Flow (perm)	1644	1667	1485	1883	0	1471	0	2983	0	221	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						492		269				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	417	230	552	425	0	1090	0	504	785	672	710	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	417	230	552	425	0	1090	0	1289	0	672	710	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

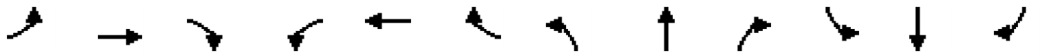
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.0	35.0	35.0	35.0		35.0		35.0		20.0	55.0	
Total Split (%)	38.9%	38.9%	38.9%	38.9%		38.9%		38.9%		22.2%	61.1%	
Maximum Green (s)	27.9	27.9	27.9	30.9		30.9		28.0		17.0	48.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	29.3	29.3	29.3	32.3		32.3		28.0		52.0	48.0	
Actuated g/C Ratio	0.32	0.32	0.32	0.35		0.35		0.31		0.57	0.53	
v/c Ratio	0.79	0.43	1.16	0.64		1.30		1.22dr		1.74	0.40	
Control Delay (s/veh)	40.6	27.4	124.7	29.8		162.3		112.1		363.8	14.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	40.6	27.4	124.7	29.8		162.3		112.1		363.8	14.2	
LOS	D	C	F	C		F		F		F	B	
Approach Delay (s/veh)		76.8			125.1			112.1			184.2	
Approach LOS		E			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 91.4			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.74			
Intersection Signal Delay (s/veh): 126.4		Intersection LOS: F	
Intersection Capacity Utilization 137.1%		ICU Level of Service H	
Analysis Period (min) 15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



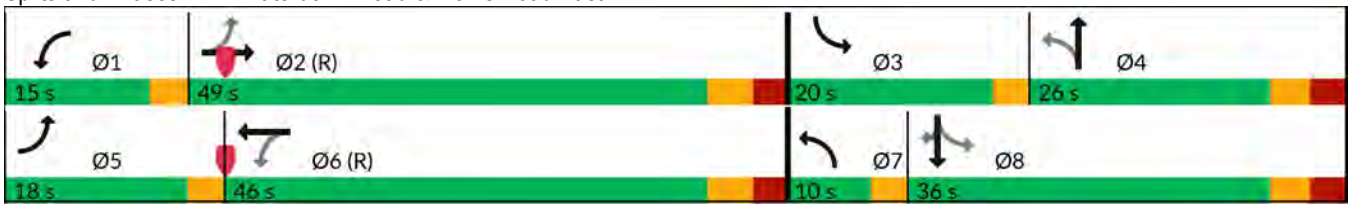


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	457	640	89	105	1125	131	194	320	61	266	334	633
Future Volume (vph)	457	640	89	105	1125	131	194	320	61	266	334	633
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	1.00		0.99	0.99		0.99		0.97
Frt		0.982			0.984			0.976				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1660	3277	0	1676	3247	0	1676	1646	0	1676	1682	1500
Flt Permitted	0.094			0.309			0.456			0.172		
Satd. Flow (perm)	164	3277	0	544	3247	0	797	1646	0	301	1682	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			13			8				257
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	476	667	93	109	1172	136	202	333	64	277	348	659
Shared Lane Traffic (%)												
Lane Group Flow (vph)	476	760	0	109	1308	0	202	397	0	277	348	659
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Max		None	Max	Max
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	61.0	45.8		51.9	39.7		30.6	20.3		43.0	29.7	29.7
Actuated g/C Ratio	0.55	0.42		0.47	0.36		0.28	0.18		0.39	0.27	0.27
v/c Ratio	1.62	0.55		0.31	1.11		0.73	1.28		0.86	0.77	1.13
Control Delay (s/veh)	319.0	26.0		14.6	95.0		44.7	185.0		51.9	49.6	104.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	319.0	26.0		14.6	95.0		44.7	185.0		51.9	49.6	104.1
LOS	F	C		B	F		D	F		D	D	F
Approach Delay (s/veh)		138.8			88.8			137.7			78.1	
Approach LOS		F			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay (s/veh): 105.9		Intersection LOS: F	
Intersection Capacity Utilization 119.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1392	36	0	1321	25	14
Future Volume (vph)	1392	36	0	1321	25	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.996				0.952	
Flt Protected					0.969	
Satd. Flow (prot)	3260	0	0	3420	1045	0
Flt Permitted					0.969	
Satd. Flow (perm)	3260	0	0	3420	1045	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10				15	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	1530	40	0	1452	27	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1570	0	0	1452	42	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.3			41.3	11.1	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.56			0.50	0.17	
Control Delay (s/veh)	5.4			4.2	13.8	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	5.4			4.2	13.8	
LOS	A			A	B	
Approach Delay (s/veh)	5.4			4.2	13.8	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.5			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 4.9		Intersection LOS: A	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

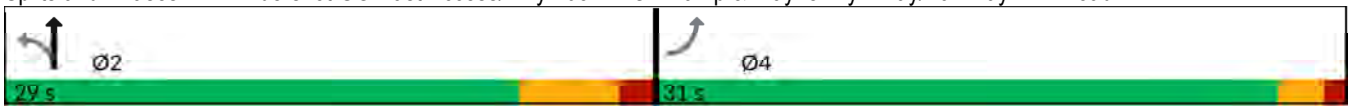


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	587	660	14	0	935	108	238	47	0	0	0	0
Future Volume (vph)	587	660	14	0	935	108	238	47	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997				0.850						
Flt Protected	0.950							0.960				
Satd. Flow (prot)	1644	1795	0	0	1800	1530	0	1728	1800	0	0	0
Flt Permitted	0.950							0.960				
Satd. Flow (perm)	1644	1795	0	0	1800	1530	0	1728	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				109						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	716	805	17	0	1140	132	290	57	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	716	822	0	0	1140	132	0	347	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	31.0						29.0	29.0				
Total Split (%)	51.7%						48.3%	48.3%				
Maximum Green (s)	28.0						23.0	23.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	20.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	26.3	0.0			0.0	0.0		15.6				
Actuated g/C Ratio	0.51	0.00			0.00	0.00		0.31				
v/c Ratio	0.85	822.00			no cap	1.21		0.66				
Control Delay (s/veh)	24.6	Error				171.5		22.2				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	24.6	Error			Error	171.5		22.2				
LOS	C	F			F	F		C				
Approach Delay (s/veh)		198426.4			Error			22.2				
Approach LOS		F			F			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 51.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 117.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road



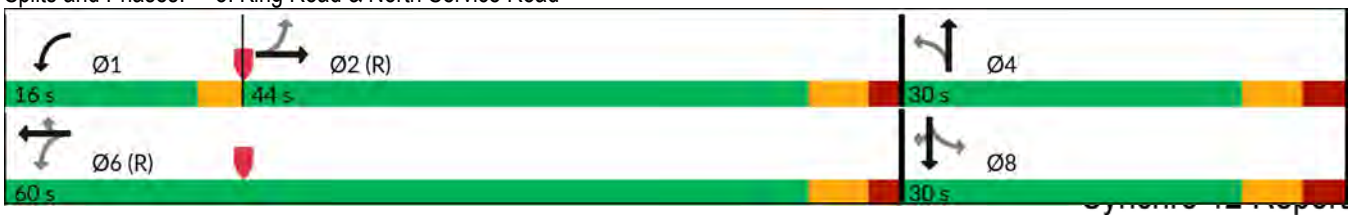
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	576	594	77	54	331	664	65	362	21
Future Volume (vph)	14	267	92	576	594	77	54	331	664	65	362	21
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.915				0.850
Flt Protected	0.950										0.992	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1751	1530
Flt Permitted	0.356			*0.470							0.607	
Satd. Flow (perm)	641	1698	0	829	1765	1469	0	*3050	*3050	0	1071	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				48		97				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	606	625	81	57	348	699	68	381	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	606	625	81	0	1104	0	0	449	22
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	24.8	24.8		43.8	40.8	42.8		39.2			39.2	36.2
Actuated g/C Ratio	0.28	0.28		0.49	0.45	0.48		0.44			0.44	0.40
v/c Ratio	0.09	0.78		1.13	0.78	0.11		0.80			0.96	0.03
Control Delay (s/veh)	22.0	39.0		99.9	27.8	5.5		27.2			62.4	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	22.0	39.0		99.9	27.8	5.5		27.2			62.4	0.1
LOS	C	D		F	C	A		C			E	A
Approach Delay (s/veh)		38.4			59.7			27.2			59.5	
Approach LOS		D			E			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay (s/veh): 46.2		Intersection LOS: D	
Intersection Capacity Utilization 157.9%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: King Road & North Service Road

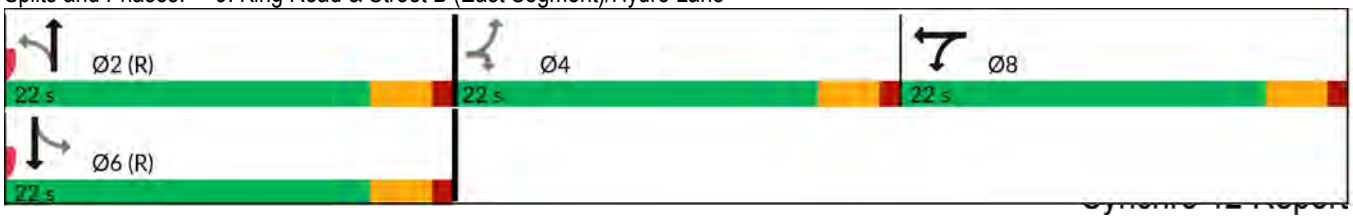


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	367	0	0	14	0	7	128	596	5	0	905	113
Future Volume (vph)	367	0	0	14	0	7	128	596	5	0	905	113
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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				
Frt					0.850			0.999			0.983	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1763	0	1800	1754	0
Flt Permitted	0.222			0.950			0.129					
Satd. Flow (perm)	400	0	1800	1710	1530	0	232	1763	0	1800	1754	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					120			1			9	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
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 (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	371	0	0	14	0	7	129	602	5	0	914	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	371	0	0	14	7	0	129	607	0	0	1028	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA		Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.3	8.3		33.5	33.5			33.5	
Actuated g/C Ratio	0.27			0.13	0.13		0.51	0.51			0.51	
v/c Ratio	3.40			0.07	0.02		1.10	0.68			1.15	
Control Delay (s/veh)	Error			22.9	0.1		141.4	22.5			101.8	
Queue Delay	0.0			0.0	0.0		0.0	0.0			0.0	
Total Delay (s/veh)	Error			22.9	0.1		141.4	22.5			101.8	
LOS	F			C	A		F	C			F	
Approach Delay (s/veh)		1119.1			15.3			43.3			101.8	
Approach LOS		F			B			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.40			
Intersection Signal Delay (s/veh): 256.0		Intersection LOS: F	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane



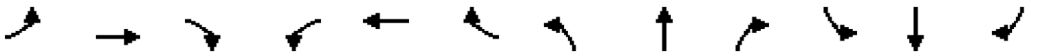
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	943	205	120	1292	1004	165	301	73	826	295	159
Future Volume (vph)	22	943	205	120	1292	1004	165	301	73	826	295	159
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.97		0.99	0.99		0.99		0.97
Frt			0.850		0.934			0.971				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3001	0	1613	1684	0	1765	1800	1500
Flt Permitted	0.062			0.191			0.273			*0.420		
Satd. Flow (perm)	112	3320	1393	342	3001	0	460	1684	0	734	1800	1460
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			119		219			8				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	22	962	209	122	1318	1024	168	307	74	843	301	162
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	962	209	122	2342	0	168	381	0	843	301	162
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	72.4	66.0	66.0	74.9	70.7		37.9	27.0		44.1	30.1	27.7
Actuated g/C Ratio	0.56	0.51	0.51	0.58	0.54		0.29	0.21		0.34	0.23	0.21
v/c Ratio	0.16	0.57	0.27	0.45	1.35		0.73	1.07		2.34	0.72	0.42
Control Delay (s/veh)	13.6	23.9	8.6	17.3	188.6		51.8	115.2		635.1	57.3	23.3
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)	13.6	23.9	8.6	17.3	188.6		51.8	115.2		635.1	57.3	23.3
LOS	B	C	A	B	F		D	F		F	E	C
Approach Delay (s/veh)		21.0			180.1			95.8			426.0	
Approach LOS		C			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.34			
Intersection Signal Delay (s/veh): 195.5		Intersection LOS: F	
Intersection Capacity Utilization 161.6%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East



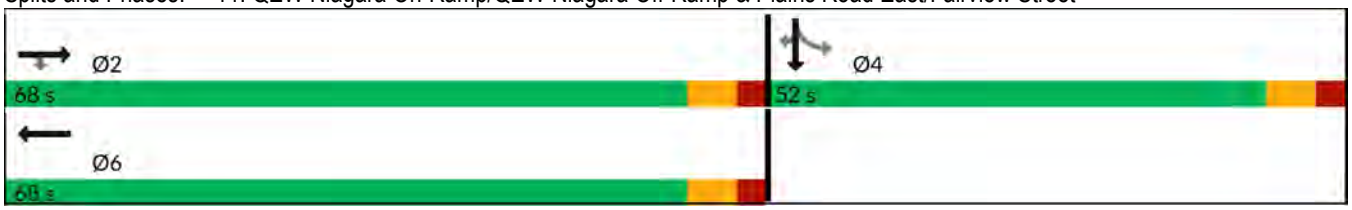


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1702	489	0	2224	1611	0	0	0	753	7	616
Future Volume (vph)	0	1702	489	0	2224	1611	0	0	0	753	7	616
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.97			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1614	1485
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1614	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			449			690						36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1737	499	0	2269	1644	0	0	0	768	7	629
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1737	499	0	2269	1644	0	0	0	384	391	629
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		68.0	68.0		68.0					52.0	52.0	52.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		61.0	61.0		61.0					44.8	44.8	44.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		60.1	60.1		60.1	119.1				44.8	44.8	44.8
Actuated g/C Ratio		0.50	0.50		0.50	1.00				0.38	0.38	0.38
v/c Ratio		0.72	0.52		0.93	1.12				0.63	0.64	1.10
Control Delay (s/veh)		25.1	4.6		36.2	71.4				36.4	36.8	100.9
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		25.1	4.6		36.2	71.4				36.4	36.8	100.9
LOS		C	A		D	E				D	D	F
Approach Delay (s/veh)		20.5			51.0						65.4	
Approach LOS		C			D						E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 119.1			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 44.7		Intersection LOS: D	
Intersection Capacity Utilization 97.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



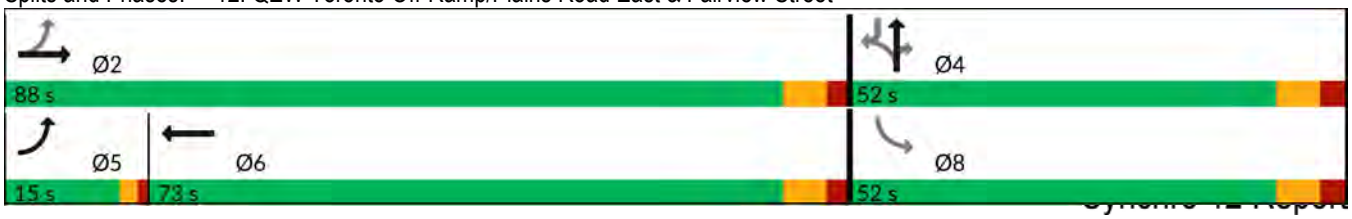
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	333	1850	109	0	2737	17	341	263	465	16	0	651
Future Volume (vph)	333	1850	109	0	2737	17	341	263	465	16	0	651
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.960	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4808	0	1577	1528	1425	1710	0	1588
Flt Permitted	0.058						0.950	0.996		0.224		
Satd. Flow (perm)	100	4818	1451	0	4808	0	1577	1528	1405	403	0	1588
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			108		1			12	52			167
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	340	1888	111	0	2793	17	348	268	474	16	0	664
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	340	1888	111	0	2810	0	313	412	365	16	0	664
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	15.0	88.0			73.0		52.0	52.0	52.0	52.0		52.0
Total Split (%)	10.7%	62.9%			52.1%		37.1%	37.1%	37.1%	37.1%		37.1%
Maximum Green (s)	12.0	81.3			66.3		44.8	44.8	44.8	44.8		44.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	85.0	81.3	140.0		66.3		44.8	44.8	44.8	44.8		44.8
Actuated g/C Ratio	0.61	0.58	1.00		0.47		0.32	0.32	0.32	0.32		0.32
v/c Ratio	1.76	0.68	0.08		1.23		0.62	0.83	0.75	0.13		1.07
Control Delay (s/veh)	390.0	21.8	0.1		142.7		46.8	58.2	47.5	37.1		90.0
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	390.0	21.8	0.1		142.7		46.8	58.2	47.5	37.1		90.0
LOS	F	C	A		F		D	E	D	D		F
Approach Delay (s/veh)		74.3			142.7			51.4			88.7	
Approach LOS		E			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.76			
Intersection Signal Delay (s/veh): 99.9		Intersection LOS: F	
Intersection Capacity Utilization 139.3%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



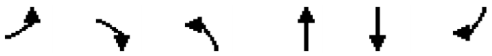
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	114	10	65	82	1807	708	0	2215	23
Future Volume (vph)	0	0	0	114	10	65	82	1807	708	0	2215	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor							1.00		0.98		1.00	
Frt						0.850			0.850		0.998	
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1602	1485	1676	4771	1515	0	4779	0
Flt Permitted				0.950	0.960		0.058					
Satd. Flow (perm)	0	0	0	1577	1602	1485	102	4771	1480	0	4779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						51			470		4	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	120	11	68	86	1902	745	0	2332	24
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	65	66	68	86	1902	745	0	2356	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Perm	NA	Free		NA	
Protected Phases					8			2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	2	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	10.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	17.2	17.2			17.2	
Total Split (s)				17.2	17.2	17.2	72.8	72.8			72.8	
Total Split (%)				19.1%	19.1%	19.1%	80.9%	80.9%			80.9%	
Maximum Green (s)				10.0	10.0	10.0	65.6	65.6			65.6	
Yellow Time (s)				4.5	4.5	4.5	5.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	7.2	7.2			7.2	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	Min	Min			Min	
Walk Time (s)				7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0	11.0	11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0	0	0			0	
Act Effct Green (s)				10.0	10.0	10.0	70.9	70.9	90.3		70.9	
Actuated g/C Ratio				0.11	0.11	0.11	0.79	0.79	1.00		0.79	
v/c Ratio				0.37	0.37	0.32	1.08	0.51	0.50		0.63	
Control Delay (s/veh)				44.0	43.9	20.0	148.5	5.3	1.2		6.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				44.0	43.9	20.0	148.5	5.3	1.2		6.5	
LOS				D	D	B	F	A	A		A	
Approach Delay (s/veh)					35.8			8.7			6.5	
Approach LOS					D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90.3			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 8.7		Intersection LOS: A	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



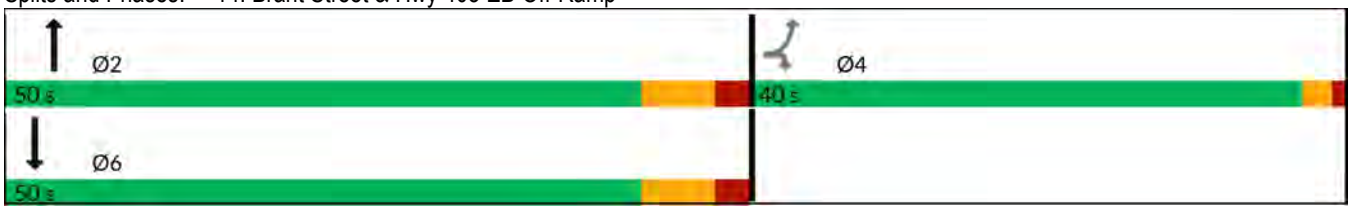


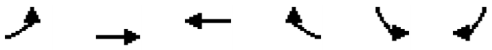
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	265	268	124	1988	1680	421
Future Volume (vph)	265	268	124	1988	1680	421
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Ped Bike Factor				1.00		0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965			0.997		
Satd. Flow (prot)	3094	1352	0	4809	4771	1485
Flt Permitted	0.965			0.665		
Satd. Flow (perm)	3094	1352	0	3207	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	7	7				301
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	273	276	128	2049	1732	434
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	375	174	0	2177	1732	434
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	14.0	14.0		42.8	42.8	67.1
Actuated g/C Ratio	0.21	0.21		0.64	0.64	1.00
v/c Ratio	0.58	0.61		2.43	0.57	0.30
Control Delay (s/veh)	27.0	32.4		661.6	8.4	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	27.0	32.4		661.6	8.4	0.5
LOS	C	C		F	A	A
Approach Delay (s/veh)	28.7			661.6	6.8	
Approach LOS	C			F	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 67.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 2.43			
Intersection Signal Delay (s/veh): 300.7		Intersection LOS: F	
Intersection Capacity Utilization 103.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



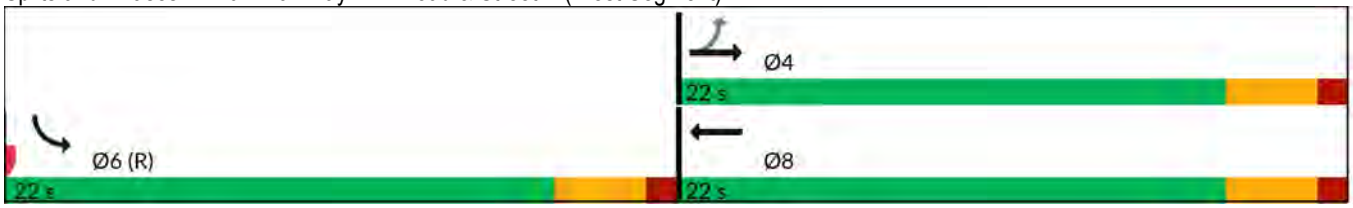


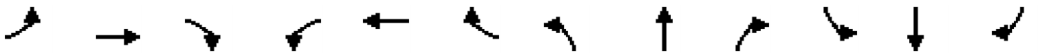
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	134	573	863	0	0	183
Future Volume (vph)	134	573	863	0	0	183
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.991				
Satd. Flow (prot)	0	3323	3353	0	1526	0
Flt Permitted		0.603				
Satd. Flow (perm)	0	2022	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					50	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	146	623	938	0	0	199
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	769	938	0	199	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		17.9	17.9		18.1	
Actuated g/C Ratio		0.41	0.41		0.41	
v/c Ratio		0.93	0.69		0.30	
Control Delay (s/veh)		35.3	18.2		8.1	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		35.3	18.2		8.1	
LOS		D	B		A	
Approach Delay (s/veh)		35.3	18.2		8.1	
Approach LOS		D	B		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay (s/veh): 24.0		Intersection LOS: C	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)





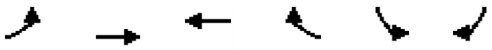
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	419	112	197	587	14	150	0	191	65	0	126
Future Volume (vph)	43	419	112	197	587	14	150	0	191	65	0	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.997			0.924			0.911	
Flt Protected		0.996		0.950				0.979			0.983	
Satd. Flow (prot)	0	3243	0	1676	1759	0	0	1596	0	0	1580	0
Flt Permitted		0.764		0.371				0.798			0.818	
Satd. Flow (perm)	0	2487	0	655	1759	0	0	1301	0	0	1315	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		82			3			177			137	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	47	455	122	214	638	15	163	0	208	71	0	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	624	0	214	653	0	0	371	0	0	208	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		17.7		17.7	17.7			18.3			18.3	
Actuated g/C Ratio		0.40		0.40	0.40			0.42			0.42	
v/c Ratio		0.59		0.81	0.92			0.58			0.33	
Control Delay (s/veh)		19.4		40.2	35.6			9.5			5.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		19.4		40.2	35.6			9.5			5.4	
LOS		B		D	D			A			A	
Approach Delay (s/veh)		19.4			36.7			9.5			5.4	
Approach LOS		B			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 23.5		Intersection LOS: C	
Intersection Capacity Utilization 91.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



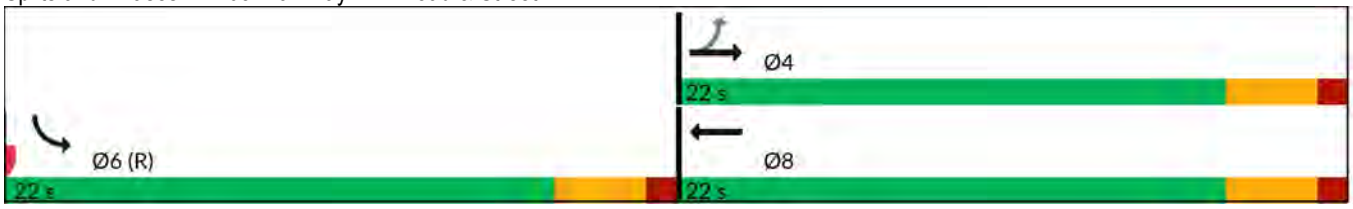


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	131	544	674	216	192	123
Future Volume (vph)	131	544	674	216	192	123
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.964		0.947	
Flt Protected		0.990			0.970	
Satd. Flow (prot)	0	3319	3232	0	1621	0
Flt Permitted		0.592			0.970	
Satd. Flow (perm)	0	1985	3232	0	1621	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			119		89	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	142	591	733	235	209	134
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	733	968	0	343	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		17.6	17.6		18.4	
Actuated g/C Ratio		0.40	0.40		0.42	
v/c Ratio		0.92	0.71		0.47	
Control Delay (s/veh)		32.8	12.9		9.5	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		32.8	12.9		9.5	
LOS		C	B		A	
Approach Delay (s/veh)		32.8	12.9		9.5	
Approach LOS		C	B		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay (s/veh): 19.5		Intersection LOS: B	
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

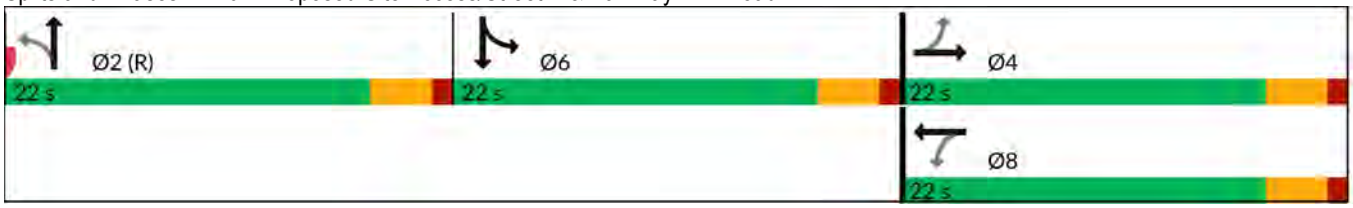


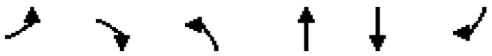
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	737	26	34	827	45	45	20	37	47	12	51
Future Volume (vph)	67	737	26	34	827	45	45	20	37	47	12	51
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.993			0.951			0.938	
Flt Protected		0.996			0.998			0.978			0.979	
Satd. Flow (prot)	0	3323	0	0	3323	0	0	1641	0	0	1621	0
Flt Permitted		0.552			0.707			0.719			0.979	
Satd. Flow (perm)	0	1842	0	0	2354	0	0	1207	0	0	1621	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			8			40			55	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	801	28	37	899	49	49	22	40	51	13	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	902	0	0	985	0	0	111	0	0	119	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		1.78			1.52			0.31			0.25	
Control Delay (s/veh)		382.4			266.7			15.8			12.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		382.4			266.7			15.8			12.6	
LOS		F			F			B			B	
Approach Delay (s/veh)		382.4			266.7			15.8			12.6	
Approach LOS		F			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.78			
Intersection Signal Delay (s/veh): 288.5		Intersection LOS: F	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



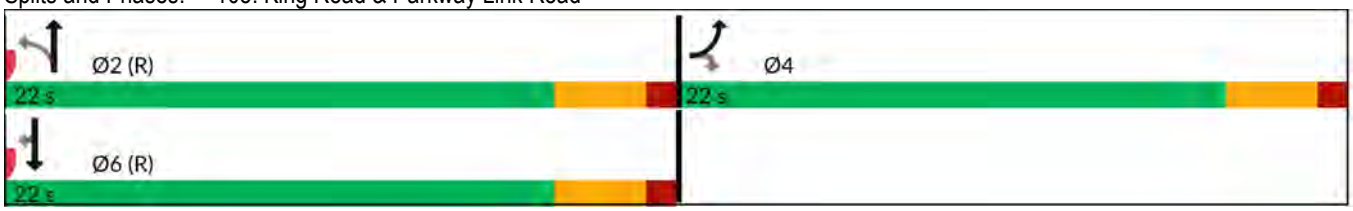


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	288	532	769	490	706	137
Future Volume (vph)	288	532	769	490	706	137
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. 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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.213			
Satd. Flow (perm)	1676	1500	376	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		90				128
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	313	578	836	533	767	149
Shared Lane Traffic (%)						
Lane Group Flow (vph)	313	578	836	533	767	149
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	17.2	17.2	18.8	18.8	18.8	18.8
Actuated g/C Ratio	0.39	0.39	0.43	0.43	0.43	0.43
v/c Ratio	0.48	0.90	5.23	0.71	1.02	0.21
Control Delay (s/veh)	12.7	32.3	Error	18.1	55.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	32.3	Error	18.1	55.9	3.6
LOS	B	C	F	B	E	A
Approach Delay (s/veh)	25.4			1182.5	47.4	
Approach LOS	C			F	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 5.23			
Intersection Signal Delay (s/veh): 530.5		Intersection LOS: F	
Intersection Capacity Utilization 111.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

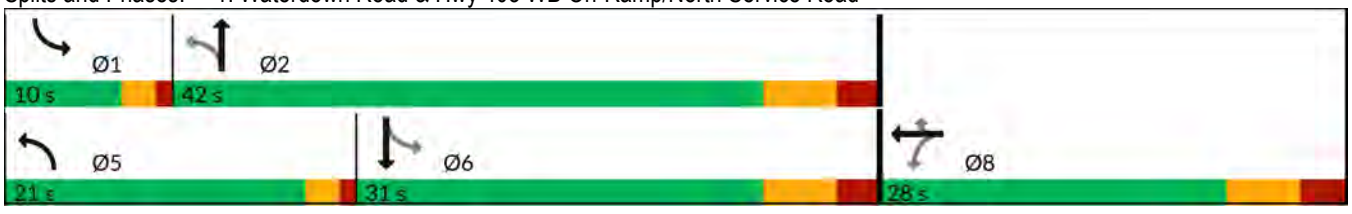


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	132	234	82	588	652	181	140	651	114
Future Volume (vph)	0	0	0	132	234	82	588	652	181	140	651	114
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	1		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.967			0.978	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	1676	3250	0	1710	3307	0
Flt Permitted				0.950			0.195			0.333		
Satd. Flow (perm)	0	0	0	1693	1782	1510	344	3250	0	599	3307	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						134		57			25	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	135	239	84	600	665	185	143	664	116
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	135	239	84	600	850	0	143	780	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				28.0	28.0	28.0	21.0	42.0		10.0	31.0	
Total Split (%)				35.0%	35.0%	35.0%	26.3%	52.5%		12.5%	38.8%	
Maximum Green (s)				20.8	20.8	20.8	18.0	35.2		7.0	24.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				14.9	14.9	14.9	45.7	34.1		31.5	20.6	
Actuated g/C Ratio				0.21	0.21	0.21	0.64	0.48		0.44	0.29	
v/c Ratio				0.38	0.64	0.20	1.07	0.53		0.38	0.80	
Control Delay (s/veh)				27.9	34.5	2.6	76.2	14.6		10.4	29.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				27.9	34.5	2.6	76.2	14.6		10.4	29.7	
LOS				C	C	A	E	B		B	C	
Approach Delay (s/veh)					26.7			40.1			26.7	
Approach LOS					C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 70.9			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay (s/veh): 33.6		Intersection LOS: C	
Intersection Capacity Utilization 85.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

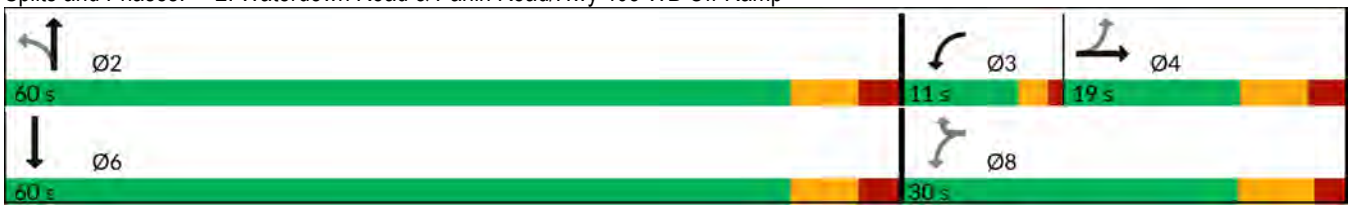


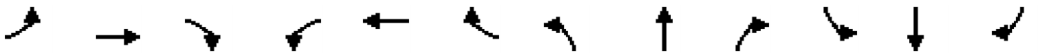
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	783	0	342	1	1058	0	0	754	0
Future Volume (vph)	1	0	1	783	0	342	1	1058	0	0	754	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.833				0.954				
Satd. Flow (perm)	0	1637	0	2824	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				87						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	824	0	360	1	1114	0	0	794	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	824	0	360	0	1115	0	0	794	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.0	19.0		11.0		30.0	60.0	60.0			60.0	
Total Split (%)	21.1%	21.1%		12.2%		33.3%	66.7%	66.7%			66.7%	
Maximum Green (s)	11.9	11.9		8.0		22.8	52.8	52.8			52.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		21.3		16.9		28.0			28.0	
Actuated g/C Ratio		0.18		0.36		0.28		0.47			0.47	
v/c Ratio		0.01		0.73		0.73		0.75			0.51	
Control Delay (s/veh)		0.0		22.8		25.7		16.9			12.6	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		22.8		25.7		16.9			12.6	
LOS		A		C		C		B			B	
Approach Delay (s/veh)					23.7			16.9			12.6	
Approach LOS					C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 18.4		Intersection LOS: B	
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



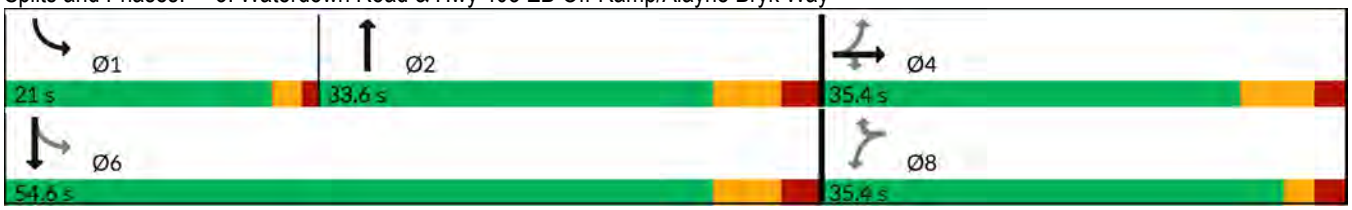


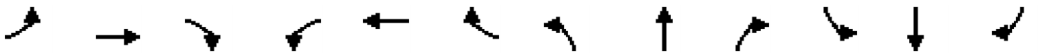
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	614	483	261	254	0	685	0	450	678	591	636	0
Future Volume (vph)	614	483	261	254	0	685	0	450	678	591	636	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		0	1		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850		0.910				
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3063	0	1676	3353	0
Flt Permitted	0.950			0.219						0.135		
Satd. Flow (perm)	1693	1782	1452	671	0	1430	0	3063	0	238	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						517		91				
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	653	514	278	270	0	729	0	479	721	629	677	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	653	514	278	270	0	729	0	1200	0	629	677	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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0	0.6	2.0	2.0		2.0		0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm		Perm		NA		pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8				6		
Detector Phase	4	4	4	8		8		2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0		7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0		10.0	17.0	
Total Split (s)	35.4	35.4	35.4	35.4		35.4		33.6		21.0	54.6	
Total Split (%)	39.3%	39.3%	39.3%	39.3%		39.3%		37.3%		23.3%	60.7%	
Maximum Green (s)	28.3	28.3	28.3	31.3		31.3		26.6		18.0	47.6	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5		2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5		1.0	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Lost Time (s)	7.1	7.1	7.1	4.1		4.1		7.0		3.0	7.0	
Lead/Lag								Lag		Lead		
Lead-Lag Optimize?								Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0		3.0	3.0	
Recall Mode	Min	Min	Min	None		None		Min		None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	29.6	29.6	29.6	32.6		32.6		26.6		51.6	47.6	
Actuated g/C Ratio	0.32	0.32	0.32	0.36		0.36		0.29		0.57	0.52	
v/c Ratio	1.19	0.89	0.59	1.13		0.87		1.42dr		1.50	0.39	
Control Delay (s/veh)	133.4	48.9	31.7	128.2		20.1		151.4		262.8	14.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	
Total Delay (s/veh)	133.4	48.9	31.7	128.2		20.1		151.4		262.8	14.2	
LOS	F	D	C	F		C		F		F	B	
Approach Delay (s/veh)		83.8			49.3			151.4			133.9	
Approach LOS		F			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 91.3			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.50			
Intersection Signal Delay (s/veh): 106.4		Intersection LOS: F	
Intersection Capacity Utilization 132.0%		ICU Level of Service H	
Analysis Period (min) 15			
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



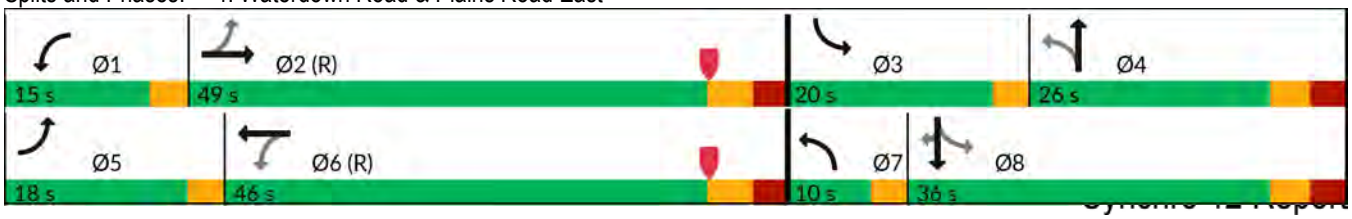


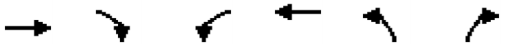
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	508	538	131	76	556	218	137	327	65	238	300	515
Future Volume (vph)	508	538	131	76	556	218	137	327	65	238	300	515
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
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	0.97	0.99		0.99	0.96		0.85	0.99		0.99		0.75
Frt		0.971			0.958			0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1693	3256	0	1676	3090	0	1710	1721	0	1676	1765	1500
Flt Permitted	0.150			0.349			0.507			0.170		
Satd. Flow (perm)	259	3256	0	609	3090	0	772	1721	0	297	1765	1127
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			59			8				300
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	529	560	136	79	579	227	143	341	68	248	313	536
Shared Lane Traffic (%)												
Lane Group Flow (vph)	529	696	0	79	806	0	143	409	0	248	313	536
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	49.0		15.0	46.0		10.0	26.0		20.0	36.0	36.0
Total Split (%)	16.4%	44.5%		13.6%	41.8%		9.1%	23.6%		18.2%	32.7%	32.7%
Maximum Green (s)	15.0	42.7		12.0	39.7		7.0	19.7		17.0	29.7	29.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	54.3	41.6		44.4	33.0		40.2	27.9		49.7	34.4	34.4
Actuated g/C Ratio	0.49	0.38		0.40	0.30		0.37	0.25		0.45	0.31	0.31
v/c Ratio	1.64	0.56		0.24	0.83		0.40	0.93		0.75	0.57	0.96
Control Delay (s/veh)	323.8	27.5		15.9	41.2		25.2	69.8		37.3	37.9	47.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	323.8	27.5		15.9	41.2		25.2	69.8		37.3	37.9	47.8
LOS	F	C		B	D		C	E		D	D	D
Approach Delay (s/veh)		155.4			38.9			58.2			42.6	
Approach LOS		F			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.64			
Intersection Signal Delay (s/veh): 80.8		Intersection LOS: F	
Intersection Capacity Utilization 108.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





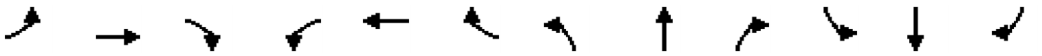
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1471	50	0	931	16	37
Future Volume (vph)	1471	50	0	931	16	37
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.995				0.905	
Flt Protected					0.985	
Satd. Flow (prot)	3347	0	0	3420	1306	0
Flt Permitted					0.985	
Satd. Flow (perm)	3347	0	0	3420	1306	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	13				32	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	1501	51	0	950	16	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1552	0	0	950	54	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	39.8			39.8	11.0	
Actuated g/C Ratio	0.84			0.84	0.23	
v/c Ratio	0.55			0.33	0.16	
Control Delay (s/veh)	5.0			3.2	10.2	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	5.0			3.2	10.2	
LOS	A			A	B	
Approach Delay (s/veh)	5.0			3.2	10.2	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.2			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 4.4		Intersection LOS: A	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way



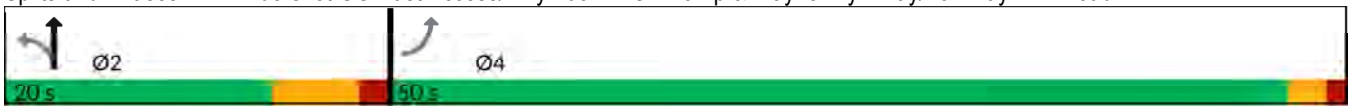


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	557	604	55	0	781	94	69	29	0	0	0	0
Future Volume (vph)	557	604	55	0	781	94	69	29	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987				0.850						
Flt Protected	0.950							0.966				
Satd. Flow (prot)	1693	1777	0	0	1800	1530	0	1739	1800	0	0	0
Flt Permitted	0.950							0.966				
Satd. Flow (perm)	1693	1777	0	0	1800	1530	0	1739	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				94						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	599	649	59	0	840	101	74	31	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	599	708	0	0	840	101	0	105	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	custom	NA			NA	NA	Perm	NA				
Protected Phases								2				
Permitted Phases	4						2					
Detector Phase	4						2	2				
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0						10.0	10.0				
Minimum Split (s)	10.0						16.0	16.0				
Total Split (s)	50.0						20.0	20.0				
Total Split (%)	71.4%						28.6%	28.6%				
Maximum Green (s)	47.0						14.0	14.0				
Yellow Time (s)	2.0						4.5	4.5				
All-Red Time (s)	1.0						1.5	1.5				
Lost Time Adjust (s)	0.0							0.0				
Total Lost Time (s)	3.0							6.0				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0						3.0	3.0				
Recall Mode	Min						None	None				
Walk Time (s)	7.0						7.0	7.0				
Flash Don't Walk (s)	16.0						16.0	16.0				
Pedestrian Calls (#/hr)	0						0	0				
Act Effct Green (s)	28.6	0.0			0.0	0.0		10.8				
Actuated g/C Ratio	0.67	0.00			0.00	0.00		0.25				
v/c Ratio	0.53	141.60			no cap	1.07		0.24				
Control Delay (s/veh)	7.9	Error				133.8		17.0				
Queue Delay	0.0	0.0				0.0		0.0				
Total Delay (s/veh)	7.9	Error			Error	133.8		17.0				
LOS	A	F			F	F		B				
Approach Delay (s/veh)		34472.4			Error			17.0				
Approach LOS		F			F			B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 42.6			
Natural Cycle: 40			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: Err			
Intersection Signal Delay (s/veh): Err		Intersection LOS: F	
Intersection Capacity Utilization 100.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

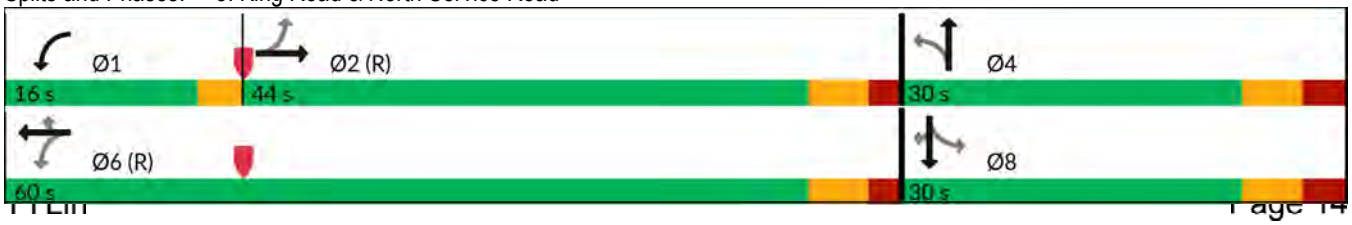


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	358	278	70	119	258	591	72	229	20
Future Volume (vph)	14	223	91	358	278	70	119	258	591	72	229	20
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.98				0.97
Frt		0.956				0.850		0.918				0.850
Flt Protected	0.950										0.988	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1778	1530
Flt Permitted	0.581			*0.470							0.603	
Satd. Flow (perm)	1046	1711	0	829	1800	1498	0	*3050	*3050	0	1085	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				74		88				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	377	293	74	125	272	622	76	241	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	377	293	74	0	1019	0	0	317	21
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	21.8	21.8		40.8	37.8	39.8		42.2			42.2	39.2
Actuated g/C Ratio	0.24	0.24		0.45	0.42	0.44		0.47			0.47	0.44
v/c Ratio	0.06	0.76		0.74	0.39	0.11		0.69			0.62	0.03
Control Delay (s/veh)	23.3	39.7		25.9	18.7	3.2		21.6			27.2	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.3	39.7		25.9	18.7	3.2		21.6			27.2	0.1
LOS	C	D		C	B	A		C			C	A
Approach Delay (s/veh)		39.0			20.8			21.6			25.5	
Approach LOS		D			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 24.3		Intersection LOS: C	
Intersection Capacity Utilization 130.7%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road

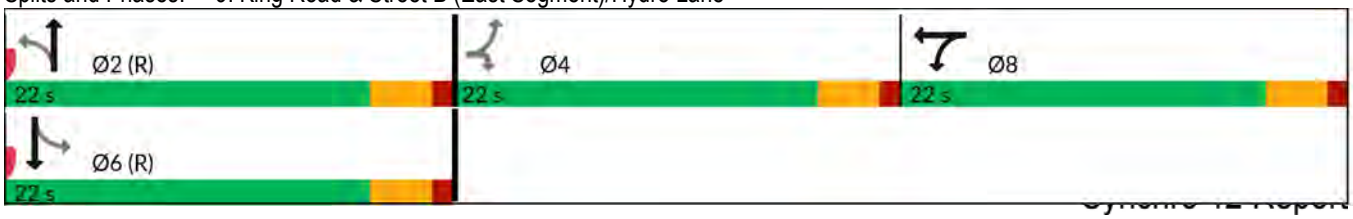


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	321	0	0	4	0	0	117	567	4	4	603	103
Future Volume (vph)	321	0	0	4	0	0	117	567	4	4	603	103
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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		1.00	1.00	
Frt								0.999			0.978	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	0	1800	1710	1800	0	1710	1780	0	1710	1740	0
Flt Permitted	0.222			0.950			0.163			0.274		
Satd. Flow (perm)	400	0	1800	1710	1800	0	293	1780	0	493	1740	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								1			13	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)						1			4			2
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 (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	331	0	0	4	0	0	121	585	4	4	622	106
Shared Lane Traffic (%)												
Lane Group Flow (vph)	331	0	0	4	0	0	121	589	0	4	728	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split			Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.1			35.6	35.6		35.6	35.6	
Actuated g/C Ratio	0.27			0.12			0.54	0.54		0.54	0.54	
v/c Ratio	3.04			0.02			0.77	0.61		0.02	0.77	
Control Delay (s/veh)	956.4			22.0			53.1	19.1		13.0	23.5	
Queue Delay	0.0			0.0			0.0	0.0		0.0	0.0	
Total Delay (s/veh)	956.4			22.0			53.1	19.1		13.0	23.5	
LOS	F			C			D	B		B	C	
Approach Delay (s/veh)		956.4			22.0			24.9			23.5	
Approach LOS		F			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.04			
Intersection Signal Delay (s/veh): 197.8		Intersection LOS: F	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane



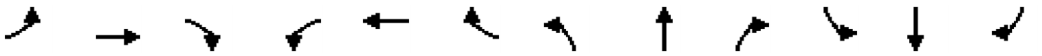
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	844	136	128	875	868	153	302	100	635	261	120
Future Volume (vph)	38	844	136	128	875	868	153	302	100	635	261	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor			0.95	0.99	0.98		0.99	0.99		0.99		0.97
Frt			0.850		0.925			0.963				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	3072	0	1676	1705	0	1782	1782	1515
Flt Permitted	0.062			0.233			0.354			*0.420		
Satd. Flow (perm)	108	3353	1437	412	3072	0	619	1705	0	738	1782	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96		280			12				92
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	39	861	139	131	893	886	156	308	102	648	266	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	861	139	131	1779	0	156	410	0	648	266	122
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
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)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6			4			8		8
Detector Phase	5	2	2	1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0		10.0	35.4		10.0	35.4	35.4
Total Split (s)	11.0	70.0	70.0	11.0	70.0		15.0	31.0		18.0	34.0	34.0
Total Split (%)	8.5%	53.8%	53.8%	8.5%	53.8%		11.5%	23.8%		13.8%	26.2%	26.2%
Maximum Green (s)	7.0	64.0	64.0	7.0	64.0		11.0	24.6		14.0	27.6	27.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7		4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3		0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0		0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0			8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0			21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	72.6	66.0	66.0	74.0	68.4		37.7	27.0		44.2	30.3	27.9
Actuated g/C Ratio	0.56	0.51	0.51	0.57	0.53		0.29	0.21		0.34	0.23	0.21
v/c Ratio	0.28	0.51	0.18	0.43	1.02		0.59	1.13		1.79	0.64	0.31
Control Delay (s/veh)	16.4	22.5	6.6	16.5	52.4		41.3	132.2		390.9	53.1	15.9
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)	16.4	22.5	6.6	16.5	52.4		41.3	132.2		390.9	53.1	15.9
LOS	B	C	A	B	D		D	F		F	D	B
Approach Delay (s/veh)		20.2			50.0			107.2			260.0	
Approach LOS		C			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 50 (38%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.79			
Intersection Signal Delay (s/veh): 98.1		Intersection LOS: F	
Intersection Capacity Utilization 135.0%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1868	260	0	1979	381	0	0	0	619	3	538
Future Volume (vph)	0	1868	260	0	1979	381	0	0	0	619	3	538
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor			0.95			0.98						0.99
Frt			0.850			0.850						0.850
Flt Protected										0.950	0.953	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1614	1500
Flt Permitted										0.950	0.953	
Satd. Flow (perm)	0	4818	1459	0	4865	1451	0	0	0	1608	1614	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			268			245						48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1926	268	0	2040	393	0	0	0	638	3	555
Shared Lane Traffic (%)										50%		
Lane Group Flow (vph)	0	1926	268	0	2040	393	0	0	0	319	322	555
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		51.0	51.0		51.0					39.0	39.0	39.0
Total Split (%)		56.7%	56.7%		56.7%					43.3%	43.3%	43.3%
Maximum Green (s)		44.0	44.0		44.0					31.8	31.8	31.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		42.6	42.6		42.6	88.6				31.8	31.8	31.8
Actuated g/C Ratio		0.48	0.48		0.48	1.00				0.36	0.36	0.36
v/c Ratio		0.83	0.32		0.87	0.27				0.55	0.56	0.99
Control Delay (s/veh)		23.8	2.8		25.8	0.5				27.6	27.7	63.6
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		23.8	2.8		25.8	0.5				27.6	27.7	63.6
LOS		C	A		C	A				C	C	E
Approach Delay (s/veh)		21.3			21.7						44.3	
Approach LOS		C			C						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 88.6			
Natural Cycle: 75			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 26.2		Intersection LOS: C	
Intersection Capacity Utilization 88.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



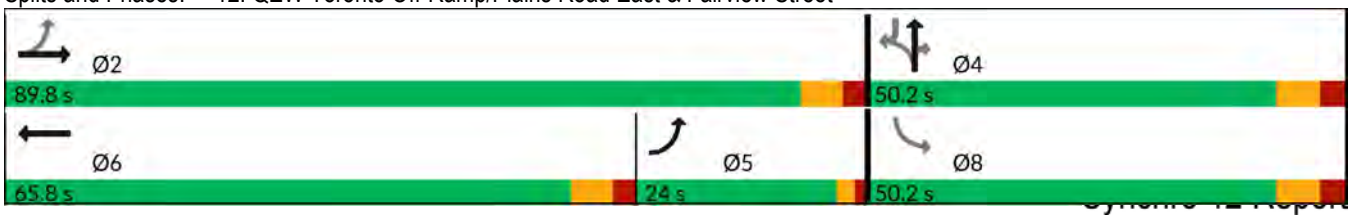
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	327	1717	192	0	2117	55	285	204	529	45	0	484
Future Volume (vph)	327	1717	192	0	2117	55	285	204	529	45	0	484
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		1
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.996			0.938	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4791	0	1593	1500	1425	1710	0	1604
Flt Permitted	0.061						0.950	0.996		0.192		
Satd. Flow (perm)	108	4865	1452	0	4791	0	1593	1500	1425	346	0	1604
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		3			18	81			248
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	334	1752	196	0	2160	56	291	208	540	46	0	494
Shared Lane Traffic (%)							10%		31%			
Lane Group Flow (vph)	334	1752	196	0	2216	0	262	404	373	46	0	494
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	24.0	89.8			65.8		50.2	50.2	50.2	50.2		50.2
Total Split (%)	17.1%	64.1%			47.0%		35.9%	35.9%	35.9%	35.9%		35.9%
Maximum Green (s)	21.0	83.1			59.1		43.0	43.0	43.0	43.0		43.0
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	86.9	83.2	136.8		59.2		39.7	39.7	39.7	39.7		39.7
Actuated g/C Ratio	0.64	0.61	1.00		0.43		0.29	0.29	0.29	0.29		0.29
v/c Ratio	1.08	0.59	0.13		1.07		0.57	0.90	0.79	0.46		0.77
Control Delay (s/veh)	121.4	17.9	0.2		78.5		46.5	68.9	47.9	56.4		30.2
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	121.4	17.9	0.2		78.5		46.5	68.9	47.9	56.4		30.2
LOS	F	B	A		E		D	E	D	E		C
Approach Delay (s/veh)		31.5			78.5			55.7			32.4	
Approach LOS		C			E			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 136.8			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 52.9		Intersection LOS: D	
Intersection Capacity Utilization 113.4%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



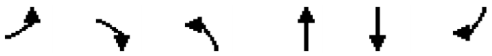
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	640	53	515	109	1512	313	0	2152	31
Future Volume (vph)	0	0	0	640	53	515	109	1512	313	0	2152	31
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.998	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4855	0
Flt Permitted				0.950	0.959		0.066					
Satd. Flow (perm)	0	0	0	1593	1605	1473	119	4865	1494	0	4855	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						75			186		2	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	667	55	536	114	1575	326	0	2242	32
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	360	362	536	114	1575	326	0	2274	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	10.0	17.2			17.2	
Total Split (s)				45.0	45.0	45.0	10.0	75.0			64.0	
Total Split (%)				37.5%	37.5%	37.5%	8.3%	62.5%			53.3%	
Maximum Green (s)				37.8	37.8	37.8	6.0	67.8			56.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				37.8	37.8	37.8	70.0	66.8	119.0		56.8	
Actuated g/C Ratio				0.32	0.32	0.32	0.59	0.56	1.00		0.48	
v/c Ratio				0.71	0.71	1.03	0.76	0.58	0.22		0.98	
Control Delay (s/veh)				44.9	44.8	83.1	48.6	18.0	0.3		45.6	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				44.9	44.8	83.1	48.6	18.0	0.3		45.6	
LOS				D	D	F	D	B	A		D	
Approach Delay (s/veh)					61.1			16.9			45.6	
Approach LOS					E			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 119			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 38.7		Intersection LOS: D	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



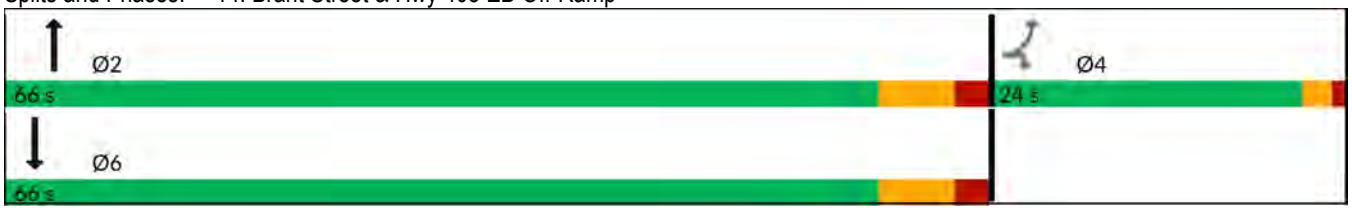


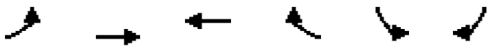
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	282	295	114	1687	1935	530
Future Volume (vph)	282	295	114	1687	1935	530
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	0.91	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99		1.00		0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965			0.997		
Satd. Flow (prot)	3194	1365	0	4854	4818	1515
Flt Permitted	0.965			0.646		
Satd. Flow (perm)	3194	1347	0	3145	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	16	16				329
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	294	307	119	1757	2016	552
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	411	190	0	1876	2016	552
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	24.0	24.0		66.0	66.0	
Total Split (%)	26.7%	26.7%		73.3%	73.3%	
Maximum Green (s)	21.0	21.0		58.7	58.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	16.2	16.2		58.8	58.8	85.3
Actuated g/C Ratio	0.19	0.19		0.69	0.69	1.00
v/c Ratio	0.66	0.71		2.02	0.61	0.37
Control Delay (s/veh)	36.2	44.4		483.1	8.5	0.7
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	36.2	44.4		483.1	8.5	0.7
LOS	D	D		F	A	A
Approach Delay (s/veh)	38.8			483.1	6.8	
Approach LOS	D			F	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 85.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 2.02			
Intersection Signal Delay (s/veh): 187.7		Intersection LOS: F	
Intersection Capacity Utilization 104.9%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp





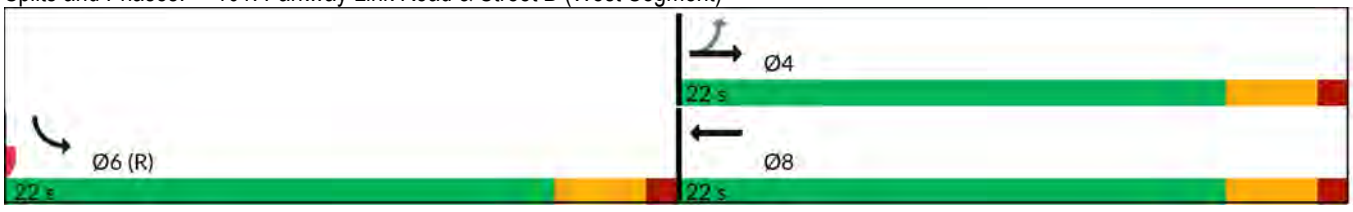
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	205	446	632	0	0	257
Future Volume (vph)	205	446	632	0	0	257
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.984				
Satd. Flow (prot)	0	3299	3353	0	1526	0
Flt Permitted		0.613				
Satd. Flow (perm)	0	2055	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					118	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	223	485	687	0	0	279
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	708	687	0	279	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		17.4	17.4		18.6	
Actuated g/C Ratio		0.40	0.40		0.42	
v/c Ratio		0.97dl	0.52		0.39	
Control Delay (s/veh)		27.2	18.0		7.3	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		27.2	18.0		7.3	
LOS		C	B		A	
Approach Delay (s/veh)		27.2	18.0		7.3	
Approach LOS		C	B		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 20.1		Intersection LOS: C	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)



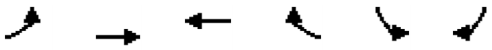
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	376	18	31	474	21	27	0	34	94	0	132
Future Volume (vph)	53	376	18	31	474	21	27	0	34	94	0	132
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.994			0.924			0.921	
Flt Protected		0.994		0.950				0.979			0.980	
Satd. Flow (prot)	0	3313	0	1676	1754	0	0	1596	0	0	1593	0
Flt Permitted		0.776		0.458				0.856			0.862	
Satd. Flow (perm)	0	2586	0	808	1754	0	0	1396	0	0	1401	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			6			37			143	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	409	20	34	515	23	29	0	37	102	0	143
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	487	0	34	538	0	0	66	0	0	245	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		16.5		16.5	16.5			19.5			19.5	
Actuated g/C Ratio		0.38		0.38	0.38			0.44			0.44	
v/c Ratio		0.50		0.11	0.81			0.10			0.35	
Control Delay (s/veh)		21.1		11.3	24.3			5.4			5.8	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		21.1		11.3	24.3			5.4			5.8	
LOS		C		B	C			A			A	
Approach Delay (s/veh)		21.1			23.5			5.4			5.8	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 18.6		Intersection LOS: B	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



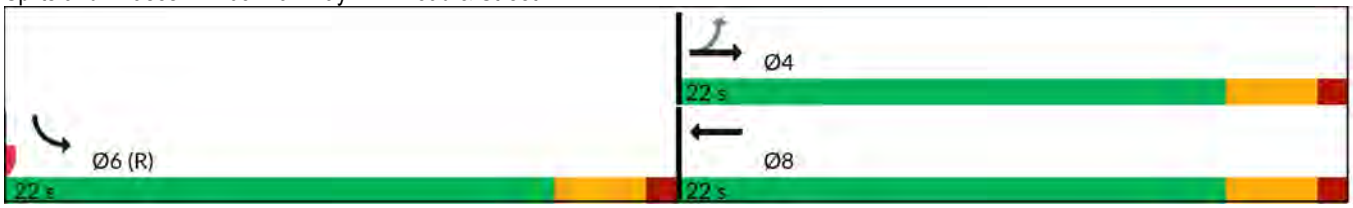


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	97	407	420	315	228	106
Future Volume (vph)	97	407	420	315	228	106
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.936		0.957	
Flt Protected		0.990			0.967	
Satd. Flow (prot)	0	3319	3138	0	1633	0
Flt Permitted		0.649			0.967	
Satd. Flow (perm)	0	2176	3138	0	1633	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			342		64	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	105	442	457	342	248	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	547	799	0	363	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	22.0	22.0	22.0		22.0	
Total Split (%)	50.0%	50.0%	50.0%		50.0%	
Maximum Green (s)	18.0	18.0	18.0		18.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	None	None		C-Max	
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)	5	5	5		5	
Act Effct Green (s)		14.8	14.8		21.2	
Actuated g/C Ratio		0.34	0.34		0.48	
v/c Ratio		0.75	0.62		0.44	
Control Delay (s/veh)		25.8	8.6		9.2	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		25.8	8.6		9.2	
LOS		C	A		A	
Approach Delay (s/veh)		25.8	8.6		9.2	
Approach LOS		C	A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2: and 6:SBL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

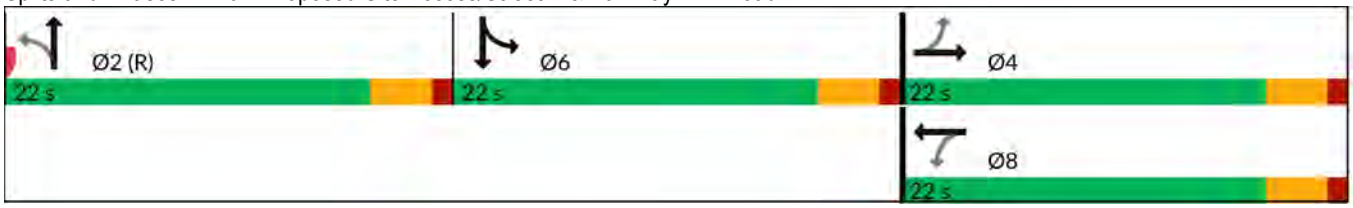


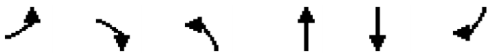
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	613	39	51	663	67	58	26	49	64	18	8
Future Volume (vph)	12	613	39	51	663	67	58	26	49	64	18	8
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.987			0.950			0.988	
Flt Protected		0.999			0.997			0.979			0.966	
Satd. Flow (prot)	0	3319	0	0	3299	0	0	1641	0	0	1684	0
Flt Permitted		0.865			0.740			0.872			0.966	
Satd. Flow (perm)	0	2874	0	0	2449	0	0	1462	0	0	1684	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			15			44			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	666	42	55	721	73	63	28	53	70	20	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	721	0	0	849	0	0	144	0	0	99	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0	18.0		18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Max	C-Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		18.0			18.0			18.0			18.0	
Actuated g/C Ratio		0.27			0.27			0.27			0.27	
v/c Ratio		0.91			1.25			0.33			0.21	
Control Delay (s/veh)		41.7			150.6			16.1			18.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		41.7			150.6			16.1			18.6	
LOS		D			F			B			B	
Approach Delay (s/veh)		41.7			150.6			16.1			18.6	
Approach LOS		D			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.25			
Intersection Signal Delay (s/veh): 89.4		Intersection LOS: F	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



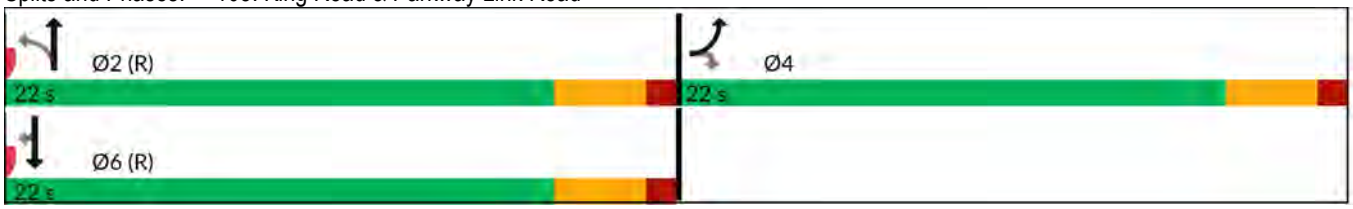


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	251	473	680	468	459	99
Future Volume (vph)	251	473	680	468	459	99
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	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)	1676	1500	1676	1765	1765	1500
Flt Permitted	0.950		0.382			
Satd. Flow (perm)	1676	1500	674	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		222				108
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	273	514	739	509	499	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	273	514	739	509	499	108
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Maximum Green (s)	18.0	18.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	14.1	14.1	21.9	21.9	21.9	21.9
Actuated g/C Ratio	0.32	0.32	0.50	0.50	0.50	0.50
v/c Ratio	0.51	0.81	2.21	0.58	0.57	0.14
Control Delay (s/veh)	14.6	18.6	571.8	13.5	13.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.6	18.6	571.8	13.5	13.1	2.9
LOS	B	B	F	B	B	A
Approach Delay (s/veh)	17.2			344.1	11.3	
Approach LOS	B			F	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 44			
Actuated Cycle Length: 44			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.21			
Intersection Signal Delay (s/veh): 170.3		Intersection LOS: F	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road



Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1117	172	0	734	49	9
Future Vol, veh/h	1117	172	0	734	49	9
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	1140	176	0	749	50	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1316	0	1603	671
Stage 1	-	-	-	-	1228	-
Stage 2	-	-	-	-	375	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	532	-	98	404
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	532	-	98	400
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	671	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	69.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	111	-	-	532	-
HCM Lane V/C Ratio	0.533	-	-	-	-
HCM Ctrl Dly (s/v)	69.6	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	2.5	-	-	0	-

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	217	140	39	90	104
Future Vol, veh/h	128	217	140	39	90	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	236	152	42	98	113
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	10.9	10	10.1
HCM LOS	B	A	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	46%	0%	78%
Vol Thru, %	0%	37%	22%
Vol Right, %	54%	63%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	194	345	179
LT Vol	90	0	140
Through Vol	0	128	39
RT Vol	104	217	0
Lane Flow Rate	211	375	195
Geometry Grp	1	1	1
Degree of Util (X)	0.291	0.451	0.272
Departure Headway (Hd)	4.96	4.334	5.032
Convergence, Y/N	Yes	Yes	Yes
Cap	719	825	708
Service Time	3.031	2.388	3.098
HCM Lane V/C Ratio	0.293	0.455	0.275
HCM Control Delay, s/veh	10.1	10.9	10
HCM Lane LOS	B	B	A
HCM 95th-tile Q	1.2	2.4	1.1

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	425	19	28	776	67	97
Future Vol, veh/h	425	19	28	776	67	97
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	462	21	30	843	73	105

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	483	0	955	242
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	482	-
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	-	-	1076	-	256	759
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1076	-	243	759
Mov Cap-2 Maneuver	-	-	-	-	243	-
Stage 1	-	-	-	-	593	-
Stage 2	-	-	-	-	556	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.5	20.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	406	-	-	1076	-
HCM Lane V/C Ratio	0.439	-	-	0.028	-
HCM Ctrl Dly (s/v)	20.6	-	-	8.4	0.2
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	2.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	44	478	784	66	29	20
Future Vol, veh/h	44	478	784	66	29	20
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	48	520	852	72	32	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	924	0	-	0	1244	462
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	356	-
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	735	-	-	-	166	547
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	680	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	735	-	-	-	151	547
Mov Cap-2 Maneuver	-	-	-	-	151	-
Stage 1	-	-	-	-	329	-
Stage 2	-	-	-	-	680	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.2	0	27.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	735	-	-	-	214
HCM Lane V/C Ratio	0.065	-	-	-	0.249
HCM Ctrl Dly (s/v)	10.2	0.4	-	-	27.3
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q (veh)	0.2	-	-	-	0.9

Intersection	
Int Delay, s/veh	102.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1222	171	0	1163	166	14
Future Vol, veh/h	1222	171	0	1163	166	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	1358	190	0	1292	184	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1548	0	2099	774
Stage 1	-	-	-	-	1453	-
Stage 2	-	-	-	-	646	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	434	-	~ 46	346
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	489	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	434	-	~ 46	346
Mov Cap-2 Maneuver	-	-	-	-	~ 46	-
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	489	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 1556.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	49	-	-	434	-
HCM Lane V/C Ratio	4.082	-	-	-	-
HCM Ctrl Dly (s/v)	$ 1556.5	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	22.2	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	163	55	39	182	0	0	0	0	0	0	0
Future Vol, veh/h	0	163	55	39	182	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	177	60	42	198	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.4	8.8	0	0
HCM LOS	A	A	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	18%	0%
Vol Thru, %	100%	75%	82%	100%
Vol Right, %	0%	25%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	218	221	0
LT Vol	0	0	39	0
Through Vol	0	163	182	0
RT Vol	0	55	0	0
Lane Flow Rate	0	237	240	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.261	0.277	0
Departure Headway (Hd)	4.936	3.961	4.145	4.936
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	900	862	0
Service Time	2.936	2.013	2.187	2.936
HCM Lane V/C Ratio	0	0.263	0.278	0
HCM Control Delay, s/veh	7.9	8.4	8.8	7.9
HCM Lane LOS	N	A	A	N
HCM 95th-tile Q	0	1	1.1	0

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	97	119	142	63	161	169
Future Vol, veh/h	97	119	142	63	161	169
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	105	129	154	68	175	184
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	10.1	10.9	12.3
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	49%	0%	69%
Vol Thru, %	0%	45%	31%
Vol Right, %	51%	55%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	330	216	205
LT Vol	161	0	142
Through Vol	0	97	63
RT Vol	169	119	0
Lane Flow Rate	359	235	223
Geometry Grp	1	1	1
Degree of Util (X)	0.48	0.313	0.325
Departure Headway (Hd)	4.819	4.793	5.251
Convergence, Y/N	Yes	Yes	Yes
Cap	739	742	677
Service Time	2.899	2.883	3.346
HCM Lane V/C Ratio	0.486	0.317	0.329
HCM Control Delay, s/veh	12.3	10.1	10.9
HCM Lane LOS	B	B	B
HCM 95th-tile Q	2.6	1.3	1.4

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	263	0	68	170	14	0	39	92	23	42	50
Future Vol, veh/h	30	263	0	68	170	14	0	39	92	23	42	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	286	0	74	185	15	0	42	100	25	46	54
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12.2	11.5	9.7	9.8
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	27%	20%
Vol Thru, %	30%	90%	67%	37%
Vol Right, %	70%	0%	6%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	293	252	115
LT Vol	0	30	68	23
Through Vol	39	263	170	42
RT Vol	92	0	14	50
Lane Flow Rate	142	318	274	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.208	0.45	0.392	0.19
Departure Headway (Hd)	5.257	5.089	5.15	5.483
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	682	707	698	654
Service Time	3.295	3.117	3.178	3.523
HCM Lane V/C Ratio	0.208	0.45	0.393	0.191
HCM Control Delay, s/veh	9.7	12.2	11.5	9.8
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.8	2.3	1.9	0.7

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	633	28	48	787	46	59
Future Vol, veh/h	633	28	48	787	46	59
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	688	30	52	855	50	64

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	718	0	1235	359
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	532	-
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	-	-	879	-	169	638
Stage 1	-	-	-	-	452	-
Stage 2	-	-	-	-	553	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	879	-	150	638
Mov Cap-2 Maneuver	-	-	-	-	150	-
Stage 1	-	-	-	-	452	-
Stage 2	-	-	-	-	491	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1	28.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	-	-	879	-
HCM Lane V/C Ratio	0.434	-	-	0.059	-
HCM Ctrl Dly (s/v)	28.8	-	-	9.4	0.5
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q (veh)	2.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	678	1023	23	29	23
Future Vol, veh/h	13	678	1023	23	29	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	14	737	1112	25	32	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1137	0	-	0	1522	569
Stage 1	-	-	-	-	1125	-
Stage 2	-	-	-	-	397	-
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	610	-	-	-	109	465
Stage 1	-	-	-	-	272	-
Stage 2	-	-	-	-	648	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	610	-	-	-	105	465
Mov Cap-2 Maneuver	-	-	-	-	105	-
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	648	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.4	0	39.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	610	-	-	-	160
HCM Lane V/C Ratio	0.023	-	-	-	0.353
HCM Ctrl Dly (s/v)	11	0.2	-	-	39.3
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q (veh)	0.1	-	-	-	1.5

Intersection	
Int Delay, s/veh	13.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1204	303	0	850	83	10
Future Vol, veh/h	1204	303	0	850	83	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	1267	319	0	895	87	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1586	0	1875	793
Stage 1	-	-	-	-	1427	-
Stage 2	-	-	-	-	448	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	420	-	~ 63	336
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	420	-	~ 63	336
Mov Cap-2 Maneuver	-	-	-	-	~ 63	-
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	611	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 356.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	69	-	-	420	-
HCM Lane V/C Ratio	1.419	-	-	-	-
HCM Ctrl Dly (s/v)	$ 356.8	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	8.1	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	74	53	271	0	0	0	0	0	0	0
Future Vol, veh/h	0	233	74	53	271	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	253	80	58	295	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.6	10.2	0	0
HCM LOS	A	B	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	16%	0%
Vol Thru, %	100%	76%	84%	100%
Vol Right, %	0%	24%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	307	324	0
LT Vol	0	0	53	0
Through Vol	0	233	271	0
RT Vol	0	74	0	0
Lane Flow Rate	0	334	352	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.375	0.412	0
Departure Headway (Hd)	5.366	4.05	4.214	5.366
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	878	845	0
Service Time	3.366	2.132	2.279	3.366
HCM Lane V/C Ratio	0	0.38	0.417	0
HCM Control Delay, s/veh	8.4	9.6	10.2	8.4
HCM Lane LOS	N	A	B	N
HCM 95th-tile Q	0	1.8	2	0

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	135	162	130	95	246	132
Future Vol, veh/h	135	162	130	95	246	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	176	141	103	267	143
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	12.7	12.4	16.5
HCM LOS	B	B	C

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	65%	0%	58%
Vol Thru, %	0%	45%	42%
Vol Right, %	35%	55%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	378	297	225
LT Vol	246	0	130
Through Vol	0	135	95
RT Vol	132	162	0
Lane Flow Rate	411	323	245
Geometry Grp	1	1	1
Degree of Util (X)	0.612	0.465	0.389
Departure Headway (Hd)	5.36	5.188	5.72
Convergence, Y/N	Yes	Yes	Yes
Cap	674	694	629
Service Time	3.398	3.234	3.768
HCM Lane V/C Ratio	0.61	0.465	0.39
HCM Control Delay, s/veh	16.5	12.7	12.4
HCM Lane LOS	C	B	B
HCM 95th-tile Q	4.2	2.5	1.8

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	256	0	32	180	21	0	60	44	31	58	69
Future Vol, veh/h	46	256	0	32	180	21	0	60	44	31	58	69
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	278	0	35	196	23	0	65	48	34	63	75
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	12.6	11.2	9.7	10.3
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	15%	14%	20%
Vol Thru, %	58%	85%	77%	37%
Vol Right, %	42%	0%	9%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	302	233	158
LT Vol	0	46	32	31
Through Vol	60	256	180	58
RT Vol	44	0	21	69
Lane Flow Rate	113	328	253	172
Geometry Grp	1	1	1	1
Degree of Util (X)	0.173	0.468	0.365	0.258
Departure Headway (Hd)	5.498	5.135	5.185	5.417
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	651	702	694	663
Service Time	3.542	3.167	3.219	3.458
HCM Lane V/C Ratio	0.174	0.467	0.365	0.259
HCM Control Delay, s/veh	9.7	12.6	11.2	10.3
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.6	2.5	1.7	1

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	562	42	74	812	63	80
Future Vol, veh/h	562	42	74	812	63	80
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	611	46	80	883	68	87

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	657	0	1236	329
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	602	-
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	-	-	926	-	168	667
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	510	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	926	-	139	667
Mov Cap-2 Maneuver	-	-	-	-	139	-
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	423	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	1.4	40.8
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	249	-	-	926	-
HCM Lane V/C Ratio	0.624	-	-	0.087	-
HCM Ctrl Dly (s/v)	40.8	-	-	9.3	0.7
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q (veh)	3.8	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	631	869	19	21	17
Future Vol, veh/h	11	631	869	19	21	17
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	12	686	945	21	23	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	966	0	-	0	1323	483
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	367	-
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	709	-	-	-	148	530
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	709	-	-	-	144	530
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	671	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.3	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	709	-	-	-	214
HCM Lane V/C Ratio	0.017	-	-	-	0.193
HCM Ctrl Dly (s/v)	10.2	0.1	-	-	25.8
HCM Lane LOS	B	A	-	-	D
HCM 95th %tile Q (veh)	0.1	-	-	-	0.7

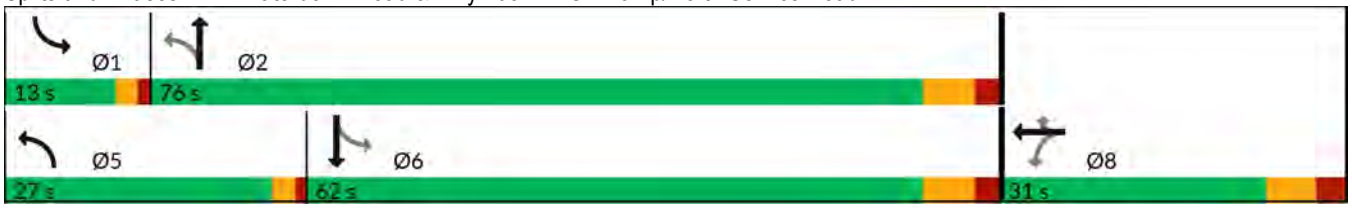
Appendix F-7:
2041 Future Total Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	77	115	2	429	588	302	87	505	175
Future Volume (vph)	0	0	0	77	115	2	429	588	302	87	505	175
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	2		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.99					1.00	
Frt						0.850		0.949			0.961	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1513	1748	1366	2910	3034	0	1676	3113	0
Flt Permitted				0.950			0.266			0.293		
Satd. Flow (perm)	0	0	0	1512	1748	1348	815	3034	0	517	3113	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						89		129			53	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)						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 (%)	0%	0%	0%	13%	3%	12%	14%	8%	5%	2%	6%	3%
Adj. Flow (vph)	0	0	0	82	122	2	456	626	321	93	537	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	82	122	2	456	947	0	93	723	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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				31.0	31.0	31.0	27.0	76.0		13.0	62.0	
Total Split (%)				25.8%	25.8%	25.8%	22.5%	63.3%		10.8%	51.7%	
Maximum Green (s)				23.8	23.8	23.8	24.0	69.2		10.0	55.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				11.1	11.1	11.1	37.6	25.6		30.6	19.3	
Actuated g/C Ratio				0.19	0.19	0.19	0.64	0.43		0.52	0.33	
v/c Ratio				0.29	0.37	0.01	0.50	0.68		0.22	0.69	
Control Delay (s/veh)				26.1	27.0	0.0	6.5	15.0		6.0	19.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				26.1	27.0	0.0	6.5	15.0		6.0	19.7	
LOS				C	C	A	A	B		A	B	
Approach Delay (s/veh)					26.3			12.3			18.2	
Approach LOS					C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 59.1			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 15.5		Intersection LOS: B	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

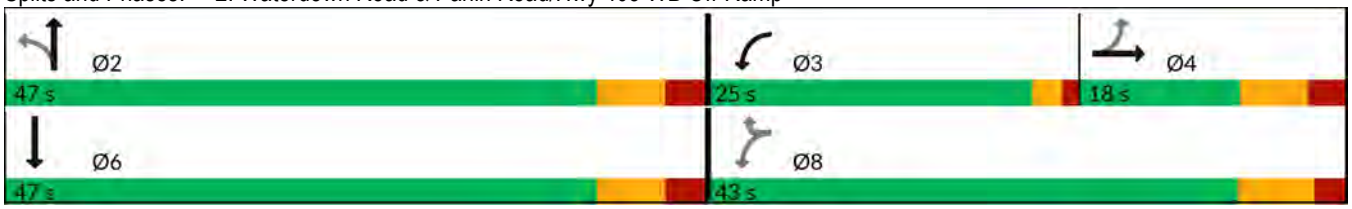


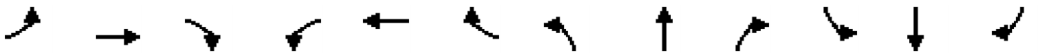
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	5	769	0	384	0	979	0	0	581	3
Future Volume (vph)	1	0	5	769	0	384	0	979	0	0	581	3
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor											1.00	
Frt		0.884				0.850					0.999	
Flt Protected		0.993		0.950								
Satd. Flow (prot)	0	1043	0	2962	0	1354	0	3167	0	0	3151	0
Flt Permitted		0.993		0.870								
Satd. Flow (perm)	0	1043	0	2713	0	1354	0	3167	0	0	3151	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87				51					1	
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	60%	12%	0%	13%	0%	8%	0%	0%	8%	100%
Adj. Flow (vph)	1	0	6	854	0	427	0	1088	0	0	646	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	7	0	854	0	427	0	1088	0	0	649	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm		NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	18.0	18.0		25.0		43.0	47.0	47.0			47.0	
Total Split (%)	20.0%	20.0%		27.8%		47.8%	52.2%	52.2%			52.2%	
Maximum Green (s)	10.9	10.9		22.0		35.8	39.8	39.8			39.8	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		30.5		26.0		30.7			30.7	
Actuated g/C Ratio		0.15		0.42		0.36		0.43			0.43	
v/c Ratio		0.03		0.69		0.82		0.81			0.48	
Control Delay (s/veh)		0.2		20.8		33.4		24.3			17.0	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.2		20.8		33.4		24.3			17.0	
LOS		A		C		C		C			B	
Approach Delay (s/veh)		0.2			25.0			24.3			17.0	
Approach LOS		A			C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 72			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 23.0		Intersection LOS: C	
Intersection Capacity Utilization 79.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



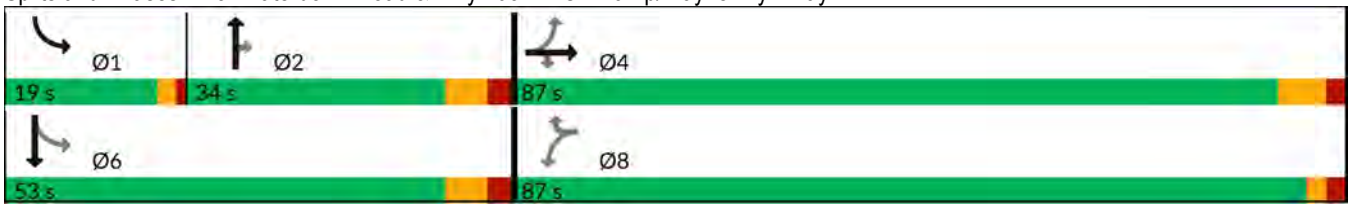


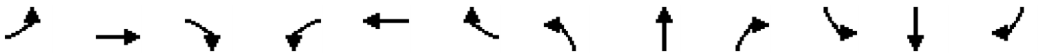
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	537	298	548	264	0	511	0	459	672	500	444	0
Future Volume (vph)	537	298	548	264	0	511	0	459	672	500	444	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		2	2		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1748	1330	1659	0	765	0	3138	2540	3072	3081	0
Flt Permitted	0.950			0.522						0.233		
Satd. Flow (perm)	1644	1748	1313	910	0	765	0	3138	2540	753	3081	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						305			730			
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)			1	1			1					1
Confl. Bikes (#/hr)												2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	3%	15%	100%	0%	100%	0%	9%	6%	8%	11%	2%
Adj. Flow (vph)	584	324	596	287	0	555	0	499	730	543	483	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	584	324	596	287	0	555	0	499	730	543	483	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0	2.0	2.0	10.0	
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)	2.0	0.6	2.0	2.0		2.0		0.6	2.0	2.0	0.6	
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)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8			2	6		
Detector Phase	4	4	4	8		8		2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0	10.0	7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0	17.0	10.0	17.0	
Total Split (s)	87.0	87.0	87.0	87.0		87.0		34.0	34.0	19.0	53.0	
Total Split (%)	62.1%	62.1%	62.1%	62.1%		62.1%		24.3%	24.3%	13.6%	37.9%	
Maximum Green (s)	79.9	79.9	79.9	82.9		82.9		27.0	27.0	16.0	46.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5	4.5	2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5	2.5	1.0	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)	7.1	7.1	7.1	4.1		4.1		7.0	7.0	3.0	7.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								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	Min	Min	Min	None		None		Min	Min	None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	72.5	72.5	72.5	75.5		75.5		25.0	25.0	48.5	44.4	
Actuated g/C Ratio	0.55	0.55	0.55	0.58		0.58		0.19	0.19	0.37	0.34	
v/c Ratio	0.64	0.34	0.82	0.55		0.98		0.84	0.68	0.96	0.46	
Control Delay (s/veh)	24.1	17.1	35.1	21.9		45.4		65.6	6.9	64.7	37.3	
Queue Delay	0.0	0.0	0.0	0.0		1.4		0.0	0.0	0.0	0.0	
Total Delay (s/veh)	24.1	17.1	35.1	21.9		46.8		65.6	6.9	64.7	37.3	
LOS	C	B	D	C		D		E	A	E	D	
Approach Delay (s/veh)		27.0			38.3			30.7			51.8	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 131.3			
Natural Cycle: 70			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 35.6		Intersection LOS: D	
Intersection Capacity Utilization 93.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



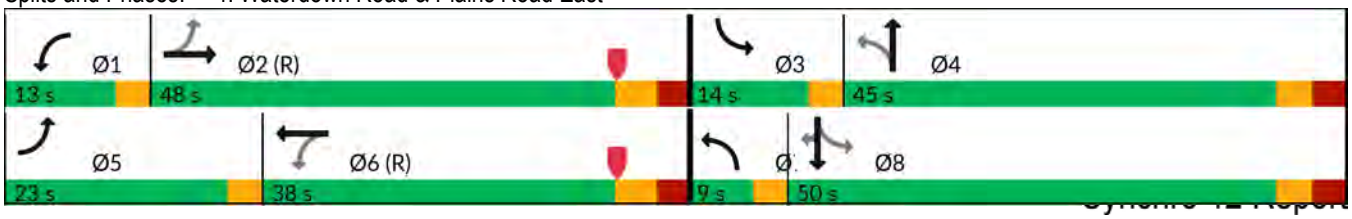


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	558	550	93	110	348	183	68	293	75	150	312	362
Future Volume (vph)	558	550	93	110	348	183	68	293	75	150	312	362
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
Lane Util. Factor	0.97	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	0.99		0.99	0.99		0.99	0.99		0.98		0.98
Frt		0.978			0.948			0.970				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3130	3166	0	1629	2932	0	1676	1629	0	1541	1682	1366
Flt Permitted	0.278			0.339			0.442			0.214		
Satd. Flow (perm)	913	3166	0	574	2932	0	775	1629	0	340	1682	1333
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			77			11				328
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	8		16	16		8	9		45	45		9
Confl. Bikes (#/hr)			3			1			1			1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	6%	4%	9%	5%	10%	9%	2%	4%	12%	11%	7%	12%
Adj. Flow (vph)	620	611	103	122	387	203	76	326	83	167	347	402
Shared Lane Traffic (%)												
Lane Group Flow (vph)	620	714	0	122	590	0	76	409	0	167	347	402
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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	23.0	48.0		13.0	38.0		9.0	45.0		14.0	50.0	50.0
Total Split (%)	19.2%	40.0%		10.8%	31.7%		7.5%	37.5%		11.7%	41.7%	41.7%
Maximum Green (s)	20.0	41.7		10.0	31.7		6.0	38.7		11.0	43.7	43.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	62.1	46.6		49.9	37.4		44.3	33.6		51.9	40.1	40.1
Actuated g/C Ratio	0.52	0.39		0.42	0.31		0.37	0.28		0.43	0.33	0.33
v/c Ratio	0.76	0.58		0.38	0.61		0.22	0.88		0.63	0.62	0.61
Control Delay (s/veh)	25.4	31.8		21.2	35.2		20.6	60.6		31.8	38.5	10.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	25.4	31.8		21.2	35.2		20.6	60.6		31.8	38.5	10.5
LOS	C	C		C	D		C	E		C	D	B
Approach Delay (s/veh)		28.8			32.8			54.3			25.0	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 32.2		Intersection LOS: C	
Intersection Capacity Utilization 85.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1293	27	4	758	19	4
Future Volume (vph)	1293	27	4	758	19	4
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Ped Bike Factor	1.00			1.00		
Frt	0.997				0.977	
Flt Protected					0.960	
Satd. Flow (prot)	3221	0	0	3402	925	0
Flt Permitted				0.949	0.960	
Satd. Flow (perm)	3221	0	0	3229	925	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	8				4	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	91%	100%	0%	100%	0%
Adj. Flow (vph)	1319	28	4	773	19	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1347	0	0	777	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	44.6			44.6	11.1	
Actuated g/C Ratio	0.93			0.93	0.23	
v/c Ratio	0.45			0.58	0.11	
Control Delay (s/veh)	2.3			6.1	16.2	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	2.3			6.1	16.2	
LOS	A			A	B	
Approach Delay (s/veh)	2.3			6.1	16.2	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47.9			
Natural Cycle: 70			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 3.8		Intersection LOS: A	
Intersection Capacity Utilization 52.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

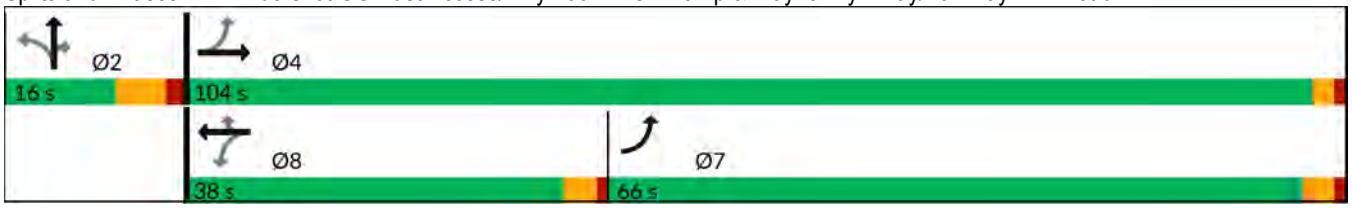


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	689	414	42	0	691	118	18	32	0	0	0	0
Future Volume (vph)	689	414	42	0	691	118	18	32	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986				0.850						
Flt Protected	0.950							0.982				
Satd. Flow (prot)	1629	3372	0	0	3420	1530	0	1768	1800	0	0	0
Flt Permitted	0.201							0.982				
Satd. Flow (perm)	345	3372	0	0	3420	1530	0	1768	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40				124						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	725	436	44	0	727	124	19	34	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	725	480	0	0	727	124	0	53	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4			8		8	2		2			
Detector Phase	7	4		8	8	8	2	2	2			
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	7.0		5.0	5.0	5.0	10.0	10.0	10.0			
Minimum Split (s)	9.0	10.0		22.0	22.0	22.0	16.0	16.0	16.0			
Total Split (s)	66.0	104.0		38.0	38.0	38.0	16.0	16.0	16.0			
Total Split (%)	55.0%	86.7%		31.7%	31.7%	31.7%	13.3%	13.3%	13.3%			
Maximum Green (s)	62.0	101.0		34.0	34.0	34.0	10.0	10.0	10.0			
Yellow Time (s)	3.0	2.0		3.0	3.0	3.0	4.5	4.5	4.5			
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.5	1.5	1.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0			
Total Lost Time (s)	4.0	3.0			4.0	4.0		6.0	6.0			
Lead/Lag	Lag			Lead	Lead	Lead						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Min		None	None	None	None	None	None			
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0			
Flash Don't Walk (s)		20.0		11.0	11.0	11.0	16.0	16.0	16.0			
Pedestrian Calls (#/hr)		0		5	5	5	0	0	0			
Act Effct Green (s)	75.4	78.7			24.6	24.6		11.9				
Actuated g/C Ratio	0.86	0.90			0.28	0.28		0.14				
v/c Ratio	0.75	0.16			0.76	0.24		0.22				
Control Delay (s/veh)	19.3	1.4			38.3	7.4		49.2				
Queue Delay	0.6	0.0			0.0	0.0		0.0				
Total Delay (s/veh)	19.9	1.4			38.3	7.4		49.2				
LOS	B	A			D	A		D				
Approach Delay (s/veh)		12.5			33.8			49.2				
Approach LOS		B			C			D				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 87.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 22.0		Intersection LOS: C	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

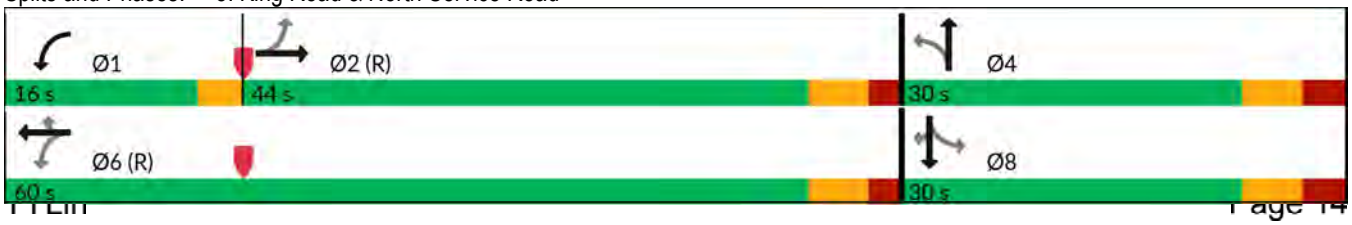


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	252	73	264	181	46	99	257	705	79	230	32
Future Volume (vph)	23	252	73	264	181	46	99	257	705	79	230	32
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		1.00				0.98
Frt		0.966				0.850		0.910				0.850
Flt Protected	0.950										0.987	
Satd. Flow (prot)	1569	1667	0	1731	1714	1530	0	*3050	*3050	0	1768	1530
Flt Permitted	0.639			*0.470							0.528	
Satd. Flow (perm)	1055	1667	0	813	1714	1497	0	*3050	*3050	0	946	1496
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				48		111				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)						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
Heavy Vehicles (%)	9%	5%	2%	4%	5%	0%	2%	6%	4%	2%	0%	0%
Adj. Flow (vph)	24	263	76	275	189	48	103	268	734	82	240	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	339	0	275	189	48	0	1105	0	0	322	33
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	23.4	23.4		41.9	38.9	40.9		41.1			41.1	38.1
Actuated g/C Ratio	0.26	0.26		0.47	0.43	0.45		0.46			0.46	0.42
v/c Ratio	0.09	0.76		0.54	0.26	0.07		0.76			0.75	0.05
Control Delay (s/veh)	23.1	39.4		18.6	16.0	3.4		24.2			35.8	0.9
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.1	39.4		18.6	16.0	3.4		24.2			35.8	0.9
LOS	C	D		B	B	A		C			D	A
Approach Delay (s/veh)		38.3			16.2			24.2			32.6	
Approach LOS		D			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 132.3%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road

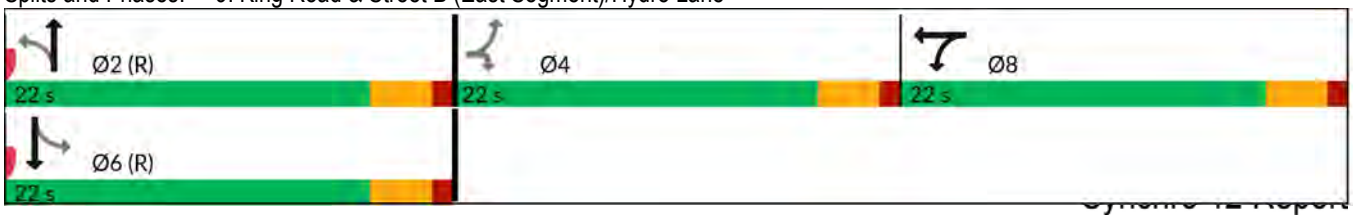


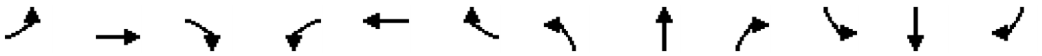
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	285	0	0	4	0	6	61	710	6	6	500	65
Future Volume (vph)	285	0	0	4	0	6	61	710	6	6	500	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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		1.00		
Frt					0.850			0.999			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1729	0	1710	1724	0
Flt Permitted	0.222			0.950			0.202			0.128		
Satd. Flow (perm)	400	0	1800	1710	1530	0	364	1729	0	230	1724	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					120			1			10	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	331	0	0	5	0	7	71	826	7	7	581	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	331	0	0	5	7	0	71	833	0	7	657	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA		Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.1	8.1		33.6	33.6		33.6	33.6	
Actuated g/C Ratio	0.27			0.12	0.12		0.51	0.51		0.51	0.51	
v/c Ratio	3.04			0.02	0.02		0.38	0.95		0.06	0.74	
Control Delay (s/veh)	956.4			22.0	0.2		26.8	41.8		16.5	24.5	
Queue Delay	0.0			0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	956.4			22.0	0.2		26.8	41.8		16.5	24.5	
LOS	F			C	A		C	D		B	C	
Approach Delay (s/veh)		956.4			9.3			40.6			24.4	
Approach LOS		F			A			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.04			
Intersection Signal Delay (s/veh): 193.4		Intersection LOS: F	
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane





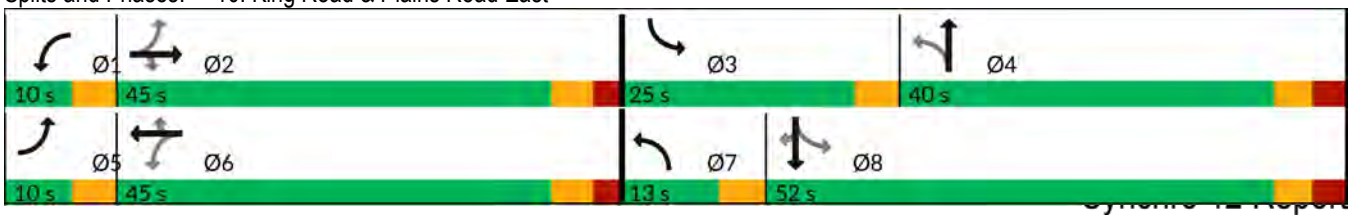
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	749	125	59	486	508	158	269	78	742	129	89
Future Volume (vph)	49	749	125	59	486	508	158	269	78	742	129	89
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor	0.99		0.96	1.00		0.95	0.99	0.99		0.98		0.98
Frt			0.850			0.850		0.966				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1629	3226	1443	1629	3167	1500	1583	1697	0	3358	1765	1485
Flt Permitted	0.347			0.171			0.670			*0.420		
Satd. Flow (perm)	587	3226	1380	292	3167	1424	1109	1697	0	1387	1765	1453
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			140			535		12				100
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	16		11	11		16	7		13	13		7
Confl. Bikes (#/hr)			3									2
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%	6%	6%	5%	8%	2%	8%	0%	8%	4%	2%	3%
Adj. Flow (vph)	52	788	132	62	512	535	166	283	82	781	136	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	788	132	62	512	535	166	365	0	781	136	94
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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
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
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
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
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
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
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
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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

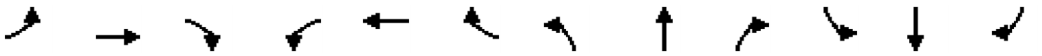
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0	20.0	6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	45.0	45.0	10.0	45.0	45.0	13.0	40.0		25.0	52.0	52.0
Total Split (%)	8.3%	37.5%	37.5%	8.3%	37.5%	37.5%	10.8%	33.3%		20.8%	43.3%	43.3%
Maximum Green (s)	6.0	39.0	39.0	6.0	39.0	39.0	9.0	33.6		21.0	45.6	45.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7	3.7	4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3	2.3	0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0	16.0		8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0	15.0		21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	37.7	33.3	33.3	37.7	33.3	31.2	37.3	28.2		51.1	37.7	35.2
Actuated g/C Ratio	0.38	0.33	0.33	0.38	0.33	0.31	0.37	0.28		0.51	0.38	0.35
v/c Ratio	0.18	0.74	0.24	0.32	0.49	0.66	0.36	0.75		0.73	0.20	0.16
Control Delay (s/veh)	21.6	36.0	5.3	24.6	30.2	7.0	19.4	44.3		21.2	23.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	21.6	36.0	5.3	24.6	30.2	7.0	19.4	44.3		21.2	23.3	5.2
LOS	C	D	A	C	C	A	B	D		C	C	A
Approach Delay (s/veh)		31.1			18.7			36.5			20.0	
Approach LOS		C			B			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 100.2			
Natural Cycle: 95			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 25.0		Intersection LOS: C	
Intersection Capacity Utilization 85.4%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 10: King Road & Plains Road East



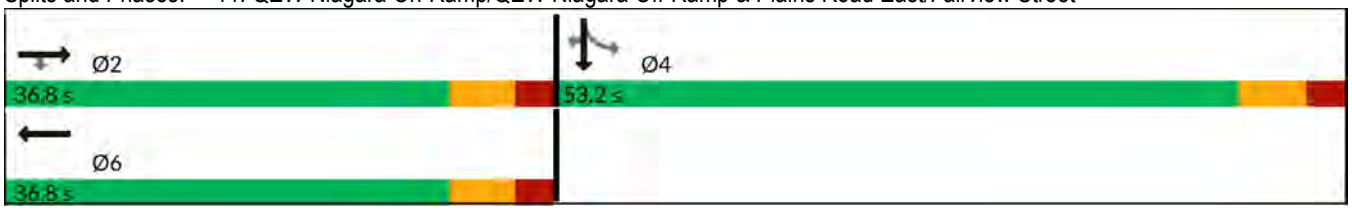


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1596	252	0	1377	427	0	0	0	419	1	328
Future Volume (vph)	0	1596	252	0	1377	427	0	0	0	419	1	328
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Ped Bike Factor			0.95			0.98					0.99	0.99
Frt			0.850			0.850					0.945	0.850
Flt Protected										0.950	0.969	
Satd. Flow (prot)	0	4680	1391	0	4680	1391	0	0	0	1562	1451	1439
Flt Permitted										0.950	0.969	
Satd. Flow (perm)	0	4680	1316	0	4680	1360	0	0	0	1562	1451	1419
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			242			393					2	48
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	5		16	16		5	3					3
Confl. Bikes (#/hr)			3									
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 (%)	0%	5%	10%	0%	5%	10%	0%	0%	0%	4%	0%	1%
Adj. Flow (vph)	0	1698	268	0	1465	454	0	0	0	446	1	349
Shared Lane Traffic (%)										38%		28%
Lane Group Flow (vph)	0	1698	268	0	1465	454	0	0	0	277	268	251
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		36.8	36.8		36.8					53.2	53.2	53.2
Total Split (%)		40.9%	40.9%		40.9%					59.1%	59.1%	59.1%
Maximum Green (s)		29.8	29.8		29.8					46.0	46.0	46.0
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		30.0	30.0		30.0	61.4				17.1	17.1	17.1
Actuated g/C Ratio		0.49	0.49		0.49	1.00				0.28	0.28	0.28
v/c Ratio		0.74	0.35		0.64	0.33				0.64	0.66	0.59
Control Delay (s/veh)		16.4	4.0		14.3	0.7				26.2	27.5	20.7
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		16.4	4.0		14.3	0.7				26.2	27.5	20.7
LOS		B	A		B	A				C	C	C
Approach Delay (s/veh)		14.7			11.1						24.9	
Approach LOS		B			B						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 61.4			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 15.0		Intersection LOS: B	
Intersection Capacity Utilization 62.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



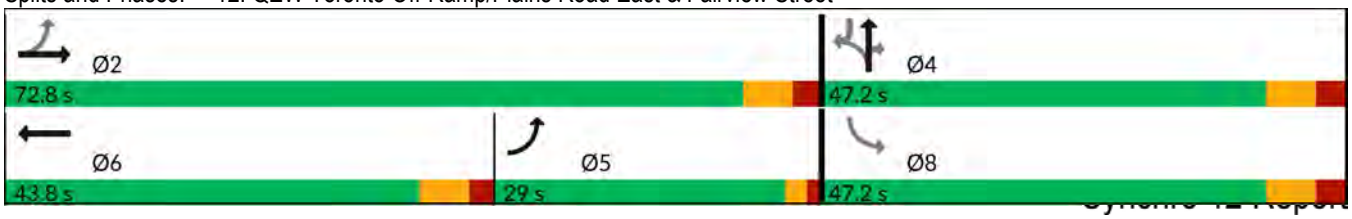
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	332	1474	77	0	1197	19	381	174	541	25	0	409
Future Volume (vph)	332	1474	77	0	1197	19	381	174	541	25	0	409
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		2
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	0.88
Ped Bike Factor	1.00		0.97		1.00			0.99	0.99	1.00		
Frt			0.850		0.998			0.931	0.850			*0.900
Flt Protected	0.950						0.950	0.995		0.950		
Satd. Flow (prot)	1569	4725	1530	0	4619	0	1533	1410	1384	1710	0	2715
Flt Permitted	0.108						0.950	0.995		0.254		
Satd. Flow (perm)	178	4725	1485	0	4619	0	1533	1410	1364	457	0	2715
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			160		2			23	95			426
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	5		16	16		5			3	3		
Confl. Bikes (#/hr)			5									
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 (%)	9%	4%	0%	0%	6%	14%	6%	9%	5%	0%	0%	5%
Adj. Flow (vph)	346	1535	80	0	1247	20	397	181	564	26	0	426
Shared Lane Traffic (%)							10%		33%			
Lane Group Flow (vph)	346	1535	80	0	1267	0	357	407	378	26	0	426
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

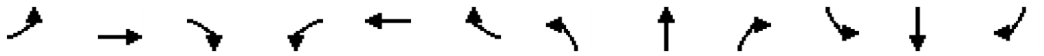
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	39.2		17.2
Total Split (s)	29.0	72.8			43.8		47.2	47.2	47.2	47.2		47.2
Total Split (%)	24.2%	60.7%			36.5%		39.3%	39.3%	39.3%	39.3%		39.3%
Maximum Green (s)	26.0	66.1			37.1		40.0	40.0	40.0	40.0		40.0
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	Min		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	65.2	61.4	111.2		34.7		35.6	35.6	35.6	35.6		35.6
Actuated g/C Ratio	0.59	0.55	1.00		0.31		0.32	0.32	0.32	0.32		0.32
v/c Ratio	0.87	0.59	0.05		0.88		0.73	0.87	0.75	0.18		0.37
Control Delay (s/veh)	59.5	18.0	0.1		45.2		44.0	54.6	36.3	32.3		3.6
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	59.5	18.0	0.1		45.2		44.0	54.6	36.3	32.3		3.6
LOS	E	B	A		D		D	D	D	C		A
Approach Delay (s/veh)		24.6			45.2			45.2			5.3	
Approach LOS		C			D			D			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 111.2			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 33.1		Intersection LOS: C	
Intersection Capacity Utilization 89.1%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



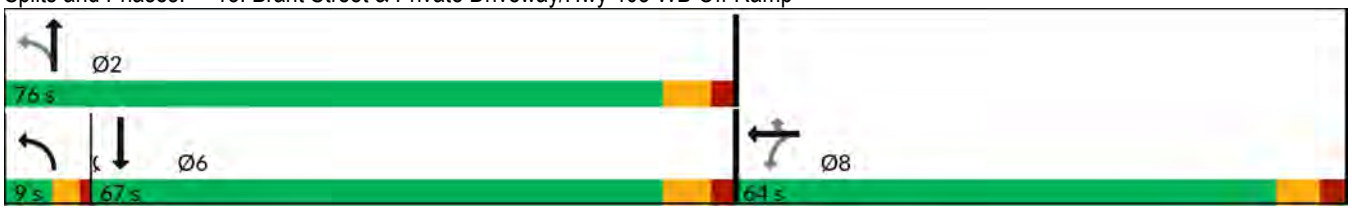


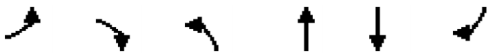
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	509	25	619	41	1206	209	0	1904	16
Future Volume (vph)	0	0	0	509	25	619	41	1206	209	0	1904	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98			
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.957		0.950					
Satd. Flow (prot)	0	0	0	1547	1556	1471	1660	4680	1457	0	4684	0
Flt Permitted				0.950	0.957		0.063					
Satd. Flow (perm)	0	0	0	1547	1556	1448	110	4680	1422	0	4684	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64			134		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	3					3			7	7		
Confl. Bikes (#/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 (%)	0%	0%	0%	5%	7%	4%	3%	5%	5%	0%	4%	100%
Adj. Flow (vph)	0	0	0	536	26	652	43	1269	220	0	2004	17
Shared Lane Traffic (%)				48%								
Lane Group Flow (vph)	0	0	0	279	283	652	43	1269	220	0	2021	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	9.0	17.2			17.2	
Total Split (s)				64.0	64.0	64.0	9.0	76.0			67.0	
Total Split (%)				45.7%	45.7%	45.7%	6.4%	54.3%			47.9%	
Maximum Green (s)				56.8	56.8	56.8	5.0	68.8			59.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				56.8	56.8	56.8	70.2	66.9	138.2		59.8	
Actuated g/C Ratio				0.41	0.41	0.41	0.51	0.48	1.00		0.43	
v/c Ratio				0.44	0.44	1.03	0.39	0.56	0.15		1.00	
Control Delay (s/veh)				32.4	32.5	80.1	27.0	26.3	0.2		58.2	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				32.4	32.5	80.1	27.0	26.3	0.2		58.2	
LOS				C	C	F	C	C	A		E	
Approach Delay (s/veh)					58.1			22.6			58.2	
Approach LOS					E			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 138.2			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 46.7		Intersection LOS: D	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



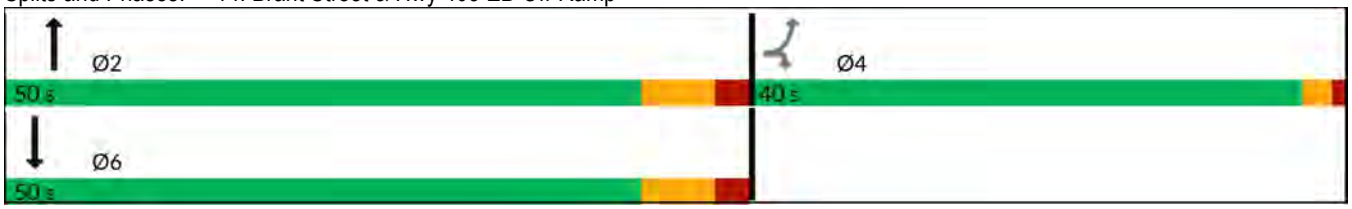


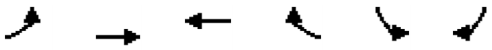
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	219	259	0	1212	1514	849
Future Volume (vph)	219	259	0	1212	1514	849
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Frt	0.951	0.850				0.850
Flt Protected	0.967					
Satd. Flow (prot)	3149	1339	0	4636	4680	1500
Flt Permitted	0.967					
Satd. Flow (perm)	3149	1339	0	4636	4680	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	11	11				674
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	4%	0%	6%	5%	2%
Adj. Flow (vph)	231	273	0	1276	1594	894
Shared Lane Traffic (%)		41%				
Lane Group Flow (vph)	343	161	0	1276	1594	894
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	12.2	12.2		24.3	24.3	47.3
Actuated g/C Ratio	0.26	0.26		0.51	0.51	1.00
v/c Ratio	0.42	0.45		0.54	0.66	0.60
Control Delay (s/veh)	16.7	19.9		8.8	10.2	1.8
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	16.7	19.9		8.8	10.2	1.8
LOS	B	B		A	B	A
Approach Delay (s/veh)	17.8			8.8	7.2	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 47.3			
Natural Cycle: 40			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 51.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	397	555	0	0	257
Future Volume (vph)	80	397	555	0	0	257
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.992				
Satd. Flow (prot)	0	3326	3353	0	1526	0
Flt Permitted		0.804				
Satd. Flow (perm)	0	2696	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					234	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	432	603	0	0	279
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	519	603	0	279	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	50.0	50.0	50.0		40.0	
Total Split (%)	55.6%	55.6%	55.6%		44.4%	
Maximum Green (s)	46.0	46.0	46.0		36.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		13.3	13.3		8.2	
Actuated g/C Ratio		0.44	0.44		0.27	
v/c Ratio		0.43	0.40		0.47	
Control Delay (s/veh)		8.0	7.4		5.3	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		8.0	7.4		5.3	
LOS		A	A		A	
Approach Delay (s/veh)		8.0	7.4		5.3	
Approach LOS		A	A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 29.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 7.2		Intersection LOS: A	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)

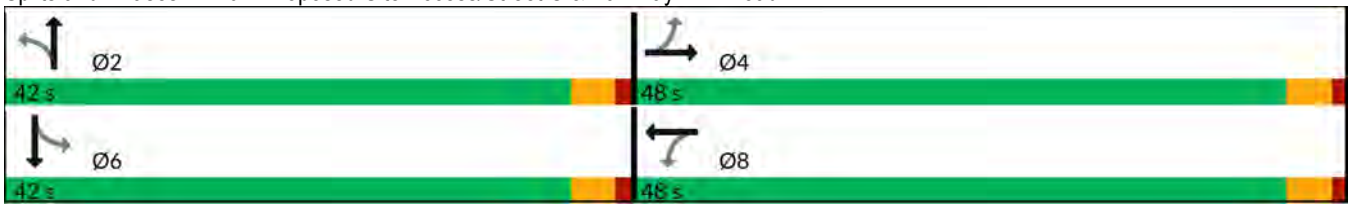


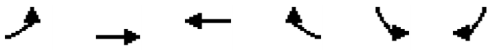
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	310	19	28	394	5	19	0	27	118	0	143
Future Volume (vph)	70	310	19	28	394	5	19	0	27	118	0	143
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998			0.922			0.926	
Flt Protected		0.991		0.950				0.979			0.978	
Satd. Flow (prot)	0	3300	0	1676	1761	0	0	1593	0	0	1598	0
Flt Permitted		0.839		0.500				0.839			0.836	
Satd. Flow (perm)	0	2793	0	882	1761	0	0	1365	0	0	1366	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			1			29			84	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	337	21	30	428	5	21	0	29	128	0	155
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	434	0	30	433	0	0	50	0	0	283	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	48.0	48.0		48.0	48.0		42.0	42.0		42.0	42.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		46.7%	46.7%		46.7%	46.7%	
Maximum Green (s)	44.0	44.0		44.0	44.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		16.5		16.5	16.5			12.0			12.0	
Actuated g/C Ratio		0.45		0.45	0.45			0.33			0.33	
v/c Ratio		0.35		0.08	0.55			0.11			0.56	
Control Delay (s/veh)		8.1		7.7	11.5			6.5			12.4	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		8.1		7.7	11.5			6.5			12.4	
LOS		A		A	B			A			B	
Approach Delay (s/veh)		8.1			11.2			6.5			12.4	
Approach LOS		A			B			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 36.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	63	391	324	157	301	102
Future Volume (vph)	63	391	324	157	301	102
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.951		0.966	
Flt Protected		0.993			0.964	
Satd. Flow (prot)	0	3329	3189	0	1643	0
Flt Permitted		0.836			0.964	
Satd. Flow (perm)	0	2803	3189	0	1643	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			106		29	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	425	352	171	327	111
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	493	523	0	438	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	38.0	38.0	38.0		52.0	
Total Split (%)	42.2%	42.2%	42.2%		57.8%	
Maximum Green (s)	34.0	34.0	34.0		48.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		13.2	13.2		16.1	
Actuated g/C Ratio		0.35	0.35		0.43	
v/c Ratio		0.50	0.44		0.61	
Control Delay (s/veh)		12.6	9.4		12.4	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		12.6	9.4		12.4	
LOS		B	A		B	
Approach Delay (s/veh)		12.6	9.4		12.4	
Approach LOS		B	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 37.7			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 11.4		Intersection LOS: B	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

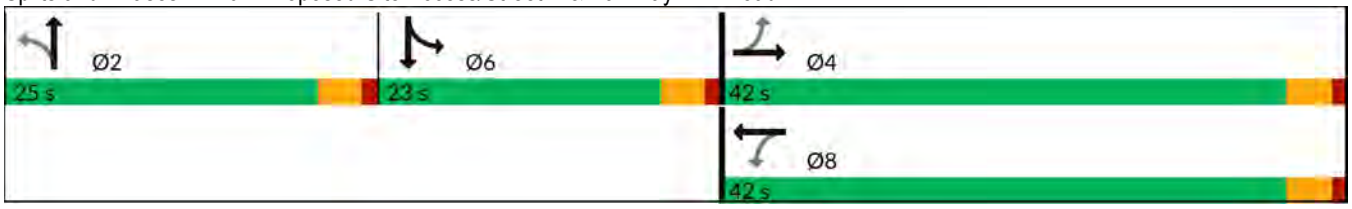


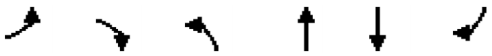
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	729	18	19	376	26	59	24	62	78	8	8
Future Volume (vph)	8	729	18	19	376	26	59	24	62	78	8	8
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.991			0.942			0.988	
Flt Protected		0.999			0.998			0.980			0.960	
Satd. Flow (prot)	0	3336	0	0	3316	0	0	1629	0	0	1674	0
Flt Permitted		0.950			0.911			0.921			0.960	
Satd. Flow (perm)	0	3173	0	0	3027	0	0	1531	0	0	1674	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			9			39			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	792	20	21	409	28	64	26	67	85	9	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	821	0	0	458	0	0	157	0	0	103	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	42.0	42.0		42.0	42.0		25.0	25.0		23.0	23.0	
Total Split (%)	46.7%	46.7%		46.7%	46.7%		27.8%	27.8%		25.6%	25.6%	
Maximum Green (s)	38.0	38.0		38.0	38.0		21.0	21.0		19.0	19.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		26.4			26.4			10.6			9.9	
Actuated g/C Ratio		0.51			0.51			0.21			0.19	
v/c Ratio		0.51			0.30			0.46			0.32	
Control Delay (s/veh)		14.8			12.5			21.7			23.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		14.8			12.5			21.7			23.8	
LOS		B			B			C			C	
Approach Delay (s/veh)		14.8			12.5			21.7			23.8	
Approach LOS		B			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 51.6			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 15.4		Intersection LOS: B	
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



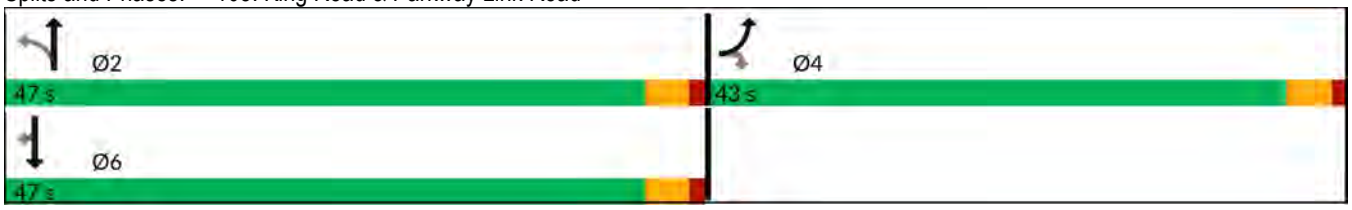


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	372	496	356	401	377	64
Future Volume (vph)	372	496	356	401	377	64
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	2			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1676	1500	3252	1765	1765	1500
Flt Permitted	0.950		0.424			
Satd. Flow (perm)	1676	1500	1452	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		359				62
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	404	539	387	436	410	70
Shared Lane Traffic (%)						
Lane Group Flow (vph)	404	539	387	436	410	70
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			7.2	7.2	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
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	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	22.0	22.0	22.0	22.0
Total Split (s)	43.0	43.0	47.0	47.0	47.0	47.0
Total Split (%)	47.8%	47.8%	52.2%	52.2%	52.2%	52.2%
Maximum Green (s)	39.0	39.0	43.0	43.0	43.0	43.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	Min	Min
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5	5	5	5	5
Act Effct Green (s)	19.2	19.2	21.4	21.4	21.4	21.4
Actuated g/C Ratio	0.39	0.39	0.43	0.43	0.43	0.43
v/c Ratio	0.62	0.67	0.62	0.57	0.54	0.10
Control Delay (s/veh)	18.5	9.8	16.9	14.9	14.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	9.8	16.9	14.9	14.3	4.2
LOS	B	A	B	B	B	A
Approach Delay (s/veh)	13.5			15.8	12.8	
Approach LOS	B			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 49.6			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

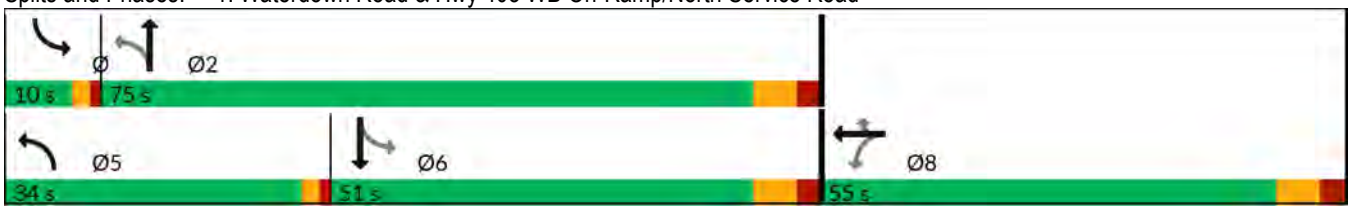


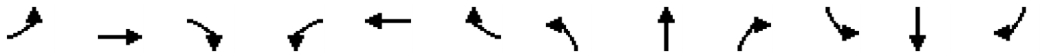
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	245	463	42	695	847	222	106	677	124
Future Volume (vph)	0	0	0	245	463	42	695	847	222	106	677	124
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	2		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99						
Frt						0.850		0.969			0.977	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1660	1782	1500	3221	3198	0	1710	3244	0
Flt Permitted				0.950			0.110			0.198		
Satd. Flow (perm)	0	0	0	1660	1782	1480	373	3198	0	356	3244	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						76		33			16	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	3%	1%	2%	3%	3%	6%	0%	3%	3%
Adj. Flow (vph)	0	0	0	275	520	47	781	952	249	119	761	139
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	275	520	47	781	1201	0	119	900	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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				55.0	55.0	55.0	34.0	75.0		10.0	51.0	
Total Split (%)				39.3%	39.3%	39.3%	24.3%	53.6%		7.1%	36.4%	
Maximum Green (s)				47.8	47.8	47.8	31.0	68.2		7.0	44.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				41.6	41.6	41.6	76.1	62.0		50.5	39.5	
Actuated g/C Ratio				0.32	0.32	0.32	0.59	0.48		0.39	0.31	
v/c Ratio				0.51	0.90	0.09	0.89	0.77		0.55	0.89	
Control Delay (s/veh)				39.6	61.8	2.5	46.2	30.7		27.0	54.2	
Queue Delay				0.0	0.0	0.0	0.0	4.3		0.0	0.0	
Total Delay (s/veh)				39.6	61.8	2.5	46.2	35.1		27.0	54.2	
LOS				D	E	A	D	D		C	D	
Approach Delay (s/veh)					51.2			39.4			51.0	
Approach LOS					D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 128.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 45.1		Intersection LOS: D	
Intersection Capacity Utilization 85.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road



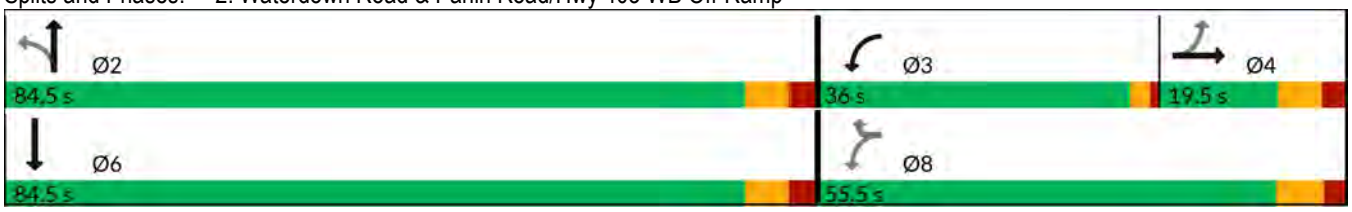


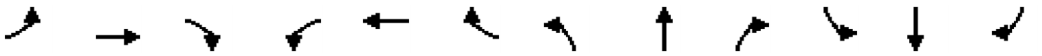
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	762	0	395	2	1285	0	0	936	0
Future Volume (vph)	0	0	5	762	0	395	2	1285	0	0	936	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.865				0.850						
Flt Protected				0.950								
Satd. Flow (prot)	0	1557	0	3221	0	1485	0	3289	0	0	3320	0
Flt Permitted				0.784				0.954				
Satd. Flow (perm)	0	1557	0	2658	0	1485	0	3137	0	0	3320	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		59				33						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							2					2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Heavy Vehicles (%)	0%	0%	0%	3%	100%	3%	0%	4%	0%	0%	3%	0%
Adj. Flow (vph)	0	0	6	918	0	476	2	1548	0	0	1128	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	6	0	918	0	476	0	1550	0	0	1128	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type		NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	19.5	19.5		36.0		55.5	84.5	84.5			84.5	
Total Split (%)	13.9%	13.9%		25.7%		39.6%	60.4%	60.4%			60.4%	
Maximum Green (s)	12.4	12.4		33.0		48.3	77.3	77.3			77.3	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		10.8		46.6		42.2		67.3			67.3	
Actuated g/C Ratio		0.09		0.37		0.34		0.54			0.54	
v/c Ratio		0.03		0.77		0.91		0.91			0.63	
Control Delay (s/veh)		0.4		40.4		60.1		35.8			22.0	
Queue Delay		0.0		0.0		0.0		1.9			0.9	
Total Delay (s/veh)		0.4		40.4		60.1		37.7			22.9	
LOS		A		D		E		D			C	
Approach Delay (s/veh)		0.4			47.1			37.7			22.9	
Approach LOS		A			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 124.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 36.8		Intersection LOS: D	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



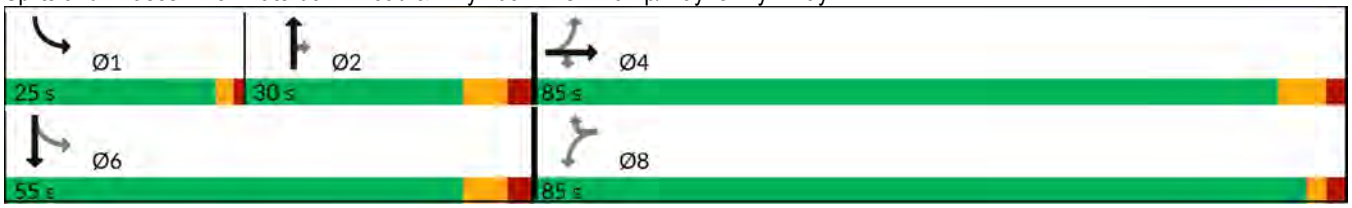


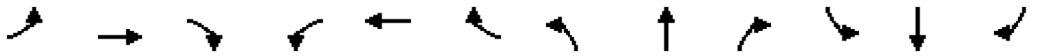
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	516	285	682	373	0	964	0	472	705	602	665	0
Future Volume (vph)	516	285	682	373	0	964	0	472	705	602	665	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		2	2		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Ped Bike Factor												
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1644	1667	1485	3100	0	1471	0	3320	2565	3159	3353	0
Flt Permitted	0.950			0.522						0.154		
Satd. Flow (perm)	1644	1667	1485	1704	0	1471	0	3320	2565	512	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						540			719			
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	8%	3%	7%	0%	4%	0%	3%	5%	5%	2%	0%
Adj. Flow (vph)	580	320	766	419	0	1083	0	530	792	676	747	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	580	320	766	419	0	1083	0	530	792	676	747	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0	2.0	2.0	10.0	
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)	2.0	0.6	2.0	2.0		2.0		0.6	2.0	2.0	0.6	
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)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm	Perm		Perm		NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4	8		8			2	6		
Detector Phase	4	4	4	8		8		2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0		7.0		10.0	10.0	7.0	10.0	
Minimum Split (s)	17.1	17.1	17.1	11.1		11.1		17.0	17.0	10.0	17.0	
Total Split (s)	85.0	85.0	85.0	85.0		85.0		30.0	30.0	25.0	55.0	
Total Split (%)	60.7%	60.7%	60.7%	60.7%		60.7%		21.4%	21.4%	17.9%	39.3%	
Maximum Green (s)	77.9	77.9	77.9	80.9		80.9		23.0	23.0	22.0	48.0	
Yellow Time (s)	5.0	5.0	5.0	2.0		2.0		4.5	4.5	2.0	4.5	
All-Red Time (s)	2.1	2.1	2.1	2.1		2.1		2.5	2.5	1.0	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)	7.1	7.1	7.1	4.1		4.1		7.0	7.0	3.0	7.0	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	
Recall Mode	Min	Min	Min	Min		Min		Min	Min	None	Min	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Don't Walk (s)	28.0	28.0	28.0								21.0	
Pedestrian Calls (#/hr)	5	5	5								5	
Act Effct Green (s)	77.9	77.9	77.9	80.9		80.9		23.0	23.0	52.0	48.0	
Actuated g/C Ratio	0.56	0.56	0.56	0.58		0.58		0.16	0.16	0.37	0.34	
v/c Ratio	0.63	0.35	0.93	0.43		1.01		0.97	0.77	1.12	0.65	
Control Delay (s/veh)	25.2	18.4	47.3	18.2		44.2		90.1	12.3	108.8	42.1	
Queue Delay	0.0	0.0	0.0	0.0		10.7		0.0	0.0	0.0	0.0	
Total Delay (s/veh)	25.2	18.4	47.3	18.2		55.0		90.1	12.3	108.8	42.1	
LOS	C	B	D	B		D		F	B	F	D	
Approach Delay (s/veh)		34.0			44.7			43.5			73.8	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 48.4		Intersection LOS: D	
Intersection Capacity Utilization 122.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



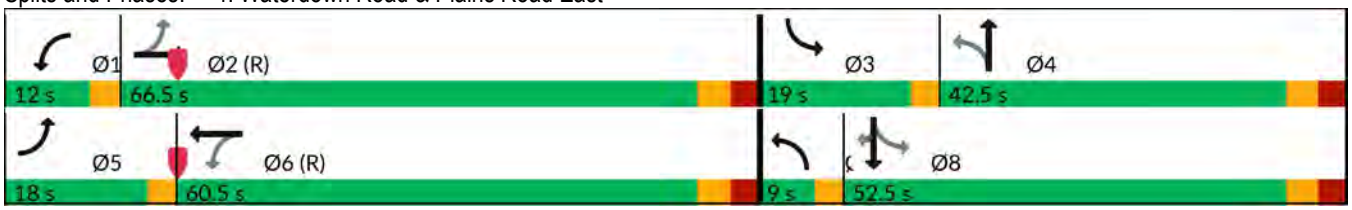


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	464	676	93	111	1182	137	204	324	64	281	336	655
Future Volume (vph)	464	676	93	111	1182	137	204	324	64	281	336	655
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
Lane Util. Factor	0.97	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	1.00		0.99	0.99		0.99		0.97
Frt		0.982			0.984			0.975				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3221	3276	0	1676	3246	0	1676	1642	0	1676	1682	1500
Flt Permitted	0.070			0.274			0.455			0.165		
Satd. Flow (perm)	237	3276	0	482	3246	0	794	1642	0	289	1682	1452
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			10			7				210
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	7		4	4		7	13		18	18		13
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 (%)	3%	2%	3%	2%	3%	7%	2%	6%	7%	2%	7%	2%
Adj. Flow (vph)	483	704	97	116	1231	143	213	338	67	293	350	682
Shared Lane Traffic (%)												
Lane Group Flow (vph)	483	801	0	116	1374	0	213	405	0	293	350	682
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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	18.0	66.5		12.0	60.5		9.0	42.5		19.0	52.5	52.5
Total Split (%)	12.9%	47.5%		8.6%	43.2%		6.4%	30.4%		13.6%	37.5%	37.5%
Maximum Green (s)	15.0	60.2		9.0	54.2		6.0	36.2		16.0	46.2	46.2
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	75.5	60.5		66.2	54.2		45.5	36.2		58.5	46.2	46.2
Actuated g/C Ratio	0.54	0.43		0.47	0.39		0.33	0.26		0.42	0.33	0.33
v/c Ratio	1.08	0.56		0.39	1.09		0.72	0.94		1.05	0.63	1.10
Control Delay (s/veh)	103.1	31.2		20.3	93.4		50.3	81.5		98.6	45.8	97.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	103.1	31.2		20.3	93.4		50.3	81.5		98.6	45.8	97.7
LOS	F	C		C	F		D	F		F	D	F
Approach Delay (s/veh)		58.3			87.7			70.7			84.2	
Approach LOS		E			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 76.5		Intersection LOS: E	
Intersection Capacity Utilization 109.2%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1407	38	0	1309	26	14
Future Volume (vph)	1407	38	0	1309	26	14
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.996				0.954	
Flt Protected					0.968	
Satd. Flow (prot)	3258	0	0	3420	1040	0
Flt Permitted					0.968	
Satd. Flow (perm)	3258	0	0	3420	1040	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10				15	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		3	3			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	3%	59%	0%	0%	81%	19%
Adj. Flow (vph)	1546	42	0	1438	29	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1588	0	0	1438	44	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	41.0			41.0	11.1	
Actuated g/C Ratio	0.85			0.85	0.23	
v/c Ratio	0.57			0.49	0.18	
Control Delay (s/veh)	5.6			4.2	13.9	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	5.6			4.2	13.9	
LOS	A			A	B	
Approach Delay (s/veh)	5.6			4.2	13.9	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 48.2			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay (s/veh): 5.0		Intersection LOS: A	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

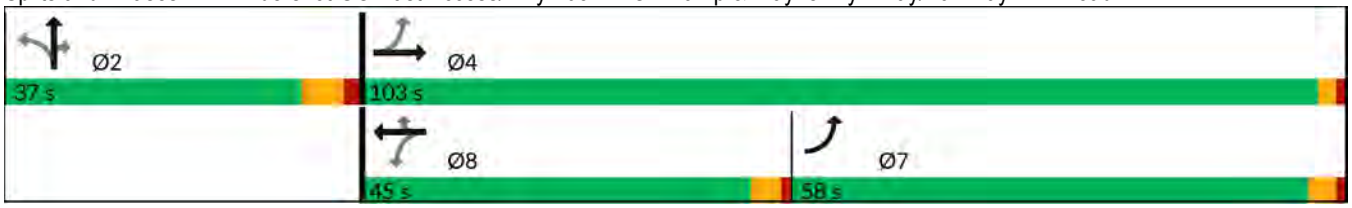


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	617	638	14	0	903	102	250	49	0	0	0	0
Future Volume (vph)	617	638	14	0	903	102	250	49	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997				0.850						
Flt Protected	0.950							0.960				
Satd. Flow (prot)	1644	3410	0	0	3420	1530	0	1728	1800	0	0	0
Flt Permitted	0.087							0.960				
Satd. Flow (perm)	151	3410	0	0	3420	1530	0	1728	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				86						
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	752	778	17	0	1101	124	305	60	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	752	795	0	0	1101	124	0	365	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases	4			8		8	2		2			
Detector Phase	7	4		8	8	8	2	2	2			
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	7.0		5.0	5.0	5.0	10.0	10.0	10.0			
Minimum Split (s)	9.0	10.0		22.0	22.0	22.0	16.0	16.0	16.0			
Total Split (s)	58.0	103.0		45.0	45.0	45.0	37.0	37.0	37.0			
Total Split (%)	41.4%	73.6%		32.1%	32.1%	32.1%	26.4%	26.4%	26.4%			
Maximum Green (s)	54.0	100.0		41.0	41.0	41.0	31.0	31.0	31.0			
Yellow Time (s)	3.0	2.0		3.0	3.0	3.0	4.5	4.5	4.5			
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.5	1.5	1.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0			
Total Lost Time (s)	4.0	3.0			4.0	4.0		6.0	6.0			
Lead/Lag	Lag			Lead	Lead	Lead						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0			
Recall Mode	None	Min		None	None	None	None	None	None			
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0			
Flash Don't Walk (s)		20.0		11.0	11.0	11.0	16.0	16.0	16.0			
Pedestrian Calls (#/hr)		0		5	5	5	0	0	0			
Act Effct Green (s)	99.0	100.0			41.0	41.0		30.7				
Actuated g/C Ratio	0.71	0.72			0.29	0.29		0.22				
v/c Ratio	1.10	0.33			1.10	0.24		0.96				
Control Delay (s/veh)	102.4	7.8			104.5	14.6		91.5				
Queue Delay	0.0	0.0			0.0	0.0		0.0				
Total Delay (s/veh)	102.4	7.8			104.5	14.6		91.5				
LOS	F	A			F	B		F				
Approach Delay (s/veh)		53.8			95.4			91.5				
Approach LOS		D			F			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 139.7			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 74.4		Intersection LOS: E	
Intersection Capacity Utilization 91.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	267	92	601	628	81	57	332	662	68	364	22
Future Volume (vph)	14	267	92	601	628	81	57	332	662	68	364	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				
Frt		0.962				0.850		0.915				0.850
Flt Protected	0.950										0.992	
Satd. Flow (prot)	1710	1698	0	1765	1765	1500	0	*3050	*3050	0	1751	1530
Flt Permitted	0.414			*0.470							0.572	
Satd. Flow (perm)	745	1698	0	829	1765	1469	0	*3050	*3050	0	1009	1530
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18				48		118				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Bikes (#/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 (%)	0%	2%	2%	2%	2%	2%	4%	1%	2%	2%	2%	0%
Adj. Flow (vph)	15	281	97	633	661	85	60	349	697	72	383	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	378	0	633	661	85	0	1106	0	0	455	23
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	

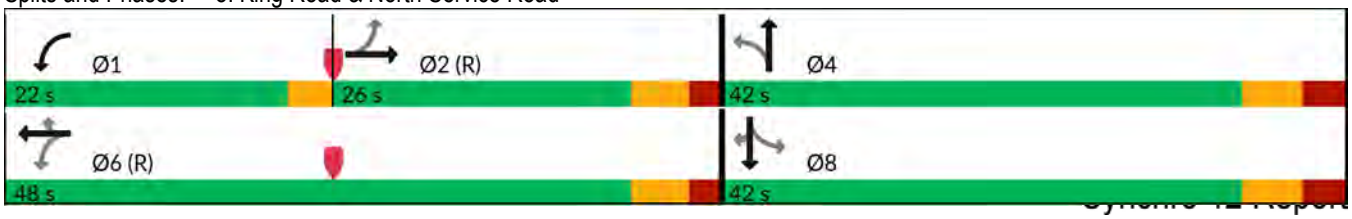
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	26.0	26.0		22.0	48.0	48.0	42.0	42.0		42.0	42.0	42.0
Total Split (%)	28.9%	28.9%		24.4%	53.3%	53.3%	46.7%	46.7%		46.7%	46.7%	46.7%
Maximum Green (s)	20.0	20.0		19.0	42.0	42.0	35.0	35.0		35.0	35.0	35.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	20.0	20.0		45.0	42.0	44.0		38.0			38.0	35.0
Actuated g/C Ratio	0.22	0.22		0.50	0.47	0.49		0.42			0.42	0.39
v/c Ratio	0.09	0.97		1.03	0.80	0.11		0.82			1.07	0.04
Control Delay (s/veh)	29.6	73.0		66.9	29.7	6.9		26.4			91.0	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	29.6	73.0		66.9	29.7	6.9		26.4			91.0	0.1
LOS	C	E		E	C	A		C			F	A
Approach Delay (s/veh)		71.3			45.4			26.4			86.6	
Approach LOS		E			D			C			F	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay (s/veh): 48.0 Intersection LOS: D
Intersection Capacity Utilization 159.7% ICU Level of Service H
Analysis Period (min) 15

* User Entered Value

Splits and Phases: 8: King Road & North Service Road

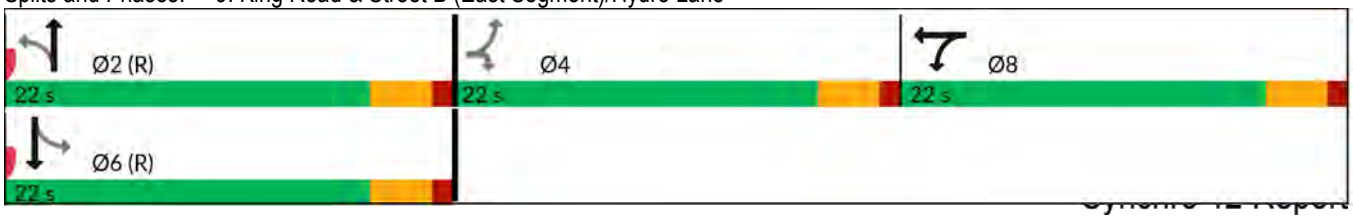


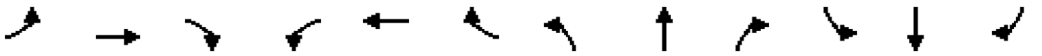
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	352	0	0	14	0	7	122	612	5	0	942	108
Future Volume (vph)	352	0	0	14	0	7	122	612	5	0	942	108
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	0.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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				
Frt					0.850			0.999			0.985	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	0	1800	1710	1530	0	1710	1763	0	1800	1757	0
Flt Permitted	0.222			0.950			0.129					
Satd. Flow (perm)	400	0	1800	1710	1530	0	232	1763	0	1800	1757	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					124			1			9	
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)									1			
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 (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Adj. Flow (vph)	356	0	0	14	0	7	123	618	5	0	952	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	356	0	0	14	7	0	123	623	0	0	1061	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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	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	
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	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	
Detector 1 Queue (s)	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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA		Perm	NA		Perm	NA	
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		
Detector Phase	4		4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None		None	None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	
Act Effct Green (s)	18.0			8.3	8.3		33.5	33.5			33.5	
Actuated g/C Ratio	0.27			0.13	0.13		0.51	0.51			0.51	
v/c Ratio	3.27			0.07	0.02		1.05	0.70			1.18	
Control Delay (s/veh)	Error			22.9	0.1		126.6	23.0			115.5	
Queue Delay	0.0			0.0	0.0		0.0	0.0			0.0	
Total Delay (s/veh)	Error			22.9	0.1		126.6	23.0			115.5	
LOS	F			C	A		F	C			F	
Approach Delay (s/veh)		1058.0			15.3			40.1			115.5	
Approach LOS		F			B			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 66			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 3.27			
Intersection Signal Delay (s/veh): 242.4		Intersection LOS: F	
Intersection Capacity Utilization 103.6%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane





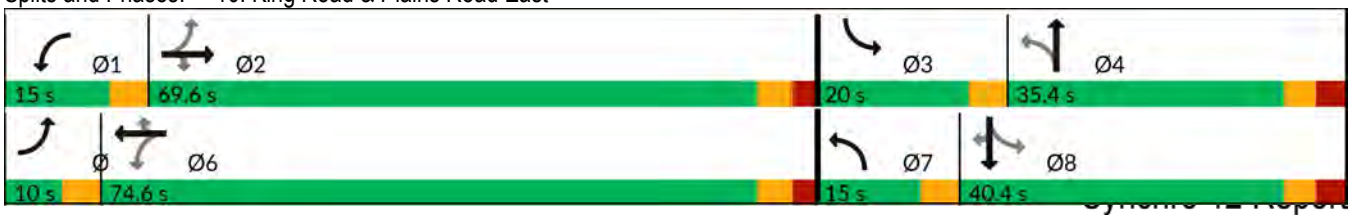
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	991	215	126	1364	986	174	303	77	821	310	168
Future Volume (vph)	27	991	215	126	1364	986	174	303	77	821	310	168
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor			0.94			0.94	0.99	0.99		0.98		0.97
Frt			0.850			0.850		0.969				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1710	3320	1471	1710	3353	1443	1613	1680	0	3424	1800	1500
Flt Permitted	0.083			0.153			0.325			*0.420		
Satd. Flow (perm)	149	3320	1390	275	3353	1356	547	1680	0	1414	1800	1459
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			463		8				117
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	18		16	16		18	11		12	12		11
Confl. Bikes (#/hr)						1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	4%	0%	2%	6%	6%	4%	0%	2%	0%	2%
Adj. Flow (vph)	28	1011	219	129	1392	1006	178	309	79	838	316	171
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	1011	219	129	1392	1006	178	388	0	838	316	171
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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
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
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
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
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
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
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
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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

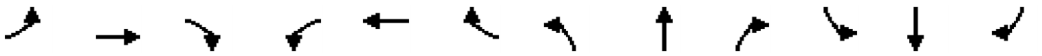
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0	20.0	6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	69.6	69.6	15.0	74.6	74.6	15.0	35.4		20.0	40.4	40.4
Total Split (%)	7.1%	49.7%	49.7%	10.7%	53.3%	53.3%	10.7%	25.3%		14.3%	28.9%	28.9%
Maximum Green (s)	6.0	63.6	63.6	11.0	68.6	68.6	11.0	29.0		16.0	34.0	34.0
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7	3.7	4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3	2.3	0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	Min	Min	None	Min	Min	None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0	16.0		8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0	15.0		21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	68.8	62.8	62.8	76.5	70.7	68.7	42.4	31.4		51.5	36.5	34.1
Actuated g/C Ratio	0.51	0.46	0.46	0.56	0.52	0.51	0.31	0.23		0.38	0.27	0.25
v/c Ratio	0.19	0.66	0.30	0.50	0.80	1.10	0.70	0.98		1.09	0.65	0.38
Control Delay (s/veh)	16.4	30.9	8.4	20.9	31.8	80.3	48.2	92.6		94.3	52.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	16.4	30.9	8.4	20.9	31.8	80.3	48.2	92.6		94.3	52.4	17.6
LOS	B	C	A	C	C	F	D	F		F	D	B
Approach Delay (s/veh)		26.7			50.6			78.7			74.4	
Approach LOS		C			D			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 136			
Natural Cycle: 135			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay (s/veh): 53.6		Intersection LOS: D	
Intersection Capacity Utilization 105.6%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 10: King Road & Plains Road East



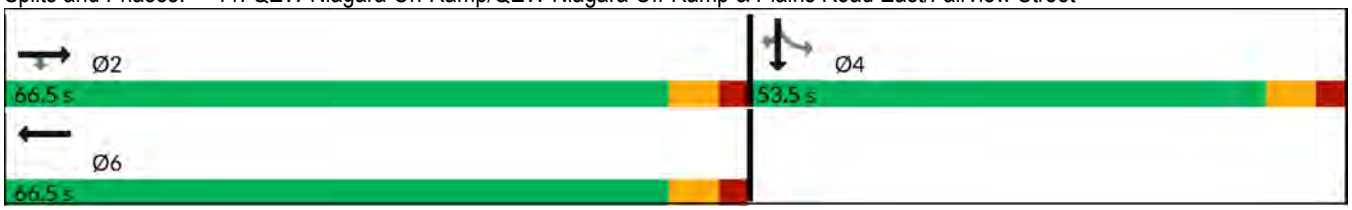


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1750	506	0	2292	1867	0	0	0	907	7	698
Future Volume (vph)	0	1750	506	0	2292	1867	0	0	0	907	7	698
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Ped Bike Factor			0.97			0.98					1.00	0.99
Frt			0.850			0.850					0.947	0.850
Flt Protected										0.950	0.969	
Satd. Flow (prot)	0	4771	1500	0	4818	1500	0	0	0	1608	1471	1411
Flt Permitted										0.950	0.969	
Satd. Flow (perm)	0	4771	1451	0	4818	1464	0	0	0	1608	1471	1393
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			440			775					1	36
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		5	5		6	1					1
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	3%	2%	0%	2%	2%	0%	0%	0%	1%	0%	3%
Adj. Flow (vph)	0	1786	516	0	2339	1905	0	0	0	926	7	712
Shared Lane Traffic (%)										38%		28%
Lane Group Flow (vph)	0	1786	516	0	2339	1905	0	0	0	574	558	513
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		66.5	66.5		66.5					53.5	53.5	53.5
Total Split (%)		55.4%	55.4%		55.4%					44.6%	44.6%	44.6%
Maximum Green (s)		59.5	59.5		59.5					46.3	46.3	46.3
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		59.5	59.5		59.5	120.0				46.3	46.3	46.3
Actuated g/C Ratio		0.50	0.50		0.50	1.00				0.39	0.39	0.39
v/c Ratio		0.76	0.55		0.98	1.30				0.93	0.98	0.92
Control Delay (s/veh)		27.0	5.6		44.1	151.3				57.9	70.8	55.9
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		27.0	5.6		44.1	151.3				57.9	70.8	55.9
LOS		C	A		D	F				E	E	E
Approach Delay (s/veh)		22.2			92.3						61.6	
Approach LOS		C			F						E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay (s/veh): 66.4		Intersection LOS: E	
Intersection Capacity Utilization 92.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



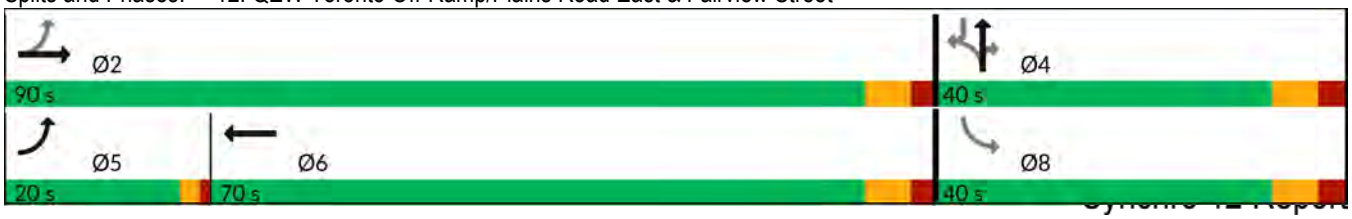
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	1919	114	0	2840	18	391	317	560	17	0	684
Future Volume (vph)	337	1919	114	0	2840	18	391	317	560	17	0	684
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		2
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	0.88
Ped Bike Factor			0.98		1.00			1.00	0.99	1.00		
Frt			0.850		0.999			0.960	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1644	4818	1485	0	4808	0	1577	1529	1425	1710	0	2795
Flt Permitted	0.060						0.950	0.996		0.122		
Satd. Flow (perm)	104	4818	1451	0	4808	0	1577	1529	1405	219	0	2795
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117		1			13	56			407
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	9		6	6		9			2	2		
Confl. Bikes (#/hr)			1									
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	4%	2%	3%	0%	2%	15%	3%	2%	2%	0%	0%	2%
Adj. Flow (vph)	344	1958	116	0	2898	18	399	323	571	17	0	698
Shared Lane Traffic (%)							10%		23%			
Lane Group Flow (vph)	344	1958	116	0	2916	0	359	494	440	17	0	698
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	20.0	90.0			70.0		40.0	40.0	40.0	40.0		40.0
Total Split (%)	15.4%	69.2%			53.8%		30.8%	30.8%	30.8%	30.8%		30.8%
Maximum Green (s)	17.0	83.3			63.3		32.8	32.8	32.8	32.8		32.8
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			31.0		31.0	31.0	31.0	25.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	87.0	83.3	130.0		63.3		32.8	32.8	32.8	32.8		32.8
Actuated g/C Ratio	0.67	0.64	1.00		0.49		0.25	0.25	0.25	0.25		0.25
v/c Ratio	1.27	0.63	0.08		1.25		0.90	1.25	1.11	0.31		0.69
Control Delay (s/veh)	182.8	15.3	0.1		145.3		74.1	171.8	118.0	56.9		21.6
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	182.8	15.3	0.1		145.3		74.1	171.8	118.0	56.9		21.6
LOS	F	B	A		F		E	F	F	E		C
Approach Delay (s/veh)		38.4			145.3			126.4			22.5	
Approach LOS		D			F			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Natural Cycle: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay (s/veh): 94.8		Intersection LOS: F	
Intersection Capacity Utilization 127.8%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street



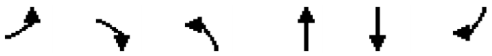
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	131	11	75	86	1886	813	0	2318	23
Future Volume (vph)	0	0	0	131	11	75	86	1886	813	0	2318	23
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor									0.98		1.00	
Frt						0.850			0.850		0.999	
Flt Protected				0.950	0.960		0.950					
Satd. Flow (prot)	0	0	0	1577	1601	1485	1676	4771	1515	0	4785	0
Flt Permitted				0.950	0.960		0.056					
Satd. Flow (perm)	0	0	0	1577	1601	1485	99	4771	1480	0	4785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						69			359		2	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)							1		6	6		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 (%)	0%	0%	0%	3%	0%	3%	2%	3%	1%	0%	2%	60%
Adj. Flow (vph)	0	0	0	138	12	79	91	1985	856	0	2440	24
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	75	75	79	91	1985	856	0	2464	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	
Minimum Split (s)				17.2	17.2	17.2	9.0	17.2			17.2	
Total Split (s)				21.3	21.3	21.3	15.0	108.7			93.7	
Total Split (%)				16.4%	16.4%	16.4%	11.5%	83.6%			72.1%	
Maximum Green (s)				14.1	14.1	14.1	11.0	101.5			86.5	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				11.5	11.5	11.5	81.6	78.4	104.6		67.6	
Actuated g/C Ratio				0.11	0.11	0.11	0.78	0.75	1.00		0.65	
v/c Ratio				0.43	0.43	0.35	0.42	0.56	0.58		0.80	
Control Delay (s/veh)				56.7	56.4	20.0	17.8	6.1	1.7		16.5	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				56.7	56.4	20.0	17.8	6.1	1.7		16.5	
LOS				E	E	C	B	A	A		B	
Approach Delay (s/veh)					44.0			5.2			16.5	
Approach LOS					D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 104.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



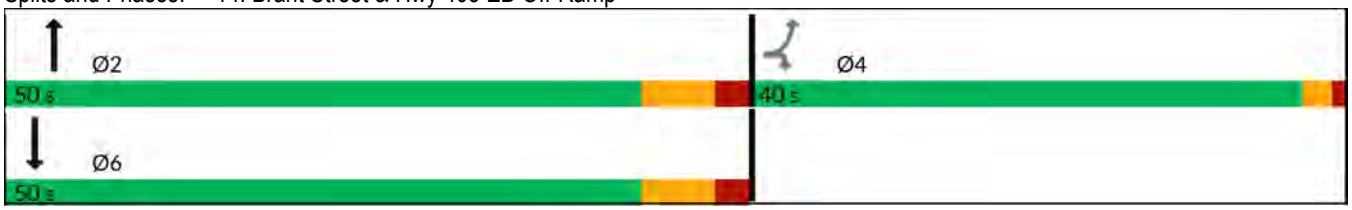


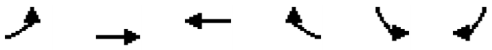
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	304	307	0	2076	1751	483
Future Volume (vph)	304	307	0	2076	1751	483
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor						0.98
Frt	0.959	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3094	1352	0	4818	4771	1485
Flt Permitted	0.965					
Satd. Flow (perm)	3094	1352	0	4818	4771	1452
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	5	5				331
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)			5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	5%	3%	0%	2%	3%	3%
Adj. Flow (vph)	313	316	0	2140	1805	498
Shared Lane Traffic (%)		37%				
Lane Group Flow (vph)	430	199	0	2140	1805	498
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	40.0	40.0		50.0	50.0	
Total Split (%)	44.4%	44.4%		55.6%	55.6%	
Maximum Green (s)	37.0	37.0		42.7	42.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	15.4	15.4		37.3	37.3	63.3
Actuated g/C Ratio	0.24	0.24		0.59	0.59	1.00
v/c Ratio	0.57	0.60		0.75	0.64	0.34
Control Delay (s/veh)	24.6	30.0		12.2	10.2	0.6
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	24.6	30.0		12.2	10.2	0.6
LOS	C	C		B	B	A
Approach Delay (s/veh)	26.3			12.2	8.2	
Approach LOS	C			B	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 63.3			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 12.1		Intersection LOS: B	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



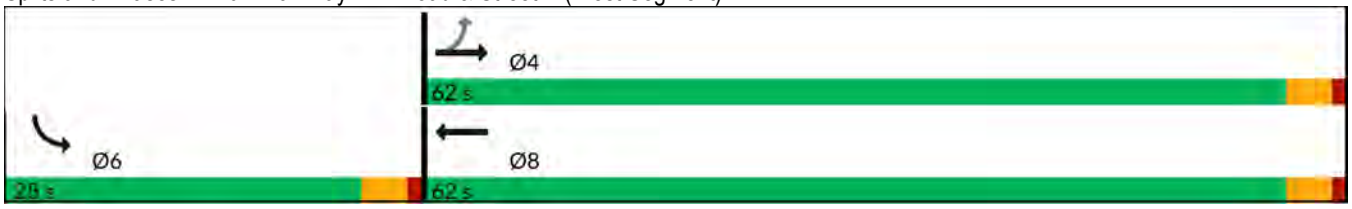


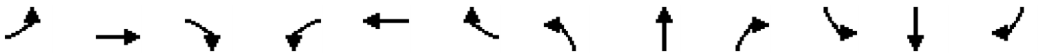
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	129	555	833	0	0	175
Future Volume (vph)	129	555	833	0	0	175
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.991				
Satd. Flow (prot)	0	3323	3353	0	1526	0
Flt Permitted		0.705				
Satd. Flow (perm)	0	2364	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					173	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	603	905	0	0	190
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	743	905	0	190	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	62.0	62.0	62.0		28.0	
Total Split (%)	68.9%	68.9%	68.9%		31.1%	
Maximum Green (s)	58.0	58.0	58.0		24.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		23.6	23.6		8.0	
Actuated g/C Ratio		0.59	0.59		0.20	
v/c Ratio		0.53	0.46		0.43	
Control Delay (s/veh)		7.4	6.1		6.9	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		7.4	6.1		6.9	
LOS		A	A		A	
Approach Delay (s/veh)		7.4	6.1		6.9	
Approach LOS		A	A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 39.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay (s/veh): 6.7		Intersection LOS: A	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)



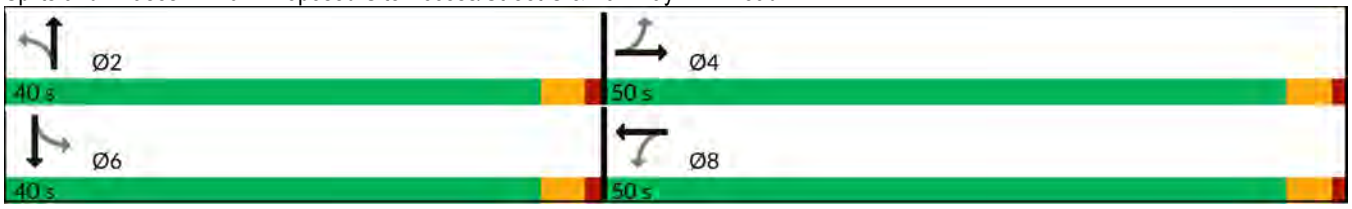


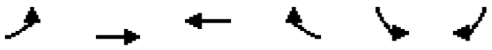
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	407	108	188	570	13	143	0	183	62	0	121
Future Volume (vph)	41	407	108	188	570	13	143	0	183	62	0	121
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971			0.997			0.924			0.910	
Flt Protected		0.996		0.950				0.979			0.983	
Satd. Flow (prot)	0	3243	0	1676	1759	0	0	1596	0	0	1579	0
Flt Permitted		0.865		0.393				0.792			0.829	
Satd. Flow (perm)	0	2816	0	694	1759	0	0	1291	0	0	1331	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48			2			86			131	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	45	442	117	204	620	14	155	0	199	67	0	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	604	0	204	634	0	0	354	0	0	199	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	50.0	50.0		50.0	50.0		40.0	40.0		40.0	40.0	
Total Split (%)	55.6%	55.6%		55.6%	55.6%		44.4%	44.4%		44.4%	44.4%	
Maximum Green (s)	46.0	46.0		46.0	46.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		26.7		26.7	26.7			19.7			19.7	
Actuated g/C Ratio		0.48		0.48	0.48			0.35			0.35	
v/c Ratio		0.44		0.61	0.75			0.69			0.36	
Control Delay (s/veh)		10.4		21.8	19.3			20.9			8.3	
Queue Delay		0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)		10.4		21.8	19.3			20.9			8.3	
LOS		B		C	B			C			A	
Approach Delay (s/veh)		10.4			19.9			20.9			8.3	
Approach LOS		B			B			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.7			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 16.0		Intersection LOS: B	
Intersection Capacity Utilization 88.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



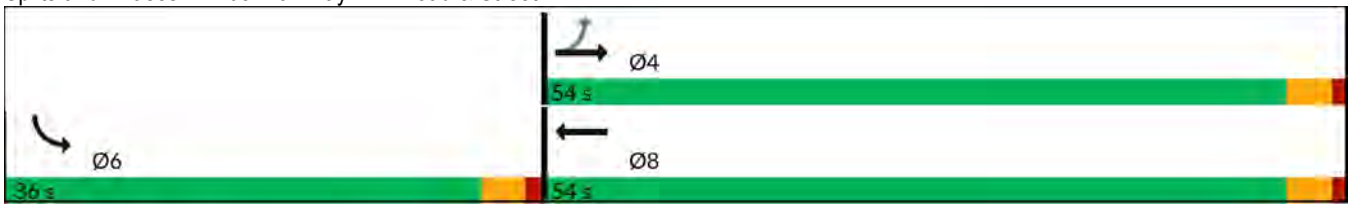


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	125	526	653	206	184	117
Future Volume (vph)	125	526	653	206	184	117
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.964		0.948	
Flt Protected		0.990			0.970	
Satd. Flow (prot)	0	3319	3232	0	1623	0
Flt Permitted		0.661			0.970	
Satd. Flow (perm)	0	2216	3232	0	1623	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			75		39	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	572	710	224	200	127
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	708	934	0	327	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	54.0	54.0	54.0		36.0	
Total Split (%)	60.0%	60.0%	60.0%		40.0%	
Maximum Green (s)	50.0	50.0	50.0		32.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		24.5	24.5		15.2	
Actuated g/C Ratio		0.51	0.51		0.31	
v/c Ratio		0.63	0.56		0.61	
Control Delay (s/veh)		12.2	9.3		18.9	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		12.2	9.3		18.9	
LOS		B	A		B	
Approach Delay (s/veh)		12.2	9.3		18.9	
Approach LOS		B	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 48.3			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	
Intersection Capacity Utilization 73.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

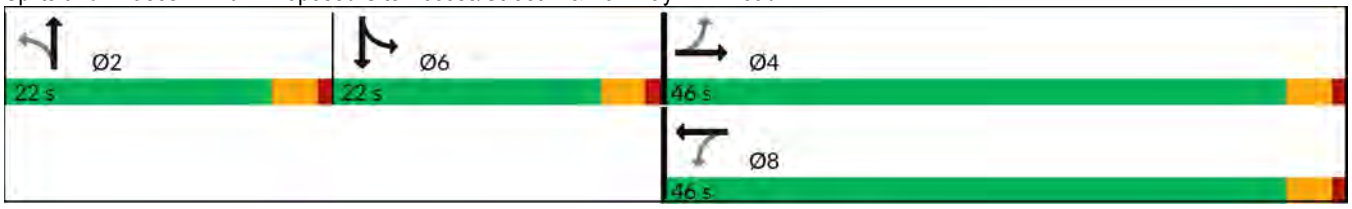


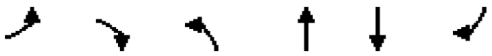
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	710	25	32	800	43	43	19	36	45	12	49
Future Volume (vph)	64	710	25	32	800	43	43	19	36	45	12	49
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.993			0.951			0.938	
Flt Protected		0.996			0.998			0.979			0.979	
Satd. Flow (prot)	0	3323	0	0	3323	0	0	1643	0	0	1621	0
Flt Permitted		0.815			0.905			0.672			0.979	
Satd. Flow (perm)	0	2719	0	0	3013	0	0	1128	0	0	1621	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			8			29			43	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	772	27	35	870	47	47	21	39	49	13	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	869	0	0	952	0	0	107	0	0	115	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA		Perm	NA		Split	NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	46.0	46.0		46.0	46.0		22.0	22.0		22.0	22.0	
Total Split (%)	51.1%	51.1%		51.1%	51.1%		24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		33.1			33.1			10.6			9.7	
Actuated g/C Ratio		0.57			0.57			0.18			0.17	
v/c Ratio		0.56			0.55			0.47			0.37	
Control Delay (s/veh)		14.5			14.1			27.6			21.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		14.5			14.1			27.6			21.9	
LOS		B			B			C			C	
Approach Delay (s/veh)		14.5			14.1			27.6			21.9	
Approach LOS		B			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 57.8			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 15.5		Intersection LOS: B	
Intersection Capacity Utilization 67.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road



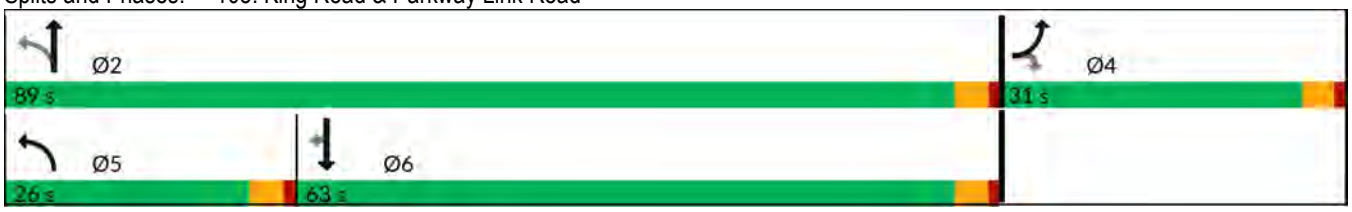


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	280	510	741	484	706	134
Future Volume (vph)	280	510	741	484	706	134
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	2			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1676	1500	3252	1765	1765	1500
Flt Permitted	0.950		0.083			
Satd. Flow (perm)	1676	1500	284	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		398				53
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	554	805	526	767	146
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	554	805	526	767	146
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			7.2	7.2	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	9.0	22.0	22.0	22.0
Total Split (s)	31.0	31.0	26.0	89.0	63.0	63.0
Total Split (%)	25.8%	25.8%	21.7%	74.2%	52.5%	52.5%
Maximum Green (s)	27.0	27.0	22.0	85.0	59.0	59.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?					Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5		5	5	5
Act Effct Green (s)	23.5	23.5	77.6	77.6	51.1	51.1
Actuated g/C Ratio	0.22	0.22	0.71	0.71	0.47	0.47
v/c Ratio	0.84	0.87	0.99	0.42	0.93	0.20
Control Delay (s/veh)	63.9	28.4	62.5	8.0	46.4	11.5
Queue Delay	0.0	0.0	0.0	0.0	3.8	0.0
Total Delay (s/veh)	63.9	28.4	62.5	8.0	50.2	11.5
LOS	E	C	E	A	D	B
Approach Delay (s/veh)	41.0			41.0	44.0	
Approach LOS	D			D	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 109.3			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 41.9		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road

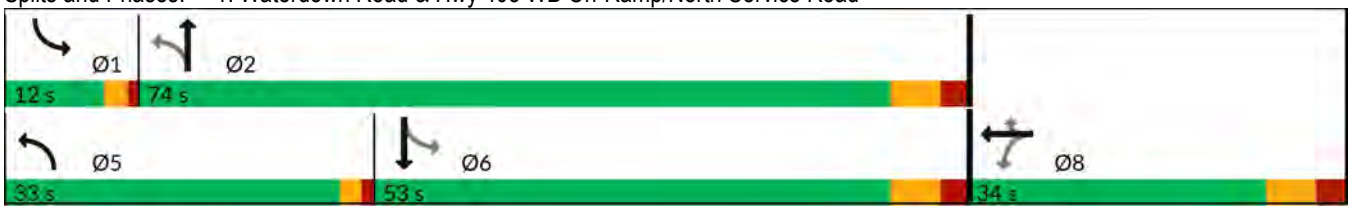


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	139	245	88	346	488	191	148	842	120
Future Volume (vph)	0	0	0	139	245	88	346	488	191	148	842	120
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	190.0		0.0	146.0		134.0	89.0		0.0	71.0		0.0
Storage Lanes	0		0	1		1	2		0	1		0
Taper Length (m)	7.5			62.0			33.0			57.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor						0.99		0.99				
Frt						0.850		0.958			0.981	
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	0	0	1693	1782	1530	3252	3214	0	1710	3318	0
Flt Permitted				0.950			0.155			0.386		
Satd. Flow (perm)	0	0	0	1693	1782	1510	531	3214	0	695	3318	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						90		78			15	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		366.7			720.1			149.0			327.8	
Travel Time (s)		26.4			51.8			10.7			23.6	
Confl. Bikes (#/hr)						1			5			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	2%	0%	1%	2%
Adj. Flow (vph)	0	0	0	142	250	90	353	498	195	151	859	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	142	250	90	353	693	0	151	981	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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2		1	2	
Detector Template		Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					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		pm+pt	NA	
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8	2			6		
Detector Phase				8	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	7.0	10.0		7.0	10.0	
Minimum Split (s)				17.3	17.3	17.3	10.0	16.8		10.0	16.8	
Total Split (s)				34.0	34.0	34.0	33.0	74.0		12.0	53.0	
Total Split (%)				28.3%	28.3%	28.3%	27.5%	61.7%		10.0%	44.2%	
Maximum Green (s)				26.8	26.8	26.8	30.0	67.2		9.0	46.2	
Yellow Time (s)				4.5	4.5	4.5	2.0	4.5		2.0	4.5	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.3		1.0	2.3	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)				7.2	7.2	7.2	3.0	6.8		3.0	6.8	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode				Min	Min	Min	None	Min		None	Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				34.0	34.0	34.0		18.0			18.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				16.9	16.9	16.9	47.4	32.3		40.9	28.5	
Actuated g/C Ratio				0.22	0.22	0.22	0.63	0.43		0.54	0.38	
v/c Ratio				0.37	0.63	0.22	0.46	0.49		0.31	0.78	
Control Delay (s/veh)				30.0	35.7	8.1	8.0	15.0		8.4	25.9	
Queue Delay				0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)				30.0	35.7	8.1	8.0	15.0		8.4	25.9	
LOS				C	D	A	A	B		A	C	
Approach Delay (s/veh)					28.9			12.6			23.5	
Approach LOS					C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 75.5			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C	
Intersection Capacity Utilization 67.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

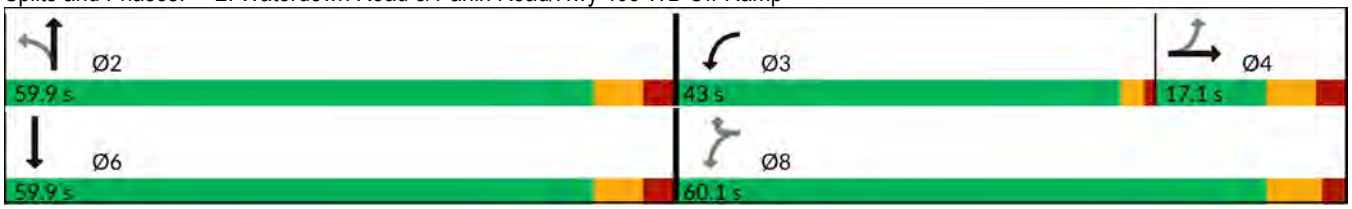


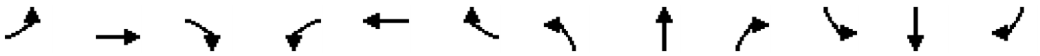
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	1	1119	0	475	1	618	0	0	950	0
Future Volume (vph)	1	0	1	1119	0	475	1	618	0	0	950	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	84.0		91.0	0.0		0.0	0.0		0.0
Storage Lanes	0		0	1		1	0		0	0		0
Taper Length (m)	7.5			100.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Ped Bike Factor								1.00				
Frt		0.932				0.850						
Flt Protected		0.976		0.950								
Satd. Flow (prot)	0	1637	0	3221	0	1530	0	3353	0	0	3353	0
Flt Permitted		0.976		0.976				0.954				
Satd. Flow (perm)	0	1637	0	3309	0	1530	0	3199	0	0	3353	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65				155						
Link Speed (k/h)		50			60			50			50	
Link Distance (m)		61.3			457.3			198.1			149.0	
Travel Time (s)		4.4			27.4			14.3			10.7	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/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 (%)	0%	0%	0%	3%	0%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	1	0	1	1178	0	500	1	651	0	0	1000	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2	0	1178	0	500	0	652	0	0	1000	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1		2			2	
Detector Template		Thru		Left	Thru	Right		Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0		10.0			10.0	
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	
Detector 1 Size(m)		0.6		2.0		2.0		0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0		0.0		0.0			0.0	
Detector 1 Delay (s)		0.0		0.0		0.0		0.0			0.0	
Detector 2 Position(m)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA		pm+pt		Perm	Perm	NA			NA	
Protected Phases		4		3				2			6	
Permitted Phases	4			8		8	2					
Detector Phase	4	4		3		8	2	2			6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0		10.0	10.0	10.0			10.0	
Minimum Split (s)	17.1	17.1		10.0		17.2	17.2	17.2			17.2	
Total Split (s)	17.1	17.1		43.0		60.1	59.9	59.9			59.9	
Total Split (%)	14.3%	14.3%		35.8%		50.1%	49.9%	49.9%			49.9%	
Maximum Green (s)	10.0	10.0		40.0		52.9	52.7	52.7			52.7	
Yellow Time (s)	4.5	4.5		2.0		5.0	4.5	4.5			4.5	
All-Red Time (s)	2.6	2.6		1.0		2.2	2.7	2.7			2.7	
Lost Time Adjust (s)		0.0		0.0		0.0		0.0			0.0	
Total Lost Time (s)		7.1		3.0		7.2		7.2			7.2	
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0	3.0			3.0	
Recall Mode	None	None		Min		Min	Min	Min			Min	
Act Effct Green (s)		11.1		31.6		26.9		29.2			29.2	
Actuated g/C Ratio		0.15		0.44		0.37		0.40			0.40	
v/c Ratio		0.01		0.81		0.75		0.50			0.74	
Control Delay (s/veh)		0.0		23.3		21.3		18.8			23.2	
Queue Delay		0.0		0.0		0.0		0.0			0.0	
Total Delay (s/veh)		0.0		23.3		21.3		18.8			23.2	
LOS		A		C		C		B			C	
Approach Delay (s/veh)					22.7			18.8			23.2	
Approach LOS					C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 72.1			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 22.1		Intersection LOS: C	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp



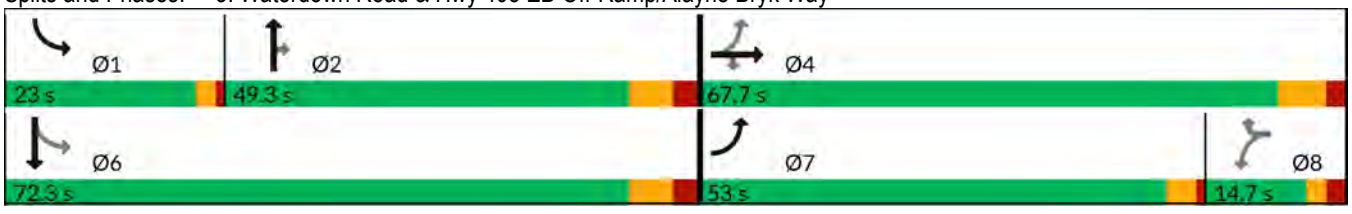


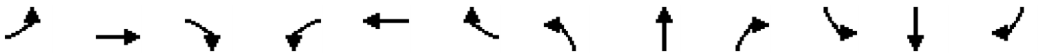
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	854	671	363	58	0	251	0	473	915	829	668	0
Future Volume (vph)	854	671	363	58	0	251	0	473	915	829	668	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	107.0		248.0	58.0		0.0	0.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	0		2	2		0
Taper Length (m)	77.0			100.0			7.5			23.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.88	0.97	0.95	1.00
Ped Bike Factor			0.99	1.00								
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1693	1782	1471	2910	0	1430	0	3386	2640	3252	3353	0
Flt Permitted	0.950			0.404						0.336		
Satd. Flow (perm)	1693	1782	1452	1237	0	1430	0	3386	2640	1150	3353	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)						267			165			
Link Speed (k/h)		60			50			50			50	
Link Distance (m)		466.8			242.6			139.6			198.1	
Travel Time (s)		28.0			17.5			10.1			14.3	
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%	4%	14%	0%	7%	0%	1%	2%	2%	2%	0%
Adj. Flow (vph)	909	714	386	62	0	267	0	503	973	882	711	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	909	714	386	62	0	267	0	503	973	882	711	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)		7.2			7.2			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1		2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right		Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0		10.0	2.0	2.0	10.0	
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)	2.0	0.6	2.0	2.0		2.0		0.6	2.0	2.0	0.6	
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)		9.4						9.4			9.4	
Detector 2 Size(m)		0.6						0.6			0.6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		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	Perm	Perm		Perm		NA	Perm	pm+pt	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases	4		4	8		8			2	6		
Detector Phase	7	4	4	8		8		2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	7.0		7.0		10.0	10.0	7.0	10.0	
Minimum Split (s)	9.0	17.1	17.1	11.1		11.1		17.0	17.0	10.0	17.0	
Total Split (s)	53.0	67.7	67.7	14.7		14.7		49.3	49.3	23.0	72.3	
Total Split (%)	37.9%	48.4%	48.4%	10.5%		10.5%		35.2%	35.2%	16.4%	51.6%	
Maximum Green (s)	49.0	60.6	60.6	10.6		10.6		42.3	42.3	20.0	65.3	
Yellow Time (s)	3.0	5.0	5.0	2.0		2.0		4.5	4.5	2.0	4.5	
All-Red Time (s)	1.0	2.1	2.1	2.1		2.1		2.5	2.5	1.0	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)	4.0	7.1	7.1	4.1		4.1		7.0	7.0	3.0	7.0	
Lead/Lag	Lead			Lag		Lag		Lag	Lag	Lead		
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	
Recall Mode	None	Min	Min	None		None		Min	Min	None	Min	
Walk Time (s)		7.0	7.0								7.0	
Flash Don't Walk (s)		28.0	28.0								21.0	
Pedestrian Calls (#/hr)		5	5								5	
Act Effct Green (s)	63.0	59.9	59.9	9.9		9.9		42.3	42.3	69.3	65.3	
Actuated g/C Ratio	0.45	0.43	0.43	0.07		0.07		0.30	0.30	0.50	0.47	
v/c Ratio	1.19	0.93	0.62	0.70		0.76		0.49	1.06	1.01	0.45	
Control Delay (s/veh)	132.2	57.8	36.1	101.9		21.7		41.8	86.3	60.5	26.2	
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0	
Total Delay (s/veh)	132.2	57.8	36.1	101.9		21.7		41.8	86.3	60.5	26.2	
LOS	F	E	D	F		C		D	F	E	C	
Approach Delay (s/veh)		87.3			36.8			71.1			45.2	
Approach LOS		F			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 139.3			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay (s/veh): 67.4		Intersection LOS: E	
Intersection Capacity Utilization 111.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way



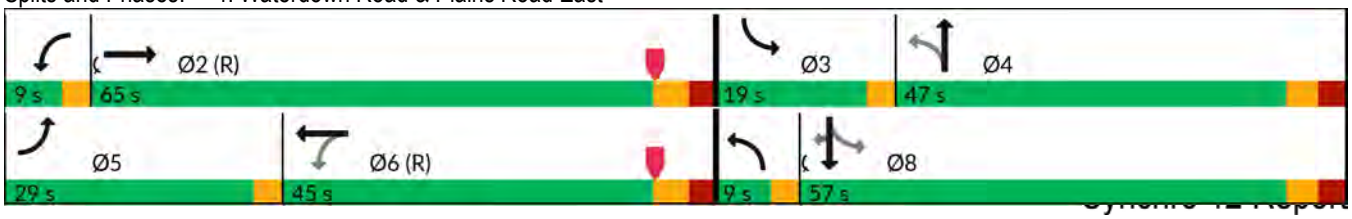


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	633	569	137	79	584	229	144	449	69	251	210	437
Future Volume (vph)	633	569	137	79	584	229	144	449	69	251	210	437
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	45.0		0.0	33.0		0.0	25.0		0.0	0.0		40.0
Storage Lanes	2		0	1		0	1		0	1		1
Taper Length (m)	37.0			27.0			58.0			7.5		
Lane Util. Factor	0.97	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	0.94	0.99		0.98	0.94		0.78	0.99				0.69
Frt		0.971			0.958			0.980				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3285	3251	0	1676	3053	0	1710	1732	0	1676	1765	1500
Flt Permitted	0.950			0.372			0.621			0.092		
Satd. Flow (perm)	3092	3251	0	647	3053	0	869	1732	0	162	1765	1039
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			41			6				418
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		320.4			2333.6			309.7			576.5	
Travel Time (s)		23.1			168.0			22.3			41.5	
Confl. Peds. (#/hr)	113		15	15		113	197		26	26		197
Confl. Bikes (#/hr)			8			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
Heavy Vehicles (%)	1%	1%	0%	2%	1%	2%	0%	1%	2%	2%	2%	2%
Adj. Flow (vph)	659	593	143	82	608	239	150	468	72	261	219	455
Shared Lane Traffic (%)												
Lane Group Flow (vph)	659	736	0	82	847	0	150	540	0	261	219	455
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)		7.2			7.2			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	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)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	2.0
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases				6			4			8		8
Detector Phase	5	2		1	6		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0		6.0	20.0		6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	9.0	27.3		9.0	31.3		9.0	33.3		9.0	33.3	33.3
Total Split (s)	29.0	65.0		9.0	45.0		9.0	47.0		19.0	57.0	57.0
Total Split (%)	20.7%	46.4%		6.4%	32.1%		6.4%	33.6%		13.6%	40.7%	40.7%
Maximum Green (s)	26.0	58.7		6.0	38.7		6.0	40.7		16.0	50.7	50.7
Yellow Time (s)	3.0	3.7		3.0	3.7		3.0	3.3		3.0	3.3	3.3
All-Red Time (s)	0.0	2.6		0.0	2.6		0.0	3.0		0.0	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
Total Lost Time (s)	3.0	6.3		3.0	6.3		3.0	6.3		3.0	6.3	6.3
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min		None	C-Min		None	Min		None	Min	Min
Walk Time (s)		8.0			8.0			10.0			10.0	10.0
Flash Don't Walk (s)		17.0			17.0			17.0			17.0	17.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	26.0	58.5		47.8	38.5		50.2	40.7		63.2	50.7	50.7
Actuated g/C Ratio	0.19	0.42		0.34	0.28		0.36	0.29		0.45	0.36	0.36
v/c Ratio	1.08	0.54		0.31	0.97		0.43	1.07		1.06	0.34	0.71
Control Delay (s/veh)	112.7	31.1		24.2	68.6		31.1	104.8		109.7	34.4	11.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	112.7	31.1		24.2	68.6		31.1	104.8		109.7	34.4	11.5
LOS	F	C		C	E		C	F		F	C	B
Approach Delay (s/veh)		69.6			64.7			88.8			44.3	
Approach LOS		E			E			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Yellow			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 65.8		Intersection LOS: E	
Intersection Capacity Utilization 107.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Waterdown Road & Plains Road East



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1957	53	0	301	17	39
Future Volume (vph)	1957	53	0	301	17	39
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor	1.00					
Frt	0.996				0.905	
Flt Protected					0.985	
Satd. Flow (prot)	3355	0	0	3420	1305	0
Flt Permitted					0.985	
Satd. Flow (perm)	3355	0	0	3420	1305	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	10				9	
Link Speed (k/h)	50			50	50	
Link Distance (m)	242.6			106.6	68.3	
Travel Time (s)	17.5			7.7	4.9	
Confl. Peds. (#/hr)		1	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	19%	0%	0%	77%	0%
Adj. Flow (vph)	1997	54	0	307	17	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2051	0	0	307	57	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)		15	25		25	15
Number of Detectors	2			2	1	
Detector Template	Thru			Thru	Left	
Leading Detector (m)	10.0			10.0	2.0	
Trailing Detector (m)	0.0			0.0	0.0	
Detector 1 Position(m)	0.0			0.0	0.0	
Detector 1 Size(m)	0.6			0.6	2.0	
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	
Detector 1 Queue (s)	0.0			0.0	0.0	
Detector 1 Delay (s)	0.0			0.0	0.0	
Detector 2 Position(m)	9.4			9.4		
Detector 2 Size(m)	0.6			0.6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	
Protected Phases	2			6	4	
Permitted Phases						

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2			6	4	
Switch Phase						
Minimum Initial (s)	8.0			8.0	8.0	
Minimum Split (s)	31.0			31.0	24.0	
Total Split (s)	30.0			30.0	15.0	
Total Split (%)	66.7%			66.7%	33.3%	
Maximum Green (s)	23.0			23.0	8.0	
Yellow Time (s)	4.0			4.0	4.0	
All-Red Time (s)	3.0			3.0	3.0	
Lost Time Adjust (s)	-3.0			-3.0	-3.0	
Total Lost Time (s)	4.0			4.0	4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	
Recall Mode	Ped			Ped	None	
Walk Time (s)	15.0			15.0	7.0	
Flash Don't Walk (s)	9.0			9.0	10.0	
Pedestrian Calls (#/hr)	0			0	0	
Act Effct Green (s)	39.6			39.6	11.0	
Actuated g/C Ratio	0.84			0.84	0.23	
v/c Ratio	0.72			0.11	0.18	
Control Delay (s/veh)	9.7			2.6	14.7	
Queue Delay	0.0			0.0	0.0	
Total Delay (s/veh)	9.7			2.6	14.7	
LOS	A			A	B	
Approach Delay (s/veh)	9.7			2.6	14.7	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 45			
Actuated Cycle Length: 47			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Aldershot GO West Access & Alayne Bryk Way

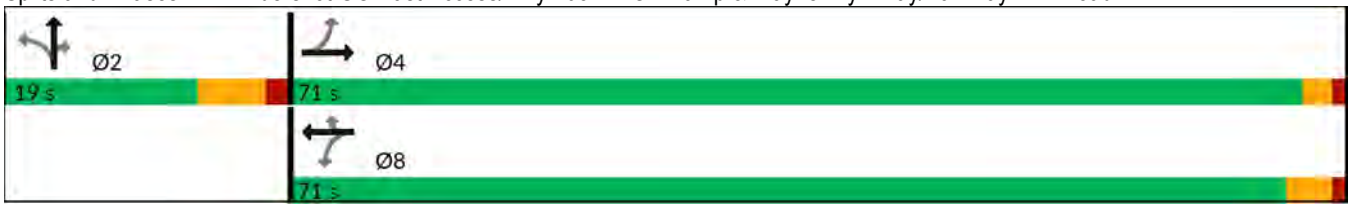


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	586	1046	57	0	144	0	72	31	0	0	0	0
Future Volume (vph)	586	1046	57	0	144	0	72	31	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992										
Flt Protected	0.950							0.966				
Satd. Flow (prot)	1693	3393	0	0	3420	1800	0	1739	1800	0	0	0
Flt Permitted	0.654							0.966				
Satd. Flow (perm)	1166	3393	0	0	3420	1800	0	1739	1800	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18										
Link Speed (k/h)		50			50			50			100	
Link Distance (m)		105.8			349.3			76.9			59.1	
Travel Time (s)		7.6			25.1			5.5			2.1	
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 (%)	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	630	1125	61	0	155	0	77	33	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	630	1186	0	0	155	0	0	110	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2			2	1		2	1		2	
Detector Template	Left	Thru			Thru	Right		Thru	Right		Thru	
Leading Detector (m)	2.0	10.0			10.0	2.0		10.0	2.0		10.0	
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)	2.0	0.6			0.6	2.0		0.6	2.0			
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	Perm	NA			NA	Perm	Perm	NA	Perm			
Protected Phases		4			8			2				
Permitted Phases	4			8		8	2		2			
Detector Phase	4	4		8	8	8	2	2	2			
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	7.0	7.0		5.0	5.0	5.0	10.0	10.0	10.0			
Minimum Split (s)	10.0	10.0		22.0	22.0	22.0	16.0	16.0	16.0			
Total Split (s)	71.0	71.0		71.0	71.0	71.0	19.0	19.0	19.0			
Total Split (%)	78.9%	78.9%		78.9%	78.9%	78.9%	21.1%	21.1%	21.1%			
Maximum Green (s)	68.0	68.0		67.0	67.0	67.0	13.0	13.0	13.0			
Yellow Time (s)	2.0	2.0		3.0	3.0	3.0	4.5	4.5	4.5			
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.5	1.5	1.5			
Lost Time Adjust (s)	0.0	0.0			0.0	0.0		0.0	0.0			
Total Lost Time (s)	3.0	3.0			4.0	4.0		6.0	6.0			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0			
Recall Mode	Min	Min		None	None	None	None	None	None			
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0			
Flash Don't Walk (s)	16.0	16.0		11.0	11.0	11.0	16.0	16.0	16.0			
Pedestrian Calls (#/hr)	0	0		5	5	5	0	0	0			
Act Effct Green (s)	51.3	51.3			50.6			12.1				
Actuated g/C Ratio	0.78	0.78			0.77			0.18				
v/c Ratio	0.69	0.45			0.06			0.34				
Control Delay (s/veh)	10.7	4.3			3.2			33.8				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay (s/veh)	10.7	4.3			3.2			33.8				
LOS	B	A			A			C				
Approach Delay (s/veh)		6.5			3.2			33.8				
Approach LOS		A			A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 7.7		Intersection LOS: A	
Intersection Capacity Utilization 58.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

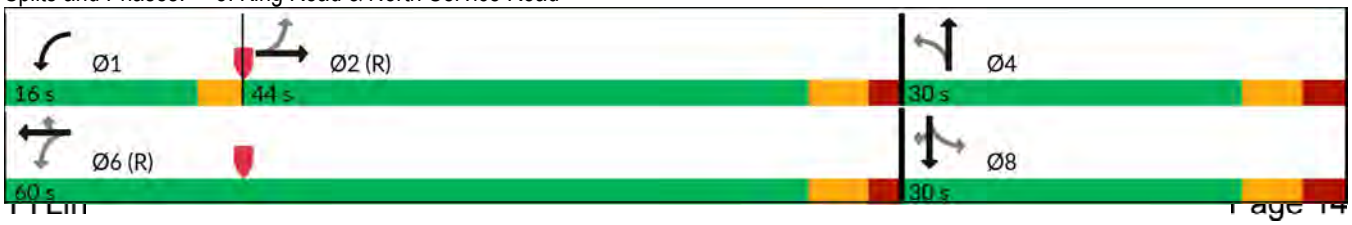


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	223	91	389	294	74	125	115	257	76	376	22
Future Volume (vph)	14	223	91	389	294	74	125	115	257	76	376	22
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	25.0		0.0	78.0		18.0	0.0		0.0	0.0		30.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	85.0			15.0			7.5			7.5		
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						0.98		0.99				0.97
Frt		0.956				0.850		0.930				0.850
Flt Protected	0.950										0.992	
Satd. Flow (prot)	1710	1711	0	1765	1800	1530	0	*3050	*3050	0	1786	1530
Flt Permitted	0.572			*0.470							0.837	
Satd. Flow (perm)	1030	1711	0	829	1800	1498	0	*3050	*3050	0	1507	1487
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28				78		60				73
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		373.1			850.2			285.2			267.0	
Travel Time (s)		22.4			51.0			20.5			19.2	
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)						1			4			3
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 (%)	0%	0%	2%	2%	0%	0%	1%	2%	2%	0%	0%	0%
Adj. Flow (vph)	15	235	96	409	309	78	132	121	271	80	396	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	331	0	409	309	78	0	524	0	0	476	23
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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2		1	2	1		2			2	1
Detector Template	Left	Thru		Left	Thru	Right		Thru			Thru	Right
Leading Detector (m)	2.0	10.0		2.0	10.0	2.0		10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0	0.6		2.0	0.6	2.0		0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2		1	6			4			8	
Permitted Phases	2			6		6	4			8		8
Detector Phase	2	2		1	6	6	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	8.0	8.0		5.0	8.0	8.0	8.0	8.0		8.0	8.0	8.0
Minimum Split (s)	24.0	24.0		8.0	24.0	24.0	15.0	15.0		15.0	15.0	15.0
Total Split (s)	44.0	44.0		16.0	60.0	60.0	30.0	30.0		30.0	30.0	30.0
Total Split (%)	48.9%	48.9%		17.8%	66.7%	66.7%	33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	38.0	38.0		13.0	54.0	54.0	23.0	23.0		23.0	23.0	23.0
Yellow Time (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		0.0	2.0	2.0	3.0	3.0		3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	-2.0		-3.0			-3.0	0.0
Total Lost Time (s)	6.0	6.0		3.0	6.0	4.0		4.0			4.0	7.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	5.0	5.0		3.0	3.0	3.0
Recall Mode	C-Min	C-Min		None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)	8.0	8.0			8.0	8.0						
Flash Don't Walk (s)	10.0	10.0			10.0	10.0						
Pedestrian Calls (#/hr)	0	0			0	0						
Act Effct Green (s)	21.9	21.9		40.9	37.9	39.9		42.1			42.1	39.1
Actuated g/C Ratio	0.24	0.24		0.45	0.42	0.44		0.47			0.47	0.43
v/c Ratio	0.06	0.76		0.80	0.41	0.11		0.36			0.68	0.03
Control Delay (s/veh)	23.4	39.6		29.9	19.0	3.1		15.4			26.9	0.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay (s/veh)	23.4	39.6		29.9	19.0	3.1		15.4			26.9	0.1
LOS	C	D		C	B	A		B			C	A
Approach Delay (s/veh)		38.9			23.0			15.4			25.6	
Approach LOS		D			C			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 56 (62%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 24.3		Intersection LOS: C	
Intersection Capacity Utilization 111.6%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: King Road & North Service Road

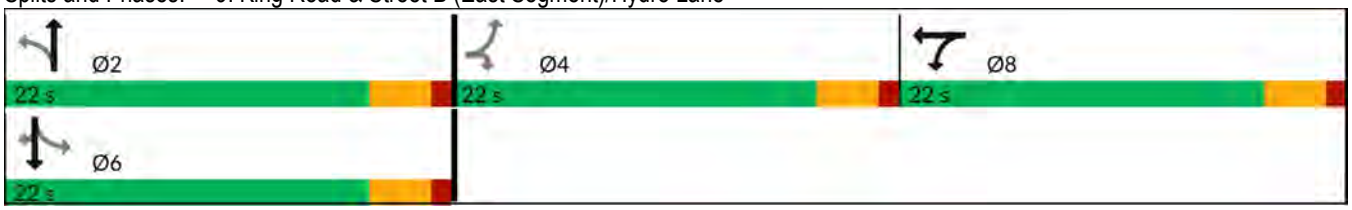


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	4	0	0	224	418	4	4	693	198
Future Volume (vph)	0	0	0	4	0	0	224	418	4	4	693	198
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	30.0		30.0
Storage Lanes	1		1	1		0	1		0	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
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			1.00	0.98
Frt								0.999				0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1800	0	1800	1710	1800	0	1710	1780	0	0	1782	1530
Flt Permitted				0.950			0.321				0.998	
Satd. Flow (perm)	1800	0	1800	1710	1800	0	578	1780	0	0	1779	1495
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)								1				101
Link Speed (k/h)		50			40			50			50	
Link Distance (m)		62.8			511.9			190.0			285.2	
Travel Time (s)		4.5			46.1			13.7			20.5	
Confl. Peds. (#/hr)									1	1		
Confl. Bikes (#/hr)						1			4			2
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 (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	4	0	0	231	431	4	4	714	204
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	4	0	0	231	435	0	0	718	204
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)		3.6			3.6			3.6			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane								Yes				
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2		1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0			10.0	2.0
Trailing Detector (m)	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
Detector 1 Size(m)	2.0		2.0	2.0	0.6		2.0	0.6			0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	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
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split			Perm	NA		Perm	NA	Perm
Protected Phases				8	8			2			6	
Permitted Phases	4		4				2			6		6
Detector Phase	4		4	8	8		2	2		6	6	6
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	22.0
Total Split (s)	22.0		22.0	22.0	22.0		22.0	22.0		22.0	22.0	22.0
Total Split (%)	33.3%		33.3%	33.3%	33.3%		33.3%	33.3%		33.3%	33.3%	33.3%
Maximum Green (s)	18.0		18.0	18.0	18.0		18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	3.0		3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0		1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0		0.0	0.0			0.0	0.0
Total Lost Time (s)	4.0		4.0	4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
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		Min	Min		Min	Min	Min
Walk Time (s)	7.0		7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)	11.0		11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	5		5	5	5		5	5		5	5	5
Act Effct Green (s)				7.5			40.4	40.4			40.4	40.4
Actuated g/C Ratio				0.16			0.88	0.88			0.88	0.88
v/c Ratio				0.01			0.45	0.28			0.46	0.15
Control Delay (s/veh)				19.5			14.9	6.8			9.8	4.2
Queue Delay				0.0			0.0	0.0			0.0	0.0
Total Delay (s/veh)				19.5			14.9	6.8			9.8	4.2
LOS				B			B	A			A	A
Approach Delay (s/veh)					19.5			9.6			8.5	
Approach LOS					B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 66			
Actuated Cycle Length: 45.8			
Natural Cycle: 110			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay (s/veh): 9.0		Intersection LOS: A	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 9: King Road & Street B (East Segment)/Hydro Lane

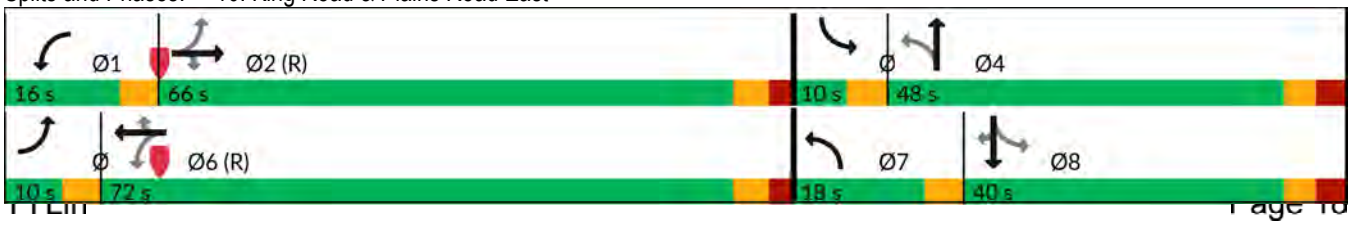


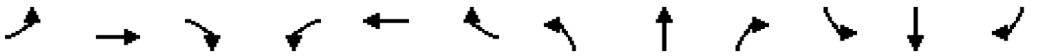
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	887	143	134	924	1413	162	421	105	211	274	126
Future Volume (vph)	44	887	143	134	924	1413	162	421	105	211	274	126
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		33.0	53.0		0.0	40.0		0.0	30.0		26.0
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (m)	34.0			16.0			66.0			21.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	0.91	1.00	1.00	1.00	0.97	1.00	1.00
Ped Bike Factor			0.95	0.99	0.98	0.95	0.99	0.99		0.98		0.97
Frt			0.850		0.937	0.850		0.970				0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1660	3353	1515	1693	2987	1392	1676	1719	0	3457	1782	1515
Flt Permitted	0.065			0.183			0.300			*0.420		
Satd. Flow (perm)	114	3353	1433	324	2987	1322	525	1719	0	1422	1782	1466
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151		168	308		9				148
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		2333.6			570.7			303.9			700.3	
Travel Time (s)		140.0			34.2			21.9			50.4	
Confl. Peds. (#/hr)	13		15	15		13	13		18	18		13
Confl. Bikes (#/hr)			1			2			1			2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	1%	1%	1%	0%	2%	1%	0%	1%	1%	1%
Adj. Flow (vph)	45	905	146	137	943	1442	165	430	107	215	280	129
Shared Lane Traffic (%)						48%						
Lane Group Flow (vph)	45	905	146	137	1635	750	165	537	0	215	280	129
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)		3.6			3.6			7.2			7.2	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane											Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
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
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
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
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
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
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
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
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2		2	6		6	4			8		8
Detector Phase	5	2	2	1	6	6	7	4		3	8	8
Switch Phase												
Minimum Initial (s)	6.0	20.0	20.0	6.0	20.0	20.0	6.0	8.0		6.0	8.0	8.0
Minimum Split (s)	10.0	37.0	37.0	10.0	37.0	37.0	10.0	35.4		10.0	35.4	35.4
Total Split (s)	10.0	66.0	66.0	16.0	72.0	72.0	18.0	48.0		10.0	40.0	40.0
Total Split (%)	7.1%	47.1%	47.1%	11.4%	51.4%	51.4%	12.9%	34.3%		7.1%	28.6%	28.6%
Maximum Green (s)	6.0	60.0	60.0	12.0	66.0	66.0	14.0	41.6		6.0	33.6	33.6
Yellow Time (s)	4.0	3.7	3.7	4.0	3.7	3.7	4.0	3.3		4.0	3.3	3.3
All-Red Time (s)	0.0	2.3	2.3	0.0	2.3	2.3	0.0	3.1		0.0	3.1	3.1
Lost Time Adjust (s)	0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.4		0.0	-2.4	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0		4.0	4.0	6.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	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
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		16.0	16.0		16.0	16.0		8.0			8.0	8.0
Flash Don't Walk (s)		15.0	15.0		15.0	15.0		21.0			21.0	21.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	69.5	63.5	63.5	77.9	70.0	68.0	54.0	44.0		43.1	37.1	34.7
Actuated g/C Ratio	0.50	0.45	0.45	0.56	0.50	0.49	0.39	0.31		0.31	0.27	0.25
v/c Ratio	0.37	0.60	0.20	0.49	1.04	0.94	0.54	0.98		0.41	0.59	0.27
Control Delay (s/veh)	24.0	36.9	11.4	21.0	64.0	40.5	36.3	81.3		32.4	51.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	24.0	36.9	11.4	21.0	64.0	40.5	36.3	81.3		32.4	51.3	5.7
LOS	C	D	B	C	E	D	D	F		C	D	A
Approach Delay (s/veh)		33.0			54.7			70.8			35.4	
Approach LOS		C			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 49.7		Intersection LOS: D	
Intersection Capacity Utilization 110.0%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 10: King Road & Plains Road East





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1588	191	0	2450	441	0	0	0	746	3	759
Future Volume (vph)	0	1588	191	0	2450	441	0	0	0	746	3	759
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		67.0	0.0		85.0	0.0		0.0	56.0		0.0
Storage Lanes	0		1	0		1	0		0	1		1
Taper Length (m)	7.5			7.5			7.5			67.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.91	0.95
Ped Bike Factor			0.94			0.98					0.99	0.98
Frt			0.850			0.850					0.917	0.850
Flt Protected										0.950	0.978	
Satd. Flow (prot)	0	4818	1530	0	4865	1485	0	0	0	1608	1433	1425
Flt Permitted										0.950	0.978	
Satd. Flow (perm)	0	4818	1438	0	4865	1451	0	0	0	1608	1433	1402
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			168			147					1	31
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		143.3			313.6			290.1			811.3	
Travel Time (s)		10.3			22.6			20.9			58.4	
Confl. Peds. (#/hr)	6		13	13		6	5					5
Confl. Bikes (#/hr)			2			1						
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 (%)	0%	2%	0%	0%	1%	3%	0%	0%	0%	1%	0%	2%
Adj. Flow (vph)	0	1637	197	0	2526	455	0	0	0	769	3	782
Shared Lane Traffic (%)										30%		37%
Lane Group Flow (vph)	0	1637	197	0	2526	455	0	0	0	538	523	493
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2	1		2	1		2		1	2	1
Detector Template		Thru	Right		Thru	Right		Thru		Left	Thru	Right
Leading Detector (m)		10.0	2.0		10.0	2.0		10.0		2.0	10.0	2.0
Trailing Detector (m)		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
Detector 1 Size(m)		0.6	2.0		0.6	2.0				2.0	0.6	2.0
Detector 1 Type		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
Detector 1 Queue (s)		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
Detector 2 Position(m)		9.4			9.4						9.4	
Detector 2 Size(m)		0.6			0.6						0.6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type		NA	Perm		NA	Free				Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases			2			Free				4		4
Detector Phase		2	2		6					4	4	4
Switch Phase												
Minimum Initial (s)		10.0	10.0		10.0					10.0	10.0	10.0
Minimum Split (s)		17.0	17.0		17.0					17.2	17.2	17.2
Total Split (s)		81.0	81.0		81.0					59.0	59.0	59.0
Total Split (%)		57.9%	57.9%		57.9%					42.1%	42.1%	42.1%
Maximum Green (s)		74.0	74.0		74.0					51.8	51.8	51.8
Yellow Time (s)		4.5	4.5		4.5					4.5	4.5	4.5
All-Red Time (s)		2.5	2.5		2.5					2.7	2.7	2.7
Lost Time Adjust (s)		0.0	0.0		0.0					0.0	0.0	0.0
Total Lost Time (s)		7.0	7.0		7.0					7.2	7.2	7.2
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		3.0	3.0		3.0					3.0	3.0	3.0
Recall Mode		Min	Min		Min					Min	Min	Min
Walk Time (s)		7.0	7.0		7.0					7.0	7.0	7.0
Flash Don't Walk (s)		16.0	16.0		16.0					39.0	39.0	39.0
Pedestrian Calls (#/hr)		0	0		0					0	0	0
Act Effct Green (s)		74.0	74.0		74.0	140.0				51.8	51.8	51.8
Actuated g/C Ratio		0.53	0.53		0.53	1.00				0.37	0.37	0.37
v/c Ratio		0.64	0.23		0.98	0.31				0.91	0.99	0.92
Control Delay (s/veh)		25.0	4.3		46.5	0.6				62.1	79.6	62.6
Queue Delay		0.0	0.0		0.0	0.0				0.0	0.0	0.0
Total Delay (s/veh)		25.0	4.3		46.5	0.6				62.1	79.6	62.6
LOS		C	A		D	A				E	E	E
Approach Delay (s/veh)		22.8			39.5						68.2	
Approach LOS		C			D						E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 120			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 41.7		Intersection LOS: D	
Intersection Capacity Utilization 96.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street



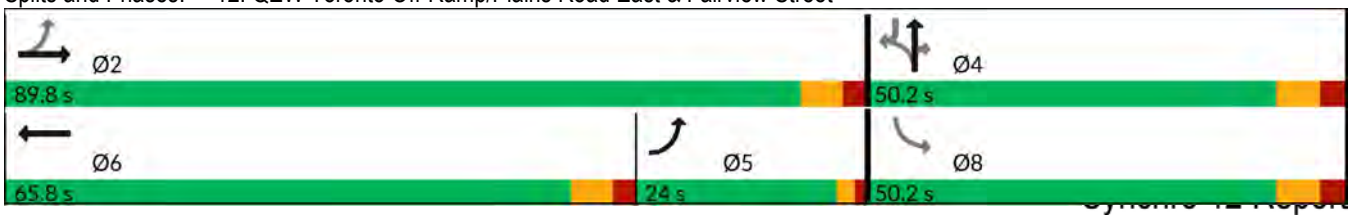
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	1555	201	0	2532	57	395	245	637	47	0	509
Future Volume (vph)	218	1555	201	0	2532	57	395	245	637	47	0	509
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	31.0		85.0	0.0		0.0	0.0		44.0	48.0		0.0
Storage Lanes	1		1	0		0	1		1	1		2
Taper Length (m)	25.0			7.5			7.5			63.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	0.88
Ped Bike Factor			0.97		1.00							
Frt			0.850		0.997			0.938	0.850			*0.900
Flt Protected	0.950						0.950	0.996		0.950		
Satd. Flow (prot)	1676	4865	1500	0	4797	0	1593	1500	1425	1710	0	2823
Flt Permitted	0.061						0.950	0.996		0.102		
Satd. Flow (perm)	108	4865	1452	0	4797	0	1593	1500	1425	184	0	2823
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137		3			26	81			435
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		313.6			942.2			471.5			555.2	
Travel Time (s)		22.6			67.8			33.9			40.0	
Confl. Peds. (#/hr)	4		22	22		4						
Confl. Bikes (#/hr)			4			1						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	1%	2%	0%	2%	5%	2%	2%	2%	0%	0%	1%
Adj. Flow (vph)	222	1587	205	0	2584	58	403	250	650	48	0	519
Shared Lane Traffic (%)							10%		31%			
Lane Group Flow (vph)	222	1587	205	0	2642	0	363	492	448	48	0	519
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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors	1	2	1		2		1	2	1	1	2	1
Detector Template	Left	Thru	Right		Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0		10.0		2.0	10.0	2.0	2.0	10.0	2.0
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)	2.0	0.6	2.0		0.6		2.0	0.6	2.0	2.0		2.0
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)		9.4			9.4			9.4				
Detector 2 Size(m)		0.6			0.6			0.6				
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0				
Turn Type	pm+pt	NA	Free		NA		Perm	NA	Perm	Perm		Perm
Protected Phases	5	2			6			4				
Permitted Phases	2		Free				4		4	8		4
Detector Phase	5	2			6		4	4	4	8		4
Switch Phase												
Minimum Initial (s)	7.0	10.0			10.0		10.0	10.0	10.0	7.0		10.0
Minimum Split (s)	10.0	16.7			16.7		17.2	17.2	17.2	17.2		17.2
Total Split (s)	24.0	89.8			65.8		50.2	50.2	50.2	50.2		50.2
Total Split (%)	17.1%	64.1%			47.0%		35.9%	35.9%	35.9%	35.9%		35.9%
Maximum Green (s)	21.0	83.1			59.1		43.0	43.0	43.0	43.0		43.0
Yellow Time (s)	2.0	4.5			4.5		4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.0	2.2			2.2		2.7	2.7	2.7	2.7		2.7
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	3.0	6.7			6.7		7.2	7.2	7.2	7.2		7.2
Lead/Lag	Lag				Lead							
Lead-Lag Optimize?	Yes				Yes							
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0		3.0
Recall Mode	None	Min			Min		None	None	None	None		None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0		7.0
Flash Don't Walk (s)		25.0			25.0		31.0	31.0	31.0	31.0		31.0
Pedestrian Calls (#/hr)		0			0		0	0	0	0		0
Act Effct Green (s)	84.6	80.9	137.8		59.1		43.0	43.0	43.0	43.0		43.0
Actuated g/C Ratio	0.61	0.59	1.00		0.43		0.31	0.31	0.31	0.31		0.31
v/c Ratio	0.80	0.56	0.14		1.28		0.73	1.01	0.90	0.84		0.44
Control Delay (s/veh)	68.7	18.3	0.2		165.2		52.7	88.7	59.0	129.0		7.9
Queue Delay	0.0	0.0	0.0		0.0		0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	68.7	18.3	0.2		165.2		52.7	88.7	59.0	129.0		7.9
LOS	E	B	A		F		D	F	E	F		A
Approach Delay (s/veh)		22.0			165.2			68.4			18.2	
Approach LOS		C			F			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 137.8			
Natural Cycle: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.28			
Intersection Signal Delay (s/veh): 88.9		Intersection LOS: F	
Intersection Capacity Utilization 114.5%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

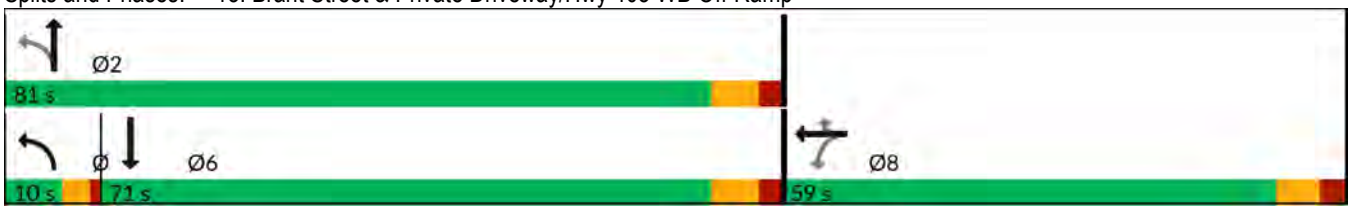


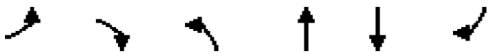
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	734	61	591	114	1463	359	0	2181	46
Future Volume (vph)	0	0	0	734	61	591	114	1463	359	0	2181	46
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0		0.0	0.0		65.0	59.0		80.0	0.0		0.0
Storage Lanes	0		0	1		1	1		1	0		0
Taper Length (m)	7.5			73.0			47.0			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	0.91
Ped Bike Factor						0.98			0.98		1.00	
Frt						0.850			0.850		0.997	
Flt Protected				0.950	0.959		0.950					
Satd. Flow (prot)	0	0	0	1593	1605	1500	1710	4865	1530	0	4850	0
Flt Permitted				0.950	0.959		0.059					
Satd. Flow (perm)	0	0	0	1593	1605	1471	106	4865	1494	0	4850	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						64			190		3	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		164.0			601.3			289.6			515.8	
Travel Time (s)		11.8			43.3			17.4			30.9	
Confl. Peds. (#/hr)	6					6			7	7		
Confl. Bikes (#/hr)									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
Heavy Vehicles (%)	0%	0%	0%	2%	3%	2%	0%	1%	0%	0%	1%	0%
Adj. Flow (vph)	0	0	0	765	64	616	119	1524	374	0	2272	48
Shared Lane Traffic (%)				46%								
Lane Group Flow (vph)	0	0	0	413	416	616	119	1524	374	0	2320	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)		3.6			3.6			3.6			3.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2	1	1	2	1		2	
Detector Template		Thru		Left	Thru	Right	Left	Thru	Right		Thru	
Leading Detector (m)		10.0		2.0	10.0	2.0	2.0	10.0	2.0		10.0	
Trailing Detector (m)		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	
Detector 1 Size(m)				2.0	0.6	2.0	2.0	0.6	2.0		0.6	
Detector 1 Type				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	
Detector 1 Queue (s)				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	
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA	Free		NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8	2		Free			
Detector Phase				8	8	8	5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	6.0	10.0			10.0	
Minimum Split (s)				42.2	42.2	42.2	10.0	17.2			17.2	
Total Split (s)				59.0	59.0	59.0	10.0	81.0			71.0	
Total Split (%)				42.1%	42.1%	42.1%	7.1%	57.9%			50.7%	
Maximum Green (s)				51.8	51.8	51.8	6.0	73.8			63.8	
Yellow Time (s)				4.5	4.5	4.5	3.0	5.0			5.0	
All-Red Time (s)				2.7	2.7	2.7	1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)				7.2	7.2	7.2	4.0	7.2			7.2	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Recall Mode				None	None	None	None	Min			Min	
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	
Flash Don't Walk (s)				28.0	28.0	28.0		11.0			11.0	
Pedestrian Calls (#/hr)				0	0	0		0			0	
Act Effct Green (s)				51.8	51.8	51.8	77.0	73.8	140.0		63.8	
Actuated g/C Ratio				0.37	0.37	0.37	0.55	0.53	1.00		0.46	
v/c Ratio				0.70	0.70	1.05	0.94	0.59	0.25		1.05	
Control Delay (s/veh)				45.2	45.1	90.6	90.8	24.0	0.4		70.7	
Queue Delay				0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay (s/veh)				45.2	45.1	90.6	90.8	24.0	0.4		70.7	
LOS				D	D	F	F	C	A		E	
Approach Delay (s/veh)					64.5			23.6			70.7	
Approach LOS					E			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Natural Cycle: 140			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 52.7		Intersection LOS: D	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp



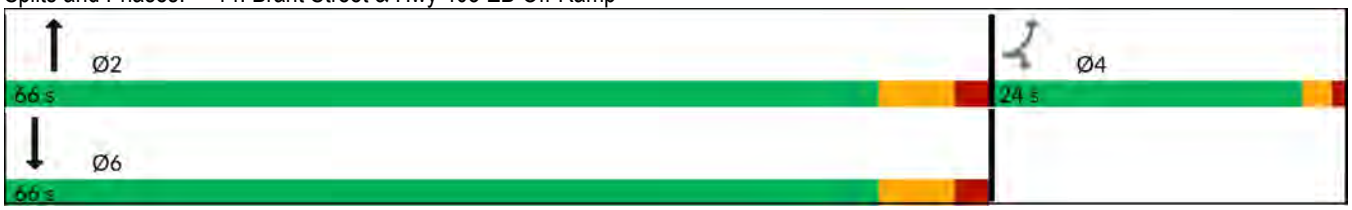


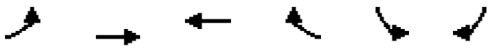
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	340	0	1647	1989	609
Future Volume (vph)	325	340	0	1647	1989	609
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	93.0	0.0			80.0
Storage Lanes	2	1	0			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	0.97	0.91	1.00	0.91	0.91	1.00
Ped Bike Factor	1.00	0.99				0.98
Frt	0.957	0.850				0.850
Flt Protected	0.965					
Satd. Flow (prot)	3194	1365	0	4865	4818	1515
Flt Permitted	0.965					
Satd. Flow (perm)	3194	1347	0	4865	4818	1480
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14	14				368
Link Speed (k/h)	60			60	60	
Link Distance (m)	566.3			399.4	289.6	
Travel Time (s)	34.0			24.0	17.4	
Confl. Peds. (#/hr)		2	5			5
Confl. Bikes (#/hr)						1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	2%	0%	1%	2%	1%
Adj. Flow (vph)	339	354	0	1716	2072	634
Shared Lane Traffic (%)		38%				
Lane Group Flow (vph)	474	219	0	1716	2072	634
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.2			3.6	3.6	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1		2	2	1
Detector Template	Left	Right		Thru	Thru	Right
Leading Detector (m)	2.0	2.0		10.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	2.0		0.6	0.6	2.0
Detector 1 Type	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
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm		NA	NA	Free
Protected Phases				2	6	
Permitted Phases	4	4				Free
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	7.0	7.0		10.0	10.0	
Minimum Split (s)	10.0	10.0		17.3	17.3	
Total Split (s)	24.0	24.0		66.0	66.0	
Total Split (%)	26.7%	26.7%		73.3%	73.3%	
Maximum Green (s)	21.0	21.0		58.7	58.7	
Yellow Time (s)	2.0	2.0		5.0	5.0	
All-Red Time (s)	1.0	1.0		2.3	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	3.0	3.0		7.3	7.3	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	30.0	30.0		20.0	20.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	15.5	15.5		38.7	38.7	65.0
Actuated g/C Ratio	0.24	0.24		0.60	0.60	1.00
v/c Ratio	0.62	0.66		0.59	0.72	0.43
Control Delay (s/veh)	26.7	33.8		9.3	11.2	0.9
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	26.7	33.8		9.3	11.2	0.9
LOS	C	C		A	B	A
Approach Delay (s/veh)	28.9			9.3	8.8	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 11.7		Intersection LOS: B	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 14: Brant Street & Hwy 403 EB Off-Ramp



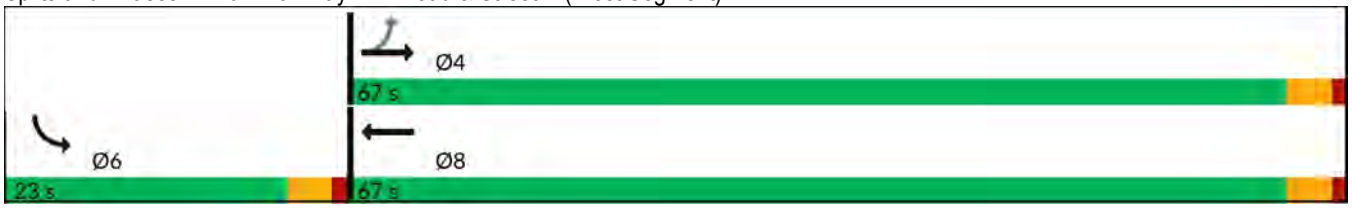


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	391	555	316	0	0	5
Future Volume (vph)	391	555	316	0	0	5
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.980				
Satd. Flow (prot)	0	3286	3353	0	1526	0
Flt Permitted		0.695				
Satd. Flow (perm)	0	2330	3353	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)					582	
Link Speed (k/h)		50	50		40	
Link Distance (m)		309.9	209.9		73.1	
Travel Time (s)		22.3	15.1		6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	425	603	343	0	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1028	343	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	67.0	67.0	67.0		23.0	
Total Split (%)	74.4%	74.4%	74.4%		25.6%	
Maximum Green (s)	63.0	63.0	63.0		19.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		39.7	39.7		7.7	
Actuated g/C Ratio		0.94	0.94		0.18	
v/c Ratio		0.47	0.11		0.01	
Control Delay (s/veh)		3.0	1.5		0.0	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		3.0	1.5		0.0	
LOS		A	A		A	
Approach Delay (s/veh)		3.0	1.5			
Approach LOS		A	A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 42.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 2.6		Intersection LOS: A	
Intersection Capacity Utilization 51.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Parkway Link Road & Street B (West Segment)

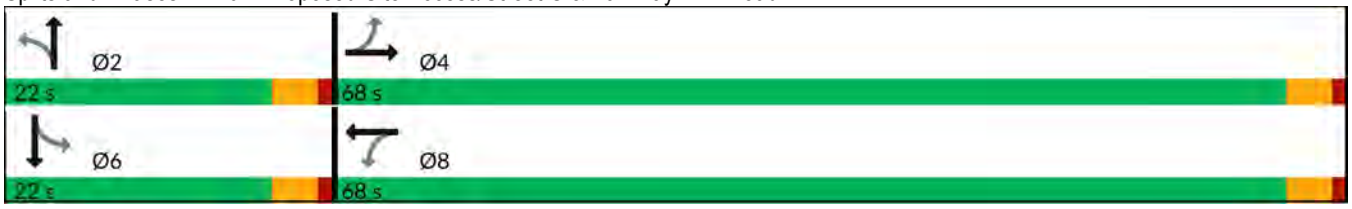


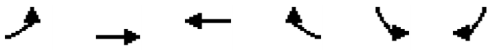
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	421	34	59	316	41	0	0	0	0	0	0
Future Volume (vph)	101	421	34	59	316	41	0	0	0	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.983							
Flt Protected		0.991		0.950								
Satd. Flow (prot)	0	3293	0	1676	1735	0	0	1765	0	0	1765	0
Flt Permitted		0.838		0.423								
Satd. Flow (perm)	0	2784	0	746	1735	0	0	1765	0	0	1765	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		18			18							
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		209.9			194.7			48.9			61.2	
Travel Time (s)		15.1			14.0			3.5			4.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	458	37	64	343	45	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	605	0	64	388	0	0	0	0	0	0	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)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2		1	2			2			2	
Detector Template		Thru		Left	Thru			Thru			Thru	
Leading Detector (m)		10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)		0.6		2.0	0.6			0.6			0.6	
Detector 1 Type		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	
Detector 1 Queue (s)		0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)		0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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	Perm	NA		Perm	NA							
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	68.0	68.0		68.0	68.0		22.0	22.0		22.0	22.0	
Total Split (%)	75.6%	75.6%		75.6%	75.6%		24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	64.0	64.0		64.0	64.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)		4.0		4.0	4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		30.4		30.4	30.4							
Actuated g/C Ratio		0.91		0.91	0.91							
v/c Ratio		0.24		0.09	0.24							
Control Delay (s/veh)		2.5		3.2	2.9							
Queue Delay		0.0		0.0	0.0							
Total Delay (s/veh)		2.5		3.2	2.9							
LOS		A		A	A							
Approach Delay (s/veh)		2.5			2.9							
Approach LOS		A			A							

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 33.3			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 102: Proposed Site Access/Street C & Parkway Link Road



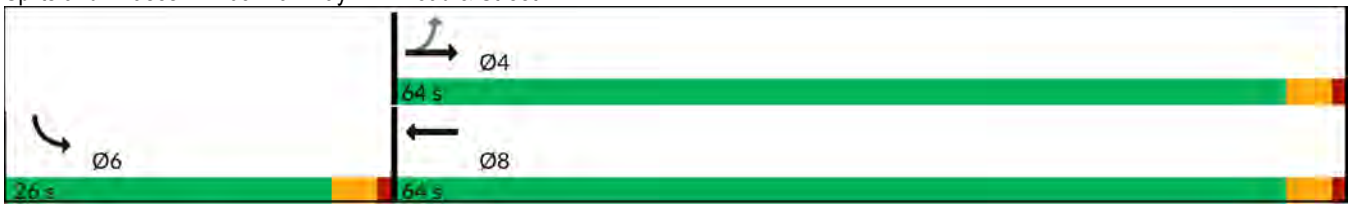


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	97	324	359	601	0	57
Future Volume (vph)	97	324	359	601	0	57
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.906		0.865	
Flt Protected		0.989				
Satd. Flow (prot)	0	3316	3038	0	1526	0
Flt Permitted		0.700				
Satd. Flow (perm)	0	2347	3038	0	1526	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			653		515	
Link Speed (k/h)		50	50		50	
Link Distance (m)		194.7	73.6		93.9	
Travel Time (s)		14.0	5.3		6.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	105	352	390	653	0	62
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	457	1043	0	62	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25			15	25	15
Number of Detectors		2	2		1	
Detector Template		Thru	Thru		Left	
Leading Detector (m)		10.0	10.0		2.0	
Trailing Detector (m)		0.0	0.0		0.0	
Detector 1 Position(m)		0.0	0.0		0.0	
Detector 1 Size(m)		0.6	0.6		2.0	
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)		0.0	0.0		0.0	
Detector 1 Queue (s)		0.0	0.0		0.0	
Detector 1 Delay (s)		0.0	0.0		0.0	
Detector 2 Position(m)		9.4	9.4			
Detector 2 Size(m)		0.6	0.6			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Detector Phase	4	4	8		6	
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Minimum Split (s)	22.0	22.0	22.0		22.0	
Total Split (s)	64.0	64.0	64.0		26.0	
Total Split (%)	71.1%	71.1%	71.1%		28.9%	
Maximum Green (s)	60.0	60.0	60.0		22.0	
Yellow Time (s)	3.0	3.0	3.0		3.0	
All-Red Time (s)	1.0	1.0	1.0		1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	
Total Lost Time (s)		4.0	4.0		4.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	Min	Min	Min		None	
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)	5	5	5		5	
Act Effct Green (s)		29.3	29.3		7.6	
Actuated g/C Ratio		0.77	0.77		0.20	
v/c Ratio		0.25	0.42		0.09	
Control Delay (s/veh)		4.2	2.3		0.2	
Queue Delay		0.0	0.0		0.0	
Total Delay (s/veh)		4.2	2.3		0.2	
LOS		A	A		A	
Approach Delay (s/veh)		4.2	2.3		0.2	
Approach LOS		A	A		A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 37.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.42			
Intersection Signal Delay (s/veh): 2.7		Intersection LOS: A	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 103: Parkway Link Road & Street D

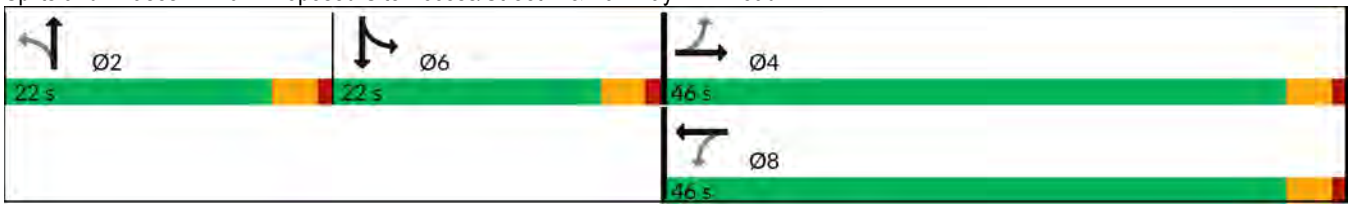


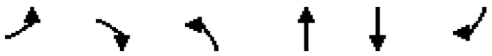
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	116	74	96	1136	127	0	0	0	0	34	16
Future Volume (vph)	0	116	74	96	1136	127	0	0	0	0	34	16
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.942			0.986						0.957	
Flt Protected					0.996							
Satd. Flow (prot)	0	3158	0	0	3293	0	0	1765	0	0	1689	0
Flt Permitted					0.908							
Satd. Flow (perm)	0	3158	0	0	3002	0	0	1765	0	0	1689	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		80			16						17	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		88.3			134.4			66.5			187.8	
Travel Time (s)		6.4			9.7			4.8			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	126	80	104	1235	138	0	0	0	0	37	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	0	1477	0	0	0	0	0	54	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)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Number of Detectors		2			2			2			2	
Detector Template		Thru			Thru			Thru			Thru	
Leading Detector (m)		10.0			10.0			10.0			10.0	
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)		0.6			0.6			0.6			0.6	
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)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
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		NA		Perm	NA						NA	
Protected Phases		4			8			2		6	6	
Permitted Phases	4			8			2					
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.0	22.0		22.0	22.0		22.0	22.0		22.0	22.0	
Total Split (s)	46.0	46.0		46.0	46.0		22.0	22.0		22.0	22.0	
Total Split (%)	51.1%	51.1%		51.1%	51.1%		24.4%	24.4%		24.4%	24.4%	
Maximum Green (s)	42.0	42.0		42.0	42.0		18.0	18.0		18.0	18.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Min	Min		Min	Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		57.6			57.6						8.4	
Actuated g/C Ratio		0.82			0.82						0.12	
v/c Ratio		0.08			0.60						0.25	
Control Delay (s/veh)		3.5			9.3						26.5	
Queue Delay		0.0			0.3						0.0	
Total Delay (s/veh)		3.5			9.6						26.5	
LOS		A			A						C	
Approach Delay (s/veh)		3.5			9.6						26.5	
Approach LOS		A			A						C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 70.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 9.4		Intersection LOS: A	
Intersection Capacity Utilization 60.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 104: Proposed Site Access/Street E & Parkway Link Road





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	78	38	1196	575	459	162
Future Volume (vph)	78	38	1196	575	459	162
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Storage Length (m)	0.0	0.0	30.0			30.0
Storage Lanes	1	1	2			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1676	1500	3252	1765	1765	1500
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1676	1500	3252	1765	1765	1500
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		41				56
Link Speed (k/h)	50			50	50	
Link Distance (m)	134.4			700.3	190.0	
Travel Time (s)	9.7			50.4	13.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	85	41	1300	625	499	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	41	1300	625	499	176
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.6			7.2	7.2	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane				Yes	Yes	
Headway Factor	1.07	1.07	1.07	1.07	1.07	1.07
Turning Speed (k/h)	25	15	25			15
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (m)	2.0	2.0	2.0	10.0	10.0	2.0
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)	2.0	2.0	2.0	0.6	0.6	2.0
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)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Perm	Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases	4	4				6

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1122	180	0	708	52	10
Future Vol, veh/h	1122	180	0	708	52	10
Conflicting Peds, #/hr	0	0	0	0	0	13
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	98	98	98	98	98	98
Heavy Vehicles, %	5	0	0	0	0	0
Mvmt Flow	1145	184	0	722	53	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1329	0	1598	678
Stage 1	-	-	-	-	1237	-
Stage 2	-	-	-	-	361	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	526	-	99	399
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	682	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	526	-	99	395
Mov Cap-2 Maneuver	-	-	-	-	99	-
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	682	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	71.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	113	-	-	526	-
HCM Lane V/C Ratio	0.56	-	-	-	-
HCM Ctrl Dly (s/v)	71.4	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	2.7	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	203	95	54	128	0	0	0	0	0	0	0
Future Vol, veh/h	0	203	95	54	128	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	221	103	59	139	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9	8.6	0	0
HCM LOS	A	A	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	30%	0%
Vol Thru, %	100%	68%	70%	100%
Vol Right, %	0%	32%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	298	182	0
LT Vol	0	0	54	0
Through Vol	0	203	128	0
RT Vol	0	95	0	0
Lane Flow Rate	0	324	198	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.35	0.233	0
Departure Headway (Hd)	5.017	3.889	4.233	5.017
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	920	843	0
Service Time	3.017	1.936	2.285	3.017
HCM Lane V/C Ratio	0	0.352	0.235	0
HCM Control Delay, s/veh	8	9	8.6	8
HCM Lane LOS	N	A	A	N
HCM 95th-tile Q	0	1.6	0.9	0

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	207	131	36	82	99
Future Vol, veh/h	122	207	131	36	82	99
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	225	142	39	89	108
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	10.5	9.7	9.7
HCM LOS	B	A	A

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	45%	0%	78%
Vol Thru, %	0%	37%	22%
Vol Right, %	55%	63%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	181	329	167
LT Vol	82	0	131
Through Vol	0	122	36
RT Vol	99	207	0
Lane Flow Rate	197	358	182
Geometry Grp	1	1	1
Degree of Util (X)	0.267	0.424	0.25
Departure Headway (Hd)	4.879	4.273	4.965
Convergence, Y/N	Yes	Yes	Yes
Cap	732	840	719
Service Time	2.938	2.317	3.021
HCM Lane V/C Ratio	0.269	0.426	0.253
HCM Control Delay, s/veh	9.7	10.5	9.7
HCM Lane LOS	A	B	A
HCM 95th-tile Q	1.1	2.1	1

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	230	0	26	112	9	0	22	35	26	67	64
Future Vol, veh/h	20	230	0	26	112	9	0	22	35	26	67	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	250	0	28	122	10	0	24	38	28	73	70
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.4	9.2	8.3	9.3
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	8%	18%	17%
Vol Thru, %	39%	92%	76%	43%
Vol Right, %	61%	0%	6%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	250	147	157
LT Vol	0	20	26	26
Through Vol	22	230	112	67
RT Vol	35	0	9	64
Lane Flow Rate	62	272	160	171
Geometry Grp	1	1	1	1
Degree of Util (X)	0.083	0.355	0.214	0.228
Departure Headway (Hd)	4.816	4.706	4.822	4.819
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	737	761	740	741
Service Time	2.887	2.758	2.88	2.879
HCM Lane V/C Ratio	0.084	0.357	0.216	0.231
HCM Control Delay, s/veh	8.3	10.4	9.2	9.3
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.3	1.6	0.8	0.9

Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	397	17	26	746	64	92
Future Vol, veh/h	397	17	26	746	64	92
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	432	18	28	811	70	100

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	450	0	903	225
Stage 1	-	-	-	-	441	-
Stage 2	-	-	-	-	462	-
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	-	-	1107	-	277	778
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1107	-	264	778
Mov Cap-2 Maneuver	-	-	-	-	264	-
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	573	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.5	18.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	433	-	-	1107	-
HCM Lane V/C Ratio	0.392	-	-	0.026	-
HCM Ctrl Dly (s/v)	18.6	-	-	8.3	0.2
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	1.8	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	449	752	60	28	19
Future Vol, veh/h	40	449	752	60	28	19
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	43	488	817	65	30	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	882	0	-	0	1180	441
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	330	-
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	762	-	-	-	183	564
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	762	-	-	-	169	564
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1.1	0	24.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	762	-	-	-	236
HCM Lane V/C Ratio	0.057	-	-	-	0.216
HCM Ctrl Dly (s/v)	10	0.3	-	-	24.4
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q (veh)	0.2	-	-	-	0.8

Intersection	
Int Delay, s/veh	113.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1228	179	0	1143	175	14
Future Vol, veh/h	1228	179	0	1143	175	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	0	0	0	0
Mvmt Flow	1364	199	0	1270	194	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1563	0	2099	782
Stage 1	-	-	-	-	1464	-
Stage 2	-	-	-	-	635	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	428	-	~ 46	341
Stage 1	-	-	-	-	~ 182	-
Stage 2	-	-	-	-	496	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	428	-	~ 46	341
Mov Cap-2 Maneuver	-	-	-	-	~ 46	-
Stage 1	-	-	-	-	~ 182	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 1647.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	49	-	-	428	-
HCM Lane V/C Ratio	4.286	-	-	-	-
HCM Ctrl Dly (s/v)	$ 1647.4	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	23.5	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	157	52	37	174	0	0	0	0	0	0	0
Future Vol, veh/h	0	157	52	37	174	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	171	57	40	189	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.3	8.7	0	0
HCM LOS	A	A	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	18%	0%
Vol Thru, %	100%	75%	82%	100%
Vol Right, %	0%	25%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	209	211	0
LT Vol	0	0	37	0
Through Vol	0	157	174	0
RT Vol	0	52	0	0
Lane Flow Rate	0	227	229	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.25	0.264	0
Departure Headway (Hd)	4.893	3.954	4.137	4.893
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	902	865	0
Service Time	2.893	2.004	2.177	2.893
HCM Lane V/C Ratio	0	0.252	0.265	0
HCM Control Delay, s/veh	7.9	8.3	8.7	7.9
HCM Lane LOS	N	A	A	N
HCM 95th-tile Q	0	1	1.1	0

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	93	114	136	60	154	162
Future Vol, veh/h	93	114	136	60	154	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	101	124	148	65	167	176
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	9.8	10.6	11.8
HCM LOS	A	B	B

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	49%	0%	69%
Vol Thru, %	0%	45%	31%
Vol Right, %	51%	55%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	316	207	196
LT Vol	154	0	136
Through Vol	0	93	60
RT Vol	162	114	0
Lane Flow Rate	343	225	213
Geometry Grp	1	1	1
Degree of Util (X)	0.455	0.296	0.307
Departure Headway (Hd)	4.766	4.73	5.191
Convergence, Y/N	Yes	Yes	Yes
Cap	749	752	686
Service Time	2.838	2.813	3.276
HCM Lane V/C Ratio	0.458	0.299	0.31
HCM Control Delay, s/veh	11.8	9.8	10.6
HCM Lane LOS	B	A	B
HCM 95th-tile Q	2.4	1.2	1.3

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	252	0	64	162	13	0	37	88	22	40	48
Future Vol, veh/h	29	252	0	64	162	13	0	37	88	22	40	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	274	0	70	176	14	0	40	96	24	43	52
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	11.7	11	9.4	9.6
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	10%	27%	20%
Vol Thru, %	30%	90%	68%	36%
Vol Right, %	70%	0%	5%	44%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	125	281	239	110
LT Vol	0	29	64	22
Through Vol	37	252	162	40
RT Vol	88	0	13	48
Lane Flow Rate	136	305	260	120
Geometry Grp	1	1	1	1
Degree of Util (X)	0.195	0.427	0.368	0.179
Departure Headway (Hd)	5.155	5.034	5.095	5.379
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	718	709	666
Service Time	3.193	3.043	3.104	3.418
HCM Lane V/C Ratio	0.195	0.425	0.367	0.18
HCM Control Delay, s/veh	9.4	11.7	11	9.6
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.7	2.1	1.7	0.6

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	612	27	46	751	44	56
Future Vol, veh/h	612	27	46	751	44	56
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	665	29	50	816	48	61

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	694	0	1188	347
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	508	-
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	-	-	897	-	181	649
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	569	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	897	-	163	649
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	465	-
Stage 2	-	-	-	-	511	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.9	25.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	281	-	-	897	-
HCM Lane V/C Ratio	0.387	-	-	0.056	-
HCM Ctrl Dly (s/v)	25.7	-	-	9.3	0.4
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q (veh)	1.8	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	656	986	22	28	22
Future Vol, veh/h	13	656	986	22	28	22
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	14	713	1072	24	30	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1096	0	-	0	1469	548
Stage 1	-	-	-	-	1084	-
Stage 2	-	-	-	-	385	-
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	633	-	-	-	118	480
Stage 1	-	-	-	-	286	-
Stage 2	-	-	-	-	657	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	633	-	-	-	114	480
Mov Cap-2 Maneuver	-	-	-	-	114	-
Stage 1	-	-	-	-	275	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.4	0	35.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	633	-	-	-	172
HCM Lane V/C Ratio	0.022	-	-	-	0.316
HCM Ctrl Dly (s/v)	10.8	0.2	-	-	35.3
HCM Lane LOS	B	A	-	-	E
HCM 95th %tile Q (veh)	0.1	-	-	-	1.3

Intersection	
Int Delay, s/veh	26.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1677	319	0	216	88	11
Future Vol, veh/h	1677	319	0	216	88	11
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	95	95	95	95	95	95
Heavy Vehicles, %	1	1	0	0	2	0
Mvmt Flow	1765	336	0	227	93	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2101	0	2047	1051
Stage 1	-	-	-	-	1933	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.1	-	6.84	6.9
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.2	-	3.52	3.3
Pot Cap-1 Maneuver	-	-	266	-	~ 48	227
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	898	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	266	-	~ 48	227
Mov Cap-2 Maneuver	-	-	-	-	~ 48	-
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	$ 618
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	53	-	-	266	-
HCM Lane V/C Ratio	1.966	-	-	-	-
HCM Ctrl Dly (s/v)	$ 618	-	-	0	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q (veh)	10.2	-	-	0	-

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

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	134	0	0	417	0	0	0	0	0	0	0
Future Vol, veh/h	0	134	0	0	417	0	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	146	0	0	453	0	0	0	0	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.3	11.2	0	0
HCM LOS	A	B	-	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	0%	0%
Vol Thru, %	100%	100%	100%	100%
Vol Right, %	0%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	134	417	0
LT Vol	0	0	0	0
Through Vol	0	134	417	0
RT Vol	0	0	0	0
Lane Flow Rate	0	146	453	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0	0.173	0.509	0
Departure Headway (Hd)	5.206	4.27	4.041	5.206
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	0	829	888	0
Service Time	3.206	2.358	2.078	3.206
HCM Lane V/C Ratio	0	0.176	0.51	0
HCM Control Delay, s/veh	8.2	8.3	11.2	8.2
HCM Lane LOS	N	A	B	N
HCM 95th-tile Q	0	0.6	2.9	0

Intersection	
Intersection Delay, s/veh	22.8
Intersection LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	102	182	470	97
Future Vol, veh/h	0	0	102	182	470	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	111	198	511	105
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay, s/veh	0	13.8	27.3
HCM LOS	-	B	D

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	83%	0%	36%
Vol Thru, %	0%	100%	64%
Vol Right, %	17%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	567	0	284
LT Vol	470	0	102
Through Vol	0	0	182
RT Vol	97	0	0
Lane Flow Rate	616	0	309
Geometry Grp	1	1	1
Degree of Util (X)	0.831	0	0.484
Departure Headway (Hd)	4.855	6.138	5.641
Convergence, Y/N	Yes	Yes	Yes
Cap	740	0	642
Service Time	2.949	4.148	3.641
HCM Lane V/C Ratio	0.832	0	0.481
HCM Control Delay, s/veh	27.3	9.1	13.8
HCM Lane LOS	D	N	B
HCM 95th-tile Q	9.2	0	2.6

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	10	0	49	330	40	0	115	13	0	0	0
Future Vol, veh/h	88	10	0	49	330	40	0	115	13	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	11	0	53	359	43	0	125	14	0	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.9	12.8	9.5	0
HCM LOS	A	B	A	-

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	90%	12%	0%
Vol Thru, %	90%	10%	79%	100%
Vol Right, %	10%	0%	10%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	98	419	0
LT Vol	0	88	49	0
Through Vol	115	10	330	0
RT Vol	13	0	40	0
Lane Flow Rate	139	107	455	0
Geometry Grp	1	1	1	1
Degree of Util (X)	0.199	0.147	0.556	0
Departure Headway (Hd)	5.14	4.97	4.395	5.429
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	719	820	0
Service Time	3.19	3.018	2.427	3.498
HCM Lane V/C Ratio	0.2	0.149	0.555	0
HCM Control Delay, s/veh	9.5	8.9	12.8	8.5
HCM Lane LOS	A	A	B	N
HCM 95th-tile Q	0.7	0.5	3.5	0

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	966	80	141	144	0	0
Future Vol, veh/h	966	80	141	144	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1050	87	153	157	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1137	0	1479	569
Stage 1	-	-	-	-	1094	-
Stage 2	-	-	-	-	385	-
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	-	-	610	-	116	465
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	657	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	610	-	84	465
Mov Cap-2 Maneuver	-	-	-	-	84	-
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	6.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	610	-
HCM Lane V/C Ratio	-	-	-	0.251	-
HCM Ctrl Dly (s/v)	0	-	-	12.9	0.6
HCM Lane LOS	A	-	-	B	A
HCM 95th %tile Q (veh)	-	-	-	1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	945	285	36	0	0
Future Vol, veh/h	21	945	285	36	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1027	310	39	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	349	0	-	0	890	175
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	560	-
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	1207	-	-	-	282	838
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1207	-	-	-	270	838
Mov Cap-2 Maneuver	-	-	-	-	270	-
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	535	-

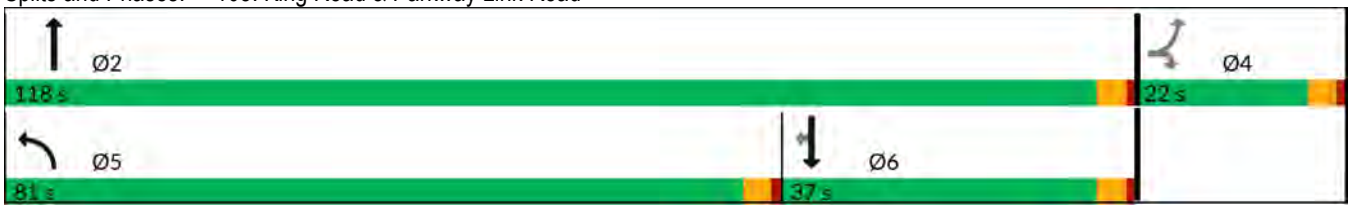
Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.4	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1207	-	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-	-
HCM Ctrl Dly (s/v)	8	0.2	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q (veh)	0.1	-	-	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.0	22.0	9.0	22.0	22.0	22.0
Total Split (s)	22.0	22.0	81.0	118.0	37.0	37.0
Total Split (%)	15.7%	15.7%	57.9%	84.3%	26.4%	26.4%
Maximum Green (s)	18.0	18.0	77.0	114.0	33.0	33.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	Min	Min	Min
Walk Time (s)	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	5	5		5	5	5
Act Effct Green (s)	11.2	11.2	48.2	87.7	34.2	34.2
Actuated g/C Ratio	0.11	0.11	0.47	0.85	0.33	0.33
v/c Ratio	0.47	0.21	0.85	0.42	0.85	0.33
Control Delay (s/veh)	56.0	16.9	31.0	3.7	51.2	23.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.0	16.9	31.0	3.7	51.2	23.7
LOS	E	B	C	A	D	C
Approach Delay (s/veh)	43.3			22.2	44.0	
Approach LOS	D			C	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 103			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 28.5		Intersection LOS: C	
Intersection Capacity Utilization 76.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 105: King Road & Parkway Link Road



Appendix G:
SimTraffic Queuing Analysis

Appendix G-1:
2026 Existing Conditions

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	10647	10808	10904	10934	10761	10814
Vehs Exited	10656	10826	10887	10878	10814	10815
Starting Vehs	499	507	506	512	564	516
Ending Vehs	490	489	523	568	511	514
Travel Distance (km)	18699	18953	19050	19062	19208	18995
Travel Time (hr)	508.6	515.1	524.2	529.9	529.9	521.6
Total Delay (hr)	133.2	135.0	141.3	147.0	144.3	140.2
Total Stops	13182	13191	13331	13632	13651	13392
Fuel Used (l)	1498.1	1516.5	1532.2	1535.4	1542.4	1524.9

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	10647	10808	10904	10934	10761	10814
Vehs Exited	10656	10826	10887	10878	10814	10815
Starting Vehs	499	507	506	512	564	516
Ending Vehs	490	489	523	568	511	514
Travel Distance (km)	18699	18953	19050	19062	19208	18995
Travel Time (hr)	508.6	515.1	524.2	529.9	529.9	521.6
Total Delay (hr)	133.2	135.0	141.3	147.0	144.3	140.2
Total Stops	13182	13191	13331	13632	13651	13392
Fuel Used (l)	1498.1	1516.5	1532.2	1535.4	1542.4	1524.9

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	36.4	31.4	17.9	54.5	38.7	57.7	22.6	49.5	46.4
Average Queue (m)	12.7	11.9	4.2	22.4	13.3	28.5	10.0	25.1	20.0
95th Queue (m)	28.0	24.6	13.0	42.5	29.6	48.6	18.9	41.8	36.4
Link Distance (m)		705.9			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	18.0	27.0	33.0	29.6	52.7	55.9	40.6	30.3
Average Queue (m)	2.5	12.1	14.5	12.7	24.4	26.1	19.3	13.1
95th Queue (m)	10.7	23.3	27.5	24.2	43.6	44.8	35.1	25.9
Link Distance (m)	47.5		442.6		174.7	174.7	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	B79	B79	SB	SB
Directions Served	L	T	R	L	L	R	T	TR	T	T	L	T
Maximum Queue (m)	59.3	37.8	66.8	20.2	33.1	42.1	91.1	104.8	2.2	4.4	52.8	70.6
Average Queue (m)	28.0	14.7	32.8	1.5	8.9	11.3	38.5	54.5	0.1	0.1	25.5	13.7
95th Queue (m)	47.1	28.6	55.5	10.0	25.9	27.3	70.6	87.4	1.6	2.3	46.2	38.4
Link Distance (m)		451.1			215.8	215.8	113.9	113.9	554.0	554.0		174.7
Upstream Blk Time (%)							0	0				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (m)	107.0		248.0	58.0							30.0	
Storage Blk Time (%)											6	0
Queuing Penalty (veh)											11	1

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB
Directions Served	T
Maximum Queue (m)	33.8
Average Queue (m)	14.3
95th Queue (m)	29.7
Link Distance (m)	174.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	T	TR	L	T	TR	L	TR	L	T	R	
Maximum Queue (m)	81.3	116.5	92.3	59.3	88.2	98.9	70.8	164.0	54.5	79.8	60.2	
Average Queue (m)	55.6	45.8	42.9	18.4	36.2	48.2	15.1	58.0	25.4	31.1	18.9	
95th Queue (m)	85.7	91.2	73.3	42.3	69.0	79.9	45.7	134.4	48.3	62.3	38.9	
Link Distance (m)		307.1	307.1		2305.4	2305.4		294.9	554.0	554.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0			33.0			25.0				40.0	
Storage Blk Time (%)	19	4		1	10		2	36		6	0	
Queuing Penalty (veh)	48	16		2	9		5	21		13	0	

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	26.8	37.6	57.9	54.8	19.4
Average Queue (m)	5.9	8.9	40.5	20.8	6.2
95th Queue (m)	19.9	28.6	66.2	57.6	18.5
Link Distance (m)	215.8	215.8	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	T	TR	LR
Maximum Queue (m)	20.9	17.1	17.4
Average Queue (m)	1.8	1.5	6.3
95th Queue (m)	10.6	9.6	13.1
Link Distance (m)	89.9	89.9	47.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (m)	73.3	14.4
Average Queue (m)	25.3	6.9
95th Queue (m)	60.8	14.5
Link Distance (m)	90.4	70.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	17.1	82.6	53.6	45.5	11.7	123.7	57.8	23.7
Average Queue (m)	4.6	40.3	26.2	18.3	3.8	58.7	24.9	3.5
95th Queue (m)	13.2	69.8	45.6	36.7	11.0	101.0	46.4	15.8
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)	0	22		8	0		6	
Queuing Penalty (veh)	0	5		20	0		2	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.3	10.4
Average Queue (m)	2.4	0.6
95th Queue (m)	9.0	5.8
Link Distance (m)	502.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	B73	B73	B73	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	T		L	TR
Maximum Queue (m)	64.8	102.1	105.8	66.4	67.8	87.5	91.7	6.5	12.4	13.4	78.6	98.8
Average Queue (m)	21.1	44.9	48.8	11.3	13.1	41.8	51.1	0.2	0.5	0.4	24.7	48.6
95th Queue (m)	47.5	84.0	87.2	39.5	36.9	75.5	83.3	4.6	5.5	6.9	50.1	84.5
Link Distance (m)		2305.4	2305.4			549.9	549.9	118.7	118.7	118.7		286.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0						40.0	
Storage Blk Time (%)	3	19	22		0	4					3	17
Queuing Penalty (veh)	9	19	23		0	2					6	25

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	50.9	136.2	35.7
Average Queue (m)	44.6	54.0	11.9
95th Queue (m)	60.9	121.5	28.9
Link Distance (m)		866.2	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	40	10	0
Queuing Penalty (veh)	77	32	0

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LT	R
Maximum Queue (m)	57.7	51.5	47.7	31.2	5.9	64.4	73.8	61.7	29.6	35.5	27.2
Average Queue (m)	29.8	22.8	20.9	10.6	0.2	30.6	36.9	18.0	12.4	18.4	12.9
95th Queue (m)	50.7	41.7	39.0	22.4	3.3	53.6	61.8	46.6	23.5	29.5	22.2
Link Distance (m)	118.7	118.7	118.7		549.9	293.1	293.1	293.1		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			0								
Queuing Penalty (veh)			0								

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	54.9	74.3	73.3	74.3	58.2	59.0	61.0	47.9	63.7	56.6	12.2	61.9
Average Queue (m)	28.1	33.2	34.5	34.0	33.1	34.4	28.5	17.5	36.4	18.9	3.9	27.6
95th Queue (m)	50.8	58.7	59.5	60.6	53.2	52.7	50.3	35.0	57.3	42.6	11.1	49.7
Link Distance (m)		293.1	293.1	293.1	924.4	924.4	924.4	450.8	450.8			536.7
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	9	8		0					5	0		1
Queuing Penalty (veh)	31	12		0					7	1		0

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	49.2	51.9	67.6	25.3	52.1	50.0	40.0	84.8	77.7	84.6
Average Queue (m)	25.4	29.1	30.9	6.9	28.8	26.7	14.5	46.8	37.6	44.3
95th Queue (m)	42.0	46.9	52.2	17.5	46.9	45.3	34.2	74.9	65.6	73.7
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		0	0		0					
Queuing Penalty (veh)		0	1		0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	24.4	33.5	20.1	43.1	34.8	27.0	45.8	42.8	34.4
Average Queue (m)	11.3	15.3	7.4	21.5	12.5	9.4	23.5	22.5	15.4
95th Queue (m)	20.1	26.1	15.9	33.7	25.4	20.9	39.9	38.1	29.6
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 400

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	14856	14788	15193	15139	14976	14989
Vehs Exited	14361	14311	14744	14687	14553	14531
Starting Vehs	891	916	960	941	994	934
Ending Vehs	1386	1393	1409	1393	1417	1393
Travel Distance (km)	26143	25886	27002	26838	26530	26480
Travel Time (hr)	1453.4	1398.8	1374.4	1290.0	1571.2	1417.6
Total Delay (hr)	930.4	881.1	834.7	754.0	1040.7	888.2
Total Stops	20462	20548	21851	20359	20928	20828
Fuel Used (l)	2688.8	2626.1	2665.5	2585.2	2810.1	2675.2

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	14856	14788	15193	15139	14976	14989
Vehs Exited	14361	14311	14744	14687	14553	14531
Starting Vehs	891	916	960	941	994	934
Ending Vehs	1386	1393	1409	1393	1417	1393
Travel Distance (km)	26143	25886	27002	26838	26530	26480
Travel Time (hr)	1453.4	1398.8	1374.4	1290.0	1571.2	1417.6
Total Delay (hr)	930.4	881.1	834.7	754.0	1040.7	888.2
Total Stops	20462	20548	21851	20359	20928	20828
Fuel Used (l)	2688.8	2626.1	2665.5	2585.2	2810.1	2675.2

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	53.7	84.9	25.8	82.2	56.9	76.4	28.6	56.4	61.7
Average Queue (m)	28.8	46.9	9.5	37.5	23.6	39.9	12.9	33.9	31.1
95th Queue (m)	48.0	71.4	19.8	64.9	44.8	66.4	23.7	53.5	52.9
Link Distance (m)		705.9			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)				0					
Queuing Penalty (veh)				0					

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	10.1	27.6	28.0	31.0	57.1	49.6	58.7	44.2
Average Queue (m)	1.5	11.9	15.1	13.4	29.4	26.3	28.6	23.8
95th Queue (m)	7.1	22.3	25.8	25.3	47.9	43.1	48.9	40.0
Link Distance (m)	47.5		442.6		174.7	174.7	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	B79	SB	SB	SB
Directions Served	L	T	R	L	L	R	T	TR	T	L	T	T
Maximum Queue (m)	59.9	45.1	65.5	22.0	28.6	44.4	68.1	80.1	1.7	52.8	58.8	53.1
Average Queue (m)	28.8	16.0	35.9	4.6	11.1	20.8	36.2	46.3	0.1	27.4	19.6	21.6
95th Queue (m)	50.8	35.5	59.4	14.6	22.5	36.1	60.7	72.8	1.2	47.9	43.4	40.4
Link Distance (m)		451.1			215.8	215.8	113.9	113.9	554.0		174.7	174.7
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0		248.0	58.0						30.0		
Storage Blk Time (%)										6	1	
Queuing Penalty (veh)										18	2	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	81.8	122.2	102.3	54.1	159.4	159.4	82.2	232.4	168.3	228.8	69.0
Average Queue (m)	41.4	50.6	45.4	15.5	79.3	85.4	50.2	109.4	70.7	87.3	58.1
95th Queue (m)	74.2	93.6	82.6	43.5	146.3	150.8	95.9	254.2	143.2	198.2	82.7
Link Distance (m)		307.1	307.1		2305.4	2305.4		294.9	554.0	554.0	
Upstream Blk Time (%)								6			
Queuing Penalty (veh)								0			
Storage Bay Dist (m)	45.0			33.0			25.0				40.0
Storage Blk Time (%)	11	11		0	31		36	60		13	42
Queuing Penalty (veh)	36	25		3	29		78	105		59	60

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	24.4	40.5	16.8	24.4	27.6
Average Queue (m)	7.1	13.2	3.9	8.2	11.2
95th Queue (m)	19.8	33.6	12.6	21.2	24.7
Link Distance (m)	215.8	215.8	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	T	TR	LR
Maximum Queue (m)	4.3	14.7	33.0
Average Queue (m)	0.1	0.7	14.1
95th Queue (m)	2.5	6.1	26.2
Link Distance (m)	89.9	89.9	47.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (m)	74.2	42.5
Average Queue (m)	39.8	19.1
95th Queue (m)	63.7	33.4
Link Distance (m)	90.4	70.0
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	73.4	162.7	93.0	840.7	63.0	169.0	164.1	46.0
Average Queue (m)	6.7	67.4	87.5	505.2	11.2	73.4	64.1	9.4
95th Queue (m)	35.9	136.4	109.3	1070.6	41.6	151.5	133.9	37.5
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)				34				
Queuing Penalty (veh)				0				
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)	0	39	58	24	0		48	
Queuing Penalty (veh)	0	5	384	126	1		10	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	T
Maximum Queue (m)	34.5	270.7
Average Queue (m)	9.8	166.0
95th Queue (m)	28.1	359.6
Link Distance (m)	502.3	266.1
Upstream Blk Time (%)		11
Queuing Penalty (veh)		80
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	B73	B73	B73	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	T		L	TR
Maximum Queue (m)	64.8	126.2	141.8	88.0	68.9	165.5	163.9	19.1	33.9	9.3	95.9	149.8
Average Queue (m)	22.0	57.6	63.0	24.7	22.3	89.5	98.7	0.9	4.3	0.9	38.9	48.9
95th Queue (m)	52.4	110.3	119.0	72.7	56.3	158.7	161.9	10.2	20.3	6.6	77.3	106.7
Link Distance (m)		2305.4	2305.4			549.9	549.9	118.7	118.7	118.7		286.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0						40.0	
Storage Blk Time (%)	3	20	24	1		19					12	21
Queuing Penalty (veh)	11	16	45	4		21					25	34

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	50.8	870.2	36.0
Average Queue (m)	50.0	802.9	18.1
95th Queue (m)	55.6	1032.7	41.3
Link Distance (m)		866.2	
Upstream Blk Time (%)		26	
Queuing Penalty (veh)		185	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	74	31	2
Queuing Penalty (veh)	314	141	11

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LT	R
Maximum Queue (m)	84.8	79.9	71.8	51.8	5.4	8.6	98.4	93.2	78.1	55.3	63.9	61.0
Average Queue (m)	38.5	32.6	28.7	16.5	0.4	0.3	46.3	50.9	31.2	30.2	38.0	24.0
95th Queue (m)	65.8	58.6	54.3	34.3	5.4	5.2	79.3	80.5	67.1	49.5	55.9	44.1
Link Distance (m)	118.7	118.7	118.7		549.9	549.9	293.1	293.1	293.1		792.9	792.9
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)			0						0	0	1	
Queuing Penalty (veh)			1						1	0	2	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.8	99.3	93.2	81.6	939.8	939.5	941.9	100.2	145.5	94.9	110.9	553.0
Average Queue (m)	36.0	51.3	49.4	46.3	755.1	759.0	762.2	30.9	71.9	52.8	29.1	505.1
95th Queue (m)	60.1	86.1	80.2	76.3	1141.9	1131.4	1122.3	75.0	111.0	92.2	107.7	647.4
Link Distance (m)		293.1	293.1	293.1	924.4	924.4	924.4	450.8	450.8			536.7
Upstream Blk Time (%)					47	48	48					73
Queuing Penalty (veh)					0	0	0					0
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	22	16		0					32	1		89
Queuing Penalty (veh)	107	29		0					51	6		12

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	23.0	23.2	20.4	33.5	47.3	47.4	42.3	60.8	51.8	53.6
Average Queue (m)	9.3	9.3	8.0	12.6	25.3	23.9	14.3	36.5	26.7	24.7
95th Queue (m)	19.0	18.9	16.6	26.0	44.8	42.8	33.1	55.3	46.1	45.9
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	38.9	42.8	32.3	55.2	43.0	52.8	51.0	43.9	41.3
Average Queue (m)	15.8	21.9	8.8	31.8	21.5	25.5	25.6	23.7	19.0
95th Queue (m)	29.8	36.1	20.7	48.6	37.4	46.1	42.5	40.2	36.5
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 2038

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	11:45	11:45	11:45	11:45	11:45	11:45
End Time	1:00	1:00	1:00	1:00	1:00	1:00
Total Time (min)	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	14292	14225	13877	14261	14167	14163
Vehs Exited	14346	14190	13871	14209	14181	14159
Starting Vehs	693	738	688	683	724	700
Ending Vehs	639	773	694	735	710	707
Travel Distance (km)	24581	24502	23872	24570	24669	24439
Travel Time (hr)	708.5	707.5	688.8	713.2	731.3	709.8
Total Delay (hr)	217.1	216.8	211.4	221.7	237.3	220.9
Total Stops	18255	18223	17546	18395	18399	18165
Fuel Used (l)	1989.8	1981.7	1934.0	1993.3	2012.7	1982.3

Interval #0 Information Seeding

Start Time	11:45
End Time	12:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	12:00
End Time	1:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	14292	14225	13877	14261	14167	14163
Vehs Exited	14346	14190	13871	14209	14181	14159
Starting Vehs	693	738	688	683	724	700
Ending Vehs	639	773	694	735	710	707
Travel Distance (km)	24581	24502	23872	24570	24669	24439
Travel Time (hr)	708.5	707.5	688.8	713.2	731.3	709.8
Total Delay (hr)	217.1	216.8	211.4	221.7	237.3	220.9
Total Stops	18255	18223	17546	18395	18399	18165
Fuel Used (l)	1989.8	1981.7	1934.0	1993.3	2012.7	1982.3

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	35.5	49.0	20.5	57.2	36.4	53.1	30.8	46.8	50.5
Average Queue (m)	15.6	23.7	9.7	27.1	14.2	25.8	15.0	27.3	22.6
95th Queue (m)	29.1	39.4	17.7	46.7	27.4	41.9	26.2	42.5	40.6
Link Distance (m)		705.9			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	7.2	28.3	35.6	27.6	44.5	38.4	50.2	42.6
Average Queue (m)	0.4	13.6	19.3	12.3	24.0	20.2	22.5	18.5
95th Queue (m)	3.5	25.3	31.8	21.7	39.5	33.9	40.6	34.1
Link Distance (m)	47.5		442.6		174.7	174.7	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	B79	SB	SB	SB
Directions Served	L	T	R	L	L	R	T	TR	T	L	T	T
Maximum Queue (m)	75.2	54.6	38.6	6.8	19.5	29.4	78.6	84.8	2.6	52.2	53.7	50.2
Average Queue (m)	43.1	30.1	18.9	1.1	4.6	10.8	37.0	49.0	0.1	27.2	17.7	22.7
95th Queue (m)	67.2	50.1	34.2	5.6	13.3	22.0	62.1	76.7	1.8	47.8	37.6	41.7
Link Distance (m)		451.1			215.8	215.8	113.9	113.9	554.0		174.7	174.7
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0		248.0	58.0						30.0		
Storage Blk Time (%)										8	1	
Queuing Penalty (veh)										22	4	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	76.7	107.8	100.1	59.8	120.9	124.0	82.9	190.7	131.6	152.3	69.0
Average Queue (m)	46.9	47.1	45.3	15.3	52.2	62.3	46.1	103.3	57.0	51.8	46.7
95th Queue (m)	78.8	106.3	97.2	42.8	101.7	108.0	95.3	228.3	107.9	126.0	76.3
Link Distance (m)		307.1	307.1		2305.4	2305.4		294.9	554.0	554.0	
Upstream Blk Time (%)								5			
Queuing Penalty (veh)								0			
Storage Bay Dist (m)	45.0			33.0			25.0				40.0
Storage Blk Time (%)	19	5		0	20		21	62		13	18
Queuing Penalty (veh)	50	14		1	14		51	77		50	28

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	36.5	50.8	10.5	18.4	25.6
Average Queue (m)	10.5	18.1	0.9	3.8	9.5
95th Queue (m)	26.8	40.6	5.5	13.0	20.9
Link Distance (m)	215.8	215.8	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	T	TR	LR
Maximum Queue (m)	2.9	19.1	28.8
Average Queue (m)	0.2	1.1	9.5
95th Queue (m)	2.2	7.8	20.6
Link Distance (m)	89.9	89.9	47.1
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (m)	60.0	22.1
Average Queue (m)	27.2	10.2
95th Queue (m)	50.8	17.4
Link Distance (m)	90.4	70.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	14.8	72.9	67.3	67.4	23.8	123.0	39.9	8.8
Average Queue (m)	3.4	40.5	35.0	28.2	5.9	63.2	17.4	1.6
95th Queue (m)	10.7	65.3	57.8	52.3	16.6	105.7	33.2	6.1
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		24	0	16	0		2	
Queuing Penalty (veh)		3	0	54	0		0	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	7.1	3.2
Average Queue (m)	0.3	0.2
95th Queue (m)	2.9	2.9
Link Distance (m)	502.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	B73	B73	B73	NB	NB
Directions Served	L	T	T	R	L	T	TR	T	T		L	TR
Maximum Queue (m)	64.9	117.6	118.8	78.7	68.9	138.8	152.4	13.1	30.1	15.5	82.2	104.6
Average Queue (m)	26.2	54.1	58.9	15.2	24.0	78.7	87.2	0.4	3.3	1.1	30.2	47.2
95th Queue (m)	57.4	94.6	97.9	50.0	57.6	132.4	141.0	6.9	15.7	7.4	60.1	84.2
Link Distance (m)		2305.4	2305.4			549.9	549.9	118.7	118.7	118.7		286.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0						40.0	
Storage Blk Time (%)	3	22	26	0	0	17					7	21
Queuing Penalty (veh)	11	24	32	0	0	20					17	32

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	50.8	273.6	36.0
Average Queue (m)	44.8	107.8	22.9
95th Queue (m)	60.6	237.1	44.5
Link Distance (m)		866.2	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	47	38	1
Queuing Penalty (veh)	166	114	6

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	WB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	R	L	LT
Maximum Queue (m)	83.8	77.5	72.2	26.1	6.6	11.1	93.3	99.6	82.7	2.0	45.9	54.5
Average Queue (m)	42.1	36.3	34.4	9.2	0.2	0.5	47.7	56.3	40.9	0.1	23.8	32.2
95th Queue (m)	70.3	65.2	63.5	19.8	3.4	6.6	83.2	89.3	82.2	1.4	39.4	46.9
Link Distance (m)	118.7	118.7	118.7		549.9	549.9	293.1	293.1	293.1			792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						85.0	56.0	
Storage Blk Time (%)			0						0		0	0
Queuing Penalty (veh)			1						1		0	0

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	51.9
Average Queue (m)	18.8
95th Queue (m)	35.1
Link Distance (m)	792.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	106.0	102.7	81.6	120.4	120.3	115.6	64.9	87.6	76.5	39.5	110.5
Average Queue (m)	42.4	53.8	50.0	43.0	72.2	75.1	68.1	21.9	48.1	33.6	9.3	49.9
95th Queue (m)	65.0	97.0	89.2	71.9	107.1	110.0	103.1	47.9	76.9	67.8	31.0	87.9
Link Distance (m)		293.1	293.1	293.1	924.4	924.4	924.4	450.8	450.8			536.7
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	34	15		0					12	1		13
Queuing Penalty (veh)	150	28		0					22	3		5

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	74.8	72.4	73.0	27.2	78.3	70.0	58.9	130.1	119.5	98.9
Average Queue (m)	41.0	44.2	34.0	13.4	39.8	38.0	27.5	80.2	65.9	55.2
95th Queue (m)	62.9	65.1	59.1	24.0	62.8	59.3	49.1	117.2	103.1	90.0
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		1	0		1					
Queuing Penalty (veh)		4	1		1					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	37.1	45.1	36.5	67.5	46.7	40.9	62.9	60.5	49.6
Average Queue (m)	17.7	22.3	11.0	33.3	19.5	15.9	25.8	25.7	20.3
95th Queue (m)	30.1	37.2	25.0	54.2	37.8	31.4	47.8	48.5	40.1
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 1010

Appendix G-2:
2031 Future Background Conditions

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	21.9	27.9	15.2	61.4	51.1	69.7	27.6	54.5	39.9
Average Queue (m)	10.8	13.0	5.2	27.1	15.0	33.1	10.6	24.0	18.9
95th Queue (m)	20.7	26.1	14.5	46.8	32.5	56.1	20.5	41.9	31.9
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	20.4	29.5	39.1	39.8	70.4	53.3	40.8	31.5
Average Queue (m)	2.6	12.1	18.9	15.5	25.9	29.7	20.8	13.9
95th Queue (m)	11.8	22.8	31.5	28.9	46.9	48.4	36.6	26.1
Link Distance (m)	45.7		440.2		172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	L	L
Maximum Queue (m)	34.2	45.3	38.7	107.9	14.0	29.1	32.9	66.2	64.4	43.9	32.8	49.3
Average Queue (m)	14.9	23.1	20.5	42.5	2.0	4.5	10.7	34.1	38.2	20.9	16.7	16.6
95th Queue (m)	26.7	35.9	35.2	72.7	9.4	16.0	24.3	54.9	56.6	37.1	28.2	32.4
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0						30.0	30.0
Storage Blk Time (%)											0	0
Queuing Penalty (veh)											1	0

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	43.0	42.8
Average Queue (m)	13.3	20.6
95th Queue (m)	29.8	39.9
Link Distance (m)	172.8	172.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	1	
Queuing Penalty (veh)	4	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.2	67.9	71.5	64.2	59.9	112.2	116.8	82.8	97.6	52.5	58.0	38.4
Average Queue (m)	22.2	37.0	37.8	42.5	13.9	33.9	46.7	11.4	58.5	29.1	32.7	15.4
95th Queue (m)	49.4	58.9	61.1	62.9	31.8	76.1	86.3	36.1	85.8	48.9	54.2	28.6
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	1	5	6		0	12		0	45		8	0
Queuing Penalty (veh)	2	15	24		0	12		0	27		17	0

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	35.2	27.3	23.5	8.6	22.9
Average Queue (m)	7.1	4.7	2.1	0.3	5.4
95th Queue (m)	24.6	17.8	11.5	2.8	17.8
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	T	TR	LR
Maximum Queue (m)	24.7	15.1	20.8
Average Queue (m)	1.6	1.0	7.4
95th Queue (m)	11.7	6.9	16.8
Link Distance (m)	89.9	89.9	47.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	44.1	15.0	20.6
Average Queue (m)	17.6	1.9	7.4
95th Queue (m)	38.0	8.3	15.4
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	8.5	64.9	45.5	48.5	15.5	110.6	45.7	10.9
Average Queue (m)	3.6	37.8	22.7	22.8	4.5	50.7	21.3	2.5
95th Queue (m)	9.8	60.1	39.2	45.2	12.3	86.1	37.9	7.1
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		23		13	0		4	
Queuing Penalty (veh)		5		34	0		1	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	7.7	15.5
Average Queue (m)	2.6	0.5
95th Queue (m)	8.1	5.1
Link Distance (m)	500.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.9	108.3	98.5	33.1	27.2	57.9	64.1	46.3	47.1	81.8	40.5	46.0
Average Queue (m)	15.4	41.7	43.5	8.1	10.4	29.3	36.4	14.5	22.1	37.6	19.0	25.0
95th Queue (m)	34.7	80.3	79.2	19.8	22.0	44.8	56.0	30.1	40.5	69.9	36.5	42.3
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	2	11	14	0		1			1	12	1	5
Queuing Penalty (veh)	6	12	16	0		0			3	19	1	10

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	50.0	33.2
Average Queue (m)	17.5	9.9
95th Queue (m)	36.2	24.0
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	5	0
Queuing Penalty (veh)	17	0

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LT	R
Maximum Queue (m)	47.6	52.6	55.1	34.4	48.5	52.6	46.7	34.8	41.9	35.1
Average Queue (m)	30.3	27.4	24.9	12.0	27.3	28.0	26.7	13.8	20.7	16.0
95th Queue (m)	46.8	45.0	42.9	25.5	45.0	47.7	42.7	24.6	31.6	27.8
Link Distance (m)	118.7	118.7	118.7		289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)				67.0				56.0		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	T	R	T	T	TR	L	LTR	R	L
Maximum Queue (m)	45.3	60.0	71.7	63.5	13.6	50.0	53.9	59.5	103.0	103.7	77.0	21.2
Average Queue (m)	22.6	30.7	33.2	32.5	0.5	31.5	33.6	33.8	21.8	47.4	29.7	3.9
95th Queue (m)	37.1	56.9	57.2	56.3	4.5	45.2	48.5	52.9	53.4	74.7	61.9	12.8
Link Distance (m)		289.4	289.4	289.4		924.4	924.4	924.4	450.8	450.8		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0				85.0						44.0	48.0
Storage Blk Time (%)	4	9								9	1	
Queuing Penalty (veh)	14	14								16	3	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB	SB
Directions Served	R	R
Maximum Queue (m)	35.1	35.6
Average Queue (m)	17.2	17.0
95th Queue (m)	29.4	30.3
Link Distance (m)	536.3	536.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	53.3	59.7	69.1	19.1	63.9	59.7	50.8	76.6	82.1	90.8
Average Queue (m)	27.8	33.9	35.5	8.6	37.0	33.8	20.3	49.4	44.3	53.7
95th Queue (m)	47.3	52.1	58.9	17.0	56.1	51.6	41.5	71.9	71.7	79.8
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		0	0		0					
Queuing Penalty (veh)		0	1		0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	31.8	40.4	22.6	53.8	37.0	23.1	69.3	56.1	53.5
Average Queue (m)	13.2	17.8	6.6	24.3	12.4	9.0	26.5	22.2	17.5
95th Queue (m)	23.3	29.3	15.0	41.0	23.9	21.1	51.5	43.4	35.8
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 277

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	87.9	103.9	20.3	64.7	44.4	78.9	39.5	71.1	71.8
Average Queue (m)	32.5	55.7	10.0	40.0	24.8	41.8	14.7	41.2	36.3
95th Queue (m)	59.5	88.8	18.3	65.0	42.6	68.1	29.7	63.8	57.0
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)								0	
Queuing Penalty (veh)								0	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	TR	LT	T	T	TR
Maximum Queue (m)	15.4	45.6	39.4	51.5	46.4	48.6	76.8	43.0
Average Queue (m)	1.7	19.1	23.8	16.8	30.8	32.0	31.5	25.3
95th Queue (m)	8.2	35.5	38.7	34.4	46.7	47.2	57.3	43.3
Link Distance (m)	45.7		440.2	440.2	172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0						
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	L	L
Maximum Queue (m)	32.7	39.7	64.8	80.2	19.4	18.7	33.0	60.2	65.4	61.6	37.2	39.3
Average Queue (m)	12.4	17.3	22.8	43.1	4.5	8.7	19.1	37.8	37.9	19.7	19.5	20.3
95th Queue (m)	27.4	32.3	43.8	68.1	13.1	16.7	31.8	59.8	58.0	40.4	34.9	35.1
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0						30.0	30.0
Storage Blk Time (%)											1	1
Queuing Penalty (veh)											3	4

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	51.3	56.6
Average Queue (m)	28.3	33.6
95th Queue (m)	49.0	57.6
Link Distance (m)	172.8	172.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	8	
Queuing Penalty (veh)	21	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	53.8	81.7	119.4	90.9	60.0	153.9	161.7	82.1	89.6	150.8	176.6	69.0
Average Queue (m)	26.2	42.9	51.5	51.5	18.6	102.5	109.5	33.4	52.9	62.2	63.7	56.5
95th Queue (m)	50.0	69.0	85.1	84.1	53.4	154.4	158.7	61.5	80.1	115.8	152.5	82.0
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	0	5	12			45		21	43		5	33
Queuing Penalty (veh)	1	17	30			45		48	79		26	50

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	41.0	33.6	22.2	28.7	31.7
Average Queue (m)	13.6	8.0	4.8	8.1	10.3
95th Queue (m)	31.7	22.9	16.4	22.7	24.6
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (m)	7.4	42.7
Average Queue (m)	0.2	20.6
95th Queue (m)	2.4	34.7
Link Distance (m)	89.9	47.8
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	79.5	8.8	48.0
Average Queue (m)	44.3	1.3	23.8
95th Queue (m)	63.7	6.3	39.1
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	15.0	121.9	93.0	311.2	63.0	125.8	183.5	46.0
Average Queue (m)	3.8	67.4	87.1	175.3	13.7	75.7	74.4	8.4
95th Queue (m)	10.7	107.7	107.3	309.3	46.6	109.7	158.6	33.1
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		46	27	34	0		44	
Queuing Penalty (veh)		6	189	186	3		10	

Intersection: 9: King Road & Hydro Lane

Movement	WB
Directions Served	LR
Maximum Queue (m)	7.7
Average Queue (m)	2.7
95th Queue (m)	8.5
Link Distance (m)	500.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.9	109.8	121.1	88.0	68.8	105.9	119.2	122.5	51.2	65.3	40.4	50.9
Average Queue (m)	19.7	54.7	62.4	24.4	21.0	66.0	74.0	36.8	26.8	39.1	25.8	41.9
95th Queue (m)	54.2	94.8	108.2	71.8	53.6	100.4	114.1	86.9	46.0	58.7	42.9	62.6
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	0	22	29	0		13			3	12	7	16
Queuing Penalty (veh)	0	20	56	0		15			7	20	31	71

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	312.3	36.0
Average Queue (m)	132.5	28.6
95th Queue (m)	241.2	47.4
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	49	7
Queuing Penalty (veh)	236	41

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LT	R
Maximum Queue (m)	73.5	67.9	58.4	44.4	15.3	16.6	61.1	66.9	76.5	52.8	62.6	78.2
Average Queue (m)	43.5	38.2	34.2	21.8	0.5	1.2	38.2	39.8	31.7	31.5	39.4	35.1
95th Queue (m)	67.8	63.9	56.1	39.1	5.0	7.8	60.8	59.7	60.9	46.8	55.4	54.4
Link Distance (m)	118.7	118.7	118.7		547.9	547.9	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)										0	1	
Queuing Penalty (veh)										0	2	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	56.0	105.6	96.6	96.2	943.6	934.8	934.8	461.2	461.2	95.0	13.7	95.7
Average Queue (m)	49.1	71.1	69.6	62.1	844.7	839.7	837.2	453.3	455.7	87.2	3.6	46.7
95th Queue (m)	68.0	103.3	95.6	90.1	1109.7	1097.8	1094.5	465.3	459.1	126.7	10.4	71.2
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					59	60	60	68	89			
Queuing Penalty (veh)					0	0	0	0	0			
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	52	17		1					93	26		8
Queuing Penalty (veh)	263	33		1					180	134		1

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	101.5
Average Queue (m)	50.2
95th Queue (m)	76.2
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	21.5	22.1	22.9	32.0	46.8	39.7	29.2	66.6	48.6	79.6
Average Queue (m)	10.1	11.3	10.3	15.4	24.9	24.0	14.3	35.2	27.0	30.2
95th Queue (m)	19.8	18.8	18.5	27.9	40.4	38.7	29.4	54.4	42.8	54.7
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	65.9	72.2	61.6	51.1	40.3	52.9	41.0	51.8	41.3
Average Queue (m)	17.8	28.2	10.6	33.5	21.5	27.9	25.6	25.2	20.5
95th Queue (m)	35.6	46.3	27.1	48.4	35.7	46.6	44.2	45.3	37.7
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 1828

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	53.4	58.3	22.0	63.7	36.1	46.8	27.9	62.3	55.7
Average Queue (m)	21.5	27.5	11.0	27.3	14.7	25.8	15.0	30.5	30.2
95th Queue (m)	41.0	47.7	19.3	49.5	31.3	41.1	24.8	49.5	46.9
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	34.3	38.6	33.1	46.3	39.1	52.5	44.8
Average Queue (m)	1.2	17.5	20.8	18.3	25.3	24.8	25.0	20.5
95th Queue (m)	6.2	30.9	32.6	32.3	40.9	38.7	43.9	36.9
Link Distance (m)	45.7		440.2		172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	B79	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	T	L
Maximum Queue (m)	42.6	52.6	66.8	67.6	13.0	17.9	28.7	59.6	59.1	57.5	5.7	38.2
Average Queue (m)	23.4	30.1	39.0	27.8	2.2	4.2	10.2	33.0	35.1	22.7	0.2	16.6
95th Queue (m)	38.1	46.1	61.9	52.7	8.8	11.5	21.3	48.4	52.5	42.3	1.9	29.7
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0							30.0
Storage Blk Time (%)												1
Queuing Penalty (veh)												2

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (m)	32.4	49.8	50.1
Average Queue (m)	19.5	21.4	29.3
95th Queue (m)	30.3	43.0	47.7
Link Distance (m)		172.8	172.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	30.0		
Storage Blk Time (%)	1	5	
Queuing Penalty (veh)	3	15	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	49.4	60.2	82.2	76.2	59.8	94.9	116.1	46.9	84.5	104.8	119.3	68.9
Average Queue (m)	22.2	34.8	44.3	44.3	12.9	55.2	64.2	21.0	49.7	50.6	31.1	42.7
95th Queue (m)	44.1	53.3	75.1	72.3	40.1	90.6	101.1	38.9	75.8	87.0	67.2	66.2
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	0	4	9			28		7	34		3	11
Queuing Penalty (veh)	1	11	30			20		17	44		11	18

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	29.6	35.0	9.3	24.2	26.3
Average Queue (m)	15.2	14.0	1.8	6.3	11.5
95th Queue (m)	29.8	31.0	7.9	19.1	22.7
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	NB
Directions Served	LR
Maximum Queue (m)	28.9
Average Queue (m)	12.2
95th Queue (m)	20.6
Link Distance (m)	47.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	61.7	15.4	22.3
Average Queue (m)	28.3	3.3	10.5
95th Queue (m)	54.3	11.4	18.1
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	14.2	107.4	52.9	54.2	21.8	137.5	45.6	11.4
Average Queue (m)	2.6	38.4	32.5	26.1	6.2	64.1	21.7	2.8
95th Queue (m)	9.4	69.3	52.5	46.7	16.0	110.1	38.4	7.4
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		20		16	0		5	
Queuing Penalty (veh)		3		59	3		1	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.8	8.4
Average Queue (m)	1.0	0.3
95th Queue (m)	6.3	2.8
Link Distance (m)	500.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.6	102.2	96.3	87.8	68.8	91.5	98.0	66.2	69.8	62.2	26.6	50.9
Average Queue (m)	17.4	53.5	59.3	14.2	25.9	53.8	62.8	34.9	27.0	28.8	9.4	21.7
95th Queue (m)	41.6	83.6	87.9	44.6	54.4	83.7	91.6	70.6	50.9	51.5	19.4	45.2
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	1	22	29			10			6	4	0	0
Queuing Penalty (veh)	3	25	37			12			16	7	0	1

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	107.3	36.0
Average Queue (m)	42.5	18.8
95th Queue (m)	82.2	41.3
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	27	
Queuing Penalty (veh)	83	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LT	R
Maximum Queue (m)	82.6	78.9	83.1	41.2	6.2	90.6	106.7	107.5	40.1	46.8	72.4
Average Queue (m)	49.4	43.6	41.3	13.9	0.2	43.1	47.9	46.3	25.0	29.4	28.0
95th Queue (m)	75.4	71.2	67.3	27.3	2.1	72.4	80.7	77.6	38.0	43.5	48.1
Link Distance (m)	118.7	118.7	118.7		547.9	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			1					1			
Queuing Penalty (veh)			2					2			

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	80.2	79.7	72.3	112.2	134.4	139.1	74.1	97.2	94.1	21.0	46.6
Average Queue (m)	40.9	41.1	44.9	42.7	77.2	79.9	82.9	31.5	65.9	52.4	8.1	26.8
95th Queue (m)	64.5	66.3	69.2	67.8	111.2	119.0	124.8	62.1	88.8	82.1	20.2	42.3
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	23	14							35	4		0
Queuing Penalty (veh)	109	28							78	18		0

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	44.4
Average Queue (m)	22.9
95th Queue (m)	37.9
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	90.8	96.5	77.7	31.9	77.9	72.0	68.6	145.0	116.6	96.6
Average Queue (m)	49.8	51.4	36.9	16.5	45.2	43.8	34.9	98.9	82.0	73.0
95th Queue (m)	80.3	81.6	62.0	28.9	66.8	61.4	57.1	132.3	108.7	102.0
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		4	1		1					
Queuing Penalty (veh)		17	3		1					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	37.7	46.1	41.7	64.4	53.7	34.1	72.0	60.4	67.3
Average Queue (m)	19.7	25.3	13.0	36.1	19.4	17.3	33.7	37.1	31.0
95th Queue (m)	32.4	39.8	26.5	54.7	38.1	30.7	58.0	62.0	54.0
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 681

Appendix G-3:
2036 Future Background Conditions

Appendix G-4:
2041 Future Background Conditions

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	44.6	40.7	15.1	96.3	55.4	75.9	21.8	40.6	46.8
Average Queue (m)	16.8	15.4	5.0	33.0	15.7	33.4	12.0	23.6	22.5
95th Queue (m)	31.7	28.6	13.5	67.6	36.2	59.3	22.0	35.2	39.5
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)				0					
Queuing Penalty (veh)				0					

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	21.3	35.4	49.6	87.2	66.6	57.5	41.1	29.8
Average Queue (m)	3.3	18.9	26.0	25.9	30.3	29.9	25.1	18.8
95th Queue (m)	14.2	31.9	42.3	54.6	51.1	47.8	41.9	31.0
Link Distance (m)	45.7		440.2		172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	L	L
Maximum Queue (m)	52.4	64.7	46.6	106.7	14.0	30.7	40.6	62.4	79.2	53.0	36.3	38.4
Average Queue (m)	23.6	32.1	26.6	58.3	0.9	6.7	11.1	43.0	45.4	27.9	17.2	17.7
95th Queue (m)	45.4	54.3	41.5	89.4	6.3	18.7	27.3	63.5	65.6	47.0	30.0	30.6
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0						30.0	30.0
Storage Blk Time (%)											1	1
Queuing Penalty (veh)											3	1

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	42.9	50.6
Average Queue (m)	23.4	29.5
95th Queue (m)	41.5	50.3
Link Distance (m)	172.8	172.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	6	
Queuing Penalty (veh)	17	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	77.3	77.3	99.0	59.8	69.2	76.1	82.7	91.8	47.7	60.8	45.3
Average Queue (m)	23.5	42.5	38.5	45.2	17.6	34.3	44.9	15.0	60.1	33.0	36.5	21.4
95th Queue (m)	54.5	69.6	69.8	74.9	41.9	60.2	72.6	39.0	85.4	47.7	60.8	38.5
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	0	6	8		2	12		1	41		8	1
Queuing Penalty (veh)	1	18	31		3	13		3	27		17	1

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	47.8	34.2	16.2	9.2	37.3
Average Queue (m)	15.5	10.0	3.4	0.3	10.1
95th Queue (m)	38.6	27.0	12.6	3.0	25.6
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	WB	NB
Directions Served	T	LT	LR
Maximum Queue (m)	26.9	9.1	23.0
Average Queue (m)	1.4	0.3	8.5
95th Queue (m)	9.9	3.0	15.1
Link Distance (m)	89.9	90.5	47.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	89.7	22.2	22.2
Average Queue (m)	25.6	3.4	8.8
95th Queue (m)	57.7	12.5	17.7
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	14.9	87.7	59.5	54.3	15.4	102.7	77.3	45.8
Average Queue (m)	4.2	46.8	26.9	22.2	4.7	55.6	31.0	4.2
95th Queue (m)	12.6	78.4	50.1	41.2	12.2	92.8	54.2	18.3
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		29		12	0		11	
Queuing Penalty (veh)		7		31	0		4	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	14.0	9.2
Average Queue (m)	2.7	0.6
95th Queue (m)	9.2	4.4
Link Distance (m)	500.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.9	98.0	93.9	19.4	33.7	64.2	59.2	45.2	44.7	61.8	40.1	50.8
Average Queue (m)	19.6	41.3	43.3	6.7	14.0	28.0	34.7	13.4	21.2	35.1	16.2	21.5
95th Queue (m)	44.0	78.7	79.1	16.4	30.7	52.0	54.4	28.0	34.9	56.0	33.7	39.8
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	1	12	14			0			1	8	1	4
Queuing Penalty (veh)	3	13	17			0			2	13	1	8

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	58.2	36.0
Average Queue (m)	25.5	13.5
95th Queue (m)	47.0	32.4
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	11	0
Queuing Penalty (veh)	37	0

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LT	R
Maximum Queue (m)	65.5	55.2	44.0	21.5	14.9	14.0	77.5	58.3	60.0	35.1	35.4	40.8
Average Queue (m)	33.2	24.8	21.3	11.5	0.5	0.5	31.6	31.5	26.0	16.8	22.1	19.4
95th Queue (m)	55.4	46.3	40.0	21.9	4.9	4.6	57.4	52.3	46.9	28.6	34.3	33.6
Link Distance (m)	118.7	118.7	118.7		547.9	547.9	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	51.8	52.5	66.8	79.6	57.4	59.9	78.3	95.8	110.5	94.8	14.2	22.2
Average Queue (m)	29.0	30.7	33.2	34.1	34.6	37.9	39.3	44.7	59.8	45.3	3.8	14.0
95th Queue (m)	49.8	51.1	56.6	59.9	48.8	57.7	63.3	77.9	91.5	83.9	10.7	21.8
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	13	8		0					22	2		
Queuing Penalty (veh)	49	13		0					48	8		

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	32.6
Average Queue (m)	17.1
95th Queue (m)	26.4
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	72.7	79.9	78.3	25.6	88.7	82.5	73.8	111.8	126.7	135.0
Average Queue (m)	33.3	41.7	49.5	9.4	37.9	37.4	25.1	63.7	58.2	65.8
95th Queue (m)	56.8	64.4	78.8	21.3	61.9	63.6	52.8	100.6	95.1	104.7
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		2	2		1					
Queuing Penalty (veh)		8	6		0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	47.4	46.1	35.4	66.5	51.4	35.6	49.6	54.4	52.7
Average Queue (m)	16.9	25.0	8.1	27.7	14.7	13.4	23.6	21.4	16.2
95th Queue (m)	33.1	42.0	19.5	48.5	29.9	30.0	43.8	41.6	34.3
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 402

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	79.0	105.6	27.4	113.5	59.2	93.8	27.8	66.3	65.1
Average Queue (m)	37.0	55.5	11.1	47.5	31.5	43.5	13.7	42.6	39.2
95th Queue (m)	66.2	84.3	20.8	82.8	54.8	74.2	24.4	66.5	62.9
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)				1				0	
Queuing Penalty (veh)				3				0	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	TR	LT	T	T	TR
Maximum Queue (m)	9.1	27.0	62.1	67.8	97.8	95.3	86.8	60.0
Average Queue (m)	1.2	16.1	26.6	27.6	36.3	33.7	34.6	31.2
95th Queue (m)	6.0	25.3	45.1	52.1	67.7	60.1	63.1	54.1
Link Distance (m)	45.7		440.2	440.2	172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0						
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	L	L
Maximum Queue (m)	59.3	41.1	46.4	92.7	6.8	18.7	70.6	86.2	77.3	53.1	41.2	53.0
Average Queue (m)	21.2	27.5	20.6	55.0	2.8	8.0	23.6	44.7	46.2	26.0	22.4	26.8
95th Queue (m)	42.9	43.0	40.8	84.9	7.9	16.0	49.9	69.9	67.3	48.2	35.7	49.6
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0						30.0	30.0
Storage Blk Time (%)											2	5
Queuing Penalty (veh)											5	14

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	91.0	99.8
Average Queue (m)	42.6	46.9
95th Queue (m)	73.2	79.3
Link Distance (m)	172.8	172.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	14	
Queuing Penalty (veh)	40	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	61.1	81.6	124.6	116.1	59.9	191.7	197.5	82.9	154.0	161.8	189.9	69.0
Average Queue (m)	22.9	39.8	64.3	62.5	23.0	91.2	97.2	40.3	61.3	66.2	84.3	61.9
95th Queue (m)	47.4	67.2	102.2	94.2	60.2	158.7	166.2	71.4	108.7	118.1	180.4	78.3
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	1	7	19			41		29	48		6	41
Queuing Penalty (veh)	4	25	51			43		71	94		34	65

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	54.0	39.8	15.6	34.7	20.4
Average Queue (m)	14.4	8.5	2.6	8.0	9.0
95th Queue (m)	40.3	28.0	10.2	24.9	21.9
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	NB
Directions Served	T	LR
Maximum Queue (m)	11.3	52.4
Average Queue (m)	0.4	20.9
95th Queue (m)	3.7	40.8
Link Distance (m)	89.9	47.8
Upstream Blk Time (%)		2
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	84.9	8.8	71.0
Average Queue (m)	42.3	1.6	24.5
95th Queue (m)	72.5	7.0	48.6
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)	0		0
Queuing Penalty (veh)	0		0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	14.9	99.9	93.0	852.9	63.0	268.2	228.9	46.0
Average Queue (m)	4.1	73.2	92.2	703.3	15.1	122.4	89.6	10.0
95th Queue (m)	11.2	97.5	96.9	1104.7	47.5	235.9	175.0	39.2
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)				40		1		
Queuing Penalty (veh)				0		7		
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		44	43	37	0		56	
Queuing Penalty (veh)		6	313	213	5		13	

Intersection: 9: King Road & Hydro Lane

Movement	WB	NB
Directions Served	LR	TR
Maximum Queue (m)	13.9	47.5
Average Queue (m)	5.3	2.4
95th Queue (m)	11.5	17.9
Link Distance (m)	500.3	862.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.8	174.1	172.4	88.0	68.8	136.4	174.5	154.2	105.8	118.7	40.5	51.0
Average Queue (m)	23.9	75.3	78.8	27.6	26.3	79.2	88.7	68.6	32.1	53.9	28.4	47.7
95th Queue (m)	61.6	130.4	139.3	74.0	60.2	113.7	129.3	127.1	67.7	93.0	46.3	60.8
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	0	34	39	3		22			6	24	13	20
Queuing Penalty (veh)	0	31	79	14		27			13	44	61	93

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	648.8	36.0
Average Queue (m)	434.8	29.1
95th Queue (m)	653.5	49.7
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	64	11
Queuing Penalty (veh)	324	71

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LT	R
Maximum Queue (m)	86.7	97.1	107.1	97.0	8.3	78.6	80.4	67.1	63.3	65.6	122.5
Average Queue (m)	46.5	44.2	41.8	22.9	0.3	42.6	41.9	30.4	39.3	45.2	48.5
95th Queue (m)	75.0	76.7	74.8	50.6	2.7	65.3	63.8	49.9	56.9	63.4	94.2
Link Distance (m)	118.7	118.7	118.7		547.9	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			1						1	2	
Queuing Penalty (veh)			3						2	6	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	147.6	153.9	94.0	940.3	934.8	936.3	461.2	462.7	95.0	8.0	81.8
Average Queue (m)	52.0	86.4	78.0	54.4	910.3	907.6	904.1	454.6	455.5	85.8	1.4	52.3
95th Queue (m)	66.0	146.5	138.3	87.1	1023.3	1021.4	1014.9	458.7	459.9	131.2	6.2	78.2
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					79	81	80	80	94			
Queuing Penalty (veh)					0	0	0	0	0			
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	71	12		1					95	15		11
Queuing Penalty (veh)	373	24		1					220	92		2

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	86.5
Average Queue (m)	58.0
95th Queue (m)	81.2
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	28.0	22.2	15.7	58.4	62.3	63.3	35.0	74.5	54.9	49.1
Average Queue (m)	13.3	10.7	7.8	20.1	31.9	26.1	15.8	41.0	34.4	29.9
95th Queue (m)	23.0	21.2	15.2	45.5	55.1	47.0	32.4	61.0	52.0	49.0
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)				0	0					
Queuing Penalty (veh)				1	0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	40.6	47.3	40.6	59.7	60.8	66.0	70.5	88.9	67.5
Average Queue (m)	24.0	32.6	16.0	41.1	26.8	35.0	35.0	33.4	28.5
95th Queue (m)	37.3	50.9	33.4	58.6	46.2	60.7	62.6	63.6	55.2
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 2489

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	46.4	55.8	32.8	61.8	66.0	65.3	27.7	53.8	49.5
Average Queue (m)	20.8	26.3	11.0	29.0	19.2	31.2	15.8	32.9	28.8
95th Queue (m)	38.8	42.8	19.8	48.1	40.4	49.1	24.7	48.5	48.6
Link Distance (m)		705.7			126.6	126.6		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		134.0	89.0			71.0		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	40.9	53.2	51.8	68.5	61.1	47.0	34.4
Average Queue (m)	0.3	21.9	33.8	23.1	29.4	32.0	27.2	20.7
95th Queue (m)	3.0	36.6	49.3	40.3	50.2	49.1	42.6	33.6
Link Distance (m)	45.7		440.2		172.8	172.8	126.6	126.6
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	R	L	L	R	T	TR	R	L	L
Maximum Queue (m)	70.4	77.2	112.6	85.0	12.4	17.8	17.0	76.7	79.8	79.6	41.2	52.8
Average Queue (m)	33.1	44.1	49.4	33.4	1.6	3.8	9.2	39.9	44.1	26.2	19.8	23.5
95th Queue (m)	57.7	66.8	81.2	58.2	6.8	11.6	16.5	63.1	65.8	48.5	33.8	42.9
Link Distance (m)			449.6			210.4	210.4	113.9	113.9	113.9		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0	107.0		248.0	58.0						30.0	30.0
Storage Blk Time (%)			0								2	2
Queuing Penalty (veh)			2								6	5

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	63.7	60.9
Average Queue (m)	34.3	37.9
95th Queue (m)	56.8	56.9
Link Distance (m)	172.8	172.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	9	
Queuing Penalty (veh)	28	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	54.8	81.7	82.3	100.5	59.9	145.0	164.4	82.8	117.0	104.4	100.4	69.0
Average Queue (m)	25.7	42.6	47.3	50.0	24.5	71.4	81.3	30.4	50.1	55.7	36.1	42.0
95th Queue (m)	52.3	64.4	77.7	76.7	62.8	127.7	137.0	61.0	84.2	91.7	76.7	69.3
Link Distance (m)			307.2	307.2		2299.8	2299.8		293.1	552.1	552.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	0	8	13		1	30		10	42		2	11
Queuing Penalty (veh)	1	25	45		4	23		27	57		8	20

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	35.1	42.3	9.2	15.7	19.5
Average Queue (m)	17.7	15.9	0.6	5.2	9.7
95th Queue (m)	35.0	34.8	4.2	14.3	16.7
Link Distance (m)	210.4	210.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	NB
Directions Served	LR
Maximum Queue (m)	23.0
Average Queue (m)	12.2
95th Queue (m)	20.7
Link Distance (m)	47.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	L	R	LT
Maximum Queue (m)	54.1	8.8	21.1
Average Queue (m)	27.3	2.5	9.7
95th Queue (m)	49.7	8.7	16.0
Link Distance (m)	90.5	90.5	66.4
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	14.9	83.5	58.7	54.0	60.9	146.6	32.6	5.1
Average Queue (m)	2.1	45.6	37.5	32.5	6.5	79.7	16.7	0.9
95th Queue (m)	8.7	76.2	53.5	51.2	24.6	139.1	29.6	3.9
Link Distance (m)		361.7		841.0		266.1	252.2	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	25.0		78.0		18.0			30.0
Storage Blk Time (%)		23		18			1	
Queuing Penalty (veh)		3		71			0	

Intersection: 9: King Road & Hydro Lane

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	7.4	21.8
Average Queue (m)	0.5	1.5
95th Queue (m)	3.6	9.6
Link Distance (m)	500.3	266.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	L
Maximum Queue (m)	64.9	95.7	106.1	88.0	68.9	130.5	133.7	89.8	58.2	95.4	39.4	50.8
Average Queue (m)	26.9	49.5	52.4	14.9	23.9	59.6	67.6	43.4	25.1	36.8	12.1	26.4
95th Queue (m)	57.1	82.3	84.7	47.5	51.1	100.6	104.8	85.3	46.4	66.6	27.3	49.2
Link Distance (m)		2299.8	2299.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	3	20	23			13			6	6	0	2
Queuing Penalty (veh)	12	24	31			17			15	11	0	7

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	120.0	36.0
Average Queue (m)	45.8	23.3
95th Queue (m)	79.3	44.6
Link Distance (m)	862.6	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	27	1
Queuing Penalty (veh)	89	7

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	R	L	LT	R
Maximum Queue (m)	80.2	64.9	72.4	65.6	84.9	96.7	84.8	15.4	47.5	58.5	73.1
Average Queue (m)	49.3	42.1	43.0	13.5	45.5	50.3	45.5	0.8	28.4	36.2	39.3
95th Queue (m)	69.9	64.1	67.4	38.3	79.8	84.0	77.6	5.9	42.2	51.6	60.2
Link Distance (m)	118.7	118.7	118.7		289.4	289.4	289.4			792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0				85.0	56.0		
Storage Blk Time (%)			0	0			0			0	
Queuing Penalty (veh)			1	2			0			1	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	T	R	T	T	TR	L	LTR	R	L
Maximum Queue (m)	55.9	113.6	107.6	93.4	6.8	152.3	178.4	178.0	111.8	158.3	95.0	27.2
Average Queue (m)	44.9	55.0	54.0	49.9	0.2	95.9	103.6	105.1	55.3	90.1	75.7	7.9
95th Queue (m)	66.2	90.3	84.0	74.7	2.2	133.2	152.4	153.3	99.9	135.2	102.5	18.8
Link Distance (m)		289.4	289.4	289.4		924.4	924.4	924.4	450.8	450.8		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0				85.0						44.0	48.0
Storage Blk Time (%)	39	21		1						54	19	
Queuing Penalty (veh)	192	43		1						142	109	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB	SB
Directions Served	R	R
Maximum Queue (m)	60.6	60.0
Average Queue (m)	33.8	31.4
95th Queue (m)	50.5	49.9
Link Distance (m)	536.3	536.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)	2	
Queuing Penalty (veh)	1	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	104.3	97.6	93.2	50.9	101.2	104.1	73.9	193.4	185.6	160.1
Average Queue (m)	68.6	69.0	50.9	17.1	58.3	55.9	41.7	127.8	112.9	95.3
95th Queue (m)	101.0	96.1	81.1	35.1	89.2	85.7	68.6	182.8	171.2	137.2
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		13	4		9					
Queuing Penalty (veh)		64	15		10					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	T	T	T	T	T	T
Maximum Queue (m)	65.1	54.4	42.5	113.5	96.5	61.9	98.3	110.7	100.0
Average Queue (m)	29.8	34.7	20.3	42.0	29.3	25.2	39.7	41.7	34.6
95th Queue (m)	49.7	51.6	38.2	71.4	59.5	49.8	73.2	78.9	72.7
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									1
Queuing Penalty (veh)									4

Network Summary

Network wide Queuing Penalty: 1123

Appendix G-5:
2031 Future Total Conditions

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	L	L	T	TR	L	T	TR
Maximum Queue (m)	43.8	34.4	45.6	46.3	73.7	90.8	20.8	80.3	55.7
Average Queue (m)	15.5	17.7	17.3	24.5	23.5	38.7	9.3	40.6	28.7
95th Queue (m)	32.6	32.9	32.8	39.4	52.1	69.5	17.0	64.3	52.3
Link Distance (m)		704.1			126.7	126.7		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		89.0	89.0			71.0		
Storage Blk Time (%)								1	
Queuing Penalty (veh)								0	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	14.9	183.6	242.8	163.0	75.4	87.8	124.6	101.6
Average Queue (m)	2.6	110.6	113.1	71.4	41.0	40.5	59.5	33.7
95th Queue (m)	11.4	202.5	236.2	186.5	71.8	68.1	102.4	73.7
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		55	45					
Queuing Penalty (veh)		221	181					

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	T	L
Maximum Queue (m)	91.9	51.1	83.4	100.9	116.0	155.8	79.0	96.6	54.0	57.4	8.6	41.4
Average Queue (m)	40.2	17.1	38.6	47.3	82.5	107.9	56.7	56.8	27.2	33.0	0.4	40.4
95th Queue (m)	68.0	36.9	72.6	92.0	125.2	134.7	81.1	87.4	45.0	52.3	3.3	44.0
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0		248.0	58.0								30.0
Storage Blk Time (%)				2	21							47
Queuing Penalty (veh)				2	30							95

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (m)	53.0	180.1	172.5
Average Queue (m)	52.8	171.6	65.2
95th Queue (m)	53.1	196.2	146.6
Link Distance (m)		172.6	172.6
Upstream Blk Time (%)		43	0
Queuing Penalty (veh)		209	0
Storage Bay Dist (m)	30.0		
Storage Blk Time (%)	83	10	
Queuing Penalty (veh)	166	48	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.9	257.7	202.0	42.5	102.9	110.1	82.9	146.4	111.5	115.5	69.0
Average Queue (m)	39.2	55.4	67.8	68.1	17.9	36.8	50.9	24.0	78.6	27.9	53.5	44.5
95th Queue (m)	76.9	86.9	166.8	145.1	34.6	67.8	84.6	68.2	124.1	62.3	101.2	78.6
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	6	24	9		1	11		1	48		14	6
Queuing Penalty (veh)	16	59	48		2	11		3	30		50	19

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	53.0	84.8	55.9	61.5	19.5
Average Queue (m)	14.2	21.2	8.8	9.3	7.0
95th Queue (m)	44.1	61.5	34.8	37.5	18.9
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	44.0	33.6	9.1	9.4	33.4
Average Queue (m)	4.5	4.1	0.6	0.3	10.4
95th Queue (m)	20.3	17.8	4.2	3.1	24.1
Link Distance (m)	89.9	89.9	90.6	90.6	39.2
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	44.7	39.6	14.5	16.5	46.3	66.0	28.4	16.2
Average Queue (m)	26.3	23.8	4.5	5.6	25.6	31.8	10.6	8.2
95th Queue (m)	40.7	37.2	13.1	13.6	42.7	55.6	20.9	15.5
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	15.5	88.7	90.2	46.1	14.6	154.9	118.2	102.5	46.0
Average Queue (m)	5.2	48.3	38.4	17.3	3.2	73.7	49.7	39.8	5.6
95th Queue (m)	14.0	78.1	71.3	35.1	10.1	116.1	92.7	76.5	27.7
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		30	1	8	0			20	
Queuing Penalty (veh)		7	2	23	0			6	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	47.0	45.3	8.3	15.3	37.2	85.6	58.1	37.5
Average Queue (m)	28.6	25.7	0.3	1.4	8.2	27.2	5.4	17.6
95th Queue (m)	45.2	39.9	2.7	7.5	20.2	61.9	26.8	34.4
Link Distance (m)	45.6	45.6	498.4	498.4		163.5	258.4	
Upstream Blk Time (%)	1	0						
Queuing Penalty (veh)	1	0						
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)						3		2
Queuing Penalty (veh)						2		0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	R	L	TR	L	L
Maximum Queue (m)	64.9	95.9	112.7	87.9	68.6	80.6	76.5	79.4	105.7	138.2	40.5	50.9
Average Queue (m)	15.1	54.4	56.1	12.0	11.0	44.1	53.4	45.0	22.8	60.4	39.8	50.8
95th Queue (m)	46.1	84.1	86.1	38.3	37.6	73.9	76.4	75.3	53.5	101.1	42.4	51.0
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	0	25	28	0		5			1	28	41	63
Queuing Penalty (veh)	0	9	31	0		3			5	40	80	125

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	675.6	36.0
Average Queue (m)	532.9	5.9
95th Queue (m)	809.2	17.9
Link Distance (m)	671.7	
Upstream Blk Time (%)	4	
Queuing Penalty (veh)	40	
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	10	
Queuing Penalty (veh)	83	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LTR	R
Maximum Queue (m)	92.4	77.1	70.5	39.4	16.8	97.6	98.1	90.6	33.4	46.6	21.6
Average Queue (m)	48.9	40.5	36.5	13.0	0.6	41.5	43.2	40.6	21.0	26.6	13.7
95th Queue (m)	75.4	67.6	57.4	25.2	5.5	82.9	80.7	78.2	31.8	37.2	20.5
Link Distance (m)	118.7	118.7	118.7		544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			0					1			
Queuing Penalty (veh)			1					2			

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	165.1	163.5	84.4	106.1	116.9	98.8	96.0	116.4	95.0	8.0	32.1
Average Queue (m)	54.6	77.5	63.2	40.5	52.2	53.0	55.8	44.4	70.1	58.0	3.2	19.5
95th Queue (m)	60.7	142.3	131.7	74.4	83.9	82.9	86.9	84.1	100.8	93.8	9.1	30.1
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	45	8		0					38	5		
Queuing Penalty (veh)	205	27		0					71	22		

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	35.0
Average Queue (m)	15.5
95th Queue (m)	25.7
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	64.7	61.6	80.7	20.6	76.5	82.7	61.6	120.4	116.6	126.1
Average Queue (m)	30.0	33.6	46.9	8.8	44.0	40.4	30.1	71.2	66.1	72.2
95th Queue (m)	51.4	53.7	79.2	17.1	70.8	67.5	57.2	106.3	112.3	114.2
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		0	3		3					
Queuing Penalty (veh)		0	6		1					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	27.5	45.6	41.4	106.4	86.0	75.1	68.3	50.0	34.3
Average Queue (m)	15.3	24.4	11.3	52.0	38.5	14.8	24.3	19.2	14.9
95th Queue (m)	26.0	40.2	25.9	91.3	76.5	39.0	48.2	38.6	30.8
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	28.6	33.2	28.6	40.9	28.1
Average Queue (m)	17.9	14.0	12.0	15.9	16.2
95th Queue (m)	29.0	25.3	23.5	28.3	24.8
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	39.0	43.1	16.8	61.6	15.0	42.2
Average Queue (m)	18.5	15.8	7.7	27.4	6.9	20.5
95th Queue (m)	33.6	32.9	17.6	49.0	13.9	38.1
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						1
Queuing Penalty (veh)						2
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	52.3	52.3	53.5	53.8	72.6
Average Queue (m)	26.3	21.8	11.8	30.9	40.0
95th Queue (m)	43.9	41.3	29.5	51.7	62.4
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)			0	1	0
Queuing Penalty (veh)			0	2	1
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	74.8	80.0	55.2	54.4	59.1	33.0
Average Queue (m)	46.3	52.3	17.5	23.1	26.6	19.7
95th Queue (m)	83.9	91.6	38.6	44.4	49.7	30.2
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	11	21			2	
Queuing Penalty (veh)	43	85			0	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	102.5	115.0	37.5	122.7	109.9	105.9	37.4
Average Queue (m)	60.4	71.3	30.2	52.4	48.9	42.3	12.3
95th Queue (m)	101.2	133.0	45.1	103.5	88.7	77.5	32.6
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	0	12					
Queuing Penalty (veh)	0	55					
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			11	31		20	0
Queuing Penalty (veh)			20	60		14	0

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	20.3	28.1
Average Queue (m)	11.5	11.8
95th Queue (m)	17.3	18.9
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	24.6	27.0	16.0
Average Queue (m)	17.3	12.6	9.9
95th Queue (m)	23.6	20.4	13.4
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	16.9	21.5	16.4	22.2
Average Queue (m)	11.2	11.2	8.1	12.2
95th Queue (m)	16.0	16.9	13.2	18.6
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	16.3	42.3
Average Queue (m)	2.7	17.1
95th Queue (m)	10.3	31.6
Link Distance (m)	390.4	77.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	16.6	8.5	14.9	11.7	22.9
Average Queue (m)	7.1	0.3	0.5	0.8	8.6
95th Queue (m)	16.3	2.8	4.9	5.1	16.8
Link Distance (m)	390.4	390.4	293.4	293.4	103.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB
Directions Served	LR
Maximum Queue (m)	9.3
Average Queue (m)	6.0
95th Queue (m)	13.0
Link Distance (m)	40.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	207.9	367.4	20.7	68.0	75.4	118.4	129.7	127.9	212.1	188.8
Average Queue (m)	100.3	109.2	4.6	46.1	48.7	58.2	69.9	56.1	123.1	105.8
95th Queue (m)	211.3	246.5	13.2	69.7	69.4	96.3	109.0	146.3	198.0	178.4
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)							0			
Queuing Penalty (veh)							1			
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)	25					1			59	
Queuing Penalty (veh)	112					7			56	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	183.9	450.6	163.0	113.5	116.9	137.6	126.7
Average Queue (m)	0.9	129.5	240.2	51.6	60.2	54.2	129.1	74.6
95th Queue (m)	5.3	235.7	540.0	151.0	90.6	88.5	145.9	140.8
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)			24				41	0
Queuing Penalty (veh)			0				180	2
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		60	48	1				
Queuing Penalty (veh)		252	202	4				

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	B79
Directions Served	L	T	R	L	L	R	T	T	R	R	T	T
Maximum Queue (m)	79.6	47.4	116.8	157.9	220.4	220.3	90.8	85.0	61.5	73.3	15.1	8.6
Average Queue (m)	38.7	16.8	44.8	60.4	139.8	176.1	65.1	60.7	33.8	45.8	0.5	0.3
95th Queue (m)	67.3	39.3	83.4	158.1	253.4	251.2	85.1	87.3	59.7	70.9	5.0	2.8
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	552.0
Upstream Blk Time (%)					3	10						
Queuing Penalty (veh)					23	68						
Storage Bay Dist (m)	107.0		248.0	58.0								
Storage Blk Time (%)				0	5							
Queuing Penalty (veh)				0	9							

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB	SB
Directions Served	L	L	T	T
Maximum Queue (m)	41.4	53.0	178.3	148.5
Average Queue (m)	41.2	52.8	176.0	50.6
95th Queue (m)	41.8	53.0	178.8	109.5
Link Distance (m)			172.6	172.6
Upstream Blk Time (%)			53	
Queuing Penalty (veh)			348	
Storage Bay Dist (m)	30.0	30.0		
Storage Blk Time (%)	42	79	12	
Queuing Penalty (veh)	126	237	75	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.8	132.7	132.4	59.9	169.0	185.4	83.0	232.7	139.2	189.8	69.0
Average Queue (m)	47.2	61.4	60.8	58.1	24.2	87.0	95.8	56.5	111.7	66.8	109.7	63.8
95th Queue (m)	75.4	87.7	101.3	94.6	63.0	143.3	150.3	96.4	210.4	112.9	197.3	78.5
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	9	36	16			40		38	60		28	38
Queuing Penalty (veh)	26	108	71			40		142	111		171	125

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	66.0	89.4	92.5	105.0	36.2
Average Queue (m)	25.2	39.4	33.2	47.5	13.8
95th Queue (m)	61.1	81.6	83.6	97.2	28.0
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)			0	3	
Queuing Penalty (veh)			2	22	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	WB	WB	NB
Directions Served	TR	LT	T	LR
Maximum Queue (m)	14.0	28.7	66.6	43.8
Average Queue (m)	1.0	1.0	5.0	43.0
95th Queue (m)	6.0	9.4	31.0	46.7
Link Distance (m)	89.9	90.6	90.6	39.2
Upstream Blk Time (%)				99
Queuing Penalty (veh)				0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	65.3	60.4	27.6	36.1	92.2	100.8	28.5	65.4
Average Queue (m)	33.7	33.1	15.1	17.1	42.4	51.3	7.8	37.0
95th Queue (m)	54.7	50.9	25.9	30.6	78.6	87.0	17.4	60.3
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								0
Queuing Penalty (veh)								0
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	109.9	296.0	93.0	858.0	13.1	139.6	116.6	264.1	46.0
Average Queue (m)	13.8	152.1	92.9	790.0	2.8	63.7	44.0	213.6	14.1
95th Queue (m)	67.0	309.0	93.0	1056.1	10.0	115.8	92.1	327.4	48.3
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)				81				53	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		70	94	13	0			84	
Queuing Penalty (veh)		10	596	80	0			17	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	51.8	50.8	20.8	8.9	37.3	97.5	265.4	37.5
Average Queue (m)	32.6	31.0	8.0	1.4	14.6	32.3	256.2	37.5
95th Queue (m)	49.4	48.0	19.1	6.7	32.6	75.5	300.5	37.5
Link Distance (m)	45.7	45.7	498.4	498.4		163.6	258.4	
Upstream Blk Time (%)	2	0					27	
Queuing Penalty (veh)	3	0					275	
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)					0	6	0	77
Queuing Penalty (veh)					1	8	1	0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	R	L	TR	L	L
Maximum Queue (m)	20.0	128.3	133.2	88.0	68.8	142.9	149.1	147.5	105.9	128.6	40.5	50.9
Average Queue (m)	5.5	68.7	73.9	44.4	26.1	90.0	99.1	90.1	39.6	76.8	39.0	50.8
95th Queue (m)	14.4	112.9	119.8	103.5	65.3	141.2	148.3	146.8	93.8	121.5	44.4	50.9
Link Distance (m)		2295.8	2295.8			547.9	547.9	547.9		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)		25	30	0		17			7	49	38	70
Queuing Penalty (veh)		5	58	1		20			26	76	166	302

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	675.9	36.0
Average Queue (m)	673.6	15.6
95th Queue (m)	675.5	38.1
Link Distance (m)	671.9	
Upstream Blk Time (%)	17	
Queuing Penalty (veh)	213	
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	26	
Queuing Penalty (veh)	257	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LTR	R
Maximum Queue (m)	88.0	91.5	85.3	37.8	11.0	84.1	86.1	76.7	90.8	91.2	86.3
Average Queue (m)	54.6	49.5	44.2	18.1	0.4	47.6	52.4	46.7	49.0	58.3	52.4
95th Queue (m)	82.2	79.0	74.5	30.8	3.6	77.3	78.8	70.6	76.1	77.5	79.0
Link Distance (m)	118.7	118.7	118.7		547.9	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			2						4	10	
Queuing Penalty (veh)			7						21	33	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	188.8	157.1	132.1	940.3	940.3	940.3	461.2	470.0	95.0	8.0	94.0
Average Queue (m)	54.0	98.9	83.4	47.5	915.2	914.9	913.3	454.6	456.7	90.6	2.5	46.9
95th Queue (m)	63.0	176.5	160.5	91.4	1008.1	1007.7	1012.2	460.1	464.9	120.1	8.4	73.0
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					78	83	84	89	95			
Queuing Penalty (veh)					0	0	0	0	0			
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	71	6		1					96	13		7
Queuing Penalty (veh)	421	20		1					185	72		1

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	91.8
Average Queue (m)	50.2
95th Queue (m)	74.8
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	22.2	20.7	21.2	26.3	35.5	57.2	47.8	84.4	69.7	73.8
Average Queue (m)	12.8	10.7	9.6	11.6	22.7	25.0	20.3	50.1	40.5	38.2
95th Queue (m)	24.3	18.2	17.7	20.8	35.5	46.7	41.8	71.3	64.7	64.1
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	53.0	49.9	51.7	203.0	183.1	159.1	97.0	90.8	74.5
Average Queue (m)	23.5	29.4	13.7	130.7	115.6	62.5	40.3	36.7	27.8
95th Queue (m)	42.0	46.8	32.1	186.9	169.4	117.4	77.8	71.8	53.8
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									0
Queuing Penalty (veh)									0

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	45.3	42.0	29.7	29.7	28.4
Average Queue (m)	22.0	20.7	11.3	12.6	15.0
95th Queue (m)	40.8	38.9	22.4	28.1	22.4
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	42.6	47.3	53.2	76.2	41.7	33.9
Average Queue (m)	21.0	21.9	22.6	37.7	29.7	14.8
95th Queue (m)	38.0	35.7	42.4	67.0	46.2	27.5
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)					7	0
Queuing Penalty (veh)					0	0
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	180.8	181.8	51.6	54.8	77.1
Average Queue (m)	71.0	65.3	12.5	27.0	53.2
95th Queue (m)	146.8	147.9	34.6	51.2	90.3
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)	0	0	0	1	32
Queuing Penalty (veh)	1	1	2	3	104
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	74.5	80.0	53.2	64.4	34.6	66.0
Average Queue (m)	59.1	72.1	22.5	24.8	17.8	17.2
95th Queue (m)	90.4	86.2	42.3	49.9	31.3	41.1
Link Distance (m)	70.0	70.0	110.0	110.0	54.5	166.9
Upstream Blk Time (%)	20	67				
Queuing Penalty (veh)	88	291				
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	113.3	116.7	33.6	37.5	191.3	169.4	37.5
Average Queue (m)	61.3	113.3	29.1	33.7	70.7	166.5	29.9
95th Queue (m)	118.9	115.6	39.7	42.7	164.2	169.5	53.6
Link Distance (m)	110.0	110.0			671.9	163.6	
Upstream Blk Time (%)	2	47				33	
Queuing Penalty (veh)	8	202				293	
Storage Bay Dist (m)			30.0	30.0			30.0
Storage Blk Time (%)			6	17	5	81	0
Queuing Penalty (veh)			32	85	41	114	1

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	73.7	20.4
Average Queue (m)	13.9	10.6
95th Queue (m)	39.6	16.6
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	185.5	161.8	20.5
Average Queue (m)	44.2	40.0	11.9
95th Queue (m)	143.2	129.6	17.6
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)	7	3	
Queuing Penalty (veh)	11	6	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.7	22.0	23.5	22.3
Average Queue (m)	11.0	12.3	9.2	11.5
95th Queue (m)	17.5	18.4	14.7	18.0
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	11.3	16.2	21.5
Average Queue (m)	0.4	4.4	11.0
95th Queue (m)	3.7	13.9	20.0
Link Distance (m)	327.0	390.4	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	15.7	15.5
Average Queue (m)	1.1	7.9
95th Queue (m)	7.0	15.2
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB
Directions Served	LR
Maximum Queue (m)	9.1
Average Queue (m)	4.2
95th Queue (m)	11.7
Link Distance (m)	40.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	48.8	79.1	21.2	37.5	39.8	58.2	71.6	34.4	78.4	59.7
Average Queue (m)	17.6	31.4	9.6	19.1	22.3	29.0	39.5	16.1	46.5	31.5
95th Queue (m)	34.1	55.9	16.1	31.1	34.8	49.3	59.2	28.1	72.0	51.0
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)									1	
Queuing Penalty (veh)									1	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	63.0	48.2	32.9	60.3	60.1	86.6	75.4
Average Queue (m)	0.3	29.6	25.5	17.4	31.0	32.1	37.2	24.3
95th Queue (m)	3.0	51.4	42.7	30.8	50.4	52.0	72.4	52.3
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	B79
Directions Served	L	T	R	L	L	R	T	T	R	R	T	T
Maximum Queue (m)	183.9	236.5	53.4	157.9	219.7	216.2	72.8	75.1	66.7	71.9	22.1	10.0
Average Queue (m)	83.6	67.9	26.4	85.9	195.1	209.7	39.1	40.0	37.3	47.1	0.7	0.6
95th Queue (m)	154.2	155.4	47.4	199.1	257.8	213.6	63.3	68.3	61.9	69.5	7.3	4.3
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	552.0
Upstream Blk Time (%)					19	46						
Queuing Penalty (veh)					92	225						
Storage Bay Dist (m)	107.0		248.0	58.0								
Storage Blk Time (%)	7	3		0	7							
Queuing Penalty (veh)	37	21		0	10							

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB	SB
Directions Served	L	L	T	T
Maximum Queue (m)	41.3	53.0	175.0	143.4
Average Queue (m)	40.1	51.3	103.7	58.6
95th Queue (m)	45.2	59.2	177.5	119.9
Link Distance (m)			172.6	172.6
Upstream Blk Time (%)			1	
Queuing Penalty (veh)			8	
Storage Bay Dist (m)	30.0	30.0		
Storage Blk Time (%)	23	59	7	
Queuing Penalty (veh)	69	179	39	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.9	199.1	140.2	60.0	153.4	148.3	82.9	183.3	91.6	140.7	69.0
Average Queue (m)	57.5	73.3	87.1	62.5	23.1	85.6	91.9	49.4	99.7	43.7	51.7	48.2
95th Queue (m)	75.1	96.1	160.6	115.5	63.4	125.7	121.5	100.5	163.6	78.0	99.0	78.8
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	21	52	10			33		17	58		16	17
Queuing Penalty (veh)	53	132	48			23		66	77		79	50

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	214.0	211.2	94.6	99.6	55.0
Average Queue (m)	64.5	89.6	88.0	90.7	15.1
95th Queue (m)	169.9	207.4	107.7	106.2	38.5
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)	0	1	42	62	4
Queuing Penalty (veh)	2	8	203	298	0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	16.2	21.2	99.1	110.5	43.8
Average Queue (m)	0.5	4.1	83.0	87.6	32.8
95th Queue (m)	5.3	15.1	128.9	135.2	44.9
Link Distance (m)	89.9	89.9	90.6	90.6	39.2
Upstream Blk Time (%)			29	48	85
Queuing Penalty (veh)			129	212	0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	69.2	58.5	26.9	35.0	331.0	331.1	311.1	59.3
Average Queue (m)	38.6	36.7	11.1	14.3	190.0	193.9	42.1	25.0
95th Queue (m)	62.9	55.9	23.8	28.5	396.9	396.6	171.6	46.9
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)					16	17		1
Queuing Penalty (veh)					49	52		0
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	15.0	113.4	93.0	843.4	61.3	155.5	142.3	170.0	46.0
Average Queue (m)	2.6	57.9	91.6	494.4	7.9	77.2	49.8	86.2	16.1
95th Queue (m)	9.4	88.8	103.0	957.8	26.5	131.6	106.0	150.1	50.6
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)				22					
Queuing Penalty (veh)				0					
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		49	88	11	0			62	
Queuing Penalty (veh)		7	292	46	1			12	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	L	TR	LT	R
Maximum Queue (m)	40.6	42.9	8.3	37.3	82.9	265.9	37.5
Average Queue (m)	24.5	21.1	0.8	15.2	36.2	211.4	17.4
95th Queue (m)	38.6	37.1	4.9	32.1	73.9	348.6	44.6
Link Distance (m)	44.8	44.8	498.4		163.5	258.4	
Upstream Blk Time (%)	0	0				21	
Queuing Penalty (veh)	0	0				138	
Storage Bay Dist (m)				30.0			30.0
Storage Blk Time (%)				1	7	63	0
Queuing Penalty (veh)				3	9	68	1

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B73	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	T	L	TR	L
Maximum Queue (m)	64.8	120.1	135.5	88.0	68.8	157.7	159.7	157.5	23.8	105.9	223.4	40.5
Average Queue (m)	15.6	70.6	74.2	20.8	29.9	94.5	103.1	90.6	1.1	60.6	126.4	39.4
95th Queue (m)	48.6	107.7	113.4	62.1	66.9	149.7	151.6	151.7	8.7	128.0	205.7	42.7
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2	118.7		286.3	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0					40.0		30.0
Storage Blk Time (%)		26	28	0	1	18				3	68	47
Queuing Penalty (veh)		8	36	0	2	22				10	99	172

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	50.9	676.1	36.0
Average Queue (m)	50.8	618.3	13.4
95th Queue (m)	51.0	829.5	36.9
Link Distance (m)		671.7	
Upstream Blk Time (%)		13	
Queuing Penalty (veh)		125	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	65	24	
Queuing Penalty (veh)	237	181	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LTR	R
Maximum Queue (m)	84.5	81.7	85.0	21.4	6.4	136.7	132.1	125.9	75.2	79.2	70.6
Average Queue (m)	60.9	53.7	49.8	11.0	0.2	57.2	62.9	58.0	49.2	56.9	47.2
95th Queue (m)	85.8	81.4	78.3	21.1	2.1	106.0	108.6	102.2	72.2	75.2	68.0
Link Distance (m)	118.7	118.7	118.7		544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			2					2	3	8	
Queuing Penalty (veh)			5					6	16	20	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	235.2	238.4	134.0	410.0	407.5	384.5	183.1	201.5	95.0	21.0	40.8
Average Queue (m)	55.8	187.7	169.8	63.5	227.3	226.7	225.0	65.1	98.1	76.9	11.8	28.6
95th Queue (m)	55.9	230.0	216.1	105.3	390.7	382.0	373.1	124.3	152.2	103.4	21.1	41.2
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	83	13		3					61	22		
Queuing Penalty (veh)	460	42		5					133	112		

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	40.5
Average Queue (m)	25.8
95th Queue (m)	39.4
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	80.6	78.2	72.3	13.2	29.3	73.0	73.6	138.6	120.1	129.1
Average Queue (m)	45.8	48.4	32.4	2.6	10.0	13.7	12.2	85.8	70.7	60.9
95th Queue (m)	66.1	70.6	56.3	8.5	24.4	40.7	48.4	121.8	103.1	101.4
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		1	1							
Queuing Penalty (veh)		4	3							

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	46.2	51.0	40.6	389.8	396.5	401.1	102.5	103.4	74.2
Average Queue (m)	26.1	29.4	15.3	384.7	385.0	57.1	37.4	34.6	27.8
95th Queue (m)	41.9	47.9	31.5	387.5	389.2	275.5	73.6	70.3	55.6
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)				99	99	7			
Queuing Penalty (veh)				0	0	0			
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									0
Queuing Penalty (veh)									0

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	48.2	35.5	33.0	27.3	28.4
Average Queue (m)	25.5	16.9	12.4	12.8	17.5
95th Queue (m)	40.2	29.4	23.7	24.6	24.0
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	33.2	28.2	16.4	46.4	28.0	39.8
Average Queue (m)	15.6	12.3	3.5	21.4	7.6	14.9
95th Queue (m)	28.3	24.5	12.7	36.3	17.9	28.7
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						1
Queuing Penalty (veh)						1
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	78.8	49.4	41.8	61.2	74.7
Average Queue (m)	29.0	22.9	6.9	33.9	51.4
95th Queue (m)	51.8	41.7	24.6	57.2	84.7
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)				2	19
Queuing Penalty (veh)				6	67
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	73.5	78.6	83.1	86.3	47.3	54.5
Average Queue (m)	36.3	61.7	41.0	54.5	20.3	19.5
95th Queue (m)	76.8	97.3	78.3	87.6	36.3	41.3
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	5	45				
Queuing Penalty (veh)	17	155				
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	108.2	113.6	37.5	671.7	677.2	169.2	37.5
Average Queue (m)	55.6	98.0	36.2	439.5	427.1	157.3	26.0
95th Queue (m)	93.8	133.2	41.2	742.9	730.8	191.3	52.8
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	1	29		0	0	32	
Queuing Penalty (veh)	4	111		1	2	190	
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			20	64		76	0
Queuing Penalty (veh)			71	227		78	1

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	23.5	23.7
Average Queue (m)	12.0	12.0
95th Queue (m)	18.8	18.7
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	181.3	136.4	35.8
Average Queue (m)	27.1	22.2	14.7
95th Queue (m)	91.0	69.4	25.2
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	22.0	23.8	15.9	20.5
Average Queue (m)	13.7	13.2	10.4	12.3
95th Queue (m)	20.1	20.4	16.1	18.6
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	EB	WB	WB	NB
Directions Served	TR	LT	T	LR
Maximum Queue (m)	6.6	210.1	216.1	78.9
Average Queue (m)	0.2	42.0	37.7	29.4
95th Queue (m)	2.2	144.2	150.0	65.0
Link Distance (m)	327.0	390.4	390.4	77.7
Upstream Blk Time (%)				10
Queuing Penalty (veh)				0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	15.6	16.5
Average Queue (m)	2.9	7.8
95th Queue (m)	10.5	16.0
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	22.1	8.6
Average Queue (m)	7.7	0.3
95th Queue (m)	17.3	2.9
Link Distance (m)	40.7	99.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Appendix G-6:
2036 Future Total Conditions

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	L	L	T	TR	L	T	TR
Maximum Queue (m)	49.1	34.0	48.0	37.8	54.4	67.6	21.3	79.3	66.1
Average Queue (m)	15.2	17.2	18.7	23.5	23.3	34.1	10.5	44.3	31.8
95th Queue (m)	33.0	32.5	36.8	36.1	45.2	61.5	17.7	72.4	57.8
Link Distance (m)		704.1			126.7	126.7		312.8	312.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	146.0		89.0	89.0			71.0		
Storage Blk Time (%)								0	
Queuing Penalty (veh)								0	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	26.9	184.0	456.0	163.0	89.6	88.0	135.8	126.7
Average Queue (m)	2.7	126.3	236.9	56.5	50.7	45.4	93.0	72.8
95th Queue (m)	13.5	234.2	545.1	145.2	84.6	73.9	135.3	130.1
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)			32				1	0
Queuing Penalty (veh)			0				4	1
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		59	43					
Queuing Penalty (veh)		328	239					

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	T	L
Maximum Queue (m)	96.1	51.4	182.5	104.4	166.5	164.2	86.5	81.7	68.2	66.1	10.2	41.4
Average Queue (m)	56.6	28.3	86.3	46.1	75.5	117.5	55.9	54.4	32.1	38.7	0.6	40.9
95th Queue (m)	89.5	51.3	168.7	88.1	128.1	144.6	82.3	80.2	56.3	58.6	4.1	43.3
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0		248.0	58.0								30.0
Storage Blk Time (%)				1	14							49
Queuing Penalty (veh)				1	19							104

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (m)	53.0	178.6	172.6
Average Queue (m)	52.9	175.6	53.8
95th Queue (m)	53.0	181.4	128.1
Link Distance (m)		172.6	172.6
Upstream Blk Time (%)		52	0
Queuing Penalty (veh)		298	1
Storage Bay Dist (m)	30.0		
Storage Blk Time (%)	83	15	
Queuing Penalty (veh)	176	74	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.1	82.3	89.9	59.7	140.1	126.6	82.9	109.3	89.8	103.5	69.0
Average Queue (m)	42.8	52.7	44.3	46.7	18.4	44.3	59.7	23.2	67.1	37.6	47.9	42.2
95th Queue (m)	71.0	77.0	70.4	82.4	43.2	87.5	104.0	59.6	103.2	70.9	83.4	74.2
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	2	17	7		3	19		4	45		13	2
Queuing Penalty (veh)	6	44	40		5	20		15	29		47	7

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	42.4	64.5	66.6	62.0	22.9
Average Queue (m)	7.8	12.0	7.2	7.0	4.9
95th Queue (m)	28.4	42.7	31.8	32.7	16.9
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	36.2	42.6	29.7	31.0	39.7
Average Queue (m)	2.6	3.7	1.5	1.6	13.9
95th Queue (m)	14.6	21.4	11.4	11.7	29.3
Link Distance (m)	89.9	89.9	90.6	90.6	39.2
Upstream Blk Time (%)					1
Queuing Penalty (veh)					0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	57.7	58.9	15.3	21.7	68.6	74.2	22.3	28.0
Average Queue (m)	32.0	30.8	6.5	7.5	29.2	36.6	9.9	11.9
95th Queue (m)	50.6	47.6	14.7	18.1	52.8	59.9	19.7	24.8
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	19.8	107.9	93.0	136.3	14.6	110.9	107.2	197.7	46.0
Average Queue (m)	6.0	53.0	50.4	30.2	4.0	71.1	51.5	52.7	8.7
95th Queue (m)	16.4	79.4	88.4	84.7	11.1	108.5	89.0	118.6	32.8
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)	0	37	10	10	0			28	
Queuing Penalty (veh)	0	9	21	31	0			9	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	45.6	41.9	7.7	9.0	37.2	82.8	58.8	37.5
Average Queue (m)	27.3	23.3	0.6	2.1	8.0	31.6	9.3	17.7
95th Queue (m)	41.9	37.9	3.9	8.0	19.5	65.8	40.0	39.7
Link Distance (m)	45.6	45.6	498.4	498.4		163.5	258.4	
Upstream Blk Time (%)	1	0						
Queuing Penalty (veh)	1	0						
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)						4		3
Queuing Penalty (veh)						3		0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	R	L	TR	L	L
Maximum Queue (m)	64.8	109.5	106.3	87.0	68.6	85.4	76.4	91.0	58.6	94.5	40.5	50.9
Average Queue (m)	9.6	63.1	65.8	23.8	9.3	43.5	51.4	45.5	25.6	47.9	39.9	50.8
95th Queue (m)	30.2	101.0	93.7	75.9	29.4	74.1	76.3	80.6	49.0	79.8	42.2	50.9
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	0	25	27			6			2	16	34	59
Queuing Penalty (veh)	0	11	32			3			5	24	70	123

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	675.7	35.9
Average Queue (m)	458.0	6.3
95th Queue (m)	662.3	17.5
Link Distance (m)	671.7	
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	4	
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	7	
Queuing Penalty (veh)	57	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LTR	R
Maximum Queue (m)	84.9	80.7	62.5	32.4	20.9	45.2	85.2	91.5	71.9	48.1	47.8	38.1
Average Queue (m)	46.2	41.3	33.7	13.4	1.3	2.1	47.5	49.3	42.4	22.2	30.5	17.3
95th Queue (m)	67.6	70.0	55.5	24.8	9.0	15.8	80.9	79.4	67.8	38.0	41.7	30.0
Link Distance (m)	118.7	118.7	118.7		544.2	544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	150.5	153.2	81.4	87.4	93.8	121.8	134.3	143.2	95.0	20.2	50.7
Average Queue (m)	53.6	75.8	64.6	50.4	63.8	65.5	67.1	61.8	83.7	67.1	6.8	22.0
95th Queue (m)	67.0	129.7	120.2	82.0	88.7	91.7	103.1	112.5	127.7	102.2	15.9	38.6
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	43	17		0					47	6		0
Queuing Penalty (veh)	205	57		0					106	31		0

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	41.2
Average Queue (m)	21.8
95th Queue (m)	37.4
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	61.4	61.0	73.9	6.9	20.4	20.5	8.7	118.5	118.3	177.2
Average Queue (m)	31.5	37.9	38.9	1.5	6.4	5.2	0.3	62.4	62.9	76.7
95th Queue (m)	48.8	57.4	62.6	5.6	15.5	15.4	2.9	99.7	102.7	138.2
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		0	1							
Queuing Penalty (veh)		0	2							

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	32.7	38.4	22.6	401.1	389.8	389.8	58.0	46.5	40.0
Average Queue (m)	18.5	24.3	9.6	394.9	388.5	383.0	28.2	24.1	19.7
95th Queue (m)	30.7	36.0	18.4	397.6	389.0	401.3	47.8	40.2	34.7
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)				97	96	95			
Queuing Penalty (veh)				0	0	0			
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	33.9	27.9	22.3	33.3	34.5
Average Queue (m)	18.8	12.4	12.8	15.6	18.2
95th Queue (m)	31.0	24.1	22.3	28.8	27.7
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	41.3	33.7	16.9	47.6	16.9	39.8
Average Queue (m)	16.4	13.9	6.0	22.8	7.8	19.9
95th Queue (m)	33.5	25.8	15.6	38.4	16.1	34.2
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	41.2	40.9	43.2	54.6	65.6
Average Queue (m)	19.1	17.1	8.9	29.4	33.2
95th Queue (m)	34.2	32.9	24.6	52.1	54.1
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)				1	
Queuing Penalty (veh)				2	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	58.1	64.6	37.9	48.7	34.4	22.1
Average Queue (m)	24.2	33.8	15.5	20.4	15.4	11.8
95th Queue (m)	47.4	58.3	31.6	40.2	24.5	22.3
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)		0				
Queuing Penalty (veh)		0				
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	88.6	85.2	37.5	90.8	111.2	91.6	37.5
Average Queue (m)	40.0	40.8	28.2	41.9	44.1	32.6	11.4
95th Queue (m)	70.5	76.4	46.0	78.5	88.9	69.3	35.2
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			5	20		9	0
Queuing Penalty (veh)			10	39		6	0

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	22.0	30.3
Average Queue (m)	11.9	11.1
95th Queue (m)	18.9	18.5
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	28.7	20.5	30.8
Average Queue (m)	16.7	10.9	11.2
95th Queue (m)	27.6	16.0	20.0
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	30.8	15.6	9.0	28.0
Average Queue (m)	13.0	9.8	7.0	12.0
95th Queue (m)	21.6	12.7	12.9	20.7
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	6.7	15.7	34.3
Average Queue (m)	0.2	2.3	15.5
95th Queue (m)	2.2	9.6	25.6
Link Distance (m)	327.0	390.4	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (m)	16.7	5.8	22.1
Average Queue (m)	6.8	0.2	9.7
95th Queue (m)	15.6	1.9	18.4
Link Distance (m)	390.4	293.4	103.5
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB
Directions Served	LR
Maximum Queue (m)	9.1
Average Queue (m)	5.4
95th Queue (m)	12.7
Link Distance (m)	40.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	208.0	505.4	15.4	76.7	81.3	110.6	120.5	127.9	323.1	328.3
Average Queue (m)	83.4	131.9	5.1	44.6	48.9	57.4	71.2	62.4	229.1	218.6
95th Queue (m)	188.9	325.0	12.6	68.7	71.8	88.1	102.0	157.7	415.8	414.8
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)									40	25
Queuing Penalty (veh)									0	0
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)	19	0				1			65	
Queuing Penalty (veh)	92	1				4			66	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	183.8	444.8	163.0	128.6	111.6	136.3	126.7
Average Queue (m)	1.3	158.2	225.8	83.7	59.5	47.3	127.0	92.2
95th Queue (m)	6.4	213.3	453.4	185.7	97.2	83.3	149.7	152.0
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)			14				42	0
Queuing Penalty (veh)			0				188	1
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		88	66	1				
Queuing Penalty (veh)		497	373	5				

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	B79
Directions Served	L	T	R	L	L	R	T	T	R	R	T	T
Maximum Queue (m)	95.7	67.6	112.1	157.9	218.9	214.0	86.0	78.4	60.9	61.5	16.9	11.1
Average Queue (m)	55.0	28.9	63.6	106.1	189.9	204.0	55.9	51.6	38.3	45.5	0.6	0.7
95th Queue (m)	87.0	52.3	100.9	202.8	253.5	230.9	75.3	75.2	56.6	64.4	5.6	5.2
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	552.0
Upstream Blk Time (%)					14	25						
Queuing Penalty (veh)					93	170						
Storage Bay Dist (m)	107.0		248.0	58.0								
Storage Blk Time (%)				0	7							
Queuing Penalty (veh)				0	13							

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB	SB
Directions Served	L	L	T	T
Maximum Queue (m)	41.4	53.0	178.6	174.7
Average Queue (m)	41.1	52.8	176.4	58.7
95th Queue (m)	42.3	53.0	178.8	125.2
Link Distance (m)			172.6	172.6
Upstream Blk Time (%)			53	1
Queuing Penalty (veh)			395	4
Storage Bay Dist (m)	30.0	30.0		
Storage Blk Time (%)	39	78	21	
Queuing Penalty (veh)	125	248	126	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.3	81.9	132.2	84.3	60.0	128.6	146.5	82.9	229.1	406.3	445.5	69.0
Average Queue (m)	49.2	61.2	66.6	56.7	15.4	86.2	95.2	62.0	112.5	105.7	163.1	66.0
95th Queue (m)	74.0	87.5	115.8	83.9	45.9	124.0	132.2	103.6	191.0	255.9	331.6	77.3
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	7	34	16			45		36	58		28	51
Queuing Penalty (veh)	23	109	71			47		137	113		178	171

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	67.9	78.1	97.9	95.3	26.2
Average Queue (m)	22.0	35.7	73.5	83.1	11.3
95th Queue (m)	55.6	77.3	115.6	112.8	26.6
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)			9	21	
Queuing Penalty (veh)			61	141	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	WB	WB	NB
Directions Served	TR	LT	T	LR
Maximum Queue (m)	7.8	96.9	99.0	43.8
Average Queue (m)	0.4	26.1	40.8	41.2
95th Queue (m)	3.2	81.9	99.3	47.2
Link Distance (m)	89.9	90.6	90.6	39.2
Upstream Blk Time (%)		1	2	100
Queuing Penalty (veh)		5	12	0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	88.0	71.3	39.8	47.3	97.0	98.2	53.8	65.4
Average Queue (m)	40.0	38.7	17.3	18.6	53.2	54.5	11.3	45.3
95th Queue (m)	64.5	58.9	33.5	37.6	83.6	81.8	26.1	70.7
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)	0							3
Queuing Penalty (veh)	0							0
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	21.4	130.2	93.0	858.0	62.9	150.8	135.7	264.1	46.0
Average Queue (m)	4.5	74.5	92.9	845.3	9.0	74.8	62.1	217.7	12.5
95th Queue (m)	13.1	112.1	93.0	851.1	34.2	132.3	129.9	329.6	45.4
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)				91				62	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)	0	67	87	26	1			84	
Queuing Penalty (veh)	0	9	585	169	11			18	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	51.2	45.8	27.7	9.1	37.2	82.7	266.1	37.5
Average Queue (m)	30.1	27.2	5.3	0.6	10.0	25.9	206.8	36.8
95th Queue (m)	48.2	45.0	15.2	4.3	23.8	63.6	356.1	40.5
Link Distance (m)	45.6	45.6	498.4	498.4		163.5	258.4	
Upstream Blk Time (%)	4	1					22	
Queuing Penalty (veh)	5	1					223	
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)						4	0	67
Queuing Penalty (veh)						5	1	0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B73	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	T	L	TR	L
Maximum Queue (m)	64.9	126.1	133.5	88.0	68.7	131.5	363.2	134.3	5.8	106.0	305.5	40.5
Average Queue (m)	9.2	59.5	64.0	22.0	17.8	75.8	92.0	73.9	0.2	94.2	264.7	39.1
95th Queue (m)	35.4	103.6	109.0	65.8	53.7	120.1	184.4	129.4	1.9	143.3	372.8	45.6
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2	118.7		286.3	
Upstream Blk Time (%)											54	
Queuing Penalty (veh)											0	
Storage Bay Dist (m)	31.0			33.0	53.0					40.0		30.0
Storage Blk Time (%)		22	28	0	0	12				18	80	41
Queuing Penalty (veh)		5	57	0	0	15				68	133	187

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	51.0	676.2	36.0
Average Queue (m)	50.8	633.5	11.2
95th Queue (m)	51.0	818.8	32.2
Link Distance (m)		671.7	
Upstream Blk Time (%)		17	
Queuing Penalty (veh)		212	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	69	13	0
Queuing Penalty (veh)	312	131	0

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LTR	R
Maximum Queue (m)	88.6	91.2	109.6	94.1	12.7	11.9	78.5	80.7	77.9	88.0	102.6	106.8
Average Queue (m)	60.4	57.1	50.3	23.7	0.4	0.9	48.9	52.4	46.2	58.1	71.5	65.3
95th Queue (m)	84.1	82.6	82.0	56.6	4.2	5.5	74.2	78.0	69.7	82.4	95.9	102.8
Link Distance (m)	118.7	118.7	118.7		544.2	544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)			2							10	20	
Queuing Penalty (veh)			11							72	74	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	56.0	187.3	171.2	83.9	940.3	940.3	940.3	466.7	470.0	95.0	14.5	105.3
Average Queue (m)	51.6	96.6	81.4	45.4	931.2	931.5	932.2	447.9	456.2	79.7	4.8	52.7
95th Queue (m)	66.5	173.4	151.5	75.5	938.0	937.1	937.8	490.8	464.9	134.3	12.6	86.9
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					90	96	96	83	96			
Queuing Penalty (veh)					0	0	0	0	0			
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	61	9		0					97	15		11
Queuing Penalty (veh)	374	29		0					225	99		2

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	123.1
Average Queue (m)	58.0
95th Queue (m)	96.7
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	48.4	28.5	22.0	33.6	75.8	51.4	41.3	86.0	73.0	87.8
Average Queue (m)	13.3	13.2	9.6	12.3	31.1	30.6	24.2	48.0	43.8	41.5
95th Queue (m)	28.0	25.3	17.9	23.6	59.8	46.3	39.7	74.0	70.4	70.4
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)					0					
Queuing Penalty (veh)					0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	46.7	47.3	51.5	192.9	180.5	140.1	74.6	67.3	57.8
Average Queue (m)	26.4	31.8	15.7	126.8	109.6	56.9	35.0	31.6	25.9
95th Queue (m)	45.6	47.3	36.2	190.1	174.4	100.0	61.1	58.1	48.6
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	50.0	40.2	215.4	33.8	22.4
Average Queue (m)	25.8	19.6	26.4	12.1	12.8
95th Queue (m)	43.3	38.0	110.5	24.5	19.6
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	55.2	70.8	67.4	67.1	45.5	43.8
Average Queue (m)	21.6	21.9	20.4	25.7	31.4	22.1
95th Queue (m)	39.7	42.5	42.4	50.6	49.4	40.7
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)					22	12
Queuing Penalty (veh)					0	24
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	184.5	182.2	51.7	55.5	77.1
Average Queue (m)	92.8	92.4	16.7	31.8	49.5
95th Queue (m)	214.4	218.7	36.6	52.5	89.3
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)	9	11	0	1	33
Queuing Penalty (veh)	31	38	0	3	104
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	74.3	86.7	47.8	60.4	59.1	47.6
Average Queue (m)	54.2	66.5	21.4	24.9	30.7	23.6
95th Queue (m)	91.9	94.0	43.4	47.2	60.9	44.0
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	16	56			5	
Queuing Penalty (veh)	68	233			0	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	113.0	115.3	37.5	153.4	99.4	168.6	37.5
Average Queue (m)	58.9	107.5	30.0	42.9	38.1	158.2	24.4
95th Queue (m)	113.6	125.2	45.5	88.3	77.1	190.7	52.4
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	5	45				30	
Queuing Penalty (veh)	20	184				276	
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			6	14		77	0
Queuing Penalty (veh)			23	54		106	1

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	23.7	20.3
Average Queue (m)	11.2	10.2
95th Queue (m)	17.7	15.0
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	185.6	83.2	20.1
Average Queue (m)	41.2	20.5	12.1
95th Queue (m)	130.5	54.2	18.2
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)	2		
Queuing Penalty (veh)	3		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	20.8	22.1	21.5	20.3
Average Queue (m)	10.8	10.8	10.5	10.8
95th Queue (m)	17.1	17.8	17.9	16.3
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	16.5	23.1
Average Queue (m)	4.0	11.7
95th Queue (m)	13.3	20.4
Link Distance (m)	390.4	77.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	15.2	20.8
Average Queue (m)	1.7	8.6
95th Queue (m)	8.0	16.7
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB
Directions Served	LR
Maximum Queue (m)	16.5
Average Queue (m)	4.7
95th Queue (m)	12.8
Link Distance (m)	40.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	50.8	67.4	21.0	42.2	44.4	63.9	69.3	27.9	121.0	102.3
Average Queue (m)	24.0	37.0	8.3	18.4	23.5	28.3	37.4	15.9	53.5	43.0
95th Queue (m)	38.0	60.9	16.5	32.1	36.4	52.0	61.3	26.4	86.4	71.1
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)									3	
Queuing Penalty (veh)									5	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	156.0	146.6	65.6	79.6	62.0	136.3	126.7
Average Queue (m)	1.1	63.2	56.0	28.9	45.5	39.7	61.4	52.9
95th Queue (m)	5.7	132.1	108.2	52.9	69.1	57.3	124.9	110.9
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)							3	0
Queuing Penalty (veh)							12	1
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		19	5					
Queuing Penalty (veh)		141	36					

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	L	L
Maximum Queue (m)	160.4	163.3	84.8	158.0	220.3	213.3	66.6	67.5	81.1	85.9	41.4	53.0
Average Queue (m)	112.1	81.4	39.3	85.0	193.3	209.0	44.6	41.1	46.0	51.9	41.2	52.9
95th Queue (m)	153.9	128.7	68.5	195.0	254.5	211.6	66.8	65.0	76.8	78.5	41.7	52.9
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9		
Upstream Blk Time (%)					20	48						
Queuing Penalty (veh)					94	226						
Storage Bay Dist (m)	107.0		248.0	58.0							30.0	30.0
Storage Blk Time (%)	12	3		1	10						38	79
Queuing Penalty (veh)	87	22		1	12						122	250

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	178.0	172.5
Average Queue (m)	157.6	94.9
95th Queue (m)	199.1	172.1
Link Distance (m)	172.6	172.6
Upstream Blk Time (%)	18	0
Queuing Penalty (veh)	138	1
Storage Bay Dist (m)		
Storage Blk Time (%)	12	
Queuing Penalty (veh)	70	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.9	163.2	133.6	59.9	160.4	163.4	82.9	279.5	84.4	119.8	69.0
Average Queue (m)	61.9	76.4	94.2	70.9	20.2	101.8	109.1	53.8	155.1	50.6	47.7	51.2
95th Queue (m)	67.6	93.0	168.8	125.4	54.7	157.4	162.5	108.5	263.2	80.3	88.7	80.7
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	21	55	4		0	48		10	70		16	20
Queuing Penalty (veh)	57	149	20		0	36		39	95		83	60

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	206.1	214.3	94.1	98.5	43.1
Average Queue (m)	75.0	100.3	88.2	93.0	14.0
95th Queue (m)	166.2	190.2	103.5	95.3	29.6
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)	0	0	44	72	
Queuing Penalty (veh)	0	4	207	335	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	9.0	22.4	98.5	101.8	43.8
Average Queue (m)	0.3	2.8	90.9	98.4	35.3
95th Queue (m)	3.0	12.7	121.8	104.5	37.9
Link Distance (m)	89.9	89.9	90.6	90.6	39.2
Upstream Blk Time (%)			46	63	100
Queuing Penalty (veh)			195	267	0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	90.6	87.5	33.2	32.7	331.8	331.1	273.5	52.0
Average Queue (m)	47.1	43.8	10.4	10.9	274.9	278.0	26.0	23.2
95th Queue (m)	71.2	67.0	23.2	25.3	452.0	447.2	123.4	41.3
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)	0	0			43	47		
Queuing Penalty (veh)	0	0			126	137		
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	109.6	313.8	93.0	843.4	19.4	126.2	114.8	256.8	46.0
Average Queue (m)	17.6	128.5	72.9	449.5	3.9	57.5	36.8	157.7	9.4
95th Queue (m)	77.5	284.5	113.9	1074.1	13.8	95.5	78.8	325.1	39.3
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)				40				42	
Queuing Penalty (veh)				0				0	
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		63	58	12	0			65	
Queuing Penalty (veh)		9	202	52	2			13	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	L	TR	LT	R
Maximum Queue (m)	38.3	41.3	8.5	37.4	68.0	264.4	37.5
Average Queue (m)	20.3	15.7	1.0	12.2	26.6	199.5	22.3
95th Queue (m)	34.4	29.6	5.2	27.2	62.8	351.7	50.8
Link Distance (m)	44.8	44.8	498.4		163.5	258.4	
Upstream Blk Time (%)		0				35	
Queuing Penalty (veh)		0				241	
Storage Bay Dist (m)				30.0			30.0
Storage Blk Time (%)				2	4	69	0
Queuing Penalty (veh)				10	5	71	0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B73	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	T	L	TR	L
Maximum Queue (m)	64.7	110.3	122.1	88.0	68.9	170.6	165.3	163.9	8.8	105.9	290.8	40.5
Average Queue (m)	15.4	72.8	77.5	31.0	31.0	91.8	100.0	95.6	0.6	63.9	139.2	40.1
95th Queue (m)	49.0	107.9	108.1	85.8	71.0	152.4	159.0	157.9	4.2	128.6	277.3	41.5
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2	118.7		286.3	
Upstream Blk Time (%)											3	
Queuing Penalty (veh)											0	
Storage Bay Dist (m)	31.0			33.0	53.0					40.0		30.0
Storage Blk Time (%)	0	25	28	1	0	24				6	54	45
Queuing Penalty (veh)	0	9	38	2	0	30				24	83	170

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	51.0	677.4	35.9
Average Queue (m)	50.8	647.4	7.5
95th Queue (m)	50.9	795.5	26.3
Link Distance (m)		671.7	
Upstream Blk Time (%)		27	
Queuing Penalty (veh)		247	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	85	15	
Queuing Penalty (veh)	322	115	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LTR	R
Maximum Queue (m)	92.5	90.1	89.2	27.6	6.4	11.4	120.1	125.4	98.1	95.4	108.3	129.9
Average Queue (m)	68.2	67.1	62.9	13.2	0.2	0.6	56.5	61.6	56.6	58.7	72.1	64.8
95th Queue (m)	92.4	88.2	90.3	24.6	2.1	4.3	95.8	100.0	86.1	83.3	97.6	105.3
Link Distance (m)	118.7	118.7	118.7		544.2	544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)			7						0	10	23	
Queuing Penalty (veh)			18						2	57	70	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	149.9	131.8	124.8	943.6	936.3	929.0	171.2	207.0	95.0	21.0	54.1
Average Queue (m)	53.2	86.4	68.8	43.6	639.4	626.6	601.1	78.0	106.2	83.1	10.1	35.5
95th Queue (m)	63.7	147.4	127.2	88.9	972.3	956.7	920.3	141.3	162.2	109.8	20.5	53.0
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					11	9	8					
Queuing Penalty (veh)					0	0	0					
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	52	13		0					67	30		1
Queuing Penalty (veh)	298	42		0					178	180		1

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	49.8
Average Queue (m)	32.8
95th Queue (m)	50.7
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	92.1	99.3	88.1	13.2	57.9	72.3	71.1	158.6	144.6	122.5
Average Queue (m)	61.3	66.6	43.0	3.5	16.9	20.7	15.5	100.7	86.5	82.7
95th Queue (m)	83.8	91.9	73.8	9.9	45.6	58.3	53.2	155.5	136.7	126.7
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		9	3		0					
Queuing Penalty (veh)		46	11		0					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	59.0	55.2	52.9	389.8	397.1	395.6	71.5	63.7	53.3
Average Queue (m)	32.1	34.8	20.2	383.1	382.3	386.8	38.5	37.2	29.2
95th Queue (m)	46.7	48.7	39.1	389.1	389.8	390.5	59.8	57.2	47.1
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)				99	98	94			
Queuing Penalty (veh)				0	0	0			
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	48.0	46.7	29.0	22.1	33.8
Average Queue (m)	23.6	15.9	10.5	10.5	18.3
95th Queue (m)	42.7	40.3	21.5	21.8	31.0
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	33.4	41.4	20.9	54.5	28.5	39.8
Average Queue (m)	15.6	16.9	5.4	22.6	10.2	15.7
95th Queue (m)	27.5	33.2	16.0	42.3	21.3	27.0
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	134.2	128.4	57.6	65.6	74.7
Average Queue (m)	46.1	43.4	10.1	31.3	57.7
95th Queue (m)	94.8	100.2	33.0	59.6	88.8
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)			0	1	33
Queuing Penalty (veh)			1	5	109
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	73.5	75.9	82.1	88.8	54.6	53.2
Average Queue (m)	35.3	61.8	33.3	42.7	22.9	14.9
95th Queue (m)	76.5	96.6	70.8	85.3	44.1	32.8
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	3	50			0	
Queuing Penalty (veh)	9	166			0	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	112.8	115.4	37.5	425.8	410.4	169.1	37.5
Average Queue (m)	68.7	100.5	35.2	249.0	214.4	154.1	16.0
95th Queue (m)	120.7	132.6	43.6	434.4	421.0	199.0	44.1
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	3	34				46	
Queuing Penalty (veh)	11	124				279	
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			29	62		79	0
Queuing Penalty (veh)			100	212		78	0

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	85.5	16.5
Average Queue (m)	19.2	10.1
95th Queue (m)	56.0	13.7
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)	7	
Queuing Penalty (veh)	20	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	184.8	161.3	18.7
Average Queue (m)	62.5	41.2	12.3
95th Queue (m)	174.6	121.5	17.8
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)	11	5	
Queuing Penalty (veh)	27	12	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.4	40.0	21.2	16.8
Average Queue (m)	11.8	14.2	10.0	11.0
95th Queue (m)	19.0	25.6	15.2	16.4
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	EB	WB	WB	NB
Directions Served	TR	LT	T	LR
Maximum Queue (m)	6.5	301.7	302.4	88.0
Average Queue (m)	0.6	113.0	116.0	56.5
95th Queue (m)	3.7	264.0	275.1	107.8
Link Distance (m)	327.0	390.4	390.4	77.7
Upstream Blk Time (%)				60
Queuing Penalty (veh)				0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	22.1	16.3
Average Queue (m)	1.6	6.4
95th Queue (m)	9.3	14.6
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	15.5	8.6
Average Queue (m)	6.9	0.3
95th Queue (m)	15.0	2.8
Link Distance (m)	40.7	99.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Appendix G-7:
2041 Future Total Conditions

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	34.4	39.3	7.2	31.5	31.8	81.6	100.2	33.2	76.6	65.4
Average Queue (m)	16.9	19.2	0.2	12.3	20.5	30.1	46.0	13.9	43.7	36.7
95th Queue (m)	33.2	33.7	2.4	26.0	30.6	62.5	79.7	26.3	68.5	58.8
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)									1	
Queuing Penalty (veh)									1	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	16.4	183.9	459.4	163.0	80.8	77.2	123.4	119.3
Average Queue (m)	1.7	170.6	365.6	106.3	48.9	45.4	60.4	41.4
95th Queue (m)	9.2	219.7	596.7	209.6	76.6	73.9	100.5	87.9
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)			42				0	
Queuing Penalty (veh)			0				0	
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		88	63	0				
Queuing Penalty (veh)		672	480	0				

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B79	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	T	L
Maximum Queue (m)	139.7	71.5	190.2	106.6	161.5	176.4	84.3	83.0	76.8	71.7	13.6	41.4
Average Queue (m)	79.0	34.6	93.2	56.9	85.2	118.0	61.4	62.9	31.3	36.6	0.5	41.1
95th Queue (m)	129.2	60.7	156.6	107.0	146.2	151.9	81.9	85.8	53.4	55.9	4.5	41.8
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	107.0		248.0	58.0								30.0
Storage Blk Time (%)	3			6	28							52
Queuing Penalty (veh)	22			8	37							115

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (m)	53.0	179.1	168.3
Average Queue (m)	52.9	176.4	74.8
95th Queue (m)	53.0	179.3	171.1
Link Distance (m)		172.6	172.6
Upstream Blk Time (%)		49	0
Queuing Penalty (veh)		333	1
Storage Bay Dist (m)	30.0		
Storage Blk Time (%)	83	18	
Queuing Penalty (veh)	185	90	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.9	158.2	152.3	59.8	95.0	123.0	82.7	202.5	72.0	96.0	69.0
Average Queue (m)	44.5	60.8	59.5	55.8	16.9	46.1	61.3	25.8	82.7	31.1	53.8	37.3
95th Queue (m)	75.3	89.9	123.1	101.6	45.1	84.6	100.8	69.3	151.4	59.7	84.1	72.3
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	5	24	7		0	18		1	49		15	2
Queuing Penalty (veh)	14	67	39		0	20		2	34		55	6

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	62.3	79.6	60.3	53.4	31.7
Average Queue (m)	18.1	37.4	16.5	16.3	11.0
95th Queue (m)	45.3	74.9	42.8	42.6	24.7
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	LT	T	LR
Maximum Queue (m)	16.2	28.7	16.4	15.5	43.8
Average Queue (m)	1.9	4.6	1.2	1.4	11.9
95th Queue (m)	8.7	17.8	7.2	7.6	26.8
Link Distance (m)	89.9	89.9	90.6	90.6	39.2
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	59.5	60.7	14.3	21.2	43.1	53.4	28.0	21.5
Average Queue (m)	26.6	26.4	3.8	5.4	24.6	30.1	10.5	8.2
95th Queue (m)	42.9	44.3	11.5	15.3	39.6	48.7	18.2	17.2
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	27.8	77.6	92.9	189.6	14.9	115.2	95.0	135.2	46.0
Average Queue (m)	6.2	52.0	55.4	52.8	5.8	71.9	46.4	54.7	7.5
95th Queue (m)	18.6	77.9	100.1	143.9	13.2	107.3	81.9	112.1	32.1
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)	1	36	22	14	0			38	
Queuing Penalty (veh)	3	8	49	44	0			12	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	46.4	39.4	8.5	8.8	21.3	156.8	90.0	37.4
Average Queue (m)	25.3	22.4	1.8	0.9	8.6	30.7	11.3	20.8
95th Queue (m)	39.0	35.3	7.0	5.1	18.1	86.6	49.9	40.5
Link Distance (m)	45.6	45.6	498.4	498.4		163.5	258.4	
Upstream Blk Time (%)	1							
Queuing Penalty (veh)	1							
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)						5	0	4
Queuing Penalty (veh)						3	0	0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	R	L	TR	L	L
Maximum Queue (m)	64.7	107.1	127.2	87.9	68.8	115.9	117.2	122.1	105.6	112.8	40.5	51.0
Average Queue (m)	12.1	50.5	53.8	15.8	14.5	42.9	53.4	43.7	23.0	62.1	40.2	50.8
95th Queue (m)	32.3	90.5	94.8	49.7	35.5	83.3	91.8	88.3	53.1	96.7	40.8	51.0
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2		286.3		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0				40.0		30.0	30.0
Storage Blk Time (%)	0	21	23	0		4			1	29	31	60
Queuing Penalty (veh)	1	10	29	0		2			3	45	68	130

Intersection: 10: King Road & Plains Road East

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	539.5	18.4
Average Queue (m)	383.9	5.4
95th Queue (m)	499.9	13.8
Link Distance (m)	671.7	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		26.0
Storage Blk Time (%)	6	
Queuing Penalty (veh)	51	

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	T	L	LTR	R
Maximum Queue (m)	84.3	72.0	64.5	37.8	53.7	30.4	90.4	88.7	79.0	47.0	47.4	45.9
Average Queue (m)	49.0	40.9	36.2	13.1	2.5	1.0	48.0	50.6	46.8	26.1	31.0	19.1
95th Queue (m)	73.0	67.7	57.5	27.7	19.5	10.0	83.7	85.8	82.6	44.3	44.5	36.1
Link Distance (m)	118.7	118.7	118.7		544.2	544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)				67.0						56.0		
Storage Blk Time (%)			0						0			
Queuing Penalty (veh)			0						0			

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	147.2	117.7	95.7	100.1	92.7	110.7	199.7	248.7	95.0	14.4	53.4
Average Queue (m)	53.0	72.3	63.4	55.1	63.9	66.4	70.4	93.6	115.3	81.1	4.1	23.5
95th Queue (m)	62.3	130.6	113.4	90.5	89.7	90.4	101.4	167.6	198.3	109.2	12.2	40.2
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	50	15		1					62	19		0
Queuing Penalty (veh)	244	49		1					167	122		0

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	40.2
Average Queue (m)	22.5
95th Queue (m)	36.1
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	102.8	104.7	122.9	32.6	97.2	102.4	85.2	195.1	218.1	243.0
Average Queue (m)	41.7	49.0	60.3	8.0	45.0	45.4	33.2	106.3	128.1	148.7
95th Queue (m)	69.4	74.0	100.1	19.1	73.0	70.0	57.0	171.1	210.7	230.9
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		2	10		2		0			
Queuing Penalty (veh)		11	27		1		0			

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T	R
Maximum Queue (m)	39.2	43.7	40.6	91.4	69.8	55.3	68.9	52.9	52.9	61.5
Average Queue (m)	21.8	25.1	13.9	53.1	37.3	16.0	35.3	30.4	23.2	2.0
95th Queue (m)	34.4	39.7	28.9	78.7	66.6	36.8	56.4	47.5	39.4	20.3
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			93.0							80.0
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	41.4	23.6	29.4	33.8	25.8
Average Queue (m)	18.5	11.3	13.0	14.8	16.1
95th Queue (m)	32.9	22.6	23.5	28.4	23.4
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	40.0	30.3	23.0	71.4	16.7	39.8
Average Queue (m)	17.6	11.6	4.5	23.5	6.4	18.3
95th Queue (m)	31.8	22.9	14.1	46.7	15.8	31.1
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	53.4	43.9	37.0	58.9	72.6
Average Queue (m)	19.4	14.8	8.7	31.1	34.0
95th Queue (m)	35.5	28.1	23.9	55.7	55.5
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)				1	0
Queuing Penalty (veh)				4	1
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	70.0	55.8	43.5	48.2	27.9	34.2
Average Queue (m)	23.2	27.8	14.6	21.6	16.8	14.1
95th Queue (m)	43.8	49.4	34.3	45.3	26.4	23.6
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	103.1	73.0	37.5	137.1	147.2	93.3	37.5
Average Queue (m)	46.6	34.7	26.8	42.9	45.0	41.6	11.6
95th Queue (m)	84.3	59.1	45.0	89.4	100.8	71.8	32.9
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	0						
Queuing Penalty (veh)	0						
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			4	13		13	0
Queuing Penalty (veh)			7	24		8	0

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	28.1	23.9
Average Queue (m)	13.0	11.2
95th Queue (m)	21.8	17.4
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	29.7	23.8	21.9
Average Queue (m)	17.3	12.7	11.1
95th Queue (m)	26.5	20.5	17.3
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	27.6	23.9	16.0	23.8
Average Queue (m)	13.1	10.6	7.2	12.7
95th Queue (m)	21.2	16.0	14.7	20.1
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	9.3	28.5
Average Queue (m)	1.2	13.1
95th Queue (m)	6.4	22.5
Link Distance (m)	390.4	77.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	27.6	22.1
Average Queue (m)	7.1	8.4
95th Queue (m)	20.9	15.8
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB
Directions Served	LR
Maximum Queue (m)	15.6
Average Queue (m)	6.7
95th Queue (m)	14.3
Link Distance (m)	40.7
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	148.9	130.9	14.8	67.7	70.2	98.2	118.5	127.9	307.6	287.9
Average Queue (m)	57.7	75.2	5.5	42.2	47.1	54.4	69.7	61.2	161.8	149.0
95th Queue (m)	116.9	112.3	13.3	63.3	68.2	89.9	108.1	151.2	304.4	281.7
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)									0	
Queuing Penalty (veh)									0	
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)	1	0				0			52	
Queuing Penalty (veh)	4	0				2			55	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	183.9	452.1	163.0	111.1	73.2	136.5	131.6
Average Queue (m)	2.2	168.1	350.5	122.9	55.5	48.9	117.2	96.7
95th Queue (m)	8.5	210.6	584.8	210.7	92.7	74.3	151.2	153.1
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)			34				21	2
Queuing Penalty (veh)			0				95	8
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		88	66	3				
Queuing Penalty (veh)		684	513	26				

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	L	L
Maximum Queue (m)	183.9	460.4	303.0	157.9	221.6	213.7	95.6	113.9	92.2	87.9	41.4	53.0
Average Queue (m)	149.8	312.4	273.2	120.9	197.3	208.2	65.0	67.2	43.0	47.3	40.9	52.8
95th Queue (m)	222.8	555.8	326.7	221.7	246.0	211.6	90.3	97.7	69.8	71.5	43.5	53.0
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9		
Upstream Blk Time (%)		10			18	27		0				
Queuing Penalty (veh)		0			120	177		0				
Storage Bay Dist (m)	107.0		248.0	58.0							30.0	30.0
Storage Blk Time (%)	10	22	25	0	12						38	78
Queuing Penalty (veh)	93	265	201	0	22						125	260

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	179.6	177.9
Average Queue (m)	176.5	96.5
95th Queue (m)	179.2	177.2
Link Distance (m)	172.6	172.6
Upstream Blk Time (%)	48	1
Queuing Penalty (veh)	411	8
Storage Bay Dist (m)		
Storage Blk Time (%)	26	
Queuing Penalty (veh)	159	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.4	81.9	323.1	311.8	60.0	143.4	142.4	82.9	227.4	375.5	397.8	69.0
Average Queue (m)	58.1	74.5	135.7	122.1	20.2	88.0	96.6	64.9	131.0	119.3	212.7	68.5
95th Queue (m)	74.8	94.6	295.6	279.8	57.7	128.4	133.6	105.9	223.7	250.5	342.0	72.6
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)			10	3								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	28	66	10		0	41		46	63		39	55
Queuing Penalty (veh)	95	222	46		0	45		177	128		254	186

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	57.0	81.1	94.0	93.7	45.5
Average Queue (m)	18.6	34.1	68.0	74.6	13.1
95th Queue (m)	44.5	72.3	115.7	111.9	33.1
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)			14	26	
Queuing Penalty (veh)			94	175	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	WB	WB	NB
Directions Served	TR	LT	T	LR
Maximum Queue (m)	16.6	94.9	102.1	43.8
Average Queue (m)	1.1	39.8	47.2	38.3
95th Queue (m)	7.0	105.6	121.4	45.6
Link Distance (m)	89.9	90.6	90.6	39.2
Upstream Blk Time (%)		3	9	100
Queuing Penalty (veh)		17	50	0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	77.2	74.4	45.6	41.7	82.4	77.2	22.8	65.5
Average Queue (m)	44.0	43.6	17.5	19.1	43.9	50.7	9.2	44.5
95th Queue (m)	70.9	68.1	32.9	37.9	73.9	78.8	18.0	70.2
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								6
Queuing Penalty (veh)								0
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	109.9	366.3	93.0	850.7	62.9	118.8	106.9	271.4	45.9
Average Queue (m)	13.9	157.7	92.8	832.1	6.0	63.8	47.3	196.4	8.4
95th Queue (m)	66.9	358.9	93.2	911.7	25.3	106.8	102.1	312.0	35.5
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)		14		85				42	
Queuing Penalty (veh)		0		0				0	
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		74	86	16	0			81	
Queuing Penalty (veh)		10	611	110	3			18	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	L	TR	L	TR	L	TR
Maximum Queue (m)	46.3	44.2	14.9	8.9	37.2	85.9	264.3	37.5
Average Queue (m)	29.2	25.9	4.0	1.7	14.7	30.4	227.3	37.5
95th Queue (m)	48.5	43.0	12.4	7.5	34.1	69.0	336.4	37.5
Link Distance (m)	45.6	45.6	498.4	498.4		163.5	258.4	
Upstream Blk Time (%)	3	0					26	
Queuing Penalty (veh)	3	0					278	
Storage Bay Dist (m)					30.0			30.0
Storage Blk Time (%)					0	5	1	69
Queuing Penalty (veh)					0	6	13	0

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B73	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	T	L	TR	L
Maximum Queue (m)	64.8	101.0	124.5	88.0	68.9	248.4	212.1	207.5	12.2	105.9	302.1	40.5
Average Queue (m)	7.6	71.4	79.8	41.1	20.4	85.0	86.0	73.7	0.4	95.7	292.9	39.5
95th Queue (m)	27.6	108.7	117.9	103.7	57.3	164.3	139.8	140.2	4.0	133.1	298.4	44.1
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2	118.7		286.3	
Upstream Blk Time (%)											81	
Queuing Penalty (veh)											0	
Storage Bay Dist (m)	31.0			33.0	53.0					40.0		30.0
Storage Blk Time (%)		26	33			16				23	82	31
Queuing Penalty (veh)		7	72			20				88	142	148

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	51.0	677.0	36.0
Average Queue (m)	50.8	664.8	12.6
95th Queue (m)	50.9	720.7	34.2
Link Distance (m)		671.7	
Upstream Blk Time (%)		22	
Queuing Penalty (veh)		269	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	71	23	0
Queuing Penalty (veh)	341	222	1

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	L	LTR	R
Maximum Queue (m)	109.9	106.6	89.2	41.8	97.7	96.8	82.0	122.4	136.3	140.2
Average Queue (m)	66.0	59.6	50.6	19.3	55.0	58.2	47.3	70.8	83.9	81.4
95th Queue (m)	94.7	92.2	84.5	36.2	82.7	83.9	69.3	105.0	121.6	130.2
Link Distance (m)	118.7	118.7	118.7		289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)				67.0				56.0		
Storage Blk Time (%)			4				0	17	25	
Queuing Penalty (veh)			22				1	140	115	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	187.6	145.3	137.8	940.3	940.3	940.3	461.2	466.6	95.0	20.7	103.0
Average Queue (m)	54.0	102.6	90.6	55.1	932.0	930.5	930.3	454.9	456.0	80.4	2.9	48.7
95th Queue (m)	62.7	174.2	158.5	103.6	938.0	939.2	935.1	459.2	461.5	134.0	11.2	83.4
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)					87	92	93	93	96			
Queuing Penalty (veh)					0	0	0	0	0			
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	65	8		0					97	11		8
Queuing Penalty (veh)	414	28		0					272	89		1

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	104.7
Average Queue (m)	54.9
95th Queue (m)	85.0
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	35.0	41.5	23.7	38.4	47.5	78.0	60.9	113.2	89.0	99.1
Average Queue (m)	13.9	15.2	10.5	11.8	25.7	36.3	28.1	57.2	45.7	45.8
95th Queue (m)	26.3	31.2	19.1	24.0	42.6	60.5	53.6	92.4	84.3	89.7
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	50.7	65.1	53.2	389.8	389.8	404.4	120.1	132.1	123.0
Average Queue (m)	27.8	35.7	17.7	274.1	257.3	215.3	49.2	46.5	39.8
95th Queue (m)	42.2	51.7	39.6	432.6	416.1	390.2	86.3	84.6	76.1
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)				2	1	3			
Queuing Penalty (veh)				0	0	0			
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									1
Queuing Penalty (veh)									3

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	55.6	64.0	27.7	29.4	37.9
Average Queue (m)	24.4	19.1	10.2	11.3	12.4
95th Queue (m)	41.9	42.0	20.5	25.4	22.7
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	192.6	194.3	47.3	67.3	39.7	40.6
Average Queue (m)	53.5	57.9	20.4	26.7	28.3	23.1
95th Queue (m)	146.5	149.8	38.6	49.5	44.3	44.4
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)	4	4			32	17
Queuing Penalty (veh)	10	11			0	31
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	194.7	181.9	49.0	55.2	74.5
Average Queue (m)	113.9	112.3	16.7	30.3	55.3
95th Queue (m)	229.5	226.9	36.9	56.2	95.9
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)	25	25	0	1	50
Queuing Penalty (veh)	81	81	0	3	152
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	74.9	76.2	50.1	52.7	59.1	55.2
Average Queue (m)	54.4	66.0	27.1	25.6	20.8	23.7
95th Queue (m)	85.3	95.7	46.3	45.4	40.0	45.7
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	12	65			0	
Queuing Penalty (veh)	47	258			0	
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	115.6	115.2	37.5	83.9	85.9	168.9	37.5
Average Queue (m)	50.7	105.0	30.7	42.3	33.7	155.1	23.0
95th Queue (m)	103.4	130.2	43.5	74.2	58.9	208.0	51.7
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)	0	46				31	
Queuing Penalty (veh)	1	181				295	
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			8	15		78	0
Queuing Penalty (veh)			29	57		105	1

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	85.6	16.4
Average Queue (m)	22.6	9.5
95th Queue (m)	65.5	13.8
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)	10	
Queuing Penalty (veh)	21	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	182.3	159.8	23.4
Average Queue (m)	79.5	43.7	10.5
95th Queue (m)	194.0	120.5	16.0
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)	16	3	
Queuing Penalty (veh)	25	5	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	35.6	16.7	20.3	21.8
Average Queue (m)	13.6	10.8	8.9	11.3
95th Queue (m)	23.6	15.6	17.3	17.6
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	15.6	21.3
Average Queue (m)	3.9	11.2
95th Queue (m)	12.3	19.4
Link Distance (m)	390.4	77.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	15.8	15.9
Average Queue (m)	1.6	7.0
95th Queue (m)	8.9	13.8
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	9.1	14.8
Average Queue (m)	4.2	1.1
95th Queue (m)	11.6	6.7
Link Distance (m)	40.7	99.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 1: Waterdown Road & Hwy 403 WB On-Ramp/North Service Road

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	L	T	TR	L	T	TR
Maximum Queue (m)	60.0	57.0	15.9	37.4	46.3	60.8	72.2	32.0	90.5	72.5
Average Queue (m)	21.6	29.0	9.1	22.3	27.0	30.1	41.3	12.9	48.3	39.5
95th Queue (m)	39.3	46.2	16.5	38.0	41.8	57.4	67.8	23.1	76.6	63.4
Link Distance (m)		704.1				126.7	126.7		312.8	312.8
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	146.0		134.0	89.0	89.0			71.0		
Storage Blk Time (%)									2	
Queuing Penalty (veh)									2	

Intersection: 2: Waterdown Road & Panin Road/Hwy 403 WB Off-Ramp

Movement	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	LTR	L	L	R	LT	T	T	TR
Maximum Queue (m)	9.1	97.6	103.7	37.4	90.3	70.5	136.7	126.7
Average Queue (m)	1.6	52.5	31.5	15.2	51.3	41.0	83.2	59.2
95th Queue (m)	7.0	91.3	70.1	28.0	81.0	65.1	151.5	126.7
Link Distance (m)	45.7		440.2		172.6	172.6	126.7	126.7
Upstream Blk Time (%)							6	0
Queuing Penalty (veh)							20	1
Storage Bay Dist (m)		84.0		91.0				
Storage Blk Time (%)		3	2					
Queuing Penalty (veh)		12	7					

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	R	T	T	R	R	L	L
Maximum Queue (m)	72.6	60.1	40.7	157.6	204.3	208.6	81.6	79.4	61.2	78.6	41.4	53.0
Average Queue (m)	43.8	38.2	16.8	35.6	71.3	112.7	46.8	44.2	29.4	42.8	41.0	52.9
95th Queue (m)	69.6	62.8	36.3	101.2	151.5	176.8	70.2	66.1	49.2	64.3	42.9	53.0
Link Distance (m)		449.6			206.4	206.4	113.9	113.9	113.9	113.9		
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	1						
Storage Bay Dist (m)	107.0		248.0	58.0							30.0	30.0
Storage Blk Time (%)				0	2						48	78
Queuing Penalty (veh)				0	2						137	223

Intersection: 3: Waterdown Road & Hwy 403 EB Off-Ramp/Alayne Bryk Way

Movement	SB	SB
Directions Served	T	T
Maximum Queue (m)	178.6	172.6
Average Queue (m)	171.1	101.5
95th Queue (m)	198.0	191.4
Link Distance (m)	172.6	172.6
Upstream Blk Time (%)	30	0
Queuing Penalty (veh)	168	1
Storage Bay Dist (m)		
Storage Blk Time (%)	17	
Queuing Penalty (veh)	94	

Intersection: 4: Waterdown Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (m)	63.3	81.9	145.7	122.6	59.9	141.2	147.6	82.9	152.5	100.5	176.4	69.0
Average Queue (m)	55.3	70.1	56.1	47.3	27.0	88.7	99.5	37.9	75.5	59.6	80.1	63.2
95th Queue (m)	77.9	93.2	118.0	81.4	69.0	129.5	142.8	79.2	126.1	96.4	148.4	80.7
Link Distance (m)			307.2	307.2		2295.8	2295.8		293.1	552.0	552.0	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0	45.0			33.0			25.0				40.0
Storage Blk Time (%)	15	43	3			38		10	51		21	25
Queuing Penalty (veh)	37	103	14			26		38	63		100	70

Intersection: 5: Aldershot GO West Access & Alayne Bryk Way

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	LR
Maximum Queue (m)	105.1	123.5	71.4	67.1	20.4
Average Queue (m)	31.0	47.6	15.5	22.3	8.2
95th Queue (m)	77.0	109.5	48.0	51.4	16.9
Link Distance (m)	206.4	206.4	89.9	89.9	53.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: Aldershot GO Centre Access & Alayne Bryk Way

Movement	EB	EB	NB
Directions Served	T	TR	LR
Maximum Queue (m)	16.1	25.0	49.6
Average Queue (m)	0.5	2.4	32.8
95th Queue (m)	5.3	12.4	55.5
Link Distance (m)	89.9	89.9	39.2
Upstream Blk Time (%)			41
Queuing Penalty (veh)			0
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Aldershot GO East Access/Hwy 403 EB On-Ramp & Alayne Bryk Way/Parkway Link Road

Movement	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	L	L	T	TR	LT	T	R	LT
Maximum Queue (m)	52.3	47.2	27.0	32.8	74.6	79.6	16.2	33.5
Average Queue (m)	28.0	27.7	10.0	13.9	31.4	37.9	9.6	15.8
95th Queue (m)	43.1	41.6	21.8	28.0	56.8	61.8	16.8	26.2
Link Distance (m)	90.6	90.6	90.6	90.6	327.0	327.0	327.0	60.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: King Road & North Service Road

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	R	LT	R
Maximum Queue (m)	8.4	103.0	92.9	103.0	14.4	189.0	161.2	127.1	46.0
Average Queue (m)	1.4	45.8	48.5	30.2	6.3	75.5	49.9	54.9	7.1
95th Queue (m)	6.4	78.2	89.2	57.9	13.4	146.3	118.6	106.6	32.2
Link Distance (m)		361.7		838.8		258.4	258.4	252.2	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)	25.0		78.0		18.0				30.0
Storage Blk Time (%)		30	9	20	0			35	
Queuing Penalty (veh)		4	28	76	0			6	

Intersection: 9: King Road & Street B (East Segment)/Hydro Lane

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	L	L	L	TR	LT	R
Maximum Queue (m)	47.2	33.6	8.5	37.3	72.1	264.8	37.5
Average Queue (m)	19.9	15.1	1.4	16.5	25.7	89.9	13.0
95th Queue (m)	33.5	26.6	6.2	33.6	59.3	251.8	37.2
Link Distance (m)	44.8	44.8	498.4		163.5	258.4	
Upstream Blk Time (%)	0					9	
Queuing Penalty (veh)	0					59	
Storage Bay Dist (m)				30.0			30.0
Storage Blk Time (%)				1	5	29	0
Queuing Penalty (veh)				7	5	29	1

Intersection: 10: King Road & Plains Road East

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B73	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	R	T	L	TR	L
Maximum Queue (m)	64.9	108.8	120.4	88.0	68.8	139.6	161.8	159.3	7.9	105.9	232.9	40.5
Average Queue (m)	11.8	67.5	72.2	32.2	27.9	78.9	94.4	84.5	0.3	30.9	99.8	40.1
95th Queue (m)	42.1	105.1	108.1	89.8	66.2	135.8	148.5	146.3	2.6	87.4	177.7	41.4
Link Distance (m)		2295.8	2295.8			544.2	544.2	544.2	118.7		286.3	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0			33.0	53.0					40.0		30.0
Storage Blk Time (%)		26	33		0	13				1	52	45
Queuing Penalty (veh)		7	40		0	15				2	71	154

Intersection: 10: King Road & Plains Road East

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (m)	50.9	674.9	36.0
Average Queue (m)	50.8	476.9	14.6
95th Queue (m)	51.0	777.4	38.0
Link Distance (m)		671.7	
Upstream Blk Time (%)		5	
Queuing Penalty (veh)		49	
Storage Bay Dist (m)	30.0		26.0
Storage Blk Time (%)	66	23	0
Queuing Penalty (veh)	226	161	2

Intersection: 11: QEW Niagara On-Ramp/QEW Niagara Off-Ramp & Plains Road East/Fairview Street

Movement	EB	EB	EB	EB	B73	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	T	T	L	LTR	R
Maximum Queue (m)	80.8	71.4	69.1	20.6	9.4	120.5	126.2	111.5	65.3	84.4	80.2
Average Queue (m)	48.7	46.2	44.8	10.3	0.3	59.5	64.9	53.9	40.5	49.7	42.1
95th Queue (m)	74.8	71.8	68.9	20.1	3.1	114.1	114.8	99.9	60.2	73.2	70.6
Link Distance (m)	118.7	118.7	118.7		544.2	289.4	289.4	289.4		792.9	792.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)				67.0					56.0		
Storage Blk Time (%)			0					3	1	6	
Queuing Penalty (veh)			0					8	5	13	

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	LTR	R	L	R
Maximum Queue (m)	55.9	141.6	130.9	113.6	182.1	193.0	190.2	63.2	90.6	80.0	20.9	59.0
Average Queue (m)	53.7	84.2	73.8	53.2	121.0	123.8	126.1	33.8	57.9	45.3	5.0	32.6
95th Queue (m)	64.3	142.3	123.0	92.8	170.2	172.5	175.2	55.6	77.1	75.5	14.4	52.8
Link Distance (m)		289.4	289.4	289.4	924.4	924.4	924.4	450.8	450.8			536.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	31.0									44.0	48.0	
Storage Blk Time (%)	57	19		2					24	1		2
Queuing Penalty (veh)	298	58		3					43	6		1

Intersection: 12: QEW Toronto Off-Ramp/Plains Road East & Fairview Street

Movement	SB
Directions Served	R
Maximum Queue (m)	49.0
Average Queue (m)	27.9
95th Queue (m)	46.9
Link Distance (m)	536.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Brant Street & Private Driveway/Hwy 403 WB Off-Ramp

Movement	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	T	T	T	T	TR
Maximum Queue (m)	74.6	85.8	106.6	32.6	81.7	77.9	67.5	133.4	137.8	103.1
Average Queue (m)	47.0	50.9	42.5	15.6	40.9	46.2	35.5	97.2	82.2	68.2
95th Queue (m)	69.6	74.4	76.9	27.9	73.8	73.1	64.2	132.9	124.2	102.4
Link Distance (m)	583.9	583.9			268.8	268.8	268.8	502.0	502.0	502.0
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)			65.0	59.0						
Storage Blk Time (%)		3	5		3					
Queuing Penalty (veh)		12	13		3					

Intersection: 14: Brant Street & Hwy 403 EB Off-Ramp

Movement	EB	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	LR	R	LT	T	T	T	T	T
Maximum Queue (m)	52.6	53.7	40.1	154.0	160.4	126.4	65.0	66.8	48.3
Average Queue (m)	27.6	30.4	13.6	97.4	78.2	33.3	26.4	24.7	19.8
95th Queue (m)	47.0	48.5	27.9	146.7	134.7	85.5	49.3	48.9	39.0
Link Distance (m)	547.3	547.3		385.2	385.2	385.2	268.8	268.8	268.8
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (m)			93.0						
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 101: Parkway Link Road & Street B (West Segment)

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	53.7	41.3	28.6	35.1	28.7
Average Queue (m)	23.3	13.8	12.4	12.8	17.5
95th Queue (m)	38.5	31.7	23.0	24.7	24.5
Link Distance (m)	293.4	293.4	190.9	190.9	50.5
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 102: Proposed Site Access/Street C & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	L	TR	LTR	LTR
Maximum Queue (m)	52.7	54.6	15.8	41.9	16.7	28.2
Average Queue (m)	17.4	13.7	7.2	22.0	8.9	16.0
95th Queue (m)	34.1	30.8	15.8	37.5	17.1	27.3
Link Distance (m)	190.9	190.9	179.7	179.7	35.1	39.8
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 103: Parkway Link Road & Street D

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (m)	63.0	69.1	51.7	60.6	72.8
Average Queue (m)	30.2	22.5	14.7	36.7	41.0
95th Queue (m)	49.7	46.0	37.7	62.6	63.9
Link Distance (m)	179.7	179.7	52.0	52.0	72.6
Upstream Blk Time (%)			0	2	0
Queuing Penalty (veh)			0	6	0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 104: Proposed Site Access/Street E & Parkway Link Road

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (m)	67.2	77.0	94.3	100.2	46.8	27.8
Average Queue (m)	23.7	38.0	36.3	43.7	18.8	15.4
95th Queue (m)	47.7	74.1	74.2	85.1	36.0	24.6
Link Distance (m)	70.0	70.0	108.2	108.2	54.5	166.9
Upstream Blk Time (%)	0	5				
Queuing Penalty (veh)	0	18				
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 105: King Road & Parkway Link Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (m)	88.7	116.1	37.5	283.7	231.1	167.8	37.5
Average Queue (m)	55.0	75.6	35.5	140.6	121.6	116.1	23.6
95th Queue (m)	84.2	124.9	43.2	245.4	235.7	183.6	51.8
Link Distance (m)	108.2	108.2		671.7	671.7	163.5	
Upstream Blk Time (%)		11				16	
Queuing Penalty (veh)		39				90	
Storage Bay Dist (m)			30.0				30.0
Storage Blk Time (%)			27	54		57	0
Queuing Penalty (veh)			89	177		55	2

Intersection: 106: Street C/Proposed Site Access & Street B (West Segment)/Street B (East Segment)

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (m)	23.7	23.7
Average Queue (m)	12.7	11.5
95th Queue (m)	21.0	18.0
Link Distance (m)	81.6	181.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 107: Street D & Street B (East Segment)

Movement	EB	WB	NB
Directions Served	TR	LT	LR
Maximum Queue (m)	41.8	21.5	29.4
Average Queue (m)	14.0	12.0	14.6
95th Queue (m)	25.9	17.9	23.3
Link Distance (m)	181.3	159.3	77.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 108: Street E/Proposed Site Access & Street B (East Segment)

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	29.9	23.2	21.9	24.0
Average Queue (m)	12.9	13.8	9.9	12.5
95th Queue (m)	21.3	21.5	16.0	20.1
Link Distance (m)	76.4	46.6	166.9	69.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 201: Proposed Site Access & Parkway Link Road

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	25.4	33.4
Average Queue (m)	9.1	13.7
95th Queue (m)	20.2	23.4
Link Distance (m)	390.4	77.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 202: Parkway Link Road & Proposed Site Access

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (m)	9.3	14.9
Average Queue (m)	0.6	6.7
95th Queue (m)	4.2	13.6
Link Distance (m)	390.4	103.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 203: Street B (West Segment) & Proposed Site Access

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	16.1	8.7
Average Queue (m)	7.1	0.6
95th Queue (m)	14.7	4.1
Link Distance (m)	40.7	99.6
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Appendix H:
Site Plan Review

AVAILABLE SIGHT DISTANCE

SIGHT LINE

TH UNITS

126m

105m

STREET B

STREET C

234m

268m

STREET D

485m

130m

PEDESTRIAN SPINE

RETAIL SQUARE

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Suite 315
Toronto, ON
M2H 3S8
P: 905.738.5700

ALINEA LAND CORPORATION - 1200 KING ROAD
INTERSECTION SIGHT DISTANCE

SCALE
N.T.S.

DRAWING No.
01

DATE
FEB 2026

AVAILABLE SIGHT DISTANCE

SIGHT LINE

TH UNITS

STREET B

STREET D

STREET E

PEDESTRIAN SPINE

RETAIL SQUARE

198m

441m

398m

232m

88m

118m

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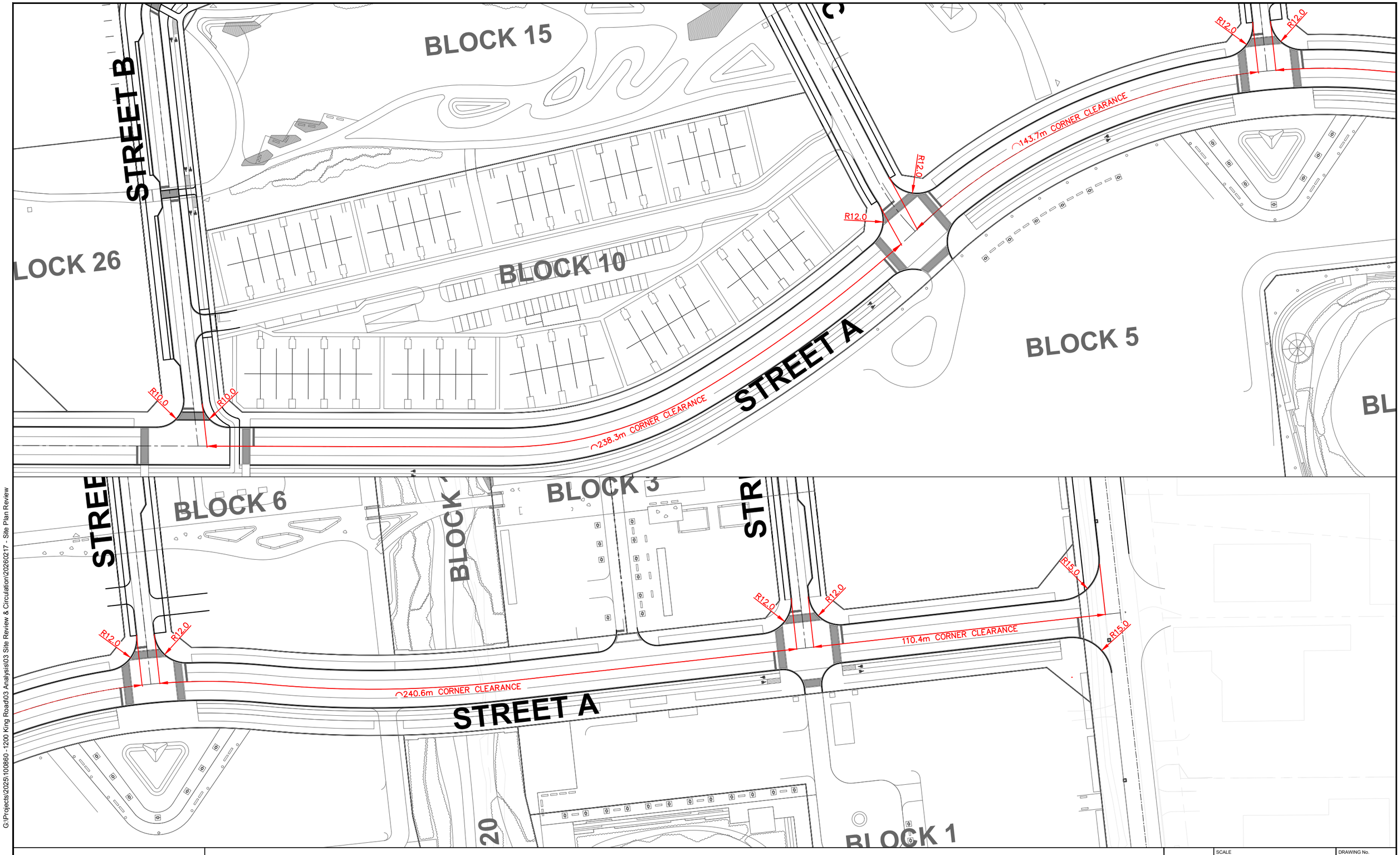
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Toronto, ON
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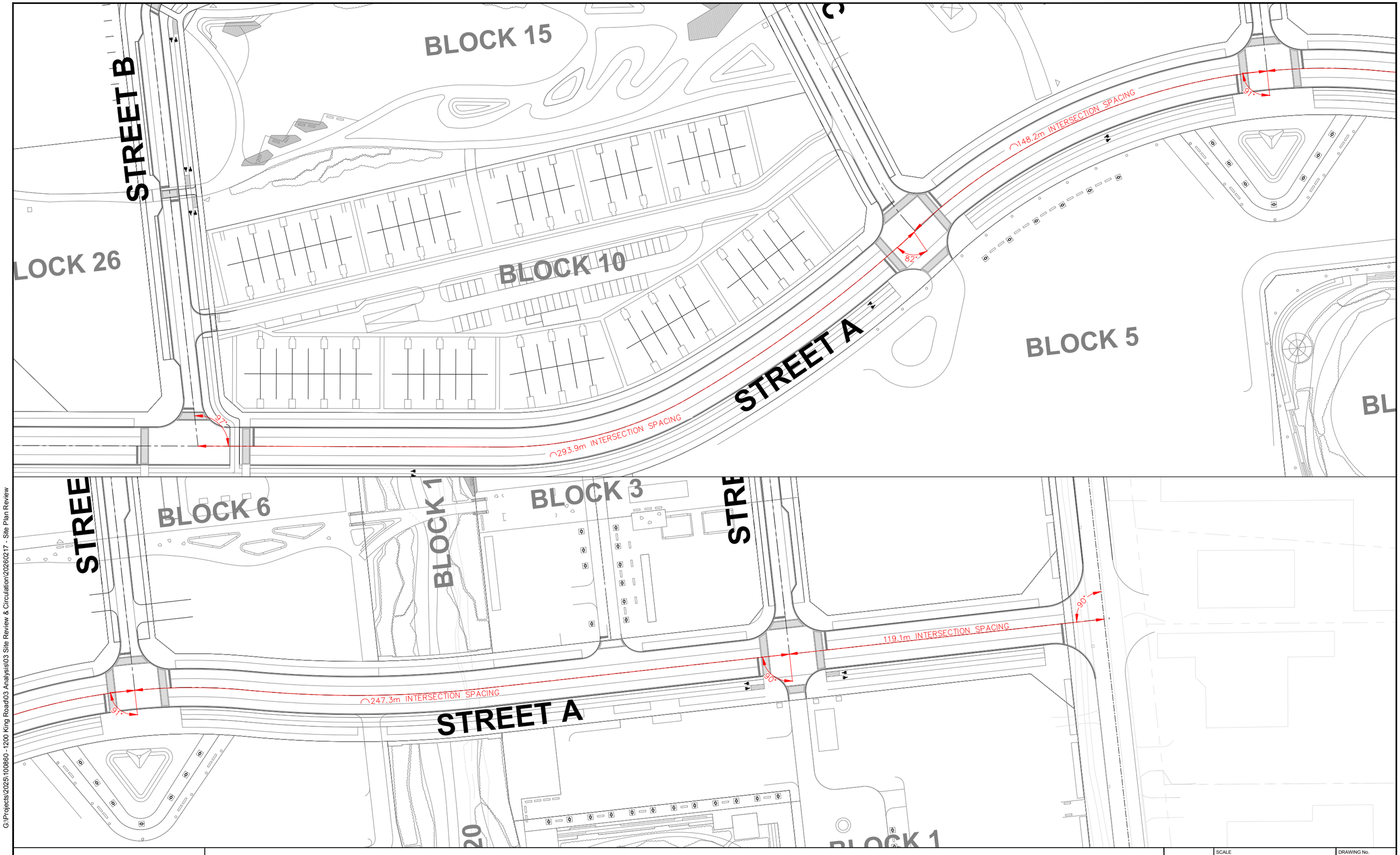
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STREET A - SITE PLAN REVIEW

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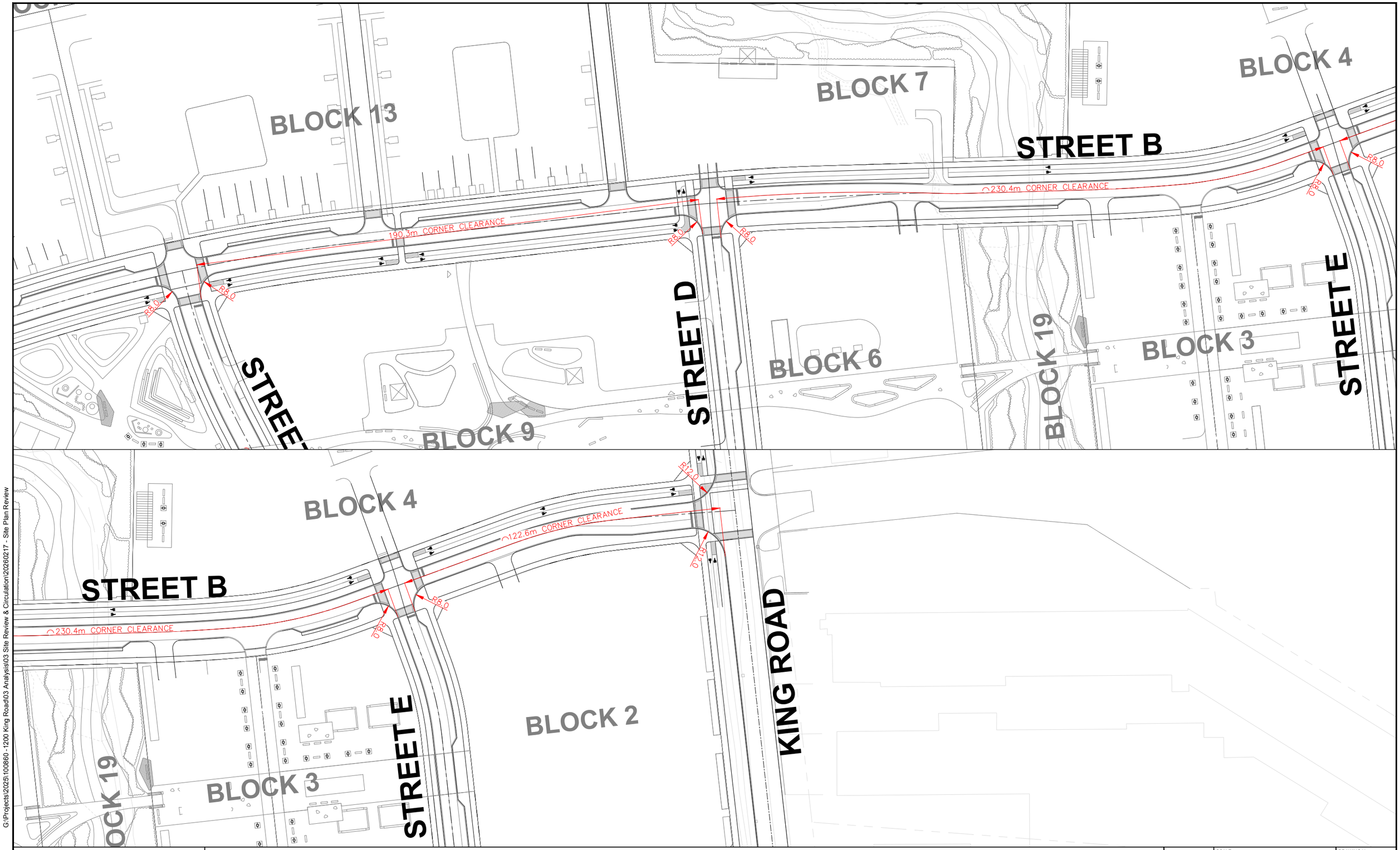
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STREET A - SITE PLAN REVIEW

SCALE 1:1250

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STREET B - SITE PLAN REVIEW

SCALE 1:1250

DRAWING No. 003

DATE FEB 2026

BLOCK 13

BLOCK 7

BLOCK 4

STREET B

237.0m INTERSECTION SPACING

200.3m INTERSECTION SPACING

91°

94°

STREET C

STREET D

STREET E

BLOCK 9

BLOCK 6

BLOCK 19

BLOCK 3

BLOCK 4

131.0m INTERSECTION SPACING

92°

STREET B

237.0m INTERSECTION SPACING

94°

BLOCK 2

KING ROAD

BLOCK 19

BLOCK 3

STREET E

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STREET B - SITE PLAN REVIEW

SCALE
1:1250

DRAWING No.
004

DATE
FEB 2026

BLOCK 13

BLOCK 9

BLOCK 4

BLOCK 2

BLOCK 3

BLOCK 1

STREET C

STREET D

STREET E

KING ROAD

171.5m CORNER CLEARANCE

118.2m CORNER CLEARANCE

129.0m CORNER CLEARANCE

140.5m CORNER CLEARANCE

R8.0

R12.0

R15.0

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SITE PLAN REVIEW

SCALE
1:1250

DRAWING No.
005

DATE
FEB 2026

BLOCK 13

BLOCK 9

BLOCK 4

BLOCK 2

BLOCK 3

BLOCK 1

STREET C

STREET D

STREET E

KING ROAD

181.8m INTERSECTION SPACING

128.1m INTERSECTION SPACING

139.4m INTERSECTION SPACING

152.4m INTERSECTION SPACING

91°

82°

94°

90°

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SITE PLAN REVIEW

SCALE 1:1250

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